COUNTY OF LASSEN
DEPARTMENT OF PUBLIC WORKS

STATE OF CALIFORNIA

NOTICE TO BIDDERS

PROPOSAL AND CONTRACT

SPECIAL PROVISIONS

FOR HACKSTAFF ROAD BRIDGES 7C-12 & 7C-81 REPLACEMENT PROJECT, LASSEN COUNTY

For Use in Connection

State of California
Business, Transportation and Housing Agency
Department of Transportation

with Standard Specifications 2018, Standard Plans 2018 and Current Labor Surcharge and Equipment Rental Rates.

SAMPLE
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CONTRACT No. 122-06-7C12 & 122-06-7C81

Federal Aid Project – BRLO 5907(033)

Bids Open: 4 p.m. May 13, 2021
Dated: April 2021

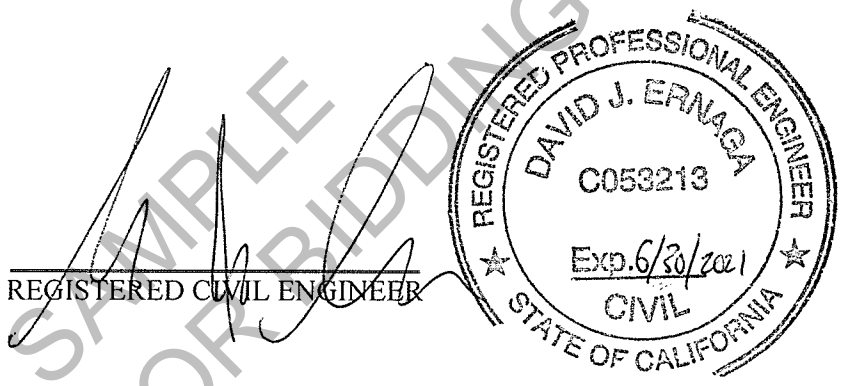
Bid Serial No. _____.

****

THE SPECIAL PROVISIONS CONTAINED HEREIN HAVE

BEEN PREPARED BY OR UNDER THE DIRECTION OF THE

FOLLOWING REGISTERED PERSON.



REGISTERED CIVIL ENGINEER

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Information only (Not a Part of this Contract)

IMPORTANT SPECIAL NOTICES

The Bidding Contractor's attention is directed to the Proposal regarding submittal of the Certificates of Insurance within ten (10) days after award.

This project includes, but is not limited to, the following special requirements:

The work embraced herein shall conform to the provisions in the Standard Specifications 2018 and Standard Plans dated 2018 and these special provisions. In case of conflict between the Standard Specifications and these special provisions, the special provisions shall take precedence over and shall be used in lieu of the conflicting portions.

In the case where a bidder claims an inadvertent clerical error in listing subcontractors, a notice of the claim must be submitted to the Lassen County Public Works in writing within two (2) working days after the time of bid opening and send copies of the notice to the subcontractors involved.

The State of California Franchise Tax Board requires that whenever payments are made to a non-resident independent Contractor in excess of $1,500 for services rendered, 7% of the gross amount must be withheld. A non-resident is anyone who is not a resident of California. An individual who comes into the state to perform a contract of short duration is considered to be a non-resident. A Corporation is also subject to the withholding requirements if it is neither incorporated nor qualified to do business in California.

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Attention is directed to the following sections of the special provisions regarding the Department's DBE program:

Section 2-1.02 Disadvantaged Business Enterprise (DBE)
Section 2-1.03 Disadvantaged Veteran Business Enterprise (DVBE)
Section 3. Award And Execution Of Contract
Section 5-1.08 Subcontractor And DBE Records
Section 5-1.083 DBE Certification Status
Section 5-1.086 Performance Of Subcontractors
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SAMPLE
NOT FOR BIDDING

DEPARTMENT OF PUBLIC WORKS

NOTICE TO BIDDER

SEALED PROPOSALS
FOR

HACKSTAFF ROAD BRIDGES 7C-12 & 7C-81 REPLACEMENT PROJECT, LASSEN COUNTY

Will be received at the Office of the Director of Administrative Services, Lassen County, 221 South Roop Street, Susanville, California 96130, until 4:00 pm on May 13, 2021, at which time they will be publicly opened and read in the Office of the Director of Administrative Services at the above address.

General Work Description:
CONTRACTOR shall, at its sole cost and expense, furnish all facilities, equipment, and other materials necessary for the construction of two new bridges with a new roadway and the removal of the two existing bridges and other improvements, to be constructed to widths and lengths, and at the locations as shown on the construction plans. The onsite job activities shall not begin before June 14, 2021 and no work will be conducted on the banks or channels of Long Valley Creek and its Overflow until June 15, 2021.

Bidders are advised that, as required by federal law, the Lassen County Department of Public Works has established a DBE goal for this project. The Department is required to report to FHWA on DBE participation for all Federal-aid contracts each year so that attainment efforts may be evaluated. To provide assistance in meeting the statewide goal, the Department may include a DBE Availability Advisory in this contract. Bidders need not achieve the percentage stated in any DBE Availability Advisory as a condition of award.

A pre-bid meeting is scheduled for this project. The pre-bid meeting is scheduled for 10:00 a.m. on April 27, 2021 in the Road Conference Room of the Lassen County Public Works Department located at 707 Nevada Street, Suite 4, Susanville, California. Changes discussed during the pre-bid meeting will not be effective unless it is made in writing as an Addendum, at which time it will be sent to all plan holders.

THIS PROJECT IS SUBJECT TO THE "BUY AMERICA" PROVISIONS OF THE SURFACE TRANSPORTATION ASSISTANCE ACT OF 1982 AS AMENDED BY THE INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991.

Bids are required for the entire work described herein.

At the time this contract is awarded, the Contractor shall possess either a Class A license or a combination of Class C licenses which constitutes a majority of the work.

The DBE Contract goal is NINE percent (9 %)

Complete the work within 95 Working Days

The estimated cost of the project is $6,400,000

Inquiries or questions based on alleged patent ambiguity of the plans, specifications or estimate must be communicated as a bidder inquiry prior to bid opening. Any such inquiries or questions, submitted after bid opening, will not be treated as a bid protest.

The Department will consider bidder inquiries only when made in writing and shall be submitted to Lassen County Public Works by either E-mail or Fax:

E-mail: dernaga@co.lassen.ca.us
FAX Number: (530) 251-2675

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This contract is subject to the provisions of Section 22300 of the California Public Contract Code, which provides for the substitution of securities for any monies withheld by a public agency to ensure performance under a contract. The bidder's attention is directed to said Section 22300 of the Public Contract Code for the specific requirements and provisions for such substitutions of securities if requested by the Contractor.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code, Section 12990.

Bid Book with special provisions, and proposal forms for bidding this project may be seen and obtained at the Office of the Department of Public Works of Lassen County, 707 Nevada Street, Suite 4, Susanville, CA 96130, telephone (530) 251-8288, Fax (530) 251-2675, and may be purchased at the following non-refundable prices:

Plans: $60.00 Specifications: $60.00 Mailing Fee: $30.00

Any Bidder wanting to submit a Sealed Bid for this project must obtain the Bid Book with Special Provisions and the proposal forms for the Office of the Department of Public Works of Lassen County, 707 Nevada Street, Suite 4, Susanville, CA 96130.

Special provisions, Amendments to the Standard Specifications, and project plans can be viewed or downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

For an informal-bid contract, special provisions, Amendments to the Standard Specifications, and project plans can be viewed or downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

The Supplemental Project Information for this project can be viewed and downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

The successful bidder shall furnish a payment bond and a performance bond equal to one hundred percent (100%) of the contract price.

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Standard Specifications 2018 and Standard Plans 2018 are available through the State of California, Department of Transportation, Publications Unit, 1900 Royal Oaks Drive, Sacramento, CA 95815, Telephone No. (916) 445-3520.

Pursuant to Section 1773 of the Labor Code the general prevailing wage rates in the county in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wage rates are predetermined and set forth in the serially numbered books issued for bidding purposes entitled, "County of Lassen, Department of Public Works, State of California, Notice to Contractor's, Proposal and Contract - Special Provisions for Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Lassen County" and in copies of said book that may be examined at the offices described above where project, special provisions and proposal forms may be seen or are available from the California Department of Industrial Relations' Internet web site at http://www.dir.ca.gov. . Addenda to modify wage rates, if necessary, will be issued to holders of the above referenced books. Future effective general prevailing wage rates, which have been predetermined, and are on file with the California Department of Industrial Relations, are referenced but not printed in the general prevailing wage rates.

The Federal minimum wage rates for this project as predetermined by the United States Secretary of Labor are set forth in the serially numbered books issued for bidding purposes entitled "County of Lassen, Department of Public Works, State of California, Notice to Contractor's, Proposal and Contract - Special Provisions for Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Lassen County", and in copies of said book that may be examined at the offices described above where project, special provisions and proposal forms may be seen or are available on the internet at http://www.dot.ca.gov/hq/esc/oe/federal-wages/. Addenda to modify the Federal minimum wage rates, if necessary, will be issued to holders of "Proposal and Contract" books. Future effective general prevailing wage rates which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates.

If there is a difference between the minimum wage rates predetermined by the United States Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The Department will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of

the employees in question.

The Contractor shall also furnish Certificates of Insurance, with the County of Lassen named as additional insured, in amounts and coverage as specified in the Specifications.

Inquiries or questions based on alleged patent ambiguity of the plans, specifications or estimate must be communicated as a bidder inquiry prior to bid opening. Any such inquiries or questions, submitted after bid opening, will not be treated as a bid protest.

The County of Lassen hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex or national origin in consideration for an award.

The County of Lassen may waive any informalities or minor defects or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within sixty (60) days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the County and the bidder.

Board of Supervisors
County of Lassen
State of California

BY: _____
Pete Heimbigner
Director of Transportation

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Wherever in the Standard Specifications, Special Provisions, Notice to Contractors, Proposal, Contract, or other contract documents the following terms are used, the intent and meaning shall be interpreted as follows:

(a) Lassen County Department of Public Works for the Department of Transportation;

(b) The Board of Supervisors for the Director of Transportation;

(c) The Lassen County Director of Public Works acting either directly or through duly authorized agents for the Chief Engineer, Caltrans;

(d) The established laboratory of the Department of Public Works of Lassen County or laboratories authorized by the County to test materials and work involved in the contract, for laboratory;

(e) The County of Lassen for the State where reference is made to the agency administering the Contract;

(f) Lassen County Auditor for the State Treasurer where reference is made to Contract payments.

SAMPLE
NOT FOR BIDDING

INFORMATION FOR BIDDERS

Any Bidder wanting to submit a Sealed Bid for this project must obtain the Bid Book with Special Provisions and the proposal forms for the Office of the Department of Public Works of Lassen County, 707 Nevada Street, Suite 4, Susanville, CA 96130.

Special provisions, Amendments to the Standard Specifications, and project plans can be viewed or downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

For an informal-bid contract, special provisions, Amendments to the Standard Specifications, and project plans can be viewed or downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

The Supplemental Project Information for this project can be viewed and downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

The successful bidder shall furnish a payment bond and a performance bond equal to one hundred percent (100%) of the contract price.

Bids will be received at the Office of the Director of Administrative Services, Lassen County, 221 South Roop Street, Susanville, California 96130, until 4:00 P.M. on May 13, 2021 at which time they will be publicly opened and read in the Office of the Director of Administrative Services at the above address.

Each Bid must be submitted to the County in a sealed envelope, addressed to Lassen County at 221 South Roop Street, Susanville, California 96130. Each sealed envelope containing a Bid must be plainly marked on the outside as Bid for the Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Lassen County, and the envelope should bear on the outside the name of the Bidder, the Bidder's address, and the Bidder's license number if applicable. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to Lassen County at 221 South Roop Street, Susanville, California 96130.

At any time five (5) days prior to Bid opening, the County Engineer may issue Addenda to the Plans and Specifications. The same shall be made available to those persons who have obtained a Contract Documents package from the County. The receipt of the Addenda shall be noted on the bid and will become part of the Contract Documents.

Bidders must satisfy themselves to the accuracy and completeness of the Bid Schedule by examination of the site and a review of the Drawings and Specifications including Addenda. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of Work or of the nature or scope of the Work to be done.

Individual bidders shall sign the Bid with their full name and address. A partner or a Partnership submitting a Bid shall sign the Bid with his or her full name and the name and address of every member of the Partnership shall be given. A duly authorized officer(s) of a corporation submitting a Bid shall sign the Bid with his/her/their full name(s) attested by the corporate seal, and the names and titles of all officers(s) of the corporation shall be given on the Bid.

The County will not consider for award more than one Bid from an individual, firm, partnership, corporation, or association under the same or different names.

A conditional or qualified bid will not be accepted.

The County may waive any informalities or minor defects or reject any and all bids. Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. No Bidder may withdraw a Bid within sixty (60) days after the actual date of the opening thereof. Should there be reasons why the Contract cannot be awarded within the specified period, the time may be extended by mutual Agreement between the County and the Bidder.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout. Some of the laws regarding wage rates, travel and subsistence payments, payroll records, apprentices, working hours and workers compensation are specified under the General Conditions.

The County will provide to bidders upon request prior to bidding, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The Contract Documents contain the provisions required for the construction of the project. Information obtained at any time from an officer, agent, or employee of the County or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the Contract.

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Each bid must be accompanied by a Bid Bond payable to the County for ten percent (10%) of the total amount of the Bid. As soon as the qualifications have been received, and the Bid prices compared, the County will return the bonds of all except the three (3) lowest responsible bidders. Lowest responsible will also include "most qualified." When the Agreement is executed the bonds of the two (2) remaining unsuccessful bidders will be returned. The Bid Bond of the successful bidder will be retained until the Payment Bond and Performance Bond have been executed and approved, after which it will be returned. The Bid Bond must be executed on the bond form included in the Contract Documents. A certified check payable to the County of Lassen may be used in lieu of a Bid Bond.

A Performance Bond in the amount of one hundred percent (100%) of the Contract Price and a Payment Bond in the amount of one hundred percent (100%) of the Contract Price, with a corporate surety approved by the County and authorized to do bonding in California, will be required for faithful performance of the Contract. The Performance Bond and the Payment Bond must be executed on the bond forms included in the Contract Documents.

Attorneys-in-fact who sign Bid Bonds, Payment Bonds and Performance Bonds must file with each bond a certified and effective dated copy of their power of attorney.

The party to whom the Contract is awarded will be required to execute the Agreement and obtain the Performance Bond, Payment Bond, and all required insurance within ten (10) calendar days from the date when Notice of Award is delivered to the bidder. The Notice of Award shall be accompanied by the necessary Agreement and bond forms. In case of failure of the bidder to execute the Agreement, the County may at its option consider the bidder in default, in which case the Bid Bond accompanying the proposal shall become the property of the County.

The County within ten (10) calendar days of receipt of acceptable insurance, Performance Bond, Payment Bond and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the County not execute the agreement within such period, the bidder may by written notice withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the County.

The Notice to Proceed shall be issued within ten (10) calendar days of the execution of the Agreement by the County. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between the County and Contractor. If the Notice to Proceed has not been issued within the ten (10) calendar day period or within the period mutually agreed upon, the Contractor may terminate the Agreement without further liability on the part of either party.

The County may make such investigations as it deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the County all such information and data for this purpose as the County may request. The County reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligations of the Agreement and to complete the Work contemplated therein. The County reserves the right to reject any or all bids at its sole discretion.

SAMPLE
NOT FOR BIDDING

Each bidder and Contractor shall be licensed in accordance with the laws of the State of California including but not limited to Chapter 9, Division III of the Business and Professions Code, Section 7000 et seq. Any bidder or Contractor not so licensed is subject to the penalties imposed by law.

The Contractor shall also furnish Certificates of Insurance, with the County of Lassen and their consultants named as additional insured, in amounts and coverage as specified in the Specifications.

This project is subject to the "Buy America" provisions of the Surface Transportation assistance act of 1982 as amended by the Intermodal Surface Transportation Efficiency act of 1991.

This project is subject to the Federal Trainee Program. The goal for the number of trainees or apprentices to be trained under this requirement will be **ZERO (0).**

This project is subject to a Disadvantaged Business Enterprise (DBE) goal of **NINE percent (9%)** for the Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project.

The County of Lassen hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex or national origin in consideration for an award.

Each bidder is responsible for inspecting the site and for reading and being thoroughly familiar with the Contract Documents.

The failure or omission of any bidder to do any of the foregoing shall in no way relieve any bidder from any obligation in respect to his Bid.

The County requests notification of discrepancies in, or omissions from the Contract Documents, if any, are found by a bidder.

A pre-bid meeting is scheduled for this project. The pre-bid meeting is scheduled for 10:00 a.m. on April 27, 2021 in the Road Conference Room of the Lassen county Public Works Department located at 707 Nevada Street, Suite 4, Susanville, California. Changes discussed during the pre-bid meeting will not be effective unless it is made in writing as an Addendum, at which time it will be sent to all plan holders.

SAMPLE
NOT FOR BIDDING

(Because some colored inks will not reproduce in copy machines, please use black ink to complete this proposal.)

PROPOSAL TO THE COUNTY OF LASSEN
DEPARTMENT OF PUBLIC WORKS
CONTRACT NO122-06-7C12 & 122-06-7C81
Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project

Name of Bidder: _____

Business Address: _____

City, State, Zip: _____

Tel. No., Area Code: ( ) _____

Fax No. Area Code: ( ) _____

Contractor License No. _____

The work for which this proposal is submitted is for the construction in conformance with the special provisions (including the payment of not less than the State general prevailing wage rates, the project plans described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the 2018 California Department of Transportation Standard Plans, the 2018 Standard Specifications, the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, and the permits issued for this project.

The Special Provisions for the work to be done are dated April 2021 and are entitled:
COUNTY OF LASSEN, DEPARTMENT OF PUBLIC WORKS, STATE OF CALIFORNIA, NOTICE TO CONTRACTORS, PROPOSAL AND CONTRACT – SPECIAL PROVISIONS FOR HACKSTAFF ROAD BRIDGES 7C-12 & 7C-81 REPLACEMENT CONSTRUCTION PROJECT, LASSEN COUNTY.

The project plans for the work to be done were approved April 2021 and are entitled:
STATE OF CALIFORNIA, COUNTY OF LASSEN, DEPARTMENT OF PUBLIC WORKS CONSTRUCTION FOR HACKSTAFF ROAD BRIDGES 7C-12 & 7C-81 REPLACEMENT CONSTRUCTION PROJECT

SAMPLE NOT FOR BIDDING

Bids are to be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all items.

The bidder shall set forth for each unit basis item of work an item price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the item price bid on the basis of the estimated quantity for the item.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

(a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;

(b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage wise the unit price or item total in the County of Lassen's Final Estimate of cost.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise, it the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid provided. Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollar and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the items total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the County of Lassen, and that discretion will be exercised in the manner deemed by the County of Lassen to best protect the public interest in the prompt and economical completion of the work. The decision of the County of Lassen respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract, furnish the bond in the sum required by the State Contract Act, with surety satisfactory to the County of Lassen and certificates of insurance that may be required, within 8 days, not including Sundays and legal holidays, after the bidder has received notice from the County that the contract has been awarded, the County of Lassen may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of such security accompanying this proposal shall operate and the same shall be the property of the County of Lassen.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans therein referred to; and he proposes, and agrees if this proposal is accepted, that he will contract with the County of Lassen in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefore the following item prices, to wit:

SAMPLE
NOT FOR BIDDING

BID ITEM LIST

		Hackstaff Road Bridges 7C-12 & 7C-81 Bridges Replacement Project				
		Bid Item List for Bridge 7C-12				
Bridge No.	Item No.	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Total
7C-12	1	Lead Compliance Plan	LS	Lump Sum		
7C-12	2	Construction Area Signs	LS	Lump Sum		
7C-12	3	Traffic Control System	LS	Lump Sum		
7C-12	4	Temporary Type III Barricade	EA	4		
7C-12	5	Portable Changeable Message Sign	EA	1		
7C-12	6	Job Site Management	LS	Lump Sum		
7C-12	7	Sheet Piling Design and Safety Plan	LS	Lump Sum		
7C-12	8	Excavation Safety Plan	LS	Lump Sum		
7C-12	9	Rain Event Action Plan	EA	4		
7C-12	10	Storm Water Sampling and Analysis	EA	2		
7C-12	11	Storm Water Annual Report	EA	1		
7C-12	12	Temporary Delineator (Class 1 - Type E)	EA	7		
7C-12	13	Temporary K-Railing	LF	140		
7C-12	14	Temporary Crash Cushion Module (Array 'U11')	EA	2		
7C-12	15	Temporary Fiber Roll	LF	300		
7C-12	16	Temporary Silt Fence	LF	2,800		
7C-12	17	Temporary Concrete Washout Facility	EA	2		
7C-12	18	Temporary ESA Fence	LF	200		
7C-12	19	Temporary Traffic Cones	EA	50		
7C-12	20	Temporary Plastic Traffic Drums	EA	25		
7C-12	21	Street Sweeping	LS	Lump Sum		
7C-12	22	Bridge Footing Rock	CY	400		
7C-12	23	Treated Wood Waste	LBS	60,000		
7C-12	24	Remove Existing Bridge Railing	LF	130		
7C-12	25	Remove Existing Fence (Type BW)	LF	2,700		
7C-12	26	Clearing and Grubbing	LS	Lump Sum		
7C-12	27	Develop Water Supply	LS	Lump Sum		
7C-12	28	Roadway Excavation	CY	300		
7C-12	29	Embankment Excavation	CY	5,300		
7C-12	30 (F)	Structure Excavation (Bridge)	CY	792		
7C-12	31 (F)	Structure Backfill (Bridge) Class 3 AB	CY	795		
7C-12	32	Furnish Piling - (HP 10X57)	LF	2,340		
7C-12	33	Drive Pile - (HP 10X57)	EA	50		
7C-12	34 (F)	Structural Concrete, Bridge Footing	CY	132		
7C-12	35 (F)	Structural Concrete, Bridge	CY	365		
7C-12	36 (F)	Furnish Precast Prestressed Concrete Girder (80'-90')	LF	574		
7C-12	37 (F)	Erect Precast Prestressed Concrete Girder	EA	7		
7C-12	38 (F)	Joint Seal (MR=1")	LF	41		
7C-12	39 (F)	Joint Seal (Type A)	LF	41		
7C-12	40 (F)	Bar Reinforcing Steel Bridge	LBS	76,412		
7C-12	41 (F)	Bar Reinforcing Steel (Epoxy Coated)	LBS	25,475		
7C-12	42	Bridge Removal	LS	Lump Sum		
7C-12	43	Rock Slope Protection (1/4 Ton, Class V - Method B)	TON	1,054		
7C-12	44	Rock Slope Protection Fabric (Class 8)	SQYD	1,053		
7C-12	45 (F)	Miscellaneous Metal Bridge	LBS	27		

SAMPLE NOT FOR BIDDING

7C-12	46 (F)	CA St-30 Bridge Rail	LF	292		
7C-12	47	Groove Concrete Bridge Deck Surface	SQYD	305		
7C-12	48	Rock Slope Protection (Granular Material)	TON	440		
7C-12	49	Removed Existing Asphalt Concrete Surface	SQYD	3,150		
7C-12	50	Finishing Roadway	LS	Lump Sum		
7C-12	51	Local Borrow	CY	300		
7C-12	52	Geotextile Fabric Class B1 for Excavation Areas	SQYD	850		
7C-12	53	Imported Embankment Base for Excavation Areas	CY	600		
7C-12	54	Imported Embankment Borrow	CY	4,700		
7C-12	55	Imported Borrow	CY	5,500		
7C-12	56	Class 2 Aggregate Base	CY	750		
7C-12		Additional Widening Class 2 Aggregate Base	CY	40		
7C-12	57	Tack Coat	TON	0.5		
7C-12		Additional Widening Hot Mix Asphalt – Type A	TON	40		
7C-12	58	Hot Mix Asphalt - Type A	TON	900		
7C-12	59	Shoulder Backing	TON	200		
7C-12	60	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	240		
7C-12	61	Construct Temporary Fence (Type BW)	LF	980		
7C-12	62	Remove Temporary Fence (Type BW)	LF	980		
7C-12	63	Construct Fence (Type BW)	LF	2,500		
7C-12	64	Construct Access Gate Opening	EA	4		
7C-12	65	Delineators (Class 2) Type E	EA	26		
7C-12	66	Delineators (Guardrailing)	EA	12		
7C-12	67	Object Markers (Type L-1 - CA)	EA	8		
7C-12	68	Object Markers (Type P - CA)	EA	4		
7C-12	69	Midwest Guardrail System (6' Post)	LF	100		
7C-12	70	Transition Railing (Type WB-31)	EA	4		
7C-12	71	Alternative In-Line Terminal System (Type SKT)	EA	4		
7C-12	72	Removal of Surplus Bridge Excavation	CY	792		
7C-12	73	Removal of Surplus Embankment Excavation	CY	5,300		
7C-12	74	Removal of Surplus Roadway Excavation	CY	500		
7C-12	75	Remove Existing Sheet Piling	LF	90		
7C-12	76	Temporary Sheet Piling	LF	490		
7C-12	77	Bridge Excavation Dewatering	LS	Lump Sum		
7C-12	78	Sediment Basin	EA	2		
7C-12	79	Thermoplastic Traffic Stripe (Sparyable)	LF	4,000		
7C-12	80	Intertial Profiler Certification	LS	Lump Sum		
7C-12	81	Willow Planting Areas	SQFT	2,900		
7C-12	82	Hydroseed Upland Area	SQFT	147,435		
7C-12	83	Hydroseed Wetland & Riparian Area	SQFT	1,150		
7C-12	84	Quality Assurance Testing for HMA	LS	Lump Sum		
7C-12	85	Construction Staking	LS	Lump Sum		
7C-12	86	Mobilization	LS	Lump Sum		

SAMPLE NOT FOR BIDDING

SUB-TOTAL FOR 7C-12 BID AMOUNT: $_____

		Hackstaff Road Bridges 7C-12 & 7C-81 Bridges Replacement Project	2021/3/16			
		Bid Item List for Bridge 7C-81				
Bridge No.	Item No.	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Total
7C-81	101	Lead Compliance Plan	LS	Lump Sum		
7C-81	102	Construction Area Signs	LS	Lump Sum		
7C-81	103	Traffic Control System	LS	Lump Sum		
7C-81	104	Temporary Type III Barricade	EA	8		
7C-81	105	Portable Changeable Message Sign	EA	1		
7C-81	106	Job Site Management	LS	Lump Sum		
7C-81	107	Sheet Piling Design and Safety Plan	LS	Lump Sum		
7C-81	108	Excavation Safety Plan	LS	Lump Sum		
7C-81	109	Rain Event Action Plan	EA	4		
7C-81	110	Storm Water Sampling and Analysis	EA	2		
7C-81	111	Storm Water Annual Report	EA	1		
7C-81	112	Temporary Delineator (Class 1 - Type E)	EA	30		
7C-81	113	Temporary K-Railing	LF	200		
7C-81	114	Temporary Crash Cushion Module (Array 'U11')	EA	2		
7C-81	115	Temporary Fiber Roll	LF	300		
7C-81	116	Temporary Silt Fence	LF	2,500		
7C-81	117	Temporary Concrete Washout Facility	EA	2		
7C-81	118	Temporary ESA Fence	LF	200		
7C-81	119	Temporary Traffic Cones	EA	50		
7C-81	120	Temporary Plastic Traffic Drums	EA	25		
7C-81	121	Street Sweeping	LS	Lump Sum		
7C-81	122	Bridge Footing Rock	CY	250		
7C-81	123	Treated Wood Waste	LBS	21,000		
7C-81	124	Remove Existing Guardrailing and Bridgerailing	LF	340		
7C-81	125	Remove Existing Fence (Type BW)	LF	2,550		
7C-81	126	Clearing and Grubbing	LS	Lump Sum		
7C-81	127	Develop Water Supply	LS	Lump Sum		
7C-81	128	Roadway Excavation	CY	250		
7C-81	129	Embankment Excavation	CY	1,300		
7C-81	130(F)	Structure Excavation (Bridge)	CY	364		
7C-81	131(F)	Structure Backfill (Bridge) Class 3 AB	CY	240		
7C-81	132	Furnish Piling - (HP 10X57)	LF	1,551		
7C-81	133	Drive Pile - (HP 10X57)	EA	32		
7C-81	134(F)	Structural Concrete, Bridge Footing	CY	51		
7C-81	135(F)	Structural Concrete, Bridge	CY	276		
7C-81	136(F)	Furnish Precast Prestressed Concrete Girder (80'-90')	LF	957		
7C-81	137(F)	Erect Precast Prestressed Concrete Girder	EA	12		
7C-81	138(F)	Joint Seal (MR=1")	LF	73		
7C-81	139F)	Bar Reinforcing Steel Bridge	LBS	29,485		
7C-81	140(F)	Bar Reinforcing Steel (Epoxy Coated)	LBS	60,577		
7C-81	141	Bridge Removal	LS	Lump Sum		
7C-81	142	Rock Slope Protection (1/4 Ton, Class V - Method B)	TON	353		
7C-81	143	Rock Slope Protection Fabric (Class 8)	SQYD	519		
7C-81	144(F)	Miscellaneous Metal Bridge	LBS	54		
7C-81	145(F)	CA St-30 Bridge Rail	LF	384		
7C-81	146	Groove Concrete Bridge Deck Surface	SQYD	585		
7C-81	147	Rock Slope Protection (Granular Material)	TON	450		
7C-81	148	Removed Existing Asphalt Concrete Surface	SQYD	2,450		

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7C-81	149	Finishing Roadway	LS	Lump Sum		
7C-81	150	Local Borrow	CY	200		
7C-81	151	Imported Embankment Borrow	CY	1,800		
7C-81	152	Imported Borrow	CY	4,500		
7C-81	153	Class 2 Aggregate Base	CY	750		
7C-81	154	Additional Widening Class 2 Aggregate Base	CY	80		
7C-81	155	Tack Coat	TON	0.5		
7C-81	156	Hot Mix Asphalt - Type A	TON	750		
7C-81	157	Shoulder Backing	TON	150		
7C-81	158	Additional Widening Hot Mix Asphalt – Type A	TON	85		
7C-81	159	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	290		
7C-81	160	Construct Temporary Fence (Type BW)	LF	600		
7C-81	161	Remove Temporary Fence (Type BW)	LF	600		
7C-81	162	Construct Fence (Type BW)	LF	1,975		
7C-81	163	Construct Access Gate Opening	EA	3		
7C-81	164	Delineators (Class 2) Type E	EA	10		
7C-81	165	Delineators (Guardrailing)	EA	25		
7C-81	166	Object Markers (Type L-1 - CA)	EA	8		
7C-81	167	Object Markers (Type P - CA)	EA	6		
7C-81	168	Midwest Guardrail System (6' Post)	LF	450		
7C-81	169	Transition Railing (Type WB-31)	EA	4		
7C-81	170	Alternative In-Line Terminal System (Type SKT)	EA	5		
7C-81	171	Removal of Surplus Bridge Excavation	CY	364		
7C-81	172	Removal of Surplus Embankment Excavation	CY	1,300		
7C-81	173	Removal of Surplus Roadway Excavation	CY	250		
7C-81	174	Remove Existing Sheet Piling	LF	90		
7C-81	175	Temporary Sheet Piling	LF	460		
7C-81	176	Geotextile Fabric Class B1	SQYD	350		
7C-81	177	Bridge Excavation Dewatering	LS	Lump Sum		
7C-81	178	Sediment Basin	EA	2		
7C-81	179	Temporary Access Roadway Imported Borrow	CY	1000		
7C-81	180	Temporary Access Roadway Aggregate Class II Base	CY	120		
7C-81	181	Temporary Access Roadway Culverts 48-inch Diameter	LF	160		
7C-81	182	Temporary Access Roadway Geotextile Fabric Class B1	SQYD	450		
7C-81	183	Removal Temporary Access Roadway	LS	Lump Sum		
7C-81	184	Thermoplastic Traffic Strip (Sparyable)	LF	3,500		
7C-81	185	Inertial Profiler Certification	LS	Lump Sum		
7C-81	186	Willow Planting Areas	SQFT	2,800		
7C-81	187	Hydroseed Upland Areas	SQFT	89,290		
7C-81	188	Hydroseed Wetlands and Riparian Areas	SQFT	8,925		
7C-81	189	Construction Staking	LS	Lump Sum		
7C-81	190	Quality Assurance Testing for HMA	LS	Lump Sum		
7C-81	191	Mobilization	LS	Lump Sum		

SAMPLE NOT FOR BIDDING

SUB-TOTAL FOR 7C-81 BID AMOUNT: $_____

TOTAL FOR 7C-12 & 7C-81 BID AMOUNT: $_____

SECTION A-1. GENERAL REQUIREMENTS

The work embraced herein shall conform with the current building codes and the provisions in the Standard Specifications 2018 and Standard Plans 2018, the constructions plans, and these special provisions. In case of a conflict between the Standard specifications and these special provisions, the special provisions shall take precedence over and shall be used in lieu of the conflicting portions.

The project is funded by HBRR Funds. Contractor shall comply with all requirements for HBRR Programs and the Contractor shall comply with all requirements for a Federal-Aid Construction Project.

SECTION A-2. PROPOSAL REQUIREMENTS AND CONDITIONS –BIDDING FORMS

A-2-1.01 General

The bidder's attention is directed to these Special Provisions for the requirements and conditions, which must be observed in the preparation of the proposal form and the submission of the bid.

The proposal form is contained within these Special Provisions together with the Notice to Contractor's and Contract. The form of the Bidder's Bond will be found following the signature page of the Proposal. This Bidder's Bond must be executed and submitted with the Proposal.

In accordance with Public Contract Code Section 7106, a Noncollusion Affidavit is included in the proposal. Signing the proposal shall also constitute signature of the Noncollusion Affidavit.

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A-2.1.02 Proposal Forms

The following forms shall be completed and included with the Contractor's Proposal.

- Proposal
- Bid Schedule (Bid Item List)
- Required Listing of Subcontractors
- Local Agency Bidder-DBE Commitment (Construction Contract)
- Local Agency Bidder DBE Information (Construction Contract)
- DBE Information – Good Faith Efforts
- Equal Employment Opportunity Certification
- Certification of Performance of Previous Contract
- Public Contract Code Section 10162 Questionnaire
- Public Contract Section 10232 Statement
- Non-Lobbying Certification for Federal-Aid Contracts
- Title 49 – Debarment and Suspension Certification
- Disclosure of Lobbying Activities
- Title 23, U. S. Code, Section 112 – Non-Collusion Affidavit
- Public Contract Code Section 10285.1 Statement
- Signature Sheet
- Bidder's Bond

(Because some colored inks will not reproduce in copy machines, please use black ink to complete this proposal.)

PROPOSAL TO THE COUNTY OF LASSEN
DEPARTMENT OF PUBLIC WORKS
CONTRACT NO. 122-06-7C12 & 122-06-7C81

Name of Bidder: _____

Business Address: _____

City, State, Zip: _____

Tel. No., Area Code: ( ) _____

Fax No. Area Code: ( ) _____

Contractor License No. _____

The work for which this proposal is submitted is for the construction in conformance with the special provisions (including the payment of not less than the State general prevailing wage rates, the project plans described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the 2018 California Department of Transportation Standard Plans, the 2018 Standard Specifications, the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, and the permits issued for this project.

The Special Provisions for the work to be done are dated April 2021 and are entitled:
COUNTY OF LASSEN, STATE OF CALIFORNIA, NOTICE TO CONTRACTORS, SPECIAL PROVISIONS, PROPOSAL AND CONTRACT FOR HACKSTAFF ROAD BRIDGES 7C-12 & 7C-81 REPLACEMENT PROJECT, LASSEN COUNTY.

The project plans for the work to be done were approved April 2021 and are entitled:
COUNTY OF LASSEN, DEPARTMENT OF PUBLIC WORKS
PROJECT PLANS FOR HACKSTAFF ROAD BRIDGES 7C-12 & 7C-81 REPLACEMENT PROJECT, COUNTY ROAD 322.

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Bids are to be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all items.

The bidder shall set forth for each unit basis item of work an item price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the item price bid on the basis of the estimated quantity for the item.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

(a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;

86 (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage wise the unit price or item total in the County of Lassen's Final Estimate of cost.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise, it the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid provided. Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollar and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the items total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the County of Lassen, and that discretion will be exercised in the manner deemed by the County of Lassen to best protect the public interest in the prompt and economical completion of the work. The decision of the County of Lassen respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract, furnish the bond in the sum required by the State Contract Act, with surety satisfactory to the County of Lassen and certificates of insurance that may be required, within 8 days, not including Sundays and legal holidays, after the bidder has received notice from the County that the contract has been awarded, the County of Lassen may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of such security accompanying this proposal shall operate and the same shall be the property of the County of Lassen.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans therein referred to; and he proposes, and agrees if this proposal is accepted, that he will contract with the County of Lassen in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefore the following item prices, to wit:

SAMPLE
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Exhibit 12-B Bidder's List of subcontractor (DBE and Non-DBE) Part 1

As of March 1, 2015 Contractors (and sub-contractors) wishing to bid on public works contracts shall be registered with the State Division of Industrial Relations and certified to bid on Public Works contracts. Please register at: https://efiling.dir.ca.gov/PWCR/ActionServlet?action=displayPWCRegistrationForm
In accordance with Title 49, Section 26.11 of the Code of Federal Regulations, and Section 4104 of the Public Contract Code of the State of California, as amended, the following information is required for each sub-contractor who will perform work amounting to more than one half of one percent (0.5%) of the Total Base Bid or $10,000 (whichever is greater). **Photocopy this form for additional firms.** Federal Project Number:

Subcontractor Name and Location	Line Item & Description	Subcontract Amount	Percentage of Bid Item Sub-contracted	Contractor License Number / DIR Reg Number	DBE (Y/N)	DBE Cert Number	Annual Gross Receipts
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.

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Exhibit 12-B: Bidder's List of subcontractor (DBE and Non-DBE) Part 2

In accordance with Title 49, Section 26 of the Code of Federal Regulations, the Bidder shall list all subcontractor who provide a quote or bid but were not selected to participate as a subcontractor on this project. Photocopy this form for additional firms.

Subcontractor Name and Location	Line Item & Description	Subcontract Amount	Percentage of Bid Item Sub-contracted	Contractor License Number / DIR Reg Number	DBE (Y/N)	DBE Cert Number	Annual Gross Receipts
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.
Name: City, State:							☐ <$1 million ☐ <$5 million ☐ <$10 million ☐ <$15 million Age of Firm: ___ yrs.

SAMPLE NOT FOR BIDDING

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THE BIDDER'S EXECUTION ON THE SIGNATURE PORTION OF THIS PROPOSAL SHALL ALSO CONSTITUTE AN ENDORSEMENT AND EXECUTION OF THOSE CERTIFICATIONS WHICH ARE A PART OF THIS PROPOSAL

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder, _____, proposed subcontractor, _____, hereby certifies that he has ____, has not ____, participated in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b) (1), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of $10,000 or under are exempt).

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contracts and subcontracts unless such contractors submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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PUBLIC CONTRACT CODE

PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has ___ , has not ___been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a checkmark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

SAMPLE
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PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

In accordance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes_____ No_____

If the answer is yes, explain the circumstances in the following space.

PUBLIC CONTRACT SECTION 10232 STATEMENT

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Noncollusion Affidavit
(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

To the COUNTY of LASSEN
DEPARTMENT OF PUBLIC WORKS.

In conformance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Noncollusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Noncollusion Affidavit.
Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, and manager:

83 Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;

84 Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;

85 Does not have a proposed debarment pending; and

86 Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

SAMPLE
NOT FOR BIDDING

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.
The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

NONLOBBYING CERTIFICATION
FOR FEDERAL-AID CONTRACTS

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(l) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such subrecipients shall certify and disclose accordingly.

SAMPLE
NOT FOR BIDDING

DISCLOSURE OF LOBBYING ACTIVITIES

COMPLETE THIS FORM TO DISCLOSE LOBBYING ACTIVITIES PURSUANT TO 31 U.S.C. 1352

1. Type of Federal Action:

☐ a. contract
b. grant
c. cooperative agreement
d. loan
e. loan guarantee
f. loan insurance

2. Status of Federal Action:

☐ a. bid/offer/application
b. initial award
c. post-award

3. Report Type:

☐ a. initial
b. material change

For Material Change Only:
year_____ quarter_____
date of last report _____

4. Name and Address of Reporting Entity

☐ Prime ☐ Subawardee
Tier _____ , if known

Congressional District, if known

5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:

Congressional District, if known

6. Federal Department/Agency:

7. Federal Program Name/Description:

CFDA Number, if applicable_____

8. Federal Action Number, if known:

9. Award Amount, if known:

10. a. Name and Address of Lobby Entity
(If individual, last name, first name, MI)

b. Individuals Performing Services (including address if different from No. 10a)
(last name, first name, MI)

(attach Continuation Sheet(s) if necessary)

11. Amount of Payment (check all that apply)

$ _____ ☐ actual planned

12. Form of Payment (check all that apply):

☐ a. cash
☐ b. in-kind; specify: nature _____
value _____

13. Type of Payment (check all that apply)

☐ a. retainer
☐ b. one-time fee
☐ c. commission
☐ d. contingent fee
☐ e deferred
☐ f. other, specify _____

14. Brief Description of Services Performed or to be performed and Date(s) of Service, including officer(s), employee(s), or member(s) contacted, for Payment Indicated in Item 11:

(attach Continuation Sheet(s) if necessary)

15. Continuation Sheet(s) attached: **Yes** ☐ **No** ☐

16. Information requested through this form is authorized by Title 31 U.S.C. Section 1352. This disclosure of lobbying reliance was placed by the tier above when his transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semiannually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature: _____

Print Name: _____

Title: _____

Telephone No.: _____ Date: _____

Federal Use Only:

Authorized for Local Reproduction
Standard Form - LLL

Standard Form LLL Rev. 09-12-97

SAMPLE NOT FOR BIDDING

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime federal recipient, at the initiation or receipt of covered federal action or a material change to previous filing pursuant to title 31 U.S.C. Section 1352. The filing of a form is required for such payment or agreement to make payment to lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress an officer or employee of Congress or an employee of a Member of Congress in connection with a covered federal action. Attach a continuation sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered federal action for which lobbying activity is and/or has been secured to influence, the outcome of a covered federal action.
2. Identify the status of the covered federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last, previously submitted report by this reporting entity for this covered federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the first tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in Item 4 checks "Subawardee" then enter the full name, address, city, State and zip code of the prime federal recipient. Include Congressional District, if known.
6. Enter the name of the federal agency making the award or loan commitment. Include at least one organization level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the federal program name or description for the covered federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
8. Enter the most appropriate federal identifying number available for the federal action identification in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract grant. or loan award number, the application/proposal control number assigned by the federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered federal action where there has been an award or loan commitment by the Federal agency, enter the federal amount of the award/loan commitments for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influenced the covered federal action.
    (b) Enter the full names of the individual(s) performing services and include full address if different from 10 (a). Enter Last Name, First Name and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed or will be expected to perform and the date(s) of any services rendered. Include all preparatory and related activity not just time spent in actual contact with federal officials. Identify the federal officer(s) or employee(s) contacted or the officer(s) employee(s) or Member(s) of Congress that were contacted.
15. Check whether or not a continuation sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name title and telephone number.

SAMPLE NOT FOR BIDDING

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

SF-LLL-Instructions Rev. 06-04-90«ENDIF»

Accompanying this proposal is _____

(Notice: INSERT THE WORDS "CASH ($_____)," "CASHIER'S CHECK, CERTIFIED CHECK," OR "BIDDER'S BOND," AS THE CASE MAY BE.)

in amount equal to at least ten percent (10%) of the total of the bid.

The name of all persons interested in the foregoing proposal as principals are as follows:

IMPORTANT NOTICE If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual copartners composing firm; if bidder or other interested person is an individual, state first and last names in full.

_____

_____

_____

_____

_____

_____

Licensed in conformance with an act providing for the registration of Contractors,

License No. _____ Classification(s) _____

ADDENDA

This Proposal is submitted with respect to the changes to the contract included in addendum number(s)

_____

_____

_____

_____

(Fill in addendum number(s) if addenda have been received and insert, in this Proposal, any Engineer's Estimate sheets that were received as part of the addenda.)

SAMPLE NOT FOR BIDDING

WARNING - If an addendum or addenda have been issued by the Department and not noted above as being received by the bidder, this Proposal may be rejected.

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Non-collusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; are true and correct.

Date: _____

SIGN _____

_____

HERE _____

Signature and Title of Bidder

Business Address: _____

Place of Business: _____

Place of Residence: _____

License Number: _____

COUNTY OF LASSEN
DEPARTMENT OF PUBLIC WORKS

BIDDER'S BOND

We, _____

_____ as Principal, and

_____ as Surety, are held and firmly bound unto the County of Lassen, State of California, hereafter referred to as "Obligee," in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal has submitted to the Obligee, for the Hackstaff Road Bridges 7C-12 & 7C-81 Bridges Replacement Project, Lassen County, for which bids are to be opened at 221 South Roop Street, Susanville, California on May 13, 2021.

NOW, THEREFORE, if the aforesaid Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the form prescribed, in conformance with the bid, and files the two bonds with the County, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials as provided by law, then this obligation shall be null and void; otherwise, it shall remain in full force and virtue.

In the event suit is brought upon this bond by the Obligee and judgement is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorney's fee to be fixed by the court.

Dated: _____

_____
_____
_____
Principal

_____
Surety
By: _____
Attorney-in-fact

SAMPLE NOT FOR BIDDING

CERTIFICATE OF ACKNOWLEDGEMENT

State of California
City/County _____ SS

On this_____day of _____in the year of _____ before me,_____,
personally appeared _____,
Attorney-in-fact
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this instrument as the attorney-in-fact of _____, and acknowledged to me that he (she) subscribed the name of the said company thereto as surety, and his (her) own name as attorney-in-fact.

(SEAL)

_____
Notary Public

Exhibit 15-G Construction Contract DBE Commitment

1. Local Agency: _____ 2. Contract DBE Goal: _____

3. Project Description: _____

4. Project Location: _____

5. Bidder's Name: _____ 6. Prime Certified DBE: ☐ 7. Bid Amount: _____

8. Total Dollar Amount for ALL Subcontractors: _____ 9. Total Number of ALL Subcontractors: _____

10. Bid Item Number	11. Description of Work, Service, or Materials Supplied	12. DBE Certification Number	13. DBE Contact Information (Must be certified on the date bids are opened)	14. DBE Dollar Amount

Local Agency to Complete this Section

21. Local Agency Contract Number: _____

22. Federal-Aid Project Number: _____

23. Bid Opening Date: _____

24. Contract Award Date: _____

Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.

25. Local Agency Representative's Signature _____ 26. Date _____

27. Local Agency Representative's Name _____ 28. Phone _____

29. Local Agency Representative's Title _____

15. TOTAL CLAIMED DBE PARTICIPATION

$ _____

_____ %

IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Names of the First Tier DBE Subcontractors and their respective item(s) of work listed above must be consistent, where applicable with the names and items of the work in the "Subcontractor List" submitted with your bid. Written confirmation of each listed DBE is required.

16. Preparer's Signature _____ 17. Date _____

18. Preparer's Name _____ 19. Phone _____

20. Preparer's Title _____

SAMPLE NOT FOR BIDDING

DISTRIBUTION: 1. Original – Local Agency
2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract. Include additional copy with award package.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

SAMPLE
NOT FOR BIDDING

INSTRUCTIONS – CONSTRUCTION CONTRACT DBE COMMITMENT

CONTRACTOR SECTION

1. Local Agency - Enter the name of the local or regional agency that is funding the contract.
2. Contract DBE Goal - Enter the contract DBE goal percentage as it appears on the project advertisement.
3. Project Location - Enter the project location as it appears on the project advertisement.
4. Project Description - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc).
5. Bidder's Name - Enter the contractor's firm name.
6. Prime Certified DBE - Check box if prime contractor is a certified DBE.
7. Bid Amount - Enter the total contract bid dollar amount for the prime contractor.
8. Total Dollar Amount for ALL Subcontractors – Enter the total dollar amount for all subcontracted contractors. SUM = (DBEs + all Non-DBEs). Do not include the prime contractor information in this count.
9. Total number of ALL subcontractors – Enter the total number of all subcontracted contractors. SUM = (DBEs + all Non-DBEs). Do not include the prime contractor information in this count.
10. Bid Item Number - Enter bid item number for work, services, or materials supplied to be provided.
11. Description of Work, Services, or Materials Supplied - Enter description of work, services, or materials to be provided. Indicate all work to be performed by DBEs including work performed by the prime contractor's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
12. DBE Certification Number - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened.
13. DBE Contact Information - Enter the name, address, and phone number of all DBE subcontracted contractors. Also, enter the prime contractor's name and phone number, if the prime is a DBE.
14. DBE Dollar Amount - Enter the subcontracted dollar amount of the work to be performed or service to be provided. Include the prime contractor if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.
15. Total Claimed DBE Participation - $: Enter the total dollar amounts entered in the "DBE Dollar Amount" column. %: Enter the total DBE participation claimed ("Total Claimed DBE Participation Dollars" divided by item "Bid Amount"). If the total % claimed is less than item "Contract DBE Goal," an adequately documented Good Faith Effort (GFE) is required (see Exhibit 15-H DBE Information - Good Faith Efforts of the LAPM).
16. Preparer's Signature - The person completing the DBE commitment form on behalf of the contractor's firm must sign their name.
17. Date - Enter the date the DBE commitment form is signed by the contractor's preparer.
18. Preparer's Name - Enter the name of the person preparing and signing the contractor's DBE commitment form.
19. Phone - Enter the area code and phone number of the person signing the contractor's DBE commitment form.
20. Preparer's Title - Enter the position/title of the person signing the contractor's DBE commitment form.

SAMPLE
NOT FOR BIDDING

LOCAL AGENCY SECTION

21. Local Agency Contract Number - Enter the Local Agency contract number or identifier.
22. Federal-Aid Project Number - Enter the Federal-Aid Project Number.
23. Bid Opening Date - Enter the date contract bids were opened.
24. Contract Award Date - Enter the date the contract was executed.
25. Local Agency Representative's Signature - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Contractor Section of this form is complete and accurate.
26. Date - Enter the date the DBE commitment form is signed by the Local Agency Representative.
27. Local Agency Representative's Name - Enter the name of the Local Agency Representative certifying the contractor's DBE commitment form.
28. Phone - Enter the area code and phone number of the person signing the contractor's DBE commitment form.
29. Local Agency Representative Title - Enter the position/title of the Local Agency Representative certifying the contractor's DBE commitment form.

DBE INFORMATION - GOOD FAITH EFFORTS

Federal-aid Project No. _____ Bid Opening Date _____

The _____(City/County of)_____established a Disadvantaged Business Enterprise (DBE) goal of _____% for this project. The information provided herein shows that a good faith effort was made.

Lowest, second lowest and third lowest bidders shall submit the following information to document adequate good faith efforts. Bidders should submit the following information even if the "Local Agency Bidder DBE Commitment" form indicates that the bidder has met the DBE goal. This will protect the bidder's eligibility for award of the contract if the administering agency determines that the bidder failed to meet the goal for various reasons, e.g., a DBE firm was not certified at bid opening, or the bidder made a mathematical error.

Submittal of only the "Local Agency Bidder DBE Commitment" form may not provide sufficient documentation to demonstrate that adequate good faith efforts were made.

The following items are listed in the Section entitled "Submission of DBE Commitment" of the Special Provisions:

51 The names and dates of each publication in which a request for DBE participation for this project was placed by the bidder (please attach copies of advertisements or proofs of publication):

Publications	Dates of Advertisement

SAMPLE NOT FOR BIDDING

B. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.):

Names of DBEs Solicited	Date of Initial Solicitation	Follow Up Methods and Dates

C. The items of work which the bidder made available to DBE firms including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to facilitate DBE participation was made available to DBE firms.

Items of Work	Bidder Normally Performs Item (Y/N)	Breakdown of Items	Amount ($)	Percentage Of Contract

D. The names, addresses and phone numbers of rejected DBE firms, the reasons for the bidder's rejection of the DBEs, the firms selected for that work (please attach copies of quotes from the firms involved), and the price difference for each DBE if the selected firm is not a DBE:

Names, addresses and phone numbers of rejected DBEs and the reasons for the bidder's rejection of the DBEs:

Names, addresses and phone numbers of firms selected for the work above:

SAMPLE
NOT FOR BIDDING

E. Efforts made to assist interested DBEs in obtaining bonding, lines of credit or insurance, and any technical assistance or information related to the plans, specifications and requirements for the work which was provided to DBEs:

F. Efforts made to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services, excluding supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate:

17 The names of agencies, organizations or groups contacted to provide assistance in contacting, recruiting and using DBE firms (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page download, etc.):

Name of Agency/Organization	Method/Date of Contact	Results

SAMPLE
NOT FOR BIDDING

18 Any additional data to support a demonstration of good faith efforts (use additional sheets if necessary):

NOTE: USE ADDITIONAL SHEETS OF PAPER IF NECESSARY.

Exhibit 17-O Disadvantaged Business Enterprises (DBE) Certification Status Change

1. Local Agency Contract Number	2. Federal-Aid Project Number	3. Local Agency	4. Contract Completion Date
5. Contractor/Consultant	6. Business Address		7. Final Contract Amount

8. Contract Item Number	9. DBE Contact Information	10. DBE Certification Number	11. Amount Paid While Certified	12. Certification/ Decertification Date (Letter Attached)	13. Comments

SAMPLE NOT FOR BIDDING

If there were no changes in the DBE certification of subcontractors/subconsultants, indicate on the form.

I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT			
14. Contractor/Consultant Representative's Signature	15. Contractor/Consultant Representative's Name	16. Phone	17. Date
I CERTIFY THAT THE CONTRACTING RECORDS AND ON-SITE PERFORMANCE OF THE DBE(S) HAS BEEN MONITORED			
18. Local Agency Representative's Signature	19. Local Agency Representative's Name	20. Phone	21. Date

DISTRIBUTION: Original – Local Agency, Copy – Caltrans District Local Assistance Engineer. Include with Final Report of Expenditures

ADA NOTICE: For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, Local Assistance Procedures Manual TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

INSTRUCTIONS –DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION STATUS CHANGE

1. Local Agency Contract Number - Enter the Local Agency contract number or identifier.
2. Federal-Aid Project Number - Enter the Federal-Aid Project Number.
3. Local Agency - Enter the name of the local or regional agency that is funding the contract.
4. Contract Completion Date - Enter the date the contract was completed.
5. Contractor/Consultant - Enter the contractor/consultant's firm name.
6. Business Address - Enter the contractor/consultant's business address.
7. Final Contract Amount - Enter the total final amount for the contract.
8. Contract Item Number - Enter contract item for work, services, or materials supplied provided. Not applicable for consultant contracts.
9. DBE Contact Information - Enter the name, address, and phone number of all DBE subcontracted contractors/consultants.
10. DBE Certification Number - Enter the DBE's Certification Identification Number.
11. Amount Paid While Certified - Enter the actual dollar value of the work performed by those subcontractors/subconsultants during the time period they are certified as a DBE.
12. Certification/Decertification Date (Letter Attached) - Enter either the date of the Decertification Letter sent out by the Office of Business and Economic Opportunity (OBEO) or the date of the Certification Certificate mailed out by OBEO.
13. Comments - If needed, provide any additional information in this section regarding any of the above certification status changes.
14. Contractor/Consultant Representative's Signature - The person completing the form on behalf of the contractor/consultant's firm must sign their name.
15. Contractor/Consultant Representative's Name - Enter the name of the person preparing and signing the form.
16. Phone - Enter the area code and telephone number of the person signing the form.
17. Date - Enter the date the form is signed by the contractor's preparer.
18. Local Agency Representative's Signature - A Local Agency Representative must sign their name to certify that the contracting records and on-site performance of the DBE(s) has been monitored.
19. Local Agency Representative's Name - Enter the name of the Local Agency Representative signing the form.
20. Phone - Enter the area code and telephone number of the person signing the form.
21. Date - Enter the date the form is signed by the Local Agency Representative.

SAMPLE NOT FOR BIDDING

Exhibit 17-F Final Report-Utilization of Disadvantaged Business Enterprises (DBE) and First-Tier Subcontractors

1. Local Agency Contract Number	2. Federal-Aid Project Number	3. Local Agency	4. Contract Completion Date
5. Contractor/Consultant	6. Business Address	7. Final Contract Amount	

8. Contract Item Number	9. Description of Work, Service, or Materials Supplied	10. Company Name and Business Address	11. DBE Certification Number	12. Contract Payments		13. Date Work Completed	14. Date of Final Payment
				Non-DBE	DBE		
15. ORIGINAL DBE COMMITMENT AMOUNT $ _____			16. TOTAL				

SAMPLE NOT FOR BIDDING

List all first-tier subcontractors/subconsultants and DBEs regardless of tier whether or not the firms were originally listed for goal credit. If actual DBE utilization (or item of work) was different than that approved at the time of award, provide comments on an additional page. List actual amount paid to each entity. If no subcontractors/subconsultants were used on the contract, indicate on the form.

I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT			
17. Contractor/Consultant Representative's Signature	18. Contractor/Consultant Representative's Name	19. Phone	20. Date
I CERTIFY THAT THE CONTRACTING RECORDS AND ON-SITE PERFORMANCE OF THE DBE(S) HAS BEEN MONITORED			
21. Local Agency Representative's Signature	22. Local Agency Representative's Name	23. Phone	24. Date

DISTRIBUTION: Original – Local Agency, Copy – Caltrans District Local Assistance Engineer. Include with Final Report of Expenditures

ADA NOTICE: For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, Local Assistance Procedures Manual TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

INSTRUCTIONS – FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE) AND FIRST-TIER SUBCONTRACTORS

1. Local Agency Contract Number - Enter the Local Agency contract number or identifier.
2. Federal-Aid Project Number - Enter the Federal-Aid Project Number.
3. Local Agency - Enter the name of the local or regional agency that is funding the contract.
4. Contract Completion Date - Enter the date the contract was completed.
5. Contractor/Consultant - Enter the contractor/consultant's firm name.
6. Business Address - Enter the contractor/consultant's business address.
7. Final Contract Amount - Enter the total final amount for the contract.
8. Contract Item Number - Enter contract item for work, services, or materials supplied provided. Not applicable for consultant contracts.
9. Description of Work, Services, or Materials Supplied - Enter description of work, services, or materials provided. Indicate all work to be performed by DBEs including work performed by the prime contractor/consultant's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
10. Company Name and Business Address - Enter the name, address, and phone number of all subcontracted contractors/consultants. Also, enter the prime contractor/consultant's name and phone number, if the prime is a DBE.
11. DBE Certification Number - Enter the DBE's Certification Identification Number. Leave blank if subcontractor is not a DBE.
12. Contract Payments - Enter the subcontracted dollar amount of the work performed or service provided. Include the prime contractor/consultant if the prime is a DBE. The Non-DBE column is used to enter the dollar value of work performed by firms that are not certified DBE or for work after a DBE becomes decertified.
13. Date Work Completed - Enter the date the subcontractor/subconsultant's item work was completed.
14. Date of Final Payment - Enter the date when the prime contractor/consultant made the final payment to the subcontractor/subconsultant for the portion of work listed as being completed.
15. Original DBE Commitment Amount - Enter the "Total Claimed DBE Participation Dollars" from Exhibits 15-G or 10-O2 for the contract.
16. Total - Enter the sum of the "Contract Payments" Non-DBE and DBE columns.
17. Contractor/Consultant Representative's Signature - The person completing the form on behalf of the contractor/consultant's firm must sign their name.
18. Contractor/Consultant Representative's Name - Enter the name of the person preparing and signing the form.
19. Phone - Enter the area code and telephone number of the person signing the form.
20. Date - Enter the date the form is signed by the contractor's preparer.
21. Local Agency Representative's Signature - A Local Agency Representative must sign their name to certify that the contracting records and on-site performance of the DBE(s) has been monitored.
22. Local Agency Representative's Name - Enter the name of the Local Agency Representative signing the form.
23. Phone - Enter the area code and telephone number of the person signing the form.
24. Date - Enter the date the form is signed by the Local Agency Representative.

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SECTION A-3. SAMPLE AGREEMENT

AGREEMENT BETWEEN LASSEN COUNTY
AND

THIS AGREEMENT is made between the COUNTY OF LASSEN, a political subdivision of the State of California (hereinafter "COUNTY"), and , a California Corporation with a principal place of business at (hereinafter "CONTRACTOR").

This Agreement is made with reference to the following facts and circumstances:

WHEREAS COUNTY needs to construct two new bridges, "Hackstaff Road Bridges 7C-12 & 7C-81 Bridges Replacement Project" using HBRRR funding, and

WHEREAS COUNTY desires to employ a Contractor to provide the services related to this project and,

WHEREAS CONTRACTOR is a qualified licensed Contractor in the State of California, license #_____, and desires to provide those services.

In consideration of the services to be rendered, the sums to be paid, and each and every covenant and condition contained herein, the parties hereto agree as follows:

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1. SERVICES.

The CONTRACTOR shall provide those services described in Attachment "A". CONTRACTOR shall provide said services at the time, place and in the manner specified in Attachment "A".

2. TERM.

The term of the agreement shall be per the provisions in Section 8-1.04, "Start of Job Site Activities," in Section 8-1.05, "Time," and Section 8-1.10, "Liquidated Damages," of the State of California, Department of Transportation, Standard Specifications 2018 and the Notice to Contractors, Proposal and Contract, Special Provisions for Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Lassen County dated April 2021.

The onsite job activities shall not begin before June 14, 2021 and no work will be conducted on the banks or channels of Long Valley Creek and its Overflow until June 15, 2021. The first working day shall be June 14, 2021 and shall diligently prosecute the same to completion before the expiration of

95 WORKING DAYS

beginning on the date that work begins.

In the event the CONTRACTOR does not complete the work within 95 working days as herein provided, for reasons or causes other than those provided for the Contract Documents hereof, COUNTY will be damaged. After considering such a breach and all aspects of the work, including, but not limited to, the type of installation, the current and future uses of facilities and premises, the disarrangement of the premises and facilities thereof during the work, and the additional cost and difficulty of using the disarranged facilities during the work, the parties agree that a reasonable daily damage for such a breach, if any, will be Six Thousand and Eight Hundred Dollars ($6.800) per day and the payment of the same, if any, is payment of liquidating damages and not a penalty. It is understood that this agreement for liquidated damages is entered into because the amount is manifestly reasonable under the circumstances existing at the time of this agreement and it would be extremely difficult or impossible to determine with any degree of accuracy the actual damages in case of any such breach. In case of such breach, it is agreed that the Owner may deduct the amount thereof from any money due or to become due said CONTRACTOR under this contract.

3. PAYMENT.

COUNTY shall pay CONTRACTOR for services rendered pursuant to this Agreement at the time and in the amount set forth in Attachment "B". The payment specified in Attachment "B" shall be the only payment made to CONTRACTOR for services rendered pursuant to this Agreement. CONTRACTOR shall submit all billing for said services to COUNTY in the manner specified in Attachment "B".

4. FACILITIES, EQUIPMENT AND OTHER MATERIALS AND OBLIGATIONS OF COUNTY.

CONTRACTOR shall, at its sole cost and expense, furnish all facilities, equipment, and other materials which may be required for furnishing services pursuant to this Agreement.

COUNTY shall:

4.1 Monitor CONTRACTOR's performance, expenditures and service levels for compliance with the terms of this Agreement.

4.2 Review all invoices submitted by CONTRACTOR for allowable costs and approve for payment as appropriate conditioned in the availability of state funds.

4.3 Retain ownership and have prompt access to any report, evaluations, preliminary findings, or data assembled/developed by CONTRACTOR under this Agreement.

5. ADDITIONAL PROVISIONS.

Those additional provisions unique to this Agreement are set forth in Attachment "C".

6. GENERAL PROVISIONS.

The general provisions set forth in Attachment "D" are part of this Agreement. Any inconsistency between said general provisions and any other terms or conditions of this

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Agreement shall be controlled by the other terms or conditions insofar as the latter are inconsistent with the general provisions.

7. DESIGNATED REPRESENTATIVES.

Pete Heimbigner, Director is the designated representative of the COUNTY and will administer this Agreement for the COUNTY. is the authorized representative for CONTRACTOR. Changes in the designated representatives shall occur only by advance written notice to the other party.

8. ATTACHMENTS.

All attachments referred to herein are attached hereto and by this reference incorporated herein. Attachments include:

Attachment A - Services
Attachment B - Payment
Attachment C - Additional Provisions
Attachment D - General Provisions
Attachment E – FHWA-1273 "Required Contract Provisions Federal-Aid Construction Projects"
Attachment F – Federal Wage Rates CA20210007 CA9
Attachment G – CONTRACTOR's Proposal (Bid Item List)

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates shown opposite their respective signatures.

CONTRACTOR

Contractor License #
DIR Registration Number:

Dated:_____ By:_____

COUNTY
County of Lassen

Dated: _____ By: _____
Pete Heimbigner
Director of Public Works

Approved as to form:

_____ Dated:_____
Lassen County Counsel

ATTACHMENT A

AGREEMENT BETWEEN LASSEN COUNTY AND

SCOPE OF SERVICES

12 **SCOPE OF SERVICES AND DUTIES.**

The services to be provided by CONTRACTOR and the scope of CONTRACTOR's duties include the following:

- Contractor shall furnish all materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the project described herein, unless otherwise stipulated in the Contract Documents, and to perform all services provided by this agreement as scheduled and, in addition, shall perform the following as scheduled.

A.1.1.1 The services in general, relate to the construction of two bridges and roadway as well as the removal of the two existing bridges, to be constructed to widths and lengths, and at the locations as shown on the plans as well as all other work which is required as per the Special Provisions entitled "County of Lassen, State of California, Notice to Contractors, Proposal and Contract, Special Provisions, for Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Lassen County," dated April 2021 and the project plans entitled "State of California, County of Lassen, Department of Public Works Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, dated April 2021, also to be supplemented by Caltrans Standard Specifications 2018, Caltrans Standard Plans 2018 and the 2014 Rev. 3 California Manual on Uniform Traffic Control Devices for Streets and Highways, bid opening date May 13, 2021.

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END OF ATTACHMENT "A"

ATTACHMENT B

AGREEMENT BETWEEN LASSEN COUNTY AND

PAYMENT

COUNTY shall pay CONTRACTOR as follows:

Compensation shall consist of the total bid price of $_____ per the Contractor's proposal for Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Lassen County.

The Contractor shall accept the compensation provided in the contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the work and for performing all work contemplated and embraced under the contract per the conditions in Section 9-1.03 "Payment Scope," State of California, Department of Transportation, Standard Specifications 2018.

Monthly payments (partial payments) may be made based upon approved estimates submitted by the Contractor detailing the total amount of work done and acceptable materials furnished during the billing period per the requirements in Section 9-1.16 "Progress Payments," of the State of California, Department of Transportation, Standard Specifications 2018. The estimates shall detail which bid items work was completed on as well as the quantity or percentage, depending on the unit of measurement of the bid item, of work completed per the Contractor' Proposal and Engineer's Estimate.

Monthly payments will be made within 30 days of an approved estimate.

The total cost shall not exceed the total bid price of $_____unless written authorization is issued by the COUNTY through approved Contract Change Orders per the requirements in Section 4-1.05 "Changes and Extra Work" of the State of California, Department of Transportation, Standard Specifications 2018.

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END OF ATTACHMENT "B"

ATTACHMENT C

AGREEMENT BETWEEN LASSEN COUNTY AND

ADDITIONAL PROVISIONS

Labor Code Requirements:

The Contractor shall comply with Labor Code Sections 1770 through 1780, inclusive. Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wage rates are available at the Lassen county Public Works Office, 707 Nevada Street, Suite 4, Susanville, California.

Future effective general prevailing wage rates, which have been predetermined, and are on file with the California Department of Industrial Relations, are referenced but not printed in the general prevailing wage rates.

Pursuant to Section 1773.2 of the Labor Code, General Prevailing Wage rates shall be posted by the Contractor at a prominent place at the site of the work.

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Contractor Registration with California Department of Industrial Relations (DIR): Labor Code Section 1771.1(a):

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public works, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

FHWA 1273 Required Contract Provisions Federal-Aid Construction Contracts:

The Contractor shall comply with FHWA-1273 "Required Contract Provisions Federal-Aid Construction Contracts" which are attached as Attachment E.

Contract Bonds:

The successful bidder (Contractor) shall procure and maintain at Contractor's expense the following bonds, in the amounts indicated per the provisions in Section 3-1.05 "Contract Bonds" of the State of California, Department of Transportation, Standard Specifications 2018 shall be amended to the following.

Payment Bond - 100 percent of the contract price
Performance Bond - 100 percent of the contract price

The bonds will not be accepted unless each conforms to its respective bond form included within the special provisions, and is properly filled out and executed. Additional bond forms may be obtained at the Office of the Department of Public Works of Lassen County, 707 Nevada Street, Suite 4, Susanville, California 96130.

The provider of the bonds will be required to submit to the County the following:

(1) A certificate from the clerk of the County in which the court or officer is located that the certificate of authority of the insurer has not been surrendered, revoked, cancelled, annulled, or suspended or, in the event that it has, that renewed authority has been granted.

(2) The Contractor shall supply or cause to be supplied to the County of Lassen those documents required by California Civil Procedures Section 995.660. Any bond submitted must be issued by an admitted surety insurer to which the Insurance Commissioner of California has issued a certificate of authority to transact surety insurance in this state, as defined in Section 105 of the Insurance Code.

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END OF ATTACHMENT "C"

ATTACHMENT D

AGREEMENT BETWEEN LASSEN COUNTY AND

GENERAL PROVISIONS

D.1. INDEPENDENT CONTRACTOR. For all purposes arising out of this Agreement, CONTRACTOR shall be: an independent contractor and CONTRACTOR and each and every employee, agent, servant, partner, and shareholder of CONTRACTOR (collectively referred to as "The Contractor") shall not be, for any purpose of this Agreement, an employee of COUNTY. Furthermore, this Agreement shall not under any circumstance be construed or considered to be a joint powers agreement as described in California Government Code sections 6000, et seq., or otherwise. As an independent contractor, the following shall apply:

D.1.1 CONTRACTOR shall determine the method, details and means of performing the services to be provided by CONTRACTOR as described in this Agreement.

D.1.2 CONTRACTOR shall be responsible to COUNTY only for the requirements and results specified by this Agreement and, except as specifically provided in this Agreement, shall not be subject to COUNTY's control with respect to the physical actions or activities of CONTRACTOR in fulfillment of the requirements of this Agreement.

D.1.3 CONTRACTOR shall be responsible for its own operating costs and expenses, property and income taxes, workers' compensation insurance and any other costs and expenses in connection with performance of services under this Agreement.

D.1.4 CONTRACTOR is not, and shall not be, entitled to receive from or through COUNTY, and COUNTY shall not provide or be obligated to provide the CONTRACTOR with workers' compensation coverage, unemployment insurance coverage or any other type of employee or worker insurance or benefit coverage required or provided by any federal, state or local law or regulation for, or normally afforded to, any employee of COUNTY

D.1.5 The CONTRACTOR shall not be entitled to have COUNTY withhold or pay, and COUNTY shall not withhold or pay, on behalf of the CONTRACTOR any tax or money relating to the Social Security Old Age Pension Program, Social Security Disability Program or any other type of pension, annuity or disability program required or provided by any federal, state or local law or regulation for, or normally afforded to, an employee of COUNTY.

D.1 .6 The CONTRACTOR shall not be entitled to participate in, or receive any benefit from, or make any claim against any COUNTY fringe benefit program including, but not limited to, COUNTY's pension plan, medical and health care plan, dental plan, life insurance plan, or other type of benefit program, plan or coverage designated for, provided to, or offered to COUNTY's employees.

D.1 .7 COUNTY shall not withhold or pay on behalf of CONTRACTOR any federal, state or local tax including, but not limited to, any personal income tax owed by CONTRACTOR.

D.1 .8. The CONTRACTOR is, and at all times during the term of this Agreement shall represent and conduct itself as, an independent contractor and not as an employee of COUNTY.

D.1.9 CONTRACTOR shall not have the authority, express or implied, to act on behalf of, bind or obligate the COUNTY any way without the written consent of the COUNTY.

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D.2 LICENSES, PERMITS, ETC. CONTRACTOR represents and warrants to COUNTY that it has all licenses, permits, qualifications, and approvals of whatsoever nature which are legally required for CONTRACTOR to practice its profession. CONTRACTOR represents and warrants to COUNTY that CONTRACTOR shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits, and approvals which are legally required for CONTRACTOR to practice its profession at the time the services are performed.

D.3 CHANGE IN STATUTES OR REGULATIONS. If there is a change of statutes or regulations applicable to the subject matter of this Agreement, both parties agree to be governed by the new provisions, unless either party gives notice to terminate pursuant to the terms of this Agreement.

D.4 TIME. CONTRACTOR shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary for the satisfactory performance of CONTRACTOR's obligations pursuant to this Agreement. Neither party shall be considered in default of this Agreement to the extent performance is prevented or delayed by any cause, present or future, which is beyond the reasonable control of the party.

D.5 INSURANCE.

D.5.1 Prior to rendering services provided by the terms and conditions of this Agreement, CONTRACTOR shall acquire and maintain during the term of this Agreement insurance coverage (hereinafter referred to as "the insurance") through and with an insurer acceptable to COUNTY. The insurance shall contain the following coverages:

D.5.1.1 Comprehensive general liability insurance including comprehensive public liability insurance with minimum coverage of One Million Dollars ($1,000,000) per occurrence and with not less than Two Million Dollars ($2,000,000) aggregate and a Ten Million Dollars ($10,000,000) Umbrella or excess liability coverage; CONTRACTOR shall insure both COUNTY and CONTRACTOR against any liability arising under or related to this Agreement.

D.5.1.2 Comprehensive automobile liability insurance with minimum coverage of One Million Thousand Dollars ($1,000,000) per occurrence and with not less than One Million Dollars ($1,000,000) on reserve in the aggregate, with combined single limit including owned, non-owned and hired vehicles.

D.5.1.3 Workers' Compensation Insurance coverage for all of CONTRACTOR's employees and other persons for whom CONTRACTOR is responsible to provide such insurance coverage, as provided by Division 4 and 4.5 of the California Labor Code.

D.5.2 The limits of insurance herein shall not limit the liability of the CONTRACTOR hereunder.

D.5.3 In respect to any insurance herein, if the aggregate limit available becomes less than that required above, other excess insurance shall be acquired and maintained immediately. For the purpose of any insurance term of this Agreement, "aggregate limit available" is defined as the total policy limits available for all claims made during the policy period.

D.5.4 Except for automobile liability insurance, the insurance shall name the COUNTY and COUNTY's officers, employees, agents and independent contractors as additional insureds and shall include an endorsement that no cancellation or material change adversely affecting any coverage provided by the insurance may be made until twenty (20) days after written notice is delivered to COUNTY.

D.5.5 The insurance policy forms, endorsements and insurer(s) issuing the insurance shall be

SAMPLE NOT FOR BIDDING

satisfactory to COUNTY at its sole and absolute discretion. The amount of any deductible payable by the insured shall be subject to the prior approval of the COUNTY and the COUNTY, as a condition of its approval, may require such proof of the adequacy of CONTRACTOR's financial resources as it may see fit.

D.5.6 Prior to CONTRACTOR rendering services provided by this Agreement, and immediately upon acquiring additional insurance, CONTRACTOR shall deliver a certificate of insurance describing the insurance coverages and endorsements to:

Pete Heimbigner
Lassen County Public Works Department
707 Nevada St, Suite 4
Susanville, CA 96130

Upon COUNTY's request, CONTRACTOR shall deliver certified copies of any insurance policies to COUNTY.

D.5.7 CONTRACTOR shall not render services under the terms and conditions of this Agreement unless each type of insurance coverage and endorsement is in effect and CONTRACTOR has delivered the certificate(s) of insurance to COUNTY as previously described. If CONTRACTOR shall fail to procure and maintain said insurance, COUNTY may, but shall not be required to, procure and maintain the same, and the premiums of such insurance shall be paid by CONTRACTOR to COUNTY upon demand. The policies of insurance provided herein which are to be provided by CONTRACTOR shall be for a period of not less than one year, it being understood and agreed that twenty (20) days prior to the expiration of any policy of insurance, CONTRACTOR will deliver to COUNTY a renewal or new policy to take the place of the policy expiring.

D.5.8 COUNTY shall have the right to request such further coverages and/or endorsements on the insurance as COUNTY deems necessary, at CONTRACTOR's expense. The amounts, insurance policy forms, endorsements and insurer(s) issuing the insurance shall be satisfactory to COUNTY in its sole and absolute discretion.

D.5.9 Any subcontractor(s), independent contractor(s) or any type of agent(s) performing or hired to perform any term or condition of this Agreement on behalf of CONTRACTOR, as may be allowed by this Agreement (hereinafter referred to as the "SECONDARY PARTIES"), shall comply with each term and condition of this Section D.5 entitled "INSURANCE". Furthermore, CONTRACTOR shall be responsible for the SECONDARY PARTIES' acts and satisfactory performance of the terms and conditions of this Agreement.

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D.6 INDEMNITY.

County shall not be liable for, and CONTRACTOR shall defend and indemnify COUNTY and its officers, agents, employees and volunteers (collectively 'County Parties'), against any and all claims, deductibles, self-insured retentions, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs (hereinafter collectively referred to as ('Claims"), which arise out of or are in any way connected to the work covered by this Agreement arising either directly or indirectly from any act, error, omission or negligence of CONTRACTOR or its officers, employees, agents, contractors, licensees or servants, including, without limitation, claims caused by the concurrent negligent act, error or omission, of County Parties. However, CONTRACTOR shall have no obligation to defend or indemnify County Parties against claims caused by the active negligence, sole negligence or willful misconduct of County Parties.

D.7 CONTRACTOR NOT AGENT. Except as COUNTY may specify in writing, CONTRACTOR shall have no authority, express or implied, to act on behalf of COUNTY in any capacity whatsoever as an agent. CONTRACTOR shall have no authority, express or implied, pursuant to this Agreement to bind COUNTY to any obligation whatsoever.

D.8 ASSIGNMENT PROHIBITED. CONTRACTOR may not assign any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no legal effect.

D.9 PERSONNEL. CONTRACTOR shall assign only competent personnel to perform services pursuant to this Agreement. In the event that COUNTY, in its sole discretion at any time during the term of this Agreement, desires the removal of any person or persons assigned by CONTRACTOR to perform services pursuant to this Agreement, CONTRACTOR shall remove any such person immediately upon receiving written notice from COUNTY of its desire for removal of such person or persons.

D.10 STANDARD OF PERFORMANCE. CONTRACTOR shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the profession in which CONTRACTOR is engaged. All products of whatsoever nature which CONTRACTOR delivers to COUNTY pursuant to this Agreement shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession.

D.11 POSSESSORY INTEREST. The parties to this Agreement recognize that certain rights to property may create a "possessory interest", as those words are used in the California Revenue and Taxation Code section 107. For all purposes of compliance by COUNTY with Section 107.6 of the California Revenue and Taxation Code, this recital shall be deemed full compliance by the COUNTY. All questions of initial determination of possessory interest and valuation of such interest, if any, shall be the responsibility of the County Assessor and the contracting parties hereto. A taxable possessory interest may be created by this, if created, and the party in whom such an interest is vested will be subject to the payment of property taxes levied on such an interest.

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D.12 TAXES. CONTRACTOR hereby grants to the COUNTY the authority to deduct from any payments to CONTRACTOR any COUNTY imposed taxes, fines, penalties and related charges which are delinquent at the time such payments under this Agreement are due to CONTRACTOR.

D.13 TERMINATION.

D.13.1 COUNTY shall have the right to terminate this Agreement at any time by giving notice in writing of such termination to CONTRACTOR. In the event COUNTY gives notice of termination, CONTRACTOR shall immediately cease rendering service upon receipt of such written notice and the following shall apply:

D.13.1.1 CONTRACTOR shall deliver to COUNTY copies of all writings prepared by it pursuant this agreement. The term "writings" shall be construed to mean and include: handwriting, typewriting, printing, photocopying, photographing computer storage medium (tapes, disks, diskettes, etc.) and every other means of recording upon any tangible thing, and form of communication or representation, including letters, pictures, sounds, or symbols, or combinations thereof.

D.13.1.2 COUNTY shall pay CONTRACTOR the reasonable value of services rendered by CONTRACTOR to the date of termination pursuant to this Agreement not to exceed the amount documented by CONTRACTOR and approved by COUNTY as work accomplished to date; provided, however, that in no event shall any payment hereunder exceed Dollars **($)**. Further provided, however, COUNTY shall not in any manner be liable for lost profits which might have been made by CONTRACTOR had

CONTRACTOR completed the services required by this Agreement. In this regard, CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of the COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of the COUNTY shall be final. The foregoing is cumulative and does not affect any right or remedy which COUNTY may have in law or equity.

D.13.2 CONTRACTOR may terminate its services under this Agreement upon thirty (30) working days written notice to the COUNTY, without liability for damages, if CONTRACTOR is not compensated according to the provisions of the Agreement or upon any other material breach of the Agreement by COUNTY, provided that CONTRACTOR has first provided COUNTY with a written notice of any alleged breach, specifying the nature of the alleged breach and providing not less than ten (10) working days within which the COUNTY may cure the alleged breach.

D.14 OWNERSHIP OF INFORMATION. All professional and technical information developed under this Agreement and all work sheets, reports, and related data shall become and/or remain the property of COUNTY, and CONTRACTOR agrees to deliver reproducible copies of such documents to COUNTY on completion of the services hereunder. The COUNTY agrees to indemnify and hold CONTRACTOR harmless from any claim arising out of reuse of the information for other than this project.

D.15 WAIVER. A waiver by any party of any breach of any term, covenant or condition herein contained or a waiver of any right or remedy of such party available hereunder at law or in equity shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant or condition herein contained or of any continued or subsequent right to the same right or remedy. No party shall be deemed to have made any such waiver unless it is in writing and signed by the party so waiving.

D.16 COMPLETENESS OF INSTRUMENT. This Agreement, together with its specific references and attachments, constitutes all of the agreements, understandings, representations, conditions, warranties and covenants made by and between the parties hereto. Unless set forth herein, neither party shall be liable for any representations made, express or implied.

D.17 SUPERSEDES PRIOR AGREEMENTS. It is the intention of the parties hereto that this Agreement shall supersede any prior agreements, discussions, commitments, representations, or agreements, written or oral, between the parties hereto.

D.18 ATTORNEY'S FEES. If any action at law or in equity, including an action for declaratory relief, is brought to enforce or interpret provisions of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, which may be set by the Court in the same action or in a separate action brought for that purpose, in addition to any other relief to which such party may be entitled.

D.19 MINOR AUDITOR REVISION. In the event the Lassen County Auditor's office finds a mathematical discrepancy between the terms of the Agreement and actual invoices or payments, provided that such discrepancy does not exceed one percent (1%) of the Agreement amount, the Auditor's office may make the adjustment in any payment or payments without requiring an amendment to the Agreement to provide for such adjustment. Should the COUNTY or the CONTRACTOR disagree with such adjustment, they reserve the right to contest such adjustment and/or to request corrective amendment.

D.20 CAPTIONS. The captions of this Agreement are for convenience in reference only and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

D.21 DEFINITIONS. Unless otherwise provided in this Agreement, or unless the context otherwise requires, the following definitions and rules of construction shall apply herein.

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D.21.1 Number and Gender. In this Agreement, the neuter gender includes the feminine and masculine, the singular includes the plural, and the word "person" includes corporations, partnerships, firms or associations, wherever the context so requires.

D.21.2 Mandatory and Permissive. "Shall" and "will" and "agrees" are mandatory. "May" is permissive.

D.22 TERM INCLUDES EXTENSIONS. All references to the term of this Agreement or the Agreement Term shall include any extensions of such term.

D.23 SUCCESSORS AND ASSIGNS. All representations, covenants and warranties specifically set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

D.24 MODIFICATION. No modification or waiver of any provisions of this Agreement or its attachments shall be effective unless such waiver or modification shall be in writing, signed by all parties, and then shall be effective only for the period and on the condition, and for the specific instance for which given.

D.25 COUNTERPARTS. This Agreement may be executed simultaneously and in several counterparts, each of which shall be deemed an original, but which together shall constitute one and the same instrument.

D.26 OTHER DOCUMENTS. The parties agree that they shall cooperate in good faith to accomplish the object of this Agreement and, to that end, agree to execute and deliver such other and further instruments and documents as may be necessary and convenient to the fulfillment of these purposes.

D.27 PARTIAL INVALIDITY. If any term, covenant, condition or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provision and/or provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

D.28 VENUE. It is agreed by the parties hereto that unless otherwise expressly waived by them, any action brought to enforce any of the provisions hereof or for declaratory relief hereunder shall be filed and remain in a court of competent jurisdiction in the County of Lassen, State of California.

D.29 CONTROLLING LAW. The validity, interpretation and performance of this Agreement shall be controlled by and construed under the laws of the State of California.

D.30 CALIFORNIA TORT CLAIMS ACT. Notwithstanding any term or condition of the Agreement, the provisions, and related provisions, of the California Tort Claims Act, Division 3.6 of the Government Code, are not waived by COUNTY and shall apply to any claim against COUNTY arising out of any acts or conduct under the terms and conditions of this Agreement.

D.31 TIME IS OF THE ESSENCE. Time is of the essence of this Agreement and each covenant and term herein.

D.32 AUTHORITY. All parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, estates or firms represented or purported to be represented by such entity(s), person(s), estate(s) or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement are in full compliance. Further, by entering into this Agreement, neither party hereto shall have breached the terms or conditions of any other contract or agreement to which such party is obligated, which such breach would have a material effect hereon.

D.33 CORPORATE AUTHORITY. If CONTRACTOR is a corporation or public agency, each individual executing this Agreement on behalf of said corporation or public agency represents and warrants that he or she is duly authorized to execute and deliver this Agreement on behalf of said corporation, in accordance with a duly adopted resolution of the Board of Directors of said corporation or in accordance with the bylaws

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of said corporation or Board or Commission of said public agency, and that this Agreement is binding upon said corporation or public entity in accordance with its terms. If CONTRACTOR is a corporation, CONTRACTOR shall, within thirty (30) days after execution of this Agreement, deliver to COUNTY a certified copy of a resolution of the Board of Directors of said corporation authorizing or ratifying the execution of this Agreement.

D.34 CONFLICT OF INTEREST.

D.34.1 Legal Compliance. CONTRACTOR agrees at all times in performance of this Agreement to comply with the law of the State of California regarding conflicts of interest, including, but not limited to, Article 4 of Chapter 1, Division 4, Title 1 of the California Government Code, commencing with Section 1090 and Chapter 7 of Title 9 of said Code, commencing with Section 87100, including regulations promulgated by the California Fair Political Practices Commission.

D.34.2 Advisement. CONTRACTOR agrees that if any facts come to its attention which raise any questions as to the applicability of this law, it will immediately inform the COUNTY designated representative and provide all information needed for resolution of the question.

D.34.3 Admonition. Without limitation of the covenants in subparagraphs D.34.1 and D.34.2, CONTRACTOR is admonished hereby as follows:

> The statutes, regulations and laws referenced in this provision D.34 include, but are not limited to, a prohibition against any public officer, including CONTRACTOR for this purpose, from making any decision on behalf of COUNTY in which such officer has a direct or indirect financial interest. A violation occurs if the public officer influences or participates in any COUNTY decision which has the potential to confer any pecuniary benefit on CONTRACTOR or any business firm in which CONTRACTOR has an interest of any type, with certain narrow exceptions.

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D.35 NONDISCRIMINATION. During the performance of this Agreement, CONTRACTOR shall not unlawfully discriminate against any employee of the CONTRACTOR or of the COUNTY or applicant for employment or for services or any member of the public because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age or sex. CONTRACTOR shall ensure that in the provision of services under this Agreement, its employees and applicants for employment and any member of the public are free from such discrimination. CONTRACTOR shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.). The applicable regulations of the Fair Employment Housing Commission implementing Government Code Section 12900, set forth in Chapter 5, Division 4 of Title 2 of the California Code of Regulations are incorporated into this Agreement by reference and made a part hereof as if set forth in full. CONTRACTOR shall also abide by the Federal Civil Rights Act of 1964 and all amendments thereto, and all administrative rules and regulation issued pursuant to said Act CONTRACTOR shall give written notice of its obligations under this clause to any labor agreement. CONTRACTOR shall include the non-discrimination and compliance provision of this paragraph in all subcontracts to perform work under this Agreement.

D.36 JOINT AND SEVERAL LIABILITY. If any party consists of more than one person or entity, the liability of each person or entity signing this Agreement shall be joint and several.

D.37 TAXPAYER I.D. NUMBER. The COUNTY shall not disburse any payments to CONTRACTOR pursuant to this Agreement until CONTRACTOR supplies the latter's Taxpayer Identification Number or Social Security Number by providing COUNTY with a completed IRS Form W-9.

D.38 NOTICES. All notices and demands of any kind which either party may require or desire to serve on the other in connection with this Agreement must be served in writing either by personal service or by registered or certified mail, return receipt requested, and shall be deposited in the United States Mail, with postage thereon fully prepaid, and addressed to the party so to be served as follows:

If to "COUNTY":

Pete Heimbigner, Director
Lassen County Public Works
707 Nevada Street, Suite 4
Susanville, CA 96130

If to "CONTRACTOR":

END OF ATTACHMENT D.

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ATTACHMENT E

AGREEMENT BETWEEN LASSEN COUNTY

AND

FHWA – 1273

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

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REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

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I. General
II. Nondiscrimination
III. No segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Compliance with Government wide Suspension and Debarment Requirements
XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

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2. EEO Officer: The contractor will designate and make known to the contracting officers and EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting and active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

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7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

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IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

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2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

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4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

SAMPLE NOT FOR BIDDING

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

SAMPLE NOT FOR BIDDING

(1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the

Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

SAMPLE NOT FOR BIDDING

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

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transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website

(https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and normally possessed by a prudent person in the ordinary course of business dealings.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3.The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which

exceed information of participant is not required to exceed that which is $100,000 and that all such recipients shall certify and disclose accordingly.

SAMPLE
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ATTACHMENT F

AGREEMENT BETWEEN LASSEN COUNTY

AND

FEDERAL WAGE RATES
CA20210007 CA9

SAMPLE
NOT FOR BIDDING

ATTACHMENT G

AGREEMENT BETWEEN LASSEN COUNTY

AND

SAMPLE
NOT FOR BIDDING

BID ITEM LIST

COUNTY OF LASSEN

DEPARTMENT OF PUBLIC WORKS

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____

_____as Principal (Contractor), and _____, as Surety (Surety), are held and firmly bound unto the County of Lassen, (Owner), in the sum of (100%) of the contract amount _____ Dollars, $(_____) for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such that whereas the Principal entered into a certain contract, hereunto attached, with the Owner, dated _____, for the Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Lassen County.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extension thereof that may be granted by the Owner, with or without notice to the Surety and during the life of any guarantee required under the contract and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, then this obligation to be void, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, 20___, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Name of Principal:_____

Type of Organization:_____

By:_____ Title:_____

By:_____ Title:_____

Address:_____

(If corporation, affix seal)

Name of Surety:_____

Address:_____

By:_____ Title:_____

(Affix corporate seal)

SAMPLE NOT FOR BIDDING

(Attach acknowledgement of signature of Surety. This bond must be recorded.)

COUNTY OF LASSEN
DEPARTMENT OF PUBLIC WORKS

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that _____, as Principal, and under the laws of the State of _____, and duly authorized to execute bonds and undertakings under the laws of the State of California as sole Surety, as Surety, their heirs, administrators, successors, and assigns are held and firmly bound jointly and severally unto the County of Lassen, State of California, in the sum of (100%) of the contract amount _____ Dollars ($_____), lawful money of the United States, and unto any and all material, men, persons, companies, or corporations furnished materials, provisions, provender, or other supplies used in, upon, for, or about the performance of the work contrasted to be executed or performed under the contract hereinafter mentioned, including any and all duly authorized modifications of said contract that may hereafter be made and all persons, companies, or corporations renting or hiring teams or implements or machinery for or contributing to said work to be done and all persons, companies, or corporations renting or hiring teams or implements or machinery for or contributing to said work to be done and all persons entitled to file claims under Section 3181 of the Civil Code or their assign, for the payment of their claims in a total sum not exceeding $_____.

THE CONDITION of the forgoing obligation is that whereas the said Principal has entered into a contract dated _____with the County of Lassen to perform in accordance with the specifications for the Hackstaff Road Bridges 7C-12 & 7C-81 Bridges Replacement Project, Lassen County. **NOW THEREFORE,** if the above-bound Principal, Contractor, person, company, or corporation or his or its subcontractor fails to pay any of the persons named in Section 3181 of the Civil Code for any materials, provisions, provender, or other supplied equipment or teams used in, upon, for, or about the performance of the work contracted to be done or for any work or labor done thereon of any kind or for any amounts due under the Unemployment Insurance Code with respect to such work or such work or labor, performed by sandy such claimant, of for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board form the wages of employees of the contractor and his subcontractors pursuant to Division Two, Part 10, Chapter 19 of the Revenue and Taxation Code, with respect to such work and labor, the surety on this bond will pay for the same in an amount not exceeding the specified in this bond and also in case suit is brought upon this bond, a reasonable attorney's fee to be fixed b the court, said attorney's fee to be taxed as costs in said suit and to be included in the judgment herein rendered.

The said surety, for value received hereby stipulates and agrees that no charge, extension of time, alteration, or addition to the terms of the contract or the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does herby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the work or to the specifications and further that not final settlement between the County of Lassen and the Principal shall abridge the right of any beneficiary hereunder, whose claims may be unsatisfied.

This bond is executed and filed to comply with the provisions of Section 3247 to 3252, inclusive, of the Civil Code of the State of California.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument on this _____ day of _____, the corporate seal of each corporate party being affixed and these presents duly signed by its governing body.

Name of Principal:_____

Type of Organization:_____

By:_____ Title:_____

By:_____ Title:_____

Address:_____
(If corporation, affix corporate seal)

Name of Surety:_____

Address:_____

By:_____ Title:_____

(Affix corporate seal)

(Attach acknowledge of signature of Surety. This bond must be recorded.)

SAMPLE
NOT FOR BIDDING

NOTICE OF AWARD

To:_____

_____

_____

Project Description: Hackstaff Road Bridges 7C-12 & 7C-81 Bridges Replacement Project, Lassen County. The construction of two new bridges with a new roadway and the removal of the two existing bridges and other improvements, to be constructed to widths and lengths, and at the locations as shown on the construction plans.

The County has considered the Bid submitted by you for the above described Work in response to its Notice Inviting Sealed Bids dated May 13, 2021 and Information for Bidders.

You are hereby notified that you have been selected as the Contractor to complete the Hackstaff Road Bridges 7C-12 & 7C-81 Bridges Replacement Project for items in the amount of _____, or as shown in the Bid.

You are required by the Information for Bidders to execute the Agreement and furnish the required Contractor's Performance Bond, Payment Bond and Certificates of Insurance within ten (10) days from the date this Notice is delivered to you.

If you fail to execute said Agreement and to furnish said Bonds within ten (10) days from the date of this Notice, County will be entitled to consider all your rights arising from the County's acceptance of your Bid as abandoned and as a forfeiture of your Bid Bond. The County will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the County.

Dated this _____ day of _____.

By: _____

Title:_____

Date:_____

SAMPLE
NOT FOR BIDDING

ACCEPTANCE OF NOTICE OF AWARD

Receipt of the attached Notice of Award is hereby acknowledged by

This, the _____ day of _____.

By:_____

Title:_____

NOTICE TO PROCEED

To:_____ Date:_____

_____ Project: Hackstaff Road Bridges 7C-12 & 7C-81 Bridges Replacement Project

_____

You are hereby notified to commence onsite work activities in accordance with the Agreement dated _____, on June 14, 2021 which will be the first Working Day and you are to complete the onsite work activities within **95** Working Days thereafter.

The date of completion of all onsite work activities is therefore October 28, 2021.

You are required to return an acknowledged copy of this Notice to Proceed to the County.

LASSEN COUNTY

By:_____

Title:_____

SAMPLE
NOT FOR BIDDING

ACCEPTANCE OF NOTICE TO PROCEED

Receipt of the above Notice to Proceed is hereby acknowledged by

This the_____day of _____.

By:_____

Title:_____

EXHIBIT 12-G REQUIRED FEDERAL-AID CONTRACT LANGUAGE

(For Local Assistance Construction Projects)

The following language must be incorporated into all Local Assistance Federal-aid construction contracts. The following language, with minor edits, was taken from the Code of Federal Regulations.

Maintain records and submit reports documenting your performance under this section

1. DISADVANTAGED BUSINESS ENTERPRISES (DBE)

The contractor, subrecipient or subcontractor shall take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26). To ensure equal participation of DBEs provided in 49 CFR 26.5, the Agency shows a contract goal for DBEs. The prime contractor shall make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

The prime contractor shall meet the DBE goal shown elsewhere in these special provisions or demonstrate that they made adequate good faith efforts to meet this goal.

It is the prime contractor's responsibility to verify that the DBE firm is certified as DBE at date of bid opening and document the record by printing out the California Unified Certification Program (CUCP) data for each DBE firm. A list of DBEs certified by the CUCP can be found here.

All DBE participation will count toward the California Department of Transportation's federally mandated statewide overall DBE goal.

Credit for materials or supplies the prime contractor purchases from DBEs counts towards the goal in the following manner:

- 100 percent counts if the materials or supplies are obtained from a DBEmanufacturer.
- 60 percent counts if the materials or supplies are obtained from a DBE regular dealer.
- Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a DBE that is neither a manufacturer nor regular dealer. 49CFR 26.55 defines "manufacturer" and "regular dealer."

The prime contractor receives credit towards the goal if they employ a DBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55(d)(1) as follows:

- The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
- The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- The DBE receives credit for the total value of the transportation services it provides on the Contract using trucks it owns, insures, and operates using drivers itemploys.
- The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the Contract.
- The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.
- A lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

SAMPLE NOT FOR BIDDING

1. **Nondiscrimination Statement**

The contractor, subrecipient or subcontractor will never exclude any person from participation in, deny any person the benefits of, or otherwise discriminate against anyone in connection with the award and performance of any contract covered by 49 CFR 26 on the basis of race, color, sex, or national origin. In administering the Local Agency components of the DBE Program Plan, the contractor, subrecipient or subcontractor will not, directly, or through contractual or other arrangements, use criteria or methods of administration that have the effect of defeating or substantially impairing accomplishment of the objectives of the DBE Program Plan with respect to individuals of a particular race, color, sex, or national origin.

2. **Contract Assurance**

Under 49 CFR 26.13(b):

The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federal-aid contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- Withholding monthly progress payments;
    - Assessing sanctions;
    - Liquidated damages; and/or
    - Disqualifying the contractor from future bidding as non-responsible.

3. **Prompt Progress Payment**

The prime contractor or subcontractor shall pay to any subcontractor, not later than **seven days** after receipt of each progress payment, unless otherwise agreed to in writing, the respective amounts allowed the contractor on account of the work performed by the subcontractors, to the extent of each subcontractor's interest therein. In the event that there is a good faith dispute over all or any portion of the amount due on a progress payment from the prime contractor or subcontractor to a subcontractor, the prime contractor or subcontractor may withhold no more than 150 percent of the disputed amount. Any violation of this requirement shall constitute a cause for disciplinary action and shall subject the licensee to a penalty, payable to the subcontractor, of 2 percent of the amount due per month for every month that payment is not made.

In any action for the collection of funds wrongfully withheld, the prevailing party shall be entitled to his or her attorney's fees and costs. The sanctions authorized under this requirement shall be separate from, and in addition to, all other remedies, either civil, administrative, or criminal. This clause applies to both DBE and non-DBE subcontractors.

4. **Prompt Payment of Withheld Funds to Subcontractors**

The Agency may hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the Agency, of the contract work, and pay retainage to the prime contractor based on these acceptances. The Agency shall designate one of the methods below in the contract to ensure prompt and full payment of any retainage kept by the prime contractor or subcontractor to a subcontractor. The Agency shall include either Method 1, Method 2, or Method 3 below and delete the other two.

Method 1: No retainage will be held by the Agency from progress payments due to the prime contractor. Prime contractors and subcontractors are prohibited from holding retainage from subcontractors. Any delay or postponement of payment may take place only for good cause and with the Agency's prior written approval. Any violation of these provisions shall subject the violating contractor or subcontractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code and Section 10262 of the California Public Contract Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies, otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the contractor, deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Method 2: No retainage will be held by the Agency from progress payments due to the prime contractor. Any retainage kept by the prime contractor or by a subcontractor must be paid in full to the earning subcontractor within seven (7) days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment may take place only for good cause and with the Agency's prior written approval. Any violation of these provisions shall subject the violating contractor or subcontractor to the penalties, sanctions, and remedies specified in Section 7108.5

SAMPLE NOT FOR BIDDING

of the California Business and Professions Code and Section 10262 of the California Public Contract Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies, otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the contractor, deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Method 3: The Agency shall hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the Agency of the contract work and pay retainage to the prime contractor based on these acceptances. The prime contractor or subcontractor shall return all monies withheld in retention from all subcontractors within seven (7) days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the Agency. Any delay or postponement of payment may take place only for good cause and with the Agency's prior written approval. Any violation of these provisions shall subject the violating prime contractor or subcontractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code and Section 10262 of the California Public Contract Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the contractor; deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Any violation of these provisions shall subject the violating prime contractor or subcontractor to the penalties, sanctions and other remedies specified therein. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

5. Termination and Substitution of DBE Subcontractors

The prime contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the Agency's written consent. The prime contractor shall not terminate or substitute a listed DBE for convenience and perform the work with their own forces or obtain materials from other sources without prior written authorization from the Agency. Unless the Agency's prior written consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE on the Exhibit 15-G Construction Contract DBE Commitment form, included in the Bid.

The Agency authorizes a request to use other forces or sources of materials if the bidder shows any of the following justifications:

11 Listed DBE fails or refuses to execute a written contract based on plans and specifications for the project.

12 The Local Agency stipulated that a bond is a condition of executing the subcontract and the listed DBE fails to meet the Local Agency's bond requirements.

13 Work requires a contractor's license and listed DBE does not have a valid license under Contractors License Law.

14 Listed DBE fails or refuses to perform the work or furnish the listed materials (failing or refusing to perform is not an allowable reason to remove a DBE if the failure or refusal is a result of bad faith or discrimination).

15 Listed DBE's work is unsatisfactory and not in compliance with the contract.

16 Listed DBE is ineligible to work on the project because of suspension or debarment.

17 Listed DBE becomes bankrupt or insolvent.

18 Listed DBE voluntarily withdraws with written notice from the Contract

19 Listed DBE is ineligible to receive credit for the type of work required.

20 Listed DBE owner dies or becomes disabled resulting in the inability to perform the work on the Contract.

21 The Agency determines other documented good cause.

The prime contractor shall notify the original DBE of the intent to use other forces or material sources and provide the reasons, allowing the DBE 5 days to respond to the notice and advise the prime contractor and the Agency of the reasons why the use of other forces or sources of materials should not occur.

SAMPLE NOT FOR BIDDING

The prime contractor's request to use other forces or material sources must include:

- One or more of the reasons listed in the preceding paragraph.
- Notices from the prime contractor to the DBE regarding the request.
- Notices from the DBEs to the prime contractor regarding the request.

If a listed DBE is terminated or substituted, the prime contractor must make good faith efforts to find another DBE to substitute for the original DBE. The substitute DBE must perform at least the same amount of work as the original DBE under the contract to the extent needed to meet or exceed the DBE goal.

6. Commitment and Utilization

Note: In the Agency's reports of DBE participation to Caltrans, the Agency must display both commitments and attainments.

The Agency's DBE program must include a monitoring and enforcement mechanism to ensure that DBE commitments reconcile to DBE utilization.

The bidder shall submit the Exhibit 15-G Construction Contract DBE Commitment, included in the Bid book. This exhibit is the bidder's DBE commitment form. If the form is not submitted with the bid, the bidder must remove the form from the Bid book before submitting their bid.

The bidder shall complete and sign Exhibit 15-G Construction Contract DBE Commitment included in the contract documents regardless of whether DBE participation is reported. The bidder shall provide written confirmation from each DBE that the DBE is participating in the Contract. A copy of a DBE's quote serves as written confirmation. If a DBE is participating as a joint venture partner, the bidder shall submit a copy of the joint venture agreement.

If the DBE Commitment form, Exhibit 15-G, is not submitted with the bid, it must be completed and submitted by all bidders to the Agency within five (5) days of bid opening. If the bidder does not submit the DBE Commitment form within the specified time, the Agency will find the bidder's bid nonresponsive.

The prime contractor shall use each DBE subcontractor as listed on Exhibit 12-B Bidder's List of Subcontractors (DBE and Non-DBE), and Exhibit 15-G Construction Contract DBE Commitment form unless they receive authorization for a substitution.

The Agency shall request the prime contractor to:

1. Notify the Resident Engineer or Inspector of any changes to its anticipated DBE participation
2. Provide this notification before starting the affected work
3. Maintain records including:

    3.1. Name and business address of each 1st-tier subcontractor

    3.2. Name and business address of each DBE subcontractor, DBE vendor, and DBE trucking company, regardless of tier

    3.3. Date of payment and total amount paid to each business (see Exhibit 9-F Monthly Disadvantaged Business Enterprise Payment)

If the prime contractor is a DBE contractor, they shall include the date of work performed by their own forces and the corresponding value of the work.

Before the 15th of each month, the prime contractor shall submit a Monthly DBE Trucking Verification (LAPM Exhibit 16-Z1) form.

If a DBE is decertified before completing its work, the DBE must notify the prime contractor in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify the prime contractor in writing of the certification date. The prime contractor shall submit the notifications. Upon work completion, the prime contractor shall complete a Disadvantaged Business Enterprises (DBE) Certification Status Change, Exhibit 17-O, form and submit the form within 30 days of contract acceptance.

SAMPLE NOT FOR BIDDING

Upon work completion, the prime contractor shall complete Exhibit 17-F Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors and submit it within 90 days of contract acceptance. The Agency will withhold $10,000 until the form is submitted. The Agency releases the withhold upon submission of the completed form.

7. DBE RUNNING TALLY OF ATTAINMENTS

After submitting an invoice for reimbursement that includes a payment to a DBE, but no later than the 10th of the following month, the prime contractor/consultant shall complete and email the Exhibit 9- F: Disadvantaged Business Enterprise Running Tally of Payments to business.support.unit@dot.ca.gov with a copy to the Agency.

1. **BID OPENING** The Agency publicly opens and reads bids at the time and place shown on the Notice to Contractors.

2. **BID RIGGING** The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is (800) 424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

3. **CONTRACT AWARD** If the Agency awards the contract, the award is made to the lowest responsible and responsive bidder.

4. CONTRACTOR LICENSE

The Contractor must be properly licensed as a contractor from contract award through Contract acceptance (Public Contract Code § 10164).

5. CHANGED CONDITIONS

a. Differing Site Conditions

i. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.

ii. Upon written notification, the engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of the determination whether or not an adjustment of the contract is warranted.

iii. No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice.

iv. No contract adjustment will be allowed under this clause for any effects caused on unchanged work. (This provision may be omitted by the Local Agency, at their option.)

b. Suspensions of Work Ordered by the Engineer

i. If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

ii. Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and modify the contract in

SAMPLE NOT FOR BIDDING

writing accordingly. The contractor will be notified of the engineer's determination whether or not an adjustment of the contract is warranted.

iii. No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.

iv. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

c. Significant Changes in the Character of Work

i. The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.

ii. If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.

iii. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.

iv. The term "significant change" shall be construed to apply only to the following circumstances:

1. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or

2. When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

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6. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

The onsite job activities shall not begin before June 14, 2021 and no work will be conducted on the banks or channels of Long Valley Creek and its Overflow until June 15, 2021. The first working day shall be June 14, 2021 and shall diligently prosecute the same to completion before the expiration of

95 WORKING DAYS

beginning on the date that work begins.

This work shall be diligently prosecuted to completion before the expiration of 95 WORKING DAYS beginning on June 14, 2021.

The Contractor shall pay to the County Lassen sum of $ 6,800.00 per day, for each and every calendar days' delay in finishing the work in excess of the number of working days prescribed above.

7. BUY AMERICA

Furnish steel and iron materials to be incorporated into the work with certificates of compliance and certified mill test reports. Mill test reports must indicate where the steel and iron were melted and manufactured. Steel and iron materials must be produced in the U.S. except:

Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478(03/24/1995)];

If the total combined cost of the materials does not exceed the greater of 0.1 percent of the total bid or $2,500, materials produced outside the U.S. may be used.

Production includes:

1. Processing steel and iron materials, including smelting or other processes that alter the physical form or shape (such as rolling, extruding, machining, bending, grinding, and drilling) or chemical composition;

2. Coating application, including epoxy coating, galvanizing, and painting, that protects or enhances the value of steel and iron materials.

8. QUALITY ASSURANCE

The Local Agency uses a Quality Assurance Program (QAP) to ensure a material is produced to comply with the Contract. The Local Agency may examine the records and reports of tests the prime contractor performs if they are available at the job site. Schedule work to allow time for QAP.

9. PROMPT PAYMENT FROM THE AGENCY TO THE CONTRACTORS

The Agency shall make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract. If the Agency fails to pay promptly, the Agency shall pay interest to the contractor, which accrues at the rate of 10 percent per annum on the principal amount of a money judgment remaining unsatisfied. Upon receipt of a payment request, the Agency shall act in accordance with both of the following:

1. Each payment request shall be reviewed by the Agency as soon as practicable after receipt for the purpose of determining that it is a proper payment request.

2. Any payment request determined not to be a proper payment request suitable for payment shall be returned to the contractor as soon as practicable, but not later than seven (7) days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.

10. FORM FHWA-1273 REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONTRACTS

(Excluding ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS)

[The following 10 pages must be physically inserted into the contract without modification.]

SAMPLE
NOT FOR BIDDING

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

SAMPLE
NOT FOR BIDDING

I. General
II. Nondiscrimination
III. No segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Compliance with Government wide Suspension and Debarment Requirements
XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

SAMPLE NOT FOR BIDDING

2. EEO Officer: The contractor will designate and make known to the contracting officers and EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting and active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

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7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

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IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

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2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

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4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

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8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

   a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

   b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

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overtime wages required by the clause set forth in paragraph (1.) of this section.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

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VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. **Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

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(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website

(https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and normally possessed by a prudent person in the ordinary course of business dealings.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

   a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

   b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3.The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which

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exceed information of participant is not required to exceed that which is $100,000 and that all such recipients shall certify and disclose accordingly.

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12. FEMALE AND MINORITY GOALS

To comply with Section II, "Nondiscrimination," of "Required Contract Provisions Federal-Aid Construction Contracts," the following are for female and minority utilization goals for Federal-aid construction contracts and subcontracts that exceed $10,000:

The nationwide goal for female utilization is 6.9 percent.

The goals for minority utilization [45 Fed Reg 65984 (10/3/1980)] are as follows:

MINORITY UTILIZATION GOALS

Economic Area		Goal (Percent)
174	Redding CA: Non-SMSA (Standard Metropolitan Statistical Area) Counties: CA Lassen; CA Modoc; CA Plumas; CA Shasta; CA Siskiyou; CA Tehama	6.8
175	Eureka, CA Non-SMSA Counties: CA Del Norte; CA Humboldt; CA Trinity	6.6
176	San Francisco-Oakland-San Jose, CA: SMSA Counties: 7120 Salinas-Seaside-Monterey, CA CA Monterey 7360 San Francisco-Oakland CA Alameda; CA Contra Costa; CA Marin; CA San Francisco; CA San Mateo 7400 San Jose, CA CA Santa Clara, CA 7485 Santa Cruz, CA CA Santa Cruz 7500 Santa Rosa CA Sonoma 8720 Vallejo-Fairfield-Napa, CA CA Napa; CA Solano Non-SMSA Counties: CA Lake; CA Mendocino; CA San Benito	 28.9 25.6 19.6 14.9 9.1 17.1 23.2
177	Sacramento, CA: SMSA Counties: 6920 Sacramento, CA CA Placer; CA Sacramento; CA Yolo Non-SMSA Counties CA Butte; CA Colusa; CA El Dorado; CA Glenn; CA Nevada; CA Sierra; CA Sutter; CA Yuba	 16.1 14.3
178	Stockton-Modesto, CA: SMSA Counties: 5170 Modesto, CA CA Stanislaus 8120 Stockton, CA CA San Joaquin Non-SMSA Counties CA Alpine; CA Amador; CA Calaveras; CA Mariposa; CA Merced; CA Tuolumne	 12.3 24.3 19.8
179	Fresno-Bakersfield, CA SMSA Counties: 0680 Bakersfield, CA CA Kern	 19.1

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	2840 Fresno, CA CA Fresno Non-SMSA Counties: CA Kings; CA Madera; CA Tulare	26.1 23.6
180	Los Angeles, CA: SMSA Counties: 0360 Anaheim-Santa Ana-Garden Grove, CA CA Orange 4480 Los Angeles-Long Beach, CA CA Los Angeles 6000 Oxnard-Simi Valley-Ventura, CA CA Ventura 6780 Riverside-San Bernardino-Ontario, CA CA Riverside; CA San Bernardino 7480 Santa Barbara-Santa Maria-Lompoc, CA CA Santa Barbara Non-SMSA Counties CA Inyo; CA Mono; CA San Luis Obispo	 11.9 28.3 21.5 19.0 19.7 24.6
181	San Diego, CA: SMSA Counties 7320 San Diego, CA CA San Diego Non-SMSA Counties CA Imperial	 16.9 18.2

For the last full week July during which work is performed under the contract, you and each non material-supplier subcontractor with a subcontract of $10,000 or more must complete Form FHWA PR-1391 (Appendix C to 23 CFR 230). Submit the forms by August 15.

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13. TITLE VI ASSURANCES

During the performance of this Agreement, the contractor, for itself, its assignees and successors in interest (hereinafter collectively referred to as CONTRACTOR) agrees as follows:

1. Compliance with Regulations: CONTRACTOR shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the REGULATIONS), which are herein incorporated by reference and made a part of this agreement.
2. Nondiscrimination: CONTRACTOR, with regard to the work performed by it during the AGREEMENT, shall not discriminate on the grounds of race, color, sex, national origin, religion, age, or disability in the selection and retention of sub-applicants, including procurements of materials and leases of equipment. CONTRACTOR shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the agreement covers a program set forth in Appendix B of the Regulations.
3. Solicitations for Sub-agreements, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by CONTRACTOR for work to be performed under a Sub-agreement, including procurements of materials or leases of equipment, each potential sub-applicant or supplier shall be notified by CONTRACTOR of the CONTRACTOR'S obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
4. Information and Reports: CONTRACTOR shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the California Department of Transportation or FHWA to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to the California Department of Transportation or the FHWA as appropriate, and shall set forth what efforts CONTRACTOR has made to obtain the information.
5. Sanctions for Noncompliance: In the event of CONTRACTOR's noncompliance with the nondiscrimination provisions of this agreement, the California Department of Transportation shall impose such agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

(b) withholding of payments to CONTRACTOR under the Agreement within a reasonable period of time, not to exceed 90 days; and/or
(c) cancellation, termination or suspension of the Agreement, in whole or in part.

6. Incorporation of Provisions: CONTRACTOR shall include the provisions of paragraphs (1) through (6) in every sub-agreement, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

CONTRACTOR shall take such action with respect to any sub-agreement or procurement as the California Department of Transportation or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance, provided, however, that, in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a sub-applicant or supplier as a result of such direction, CONTRACTOR may request the California Department of Transportation enter into such litigation to protect the interests of the State, and, in addition, CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

14. USE OF UNITED STATES-FLAG VESSELS

The CONTRACTOR agrees-

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carries, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- To Furnish within 20 days following the date of loading for shipments originating within the United State or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

15. Labor Code Requirements:

The Contractor shall comply with Labor Code Sections 1770 through 1780, inclusive. Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wage rates are available at the Lassen county Public Works Office, 707 Nevada Street, Suite 4, Susanville, California.

Future effective general prevailing wage rates, which have been predetermined, and are on file with the California Department of Industrial Relations, are referenced but not printed in the general prevailing wage rates.

Pursuant to Section 1773.2 of the Labor Code, General Prevailing Wage rates shall be posted by the Contractor at a prominent place at the site of the work.

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16. Contractor Registration with California Department of Industrial Relations (DIR):

Labor Code Section 1771.1(a):

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public works, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

Federal Trainee Program Special Provisions
(to be used when applicable)

17. FEDERAL TRAINEE PROGRAM

For the Federal training program, the number of trainees or apprentices is **ZERO (0).**

This section applies if a number of trainees or apprentices is specified in the special provisions.

As part of your equal opportunity affirmative action program, provide on-the-job training to develop full journeymen in the types of trades or job classifications involved.

You have primary responsibility for meeting this training requirement.

If you subcontract a contract part, determine how many trainees or apprentices are to be trained by the subcontractor.

Include these training requirements in your subcontract.

Where feasible, 25 percent of apprentices or trainees in each occupation must be in their 1st year of apprenticeship or training.

Distribute the number of apprentices or trainees among the work classifications on the basis of your needs and the availability of journeymen in the various classifications within a reasonable recruitment area.

Before starting work, submit to the City/County of _Lassen__:

A. Number of apprentices or trainees to be trained for each classification

B. Training program to be used

C. Training starting date for each classification

Obtain the City/County's of _Lassen__ approval for this submitted information before you start work. The City/County of _Lassen__ credits you for each apprentice or trainee you employ on the work who is currently enrolled or becomes enrolled in an approved program.

The primary objective of this section is to train and upgrade minorities and women toward journeymen status. Make every effort to enroll minority and women apprentices or trainees, such as conducting systematic and direct recruitment through public and private sources likely to yield minority and women apprentices or trainees, to the extent they are available within a reasonable recruitment area. Show that you have made the efforts. In making these efforts, do not discriminate against any applicant for training.

Do not employ as an apprentice or trainee an employee:

G. In any classification in which the employee has successfully completed a training course leading to journeyman status or in which the employee has been employed as a journeyman

H. Who is not registered in a program approved by the US Department of Labor, Bureau of Apprenticeship and Training

Ask the employee if the employee has successfully completed a training course leading to journeyman status or has been employed as a journeyman. Your records must show the employee's answers to the questions.

In your training program, establish the minimum length and training type for each classification. The City/County of _Lassen__ and FHWA approves a program if one of the following is met:

A.1. It is calculated to:

1.1.1. Meet the your equal employment opportunity responsibilities

1.1.2. Qualify the average apprentice or trainee for journeyman status in the classification involved by the end of the training period

A.2. It is registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, and it is administered in a way consistent with the equal employment responsibilities of Federal-aid highway construction contracts

Obtain the State's approval for your training program before you start work involving the classification covered by the program.

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Provide training in the construction crafts, not in clerk-typist or secretarial-type positions. Training is allowed in lower level management positions such as office engineers, estimators, and timekeepers if the training is oriented toward construction applications. Training is allowed in the laborer classification if significant and meaningful training is provided and approved by the division office. Off-site training is allowed if the training is an integral part of an approved training program and does not make up a significant part of the overall training.

The City/County of _Lassen_ reimburses you 80 cents per hour of training given an employee on this contract under an approved training program:

a. For on-site training

b. For off-site training if the apprentice or trainee is currently employed on a Federal-aid project and you do at least one of the following:

   i. Contribute to the cost of the training
   ii. Provide the instruction to the apprentice or trainee
   iii. Pay the apprentice's or trainee's wages during the off-site training period

3. If you comply this section.

Each apprentice or trainee must:

(a) Begin training on the project as soon as feasible after the start of work involving the apprentice's or trainee's skill

(b) Remain on the project as long as training opportunities exist in the apprentice's or trainee's work classification or until the apprentice or trainee has completed the training program

Furnish the apprentice or trainee:

1. Copy of the program you will comply with in providing the training

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SPECIAL PROVISIONS
STANDARD PLANS LIST

The standard plan sheets applicable to this Contract include those listed below. The applicable revised standard plans (RSPs) listed below are included in the project plans.

A3A	Abbreviations (Sheet 1 of 3)
A3B	Abbreviations (Sheet 2 of 3)
A3C	Abbreviations (Sheet 3 of 3)
A10A	Legend - Lines and Symbols (Sheet 1 of 5)
A10B	Legend - Lines and Symbols (Sheet 2 of 5)
A10C	Legend - Lines and Symbols (Sheet 3 of 5)
A10D	Legend - Lines and Symbols (Sheet 4 of 5)
A10E	Legend - Lines and Symbols (Sheet 5 of 5)
A10F	Legend - Soil (Sheet 1 of 2)
A10G	Legend - Soil (Sheet 2 of 2)
A10H	Legend - Rock
A20A	Pavement Markers and Traffic Lines - Typical Details
RSP A20B	Pavement Markers and Traffic Lines - Typical Details
A24A	Pavement Markings - Arrows
A24B	Pavement Markings - Arrows and Symbols
RSP A24G	Pavement Markings - Yield Lines, Limit Lines, and Wrong Way Details
A62A	Excavation and Backfill - Miscellaneous Details
A62B	Limits of Payment for Excavation and Backfill - Bridge Surcharge and Wall
A62C	Limits of Payment for Excavation and Backfill - Bridge
A62D	Excavation and Backfill - Concrete Pipe Culverts
A62DA	Excavation and Backfill - Concrete Pipe Culverts - Indirect Design Method
A62F	Excavation and Backfill - Metal and Plastic Culverts
RSP A62G	Excavation and Backfill - Precast Reinforced Concrete Box Culvert
A73A	Object Markers
RSP A73B	Markers
A73C	Delineators, Channelizers and Barricades
RSP A77L2	Midwest Guardrail System - Standard Railing Section (Steel Post with Notched Wood or Notched Recycled Plastic Block)
RSP A77M1	Midwest Guardrail System - Standard Hardware
A77N2	Midwest Guardrail System - Steel Post and Notched Wood Block Details
RSP A77N3	Midwest Guardrail System - Typical Line Post Embedment and Hinge Point Offset Details

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RSP A77N4	Midwest Guardrail System - Typical Railing Delineation and Dike Positioning Details
RSP A77Q1	Midwest Guardrail System - Typical Layouts for Structure Approach
RSP A77Q4	Midwest Guardrail System - Typical Layouts for Structure Departure
A77S2	Midwest Guardrail System - Rail Tensioning Assembly
A77S3	Metal Railing Anchor Cable and Anchor Plate Details
A77U1	Midwest Guardrail System - Connections to Bridge Railings without Sidewalks Details No. 1
A77U2	Midwest Guardrail System - Connections to Bridge Railings without Sidewalks Details No. 2
RSP A77U4	Midwest Guardrail System - Transition Railing (Type WB-31)
A86	Barbed Wire and Wire Mesh Fences
A86A	Barbed Wire and Wire Mesh Fence Detail on Sharp Break in Grade
A86B	Barbed Wire and Wire Mesh Fence Details
A86C	Barbed Wire and Wire Mesh Fence Details at Ditch Crossing
A86D	Barbed Wire and Wire Mesh Fence - Miscellaneous Details
A87B	Hot Mix Asphalt Dikes
P74	Pavement Edge Treatments
P76	Pavement Edge Treatments - New Construction
D72E	CIP Drainage Inlets - Types GO and GDO
D72F	CIP Drainage Inlet Notes
D72G	CIP Drainage Inlet Tables
RSP D73E	Precast Drainage Inlets - Types GO and GDO
D73F	Precast Drainage Inlet Notes
D73G	Precast Drainage Inlet Tables
D74	Drainage Inlet Details
D75C	Pipe Inlets - Ladder and Trash Rack Details
D77B	Grate Details No. 2
D80	Cast-In-Place Reinforced Concrete Single Box Culvert

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RSP D82	Cast-In-Place Reinforced Concrete Box Culvert - Miscellaneous Details
RSP D84	Box Culvert Wingwalls - Types A, B and C
D87A	Corrugated Metal Pipe Downdrain Details
D94A	Metal and Plastic Flared End Sections
D94B	Concrete Flared End Sections
D97C	Corrugated Metal Pipe Coupling Details No. 3 - Helical and Universal Couplers
D97D	Corrugated Metal Pipe Coupling Details No. 4 - Hugger Coupling Bands
D97E	Corrugated Metal Pipe Coupling Details No. 5 - Standard Joint
D97G	Corrugated Metal Pipe Coupling Details No. 7 - Downdrain
D97H	Reinforced Concrete Pipe or Non-Reinforced Concrete Pipe - Standard and Positive Joints
H1	Landscape and Erosion Control Symbols
H2	Landscape Details
T1A	Temporary Crash Cushion, Sand Filled (Unidirectional)
T1B	Temporary Crash Cushion, Sand Filled (Bidirectional)
T2	Temporary Crash Cushion, Sand Filled (Shoulder Installations)
T3A	Temporary Railing (Type K)
T3B	Temporary Railing (Type K)
T9	Traffic Control System Tables for Lane and Ramp Closures
T51	Temporary Water Pollution Control Details (Temporary Silt Fence)
T56	Temporary Water Pollution Control Details (Temporary Fiber Roll)
T57	Temporary Water Pollution Control Details (Temporary Check Dam)
T58	Temporary Water Pollution Control Details (Temporary Construction Entrance)
T59	Temporary Water Pollution Control Details (Temporary Concrete Washout Facility)
RSP B0-1	Bridge Details
B0-3	Bridge Details
B0-13	Bridge Details

SAMPLE
NOT FOR BIDDING

B2-3	16" and 24" Cast-In-Drilled-Hole Concrete Pile
B3-1A	Retaining Wall Type 1 (Case 1)
B6-21	Joint Seals (Maximum Movement Rating = 2")
RS1	Roadside Signs - Typical Installation Details No. 1
RS2	Roadside Signs - Wood Post - Typical Installation Details No. 2
RS4	Roadside Signs - Typical Installation Details No. 4
S93	Framing Details for Framed Single Sheet Aluminum Signs, Rectangular Shape
S94	Roadside Framed Single Sheet Aluminum Signs, Rectangular Shape
S95	Roadside Single Sheet Aluminum Signs, Diamond Shape
RSP ES-1A	Electrical Systems (Legend)
RSP ES-1B	Electrical Systems (Legend)
RSP ES-1C	Electrical Systems (Legend)
RSP ES-2A	Electrical Systems (Service Equipment)
RSP ES-2D	Electrical Systems (Service Equipment Enclosure and Typical Wiring Diagram, Type III - A Series)
RSP ES-3C	Electrical Systems (Controller Cabinet Foundation and Pad Details)
ES-5A	Electrical Systems (Loop Detectors)
RSP ES-5B	Electrical Systems (Detectors)
RSP ES-5D	Electrical Systems (Curb and Shoulder Termination, Trench, and Handhole Details)
RSP ES-6A	Electrical Systems (Lighting Standard, Types 15 and 21)
ES-6B	Electrical Systems (Electrolier Anchorage and Grouting for Type 15 and Type 21 Barrier Rail Mounted)
RSP ES-7M	Electrical Systems (Signal and Lighting Standard, Detail No. 1)
ES-7N	Electrical Systems (Signal and Lighting Standard, Detail No. 2)
RSP ES-7O	Electrical Systems (Signal and Lighting Standard, Detail No. 3)
RSP ES-8A	Electrical Systems (Non-Traffic Pull Box)
RSP ES-8B	Electrical Systems (Traffic Pull Box)
ES-10A	Electrical Systems (Isofootcandle Curves)
ES-11	Electrical Systems (Foundation Installations)
ES-13A	Electrical Systems (Splice Insulation Methods Details)
RSP ES-16B	Electrical Systems (Camera Pole - 25' to 45' Pole)

SAMPLE
NOT FOR BIDDING

CANCELED STANDARD PLANS LIST

The standard plan sheets listed below are canceled and not applicable to this contract.

Plan No.	Date Canceled	Plan No.	Date Canceled	Plan No.	Date Canceled
P31B	10-18-19				
P32A	10-18-19				
P32B	10-18-19				
C7A	10-19-18				
C7B	10-19-18				
C7C	10-19-18				
D89	10-18-19				
B11-55	04-19-19				
B11-56	10-19-18				
B11-57	10-19-18				
ES-2C	10-19-18				
RSP ES-3I	10-16-20				
ES-3J	10-16-20				
ES-3L	10-16-20				
ES-7P	04-17-20				

SAMPLE
NOT FOR BIDDING

ORGANIZATION

Special provisions are under headings that correspond with the main-section headings of the *Standard Specifications*. A main-section heading is a heading shown in the table of contents of the *Standard Specifications*.

Each special provision begins with a revision clause that describes or introduces a revision to the *Standard Specifications* as revised by any revised standard specification.

Any paragraph added or deleted by a revision clause does not change the paragraph numbering of the *Standard Specifications* for any other reference to a paragraph of the *Standard Specifications*.

^^

DIVISION I GENERAL PROVISIONS

1 GENERAL

Add to section 1-1.01:

Section 1 includes general rules of interpretation.
The Department is gradually standardizing the style and language of the specifications. The new style and language includes:

1. Use of:

    1.1. Imperative mood
    1.2. Introductory modifiers
    1.3. Conditional clauses

2. Elimination of:

    2.1. Language variations
    2.2. Definitions for industry-standard terms
    2.3. Redundant specifications
    2.4. Needless cross-references

SAMPLE NOT FOR BIDDING

The use of this new style does not change the meaning of a specification not yet using this style.
Sections 1 through 9 include general specifications applicable to every contract unless specified as applicable under certain conditions.
The specifications are written to the Bidder before award and the Contractor after. Before award, interpret sentences written in the imperative mood as starting with "The Bidder must" and interpret "you" as "the Bidder" and "your" as "the Bidder's." After award, interpret sentences written in the imperative mood as starting with "The Contractor must" and interpret "you" as "the Contractor" and "your" as "the Contractor's."
Omission of "a," "an," and "the" is intentional. These articles have been omitted in some specifications for streamlining purposes.
Unless an object or activity is specified to be less than the total, the quantity or amount is all of the object or activity.
A plural term includes the singular.
All items in a list apply unless the items are specified as choices.
Headings are included for the purposes of organization and referencing. Inclusion of a heading with no related content, "Reserved," or "Not Used" does not indicate that no specification exists for that subject; applicable specifications may be covered in a general or referenced specification.

Add to section 1-1.01:

Bid Items and Applicable Sections

Item code	Item description	Applicable section
160102	CLEARING AND GRUBBING	17

Add to section 1-1.05:

Where Standard Specifications refer to the special provisions to describe the work, interpret the reference as a reference to the Bid Item List, the special provisions, or both.
Interpret a reference to a section of the Standard Specifications as a reference to the Standard Specifications as revised by any amendment, special provision, or both.

Add to section 1-1.09:

This project is in a freeze-thaw area.

^^

2 BIDDING

2-1.03A General

Any Bidder wanting to submit a Sealed Bid for this project must obtain the Bid Book with Special Provisions and the proposal forms for the Office of the Department of Public Works of Lassen County, 707 Nevada Street, Suite 4, Susanville, CA 96130.

Standard Specifications and Standard Plans may be viewed at the California Department of Transportation Web site and may be purchased at the Publication Distribution Unit.
Special provisions, Amendments to the Standard Specifications, and project plans may be viewed at:

Lassen County Department of Public Works
707 Nevada Street, Suite 4
Susanville, Ca. 96130
530-251-8288

Special provisions, Amendments to the Standard Specifications, and project plans can be downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

For an informal-bid contract, special provisions, Amendments to the Standard Specifications, and project plans may be viewed at:

Lassen County Department of Public Works
707 Nevada Street, Suite 4
Susanville, Ca. 96130
530-251-8288

For an informal-bid contract, special provisions, Amendments to the Standard Specifications, and project plans can be downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

Bid books, special provisions, Amendments to the Standard Specifications, and project plans may be obtained at the Lassen County Department of Public Works.

2-1.03B Supplemental Project Information

The Supplemental Project Information for this project can be viewed and downloaded from the Lassen County website at: www.lassencounty.org/government/resources/public-worksroads

There are no as-built drawings are available for this project:

SAMPLE NOT FOR BIDDING

Add to section 2-1.06B:

The Department makes the following supplemental project information available:

Supplemental Project Information

Means	Description
Written request to the Lassen County Department of Public Works	1. PLAC - California Department of Fish and Wildlife 1600-2020-0193-R1_LAS_Hackstaff Road Bridges LSAA Final 2. PLAC - United States Army Corps of Engineers Nationwide Permit Summary No. 14 – 2020.08.27-NWP 3. PLAC - United States Army Corps of Engineers Nationwide Permit 14 Letter – 2020.08.27-NWP 4. PLAC - California Regional Water Quality Control Board Lahontan Region Permit R6T-2021-0001_Hackstaff Bridges_401_6A182005003 5. Storm Water Pollution Prevention Plan 6. 7C-12 Foundation Report Prepared by Crawford Dated 5/12/2015 7. 7C-81 Foundation Report Prepared by Crawford Dated 6/45/2015 8. Geotechnical Investigation Report for Bridge 7C-12 Prepared by Converse 3/6/2006 9. Geotechnical Investigation Report for Bridge 7C-81 Prepared by Converse 5/11/2007 10. LOTB for 7C-12 & 7C-81 Prepared by Converse 11. Final Design Hydraulic Study for 7C-12 Dated 5/5/2015 prepared By PHI 12. Final Amended Design Hydraulic Study for 7C-81 Dated 5/5/2015 prepared By PHI 13. Lassen County Quantity Control Program Manual Dated February 2021.
Included with the project plans	Logs of Test Borings - Long Valley Creek Bridges, (Br. No. 7C-12 & 7C-81) prepared by Crawford

SAMPLE NOT FOR BIDDING

Replace to section 2-1.33A General

Complete forms in the Bid book. Submit all forms with your bid:

On the Subcontractor List you must submit the percentage of each bid item subcontracted with your bid.

Replace to section 2-1.43: in specs

Bid Opening

The Agency publicly opens and reads bids at the time and place shown on the *Notice to Bidders*.

Replace to section 2-1.50: in specs

Bid Rigging

The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is (800) 424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous.. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

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3 CONTRACT AWARD AND EXECUTION

Replace to section 3-1.04: in specs

Contract Award
If the Agency awards the contract, the award is made to the lowest responsible bidder.

Replace to section 3-1.05: in specs

Contract Bonds (Pub Cont Code §§ 10221 and 10222)
The successful bidder must furnish 2 bonds:

1. Payment bond to secure the claim payments of laborers, workers, mechanics, or material men providing goods, labor, or services under the contract. This bond must be equal to at least 100 percent of the total bid.
2. Performance bond to guarantee the faithful performance of the contract. This bond must be equal to at least 100 percent of the total bid.

Replace to section 3-1.06: in specs

Contractor License

1. The Contractor must be properly licensed as a contractor from bid opening through contract acceptance (Bus & Prof Code § 7028.15)
2. "A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5 . It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 1016 4 or 20103.5 of the Public Contract Code, provided the contractor is register to perform public work pursuant to Section 1725.5 at the time the contract is awarded."
3. Joint venture bidders must obtain a joint venture license before contract award (Bus & Prof Code § 7029.1)

SAMPLE NOT FOR BIDDING

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4 SCOPE OF WORK

Add to section 4-1.01: in specs

General
Construct the work described in the special provisions and on project plans and by the bid items. The special provisions, project plans, and bid item descriptions set forth the specifications that apply.

Replace to section 4-1.06B: in specs

DIFFERING SITE CONDITIONS

Contractor's Notification

Promptly notify the Agency's Engineer if you find either of the following conditions:

1. Physical conditions differing materially from either of the following:
    1. Contract documents
    2. Job site examination
2. Physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract.

Include details explaining the information you relied on and the material differences you discovered.

If you fail to promptly notify the Engineer, you waive the differing site condition claim for the period between your discovery of the differing site condition and your notification to the Engineer.

If you disturb the site after discovery and before the Engineer's investigation, you waive the differing site condition claim.

Replace to section 4-1.06C: in specs

Engineer's Investigation and Decision

Upon your notification, the Agency's Engineer investigates job site conditions and:

1. Notifies you whether to resume affected work
2. Decides whether the condition differs materially and is cause for an adjustment of time, payment, or both.

Add to section 4-1.06C: in specs

Protests

You may protest the Agency's Engineer's decision by:

1. Submitting an Initial Notice of Potential Claim within 5 business days after receipt of the Engineer's notification
2. Complying with claim procedures

The Initial Notice of Potential Claim must detail the differences in your position from the Engineer's determination and support your position with additional information, including additional geotechnical data.
Attach to the Initial Notice of Potential Claim a certification stating that you complied with Section 5-1.43, "POTENTIAL CLAIMS AND DISPUTE RESOLUTION."
Promptly submit supplementary information when obtained.

SAMPLE
NOT FOR BIDDING

^^

5 CONTROL OF WORKS

Add to section 5-1.01: in specs

General

After contract approval, submit documents and direct questions to the Agency's Engineer. Orders, approvals, authorizations, and requests to the Contractor are by the Agency's Engineer.

The Agency's Engineer furnishes the following in writing:
1. Approvals
2. Authorizations
3. Notifications
4. Orders

The Contractor must furnish the following in writing:
1. Assignments
2. Notifications
3. Proposals
4. Requests, sequentially numbered
5. Subcontracts
6. Test results

The Department rejects a form if it has any error or any omission.
Convert foreign language documents to English.
If the last day for submitting a document falls on a Saturday or holiday, it may be submitted on the next business day with the same effect as if it had been submitted on the day specified.

Replace to section 5-1.26: in specs

Construction Surveys

The Contractor shall places stakes and marks under Chapter 12, "Construction Surveys," of the California Department of Transportation CALTRANS - Surveys Manual.

On request from the Contractor or Contractor representative the County shall furnish an AutoCAD Civil 3D 2018 DWG file to the Contractor or Contractor representative so that they can obtain the necessary information to construct the project.

The Contractor or the Contractor representative is responsibility for all necessary dimensions and elevations in the AutoCAD Civil 3D 2018 DWG file as they compare to the project per the plans and specifications. Any decresonle between the AutoCAD Civil 3D 2018 DWG file and the project plans and specifications shall notify the Engineer in writing immediately.

The Contractor or the Contractor representative is responsibility for all necessary construction staking to construct the project per the plans and specifications.

It is the Contractors responsibility to preserve stakes and marks placed. If the stakes or marks are destroyed, the Contractor will replace them before the phase of work may continue at the Contractor expense.

The project boundary limits shall be staked every 100 feet with wooden lath by or under the direction of a California Licensed Land Surveyor or a California Licensed Civil Engineer who can practice land surveying in California. The California Licensed Land Surveyor or a California Licensed Civil Engineer who can practice land surveying in California shall certify that the boundary staking is per the project plans.

SAMPLE NOT FOR BIDDING

Add to section 5-1.26: in specs

5-1.26 GRADE QUALITY CONTROL

Use a GNSS rover, robotic total station equipment, or a level to check the grades at the frequencies shown in the following table:

Grade Checking Requirements

Type of work	Area or distance represented by the grade checking	Frequency (number of grade points)
Earthwork for cut and fill slopes ≤15 feet	200 feet	2
Earthwork for cut and fill slopes >15 feet	1,000 sq yd	1
Rough grading	1,000 sq yd	1
Trenching	100 feet	6
Subgrade	1 mi	30
Subbase layer	1 mi	50
Base layer	1 mi	100
Curb and gutter	100 feet	6
Concrete barrier	100 feet	5
Finishing roadway	1,000 sq yd	2

Increase the frequency of grade checking of a roadway:

1. Wherever its curve radius is 500 feet or less
2. In areas of a superelevation transition
3. At intersections

Notify the Engineer when an area is ready for line and grade inspection. Submit the grade checking results on a Grade Checking Report form as an informational submittal.

Add to the end of section 5-1.32:

Personal vehicles of your employees must not be parked on the traveled way or shoulders. Do not cast precast concrete members within the existing right-of-way of Hackstaff Road.

Add to the end of section 5-1.37A:

Only vehicles with pneumatic tires and non-metallic tracks and wheels are allowed onto the unprotected asphalt concrete or concrete surfaces.

Replace "plant" in the 4th paragraph of section 5-1.43E(3)(d) with:

erosion control

^^

6 CONTROL OF MATERIALS

Add to section 6-1.03 of the RSS:

6-1.03B Submittals

6-1.03B(1) Work Plan

For local material, such as rock, gravel, earth, structure backfill, pervious backfill, imported borrow, and culvert bedding, obtained from a (1) noncommercial source, or (2) source not regulated under California jurisdiction, submit a local material plan for each material at least 60 days before placing the material. The local material plan must include:

1. Certification signed by you and an engineer who is registered as a civil engineer in the State or a professional geologist licensed as a professionalgeologist by the State stating:

   I am aware local material from a noncommercial source or a source not regulated under CA jurisdiction must be sampled and analyzed for pH and lead and may require sampling and analysis under section 6-1.03B(3) for other constituents of concern based on the land use history. I am aware that local material sources must not contain ADL at concentrations greater than 80 mg/kg total lead or equal to or greater than 5 mg/L soluble lead as determined by the Waste Extraction Test (WET) Procedures, 22 CA Code of Regs § 66261.24(a)(2) App II. I am aware that a maximum quantity of material may be excavated at the site based on the minimum number of samples taken before excavating at the site under section 6-1.03B(3).

2. Land use history of the local material location and surroundingproperty
3. Sampling protocol
4. Number of samples per volume of local material
5. QA and QC requirements and procedures
6. Qualifications of sampling personnel
7. Stockpile history
8. Name and address of the analytical laboratory that will perform the chemicalanalyses
9. Analyses that will be performed for lead and pH
10. Other analyses that will be performed for possible hazardous constituents based on:
    - Source property history
    - Land use adjacent to source property
    - Constituents of concern in the ground water basin where the job site is located

The plan must be sealed and signed by an engineer who is registered as a civil engineer in the State or a professional geologist licensed as a professional geologist by the State.

If the plan requires revisions, the Engineer provides comments. Submit a revised plan within 7 days of receiving comments. Allow 7 days for the review.

6-1.03B(2) Analytical Test Results

At least 15 days before placing local material, submit analytical test results for each local material obtained from a noncommercial source or a source not regulated under CA jurisdiction. The analytical test results must include:

2. Certification signed by an engineer who is registered as a civil engineer in the State or a professional geologist licensed as a professional geologist by the Statestating:

   The analytical testing described in the local material plan has been performed. I performed a statistical analysis of the test results using the US EPA's ProUCL software with the applicable 95 percent upper confidence limit. I certify that the material from the local material source is suitable for unrestricted

SAMPLE NOT FOR BIDDING

use at the job site, it has a pH above 5.0, does not contain soluble lead in concentrations equal to or greater than 5mg/l as determined by the Waste Extraction Test (WET) Procedures, 22 CA Code of Regs § 66261.24(a)(2) App II, does not contain lead in concentrations above 80 mg/kg total lead, is free from all other contaminants identified in the local material plan, and will comply with the job site's basin plan and water quality objectives of the RWQCB.

3. Chain of custody of samples
4. Analytical results no older than 1 year
5. Statistical analysis of the data using US EPA's ProUCL software with a 95 percent upper confidence limit
6. Comparison of sample results to hazardous waste concentration thresholds and the RWQCB's basin plan requirements and water quality objectives for the jobsite location

6-1.03B(3) Sample and Analysis

Sample and analyze local material from a (1) noncommercial source or (2) source not regulated under CA jurisdiction:

1. Before bringing the local material to the job site
2. As described in the local material plan
3. Under US EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)

The sample collection must be designed to generate a data set representative of the entire volume of proposed local material.

Before excavating at the (1) noncommercial material source or (2) a source not regulated under CA jurisdiction, collect the minimum number of samples and perform the minimum number of analytical tests for the corresponding maximum volume of local material as shown in the following table:

SAMPLE NOT FOR BIDDING

Minimum Number of Samples and Analytical Tests for Local Material

Maximum volume of imported borrow (cu yd)	Minimum number of samples and analytical tests
< 5,000	8
5,000–10,000	12 for the first 5,000 cu yd plus 1 for each additional 1,000 cu yd or portion thereof
10,000–20,000	17 for the first 10,000 cu yd plus 1 for each additional 2,500 cu yd or portion thereof
20,000-40,000	21 for the first 20,000 cu yd plus 1 for each additional 5,000 cu yd or portion thereof
40,000–80,000	25 for the first 40,000 cu yd plus 1 for each additional 10,000 cu yd or portion thereof
> 80,000	29 for the first 80,000 cu yd plus 1 for each additional 20,000 cu yd or portion thereof

Do not collect composite samples or mix individual samples to form a composite sample.

Analyze the samples using the US EPA's ProUCL software with a 95 percent upper confidence limit. All chemical analysis must be performed by a laboratory certified by the SWRCB's Environmental Laboratory Accreditation Program (ELAP).

The analytical test results must demonstrate that the local material:

1. Is not a hazardous waste
2. Has a pH above 5.0
3. Has an average total lead concentration, based upon the 95 percent upper confidence limit, at or below 80 mg/kg
4. Is free of possible contaminants identified in the local materialplan
5. Complies with the RWQCB's basin plan for the job site location
6. Complies with the RWQCB's water quality objectives for the job sitelocation

6-1.03C Local Material Management

Do not place local material until authorized.

If the Engineer determines the appearance, odor, or texture of any delivered local material suggests possible contamination, sample and analyze the material. The sampling and analysis is change order work unless (1) hazardous waste is discovered or (2) the analytical test results indicate the material does not comply with section 6-1.03B(3).

Dispose of noncompliant local material at an appropriately permitted CA Class I, CA Class II or CA Class III facility. You are the generator of noncompliant local material.

Replace section 6-1.06 of the RSS for section 6-1 with: 6-1.06

BUY CLEAN CALIFORNIA ACT

6-1.06A Summary

The materials or products shown in the following table are subject to the Buy Clean California Act (Pub Cont Code § 3500 et seq.):

Material or product	Material specifications
Carbon steel rebar[a]	Section 52-1.02B, "Bar Reinforcement" Excludes epoxy-coated or galvanized reinforcement uses.
Structural steel[b]	Section 55-1.02D(1), "General," – Structural Steel and Other Materials tables and Section 99, "Building Construction" For hot-rolled, plate or hollow products.
Flat glass[c]	Section 99, "Building Construction"
Mineral wool board insulation[d]	Section 99, "Building Construction"

[a]For each mill providing 20,000 pounds or more on the project
[b]For each mill providing 5,000 pounds or more on the project
[c]For each manufacturer providing 2,000 square feet or more on the project
[d]For each manufacturer providing 4,000 square feet or more on the project

SAMPLE NOT FOR BIDDING

For product category rules for applicable materials or products, go to the METS website. Use the product category rule in effect on the date of bid opening unless otherwise authorized. An environmental product declaration is not required for a material or product for either of the following conditions:

1. Applicable product category rule has expired without replacement as of the bid opening date.
2. Applicable product category rule was issued less than 100 days before the bid opening date.

For projects with a bid opening date from December 1, 2019, through May 31, 2021, with total bid over $1 million and 175 or more original working days, submit an environmental product declaration as an informational submittal for each applicable material or product. Submit each environmental product declaration within 15 days of initial installation of the material or product.

For projects with a bid opening date after May 31, 2021, with total bid over $1 million and 175 or more original working days, submit an environmental product declaration for each applicable material or product. Submit an environmental product declaration for each applicable material or product at least 15 days before scheduled installation. The global warming potential of each applicable material or product as evidenced by its environmental product declaration shall not exceed the maximum acceptable global warming potential values established by the Department of General Services. Do not install the applicable material or product until the submittal is authorized.

The Department of General Services publishes the maximum acceptable global warming potential for each category of material or product in the State Contracting Manual. For the manual go to: https://www.dgs.ca.gov/.

6-1.06B Definitions

environmental product declaration: Independently verified document created and verified under International Organization for Standardization (ISO) 14025 for Type III environmental declarations that identifies the global warming potential emissions of the facility-specific material or product through a product stage life cycle assessment.

product category rule: Program operator established rule based on the science of life cycle assessment that governs the development of the environmental product declaration for the material or product.

product stage: Boundary of the environmental product declaration that includes (1) raw material supply, (2) transportation processes, and (3) processing operations, including operations such as melting, mixing, fabrication, finishing, curing, cooling, trimming, packaging and loading for transport delivery. Commonly referred to as a "cradle-to-gate" life cycle assessment.

program operator: Independent agency that supervises and confirms the full environmental product declaration development process under ISO 14025.

raw material supply: Upstream processes which can include allocations, extraction, refinement, reclamation, handling and processing of the constituents used in producing the material or product.

transportation processes: Includes transportation of raw, reclaimed or recycled material constituents from the supplier to the gate of the manufacturer, producer or fabricator. Includes transport of related waste products.

6-1.06C Submittals

At least 15 days before submitting environmental product declarations, you must register on the Department's Data Interchange for Materials Engineering. Follow the registration process at:

https://dime.dot.ca.gov/

Submit environmental product declarations for applicable materials or products to the Department's Data Interchange for Materials Engineering and provide PDF copies to the Engineer. Carbon steel rebar or structural steel environmental product declarations must be mill produced.

Immediately notify the Engineer if a program operator has determined their product category rule does not allow for development of a facility-specific environmental product declaration for an applicable material or product. Include written correspondence from the program operator. If the Engineer determines the development of a facility-specific environmental product declaration for an applicable material or product cannot be achieved, no environmental product declaration will be required for that specific material or product.

6-1.06D Quality Assurance

Not Used

SAMPLE NOT FOR BIDDING

Add to the beginning of section 6-1.04C: in specs

Buy America

Furnish steel and iron materials to be incorporated into the work with certificates of compliance. Steel and iron materials must be produced in the U.S. except:

1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478 (03/24/1995)];
2. If the total combined cost of the materials does not exceed the greater of 0.1 percent of the total bid or $2,500, materials produced outside the U.S. may be used.

Production includes:

1. Processing steel and iron materials, including smelting or other processes that alter the physical form or shape (such as rolling, extruding, machining, bending, grinding, and drilling) or chemical composition;
2. Coating application, including epoxy coating, galvanizing, and painting, that protects or enhances the value of steel and iron materials.

For steel and iron materials to be incorporated into the work, submit a Certificate of Compliance under Section 6-2.03C, "Certificates of Compliance," of the Standard Specifications that certifies all production processes occurred in the United States except for the above exceptions.

Add to section 6-2.01D: in specs

Authorized Material Source Lists

No allowance or additional compensation will be made for lost time or for delay in completing the work due to moving the Contractor's plant from the designated mandatory source to the alternative mandatory source, other than a time adjustment as specified in Section 8-1.07, "Delays."

Add to section 6-2.02D: in specs

Quality Assurance
The Agency uses a Quality Assurance Program (QAP) to ensure a material is produced to comply with the Contract.

You may examine the records and reports of tests the Agency performs if they are available at the job site.

Schedule work to allow time for QAP.

Tests are tests to assure the quality and to determine the acceptability of the work.
The Department deducts costs of testing work found to be noncompliant.

The contractor shall be required to submit their QC Plan to the Engineer which shall include a description of the organization, responsible parties and procedures you will use for QC Plan for sampling, testing and reporting, determining action limits when corrective actions are needed and implement corrective actions.

SAMPLE NOT FOR BIDDING

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7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Add to section 7-1.02K(6)(b):

7-1.02K(6)(b) Excavation Safety
For excavation 5 feet or more in depth excavation safety plan must be submitted to the Agency's Engineer showing the design and details for providing worker and equipment protection from caving ground during excavation. The excavation safety plan must be designed by a registered professional engineer and must be sealed and signed by an engineer who is registered as a civil engineer in the State of California. No excavation work shall begin until the excavation safety plan has been review by the Agency's Engineer.

Replace *Reserved* in section 7-1.02K(6)(j)(iii) with:

Section 7-1.02K(6)(j)(iii) includes specifications for handling, removing, and disposing of earth material containing lead.

Lead is present in earth material on the job site. Management of this material exposes workers to health hazards that must be addressed in your lead compliance plan. The average lead concentrations are below 1,000 mg/kg total lead and below 5 mg/L soluble lead. The material on the job site:

1. Is not a hazardous waste
2. Does not require disposal at a permitted landfill or solid waste disposal facility

Lead has been detected in material to a depth of 2.5 in unpaved areas of the highway. Levels of lead found on the job site range from less than 3.2 to 250 mg/kg total lead with an average concentration of <50 mg/kg total lead as analyzed by EPA test method 6010 or EPA test method 7000 series and based upon a 95 percent upper confidence limit.

Handle the material under all applicable laws, rules, and regulations, including those of the following agencies:

1. Cal/OSHA
2. CA RWQCB, Region 6SLT—Lahontan
3. CA Department of Toxic Substances Control

If the material is disposed of:

1. Disclose the lead concentration of the material to the receiving property owner when obtaining authorization for disposal on the property
2. Obtain the receiving property owner's acknowledgment of lead concentration disclosure in the written authorization for disposal
3. You are responsible for any additional sampling and analysis required by the receiving property owner

If you choose to dispose of the material at a commercial landfill:

1. Transport it to a Class III or Class II landfill appropriately permitted to receive the material
2. You are responsible for identifying the appropriately permitted landfill to receive the material and for all associated trucking and disposal costs, including any additional sampling and analysis required by the receiving landfill

Replace *Reserved* in the RSS for section 7-1.02K(6)(j)(iii) with:

Section 7-1.02K(6)(j)(iii) includes specifications for handling, removing, and disposing of unregulated earth material containing lead. Management of this material exposes workers to health hazards that must be addressed in your lead compliance plan. This material contains average lead concentrations below 80 mg/kg total lead and below 5 mg/L soluble lead and is not regulated by DTSC as a hazardous substance or a hazardous waste. This material does not require disposal at a permitted landfill or solid waste disposal facility. The RWQCB has jurisdiction over reuse of this material at locations outside the job site limits.Unregulated earth material exists throughout the job site.

Lead is typically found within the top 2 feet of material within the highway. Reuse all of the excavated material on the right-of-way.

Handle the material under all applicable laws, rules, and regulations, including those of the following agencies:

1. Cal/OSHA
2. CA RWQCB, Region 6SLT—Lahontan

SAMPLE
NOT FOR BIDDING

Add to section 7-1.02K(6)(j)(iv):

7-1.02K(6)(j)(iv) Sheet Piling Design and Safety Plan

The Contractor is responsible for the proper design, construction, layout, placement, maintenance, and removal of the sheet piling (ie cofferdam). The Contractor is required to submit calculations and shop drawings showing the layout to the Resident Engineer prior to the installation of the sheet piling. The Contractor is also required to comply with the applicable sections of the Construction Safety Orders (Sections 1539-1543) and the provisions of Section 6705 of the California Labor Code. Refer to the Trenching and Shoring Manual for additional information.

The sheet piling design and safety plan must be submitted to the Agency's Engineer showing the design and details for providing worker and equipment protection from caving ground during excavation. The sheet piling design and safety plan must be designed by a registered professional engineer and must be sealed and signed by an engineer who is registered as a civil engineer in the State of California. The Contractor or the Contractors representative shall determine the placement of the temporary sheet piling so there is enough space to construct the bridge abutments and bent elements.

No excavation work shall begin until the sheet piling design and safety plan has been review by the Agency's Engineer.

Replace "Reserved" in section 7-1.02M(2) with:

7-1.02M(2) Fire Prevention

Cooperate with local fire prevention authorities in eliminating hazardous fire conditions.

Obtain the phone numbers of the nearest fire suppression agency, California Department of Forestry and Fire Protection (Cal Fire) unit headquarters, United States Forest Service (USFS) ranger district office, and U.S. Department of Interior (USDI) BLM field office. Submit these phone numbers to the Engineer before the start of job site activities.

Immediately report to the nearest fire suppression agency fires occurring within the project limits. Prevent

project personnel from setting open fires that are not part of the work.

Prevent the escape of and extinguish fires caused directly or indirectly by job site activities

Except for motor trucks, truck tractors, buses, and passenger vehicles, equip all hydrocarbon-fueled engines, both stationary and mobile including motorcycles, with spark arresters that meet USFS standards as specified in the *Forest Service Spark Arrester Guide*. Maintain the spark arresters in good operating condition. Spark arresters are not required by Cal Fire, the BLM, or the USFS on equipment powered by properly maintained exhaust-driven turbo-charged engines or equipped with scrubbers with properly maintained water levels. The *Forest Service Spark Arrester Guide* is available at the district offices.

Each toilet must have a metal ashtray at least 6 inches in diameter by 8 inches deep half-filled with sand and within easy reach of anyone using the facility.

Locate flammable materials at least 50 feet away from equipment service, parking, and gas and oil storage areas. Each small mobile or stationary engine site must be cleared of flammable material for a radius of at least 15 feet from the engine.

Each area to be cleared and grubbed must be cleared and kept clear of flammable material such as dry grass, weeds, brush, downed trees, oily rags and waste, paper, cartons, and plastic waste. Before clearing and grubbing, clear a fire break at the outer limits of the areas to be cleared and grubbed. Other fire breaks may be ordered and are change order work.

Cal Fire, USFS, and BLM have established the following adjective class ratings for 5 levels of fire danger for use in public information releases and fire protection signing: low, moderate, high, very high, extreme. Obtain the fire danger rating daily for the project area from the nearest Cal Fire unit headquarters, USFS ranger district office, or BLM field office.

Arrangements have been made with Cal Fire, USFS, and BLM to notify the Department when the fire danger rating is very high or extreme. This information will be furnished to the Engineer who will notify you for dissemination and action in the area affected. If a discrepancy between this notice and the fire danger rating obtained from the nearest office of either Cal Fire or USFS exists, you must conduct operations according to the higher of the two fire danger ratings.

SAMPLE NOT FOR BIDDING

If the fire danger rating reaches very high:

1. Falling of dead trees or snags must be discontinued.
2. No open burning is permitted and fires must be extinguished.
3. Welding must be discontinued except in an enclosed building or within an area cleared of flammable material for a radius of 15 feet.
4. Blasting must be discontinued.
5. Smoking is allowed only in automobiles and cabs of trucks equipped with an ashtray or in cleared areas immediately surrounded by a fire break unless prohibited by other authority.
6. Vehicular travel is restricted to cleared areas except in case of emergency.

If the fire danger rating reaches extreme, take the precautions specified for a very high fire danger rating except smoking is not allowed in an area immediately surrounded by a firebreak and work of a nature that could start a fire requires that properly equipped fire guards be assigned to such operation for the duration of the work.

The Engineer may suspend work wholly or in part due to hazardous fire conditions. The days during this suspension are non–working days.

If field and weather conditions become such that the determination of the fire danger rating is suspended, section 7-1.02M(2) will not be enforced for the period of the suspension of the determination of the fire danger rating. The Engineer will notify you of the dates of the suspension and resumption of the determination of the fire danger rating.

Add to section 7-1.02M(3):

Surface Mining and Reclamation Act

The Contractor shall submit to the resident engineer proof that the import borrow or aggregate material source site or sites are permitted under the Surface Mining and Reclamation Act of 1975 , Pub Res Code 2710 et seq. at least 5 working days before the material is planned to be used on the project.

Add to section 7-1.03:

If a height differential of more than 0.04 foot is created by construction activities at joints transverse to the direction of traffic on the traveled way or shoulder subject to public traffic, construct temporary tapers with slopes (horizontal: vertical) in conformance with the following table:

Temporary Tapers

Height differential	Slope	
	Taper use of 14 days or less	Taper use of more than 14 days
Greater than 0.10 foot	100:1 or flatter	200:1 or flatter
0.04 to 0.10 foot	70:1 or flatter	70:1 or flatter

SAMPLE NOT FOR BIDDING

For temporary tapers on existing asphalt concrete or concrete pavement, construct tapers with the type of HMA used in the project or commercial mix HMA that complies with. HMA spreading and compacting equipment must comply with section 39-2.01C(2).

Grind existing surfaces to accommodate a minimum taper thickness of 0.10 foot when either:

1. HMA material such as rubberized, polymer modified or open graded is unsuitable for raking to a maximum 0.02 foot thickness at the conform
2. Temporary taper will be in place for more than 14 days

For temporary tapers on bridge decks or approach slabs, construct temporary tapers with polyester concrete that complies with section 15-1.03.

The completed temporary taper surface must be uniform and must not vary from the lower edge of a 12- foot straightedge more than 0.02 foot when laid upon its surface in directions parallel and perpendicular to traffic. If authorized, you may use alternative materials or methods to produce the required taper. This temporary taper slope must be used instead of any other temporary transverse joint taper slope described in the Contract.

Add to section 7-1.11D

Federal Trainee Program

For the Federal training program, the number of trainees or apprentices is **ZERO (0)**.

^^

8 PROSECUTION AND PROGRESS

Add to section 8-1.01:

8-1.01 Assignment

No third-party agreement relieves you or your surety of your responsibility to complete the work. Do not sell, transfer, or otherwise dispose of any contract part without prior written consent from the Department.
If you assign the right to receive contract payments, the Department accepts the assignment upon the Engineer's receipt of a notice. Assigned payments remain subject to deductions and withholds described in the contract. The Department may use withheld payments for work completion whether payments are assigned or not.

8-1.04 Start of Job Site Activities

Replace "Reserved" in section 8-1.04C with:

The onsite job activities shall not begin before June 14, 2021 and no work will be conducted on the banks or channels of Long Valley Creek and its Overflow until June 15, 2021. The first working day shall be June 14, 2021 and shall diligently prosecute the same to completion before the expiration of

95 WORKING DAYS

beginning on the date that work begins.

The first working day will be June 14, 2021.

Do not start other job site activities until all the submittals from the above list are authorized or accepted and the following information is received by the Engineer:

1. Notice of Materials To Be Used form.

Submit a notice 72 hours before starting job site activities. If the project has more than 1 location of work, submit a separate notice for each location.

SAMPLE
NOT FOR BIDDING

8-1.07 Delays

Add to section 8-1.07A with:

8-1.07A General

An excusable delay is a delay of a controlling activity beyond your control, not foreseeable when the work began such as:

1. Change in the work
2. Department action that is not part of the contract
3. Presence of an underground utility main not described in the contract or in a location different from that specified
4. Described facility reconstruction not reconstructed as described, by the utility owner by the date specified, unless the reconstruction is solely for your convenience
5. Department's failure to obtain timely access to the right-of-way
6. Department's failure to perform an action in the time specified

A critical delay is a delay that extends the schedule completion date.
If requesting a delay-related time or payment adjustment, follow the dispute and claim procedures specified in Sections 5-1.43, "Potential Claims and Dispute Resolution," and 9-1.17D, "Final Payment and Claims."
Minimize and mitigate impacts of delays.

^^

9 PAYMENT

Add to section 9-1.16C:

The following items are eligible for progress payment even if they are not incorporated into the work:

1. Miscellaneous bridge metal
2. Precast concrete members
3. Bridge Railings

^^

DIVISION II GENERAL CONSTRUCTION

10 GENERAL

Replace *Reserved* in section 10-1.02A:

The first item of work shall be the construction of the barbwire fencing and stock gates along the right of way from Station 0+42 to 3+86 and from Station 20+78 to 23+75 on the north side and install the temporary barbwire fencing from Station 3+86 to 20+78 along the temporary construction easement on the north side as shown on the project plans.

The additional HMA widening areas as shown on plans sheet 19 shall be constructed prior to any earthwork

Add to section 10-1.02A:

Temporary Silt fence must be installed, prior to any earthwork

.

Replace *Reserved* in section 10-1.03 with:

The Contractor may only conduct work on the banks of Long Valley Creek and its overflow channel from June 15 to October 15 and the creek is in low flow conditions.

SAMPLE NOT FOR BIDDING

Add to section 10-6:

The source or sources for the develop of the water supply shall be submitted to the Engineer a minimum of 7 days for review before any work is schedule and must approved by the Engineer before any work can begin.

Replace the 1st sentence of the paragraph in section 10-6 with:

Water must be nonpotable.

Replace *Reserved* in section 10-16:

^^

11 WELDING

Add to section 11-1.04:

11-1.04 PERSONAL QUALIFICATIONS AN CERTIFICATIONS

A certificated welder shall do any welding that is required on site and copies of their certifications shall be submitted to the Agency's Engineer before the work is performed.

^^

12 TEMPORARY TRAFFIC CONTROL

12-1 GENERAL

Add to section 12-1.03 with:

When any work encroaches or is being completed on Hackstaff Road, County Road 322, temporary traffic control will be required which will be the appropriate number of flaggers and pilot car.

During the traffic striping work temporary traffic control is required which will be the appropriate number of flaggers and pilot car.

SAMPLE NOT FOR BIDDING

Replace to section 12-1.04 with:

12-1.04 PAYMENT

Traffic control system for lane closure is paid for as traffic control system.

Full compensation for furnishing and operating the pilot car, (including driver, radios and other equipment and labor required) shall be considered as included in the contract prices paid for the various items of work and no separate payment will be made therefor.

Full compensation for providing the traffic control system shown on the plans (including signs) shall be considered as included in the contract prices paid for the various items of work and no separate payment will be made therefor.

Full compensation for furnishing flag persons (including radios, signs and any other equipment and labor required) shall be considered as included in the contract prices paid for the various items of work and no separate payment will be made therefor.

The adjustment provisions in Section 12-1.04, "Payment" of the Standard Specifications, shall **NOT** apply to the item of traffic control system. Adjustments in compensation for traffic control system will be made only for increased or decreased traffic control system required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary. Such adjustment will be made on a force account basis as provided in Section 9-1.04 "FORCE ACCOUNT," of the Standard Specifications for increased work, and estimate on the same basis in the case of decreased work.

The requirements in section 4-1.05 for payment adjustment do **NOT** apply to traffic control system. Adjustments in compensation for traffic control system will be made for an increase or decrease in traffic control work if ordered and will be made on the basis of the cost of the necessary increased or decreased traffic control. The adjustment will be made on a force account basis for increased work and estimated on the same basis in the case of decreased work.

A traffic control system required by change order work is paid for as a part of the change order work.

12-3 TEMPORARY TRAFFIC CONTROL DEVICES

Add to section 12-3.02C:

The placement of the temporary traffic cones shall be at the discretion of the Resident Engineer

Replace to section 12-3.02D:

Payment for the temporary traffic cones shall be pay as bid item Temporary Traffic Cones per cone and no additional compensation shall be made for the temporary traffic cones.

Add to section 12-3.03C:

The placement of the temporary plastic traffic drums shall be at the discretion of the Resident Engineer

Replace to section 12-3.03D:

Payment for the temporary plastic drums shall be pay as bid item Temporary Plastic Drums per drum and no additional compensation shall be made for the temporary plastic drums.

Add to section 12-3.10C:

The placement of the temporary type III barricades shall be at the discretion of the Resident Engineer

Add to section 12-3.10D:

Payment for the temporary type III barricades shall be pay as bid item Temporary Type III Barricades per barricade and no additional compensation shall be made for the temporary type III barricades.

Add to section 12-3.11D:

Payment for the construction area signs shall be pay as bid item Construction Area Signs and no additional compensation shall be made for the construction area signs.

Add to section 12-3.22D:

Payment for the Temporary Crash Cushion Modules shall be pay as bid item for Temporary Crash Cushion Modules per Module and no additional compensation shall be made for the temporary Crash Cushion Modules.

Add to section 12-3.32C:

The portable changeable message signs shall be placed prior to the beginning of work and shall remain in place and operating until the completion of the project or until the Resident Engineer had determined that they are no longer needed..

Replace to section 12-3.32D:

Payment for the portable changeable message signs shall be pay as bid item Portable Changeable Message sign per sign and no additional compensation shall be made for the signs.

SAMPLE NOT FOR BIDDING

12-3.36 PORTABLE TRANSVERSE RUMBLE STRIPS

Replace *Reserved* in section 12-3.36 with:

12-3.36A General

12-3.36A(1) Summary

Section 12-3.36 includes specifications for placing portable transverse rumble strips.

12-3.36A(2) Definitions

Not Used

12-3.36A(3) Submittals

Submit a copy of the manufacturer's instructions.**12-3.36A(4) Quality Assurance**

Not Used

12-3.36B Materials

The strip must be either the RoadQuake 2 or the RoadQuake 2F Folding Temporary Portable Rumble Strip manufactured by Plastic Safety Systems, Inc. For information on obtaining the rumble strips, contact:

CUSTOMER SERVICE
PLASTIC SAFETY SYSTEMS, INC.
2444 BALDWIN RD
CLEVELAND, OH 44104

Telephone no.: (800) 662-6338 or (216) 231-8590

12-3.36C Construction

Place portable transverse rumble strips as shown before closing the lane to traffic.

For a RoadQuake 2 rumble strip, securely connect the 3 sections under the manufacturer's instructions before placing them in the traffic lane.

Remove all portable transverse rumble strips and warning signs before opening the lane to traffic.

If the Engineer determines that the portable transverse rumble strips no longer provide audible and vibratory alerts, replace them.

12-3.36D Payment

Not Used

SAMPLE
NOT FOR BIDDING

12-4 MAINTAINING TRAFFIC

Add to section 12-4.02A:

Except when traffic is traveling over an unpaved surface under 24-hr one way traffic control, the full width of the traveled way must be open to traffic when there are no active construction activities in the traveled way or within 6 feet of the traveled way and on:

1. Fridays after 3:00 p.m.
2. Saturdays
3. Sundays
4. Designated holidays
5. Special days

Designated holidays are shown in the following table:

Designated Holidays

Holiday	Date observed
New Year's Day	January 1st
Washington's Birthday	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4th
Labor Day	1st Monday in September
Veterans Day	November 11th
Thanksgiving Day	4th Thursday in November
Christmas Day	December 25th

If a designated holiday falls on a Sunday, the following Monday is a designated holiday. If November 11th falls on a Saturday, the preceding Friday is a designated holiday.

Add to section 12-4.02C(1):

For a one-way reversing traffic-control lane closure, traffic may be stopped in 1 direction for periods not to exceed 10 minutes. After each stoppage, all accumulated traffic for that direction must pass through the work zone before another stoppage is made. Conduct operations so that maximum delay to traffic is no longer than 15 minutes.

The maximum length of a single stationary one-way reversing traffic-control lane closure is 1.5 mile between flaggers.

Not more than 1 stationary lane closures will be allowed in each at one time.

Personal vehicles of your employees must not be parked on the traveled way or shoulders, including sections closed to traffic.

If work vehicles or equipment are parked within 6 feet of a traffic lane, close the shoulder area with fluorescent orange traffic cones or portable delineators. Place the cones or delineators on a taper in advance of the parked vehicles or equipment and along the edge of the traveled way at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. Use at least 9 cones or delineators for the taper. Use a W20-1, "Road Work Ahead," W21-5b, "Right/Left Shoulder Closed Ahead," or C24(CA), "Shoulder Work Ahead," sign mounted on a crashworthy, portable sign support with flags. The sign must be 48 by 48 inches and placed as ordered by the Engineer. If a cone or delineator is displaced or overturned, immediately restore the device to its original position or location.
Have the necessary materials and equipment on site to erect or remove the material before detouring or stopping traffic.

The full width of the traveled way must be open to traffic when construction activities are not actively in progress.

Equipment and materials must not remain in a lane unless the lane is closed to traffic and is used for Contract activities.

If a lane is closed for construction activities and opening the lane becomes necessary for use by traffic, immediately stop active Contract activities and start clearing the lane.

Do not close lanes if the atmospheric visibility is less than 1,000 feet.

Keep the full width of the traveled way open to traffic when no active construction activities are occurring in the traveled way or within 6 feet of the traveled way.

SAMPLE
NOT FOR BIDDING

Add to the end of section 12-4.02C(3)(a):

If work vehicles or equipment are parked within 6 feet of a traffic lane, close the shoulder area with fluorescent orange traffic cones or portable delineators. Place the cones or delineators on a taper in advance of the parked vehicles or equipment and along the edge of the traveled way at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. Use at least 9 cones or delineators for the taper. Use a W20-1, "Road Work Ahead," W21-5b, "Right/Left Shoulder Closed Ahead," or C24(CA), "Shoulder Work Ahead," sign mounted on a crashworthy, portable sign support with flags. The sign must be 48 by 48 inches and placed as ordered by the Engineer. If a cone or delineator is displaced or overturned, immediately restore the device to its original position or location.

A minimum of 1 unpaved traffic lane not less than 12 feet wide must be open for use by traffic.

Replace *Reserved* in section 12-4.02C(3)(k) with:

Lane Closure Restriction for Designated Holidays										
Thu	Fri	Sat	Sun	Mon	Tues	Wed	Thu	Fri	Sat	Sun
x	**H** xx	xx	xx							
x	xx	**H** xx	xx							
	x	xx	**H** xx	xx						
	x	xx	xx	**H** xx	xx					
				x	**H** xx					
					x	**H** xx				
						x	**H** xx	xx	xx	xx

Legend:	
x	The full width of the traveled way must be open for use by traffic after 3 p.m. Except when traffic is traveling on an unpaved surface under 24-hr one way traffic control.
xx	The full width of the traveled way must be open for use by traffic. Except when traffic is traveling on an unpaved surface under 24-hr one way traffic control.
H	Designated holidays. Except when traffic is traveling on an unpaved surface under 24-hr one way traffic control.

SAMPLE NOT FOR BIDDING

Add to section 12-4.02C(7)(a) with:

Specifications for closing traffic lanes with stationary lane closures on 2-lane, 2-way highways. The traffic control system for a lane closure must comply with the details shown.

Traffic control system includes signs.

Whenever components of the traffic control system are displaced or cease to operate or function as specified from any cause, immediately repair the components to the original condition or replace the components and restore the components to the original location.

Add to the end of section 12-4.02C(7)(a):

Except where prohibited, use an impact attenuator vehicle:

1. To follow behind equipment and workers who are placing and removing components of a closure. Operate the flashing arrow sign in the arrow or caution mode during this activity, whichever applies. Follow at a distance that prevents intrusion into the work space from passing traffic.

After placing components of a stationary traffic control system, you may place the impact attenuator vehicle in advance of the work area or at another authorized location to protect traffic and workers.

Add to section 12-4.02C(7)(b) with:

For a stationary lane closure made only for the work period, remove the components of the traffic control system from the traveled way and shoulder, except for portable delineators placed along open trenches or excavation adjacent to the traveled way at the end of each work period. You may store the components at selected central locations designated by the Engineer within the limits of the highway.

For traffic under 1-way control on unpaved areas, the cones shown along the centerline need not be placed.

When traffic is on unpaved surface:

1. Reversing one-way traffic control must be in place 24 hours per day.
2. Provide dust control when operations are not in progress, including weekends and designated holidays. This does not relieve you of the requirement of providing dust control when operations are in progress.

Use a pilot car to control traffic. The cones shown along the centerline need not be placed. The pilot car must have radio contact with personnel in the work area. Operate the pilot car through the traffic control zone at a speed not greater than 25 miles per hour.

Add to the end of section 12-4.02C(7)(b):

Additional flaggers are required when reversing control lane closures affect intersections.

Not more than 1 stationary closure is allowed in each direction of travel at one time.

For a stationary one-way-reversing traffic-control lane closure, you may stop traffic in 1 direction for periods not to exceed 12 minutes. After each stoppage, all accumulated traffic for that direction must pass through the work zone before another stoppage is made. Conduct operations so that the maximum delay to traffic is no longer then 15 minutes. Traffic delay is defined as the difference between the time it takes a vehicle to travel through the project at the posted speed limit when no work is in progress and the time it takes a vehicle to travel through the project when work is inprogress.

The maximum length of a single stationary one-way-reversing traffic-control lane closure is 1 miles between flaggers.

Not more than 1 stationary one-way-reversing traffic-control lane closures will be allowed at one time.

You must use a pilot car to control traffic during stationary one-way-reversing traffic-control lane closures. When a pilot car is used to control traffic, the cones shown along the centerline are not required. Pilot cars must have cellular or radio contact with other pilot cars and personnel in the work zone. The maximum speed of the pilot cars convoying or controlling traffic through the traffic control zone is 25 mph. Pilot cars must only use traffic lanes open to traffic. Payment for pilot car is included in Traffic Control System.

SAMPLE NOT FOR BIDDING

13 WATER POLLUTION CONTROL

Add to section 13-1.01:

13-1.01 GENERAL

Water pollution control work shall conform to the provisions in Section 13, "Water Pollution," of the Standard Specifications, section of these special provisions entitled "Relations With California Regional Water Quality Control Board," and these special provisions.

The Contractor shall perform water pollution control work in conformance with the requirements in the "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual" and its addenda in effect on the day the Notice to Contractors is dated. This manual is referred to as the "Preparation Manual." Copies of the Preparation Manual may be obtained from:

State of California
Department of Transportation
Publication Distribution Unit
1900 Royal Oaks Drive
Sacramento, California 95815
Telephone: (916) 445-3520

The Preparation Manual and other references for performing water pollution control work are available from the Department's Construction Storm Water and Water Pollution Control web site at:

http://www.dot.ca.gov/hq/construc/stormwater/

The Contractor shall designate in writing a Water Pollution Control Manager (WPCM). The Contractor shall submit a statement of qualifications describing the training, work history, and expertise of the proposed WPCM.

the Construction Stormwater website.

Replace section 13-1.01A with:

13-1.01A Summary

Section 13-1 includes general specifications for preventing, controlling, and abating water pollution within waters of the State of California.

Information on forms, reports, and other documents is in the following Caltrans manuals:

1. Field Guide to Construction Site Dewatering
2. Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual
3. Construction Site Best Management Practices (BMPs) Manual
4. Construction Site Monitoring Program Guidance Manual

You may view these manuals at the Stormwater and Water Pollution Control Information link at the Caltrans Division of Construction website or purchase them at the Caltrans Publication Distribution Unit.

If required, a WPCP and a SWPPP must comply with the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual and must be prepared using the latest template posted on the Construction Stormwater website.

SAMPLE
NOT FOR BIDDING

Add to the end of section 13-1.01A:

The specifications in section 13 for water quality monitoring apply to the following work activities whenever they occur in water:

1. Installation and removal of Temporary Access Road
2. All in water work
3. Sheet Piling (ie Cofferdams)

The receiving water for this project is Long Valley Creek and Long Valley Creek Overflow.

Replace the 1st sentence in the 1st paragraph of section 13-1.01C(4)(c) with:

Whenever work activities occur in water and during the installation and removal of the Sheet Piling and Temporary Access Road, submit a report within two weeks.

Add item 6 to the list in the 1st paragraph of section 13-1.01C(4)(c):

6. Requirements described in the State Water Board PLAC, 401 Water Quality Certification and Order

Test the receiving water under the test methods for the WQOs shown in the following table:

Water Quality Objectives

Quality characteristic	Test method	Detection limit (min)	Requirement
Turbidity during activities for in-water work (NTU)	Field test with a calibrated portable instrument (Measured at downstream sampling location)	1	15 above natural background
Turbidity during activities excluding in-water work (NTU)	Field test with a calibrated portable instrument (Measured at downstream sampling location)	1	1. Where natural turbidity is less than 1 NTU, increases must not exceed 2 NTU. 2. Where natural turbidity is from 1 to 5 NTUs, increases must not exceed 1 NTU. Where natural turbidity is from 5 to 50 NTUs, increases must not exceed 20 percent. Where natural turbidity is from 50 to 100 NTUs, increases must not exceed 10 NTUs. 5. Where natural turbidity is greater than 100 NTUs, increases must not exceed 10 percent.
Settleable material (ml/L)	Observed	--	Greater than 0.1 ml/L

SAMPLE NOT FOR BIDDING

13-3 STORMWATER POLLUTION PREVENTION PLAN

Add to section 13-3.01:

13-3.01 GENERAL

The SWPPP shall be in place of the water pollution control program required by the provisions in Section 13, "Water Pollution," of the Standard Specifications.

The SWPPP includes water pollution control practices:

A. For storm water and non-storm water from areas outside of the job site related to construction activities for this contract such as:

1. Staging areas.
2. Storage yards.
3. Access roads.

B. Appropriate for each season as described in "Implementation Requirements" of these special provisions.
C. For activities or mobile operations related to all NPDES permits.

The SWPPP include a schedule that:

A. Describes when work activities that could cause water pollution will be performed.
B. Identifies soil stabilization and sediment control practices for disturbed soil area.
C. Includes dates when these practices will be 25, 50, and 100 percent complete.
D. Shows 100 percent completion of these practices before the rainy season.
1 Develop a spill response and implementation element.

The SWPPP includes the following temporary water pollution control practices and their associated contract items of work as shown on the plans or specified in these special provisions:

A. Temporary Linear Sediment Control

1. Temporary Fiber Roll
2. Temporary Silt Fence

B. Waste Management and Materials Pollution Control

1. Temporary Concrete Washout Facility

The SWPPP includes the following contract items of work for permanent water pollution control as shown on the plans or as specified in these special provisions:

A. Erosion Control (Type D)
B. Rock Slope Protection (Method B)
C. Bridge Construction
D. Structure Excavation
E. Pile Driving
E. Structure Backfill

The Contractor shall keep a copy of the approved SWPPP at the job site. The SWPPP shall be made available when requested by a representative of the Regional Water Quality Control Board, State Water Resources Control Board, United States Environmental Protection Agency, or the local storm water management agency. Requests from the public shall be directed to the Engineer.

SAMPLE
NOT FOR BIDDING

IMPLEMENTATION REQUIREMENTS

The Contractor's responsibility for SWPPP implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 8-1.06," Suspensions," of the Standard Specifications.

If the Contractor or the Engineer identifies a deficiency in the implementation of the approved SWPPP, the deficiency shall be corrected immediately, unless an agreed date for correction is approved in writing by the Engineer. The deficiency shall be corrected before the onset of precipitation. If the Contractor fails to correct the deficiency by the agreed date or before the onset of precipitation, the Department may correct the deficiency and deduct the cost of correcting deficiencies from payments.

If the Contractor fails to conform to the provisions of this section, "Water Pollution Control," the Engineer may order the suspension of work until the project complies with the requirements of this section.

Year-Round

The Contractor shall monitor the National Weather Service weather forecast on a daily basis during the contract. The Contractor may use an alternative weather forecasting service if approved by the Engineer. Appropriate water pollution control practices shall be in place before precipitation.

The Contractor may discontinue earthwork operations for a disturbed area for up to 21 days and the disturbed soil area will still be considered active. When earthwork operations in the disturbed area have been completed, the Contractor shall implement appropriate water pollution control practices within 15 days, or before predicted precipitation, whichever occurs first.

Rainy Season

The Contractor shall provide soil stabilization and sediment control practices during the rainy season between March 1 and May 1, and between September 1 and December 1.

The Contractor shall implement soil stabilization and sediment control practices a minimum of 10 days before the start of the rainy season.

During the defined rainy season, the active disturbed soil area of the project site shall be not more than 5 acres. The Engineer may approve expansions of the active disturbed soil area limit if requested in writing. The Contractor shall maintain soil stabilization and sediment control materials on site to protect disturbed soil areas.

INSPECTION AND MAINTENANCE

The WPCM shall inspect the water pollution control practices identified in the SWPPP as follows:

A. Before a forecasted storm,
B. After precipitation that causes site runoff,
C. At 24-hour intervals during extended precipitation,
D. On a predetermined schedule, a minimum of once every 2 weeks outside of the defined rainy season, and
E. On a predetermined schedule, a minimum of once a week during the defined rainy season.

The WPCM shall oversee the maintenance of the water pollution control practices.

The WPCM shall use the Storm Water Quality Construction Site Inspection Checklist provided in the Preparation Manual or an alternative inspection checklist provided by the Engineer. A copy of the completed site inspection checklist shall be submitted to the Engineer within 24 hours of finishing the inspection.

REPORTING REQUIREMENTS

If the Contractor identifies discharges into surface waters or drainage systems causing or potentially causing pollution, or if the project receives a written notice or order from a regulatory agency, the Contractor shall immediately inform the Engineer. The Contractor shall submit a written report to the Engineer within 7 days of the discharge, notice or order. The report shall include the following information:

A. The date, time, location, and nature of the operation, type of discharge and quantity, and the cause of the notice or order.
B. The water pollution control practices used before the discharge, or before receiving the notice or order.
C. The date of placement and type of additional or altered water pollution control practices placed after the discharge, or after receiving the notice or order.
D. A maintenance schedule for affected water pollution control practices.

Annual Certifications

By June 15 of each year, the Contractor shall complete and submit to the Engineer an Annual Certification of Compliance, as contained in the Preparation Manual.

SAMPLE
NOT FOR BIDDING

CONSTRUCTION

General

Manage work activities in a way that reduces the discharge of pollutants to surface waters, groundwater, and separate municipal storm sewer systems.

Continue WPCP implementation during any suspension of work activities.

You are responsible for delays and you must pay all costs associated with submitting a SWPPP due to your actions that result in one of the following:

1. 1 or more acres of soil disturbance on projects without an Erosivity Waiver
2. More than 5 acres of soil disturbance on projects with an Erosivity Waiver
3. Failure to comply with the schedule for soil disturbing activities for projects with an Erosivity Waiver if the delays void
   the Erosivity Waiver

Install facilities and devices used for water pollution control practices before performing work activities. Install soil stabilization materials for water pollution control practices in all inactive areas or before storm events.

Repair or replace water pollution control practices within 24 hours of discovering any damage, unless a longer period is authorized.

The Department does not pay for the cleanup, repair, removal, disposal, or replacement of water pollution control practices due to improper installation or your negligence.

You may request changes to the water pollution control work or the Engineer may order changes to water pollution control work. Changes may include additional or new water pollution control practices. Additional water pollution control work is paid for as extra work under Section 4-1.05, "Changes and Extra Work," of the Standard Specifications.

Retain a printed copy of the approved WPCP at the job site.

Monitoring

Monitor and inspect water pollution control practices at the job site.
Notify the Engineer within 6 hours whenever any of the following occurs:

1. You identify discharges into receiving waters or drainage systems that are causing or could cause water pollution
2. You receive a written notice or order for the project from the RWQCB or any other regulatory agency

Monitor the National Weather Service's forecast on a daily basis. For the National Weather Service's forecast, go to the Web site for the National Weather Service.

Inspections

Use the Stormwater Site Inspection Report form for documenting site inspections.
The WPC manager must oversee:

1 Inspections of water pollution control practices identified in WPCP:

- 1.1. Before a forecasted storm event
- 1.2. After a qualifying rain event that produces site runoff
- 1.3. At 24-hour intervals during extended storm events
- 1.4. On a predetermined schedule of at least once a week
-

2. Daily inspections of:

2.1. Storage areas for hazardous materials and waste
2.2. Hazardous waste disposal and transporting activities
2.3. Hazardous material delivery and storage activities

3. Inspections of:

3.1. Vehicle and equipment cleaning facilities:

3.1.1. Daily if vehicle and equipment cleaning occurs daily
3.1.2. Weekly if vehicle and equipment cleaning does not occur daily

3.2. Vehicle and equipment maintenance and fueling areas:

3.2.1. Daily if vehicle and equipment maintenance and fueling occurs daily
3.2.2. Weekly if vehicle and equipment maintenance and fueling does not occur daily

3.3. Vehicles and equipment at the job site for leaks and spills on a daily schedule. Verify that operators are inspecting vehicles and equipment each day of use.
3.4. Demolition sites within 50 feet of storm drain systems and receiving waters daily.
3.5. Pile driving areas for leaks and spills:

3.5.1. Daily if pile driving occurs daily
3.5.2. Weekly if pile driving does not occur daily

3.6. Temporary concrete washouts:

3.6.1. Daily if concrete work occurs daily
3.6.2. Weekly if concrete work does not occur daily

3.7. Paved roads at job site access points for street sweeping:

3.7.1. Daily if earthwork and other sediment or debris-generating activities occur daily
3.7.2. Weekly if earthwork and other sediment or debris-generating activities do not occur daily
3.7.3. Within 24 hours of precipitation forecasted by the National Weather Service

SAMPLE
NOT FOR BIDDING

3.8. Dewatering work:

3.8.1. Daily if dewatering work occurs daily
3.8.2. Weekly if dewatering work does not occur daily

3.9. Temporary active treatment system:

3.9.1. Daily if temporary active treatment system activities occur daily
3.9.2. Weekly if temporary active treatment system activities do not occur daily

3.10. Work over water:

3.10.1. Daily if work over water occurs daily
3.10.2. Weekly if work over water does not occur daily

Deficiencies

Whenever you or the Engineer identify a deficiency in the implementation of the approved WPCP, correct the deficiency:

1 Immediately, unless a later date is authorized
2 Before precipitation occurs

The Department may correct the deficiency and deduct the cost of correcting the deficiency from payment if you fail to correct the deficiency by the agreed date or before the onset of precipitation.

SAMPLE NOT FOR BIDDING

Replace section 13-1.01A with:

13-1.01A Summary

Section 13-1 includes general specifications for preventing, controlling, and abating water pollution within waters of the State of California.

Information on forms, reports, and other documents is in the following Caltrans manuals:

1. Field Guide to Construction Site Dewatering
2. Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual
3. Construction Site Best Management Practices (BMPs) Manual
4. Construction Site Monitoring Program Guidance Manual

You may view these manuals at the Stormwater and Water Pollution Control Information link at the Caltrans Division of Construction website or purchase them at the Caltrans Publication Distribution Unit.

If required, a WPCP and a SWPPP must comply with the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual and must be prepared using the latest template posted on the Construction Stormwater website.

Add to section 13-3.01A:

The project is risk level 1.

Replace the paragraphs in section 13-3.01D(2) with:

Discharges of stormwater from the job site must comply with the permit issued by the Central Valley and Lahontan RWQCBs for National Pollutant Discharge Elimination System (NPDES) Permit 401, Permit ID SB 18067IN. The Central Valley and Lahontan RWQCBs permit governs stormwater and nonstormwater discharges resulting from construction activities at the job site.

Add to section 13-3.01C(2)(b)(ii):

The contractor or the contractor representative shall be responsible for Stormwater Site Inspection Reports.

Replace section 13-3.04:

13-3.04 PAYMENT

For a project with 60 original working days or less, the Department pays for prepare stormwater pollution prevention plan as follows:

1 Total of 75 percent of the item total upon authorization of the SWPPP
2 Total of 100 percent of the item total upon Contract acceptance

For a project with more than 60 original working days, the Department pays for prepare stormwater pollution prevention plan as follows:

1 Total of 50 percent of the item total upon authorization of the SWPPP
2 Total of 90 percent of the item total upon work completion
3 Total of 100 percent of the item total upon Contract acceptance

The Department does not pay for the preparation, collection, laboratory analysis, and reporting of stormwater samples for nonvisible pollutants if WPC practices are not implemented before precipitation or if you fail to correct a WPC practice before precipitation.

The Department does not adjust the unit price for an increase or decrease in the quantity of:

1 Rain event action plan
2 Storm water sampling and analysis day
3 Storm water annual report

During each estimate period the Contractor fails to conform to the provisions in this section, "Water Pollution Control," or fails to implement the water pollution control practices shown on the plans or specified elsewhere in these special provisions as items of work, the Department will withhold 25 percent of the progress payment.

Withholds for failure to perform water pollution control work will be in addition to all other withholds provided for in the contract. The Department will return performance-failure withholds in the progress payment following the correction of noncompliance.

Implementation of water pollution control practices in areas outside the highway right of way not specifically provided for in the SWPPP or in these special provisions will not be paid for.

Water pollution control practices for which there are separate contract items of work will be measured and paid for as those contract items of work.

Payment for the Stormwater Site Inspection Reports shall be included and paid for under the Job Site Management pay item.

SAMPLE NOT FOR BIDDING

13-4 JOB SITE MANAGEMENT

Add to section 13-4.03A:

Job Site Management

Construction site management shall consist of controlling potential sources of water pollution before they come in contact with storm water systems or watercourses. The Contractor shall control material pollution and manage waste and non-storm water existing at the construction site by implementing effective handling, storage, use, and disposal practices.

Attention is directed to "Water Pollution Control" of these special provisions regarding the Contractor's appointment of a water pollution control manager (WPCM) for the project.

The Contractor shall train all employees and subcontractors regarding:

A. Material pollution prevention and control;
B. Waste management;
C. Non-storm water management;
D. Identifying and handling hazardous substances; and
E. Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances.

Training shall take place before starting work on this project. New employees shall receive the complete training before starting work on this project. The Contractor shall have regular meetings to discuss and reinforce spill prevention and control; material delivery, storage, use, and disposal; waste management; and non-storm water management procedures.

Instructions for material and waste handling, storage, and spill reporting and cleanup shall be posted at all times in an open, conspicuous, and accessible location at the construction site.

Nonhazardous construction site waste and excess material shall be recycled when practical or disposed of in accordance with the provisions in Section 5-1.20B(4), "Contractor-Property Owner Agreement," of the Standard Specifications, unless otherwise specified.

Vehicles and equipment at the construction site shall be inspected by the WPCM on a frequent, predetermined schedule, and by the operator each day of use. Leaks shall be repaired immediately, or the vehicle or equipment shall be removed from the construction site.

Add to section 13-4.03C(2):

Material Storage

The Contractor shall store liquids, petroleum products, and substances listed in CFR Title 40, Parts 110, 117, and 302 in containers or drums approved by the United States Environmental Protection Agency, and place them in secondary containment facilities.

Secondary containment facilities shall be impervious to the materials stored there for a minimum contact time of 72 hours.

Throughout the rainy season secondary containment facilities shall be covered during non-working days and when precipitation is predicted. Secondary containment facilities shall be adequately ventilated.

The Contractor shall keep the secondary containment facility free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, accumulated liquid shall be collected and placed into drums within 24 hours. These liquids shall be handled as hazardous waste in accordance with the provisions in "Hazardous Waste" of these special provisions, unless testing determines them to be nonhazardous.

Incompatible materials, such as chlorine and ammonia, shall not be stored in the same secondary containment facility.

Materials shall be stored in the original containers with the original product labels maintained in legible condition. Damaged or illegible labels shall be replaced immediately.

The secondary containment facility shall have the capacity to contain precipitation from a 24-hour-long, 25-year storm; and 10 percent of the aggregate volume of all containers, or all of the volume of the largest container within the facility, whichever is greater.

The Contractor shall store bagged or boxed material on pallets. Throughout the rainy season, bagged or boxed material shall be protected from wind and rain during non-working days and when precipitation is predicted.

The Contractor shall provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas shall be kept clean, well organized, and equipped with cleanup supplies appropriate for the materials being stored.

The Contractor shall repair or replace perimeter controls, containment structures, covers, and liners as needed. Storage areas shall be inspected before and after precipitation, and at least weekly during other times.

SAMPLE
NOT FOR BIDDING

Add to section 13-4.03C(3):

Stockpile Management

The Contractor shall reduce or eliminate potential air and water pollution from stockpiled material including soil, paving material, or pressure treated wood. Stockpiles shall be located out of floodplains when possible, and at least 50 feet from concentrated flows of storm water, drainage courses, or inlets unless written approval is obtained from the Engineer.

The Contractor may discontinue adding or removing material for up to 21 days and a stockpile will still be considered active.

The Contractor shall protect active stockpiles with plastic or geotextile cover, soil stabilization measures, or with linear sediment barrier when precipitation is predicted. Active stockpiles of cold mix asphalt concrete shall be placed on an impervious surface and covered with plastic when precipitation is predicted.

The Contractor shall protect inactive soil stockpiles with a plastic or geotextile cover, or with soil stabilization measures at all times during the rainy season. A linear sediment barrier around the perimeter of the stockpile shall also be used. During the non-rainy season soil stockpiles shall be covered and protected with a linear sediment barrier when precipitation is predicted. The Contractor shall control wind erosion during dry weather as provided in Section 10, "Dust

Control," of the Standard Specifications.

Stockpiles of portland cement concrete rubble, asphalt concrete (AC), hot mix asphalt (HMA), AC and HMA rubble, aggregate base, or aggregate subbase shall be covered with plastic or geotextile, or protected with a linear sediment barrier at all times during the rainy season, and when precipitation is predicted during the non-rainy season.

Stockpiles of cold mix asphalt concrete shall be placed on and covered with impermeable material at all times during the rainy season, and when precipitation is predicted during the non-rainy season.

Stockpiles of pressure treated wood shall be covered with impermeable material and placed on pallets at all times during the rainy season, and when precipitation is predicted during the non-rainy season.

The Contractor shall repair or replace linear sediment barriers and covers as needed or as directed by the Engineer to keep them functioning properly. Sediment shall be removed when it accumulates to 1/3 of the linear sediment barrier height.

Add to section 13-4.03E(1):

The Contractor shall prevent erosion or the discharge of pollutants into storm drain systems or watercourses by managing the water used for construction operations. The Contractor shall obtain the Engineer's approval before washing anything on the construction site with water that could discharge into a storm drain system or watercourse. Discharges shall be reported to the Engineer immediately.

The Contractor shall implement water conservation practices when water is used on the construction site. Irrigation areas shall be inspected and watering schedules shall be adjusted to prevent erosion, excess watering, or runoff. The Contractor shall shut off the water source to broken lines, sprinklers, or valves, and they shall be repaired as soon as possible. When possible, water from waterline flushing shall be reused for landscape irrigation. Paved areas shall be swept and vacuumed, not washed with water.

Construction water runoff, including water from water line repair, shall be directed to areas to infiltrate into the ground and shall not be allowed to enter storm drain systems or watercourses. Spilled water shall not be allowed to escape water truck filling areas. When possible, the Contractor shall direct water from off-site sources around the construction site, or shall minimize contact with the construction site.

Add to section 13-4.03F:

STREET SWEEPING

This work includes street sweeping using machine-operated sweepers or self propelled brooms.

Street sweeping must comply with the specifications for sweeping in the Section titled, "Construction Site Management," of these special provisions except a machine-operated sweeper must be used.

Street sweeping does not void specifications for main residue collection included in other work activities, such as grooving, grinding, or asphalt concrete planing.

The WPCP must describe and include the use of street sweeping as a water pollution control practice for sediment control and tracking control.

Submittals

At least 5 business days before you start clearing and grubbing, earthwork, or other activities with the potential for tracking sediment or debris, submit:

1. Number of machine-operated sweepers or self propelled broom described in the WPCP
2. Type of sweeper technology

Quality Control and Assurance

Retain and submit records of street sweeping, including:

1. Quantity of disposed sweeping waste
2. Sweeping times and locations

MATERIALS

Machine-operated sweepers must use one of the following technologies:

1. Mechanical sweeper followed by a vacuum-assisted sweeper
2. Vacuum-assisted dry (waterless) sweeper
3. Regenerative-air sweeper

SAMPLE NOT FOR BIDDING

CONSTRUCTION

At least 1 self propelled broom must be on the job site at all times during the duration of the construction work. The sweeper or broom must be in good working order.

Add to section 13-4.03G:

DEWATERING

Dewatering shall consist of discharging accumulated storm water, ground water, or surface water from excavations or temporary containment facilities. The Contractor shall discharge water within the limits of the project.

Dewatering discharge shall not cause erosion, scour, or sedimentary deposits that impact natural bedding materials.

The Contractor shall conduct dewatering activities in accordance with the Field Guide for Construction Dewatering available at:

http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm

Before dewatering the Contractor shall submit a Dewatering and Discharge Plan to the Engineer in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications and "Water Pollution Control," of these special provisions. At a minimum, the Dewatering and Discharge Plan shall include the following:

A. A title sheet and table of contents;
B. A description of the dewatering and discharge operations detailing the locations, quantity of water, equipment, and discharge point;
C. The estimated schedule for dewatering and discharge (begin and end dates, intermittent or continuous);
D. Discharge alternatives such as dust control or percolation; and
E. Visual monitoring procedures with inspection log.

The Contractor shall not discharge storm water or non-storm water that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface and shall notify the Engineer immediately upon discovery.

If water cannot be discharged within the project limits due to site constraints it shall be disposed of in the same manner specified for material in Section 5-1.20B(4), "Contractor-Property Owner Agreement," of the Standard Specifications.

SAMPLE NOT FOR BIDDING

Replace section 13-4.04 with:

PAYMENT

The contract lump sum price paid for job site management shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved but not limited to, in spill prevention and control, material management, waste management, non-storm water management, and dewatering and identifying, sampling, testing, handling, and disposing of hazardous waste, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

13-4.04 PAYMENT

Payment for the Dewatering shall be pay as bid item Bridge Excavation Dewatering and no additional compensation shall be made for the Dewatering.

Payment for job site management is included in the contract prices paid for the various items of work and no separate payment will be considered.

13-5 TEMPORARY SOIL STABILIZATION

Replace section 13-5.04 with:

13-5.04 PAYMENT

The payment quantity for temporary soil stabilization bid items paid for by the area is the area measured parallel with the ground surface not including the additional quantity used for overlaps.

The Contractor is responsible for the cost for maintaining soil stabilization measures under section 9-1.04.

1.2 TEMPORARY SEDIMENT CONTROL

Replace section 13-6.04 with:

13-6.04 PAYMENT

The payment quantity for temporary sediment control bid items paid for by the length is the length measured along the centerline of the installed material.

The payment quantity for temporary fiber roll does not include the additional quantity used for overlaps.

The Department does not pay for the relocation of temporary drainage inlet protection during work progress.

The Contractor is responsible for the cost for maintaining sediment control measures under section 9-1.04..

The contractor is responsible for the cost constructing, maintaining and removing the temporary sediment control as shall be paid for at the contract price.

SAMPLE
NOT FOR BIDDING

1.3 TEMPORARY TRACKING CONTROL

Replace section 13-7.01D with:

Payment for Temporary Tracking Control is included in the contract prices paid for the various items of work and no separate payment will be considered.

Replace section 13-7.02C with:

13-7.02C Construction

Use one of the following types of street sweeper trucks:

Mechanical sweeper followed by a vacuum-assisted sweeper
Vacuum-assisted, dry, waterless, sweeper
Regenerative-air sweeper

Street sweeping does not void the requirements for residue collection included in other work activities, such as grooving, grinding, or asphalt concrete planing.

Sweep streets as specified for sweeping in section 13-4.03F except use a street sweeper.

At least 1 street sweeper truck must be at the job site at all times for the duration of the construction project. The street sweeper truck must be in good working order.

Replace section 13-7.02D with:

13-7.02D PAYMENT

Payment for the street sweeping shall be pay as bid item Street Sweeping and no additional compensation shall be made for the street sweeping.

Replace section 13-7.03 with:

13-7.03 TEMPORARY ACCESS ROADWAYS AND ENTRANCES

TEMPORARY ACCESS ROADWAYS AND ENTRANCES

Summary

This work includes constructing, maintaining, and removing temporary construction entrance to provide temporary access.

Submittals

Submit a Certificate of Compliance under Section 6-1.03C, "Certificates of Compliance," of the Standard Specifications for:

1 Temporary Access Road Geotexile fabric

MATERIALS Temporary Access Road Fabric

Temporary Access Road fabric must comply with Section 96-1.02O, "Subgrade Enhancement Geotexile," of the Standard Specifications and be Woven Class B1.

Temporary Access Road Imported Borrow

Imported Embankment borrow compacted to a relative compaction of at least 95 percent and must have a sand equivalent value of at least 10 and comply with the minimum gradation requirements shown in the following table:

Sieve size	Operating Range
1-1/2"	100
3/4"	75-100
No. 4	20-100
No.50	0–60
No.200	0-50

Quality Characteristic	Test Method	Requirements
Plasticity Index (max)	California Test 204	20
pH	California Test 204	5-9

SAMPLE NOT FOR BIDDING

Steel Panels

Steel panels must:

1 Be made of steel.
2 Be pressed or shop welded
3 Have a slot or hook for connecting panels together

CONSTRUCTION

Do not drive on fabric until material is spread.
Repair fabric damaged during rock spreading by placing a new fabric over the damaged area. New fabric must be large enough to cover damaged area and provide at least 18-inch overlap on all edges.

Maintenance

Maintain temporary access road to minimize generation of dust and tracking of soil and sediment onto public roads. If dust or sediment tracking increases, place additional rock unless the Engineer approves another method.

Repair temporary construction entrance if:

1 Fabric is exposed
2 Depressions in the surface develop

Repair temporary construction access road within 24 hours of discovering damage unless the Engineer approves a longer period.
During use of temporary construction access road, do not allow soil, sediment, or other debris tracked onto pavement to enter storm drains, open drainage facilities, or watercourses. When material is tracked onto pavement, remove it within 24 hours unless the Engineer approves a longer period.
If your vehicles, equipment, or activities disturb or displace the temporary construction access road, repair it at your expense.
The Department does not pay maintenance costs for cleanup, repair, removal, disposal, or replacement due to improper installation or your negligence.

Removal

When the Engineer determines that temporary access road is not required, remove and dispose of the surplus materials shall be paid under contract bid item "Removal Temporary Access Road" and removed to the Lassen County Maintenance Yard in Doyle CA.
Backfill and repair ground disturbance, including holes and depressions, caused by installation and removal of temporary construction access road and return the channel bed and banks to the original condition.

Replace section 13-7.03D with:

MEASUREMENT AND PAYMENT

Temporary construction entrance is determined from actual count in place. Temporary construction entrance is measured one time only and no additional measurement will be recognized.

The contract price paid for each bid item for the temporary construction access road includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing temporary construction entrance, complete in place, including removal of temporary construction entrance, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

No additional compensation will be made if the temporary construction access road is relocated during the course of construction.

The contractor is responsible for the cost constructing, maintaining and removing the temporary access road as shall be paid for at the contract price for each of the bid items.

SAMPLE NOT FOR BIDDING

TEMPORARY CONCRETE WASHOUTS

Replace section 13-9.04 with:

13-7.04 PAYMENT

The contract lump sum price paid for temporary concrete washout (portable) 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 portable temporary concrete washout, including removal and disposal of concrete waste, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

TEMPORARY LINEAR SEDIMENT BARRIERS

Replace section 13-10.03F:

TEMPORARY SILT FENCE

Temporary silt fence shall be furnished, installed, maintained, and later removed at the locations shown on the approved Storm Water Pollution Prevention Plan in conformance with "Water Pollution Control" of these special provisions, and in conformance with details shown on the plans and these special provisions.

Attention is directed to "Water Pollution Control" of these special provisions.

Temporary silt fence shall be one of the water pollution control practices for sediment control. The Storm Water Pollution Prevention Plan shall include the use of temporary silt fence.

MATERIALS

At the Contractor's option, temporary silt fence shall be prefabricated or constructed with silt fence fabric, posts, and fasteners.

Silt Fence Fabric

Silt fence fabric shall be geotextile manufactured from woven polypropylene or polymer material. Silt Fence Fabric may be virgin or recycled, or a combination of virgin and recycled polymer materials. No virgin or recycled polymer materials shall contain biodegradable filler materials that can degrade the physical or chemical characteristics of the finished fabric. The Engineer may order tests to confirm the absence of biodegradable filler materials in conformance to the requirements in ASTM Designation: E 204 (Fourier Transformed Infrared Spectroscopy-FTIR).

Silt fence fabric shall conform to the following requirements: * or appropriate test method for specific polymer

Specification	Requirements
Width, mm, min.	900
Grab tensile strength (25-mm grip), kilo netwtons, min. in each direction ASTM Designation: D 4632*	0.55
Elongation, percent minimum in each direction ASTM Designation: D 4632*	15
Permittivity, 1/sec., min. ASTM Designation: D 4491	0.05
Flow rate, liters per minute per square meter, min. ASTM Designation: D 4491	400
Ultraviolet stability, percent tensile strength retained after 500 hours, min. ASTM Designation: D 4355 (xenon-arc lamp and water spray weathering method)	70

SAMPLE NOT FOR BIDDING

Posts

Posts for temporary silt fence shall be one of the following:

A. Posts shall be untreated fir or pine, minimum 1-3/8 inch x 1-5/8 inch in size, and 4 feet in length. One end of the post shall be pointed.

Posts shall be steel and have a "U", "T", "L" or other cross sectional shape that can resist failure by lateral loads. The steel posts shall have a minimum mass per length of 0.75 pounds/ft and a minimum length of 4 feet. One end of the steel posts shall be pointed and the other end shall be capped with an orange or red plastic safety cap which fits snugly to the steel post. The Contractor shall submit to the Engineer for approval a sample of the capped steel post prior to installation.

Fasteners

Fasteners for attaching silt fence fabric to posts shall be as follows:

A. When prefabricated silt fence is used, posts shall be inserted into sewn pockets.
B. Silt fence fabric shall be attached to wooden posts with nails or staples as shown on the plans or as recommended by the manufacturer or supplier. Tie wire or locking plastic fasteners shall be used to fasten the silt fence fabric to steel posts. Maximum spacing of fasteners shall be 8 inches along the length of the steel post.

INSTALLATION

Temporary silt fence shall be installed parallel with the slope contour in reaches not to exceed 6 inches. A reach is considered a continuous run of temporary silt fence from end to end or from an end to an opening, including joined panels. Each reach shall be constructed so that the elevation at the base of the fence does not deviate from the contour more than one third of the fence height.

The silt fence fabric shall be installed on the side of the posts facing the slope. The silt fence fabric shall be anchored in a trench as shown on the plans. The trench shall be backfilled and mechanically or hand tamped to secure the silt

fence fabric in the bottom of the trench.

Mechanically pushing 12 inches of the silt fence fabric vertically through the soil may be allowed if the Contractor can demonstrate to the Engineer that the silt fence fabric will not be damaged and will not slip out of the soil, resulting in sediment passing under the silt fence fabric.

At the option of the Contractor, the maximum post spacing may increase to 10 feet if the fence is reinforced by a wire or plastic material by prefabrication or by field installation. The field-assembled reinforced temporary silt fence shall be able to retain saturated sediment without collapsing.

Temporary silt fence shall be joined as shown on the plans. The tops of the posts shall be tied together by minimum of 2 wraps of tie wire of a minimum 1/16 inch diameter. The silt fence fabric shall be attached to the posts at the joint as specified in these special provisions.

Temporary silt fence shall be repaired or replaced at the expense of the Contractor on the same day when the damage occurs.

When no longer required as determined by the Engineer, temporary silt fence shall become the property of the Contractor and be removed and disposed of in conformance with the provisions in Section 5-1.20B(4), "Contractor-Property Owner Agreement," of the Standard Specifications. Trimming the silt fence fabric and leaving it in place will not be allowed.

Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary silt fence shall be backfilled and repaired.

MAINTENANCE

Temporary silt fence shall be maintained to provide a sediment holding capacity of approximately one-third the height of the silt fence fabric above ground. When sediment exceeds this height, or when directed by the Engineer, sediment shall be removed. The removed sediment shall be deposited within the project limits in such a way that the sediment is not subject to erosion by wind or by water.

Temporary silt fence shall be repaired or replaced on the same day when the damage occurs. Damage to the temporary silt fence resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.

PAYMENT

The quantity of temporary silt fence to be paid for will be measured by the foot, parallel with the ground slope along the line of the installed temporary silt fence, deducting the widths of openings.

The contract price paid per foot for temporary silt fence shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing temporary silt fence, complete in place, including trench excavation and backfill, maintenance, and removal of temporary silt fence, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

No adjustment of compensation will be made for any increase or decrease in the quantities of temporary silt fence required, regardless of the reason for the increase or decrease. The provisions in Section 9-1.06, "Changes Quantity Payment Adjustments," of the Standard Specifications shall not apply to temporary silt fence.

SAMPLE NOT FOR BIDDING

Replace section 13-10.04 with:

13-10.04 PAYMENT

Full compensation for installing, maintaining, removing, and disposing of Temporary Linear Control shall be considered as included in the contract prices paid per foot for the various types of temporary linear control, and no additional compensation will be allowed therefor.

^^

14 ENVIRONMENTAL STEWARDSHIP

Add to section 14-1.02:

ENVIRONMENTALLY SENSITIVE AREA (ESA)

An ESA is not anticipated on this project, but an ESA is discovered during the project the below conditions will apply.

If an ESA is discovered during the project the location of the Temporary Fencing (TYPE ESA) shall be directed by the Resident Engineer.

Summary

This work includes constructing, maintaining, and removing temporary fence (Type ESA). Temporary fence (Type ESA) provides a visible boundary adjacent to protected areas such as an environmentally sensitive area.

Submittals

Submit a Certificate of Compliance as specified in Section 6-1.07, "Certificates of Compliance" of the Standard Specifications for:

1 High visibility fabric
2 Safety cap for metal posts

MATERIALS High Visibility Fabric

High visibility fabric for temporary fence (Type ESA) must consist of one of the following:

1 Polyethylene
2 Polypropylene
3 Combined polyethylene and polypropylene

Sample under ASTM D 4354, Procedure C.Test under ASTM D 4759. All properties must be based on Minimum Average Roll Value.Identify, store, and handle under ASTM D 4873. High visibility fabric must:

1 Contain ultraviolet inhibitors
2 Comply with the following:

Property	Specifications	Requirements
Width, inches, Min	Measured	48
Opening size inches	Measured	1" x 1" (Min) 2" x 2" (Max)
Color	Observed	Orange
Grab breaking load 1-inch grip, lb, Min. in each direction	ASTM D4632	260
Apparent elongation percent, Min., in each direction	ASTM D4632	5
Ultraviolet Degradation percent of original unexposed grab breaking load 500 hr, minimum	ASTM D4355	70

SAMPLE NOT FOR BIDDING

Posts

Posts must be wood or steel. Wood posts must be:

1 Untreated fir, redwood, cedar, or pine and cut from sound timber
2 Straight and free of loose or unsound knots and other defects that would render the stakes unfit for use
3 Pointed on the end to be driven into the ground
4 At least 2" x 2" in size and 6 feet long

Steel posts must:

1 Have a "U," "T," "L," or other cross sectional shape that can resist failure from lateral loads.
2 Be pointed on the end to be driven into the ground.
3 Weigh at least 0.75-pound per foot.
4 Be at least 6 feet long.
5 Have a safety cap attached to the exposed end. The safety cap must be yellow, orange or red plastic and fit snugly to the metal post.

Signs

If specified, signs must be:

1 Weatherproof and fade-proof and may include plastic laminated printed paper affixed to an inflexible weatherproof backer board
2 Attached to the high visibility fabric with tie wire or locking plastic fasteners

CONSTRUCTION

General

Install temporary fence (Type ESA):

1 With high visibility fabric, posts, and fasteners as follows:

a. 1.1. If wood posts are used, fasteners must be staples or nails
b. 1.2. If steel posts are used, fasteners must be tie wires or locking plastic fasteners
c. 1.3. Spacing of the fasteners must be no more than 8 inches apart
d.

2. Before clearing and grubbing activities
3. From outside of the protected area
4. With posts spaced 8 feet apart and embedded at least 16 inches in the soil

If specified, signs must be:

F. Attached with the top of the sign panel flush with the top of the high visibility fabric
G. Placed 100 feet apart along the length and at each end of the fence

If trees and other plants need protection, install fence to:

1 Enclose the foliage canopy (drip line) of protected plants
2 Protect visible roots from encroachment

Maintenance

Maintain temporary fence (Type ESA) by:

1 Keeping posts in a vertical position
2 Reattaching fabric to posts
3 Replacing damaged sections of fabric
4 Replacing and securing signs

SAMPLE NOT FOR BIDDING

Removal

When the Engineer determines that temporary fence (Type ESA) is no longer required, remove and dispose of it under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Backfill and repair ground disturbance caused by the installation and removal of temporary fence (Type ESA), including holes and depressions.

MEASUREMENT AND PAYMENT

Temporary fence (Type ESA) is measured and paid for by the linear foot in the same manner specified for fence (Type BW or WM) in Section 80, "Fences," of the Standard Specifications.

The contract price paid per linear foot for temporary fence (Type ESA) includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the temporary fence (Type ESA), complete in place, including maintenance, removal of materials, and backfilling and repairing holes, depressions and other ground disturbance, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as ordered by the Engineer.

Replace *Reserved in* section 14-6.03D with
COUNTY SUPPLIED BIOLOGIST

Add to section 14-6.03D(1) with:

The County has an Environmental Consulting Firm under contract for this project and the biologist shall be provided and paid for by the County. The biologist shall perform the below mention tacks.

No clearing and grubbing activity will be done between March 1 to September 30 unless the County supplied biologist certify that there are no nesting by migratory and nongame birds within the site. The biologist certification shall be submitted to the Engineer a minimum of 7 days for review before any work is schedule and must approved by the Engineer before any work can begin.

Add to section 14-6.03D(1) with:

Pre-Construction Survey

Survey the work area for regulated species within 14 days before starting construction activities.

The Pre-Construction Survey Report includes one of the following:

1. Detailed observations and locations where regulated species were observed
2. Statement that no regulated species were observed by each biologist

Pre-Construction Survey Report

Submit an initial monitoring report as an informational submittal within 12 hours after starting ground-disturbing activities.

Notification and Reporting

All reports must include the following:

1. PLAC requirement implementation
2. Name(s) of the biologist(s) conducting biological activity
3. Date(s) and time(s) of monitoring
4. Locations and activities monitored
5. Representative photographs
6. Findings
7. If regulated species are observed, reports must recommend actions to protect the regulated species
8. Name of the biologist who prepared the report
9. Signature of the biologist certifying the accuracy of the report

Submit a biological resource incident report within 24 hours of the incident. The incident report must include:

5. Description of any take of regulated species or any violation of a biological resource PLAC
6. Species name and number taken
7. Details of required notifications with contact information
8. Corrective actions proposed or taken
9. Disposition of taken species

SAMPLE NOT FOR BIDDING

Submit an annual monitoring report no later than January 15 during each year of construction. The annual monitoring report must include:

1. Start and end dates of construction
2. Project impacts on the regulated species
3. Species protection measures and implementation details
4. Incidental take details, including species name, number taken, people contacted, contact information, and disposition of taken species
5. Assessment of the effectiveness of the species protection measures in mitigating project impacts
6. Recommendations for improving species protection measures

Submit a final monitoring report no later than 20 days after completion of the project. If the report requires revisions, the Department provides comments. Submit a revised report within 7 days of receiving comments. The final monitoring report must be a cumulative report including:

1. Start and end dates of construction
2. Project impacts on the regulated species
3. Species protection measures and implementation details
4. Incidental take details, including species name, number taken, people contacted, contact information, and disposition of taken species
5. Assessment of the effectiveness of the species protection measures in mitigating project impacts
6. Recommendations for improving species protection measures

Replace the 4rd paragraph of section 14-6.03D(1) with:

14-6.03D(1) General

A biologist must meet PLAC requirements. Provide required qualifications for transmittal to regulatory agencies. All project specific authorizations must be current and valid for the duration of the project.

Add section 14-6.03D(4):

14-6.03D(4) Payment

Full compensation for the Biologist shall be the responsibility of the County

SOLID WASTE DISPOSAL AND RECYCLING

Replace *Reserved* in section 14-10.03:

14-10.03 Payment

Payment for the solid waste disposal and recycling is included in the contract prices paid for the various items of work and no separate payment will be considered.

Add to section 14-11.01:

Hazardous Waste and Contamination General

Submit a copy of uniform hazardous waste manifest forms to the Engineer within 24 hours of transporting hazardous waste.

Submit receiving landfill documentation of proper disposal to the Engineer within 5 business days of hazardous waste transport from the project.

Add to section 14-11.01:

Hazardous Waste Transport and Disposal

Dispose of hazardous waste within California at a disposal site operating under a permit issued by the DTSC.

SAMPLE NOT FOR BIDDING

The Engineer will obtain the US EPA Generator Identification Number for hazardous waste disposal.

The Engineer will sign all hazardous waste manifests. Notify the Engineer 5 business days before the manifests are to be signed.

The Department will not consider you a generator of the hazardous waste and you will not be obligated for further cleanup, removal, or remedial action for such material if handled or disposed of under these specifications and the appropriate State and federal laws and regulations and county and municipal ordinances and regulations regarding hazardous waste.

14-11.06 CONTRACTOR-GENERATED HAZARDOUS WASTE

Add section 14-11.06C:

14-11.06C Payment

Payment for the contractor-generated hazardous waste is included in the contract prices paid for the various items of work and no separate payment will be considered.

Replace section 14-11.14 with:

14-11.14 TREATED WOOD WASTE

14-11.14A General

Section 14-11.14 applies if treated wood waste is shown on the Bid Item List. Wood removed from guardrail is treated wood waste.

Section 14-11.14 includes specifications for handling, storing, transporting, and disposing of treated wood waste. Manage treated wood waste under 22 CA Code of Regs Div 4.5 and section 14-11.07.

14-11.14B Storage of Treated Wood Waste

Until disposal, store treated wood waste under section 14-11.07 in metal containers approved by the US Department of Transportation for the transportation and temporary storage of hazardous waste.

14-11.14C Transport and Disposal of Treated Wood Waste

Transport and dispose of treated wood waste under section 14-11.07. Dispose of treated wood waste at a California disposal site operating under a DTSC permit.

SAMPLE
NOT FOR BIDDING

Replace *Reserved* in section 14-12.04:

RELATIONS WITH UNITED STATES ARMY CORPS OF ENGINEERS

A portion of this project is located within the jurisdiction of the United States Army Corps of Engineers. A nationwide permit will be issued by the Army Corp of Engineers regarding this project. The Contractor shall be fully informed of the requirements of this permit as well as rules, regulations, and conditions that may govern the Contractor's operations in these areas and shall conduct the work accordingly.

The County has obtaining the permit form the Army Corp of Engineers for the Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Permit No. SPK-2020-00348.

Attention is directed to Section 7-1.02, "Laws," Section 14, "Environmental Stewardship," and Section 7-1.05, "Indemnification and Section 7-1.06, "Insurance," of the Standard Specifications.

Modifications to the nationwide permit between the Department of Public Works and the Army Corps of Engineers which are proposed by the Contractor shall be submitted in writing to the Engineer for transmittal to the Army Corps of Engineers for their consideration.

The provisions of this section shall be made a part of every subcontract executed pursuant to this contract.

Replace *Reserved* in section 14-12.05:

RELATIONS WITH CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

The location of the project is within an area controlled by the Regional Water Quality Control Board. Regional Water Quality Control Board will be issuing a waiver of waste discharge and water quality certification covering work to be performed under this contract. The Contractor shall be fully informed of rules, regulations, and conditions that may govern the Contractor's operations in the areas and shall conduct the work accordingly.

The County has obtaining the permit from the Lahontan Regional Water Quality Control Board for the Hackstaff

Road Bridges 7C-12 & 7C-81 Replacement Project, Board Order No. R6T-2021-0001 and Permit No. WDID No. 6A182005003.

The County has obtaining the permit form the State Water Board for the Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Construction General Permit No. WDID No. 6A18C392781.

Attention is directed to Section 7-1.02, "Laws," Section 14, "Environmental Stewardship," and Section 7-1.05, "Indemnification and Section 7-1.06, "Insurance," of the Standard Specifications.

Changes in the above listed conditions proposed by the Contractor shall be submitted to the Engineer for transmittal to the Regional Water Quality Control Board for their approval. Changes shall not be implemented until approved in writing by the Regional Water Quality Control Board.

Attention is directed to Section 8-1.05, "Time," of the Standard Specifications. Days during which the Contractor's operations are restricted in the floodway by the requirements of this section shall be considered to be nonworking days if these restrictions cause a delay in the current controlling operation or operations.

Replace *Reserved* in section 14-12.06:

RELATIONS WITH CALIFORNIA DEPARTMENT OF FISH AND WILDLIE

A portion of this project is located within the jurisdiction of the California Department of Fish and Wildlife. An agreement regarding a stream or lake will be entered into by the Department of Transportation and the Department of Fish and Wildlife. The Contractor shall be fully informed of the requirements of this agreement as well as rules, regulations, and conditions that may govern the Contractor's operations in these areas and shall conduct the work accordingly.

The County has obtaining the permit from the California Department Fish and Wildlife for the Hackstaff Road Bridges 7C-12 & 7C-81 Replacement Project, Streambed Alteration Agreement Notification No. 1600-2020-0193-R1.

It is unlawful for any person to divert, obstruct or change the natural flow of the bed, channel or bank of a stream, river or lake without first notifying the Department of Fish and Game, unless the project or activity is noticed and constructed in conformance with conditions imposed under Fish and Game Code Section 1602.

Attention is directed to Section 7-1.02, "Laws," Section 14, "Environmental Stewardship," and Section 7-1.05, "Indemnification and Section 7-1.06, "Insurance," of the Standard Specifications.

Modifications to the agreement between the Department of Public Works and the Department of Fish and Wildlife which are proposed by the Contractor shall be submitted in writing to the Engineer for transmittal to the Department of Fish and Wlidlife for their consideration.

When the Contractor is notified by the Engineer that a modification to the agreement is under consideration, no work shall be performed which is inconsistent with the original agreement or proposed modification until the Departments take action on the proposed modifications. Compensation for delay will be determined in conformance with the provisions in Section 8-1.07, "Delays," of the Standard Specifications.

The provisions of this section shall be made a part of every subcontract executed pursuant to this contract.

Modifications to any agreement between the Department of Public Works and the Department of Fish and Wildlife will be fully binding on the Contractor. The provisions of this section shall be made a part of every subcontract executed pursuant to this contract.

SAMPLE NOT FOR BIDDING

Add to section 14-12.04D:

14-12.04D Payment

Payment for Environmental Stewardship is included in the contract prices paid for the various items of work and no separate payment will be considered.

^^

15 EXISTING FACILITIES

Add to section 15-1.01:

The existing bridge 7C-12 on Hackstaff Road over Long Valley Creek has a Posted Load Limit of **3-TON Maximum.**

The existing bridge 7C-81 on Hackstaff Road over Long Valley Creek is only one lane (12 foot wide).

Attention is directed to the westside of the existing bridge 7C-12 that it is a marshy area and the eastside of the existing bridge 7C-12 were the water table is approximately 12 feet above the bottom of the bridge footing. It is anticipated that the ground conditions shall be marginal so during the excavation it may be necessary to add Geotextile Fabric and Class II aggregate base to the areas so that the ground with be stabilize enough to carry to loads of the equipment needed to construct the new bridge structure.

Replace the 1st paragraph of section 15-1.02 with:

All removed, replaced or surplus materials of any type, quantity, or substance, except those to be salvaged, reconstructed, reused, or claimed by the department at the Engineers request, become the property of the Contractor and must be removed from the site and disposed of in conformance with the provisions in section 5-1.20B(4), unless otherwise specified in the plans and specifications or directed or approved by the Resident Engineer.

Add to section 15-1.03A: Obliterate Roads, Detours, and Surfacing

All of the Existing Asphalt Concrete Surface (ie. Old Hackstaff Road see plan sheet 37) that needs to be removed shall be Cold Planed Grinding. The Existing Asphalt Concrete Surface grinding shall be hauled to the disposal site at the Lassen County Road Department Doyle Maintenance Yard in Doyle, CA. (see page 1 of the Construction Plans for location map)

Add to section 15-1.04

Full compensation for the cold planed grinding, removal and hauling of existing asphalt concrete surface is included in the contract unit prices paid for Removal of Existing Asphalt Concrete Surface.

Add to section 15-1.03C:

All of the metal from the demolition of the 7C-81 bridge shall remain on site and by stored out of the way on the temporary construction easement so it will not interfere with the construction activities. All of the metal from the demolition of the 7C-81 shall be the property of the landowner – Jeff Scheff.

The existing cattle guard on Hackstaff Road shall be removed when the existing asphalt concrete surface in cold planned and be set aside. The existing cattle guard is the property of Lassen County Road Department and the County haul the cattle guard off using their own forces.

SAMPLE NOT FOR BIDDING

Replace *Reserved* in section 15-1.03D:

OBSTRUCTIONS

Attention is directed to Section 15, "Existing Facilities," of the Standard Specifications and these special provisions.

The contractor or the subcontractor shall be responsible for notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to performing any excavation or other work close to any underground pipeline, conduit, duct, wire or other structure. Regional notification centers include, but are not limited to, the following:

Notification Center	Telephone Number
Underground Service Alert-Northern California (USA)	1-800-642-2444 1-800-227-2600
Underground Service Alert-Southern California (USA)	1-800-422-4133 1-800-227-2600

^^

DIVISION III GRADING

17 CLEARING AND GRUBBING

Add to section 17-2.03A:

Do not cut trees, brush or any clearing and grubbing activities from March 1 to September 31 unless you:

1. A biological survey for nesting migratory and nongame birds will be performed at least 7days in advance by the biologist before any clearing and grubbing activity can begin.
2. The site must be certified by the biologist that there are no nesting birds within the construction and approved by the Engineer before any clearing or grubbing can being.
3. Do not begin any clearing ad grubbing activity without written approval by the Engineer.

The contractors or subcontractor will:

1. Fell trees
2. Decking merchantable trees
3. Decking non-merchantable trees

The contractor or the subcontractor must chip or properly dispose of remaining trees, limbs and stumps.

If additional tree felling is necessary:

- Notify the Engineer 7 days before felling trees to allow time the biologist to complete a bird survey and have it approved.
- Do not fell trees without written approval

The contactor or the subcontractor that will be performing the tree felling operation must process a valid timber operator licensed.

SAMPLE NOT FOR BIDDING

Add to section 17-2.03A with:

Clear and grub vegetation only within the excavation and embankment slope lines.

Clear trees to 10 feet outside of the excavation and embankment slope lines. Do not grub stumps between excavation and embankment slope lines and 10 feet outside of the excavation and embankment slope lines.

Add to section 17-2.03A:

Do not fell trees across or within a Class I or Class II watercourses under California Forest Practice Rules. If possible, fell trees in a direction away from the watercourse or drainage.

Comply with section 13.

Add to section 17-2.0A:

The surplus material generated by the clearing and grubbing activities will be removed to the disposal site at the Lassen County Gravier Pit (see page 1 of the Construction Plans for location map). Full compensation for removal of surplus material is included in the contract unit price paid for Clearing and Grubbing.

^^

19 EARTHWORK

Replace the 2nd, 3rd, and 4th paragraphs of section 19-2.03B with:

Dispose of surplus material. Ensure enough material is available to complete the embankments before disposing of it.

Add to section 19-2.03B with

Approximately one half of the surplus material generated by the Roadway Excavation activities shall be removed to the disposal site at the Lassen County Road Department Doyle Maintenance Yard in Doyle, CA. The other half of the surplus material generated by the Roadway Excavation activities shall be removed to the disposal site at the Lassen County Road Department Gravier Pit (see page 1 of the Construction Plans for location map).No off-highway trucks will be allowed, legal truckloads only.

Full compensation for removal of surplus material is included in the contract unit prices paid for Removal of surplus Roadway Excavation.

Add between the 8th and 9th paragraphs of section 19-2.03G:

Roughen embankment slopes to receive erosion control materials by either track-walking or rolling with a sheepsfoot roller. Track-walk slopes by running track-mounted equipment perpendicular to the slope contours.

Roughen excavation slopes and flat surfaces to receive erosion control materials by scarifying to a depth of 2 inches.

Replace *Reserved* in section 19-3.01C(1) with:

Submit structure excavation and backfill plans for all structure excavation and backfill activities. Plans

must include:

1. All equipment to be used, including proposed hauling equipment
2. Methods to protect buried structures and spillway concrete from damage
3. Shoring plans per Cal/OSHA requirements

Allow 20 days for the review of structure excavation and structure backfill plans

SAMPLE NOT FOR BIDDING

Add in section 19-3.01C(2) with:

The Contractor is responsible for the proper design, construction, placement, maintenance, and removal of the sheet piling (ie cofferdam). The Contractor is required to submit shop drawing and calculations to the Resident Engineer prior to the installation of the sheet piling. The Contractor is also required to comply with the applicable sections of the Construction Safety Orders (Sections 1539-1543) and the provisions of Section 6705 of the California Labor Code. Refer to the Trenching and Shoring Manual for additional information.
The sheet piling design and safety plan must be submitted to the Agency's Engineer showing the design and details for providing worker and equipment protection from caving ground during excavation. The sheet piling design and safety plan must be designed by a registered professional engineer and must be sealed and signed by an engineer who is registered as a civil engineer in the State of California. The Contractor or the Contractors representative shall determine the placement of the temporary sheet piling so there is enough space to construct the bridge abutments and bent elements.
No excavation work shall begin until the sheet piling design and safety plan has been review by the Agency's Engineer.

Replace section 19-3.02C with:

Structure backfill must be free of organic or other unsatisfactory material.

The structure backfill shall be Class 3 Aggregate Base ¾" max..

The limits for the structure backfill shall be within the abutment and wingwalls areas and 10 feet beyond the end of the wingwalls.

The California Test Method 216 " Method of Test for Relative Compaction of Untreated and Treated Soils and Aggregates" will be used to determine the unit weight of Structure backfill material. By using this test to determine the Specific Gravity of the material, the unit weight of the material can be converted from lbs/ft^3 to cubic yards.

Structure backfill compacted to a relative compaction of at least 95 percent and material placed behind retaining walls must have a sand equivalent value of at least 21 and comply with the gradation requirements shown in the following table:

Sieve size	Operating range	Comtract compliance
1"	100	100
3/4"	90-100	87-100
No. 4	40-70	35-75
No. 30	12-40	7-45
No. 200	3-15	0-19

Add to section 19-3.03B with

The surplus material generated by the Structure Excavation (Bridge) activities for the westside of Bridge 7C-12 shall be removed to the disposal site at the Lassen County Road Department Doyle Maintenance Yard in Doyle, CA.

The Eastside surplus material generated by the Structure Excavation (Bridge) activities of Bridge 7C-12 and Bridge 7C-81 shall be Removed as follows: Approximately one half of the surplus material generated by the Structure Excavation (Bridge) activities shall be removed to the disposal site at the Lassen County Road Department Doyle Maintenance Yard in Doyle, CA. The other half of the surplus material generated by the Structure Excavation (Bridge) activities shall be removed to the disposal site at the Lassen County Road Department Gravier Pit. The haul trucks must use Hackstaff Road to Laver Crossing to US Highway 395 for the haul road because of the 3-TON LOAD LIMIT on Bridge 7C-12. (see page 1 of the Construction Plans for location map).No off-highway trucks will be allowed, legal truckloads only.

Full compensation for removal of surplus material is included in the contract unit prices paid for Removal of Surplus Bridge Excavation.

The surplus material generated by the Embankment Excavation activities for the westside of Bridge 7C-12 shall be removed to the disposal site at the Lassen County Road Department Doyle Maintenance Yard in Doyle, CA.

The Eastside surplus material generated by the Embankment Excavation activities of Bridge 7C-12 and Bridge 7C-81 shall be Removed as follows: Approximately one half of the surplus material generated by the Embankment Excavation activities shall be removed to the disposal site at the Lassen County Road Department Doyle Maintenance Yard in Doyle, CA. The other half of the surplus material generated by the Embankment Excavation activities shall be removed to the disposal site at the Lassen County Road Department Gravier Pit. The haul trucks must use Hackstaff Road to Laver Crossing to US Highway 395 for the haul road because of the 3-TON LOAD LIMIT on Bridge 7C-12. (see page 1 of the Construction Plans for location map).No off-highway trucks will be allowed, legal truckloads only.

Full compensation for removal of surplus material is included in the contract unit prices paid for Removal of Surplus Embankment Excavation.

SAMPLE NOT FOR BIDDING

Add to section 19-3.03B(5):

The foundation bridge footing rock shall comply with the minimum gradation requirements shown in Section 90-1.02C(4)(b): Coarse Aggregate Gradation for the 1-1/2 inch x 3/4 inch primary aggregate nominal sizes.

Replace the 7th paragraph of section 19-3.03E(1) with:

Scarify top 8 inches of soil and re-compact structure backfill to a relative compaction of at least 95 percent except you may compact structure backfill to a relative compaction of at least 90 percent at the following locations:

1. Overside drains
2. Footings for slope protection, slope paving, andaprons
3. Headwalls, endwalls, and culvertwingwalls
4. Retaining walls, except for portions under anysurfacing
5. Inlets in median areas or in traffic interchangeloops
6. Footings and pumping plants not beneathsurfacing

Add to section 19-3.04:

Structure excavation for footings at locations not shown as structure excavation (Type D) and where ground or surface water is encountered is paid for as structure excavation (bridge).

Pervious backfill material placed within the limits of payment for bridges is paid for as structure backfill (bridge).

Full compensation for the preparation of the temporary sheet piling (cofferdams) design and plan shall be included in the contract prices paid for Sheet Piling Design and Safety Plan and no additional compensation shall be made for the temporary sheet piling (cofferdams) design and plan.

Full compensation for the temporary sheet piling (cofferdams) installation, layout, removal and hauling of temporary sheet piling (cofferdams) is included in the contract unit prices paid for Temporary Sheet Piling and no additional compensation shall be made for the temporary sheet piling (cofferdams).

SAMPLE NOT FOR BIDDING

Add to section 19-6.02A:

The California Test Method 216 " Method of Test for Relative Compaction of Untreated and Treated Soils and Aggregates" will be used to determine the unit weight of Embankment material. By using this test to determine the Specific Gravity of the material, the unit weight of the material can be converted from lbs/ft^3 to cubic yards.

Embankment material compacted to a relative compaction of at least 95 percent and must have a sand equivalent value of at least 10 and comply with the minimum gradation requirements shown in the following table:

Sieve size	Operating Range
1"	100
3/4"	75-100
No. 4	20-100
No. 50	0-60
No. 200	0-50

Add to section 19-7.02C:

The California Test Method 216 " Method of Test for Relative Compaction of Untreated and Treated Soils and Aggregates" will be used to determine the unit weight of Imported Borrow material. By using this test to determine the Specific Gravity of the material, the unit weight of the material can be converted from lbs/ft^3 to cubic yards.

Imported borrow compacted to a relative compaction of at least 95 percent and must have a sand equivalent value of at least 10 and comply with the minimum gradation requirements shown in the following table:

Sieve size	Operating Range
1"	100
3/4"	75-100
No. 4	20-100
No. 50	0-60
No. 200	0-50

19-9.02 MATERIALS

Replace 3th paragraph of section 19-9.02:

Shoulder backing that contains reclaimed asphalt concrete shall not be used.

Shoulder backing must comply with the quality requirements shown in the following table:

Property	California Test	Requirements
Sand equivalent	217	10–35
Percentage crushed particles (%, min)[a]	205	
One fractured face		75
Two fractured faces		50
Durability index	229	25

[a] Applies to material retained on no. 4 sieve only

Replace the 6th paragraph of section 19-9.02 with:

When tested under California Test 212 using the rodding method, the minimum unit weight of shoulder backing must be 105 lb/cu ft.

SAMPLE NOT FOR BIDDING

20 LANDSCAPE

Willow Cuttings

Add to section 20-3.2C(3)(d)(ii):

Native woody species will be replanted to replace previously existing woody vegetation where removal of woody vegetation root masses is necessary within the temporarily impacted areas. Additional plantings will be installed to mitigate for permanent impacts to riparian vegetation as well.

Live stakes (also called cuttings or sprigs) of sandbar willow will be procured either by harvesting from existing willows onsite (i.e., from those being removed for construction purposes) or purchased from a nursery that can provide locally sourced planting materials. If live stakes are to be harvested, the following practices will be followed:

Harvest stakes during the dormant period after willows have lost their leaves and before buds open in the spring. The dormant period is approximately late fall through early spring, with December through January typically being the optimal time for harvesting.

Harvest stakes from healthy, disease- and insect-free branches.

Select relatively straight branches, 0.75 to 1.25 inches in diameter and a minimum of 18 inches long. Length of stakes should be determined based on depth to the water table at the restoration site, so that the stakes will be able to reach the low water table when 80 percent of the length of the stake is planted into the ground.

Avoid damaging stakes or creating split ends.

Bundle stakes in groups of 50 and keep cool, moist, and shaded during storage and transport.

Prior to planting, stakes should be soaked in water for five to seven days with water covering 50 to 80 percent of the length of the stakes.

In addition, the following recommendations should be followed for planting of the stakes:

Install plantings during the rainy season to allow for successful establishment.

First use a piece of rebar and mallet, or other tool to create pilot holes, then insert the willow stakes into the holes, in order to prevent damaging stakes. Avoid using a mallet to install the stakes themselves.

Install protective tubes around the stakes where feasible to reduce herbivory.

Stake planting areas should be protected by cattle fencing (e.g., barbed wire fencing) to prevent cattle intrusion during the monitoring period.

Stake plantings may be also used to secure straw wattles or erosion control mats for additional biostabilization. Attachment D provides a typical drawing of live staking methods. It is recommended that willow stakes be spaced roughly two to three feet apart on-center during installation (for an 0.085-acre revegetation area, which would equal roughly 406 to 914 plantings). Additional stakes should be collected to install within RSP where possible.

Supplemental watering is not anticipated to be needed, as plantings will be installed such that they have access to water available in the capillary area above the groundwater table (where sufficient moisture exists but roots are not oxygen-deprived; shown as "vadose zone" on Attachment D). However, the need for supplemental watering and shade structures will be assessed and implemented, as necessary, during monitoring and maintenance activities as described in Sections 7.0 and 8.0.

SAMPLE NOT FOR BIDDING

21 EROSION CONTROL

Add to section 21-2.02H:

Straw must be certified weed free under the Department of Food and Agriculture.

Replace section 21-2.02K with:

21-2.02K Compost

Compost must be derived from one or a combination of the following types of materials:

1. Green material consisting of chipped, shredded, or ground vegetation or clean, processed, recycled wood products

1. Biosolids
2. Manure
3. Mixed food waste

Compost must not be derived from mixed municipal solid waste and must not contain paint, petroleum products, pesticides, or other chemical residues harmful to plant or animal life. Metal concentrations in compost must not exceed the maximum listed under 14 CA Code of Regs § 17868.2.

Process compost materials under 14 CA Code of Regs § 17868.3.

The quality characteristics of compost must have the values shown in the following table:

Compost

Quality characteristic	Test method[a]	Requirement	
		Fine	Medium/Coarse
pH	TMECC 04.11-A	6–8.5	6-8.5
Soluble salts (dS/m)	TMECC 04.10-A	0–10	0-10
Moisture content (% wet weight)	TMECC 03.09-A	25–60	25-60
Organic matter content (% dry weight)	TMECC 05.07-A	30–70	30-100
Maturity (seed emergence) (% relative to positive control)	TMECC 05.05-A	80 or above	80 or above
Maturity (seedling vigor) (% relative to positive control)	TMECC 05.05-A	80 or above	80 or above
Stability (mg CO_2-C/g OM per day)	TMECC 05.08-B	5 or below	8 or below
Pathogen Salmonella (most probable number per 4 grams dry weight basis)	TMECC 07.01-B	< 3	< 3
Pathogen Fecal coliform (most probable number per gram dry weight basis)	TMECC 07.01-B	< 1,000	< 1,000
Physical contaminants (% dry weight) Plastic, glass, and metal	TMECC 02.02-C	combined total: < 0.5	combined total: < 1.0
Film plastic (% dry weight)	TMECC 02.02-C	Combined total: < 0.1%	Combined total: < 0.1%

[a] TMECC refers to *Test Methods for the Examination of Composting and Compost*, published by the United States Department of Agriculture and the United States Compost Council (USCC).

SAMPLE NOT FOR BIDDING

The particle size must comply with the requirements shown in the following table:

Compost Gradation

Quality characteristic	Test method[a]	Requirement	
		Min	Max
Gradation Fine:(dry weight % passing) 1-inch sieve 3/8-inch sieve	TMECC 02.02-B	 100 95	 -- --
Gradation Medium:(dry weight % passing) 2-inch sieve 3/8-inch sieve	TMECC 02.02-B	 95 40	 -- 55
Gradation Coarse:(dry weight % passing) 3-inch sieve 3/8-inch sieve	TMECC 02.02-B	 95 25	 -- 35

[a] TMECC refers to *Test Methods for the Examination of Composting and Compost*, published by the United States Department of Agriculture and the United States Compost Council (USCC).

Fiber Roll
Add to section 21-2.04:

MEASUREMENT AND PAYMENT

Quantities of temporary fiber rolls to be paid for will be determined by the linear foot measured along the centerline of the installed roll. Where temporary fiber rolls are joined and overlapped, the overlap will be measured as a single installed roll.

The contract price paid per linear foot for temporary fiber roll shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing temporary fiber rolls, complete in place, including furrow excavation and backfill, and removal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Damage to temporary fiber rolls resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.

The cost of maintaining temporary fiber rolls will be borne by the Contractor.

Cleanup, repair, removal, disposal, or replacement due to improper installation or the Contractor's negligence will not be considered as included in the cost for performing maintenance.

^^

DIVISION V SURFACINGS AND PAVEMENTS

36 GENERAL

Replace section 36-3 PAVEMENT SMOOTHNESS with:

36-3.01 GENERAL

36-3.01A Summary

Section 36-3 includes specifications for measuring the smoothness of pavement surfaces.

36-3.01B Definitions

Area of Localized Roughness (ALR): Continuous moving average of the 25-foot International Roughness Index (IRI) values for each wheel path using a 250-mm filter.

Mean Roughness Index (MRI): Average of the 0.1-mile IRI values for the left and right wheel paths for the same traffic lane using a 250-mm filter.

Wheel paths: Pair of parallel lines 3 feet left and right of the center of a traffic lane. Left and right wheel paths are based on the direction of travel.

36-3.01C Submittals

36-3.01C(1) General

Not used

36-3.01C Submittals

36-3.01C(1) General

Reserved

36-3.01C(2) Inertial Profiler Data

At least 15 days before measuring pavement smoothness with an inertial profiler, you must register with the Department's secure file sharing system. To obtain information on the registration process, send an e- mail with your contact information to asphalt.smoothness@dot.ca.gov for asphalt and concrete.smoothness@dot.ca.gov for concrete surfaces.

Submit electronic copy of the raw profile data as a PPF file on an authorized data storage device within 12 hours or on the same day of completing smoothness measurement, with a coordinated video or images taken at intervals no greater than 52.8 feet for the existing and baseline profiles. Also, submit a printout or a PDF file listing the following:

1. Profile data collection time and date

SAMPLE NOT FOR BIDDING

2. Data collection software version used
3. Sensor serial number
4. Low- and high-pass filter used
5. 0.1-MRI values

Within 2 business days after each day of profiling, submit the profile information to the Engineer and to the Department's secure file sharing system. After submitting the profile information to the Department's file sharing system, send a notification of your electronic submittal to the Engineer and to the above electronic mailbox address with the names of the files submitted.

For each surface subject to inertial profile smoothness requirements, the profile data information must include:

1. Raw profile data for each lane
2. ProVAL ride quality analysis report for the MRI of each lane in a PDF file. Report the following:
   - Listing of MRI values for 0.1-mile segments or portions thereof
   - Input data including the specified MRI threshold and fixed segment length
   - Raw profile data name selections
   - Areas exempt from inertial profile smoothness requirements
3. ProVAL ride quality analysis report for the IRI of the left and right wheel paths of each lane in a PDF file. Report the following:
   - Listing of ALR
   - Input data including the specified area of the localized roughness threshold and continuous segment length
   - Raw profile data name selections
   - Areas exempt from inertial profile smoothness
4. GPS data file for each lane. Submit the data file in GPS eXchange file format.
5. Manufacturer's recommended calibration and verification test results for the inertial profiler.
6. Inertial profiler's calibration and verification test results, including results for bounce, block, and the distance measurement instrument.
7. Completed Pavement Smoothness Inertial Profiler Submittal Record.

Submit Asphalt Concrete Pavement Smoothness Corrections Information or Concrete Pavement Smoothness Corrections Information with your final profile data information submittal.

SAMPLE
NOT FOR BIDDING

Submit the raw profile data in an unfiltered pavement profile standard (PPF) file format. Use the following file naming convention:

YYYYMMDD_TTCCCRRR_EA_D_L_W_B_E_X_PT.EXT

where:

YYYY = year
MM = month, leading zero
DD = day of the month, leading zero TT = district, leading zero
CCC = county, 2- or 3-letter abbreviation as shown in section 1-1.08
RRR = route number with no leading zeros
EA = Contract number, excluding the district identification number, expressed as 6 characters
D = traffic direction, *NB*, *SB*, *WB*, or *EB*
L = lane number from left to right in the direction of travel
W = wheel path, *L* for left, *R* for right, or *B* for both
B = beginning station to the nearest foot, such as 10+20, or beginning postmile to the nearest hundredth, such as 25.06 with no leading zero.
E = ending station to the nearest foot, such as 14+20, or ending postmile to the nearest hundredth, such as 28.06 with no leading zero.
X = profile operation, *EXIST* for existing pavement, *BASELINE* for existing pavement after performing repairs, *PAVE* for after paving, and FINAL for completed pavement documentation of compliance.
PT = type of pavement surface profiled, such as Type A HMA, RHMA-G, OGFC, JPCP, or CRCP
EXT = "PPF" for raw profile data file extension.

If you are submitting multiple inertial profiler data files, compress the files into a .ZIP file format and submit them using the file-naming convention TT_EA_X_YYYYMMDD.zip.

36-3.01C(3) Smoothness Corrective Grinding Plan

At least 2 business days before performing corrective grinding for areas that do not meet the smoothness requirements, submit a corrective grinding plan as an informational submittal.

The corrective grinding plan must include:

1. Grinder make and model
2. Grinder wheelbase in feet, measured from the front centerline to the back centerline of the single wheel or tandem wheel spread
3. Grinder head position in feet, measured relative to the centerline of the front single wheel or the front tandem wheel spread
4. Tandem wheel spreads in feet
5. Tabular listing of the planned corrective grinding, including:
   - Begin and End locations in stationing to the nearest foot
   - Width of grind, such as left half lane, right half lane, or full-width lane
   - Corresponding grinder head depths to the nearest 0.01 inch
   - Direction of grind such as forward, reverse, forward-forward, reverse-reverse, forward-reverse, reverse-forward
6. Forecasted improvement in terms of the MRI and ALR values

36-3.01C(4) Straightedge Measurements

Within 2 business days of measuring smoothness with a straightedge, submit a list of the areas requiring smoothness correction. Identify the areas by:

1. Location number
2. District-County-Route
3. Beginning station or post mile to the nearest 0.01 mile
4. For correction areas within a traffic lane:
   - *4.1.* Lane direction, *NB, SB, EB*, or *WB*
   - 4.2. Lane number from left to right in the direction of travel
   - 4.3. Wheel path, *L* for left, *R* for right, or *B* for both
5. For correction areas not within a traffic lane:
   - 5.1. Identify the pavement area, such as shoulder, weigh station, or turnout
   - 5.2. Direction and distance from the centerline, *L* for left or *R* for right
6. Estimated size of correction area

SAMPLE NOT FOR BIDDING

36-3.01C(5) Smoothness Quality Control Plan

Submit a written Smoothness Quality Control Plan to the Engineer at or before Preconstruction Meeting. The plan must include:

1. Organization: Contact names, organizational chart, telephone numbers, current certifications and titles, and roles and responsibilities of personnel for monitoring smoothness, collecting profile data, submitting data, pay adjustment requests and reports, and implementing corrective actions.
2. Inertial profiler certification:
   - Inertial profiler certification issued by the Department
   - Operator certification for the inertial profiler issued by the Department
   - Manufacturer's instructions and test procedures for calibration and verification of the inertial profiler
3. Schedule: The methods and timing used for monitoring and/or testing ride quality throughout the placement operation process. Indicate the approximate timing of acceptance testing for the profile operations defined in Section 36-3.01C(6)(b) in relation to placement operations.
4. Layout plan:
   - Establish semipermanent reference points at the beginning and end of the project based on the plans. For each profile run, define additional semipermanent reference points for the starting and end position of each run. Show the position and name of each semipermanent reference point. These reference points must be located outside of the traveled way perpendicular to the starting position of each lane. Where starting positions are adjacent to each other but staggered, use separate starting positions. Semipermanent reference points used to establish the beginning position of a profile run must be labeled in the field and in the pavement profiles using the following naming convention:

XXX-D-L-STA-VAL

where:

XXX = "Beg" for the beginning of each profile run, "End" for the end of each profile run, "ExB" for the beginning point of the areas excluded from inertial profiler testing and "ExE" for the end point of the areas excluded from inertial profiler testing.

D = traffic direction, *NB*, *SB*, *WB*, or *EB*.

L = lane number from left to right in the direction of travel, such as "1", "2", or "3." STA=

station to the nearest foot, such as 10+20. Do not use postmiles.

VAL= use "INC" where the value of stationing in the pavement profile data file (*.PPF) will increase in the direction of travel. Use "DEC" where the absolute value of the stationing in the pavement profile data file (*.PPF) will decrease in the direction of travel.

Use the same label name regardless of the stage of the profile.

- For each semipermanent reference point, include a KMZ file with:
  - Color photographs clearly displaying the physical label used to define the semipermanent reference points.
  - Listing of GPS coordinates.

Semipermanent reference points, wherever possible, must be recorded by inertial profilers using electronic eye readings of reflectors.

36-3.01C(6) Smoothness Payment Adjustment Request 36-3.01C(6)(a) General

Smoothness payment adjustment data includes a ProVAL project file and a payment adjustment spreadsheet for each lane.

36-3.01D Quality Assurance

36-3.01D(1) General Reserved

36-3.01D(2) Certifications

The inertial profiler must display a current certification decal showing the expiration date. The certifications for the inertial profiler and operator must not be more than 12 months old. The operator must be certified for each model of inertial profiler operated.

36-3.01D(3) Quality Control

36-3.01D(3)(a) General

Reserved

36-3.01D(3)(b) Smoothness

36-3.01D(3)(b)(i) General

Test pavement smoothness using an inertial profiler except use a 12-foot straightedge for the pavement at:

4. Traffic lanes less than 1,000 feet in length, including ramps, turn lanes, and acceleration and deceleration lanes
5. Areas within 15 feet of manholes
6. Shoulders
7. Weigh-in-motion areas
8. Miscellaneous areas such as medians, gore areas, turnouts, and maintenance pullouts

SAMPLE NOT FOR BIDDING

Where inertial profiler testing is required:

4. Determine the pavement smoothness for each traffic lane by obtaining the International Roughness Index for the left and right wheel paths in an individual lane. The average of the International Roughness Index values for the left and right wheel paths for the same traffic lane is the Mean Roughness Index of the lane. The wheel paths are a pair of lines 3 feet from and parallel to the edge of a traffic lane. Left and right wheel paths are based on the direction of travel.
5. Identify the areas of localized roughness using the FHWA's engineering software ProVAL to perform smoothness assurance analysis. Calculate the continuous International Roughness Index values for each wheel path with a 25-foot interval using a 250 mm filter.

Where OGFC is required, test pavement smoothness of the final HMA or concrete pavement surface before placing OGFC and after placing OGFC.

36-3.01D(3)(b)(ii) Inertial Profiler Calibration and Verification Tests

Notify the Engineer at least 2 business days before performing calibration and verification testing of the inertial profiler.

Conduct the following calibration and verification tests in the Engineer's presence each day before profiling:

3. Block test to verify the accuracy of the height sensor under California Test 387.
4. Bounce test to verify the combined accuracy of the height sensor and accelerometer under California Test 387.
5. Distance measurement instrument test to verify the accuracy of the distance measuring instrument under California Test 387.
6. Manufacturer's recommended tests.

Conduct a cross-correlation verification test of the inertial profiler in the Engineer's presence before performing the initial profiling. A verification test must be performed at least annually. Conduct 5 repeat runs of the inertial profiler on an authorized test section. The test section must be a 0.1-mile segment of existing concrete pavement if you are measuring new concrete pavement or existing asphalt concrete pavement if you are measuring new asphalt concrete pavement. Calculate a cross-correlation to determine the repeatability of your device under California Test 387 using a ProVAL profiler certification analysis with a 3-foot maximum offset. The cross-correlation must be a minimum of 0.92.

36-3.01D(3)(b)(iii) Performing, Analyzing and Collecting Data

Operate the inertial profiler under the manufacturer's instructions and AASHTO R 57 at 1-inch recording intervals. For concrete pavement, use a minimum 4-inch line laser sensor.

Collect profiling data under AASHTO R 56 and analyze it using 250 mm and International Roughness Index filters.

While collecting the profile data to determine the International Roughness Index values, record the following locations in the raw profile data at the beginning and end of all:

3. Bridge approach slabs
4. Bridges
5. Culverts visible on the roadway surface
6. At-grade intersections

Profile the left and right wheel paths of each lane.

Determine the Mean Roughness Index for 0.1-mile fixed sections using the ProVAL ride quality analysis with a 250 mm filter. Calculate the Mean Roughness Index of each lane. A partial section less than 0.1 mile that is the result of an interruption to a continuous pavement surface must comply with the Mean Roughness Index specifications for a full section. Adjust the Mean Roughness Index for a partial section to reflect a full section based on the proportion of a paved section.

Determine the areas of localized roughness using ProVAL with a continuous International Roughness Index for each wheel path with a 25-foot interval using a 250 mm filter.

SAMPLE NOT FOR BIDDING

36-3.01D(4) Department Acceptance

The Department accepts pavement surfaces for smoothness based on compliance with the smoothness specifications for the type of pavement surface specified.

For areas that require pavement smoothness determined using a 12-foot straightedge, the pavement surface must not vary from the lower edge of the straightedge by more than:

1. 0.01 foot when the straightedge is laid parallel with the centerline
2. 0.02 foot when the straightedge is laid perpendicular to the centerline and extends from edge to edge of a traffic lane
3. 0.02 foot when the straightedge is laid within 24 feet of a pavement conform

For each 0.1-mile section, your International Roughness Index values must be within 10 percent of the Department's International Roughness Index values. The Engineer may order you to recalibrate your inertial profiler equipment and reprofile. If your results are inaccurate due to operator error, the Engineer may disqualify your inertial profiler operator.

36-3.02 MATERIALS

Not Used

36-3.03 CONSTRUCTION

Notify the Engineer of the start location by station and start time at least 2 business days before profiling.

Before profiling, remove foreign objects from the pavement surface and mark the beginning and ending station on the pavement shoulder. The stationing must be the same when profiling more than one surface.

Replace section 36-3.04:

36-3.04 PAYMENT

Payment for the inertial profiler certification shall be pay as bid item Inertial Profiler Certification and no additional compensation shall be made for the inertial profiler certification.

SAMPLE
NOT FOR BIDDING

Replace *Reserved* in section 36-4 with:

36-4.01 GENERAL

Section 36-4 includes specifications for performing work involving residue from grinding and cold planing that contains lead from paint and thermoplastic.

36-4.02 MATERIALS

Not Used

36-4.03 CONSTRUCTION

The residue from grinding or cold planing contains lead from paint and thermoplastic. The average lead concentrations are less than 1,000 mg/kg total lead and 5 mg/L soluble lead. This residue:

4. Is a nonhazardous waste
5. Does not contain heavy metals in concentrations that exceed thresholds established by theHealth and Safety Code and 22 CA Code of Regs
6. Is not regulated by the Federal Resource Conservation and Recovery Act, 42 USC § 6901 etseq.

Management of this material exposes workers to health hazards that must be addressed in your lead compliance plan.

36-4.04 PAYMENT

Payment for disposal of residue from grinding and cold planing that contains lead from paint and thermoplastic is included in the contract prices paid for the various items of work and no separate payment will be considered.

39 ASPHALT CONCRETE

Add to the table in the 1st paragraph of section 39-2.01A(4)(h)(iii)(B):

Coarse durability index[c]	AASHTO T 210	1 per 3,000 tons or 1 per paving day, whichever is greater
Fine durability index	AASHTO T 210	1 per 3,000 tons or 1 per paving day, whichever is greater
Sodium sulfate soundness[d]	AASHTO T 104	1 per project

[c]The test is required only if the aggregate source is in Lassen, Modoc, Siskiyou, or Shasta County.
[d]The test is required only if the aggregate source is in Modoc, Siskiyou, or Shasta County.

Replace section 39-2.01A(4)(i)(iii) with:

39-2.01A(4)(i)(iii) Pavement Smoothness

Schedule smoothness testing with the Engineer. Unless otherwise authorized, all smoothness testing must be performed in the presence of the Engineer.

Measure smoothness of new pavement alignment or pavement realignment with an inertial profiler. The Department determines smoothness pay adjustments using the Target 60 Pay Adjustment table in Section 39-2.01A(4)(i)(iii)(A).

Measure smoothness of pavement constructed on existing pavement surfaces with an inertial profiler. The Department determines pay adjustments as shown in the applicable Pay Adjustment table.

Measure smoothness of:

1. Existing asphalt concrete surface before performing any work on the surface and provide the Engineer the result labeled as the "EXIST" inertial profiler data file. Notify the Engineer if mean roughness index (MRI) results vary more than 10 percent from the MRI information provided by the Department at the time of advertisement. For projects suspended for more than 30 days, measure the smoothness of the existing surface that has not received an HMA overlay and provide the Engineer the result labeled as "EXISTR" inertial profiler data file. Use the segment MRIs from this profile as the MRI0.
2. Existing pavement segments if structural repairs such as remove and replace asphalt concrete or leveling courses are made and provide the Engineer the result labeled as "BASELINE" inertial profiler data file.
3. Pavement segments, exclusive of OGFC on new HMA, before performing any HMA smoothness corrections and provide the Engineer the result labeled as "PAVE" inertial profiler data file.
4. Pavement segments, exclusive of OGFC on new HMA, after performing any HMA smoothness corrective work and provide the Engineer the results labeled as "FINAL" inertial profiler data file. Use the "PAVE" inertial profiler data as the "FINAL" inertial profiler data if there is no corrective work in the segment.
5. Pavement segments of OGFC before performing any OGFC smoothness correction. Profile the sections and provide the Engineer the result labeled as "PAVEO" inertial profiler data file.
6. Pavement segments of OGFC after performing any OGFC smoothness corrective work and provide the Engineer the result labeled as "FINALO" inertial profiler data file. Use the "PAVEO" inertial profiler data file as the "FINALO" inertial profiler data file when no corrective work in the segment is performed.

SAMPLE NOT FOR BIDDING

MRI_0 is the lower MRI value from the "EXIST" and "BASELINE" profiles for the 0.1-mi segment and must be used to determine the applicable section:

HMA Pay Adjustment

Total Asphalt Thickness (ft)[a]	MRI_0 (in/mi)	HMA Final MRI (in/mi) Adjustment Table	Applicable Section
≥ 0.30	<165	Target 60 Pay Adjustment	39-2.01A(4)(i)(iii)(A)
	≥165	Percent Improvement Pay Adjustment	39-2.01A(4)(i)(iii)(C)
< 0.30	<135	Target 75 Pay Adjustment	39-2.01A(4)(i)(iii)(B)
	≥135	Percent Improvement Pay Adjustment	39-2.01A(4)(i)(iii)(C)

[a] Total HMA thickness exclusive of OGFC

Notify the Engineer 10 days before collecting inertial profiler data. Allow the Engineer 2 days after receipt of your data to complete inertial profiler verification of all data except the "FINAL" inertial profiler data.
Allow the Engineer 10 days after receipt of your data to complete verification of "FINAL" inertial profiler data.

If accepted by the Engineer, the Department uses your inertial profiler data for acceptance and determination of the payment adjustment.

Segments may be correctively ground to improve pay adjustments to full pay. The Department does not allow corrective grinding into positive pay adjustments. The Department determines positive pay adjustment segments before any corrective grinding. Correction of areas of localized roughness in positive pay adjustment segments cannot improve pay.

Corrective Actions:

1. Correction may be diamond grinding or remove and replace at your option.
2. Corrective grinding must comply with section 39-2.01C(16).
3. When OGFC is being placed over the surface of HMA, these requirements apply to the HMA surface of which the OGFC is being placed on. Smoothness requirements for OGFC are specified in Section 39-2.04A(4)(c)(iii).

SAMPLE NOT FOR BIDDING

39-2.01A(4)(i)(iii)(A) Pay Adjustments for Target MRI 60

The Department applies the following pavement smoothness pay adjustments to 0.1-mi segments based on your verified inertial profiler data:

Target 60 Pay Adjustment

MRI_{SEG}(in/mi)	Pay Adjustment per 0.1 mi	Corrective Actiona
≤ 45.00	+ $900.00	None
45.01 – 55.00	+ ((55.00 – MRI_{SEG}) x $90.00)	None
55.01 - 65.00	Full Pay	None
65.01 – 80.00	- ((MRI_{SEG} – 65.00) x $190.00)	Optional
> 80.00	Not Applicable	Mandatory

[a] See 39-2.01A(4)(i)(iii) Pavement Smoothness

No areas of localized roughness over 160 IRI are allowed.

39-2.01A(4)(i)(iii)(B) Pay Adjustments for Target MRI 75

The Department applies the following pavement smoothness pay adjustments to 0.1-mi segments based on your verified inertial profiler data:

Target 75 Pay Adjustment

MRI_{SEG}(in/mi)	Pay Adjustment per 0.1 mi	Corrective Action[a]
≤ 60.00	+ $450.00	None
60.01 –70.00	+ ((70.00 – MRI_{SEG}) x $45.00)	None
70.01 - 80.00	Full Pay	None
80.01 – 90.00	- ((MRI_{SEG} – 80.00) x $135.00)	Optional
> 90.00	Not Applicable	Mandatory

[a] See 39-2.01A(4)(i)(iii) Pavement Smoothness

No areas of localized roughness over 160 IRI are allowed.

39-2.01A(4)(i)(iii)(C) Acceptance Criteria using Percent Improvement

The Department applies pavement smoothness pay adjustments to 0.1-mi segments based on your verified inertial profiler data. The Department determines payment adjustments using a percent of target MRI (PoT). The target MRI (MRI_t) is determined based on the "EXIST" or "BASELINE" MRI (MRI_0) exclusive of the OGFC and the number of opportunities as shown in the following table:

Target MRI (MRI_t)

Number of Opportunities	Target MRI (MRI_t)
1	= 0.3 x MRI_0 + 35
2	= 0.09 x MRI_0 + 45.5
3	= 0.027 x MRI_0 + 48.7

Note: If the calculated MRI_t is less than 60, use MRI_t = 60 for HMA thickness ≥ 0.3'.
If the calculated MRI_t is less than 75, use MRI_t = 75 for HMA thickness < 0.3'.

SAMPLE NOT FOR BIDDING

Opportunities for improving smoothness include:

1. A single lift of asphalt. Where an HMA layer thickness allows the layer to be placed in more than one lift, the number of opportunities will be equal to the maximum number of lifts the layer can be broken into regardless of aggregate size chosen by the contractor.
2. Micro milling or cold planing not in the same shift as the paving. When the contractor chooses to micro mill or cold plane and pave in the same shift, but has the option to micro mill or cold plane and pave in different shifts, the micro milling or cold planning will still be considered a separate opportunity.

Determine the Percent of Target MRI (PoT) of each completed 0.1-mi segment of lane using the following equation:

(%)PoT = (MRI_{SEG} / MRI_t) x 100 rounded to the nearest tenth of one percent where:

MRI_{SEG} = the MRI of each 0.1-mi section of completed lane after all corrections.

Payment adjustments for each 0.1-mi segment of lane will be made as shown in the following table:

Percent Improvement Pay Adjustment

PoT	Payment adjustment per 0.1 mi per lane ≥ 0.30'	Payment adjustment per 0.1 mi per lane < 0.30'	Corrective Action in fixed increment[a]
PoT ≤ 75	$900.00	$450.00	May only grind areas to meet localized roughness thresholds
75 < PoT ≤ 90	$900.00 - (PoT – 75.00) x $60.00	$450.00 - (PoT- 75.00) x $30.00	May only grind areas to meet localized roughness thresholds
90 < PoT ≤ 110	Full Pay	Full Pay	May only grind areas to meet localized roughness thresholds
110 < PoT ≤ 125	-(PoT – 110.00) x ($190.00)	-(PoT – 110.00) x ($90.00)	Corrective Actions permitted
If MRI_{SEG} ≤ 90 in/mi and PoT > 125	-(PoT-110.00) x ($190.00)	-(PoT-110.00) x ($90.00)	Corrective Actions permitted
If MRI_{SEG} > 90 in/mi and PoT > 125	Not Applicable	Not Applicable	Mandatory Correction

[a] 39-2.01A(4)(i)(iii) Pavement Smoothness

No areas of localized roughness (ALR) greater than ALR_{MAX} are allowed. ALR_{MAX} is the greater value of 160 in/mi or calculated value using the following equation:

$ALR_{MAX} = 2.1 \times MRI_t$

39-2.01A(4)(i)(iii)(D) Verification Testing

The Engineer verifies your inertial profiler data in accordance with 36-3.01D(3)(b)(ii).

Replace section 39-2.01B(2)(b) with:

Determine the plasticity index of the aggregate blend under California Test 204. Use only the aggregate blend with plasticity index equal to or less than 10.

Treat aggregate with lime slurry with marination.

Replace *0.8–1.5* in the row for combined aggregate fractions in the table in the 7th paragraph of section 39-2.01B(4)(c)(i) with:

1.0–1.5

Replace the 2nd sentence in the paragraph of section 39-2.01B(10) with:

Choose from CRS2, CQS1, or PMCRS2 asphaltic emulsion or asphalt binder.

Replace section 39-2.01C(3)(d) with:

39-2.01C(3)(d) Reserved

SAMPLE NOT FOR BIDDING

Replace the table in the 3rd paragraph of section 39-2.01C(3)(f) with: Tack Coat Application Rates for HMA

HMA over:	Minimum residual rates (gal/sq yd)	
	CRS2 and CQS1 asphaltic emulsion	Asphalt binder and PMCRS2 asphaltic emulsion
New HMA (between layers)	0.03	0.02
Concrete pavement and existing asphalt concrete surfacing	0.04	0.03
Planed pavement	0.06	0.04

Delete the 2nd and 3rd paragraphs and replace the 1st sentence of the 4th paragraph of section 39-2.01C(4)(a) with:

Place HMA on adjacent traveled way lanes such that at the end of each work shift, the distance between the ends of HMA layers on adjacent lanes is from 5 to 10 feet.

Delete section 39-2.01C(4)(b).

Add to the end of section 39-2.02A(1):

Do not place Type A HMA on the traveled way between November 1 and May 1.

Add to section 39-2.02A(4)(a):

The contractor or the contractor's representative shall be responsible for the Quality Assurance testing of the Hot Mix asphalt concrete and the compaction testing Hot Mix asphalt concrete surface.

Add to section 39-2.02A(4)(b)(i):

The contractor or the contractor's representative shall be responsible for the Quality Control testing of the Hot Mix asphalt concrete and the compaction testing Hot Mix asphalt concrete surface.

SAMPLE NOT FOR BIDDING

Replace the paragraphs in the RSS for section 39-2.02A(3)(b) with:

The JMF must be based on the Superpave HMA mix design system as described in the MS-2 Asphalt Mix Design Methods by the Asphalt Institute.

For a Type A HMA mixture using RAP substitution greater than 15 percent of the aggregate blend, the asphalt binder grade from the HMA mixture must comply with the binder grade specified in section 39- 2.02B(3). The HMA mixture binder grade must not be stiffer than the PG binder grade specified and must be determined by blending charts for high, intermediate, and low critical temperatures. Original binder requirements, ductility requirements, and footnote d in the table in the 1st paragraph in section 92-1.02B do not apply in the determination of the HMA mixture binder grade using blending charts.

Add to section 39-2.02A(3)(c):

For RAP substitution greater than 15 percent of the aggregate blend, submit blending calculation sheets and blending charts for high, intermediate, and low critical temperatures. The blending calculation sheets and blending charts must be based on the MS-2 Asphalt Mix Design Methods by the Asphalt Institute.
You may use critical temperatures of virgin binder or the maximum theoretical critical temperature of the PG grade of the virgin binder. Critical temperatures must be in whole degree. The calculation sheets must be sealed and signed by an engineer who is registered as a civil engineer in the State or by the AMRL- AASHTO-accredited laboratory manager responsible for the calculations and blending charts.

Add to the table in the 1st paragraph of section 39-2.02A(4)(b)(ii):

Coarse durability index[e]	AASHTO T 210	1 per 3,000 tons or 1 per paving day, whichever is greater
Fine durability index	AASHTO T 210	1 per 3,000 tons or 1 per paving day, whichever is greater
Sodium sulfate soundness[f]	AASHTO T 104	1 per project

[e]The test is required only if the aggregate source is in Lassen, Modoc, Siskiyou, or Shasta County.
[f]The test is required only if the aggregate source is in Modoc, Siskiyou, or Shasta County.

Add between the heading and the 1st paragraph of section 39-2.02A(4)(b)(iii):

39-2.02A(4)(b)(iii)(A) General

Add to section 39-2.02A(4)(b)(iii):

39-2.02A(4)(b)(iii)(B) Virgin and Recovered Reclaimed Asphalt Pavement Binder

Section 39-2.02A(4)(b)(iii)(B) applies to Type A HMA mixtures using RAP substitution greater than 15 percent of the aggregate blend.

Perform solvent extraction of RAP binder under AASHTO T 164, Method A, and recovery under AASHTO R 59 or ASTM D1856. Test the quality characteristics of the recovered RAP binder under the test methods and frequencies shown in the following table:

Quality characteristic	Test method	Minimum testing frequency
Critical temperatures of RAP binder	AASHTO T 315 and AASHTO T 313	1 per project if RAP is not augmented or 1 per 500 tons of augmented RAP

SAMPLE NOT FOR BIDDING

If you use critical temperature of virgin binder in blending charts, test the quality characteristics of the virgin binder under the test methods and frequencies shown in the following table:

Quality characteristic	Test method	Minimum testing frequency
Critical temperatures of virgin binder	AASHTO T 315 and AASHTO T 313	1 per 5 paving days or 1 per project, whichever is greater

Determine the blended binder grade using blending charts under the MS-2 Asphalt Mix Design Methods by the Asphalt Institute each time the critical temperatures are determined.

Replace *40* in the row for *Los Angeles Rattler (max, %)* in the table in item 1 in the list in the paragraph of section 39-2.02A(4)(e) with:

25

Add to the table in item 1 in the list in the paragraph of section 39-2.02A(4)(e):

Coarse durability index (D_c, min)[e]	AASHTO T 210	65
Fine durability index (D_f, min)	AASHTO T 210	50
Sodium sulfate soundness (max loss, %)[f]	AASHTO T 104	25

[e]The test is required only if the aggregate source is in Lassen, Modoc, Siskiyou, or Shasta County.
[f]The test is required only if the aggregate source is in Modoc, Siskiyou, or Shasta County.

Delete the row for *For RAP substitution equal to or less than 15%* of the RSS for the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e).

Delete the row for *For RAP substitution greater than 15%* of the RSS for the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e).

Replace the row for *Moisture susceptibility (min, psi, wet strength)* in the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e) with:

Moisture susceptibility (min, tensile strength ratio)	AASHTO T 283	80

Add to the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e):

Surface abrasion loss (max, g/cm^2)^h	California Test 360	0.4

Add to the list in section 39-2.02A(4)(e):

1. For RAP substitution greater than 15 percent of the aggregate blend, the asphalt binder grade must comply with the specified binder grade. A tolerance of +2 degrees C may be applied to the critical high and low temperatures of the blended binder. Original binder requirements, ductility requirements, and footnote d in the table in the 1st paragraph in section 92-1.02B do not apply in the determination of the PG binder grade using blending charts.

Replace the row for *Moisture susceptibility, dry strength (min, psi)* in the 1st paragraph of section 39-2.02B(2) with:

For RAP Substitution greater than 15% Moisture susceptibility (max, psi, dry strength)	AASHTO T 283	300

Delete the row for *For RAP substitution equal to or less than 15%* of the RSS for the table in the 1st paragraph of section 39-2.02B(2).

Delete the row for *For RAP substitution greater than 15%* of the RSS for the table in the 1st paragraph of section 39-2.02B(2).

Replace the row for *Moisture susceptibility, wet strength (min, psi)* in the 1st paragraph of section 39-2.02B(2) with:

Moisture susceptibility (min, tensile strength ratio)	AASHTO T 283	80

Add to the table in the 1st paragraph of section 39-2.02B(2):

Surface abrasion loss (max, g/cm2)^f	California Test 360	0.4

Replace the 3rd and 4th paragraphs in section 39-2.02B(2) with:

For a Type A HMA mixture using RAP substitution greater than 15 percent of the aggregate blend, the mix design blended binder grade must comply with the specified binder grade. The mix design blended binder grade must be determined using blending charts as described in the MS-2 Asphalt Mix Design

Methods by the Asphalt Institute. Original binder requirements, ductility requirements, and footnote d in the table in the 1st paragraph in section 92-1.02B do not apply in the determination of the HMA mixture binder grade using blending charts.

SAMPLE NOT FOR BIDDING

Replace *Reserved* in section 39-2.02B(3):

The grade of asphalt binder for Type A HMA must be PG 64-28M.

For Type A HMA using RAP substitution of greater than 15 percent of the aggregate blend, the HMA mixture binder grade must comply with the PG binder grade specified above.

For Type A HMA using RAP substitution of 15 percent or less of the aggregate blend, the grade of the virgin binder must comply with the PG binder grade specified above.

Add to section 39-2.02B(4):

Aggregate used in HMA Type A must comply with the 3/4-inch HMA Types A gradation.

If aggregate source is from Modoc, Siskiyou, or Shasta County, submit aggregate samples to the Engineer at least 20 days before the aggregate's intended use.

Replace *40* in the row for Los Angeles Rattler in the table in the 1st paragraph of section 39- 2.02B(4)(a) with:

25

SAMPLE NOT FOR BIDDING

Add to the table in the 1st paragraph of section 39-2.02B(4)(a):

Coarse durability index (D_c, min)[d]	AASHTO T 210	65
Fine durability index (D_f, min)	AASHTO T 210	50
Sodium sulfate soundness (max loss, %)[e]	AASHTO T 104	25

[d]The test is required only if the aggregate source is in Lassen, Modoc, Siskiyou, or Shasta County.
[e]The test is required only if the aggregate source is in Modoc, Siskiyou, or Shasta County.

Replace the 2nd sentence of 2nd paragraph in section 39-2.02B(11) with:

For RAP substitution of 15 percent or less, RAP must be within ±3 of RAP percentage shown in your Contractor Job Mix Formula Proposal form without exceeding 15 percent. For RAP substitution of greater than 15 percent, RAP must be within ±3 of RAP percentage shown in your Contractor Job Mix Formula Proposal form without exceeding 25 percent.

Add to the beginning of section 39-2.02C:

Use a material transfer vehicle when placing Type A HMA if:

1. Quantity of HMA to be paved is greater than 1000 tons.
2. Any of the following exists:
    - Paving is allowed and the ambient air temperature is below 70 degrees F.
    - Time from discharge to truck at the HMA plant until transfer to the paver's hopper is 90 minutes or greater.

Add to section 39-2.02C:

The Type A HMA shall be placed in TWO equal lifts for the Hackstaff Road.

Replace section 39-2.02D:

39-2.02D PAYMENT

Payment for the Quality Assurance and Quality Control testing of the Hot Mix asphalt concrete and the compaction testing Hot Mix asphalt concrete surface shall be pay as bid item for the Quality Assurance Testing for HMA and no additional compensation shall be made for the Quality Assurance and Quality Control testing.

Add to section 39-3.04A with:

The grinding from the Cold Planing Asphalt Concrete Surface shall be removed from the job-site and shall be hauled to the designated disposal site, Lassen County Maintenance Doyle Yard.

Replace section 39-3.04D with:

Payment for the removal of the grinding from the Cold Planing Asphalt Concrete Surface shall be pay as bid item Removed Existing Asphalt Concrete Surface and no additional compensation shall be made for the Removed Existing Asphalt Concrete Surface.

^^

DIVISION VI STRUCTURES

48 TEMPORARY STRUCTURES

Add to section 48-2.01 with:

The contractor shall have registered professional engineer inspect the concrete falsework for the abutments on Bridge 7C-101 and the concrete falsework for the abutments and bent on Bridge 7C-102. The registered professional engineer shall provide a written certification approving the concrete falsework and authorization the contractor to proceed with placing the concrete within the falsework for the abutments and bent. The written certification approving the concrete falsework shall be sealed and signed by the engineer who is registered as a civil engineer in the State of California.

Replace section 48-2.04D with:

Full compensation for the inspection and written certification approving the concrete falsework by the registered professional engineer is included in the contract unit price paid for various item of concrete work.

SAMPLE
NOT FOR BIDDING

49 PILING

Add to section 49-2.01 with:

Piling shall conform to the provisions in Section 49, "Piling," of the Standard Specifications, and these special provisions.

Unless otherwise specified, welding of any work performed in conformance with the provisions in Section 49, "Piling," of the Standard Specifications, shall be in conformance with the requirements in AWS D1.1.

Foundation recommendations are included in the "Information Handout" available to the Contractor as provided for in Section 2-1.03, "Examination of Plans, Specifications, Contract, and Site of Work," of the Standard Specifications.

Attention is directed to "Welding" of these special provisions.

Pile layout shall be approved by the Engineer at each pier column foundation prior to beginning pile driving operations.

Driving System Submittal

Prior to installing driven piling, the Contractor shall provide a driving system submittal, including driveability analysis, in conformance with the provisions in Section 5-1.23, "Submittals," of the Standard Specifications. A submittal shall be made for each control location shown below. All proposed driving systems (i.e., each hammer that may be brought onto the site) shall be included in the submittal.

The driving system submittal shall contain an analysis showing that the proposed driving systems will install piling to the specified tip elevation and specified bearing. Driving systems shall generate sufficient energy to drive the piles with stresses not more than 95 percent of the specified yield strength of the steel pile or unfilled steel shell. Submittals shall include the following:

A. Complete description of soil parameters used, including soil quake and damping coefficients, skin friction distribution, ratio of shaft resistance to nominal compression resistance, assumptions made regarding the formation of soil plugs, and assumptions made regarding drilling through the center of open ended steel shells.
B. List of all hammer operation parameters assumed in the analysis, including fuel settings, stroke limitations, and hammer efficiency.
C. Driveability studies that are based on a wave equation analysis using a computer program that has been approved by the Engineer. Driveability studies shall model the Contractor's proposed driving systems, including the hammers, capblocks, and pile cushions, as well as determine driving resistance and pile stresses for assumed site conditions. Separate analyses shall be completed at elevations above the specified tip elevations where difficult driving is anticipated. Studies shall include plots for a range of pile compression capacities above and below the nominal compression resistance shown on the plans. Plots shall include the following:

    1 Pile compressive stress versus blows per 1-ft.
    2 Pile tensile stress versus blows per 1-ft.
    3 Nominal compression resistance versus blows per 1-ft.

    When the driveability analysis hammers indicate that open ended pipe pile and steel shell penetration rates are less than 1-ft per 200 blows and the driving stresses will exceed 80 percent of the specified yield strength of the pipe and steel shell, the study shall include assumptions for drilling through the center of open ended pipe piles and steel shells.
D. Copies of all test results from any previous pile load tests, dynamic monitoring, and all driving records used in the analyses.
E. Completed "Pile and Driving Data Form," which is shown in these special provisions. The driving system submittal shall be stamped and signed by an engineer who is registered as a Civil Engineer in the State of California. Prior to installing piling, the Contractor shall allow the Engineer 15 working days to review a driving system submittal after a complete set, as determined by the Engineer, has been received. Should the Engineer fail to complete his review within the time allowance, and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in the driving system submittal review, the delay will be considered a right of way delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays" of the Standard Specifications.

SAMPLE NOT FOR BIDDING

The Contractor shall use the driving system and installation methods described in the approved driving system submittal for a given control location. Any change in hammers from those submitted and approved by the Engineer shall also meet the requirements for driving system submittals. Revised and new driving system submittals shall be approved by the Engineer prior to using corresponding driving systems on production piling. The Contractor shall allow the Engineer 15 working days to review each revised and each new driving system submittal after a complete set, as determined by the Engineer, has been received.

Approval of pile driving equipment will not relieve the Contractor of his responsibility to drive piling, free of damage, to the specified penetration.

LASSEN COUNTY DEPARTMENT OF TRANSPORTATION

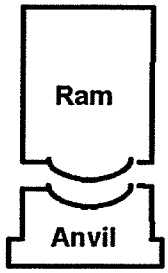
PILE AND DRIVING DATA FORM

Structure Name :_____ Contract No.:_____

_____ Project:_____

Structure No.:_____ Pile Driving Contractor or

Dist./Co./Rte./Post Mi_____ Subcontractor_____ (Pile Driven By)



Hammer

Manufacturer:_____ Model:_____

Type:_____ Serial No.:_____

Rated Energy:_____ at _____ Length of Stroke

Modifications: _____

_____

_____

_____

_____

Capblock (Hammer Cushion)

Material:_____

Thickness:_____ in Area:_____ in^2

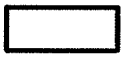
Modulus of Elasticity - E:_____ ksi

Coefficient of Restitution - e:

Pile Cap

Helmet
Bonnet
Anvil Block
Drivehead

Weight: kips



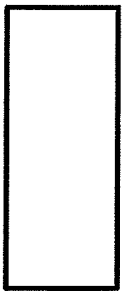
Pile

Material:_____

Thickness:_____ in Area: _____ in^2

Modulus of Elasticity - E:_____ ksi

Coefficient of Restitution - e:_____



Pile

Pile Type:_____

Length (In Leads):_____ ft

Lb/ft.:_____ Taper:_____

Wall Thickness:_____ in

Cross Sectional Area:_____ in^2

Design Pile Capacity:_____ kips

Description of Splice:_____

_____

Tip Treatment
Description:

SAMPLE NOT FOR BIDDING

DISTRIBUTE one copy

- ☐ Translab, Foundation Testing
- ☐ Translab, Geotechnical Design
- ☐ Resident Engineer

Note: If mandrel is used to drive the pile, attach separate manufacturer's detail sheet(s) including weight and dimensions.

Submitted By:_____

Date:_____ **Phone No.:**_____

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
BIG FOOT	MATRIX CONSTRUCTION PRODUCTS 50 S MAIN ST STE 200 NAPERVILLE IL 60540 (877) 591-3137
POLY-BORE	BAROID INDUSTRIAL DRILLING PRODUCTS 3000 N SAM HOUSTON PKWY EAST HOUSTON TX 77032 (877) 379-7412

SAMPLE NOT FOR BIDDING

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

Quality characteristic	Test method	Requirement
Density During drilling (pcf)	Mud weight (density), API RP 13B-1, section 4	≤ 67.0[a]
Before final cleaning and immediately before placing concrete (pcf)		≤ 64.0[a]
Viscosity During drilling (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	50–120
Before final cleaning and immediately before placing concrete (sec/qt)		≤ 70
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	≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.

[a]If authorized, you may use slurry in a salt water environment. The allowable density of slurry in a salt water environment may be increased by 2 pcf.

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

Super Mud

Quality characteristic	Test method	Requirement
Density During drilling (pcf)	Mud weight (density), API RP 13B-1, section 4	≤ 64.0[a]
Before final cleaning and immediately before placing concrete (pcf)		≤ 64.0[a]
Viscosity During drilling (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	32–60
Before final cleaning and immediately before placing concrete (sec/qt)		≤ 60
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	≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a salt water environment. The allowable density of slurry in a salt water environment may be increased by 2 pcf.

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

Shore Pac GCV

Quality characteristic	Test method	Requirement
Density During drilling (pcf)	Mud weight (density), API RP 13B-1, section 4	≤ 64.0[a]
Before final cleaning and immediately before placing concrete (pcf)		≤ 64.0[a]
Viscosity During drilling (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	33–74
Before final cleaning and immediately before placing concrete (sec/qt)		≤ 57
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	≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a salt water environment. The allowable density of slurry in a salt water environment may be increased by 2 pcf.

SAMPLE NOT FOR BIDDING

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

Terragel or Novagel Polymer

Quality characteristic	Test method	Requirement
Density During drilling (pcf)	Mud weight (density), API RP 13B-1, section 4	≤ 67.0[a]
Before final cleaning and immediately before placing concrete (pcf)		≤ 64.0[a]
Viscosity During drilling (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	45–104
Before final cleaning and immediately before placing concrete (sec/qt)		≤ 104
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	≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a salt water environment. The allowable density of slurry in a salt water environment may be increased by 2 pcf.

BIG-FOOT synthetic slurry must comply with the requirements shown in the following table:

BIG-FOOT

Quality characteristic	Test method	Requirement
Density During drilling (pcf)	Mud weight (density), API RP 13B-1, section 4	≤ 64.0[a]
Before final cleaning and immediately before placing concrete (pcf)		≤ 64.0[a]
Viscosity During drilling (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	30–125
Before final cleaning and immediately before placing concrete (sec/qt)		55-114
pH	Glass electrode pH meter or pH paper	8.5–10.5
Sand content, percent by volume Before final cleaning and immediately before placing concrete (%)	Sand, API RP 13B-1, section 9	≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a salt water environment. The allowable density of slurry in a salt water environment may be increased by 2 pcf.

SAMPLE NOT FOR BIDDING

POLY-BORE synthetic slurry must comply with the requirements shown in the following table:

POLY-BORE

Quality characteristic	Test method	Requirement
Density During drilling (pcf)	Mud weight (density), API RP 13B-1, section 4	62.8-65.8[a]
Before final cleaning and immediately before placing concrete (pcf)		62.8-64.0[a]
Viscosity During drilling (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	50–80
Before final cleaning and immediately before placing concrete (sec/qt)		50-80
pH	Glass electrode pH meter or pH paper	7.0–10.0
Sand content, percent by volume Before final cleaning and immediately before placing concrete (%)	Sand, API RP 13B-1, section 9	≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a salt water environment. The allowable density of slurry in a salt water environment may be increased by 2 pcf.

SAMPLE NOT FOR BIDDING

DIVISION VI STRUCTURES

50 PRESTRESSING CONCRETE

Replace "METS" in all sections of 50-1.01C with:

the County of Lassen

Delete the third paragraph of section 50-1.01C(3).

Replace "45 days" in item 2. of the seventh paragraph of section 50-1.01C(3) with:

21 days

Replace "METS" in section 50-1.01D(2)(b)(ii) with:

an authorized laboratory

Delete item 1. In the second paragraph of section 50-1.01D(2)(b)(ii).

Replace "a laboratory on the Authorized Laboratories List" in section 50-1.01D(2)(b)(iii) with:

an authorized laboratory

Add to the end of the first and second paragraphs of section 50-1.01D(2)(f):

or as directed by the Engineer.

Replace "on the Authorized Material List" in section 50-1.02A with:

approved by the Engineer.

51 CONCRETE STRUCTURES

Add to section 51-1.02B:

For the portions of structures shown in the following table, concrete must contain at least 675 pounds of cementitious material per cubic yard:

Bridge name and no.	Portion of structure
07C-101	Deck, Curbs, Girders, Substructure
07C-102	Deck, Curbs, Girders, Substructure

Concrete in superstructures and barriers for the bridges shown in the table above must:

1. Contain no more than 360 pounds of total water per cubic yard. Total water is the combined total of free water and water absorbed by aggregates in reaching a saturated surface-dry condition.
2. Be prequalified under section 90-1.01D(5)(b). Include water absorbed by the aggregates and free water in the certified test data and trial batch test reports. You must (1) submit a certificate of compliance for the workability of concrete with the prequalification test reports or (2) demonstrate the workability of trial batches in the Engineer's presence.

If authorized, you may use concrete from trial batches in structures at locations where concrete without a total water requirement is allowed. Concrete from trial batches used in structures at locations where air entrainment is not required must have air entrainment as specified for the trial batch instead of the requirements in section 90-1.02E(3).

Add to section 51-1.03F(3):

The concrete surfaces that will be exposed for the abutments, bent and retaining walls shall have a Class 1 Surface Finish

Add to section 51-1.04:

Full compensation for the Class 1 Surface Finish is included in the contract unit price paid for various item of concrete work.

SAMPLE NOT FOR BIDDING

60 EXISTING STRUCTURES

Add to section 60-2.01A:

Remove the following structure:

Bridge no./Structure name	Description of work
Long Valley Creek Bridge (Bridge No. 07C-0012)	Remove existing wooden bridge on wooden piling

The existing bridge 7C-12 on Hackstaff Road over Long Valley Creek has a Posted Load Limit of **3-TON Maximum.**

Remove the following structure:

Bridge no./Structure name	Description of work
Long Valley Creek Bridge (Bridge No. 07C-0081)	Remove existing medal bridge

The existing bridge 7C-81 on Hackstaff Road over Long Valley Creek is only one lane (12 foot wide).

Add to section 14-12.04D:

60-2.02D Payment

Full compensation for bridge removal is included in the contract unit prices paid for Bridge Removal.

^^

DIVISION VIII MISCELLANEOUS CONSTRUCTION

80 FENCES

Add in section 80-1.01:

TEMPORARY FENCE

Temporary Barbwire fencing shall conform to 2018 Caltrans Standard Plans Sheet A86.
Temporary ESA fencing shall conform to High visibility fabric.
Temporary fence shall be furnished, constructed, maintained, and later removed as shown on the plans, as specified in these special provisions and as directed by the Engineer.
Except as otherwise specified in this section, temporary fence shall conform to the plan details and the specifications for permanent fence of similar character as provided in Section 80, "Fences," of the Standard Specifications.

Used materials may be installed provided the used materials are good, sound and are suitable for the purpose intended, as determined by the Engineer.

Materials may be commercial quality provided the dimensions and sizes of the materials are equal to, or greater than, the dimensions and sizes shown on the plans or specified herein.

Line Posts shall be either metal or wood at the Contractor's option.

Corner Posts shall be either metal or wood at the Contractor's option.

Galvanizing and painting of steel items will not be required.

Treating wood with a wood preservative will not be required.

Concrete footings for metal posts will not be required.

Temporary fence that is damaged during the progress of the work shall be repaired or replaced by the Contractor at the Contractor's expense.

When no longer required for the work, as determined by the Engineer, temporary fence shall be removed. The removed temporary fence materials shall become the property of the Land Owner (Jeff Scheff) and shall be stored on site, except as otherwise provided in this section.

Holes caused by the removal of temporary fence shall be backfilled.

The various types and kinds of temporary fence will be measured and paid for in the same manner specified for permanent fence of similar character as provided in Section 80, "Fences," of the Standard Specifications.

SAMPLE NOT FOR BIDDING

Add in section 80-1.04:

Full compensation for maintaining, removing, and disposing of all temporary fence shall be considered as included in the contract prices paid per foot for the various types of temporary fence and no additional compensation will be allowed therefor.

Add in section 80-2.04:

The contractor shall maintain and repair the new fence Type BW through the duration of the construction project. Full compensation for shall be considered as included in the contract prices paid per foot for the various types of construct fence– Type BW and no additional compensation will be allowed therefor.

Add in section 80-10.02:

The gate opening shall consist of TWO - 12 foot (L) x 50 inches (H) gates and shall be galvanized or powder coated steel farm style livestock utility gates and shall not be included in the measurement of the new barbwire fencing.

Add in section 80-15.03A:

All of the existing metal T-posts from the demolition of the existing barbwire fencing shall remain on site and by stored out of the way on the temporary construction easement so it will not interfere with the construction activities. All of the existing metal T-posts from the demolition of the existing barbwire fencing shall be the property of the landowner – Jeff Scheff.

All of the metal T-posts from the removal of the temporary barbwire fencing shall remain on site and by stored out of the way on the temporary construction easement so it will not interfere with the construction activities. All of the metal T-posts from the removal of the temporary barbwire fencing shall be the property of the landowner – Jeff Scheff.

^^

DIVISION IX TRAFFIC CONTROL DEVICES

83 RAILINGS AND BARRIERS

SAMPLE NOT FOR BIDDING

Replace section 83-2.04B with:

83-2.04B Alternative In-line Terminal Systems

83-2.04B(1) General

83-2.04B(1)(a) Summary

Section 83-2.04B includes specifications for constructing alternative in-line terminal systems.

83-2.04B(1)(b) Definitions

Not Used

83-2.04B(1)(c) Submittals

Submit a certificate of compliance for alternative in-line terminal systems.

83-2.04B(1)(d) Quality Assurance

For each model of alternative in-line terminal system being installed, obtain the manufacturer's check list for the assembly and installation of the alternative in-line terminal systems from the manufacturer's representative or distributor. Notify the Engineer of the alternative in-line terminal systems to be installed at each location before starting installation activities. Complete, sign, and date the check list for each installed in-line terminal system and submit a copy of the completed and signed check list for each installed location, and include the following:

1. Contract number
2. Name of installation Contractor
3. Flare offset used in layout
4. Date of installation
5. Location on the project by post mile, and by station if stationing shown on plans
6. Name and signature of individual completing the checklist.

The Engineer signs and dates the completed check lists, verifying the in-line terminal system at each location was assembled and installed under the manufacturer's instructions and as described.

Use personnel trained by the manufacturer to install in-line terminal systems. A record of training provided by the manufacturer may be requested by the Engineer at any time.

83-2.04B(2) Materials

Alternative in-line terminal systems must be one of the following or a Department-authorized equal:

1. Type SoftStop terminal systems must be SoftStop End Terminal System manufactured by Trinity

Highway Products, LLC, and must include the connection components. Type SoftStop terminal system - Type SoftStop terminal system must be a SoftStop terminal with a System lengthof 50'-9 1/2" for test level 3, manufactured by Trinity Highway Products, LLC, and must include items detailed for SoftStop terminal system, as shown. The SoftStop terminal can be obtained from the manufacturer:

Address	Telephone no.
TRINITY HIGHWAY PRODUCTS LLC PO BOX 99 CENTERVILLE UT 84012	(800) 772-7976

2. Type MSKT - Type MSKT terminal system must be a 31" MSKT Guard Rail End Terminal with a system length of 50'-0" as manufactured by Road Systems, Inc., located in Big Spring, Texas, and must include items detailed for Type MSKT terminal system shown on the plans. The MSKT Guard Rail End Terminal can be obtained from the distributor:

Address	Telephone no.
UNIVERSAL INDUSTRIAL SALES PO BOX 699 PLEASANT GROVE UT 84062	(801) 785-0505
GREGORY INDUSTRIES INC 4100 13TH ST SW CANTON OH 44708	(330) 477-4800

3. Type MAX-Tension Tangent Guardrail End Treatment by Barrier Systems, Inc. is a tangent, re- directive gating guardrail terminal. The MAX-Tension has a length of 55'-1/2", and can be flared for an offset of 0 to 2 feet at the head. The MAX-Tension terminal can be obtained from the distributor:

Address	Telephone no.
STATEWIDE SAFETY AND SIGNS INC 130 GROBRIC COURT FAIRFIELD CA 94533	(800) 770-2644

SAMPLE NOT FOR BIDDING

83-2.04B(3) Construction

Identify each terminal system by painting the type of terminal system in 2-inch-high, neat, black letters and figures on the backside of the rail element between system posts number 4 and 5. Paint must be metallic acrylic resin type spray paint. Before applying terminal system identification, the surface to receive terminal system identification must be free of all dirt, grease, oil, salt, or other contaminants by washing the surface with detergent or other suitable cleaner. Rinse thoroughly with fresh water and allow to fully dry.

Install Type SoftStop terminal system under the manufacturer's installation instructions. For Type SoftStop terminal system, use W6 x 8.5 steel yielding terminal posts for Posts 1 and 2 and standard W6 x 8.5 steel posts for the other posts. Drive all posts or place them in drilled holes. Backfill the space around the posts with selected earth that is free of rock. Moisten and thoroughly compact each layer. For the terminal with a system length of 50'-9 1/2" or system length of 38'-3 1/2", all blocks must be wood or plastic and must be 8 or 12 inches deep.

For Type MSKT terminal system, install a W6x15 at lower section Post 1 with a soil plate attached and a 6 by 6 by 1/8 inches tube section at upper section Post 1. Install a W6x9 or W6x8.5 post assembly top and post assembly bottom at Post 2. Install W6x9 or W6x8.5 at Posts 3 through 8. Attach a 9'-4 1/2" W- beam MGS rail section to Post 3. Use 8-inch blocks. The posts must be, at your option, driven with or without pilot holes, or placed in drilled holes. Do not pound on the side plates when installing lower post #1 and lower post #2. Space around the posts must be backfilled with selected earth, free of rock, placed in layers approximately 4 inches thick and each layer must be moistened and thoroughly compacted.

Install Type MAX-Tension terminal system under the manufacturer's installation instructions. Use 8- or 12-inch wood or composite blocks. Install W6x8.5 or W6x9 at post positions after Post 1. Backfill the space around the posts with selected earth that is free of rock. The posts must be, at your option, driven with or without pilot holes, or placed in drilled holes. Space around the posts must be backfilled with selected earth, free of rock, placed in layers approximately 4 inches thick and each layer must be moistened and thoroughly compacted.

83-2.04B(4) Payment

Not Used

Replace section 83-2.05A(1) with:

Section 83-2.05 includes specifications for constructing California bridge rail type ST-30.

Replace *7* in the 2nd paragraph of section 83-2.05A(3) with:

9

Add to section 83-2.05B(2):

Bar reinforcing steel used in concrete end block must be epoxy coated under section 52-2.03.

Replace section 83-4.07 with:

83-4.07 ALTERNATIVE CRASH CUSHION SYSTEM

83-4.07A General

83-4.07A(1) Summary

Section 83-4.07 includes specifications for constructing alternative crash cushion systems, including foundations, transitions, and hardware required to connect to a structure or barrier as described.

83-4.07A(2) Definitions

Not Used

83-4.07A(3) Submittals

Submit a certificate of compliance for each model of crash cushion system.

SAMPLE
NOT FOR BIDDING

At least 10 days before installation, for each model of crash cushion system used on the project, submit at least two copies of the following:

1. Manufacturer's:
   1.1. Instruction manuals with installation checklists
   1.2. Maintenance manuals
2. List of installation locations

As each crash cushion system is installed, complete the manufacturer's installation checklist and include the following:

1. Contract number
2. Name of installation Contractor
3. Type of crash cushion system installed
4. Date of installation
5. Location by post mile and by station if stationing is shown
6. Name and signature of person completing the checklist

For each crash cushion system installed, submit a completed manufacturer's checklist within 10 days after installation. The checklist must be completed by personnel that have been trained by the manufacturer.

83-4.07A(4) Quality Assurance

Personnel trained by the manufacturer must be on site during installation. Provide list of trained personnel to the Engineer.

83-4.07B Materials

Concrete must comply with the specifications for minor concrete and the manufacturer's strength requirements.

Reinforcement must comply with section 52.

Alternative crash cushion system must meet test level 3 criteria and must be one of the following or a Department-authorized equal:

1. CRASH CUSHION (TYPE SCI-100GM) - The Type SCI-100GM is a potentially reusable, re-directive, non-gating, bidirectional, impact crash cushion for roadside features of 24" width with the use of an approved transition. The system length is 21'-6". The Type SCI-100GM can be obtained from the following distributors:

Address	Telephone and fax nos.
WORK AREA PROTECTION CORPORATION 2500 PRODUCTION DRIVE ST. CHARLES IL 60174-9081	Telephone: (800) 327-4417 Fax: (614) 340-6296
D&M TRAFFIC SERVICES INCORPORATED 845 REED STREET SANTA CLARA CA 95050	Telephone: (408) 436-1127 Fax: (408) 436-1675

2. CRASH CUSHION (QUADGUARD M10, 6-bay) - The Type QuadGuard M10, 6-bay, is a potentially reusable, re-directive, non-gating crash cushion for roadside features of 24" in width with use of an approved transition. The system length is 21'-11". The Type QuadGuard M10, 6-bay must be a QM10024 Tension Strut Backup or Concrete Backup with a backup width of 24 inches. The QuadGuard M10, 6-bay crash cushion can be obtained from the following manufacturer or distributor:

Address	Telephone and fax nos.
TRINITY HIGHWAY-ENERGY ABSORPTION 70 WEST MADISON STREET, SUITE 2350 CHICAGO IL 60602	Telephone: (888) 323-6374 Fax: (800) 770-6755
TRAFFIC MANAGEMENT INCOPORATED 5806 PERRIN AVENUE McCLELLAN CA 95652 e-mail: trinity@trafficmanagement.com	Telephone: (510) 289-6975

3. CRASH CUSHION (TAU-M, 7-bay) - The Type TAU-M, 7-bay, is a potentially reusable, re-directive, non-gating crash cushion for roadside features of up to 27.5 inches in width with use of an approved transition. The Type TAU-M has a system length of 23'-11". The Type TAU-M crash cushion can be obtained from the distributor:

Address	Telephone and fax nos.
STATEWIDE SAFETY AND SIGNS INCORPORATED 130 GROBRIC COURT FAIRFIELD CA 94533	Telephone: (800) 770-2644 Fax: (707) 864-9956

SAMPLE NOT FOR BIDDING

83-4.07C Construction

For each model of crash cushion system being installed, have a copy of the Caltrans approved manufacturer's drawings and installation manual onsite for reference.

Attach a manufacturer-supplied retroreflective marker panel to the front of the crash cushion if the closest point of the crash cushion is within 12 feet of the traveled way. Install Left, Right, or Median marker as appropriate. Firmly attach the marker panel to the crash cushion as recommended by the manufacturer or by other authorized methods.

Do not install crash cushion system over expansion joints or drainage basins.

Use the reinforced concrete foundation option.

Install Type SCI-100GM crash cushion under the manufacturer's installation instructions. Foundations must be a flat surface with longitudinal and cross slopes of 10:1 or less. Concrete foundations must reach full cure strength before use and the surface of the foundation must be cleaned of all debris, dirt, mud, etc.

Install Type QuadGuard M10, 6-bay crash cushion under the manufacturer's installation instructions. The QuadGuard M10, 6-bay must be a Tension Strut Backup or a Concrete Backup. A transition panel or side panel must be used on each side of the backup. The QuadGuard M10, 6-bay must only be assembled on an existing or freshly placed and cured concrete base. Cross-slope shall not exceed 8% and should not twist more than 2 percent over the length of the system. Concrete anchorage devices used for attaching the crash cushion to the base slab must be limited to those provided by the manufacturer.

Install Type TAU-M, 7-bay crash cushion under the manufacturer's installation instructions. The TAU-M, 7-bay must be connected to the barrier using the manufacturer's recommended transition. A transition panel or side panel must be used on each side of the backup. The TAU-M, 7-bay must only be assembled on an existing or freshly placed and cured concrete base. Concrete anchorage devices used for attaching the crash cushion to the base slab must be limited to those provided by the manufacturer.

Identify each crash cushion system installed by painting the system type, installation date, and project identification number in 2-inch-high, neat letters and figures in a contrasting color on the foundation beneath the crash cushion in a conspicuous location near the impact head.

Before applying paint, the surface must be free of all dirt, grease, oil, salt, or other contaminants by washing it with a brush and a suitable cleaner. Rinse thoroughly with fresh water and allow to fully dry.

Paint must be an epoxy-based paint specifically intended for exterior use on concrete.

83-4.07D Payment

Not Used.

SAMPLE
NOT FOR BIDDING

^^

84 MARKINGS

Replace *Reserved* in section 84-9.03C with:

Residue from the removal of painted or thermoplastic traffic stripes and pavement markings contains lead from the paint or thermoplastic. The average lead concentrations are less than 1,000 mg/kg total lead and 5 mg/L soluble lead. This residue:

1. Is a nonhazardous waste
2. Does not contain heavy metals in concentrations exceeding the thresholds established by the Health and Safety Code and 22 CA Code of Regs
3. Is not regulated under the Federal Resource Conservation and Recovery Act (RCRA), 42 USC § 6901 et seq.

Management of this material exposes workers to health hazards that must be addressed in your lead compliance plan.

^^

DIVISION XI MATERIALS

90 CONCRETE

Replace the row for bridge deck concrete in the table in the 1st paragraph of section 90-1.02A with:

Bridge deck concrete	0.032

Add to the fourth paragraph section 90-1.02G(6):

Use Type G chemical admixture (superplasticizer) in all bridge deck and approach slab concrete. For deck and approach slab concrete the ratio of the quantity of free water to the quantity of cementitious material must not exceed 0.385.

Add to section 90-1.02I(1):

This bridge location is in a freeze-thaw area.

Add to section 90-1.02I(2)(a):

The mortar strength of the fine aggregate relative to the mortar strength of Ottawa sand must be a minimum of 100 percent under California Test 515.

Add to section 90-1.02I(2)(b):

Concrete at the bridge location is exposed to deicing chemicals.

Replace "on the Authorized Facility Audit List" in section 90-4.01D(2)(a) with:

approved by the Engineer.

Delete section 90-4.01D(2)(b).

^^

SAMPLE NOT FOR BIDDING

APPENDIX A

REVISED STANDARD SPECIFICATIONS APPLICABLE TO THE 2018 EDITION OF THE STANDARD SPECIFICATIONS

DATED 03/15/2021

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

REVISED STANDARD SPECIFICATIONS
APPLICABLE TO THE 2018 EDITION
OF THE STANDARD SPECIFICATIONS

SAMPLE
NOT FOR BIDDING

REVISED STANDARD SPECIFICATIONS DATED 11-19-20

ORGANIZATION

Revised standard specifications are under headings that correspond with the main-section headings of the *Standard Specifications*. A main-section heading is a heading shown in the table of contents of the *Standard Specifications*. A date under a main-section heading is the date of the latest revision to the section.

Each revision to the *Standard Specifications* begins with a revision clause that describes or introduces a revision to the *Standard Specifications*. For a revision clause that describes a revision, the date on the right above the clause is the publication date of the revision. For a revision clause that introduces a revision, the date on the right above a revised term, phrase, clause, paragraph, or section is the publication date of the revised term, phrase, clause, paragraph, or section. For a multiple-paragraph or multiple-section revision, the date on the right above a paragraph or section is the publication date of the paragraphs or sections that follow.

Any paragraph added or deleted by a revision clause does not change the paragraph numbering of the *Standard Specifications* for any other reference to a paragraph of the *Standard Specifications*.

^^

SAMPLE NOT FOR BIDDING

DIVISION I GENERAL PROVISIONS

1 GENERAL

04-17-20

Add between the 1st and 2nd paragraphs of section 1-1.01:

10-19-18

Global revisions are changes to contract documents not specific to a section of the Standard

Specifications. In each contract document at each occurrence, interpret the following terms as shown:

Term	Interpretation	Conditions
Fed-Std-595	AMS Std 595	--

04-17-20

Grade SS1	Grade SS-1	--
Grade SS1h	Grade SS-1h	--
Grade CSS1	Grade CSS-1	--
Grade CSS1h	Grade CSS-1h	--
Grade QS1h	Grade QS-1h	--
Grade CQS1h	Grade CQS-1h	--

Add to the table in the 1st paragraph of section 1-1.06:

04-19-19

CSC	conductor signal cable

04-17-20

NDS	National Design Specification for Wood Construction
BWC	Bonded wearing course

Replace the row for *12* in the table in the 1st paragraph of section 1-1.08 with:

04-17-20

12	Orange (Ora)	1750 E 4TH ST STE 100 SANTA ANA CA	1750 E 4TH ST STE 100 SANTA ANA CA 92705-3909

Replace the 9th row in the table of section 1-1.11 with:

04-19-19

Department of Conservation, Division of Mine Reclamation	http://www.conservation.ca.gov/dmr	--	--

Add to the table in section 1-1.11:

04-19-19

Data Interchange for Materials Engineering	https://dime.dot.ca.gov	MATERIALS ENGINEERING AND TESTING SERVICES DEPARTMENT OF TRANSPORTATION 5900 FOLSOM BLVD SACRAMENTO CA 95819-4612	(916) 227-5238
SWRCB, Land Disposal Program	https://www.waterboards.ca.gov/water_issues/programs/land_disposal/walist.html	--	--

SAMPLE
NOT FOR BIDDING

^^

2 BIDDING

10-19-18

Replace the 5th paragraph of section 2-1.12B(1) with:

10-19-18

You are responsible to verify at bid opening the DBE firm is certified as a DBE by the California Unified Certification Program and possesses the most specific available NAICS codes or work codes applicable to the type of work the firm will perform on the Contract.

Replace section 2-1.12B(2) with:

10-19-18

2-1.12B(2) DBE Commitment Submittal

Submit DBE information under section 2-1.33.

Submit a copy of the quote from each DBE shown on the DBE Commitment form that describes the type and dollar amount of work shown on the form no later than 4 p.m. on the 5th day after bid opening. If the last day for submitting the quote falls on a Saturday or holiday, it may be submitted on the next business day with the same effect as if it had been submitted on the 5th day.

Submit a DBE Confirmation form for each DBE shown on the DBE Commitment form to establish that it will be participating in the Contract in the type and dollar amount of work shown on the form. If a DBE is participating as a joint venture partner, submit a copy of the joint venture agreement.

Failure to submit a completed DBE Confirmation form and a copy of the quote from each DBE will result in disallowance of the DBE's participation.

Add between the 4th and 5th paragraphs of section 2-1.15B:

10-19-18

Submit a copy of the quote from each DVBE listed on the Certified DVBE Summary form that describes the type and dollar amount of work shown on the form no later than 4 p.m. on the 4th business day after bid opening.

Add between the 3rd and 4th paragraphs of section 2-1.15C(1):

10-19-18

Submit a copy of the quote from each DVBE listed on the Certified DVBE Summary form that describes the type and dollar amount of work shown on the form no later than 4 p.m. on the 4th business day after bid opening.

Add between the 1st and 2nd paragraphs of section 2-1.18C:

10-19-18

Failure to submit a completed Certified Small Business Listing for the Non–Small Business Preference form by 4 p.m. on the 2nd business day after bid opening will result in a nonresponsive bid.

Replace section 2-1.33B with:

10-19-18

2-1.33B Bid Form Submittal Schedules

2-1.33B(1) General

The *Bid* book includes forms specific to the Contract. The deadlines for the submittal of the forms vary depending on the requirements of each Contract. Determine the requirements of the Contract and submit the forms based on the applicable schedule specified in section 2-1.33B.

Bid forms and information on the form that are due after the time of bid may be submitted at the time of bid.

2-1.33B(2) Federal-Aid Contracts

2-1.33B(2)(a) General

Section 2-1.33B(2) applies to a federal-aid contract.

2-1.33B(2)(b) Contracts with a DBE Goal

2-1.33B(2)(b)(i) General

Section 2-1.33B(2)(b) applies if a DBE goal is shown on the *Notice to Bidders*.

2-1.33B(2)(b)(ii) Bid Form Submittal

Submit the bid forms according to the schedule shown in the following table:

SAMPLE NOT FOR BIDDING

Bid Form Submittal Schedule for a Federal-Aid Contract with a DBE Goal

Form	Submittal deadline
Bid to the Department of Transportation	Time of bid except for the public works contractor registration number
Copy of the Bid to the Department of Transportation as submitted at the time of bid with the public works contractor registration number	10 days after bid opening
Subcontractor List	Time of bid except for the public works contractor registration number
Copy of the Subcontractor List as submitted at the time of bid with the public works contractor registration number	10 days after bid opening
Small Business Status	Time of bid
Opt Out of Payment Adjustments for Price Index Fluctuations[a]	Time of bid
DBE Commitment	No later than 4 p.m. on the 5th day after bid opening[b]
DBE Confirmation	No later than 4 p.m. on the 5th day after bid opening[b]
DBE Good Faith Efforts Documentation	No later than 4 p.m. on the 5th day after bid opening[b]

[a]Submit only if you choose the option.
[b]If the last day for submitting the bid form falls on a Saturday or holiday, it may be submitted on the next business day with the same effect as if it had been submitted on the day specified.

2-1.33B(2)(b)(iii) Reserved

2-1.33B(2)(c) Contracts without a DBE Goal

2-1.33B(2)(c)(i) General

Section 2-1.33B(2)(c) applies if a DBE goal is not shown on the *Notice to Bidders.*

2-1.33B(2)(c)(ii) Bid Form Schedule

Submit the bid forms according to the schedule shown in the following table:

Bid Form Submittal Schedule for a Federal-Aid Contract without a DBE Goal

Form	Submittal deadline
Bid to the Department of Transportation	Time of bid except for the public works contractor registration number
Copy of the Bid to the Department of Transportation as submitted at the time of bid with the public works contractor registration number	10 days after bid opening
Subcontractor List	Time of bid except for the public works contractor registration number
Copy of the Subcontractor List as submitted at the time of bid with the public works contractor registration numbers	10 days after bid opening
Small Business Status	Time of bid
Opt Out of Payment Adjustments for Price Index Fluctuations[a]	Time of bid

[a]Submit only if you choose the option.

SAMPLE NOT FOR BIDDING

2-1.33B(2)(c)(iii) Reserved

2-1.33B(2)(d)–2-1.33B(2)(h) Reserved

2-1.33B(3) Non-Federal-Aid Contracts

2-1.33B(3)(a) General

Section 2-1.33B(3) applies to non-federal-aid contracts.

2-1.33B(3)(b) Contracts with a DVBE Goal

2-1.33B(3)(b)(i) General

Section 2-1.33B(3)(b) applies if a DVBE goal is shown on the *Notice to Bidders.*

2-1.33B(3)(b)(ii) Bid Form Submittal

Submit the bid forms according to the schedule shown in the following table:

Bid Form Submittal Schedule for a Non-Federal-Aid Contract with a DVBE Goal

Form	Submittal deadline
Bid to the Department of Transportation	Time of bid except for the public works contractor registration number for a joint-venture contract
For a joint-venture contract, copy of the Bid to the Department of Transportation as submitted at the time of bid with the public works contractor registration number	10 days after bid opening
Subcontractor List	Time of bid
Opt Out of Payment Adjustments for Price Index Fluctuations[a]	Time of bid
Certified DVBE Summary	No later than 4 p.m. on the 4th business day after bid opening
California Company Preference	Time of bid
Request for Small Business Preference or Non–Small Business Preference[a]	Time of bid
Certified Small Business Listing for the Non–Small Business Preference[a]	No later than 4 p.m. on the 2nd business day after bid opening

[a]Submit only if you choose the option or preference.

2-1.33B(3)(b)(iii) Reserved

2-1.33B(3)(c) Contracts without a DVBE Goal

2-1.33B(3)(c)(i) General

Section 2-1.33B(3)(c) applies if a DVBE goal is not shown on the *Notice to Bidders.*

2-1.33B(3)(c)(ii) Bid Form Submittal

Submit the bid forms according to the schedule shown in the following table:

SAMPLE NOT FOR BIDDING

Bid Form Submittal Schedule for a Non-Federal-Aid Contract without a DVBE Goal

Form	Submittal deadline
Bid to the Department of Transportation	Time of bid except for the public works contractor registration number for a joint-venture contract
For a joint-venture contract, copy of the Bid to the Department of Transportation as submitted at the time of bid with the public works contractor registration number	10 days after bid opening
Subcontractor List	Time of bid
Opt Out of Payment Adjustments for Price Index Fluctuations[a]	Time of bid
California Company Preference	Time of bid
Certified DVBE Summary[b]	No later than 4 p.m. on the 4th business day after bid opening
Request for Small Business Preference or Non–Small Business Preference[a]	Time of bid
Certified Small Business Listing for the Non–Small Business Preference[a]	No later than 4 p.m. on the 2nd business day after bid opening

[a]Submit only if you choose the option or preference.
[b]Submit only if you obtain DVBE participation or you are the apparent low bidder, 2nd low bidder, or 3rd low bidder and you choose to receive the specified incentive.

2-1.33B(3)(c)(iii) Reserved

2-1.33B(3)(d)–2-1.33B(3)(h) Reserved

2-1.33B(4)–2-1.33B(9) Reserved

^^

3 CONTRACT AWARD AND EXECUTION

04-17-20

Replace the 1st paragraph of Section 3-1.04 with:

04-17-20

Submit any bid protest to the Office Engineer before contract award.

^^

4 SCOPE OF WORK

10-18-19

Replace the 7th and 8th paragraphs of section 4-1.07B with:

10-18-19

The Department decides whether to accept a VECP and the estimated net construction-cost savings from adopting the VECP or parts of it. The Department may require you to accept a share of the investigation cost as a condition of reviewing a VECP. In determining the estimated net construction-cost savings, the Department excludes your VECP preparation cost and the Department's VECP investigation costs, including parts paid by you. After written acceptance, the Department considers the VECP and deducts the agreed cost of the investigation.

SAMPLE NOT FOR BIDDING

Replace item 4 in the list in the 9th paragraph of section 4-1.07B with:

10-18-19

3. Adjusts the payment so that the Change Order results in a credit to the Department of 50 percent of the estimated net construction-cost savings, except if the VECP provides a reduction in traffic congestion or avoids traffic congestion

Replace the 10th paragraph of section 4-1.07B with:

10-18-19

If a VECP providing for a reduction in traffic congestion or avoiding traffic congestion is accepted by the Department, the Department adjusts the payment that results in a credit to the Department of 40 percent of the estimated net construction-cost savings attributable to the VECP. Submit detailed traffic handling comparisons between the existing Contract and the proposed change, including estimates of the traffic volumes and congestion.

10-18-19

Delete the 12th paragraph of section 4-1.07B

^^

5 CONTROL OF WORK

10-16-20

Replace section 5-1.09B with:

10-16-20

5-1.09B Partnering Meetings

5-1.09B(1) General

Reserved

5-1.09B(2) Partnering Facilitator, Workshops, and Meetings

The Engineer sends you a written invitation to enter into a partnering relationship after Contract approval. Respond within 15 days to accept the invitation and request the initial partnering workshop. After the Engineer receives the request, you and the Engineer cooperatively:

1. Select a partnering facilitator that offers the service of a monthly partnering-evaluation survey with a 5-point rating and agrees to follow the Department's *Partnering Facilitator Standards and Expectations* available at the Department's Division of Construction website.
2. Determine the initial workshop date, duration, and site location.
3. Discuss when, where, and how the project close-out partnering workshop will be held.
4. Agree to other workshop administrative details.

During the initial partnering workshop, determine the schedule for follow-up partnering team meetings. Monthly follow-up partnering team meetings are encouraged through Contract acceptance. Quarterly follow-up partnering team meetings are required if monthly team meetings are not held. Additional partnering workshops may be held outside the scheduled partnering team meetings as determined by you and the Engineer.

5-1.09B(3) Facilitated Dispute Resolution

The Department encourages the project team to exhaust the use of partnering meetings in dispute resolution before engaging an objective third party.

For certain disputes a facilitated dispute resolution session may be appropriate and effective in clarifying issues and resolving all or part of a dispute before referring the dispute to a DRA or DRB.

For projects with a DRB, an additional 20 days can be added before referring the dispute to a DRB traditional dispute meeting in accordance with section 5-1.43E(3)(d). This additional time affords the project team time to plan and hold the facilitated dispute resolution session. To allow this additional referral time, the project team must document its agreement and intention in the partnering charter as part of the dispute resolution plan.

SAMPLE NOT FOR BIDDING

Replace the 6th paragraph of section 5-1.13B(2) with:

10-19-18

If the Department authorizes the termination or substitution of a listed DBE, make good faith efforts to find another DBE. The substitute DBE must (1) perform at least the same dollar amount of work as the original DBE under the Contract to the extent needed to meet the DBE goal and (2) be certified as a DBE with the most specific available NAICS or work code applicable to the type of work the DBE will perform on the Contract at the time of your request for substitution. Submit your documentation of good faith efforts within 7 days of your request for authorization of the substitution. The Department may authorize a 7-day extension of this submittal period at your request. Refer to 49 CFR 26 app A for guidance regarding evaluation of good faith efforts to meet the DBE goal.

Replace the 2nd sentence in the 2nd paragraph of section 5-1.13C with:

10-19-18

The substitute must be another DVBE, unless DVBEs are not available. The substitute must perform the work originally stated.

Replace the 6th paragraph of section 5-1.13C with:

10-19-18

If a DVBE substitute is not available, requests for substitutions of a listed DVBE must include:

1. Contact with the DVBE advocate from the Department and the Department of Veteran Affairs
2. Search results from the Department of General Services' website of available DVBEs
3. Communication with a DVBE community organization nearest the job site, if applicable
4. Documented communication with DVBEs describing the work to be performed, the percentage of the total bid, the corresponding dollar amount, and the responses to the communication

SAMPLE NOT FOR BIDDING

Add to the list in the 1st paragraph of section 5-1.16:

10-16-20

5. Coordinate and manage project safety work

Replace section 5-1.24 with:

10-19-18

5-1.24 CONSTRUCTION SURVEYS

5-1.24A General

The Department places stakes and marks under chapter 12, "Construction Surveys," of the Department's *Surveys Manual.*

Submit your request for Department-furnished stakes:

1. Once staking area is ready for stakes
2. On a Request for Construction Staking form

After your submittal, the Department starts staking within 2 business days.

Preserve stakes and marks placed by the Department. If the stakes or marks are destroyed, the Department replaces them at the Department's earliest convenience and deducts the cost.

SAMPLE
NOT FOR BIDDING

Replace section 5-1.26 with:

10-19-18

5-1.26 RESERVED

Replace section 5-1.28 with:

10-16-20

5-1.28 PROJECT SAFETY REVIEWS

Your assigned project safety representative must:

1. Participate in a project safety meeting before starting work
2. Perform and document joint safety reviews every other week with the Engineer
3. Participate in a post-project safety meeting

Replace the 2nd and 3rd paragraphs of section 5-1.43A with:

10-18-19

Submit potential claim records using the Department's Internet potential claim system. For information on submittal of potential claim records using the Internet potential claim system, go to the Department's Division of Construction website.

A potential claim record that you submit using the Internet potential claim system is the same as the originator of the claim and you signing the potential claim record.

For the Internet potential claim system, potential claim records are:

1. Initial Potential Claim Record form
2. Supplemental Potential Claim Record form
3. Full and Final Potential Claim Record form
4. Closed Potential Claim Record form

Submit a Closed Potential Claim Record form if you choose not to pursue an Initial Potential Claim Record that has been submitted.

SAMPLE
NOT FOR BIDDING

Replace item 3.3.4 in the list in the 2nd paragraph of section 5-1.43D with:

04-17-20

3.3.4. Equipment rates at the rental rates listed in Labor Surcharge and Equipment Rental Rates in effect when the affected work related to the potential claim was performed

Add between the 2nd and 3rd paragraphs of section 5-1.43D:

04-17-20

If the total potential claim cost exceeds $500,000, include an independent CPA cost audit report. Submit the audit report within 70 days of the completion of the potentially claimed work. The CPA's cost audit must be performed as an examination-level engagement under the attestation engagements in the *Government Auditing Standards* published by the Comptroller General of the United States. The attest documentation prepared by the CPA in connection with the audit must be submitted for review with the audit report. Within 20 days of the Engineer's request, make your financial records available for an audit by the State for verifying the actual cost described in your audit. The Department does not participate in costs for the report where no entitlement is determined. If entitlement is determined, the Department pays for 1/2 the cost of the report; the Contractor pays for the other 1/2. The cost is determined under section 9-1.05 except no markup is allowed.

Replace section 5-1.43E(1)(i) with:

10-16-20

5-1.43E(1)(i) Payment

04-17-20

Pay the DRA or each DRB member $2,000 per day for the DRA's or DRB member's participation at each on-site meeting.

On-site meetings include:

1. Initial project meeting
2. Progress meetings
3. Dispute meetings

The payment includes full compensation for on-site time, travel expenses, transportation, lodging, travel time, and incidentals for each day or portion thereof.

Before a DRA or DRB member spends any time reviewing the plans or specifications, evaluating positions, preparing recommendations, completing forms, or performing any other off-site DRA- or DRB-related tasks, the parties must agree to pay for the tasks. Pay the DRA or DRB member $200 per hour for these off-site tasks. This payment includes full compensation for incidentals such as expenses for telephone, fax, and computer services.

The Department does not pay for (1) any DRA- or DRB-related work performed after Contract acceptance or (2) your cost of preparing for or attending ADR resolution meetings.

The Department pays:

1. $2,000 for each DRA on-site meeting
2. $6,000 for each DRB on-site meeting
3. $200 per hour for agreed off-site DRA- or DRB-related tasks

The Department does not adjust the unit price for an increase or decrease in the quantity of:

1. DRA on-site meeting
2. DRB on-site meeting
3. Hourly off-site DRA- or DRB-related tasks

Within 60 days of receipt of Department payment, submit copies of associated invoices and supporting documents in the form of a canceled check or bank statement for DRA- or DRB- payment verification.

SAMPLE NOT FOR BIDDING

Replace section 5-1.43E(2)(a) with:

10-16-20

5-1.43E(2)(a) General

04-17-20

Section 5-1.43E(2) applies to a contract with an estimated cost from $3 million to $10 million.

Replace item 1.2 in the list in the 1st paragraph of section 5-1.43E(2)(b) with:

10-19-18

1.2. Have completed training by the Department

Replace section 5-1.43E(3)(a) with:

10-16-20

5-1.43E(3)(a) General

04-17-20

Section 5-1.43E(3) applies to a contract with an estimated cost of over $10 million.

Replace item 1.2 in the list in the 1st paragraph of section 5-1.43E(3)(b) with:

10-19-18

1.2. Have completed training by the Department

^^

6 CONTROL OF MATERIALS

10-16-20

Replace section 6-1.03 with:

04-19-19

6-1.03 LOCAL MATERIALS

6-1.03A General

Local material must be rock, sand, gravel, earth, or mineral material other than local borrow, or selected material obtained or produced from a source in the work vicinity, specifically for use on the project. Local borrow must not be a material from an established commercial source.

Upon your request, the Department tests material for quality characteristics from an untested local source. If satisfactory material from that source is used in the work, the Department does not charge you for the tests; otherwise, the Department deducts the test costs.

SAMPLE
NOT FOR BIDDING

Add to section 6-1:

10-16-20

6-1.06 RESERVED

6-1.07 PROHIBITIONS ON MATERIALS, EQUIPMENT, AND SERVICES

6-1.07A General

Reserved

6-1.07B Telecommunications and Video Surveillance Equipment or Services

Do not enter into, extend, or renew a contract to procure or obtain telecommunications and video surveillance equipment or services as described in 2 CFR 200.216 and 2 CFR 200.471.

Furnish telecommunications and video surveillance equipment with a certificate of compliance. The certificate must state telecommunications and video surveillance equipment was not procured or obtained from manufacturers identified in section 889 of the National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232).

6-1.07C–6-1.07G Reserved

^^

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

10-16-20

Replace item 1.3 in the list in the 2nd paragraph of section 7-1.02K(3) with:

10-18-19

1.3. Last four digits of social security number pursuant to Labor Code § 226(a)

10-16-20

Delete the 4th paragraph of section 7-1.02K(3).

SAMPLE
NOT FOR BIDDING

Replace the 6th through 10th paragraphs of section 7-1.02K(3) with:

10-16-20

Submit certified payroll records electronically using the Department's contracted certified payroll internet system LCPtracker Pro. For information on submittal of certified payroll records using LCPtracker Pro, go to the LCPtracker website:

https://www.lcptracker.com/solutions/lcptracker

Request user account for your designated representative by submitting LCPtracker Vendor Access Request form.

Replace the 12th paragraph of section 7-1.02K(3) with:

10-18-19

Make all payroll records, including employee's complete social security number, available for inspection and copying or furnish a copy upon request of a representative of the:

1. Department
2. Division of Labor Standards Enforcement of the Department of Industrial Relations
3. Division of Apprenticeship Standards of the Department of Industrial Relations

Replace the 1st sentence in the 5th paragraph of section 7-1.02K(6)(a) with:

10-19-18

Submit copies of your Injury and Illness Prevention Program, Code of Safe Practices, and permits required by Cal/OSHA as informational submittals.

Replace section 7-1.02K(6)(j)(iii) with:

10-18-19

7-1.02K(6)(j)(iii) Unregulated Earth Material Containing Lead

Reserved

Replace *Reserved* in section 7-1.02M(2) with:

10-18-19

Submit the names and emergency telephone numbers of the nearest fire suppression agencies before the start of job site activities as an informational submittal. Post the names and phone numbers at a prominent place at the job site.

Submit a copy of your fire prevention plan required by Cal/OSHA as an informational submittal before the start of job site activities.

04-19-19

Cooperate with fire prevention authorities in performance of the work.

Immediately report fires occurring within and near the project limits by dialing 911 and to the nearest fire suppression agency by using the emergency phone numbers retained at the job site.

Prevent project personnel from setting open fires that are not part of the work.

Prevent the escape of and extinguish fires caused directly or indirectly by job site activities.

SAMPLE NOT FOR BIDDING

Replace the 2nd paragraph of section 7-1.02M(3) with:

04-19-19

For the list of permitted sites, go to the Department of Conservation, Division of Mine Reclamation website.

Replace the 13th paragraph of section 7-1.03 with:

10-18-19

For a taper on a bridge deck or approach slab, construct the taper with rapid setting concrete under

section 60-3.02B(2) or polyester concrete under section 60-3.04B(2). Prepare the surface to receive the taper under section 60-3.02C(7). For tapers with aggregate fillers, rake conform edges to ensure smooth transitions. Cure the taper for at least 3 hours or the minimum time recommended by the manufacturer before opening to traffic.

Replace the 4th sentence in the 16th paragraph of section 7-1.03with:

10-16-20

When not described and if ordered, providing flaggers is change order work.

Replace the 3rd sentence in the 7th paragraph of section 7-1.04 with:

10-16-20

When not described and if ordered, providing flaggers is change order work.

Replace the 13th paragraph of section 7-1.04 with:

10-18-19

Equipment must enter and leave the highway via existing ramps and crossovers and must move in the direction of traffic. All movements of workers and construction equipment on or across lanes open to traffic must be performed in a manner that do not endanger the public. Your vehicles or other mobile equipment leaving an open traffic lane to enter the construction area must slow down gradually in advance of the location of the turnoff to give the traffic following an opportunity to slow down. When leaving a work area and entering a roadway carrying traffic, your vehicles and equipment must yield to traffic. Compensation for flaggers, used for all movement of workers and construction vehicles and equipment on or across lanes open to traffic, is included in the bid items of work involved.

SAMPLE
NOT FOR BIDDING

Replace section 7-1.09 with:

10-16-20

7-1.09 UNSHELTERED INDIVIDUALS ENCAMPMENTS

Notify the Engineer at least 10 days prior to needing access to areas in the right of way with

encampments that affect performance of the work. The Department will remove encampments including encampment debris.

^^

8 PROSECUTION AND PROGRESS

04-17-20

Replace the row for *Safety* in the table in the 2nd paragraph of section 8-1.03 with:

10-19-18

Safety	Injury and Illness Prevention Program, Code of Safe Practices, and job site posters

Replace the 2nd paragraph of section 8-1.07C with:

04-17-20

Losses for idle equipment, idle workers, and moving or transporting equipment are eligible for delay-related payment adjustments.

Replace item 3 in the list in the 3rd paragraph of section 8-1.07C with:

04-19-19

3. Delay days exclude Saturdays and holidays.

Add to section 8-1.07C:

04-17-20

If you claim additional costs due to impacts from an excusable delay, you must comply with section 5-1.42. Support your claim for additional costs based on the difference between the cost to perform the work as planned and the cost to perform the work as changed as determined under section 9-1.04. The Department adjusts payment for the work portion that was impacted.

Replace section 8-1.14E with:

10-18-19

8-1.14E Payment Adjustment for Termination

If the Department issues a termination notice, the Engineer determines the payment for termination

during the performance period, from contract approval date to contract acceptance date, based on the following:

1. Direct cost for the work performed:
   - 1.1. Including:
     - 1.1.1. Mobilization
     - 1.1.2. Demobilization
     - 1.1.3. Securing the job site for termination
     - 1.1.4. Losses from the sale of materials
   - 1.2. Not including:
     - 1.2.1. Cost of materials you keep
     - 1.2.2. Profit realized from the sale of materials
     - 1.2.3. Cost of material damaged by:
       - 1.2.3.1. Act of God
       - 1.2.3.2. Act of a public enemy
       - 1.2.3.3. Fire
       - 1.2.3.4. Flood.
       - 1.2.3.5. Governor-declared state of emergency
       - 1.2.3.6. Landslide
       - 1.2.3.7. Tsunami
     - 1.2.4. Other credits
2. Cost of remedial work, as estimated by the Engineer, is not reimbursed.

SAMPLE NOT FOR BIDDING

3. Allowance for profit not to exceed 4 percent of the cost of the work performed where a likelihood of having made a profit had the Contract not been terminated is shown.
4. Material handling costs for material returned to the vendor or disposed of as ordered.
5. Costs in determining the payment adjustment due to the termination, excluding attorney fees and litigation costs.
6. Overhead costs.

Termination of the Contract does not relieve the surety of its obligation for any just claims arising out of the work performed.

^^

9 PAYMENT

10-16-20

Add between the 1st and 2nd paragraphs of section 9-1.04A:

04-17-20

The Tentative Daily Extra Work Agreement form is used to identify the labor, materials, and equipment used on change order work paid at force account. Signatures on this form do not constitute final agreement regarding payment.

Replace the 2nd paragraph of section 9-1.06B with:

10-16-20

If the payment for the number of units of a bid item in excess of 125 percent of the Bid Item List is less than $15,000 at the unit price, the Engineer may not adjust the unit price unless you request it.

SAMPLE NOT FOR BIDDING

Replace section 9-1.07B(5) with:

10-19-18

9-1.07B(5) Hot Mix Asphalt Containing Reclaimed Asphalt Pavement

The Engineer calculates the quantity of asphalt in HMA containing RAP using the following formula:

$Qrap = HMARTT \times Xaa$

where:
$Xaa = Xta - [(Xrap \times Xra \times (Xta-100)) / (100 \times (Xra - 100))]$

and:
Qrap = quantity in tons of asphalt used in HMA containing RAP
HMARTT = HMA containing RAP, total tons placed
Xaa = asphalt content of HMA containing RAP adjusted to exclude the asphalt content in RAP, expressed as a percentage of the total weight of HMA containing RAP
Xta = total theoretical asphalt content in HMA containing RAP from the job mix formula, expressed as a percentage of the total weight of HMA containing RAP
Xrap = RAP percentage in HMA containing RAP from the job mix formula, expressed as a percentage of the total dry weight of aggregate in HMA containing RAP
Xra = average asphalt content of RAP from the job mix formula, expressed as percentage of total weight of RAP

Replace the 2nd sentence in the 7th paragraph of section 9-1.11E with:

04-19-19

The cost is determined under section 9-1.05 except no markup is allowed.

Replace section 9-1.16C with:

10-19-18

9-1.16C Materials On Hand

A material on hand but not incorporated into the work is eligible for a progress payment if:

1. Compliant with other Contract parts
2. Material cost exceeds either of the following:
   - 2.1. $50,000
   - 2.2. $25,000 if the requestor is certified as one or more of the following:
     - 2.2.1. DVBE
     - 2.2.2. DBE
     - 2.2.3. Small business as certified by Department of General Services, Office of Small Business and Disabled Veteran Business Enterprise Services
3. Purchased
4. Invoice is submitted
5. Stored within the State and you submit evidence that the stored material is subject to the Department's control
6. Protected from weather and contamination
7. Water pollution control measures are established and maintained
8. Requested on the Department-furnished form

Replace the 1st paragraph of section 9-1.16E(3) with:

10-18-19

During each estimate period you fail to comply with a Contract part, including the submittal of a document as specified, such as QC plans, schedules, traffic control plans and water pollution control submittals, the Department withholds a part of the progress payment except as specified below for the failure to submit a document during the last estimate period.

SAMPLE NOT FOR BIDDING

Replace the 3rd paragraph of section 9-1.17C with:

10-18-19

If you claim that the total for work completed, excluding deductions, in the proposed final estimate is less than 90 percent of your total bid, the Department adjusts the final payment to cover your overhead. The adjustment in the final estimate is 10 percent of the difference between 90 percent of your total bid and the total for work completed, excluding deductions. The Department does not make this adjustment on a terminated contract.

Replace section 9-1.17D(2)(b) with:

04-17-20

9-1.17D(2)(b) Overhead Claims

9-1.17D(2)(b)(i) General

Section 9-1.17D(2)(b) includes specifications for overhead claims.

The Department deducts an amount for field and home office overhead paid on added work from any claim for overhead. The home office overhead deduction equals 5 percent of the added work. The field office overhead deduction equals 5-1/2 percent of the added work.

9-1.17D(2)(b)(ii) Definitions

actual daily overhead rates: The home office overhead and field office overhead rates expressed per business day for the contract performance period. The home office overhead rate is calculated using the Eichleay Formula and is based on overhead cost pools and all allocation bases from Contract and company revenues.

added work: Equals the value of the work completed minus the total bid.

contract performance period: The period from Contract approval to Contract acceptance.

9-1.17D(2)(b)(iii) Submittals

Submit the following for an overhead claim:

1. Final amount of additional payment requested.
2. Specific identification of each claim and dates associated with each claim for which you seek reimbursement for specific overhead costs.
3. Audit report prepared by an independent CPA for the contract performance period identifying the actual daily overhead rates, supporting calculations and documentation for both field and home office overhead excluding a profit markup.

Field office overhead costs from which the actual daily overhead rate is calculated must be:

1. Allowable under 48 CFR 31
2. Supported by reliable records
3. Related solely to the project
4. Incurred during the contract performance period
5. Comprised of only time-related field office overhead costs
6. Not a direct cost

Home-office overhead costs from which the actual daily overhead rate is calculated must be:

1. Allowable under 48 CFR 31
2. Supported by reliable records
3. Incurred during the contract performance period
4. Comprised of only fixed home-office overhead costs
5. Not a direct cost

Failure to submit the audit report for an overhead claim with the claim statement is a waiver of the overhead claim and operates as a bar to arbitration on the claim (Pub Cont Code § 10240.2).

The CPA's audit must be performed as an examination-level engagement under the attestation engagements in the *Government Auditing Standards* published by the Comptroller General of the United States. The CPA's audit report must express an opinion of whether or not your calculations of your actual field and home office overhead daily rates comply with section 9-1.17D(2)(b). The attest documentation prepared by the CPA in connection with the audit must be submitted for review with the audit report.

Within 20 days of the Engineer's request, make your financial records available for an audit by the State for verifying the actual daily overhead rates in your audit report. The actual rate of time-related overhead is subject to authorization by the Engineer.

The Department pays for 1/2 the cost of the report unless otherwise specified. The cost is determined under section 9-1.05 except no markup is allowed.

^^

DIVISION II GENERAL CONSTRUCTION

10 GENERAL

04-19-19

Replace the 1st sentence in the 4th paragraph of section 10-6 with:

04-19-19

The sources and discharge of recycled water must comply with the water-recycling criteria of the CDPH, SWRCB Order No. WQ 2016-0068-DDW, and the requirements of the appropriate RWQCB.

SAMPLE NOT FOR BIDDING

^^

11 WELDING

10-16-20

Replace the table in the 3rd paragraph of section 11-1.01 with:

10-16-20

AWS code	Year of adoption
D1.1	2020
D1.3	2018
D1.4	2018
D1.5	2015
D1.6	2017
D1.8	2016

Replace the introductory clause in the 1st paragraph of section 11-1.03 with:

10-16-20

Replace clause 8.1.3 of AWS D1.1, the 1st paragraph of clause 9.1.2 of AWS D1.4, and clause 6.1.2 of AWS D1.5 with:

Replace the introductory clause of the 2nd paragraph of section 11-1.04 with:

10-16-20

Replace clause 8.14.6.1 of AWS D1.1, clause 9.8.1 of AWS D1.4, and clause 6.1.3.4 of AWS D1.5 with:

Add before the 1st paragraph of section 11-1.05:

10-16-20

Replace the first sentence of clause 7.21.1.1 of AWS D1.1 with the following:

7.21.1.1. The separation between surfaces of plug and slot welds, and of joints landing on a backing, shall not exceed 1/16 in [2 mm].

Replace clause 3.3.1.1 of AWS D1.5 with the following:

3.3.1.1. The separation between surfaces of plug and slot welds, and of joints landing on a backing, shall not exceed 2 mm [1/16 in].

Replace the 1st paragraph of section 11-1.05 with:

10-16-20

If weld joint details proposed for use in the work are not prequalified under clause 5 of AWS D1.1 or figure 2.4 or 2.5 of AWS D1.5, submit the proposed WPS and the intended weld joint locations.

Replace item 2 in the list in the 2nd paragraph of section 11-1.05 with:

04-19-19

2. Be mechanically and radiographically tested. Mechanical and radiographic testing and acceptance criteria must comply with the applicable AWS codes. The type of mechanical testing must be authorized.

SAMPLE NOT FOR BIDDING

Replace the 3rd paragraph of section 11-1.05 with:

10-16-20

If a nonprequalified weld joint configuration is proposed using a combination of WPSs for work welded under AWS D1.1, you may conduct a single test combining the WPSs to be used in production, if the essential variables, including weld bead placement, of each process are limited to those established in table 6.5 of AWS D1.

Replace the 1st paragraph of 11-1.06 with:

04-19-19

Replace item 3 of clause 6.26.3.2 of AWS D1.5 with:

3. If indications that exhibit these planar characteristics are present at scanning sensitivity, or other evidence exists to suggest the presence of transverse cracks, a more detailed evaluation of the discontinuity by other means must be performed (e.g., alternate UT techniques, RT, grinding, or gouging for visual inspection or MT of the excavated areas.)

Replace the scanning angle in clause 6.24.2.2 of AWS D1.5 with:

Up to 45 degrees

Replace the 2nd paragraph of section 11-1.06 with:

10-16-20

Clause 8.6.5 of AWS D1.1, clause 9.6.5 of AWS D1.4, and clause 6.6.5 of AWS D1.5 do not apply.

Replace the introductory clause of the 1st paragraph of section 11-2.04 with:

10-16-20

Clauses 8.1.4.2 and 8.1.4.4 of AWS D1.1, the 2nd paragraph of clause 9.1.2 of AWS D1.4, clauses 6.1.3.1 through 6.1.3.3 of AWS D1.5, and clause 7.2.3 of AWS D1.8 are replaced with:

Replace item 2 in the list in the 2nd paragraph of section 11-2.04 with:

04-19-19

2. Structural steel for building construction work is performed at a permanent fabrication or manufacturing plant that is certified under the AISC Quality Certification Program, Category BU, Standard for Steel Building Structures.

Replace section 11-2.06 with:

04-19-19

11-2.06 WELDING PROCEDURES QUALIFICATION

Welding procedures qualification for work welded under AWS D1.5 must comply with clause 5.12 or 5.12.4 of AWS D1.5 and the following:

1. Macroetch tests are required for all WPS qualification tests, and acceptance must comply with clause 5.19.3 of AWS D1.5.
2. If a nonstandard weld joint is to be made using a combination of WPSs, you may conduct a test under figure 5.3, combining the qualified or prequalified WPSs to be used in production, if the essential variables, including weld bead placement, of each process are limited to those established in table 5.4 of AWS D1.5.
3. Before preparing mechanical test specimens, inspect the PQR welds by visual and radiographic tests. The backing bar must be 3 inches in width and must remain in place during NDT. Results of the

SAMPLE NOT FOR BIDDING

visual and radiographic tests must comply with clause 6.26.2 of AWS D1.5 excluding clause 6.26.2.2. All other requirements for clause 5.17 are applicable.

10-16-20

When electric resistance welding is used for work welded under AWS D1.1, the welding procedure must be qualified under Clause 6 of AWS D1.1. Welding procedures must be qualified for the thickness and the pole diameter tested. Test samples for tapered poles must be obtained from three locations, each end and the middle of the tapered pole, to qualify for the diameter rangetested.

Replace the 3rd paragraph of section 11-3.02 with:

04-19-19

The AISC Certification category for pole structures is Bridge and Highway Metal Component (CPT) or Standard for Steel Building Structures (BU).

^^

Replace section 12 with:

10-18-19

12 TEMPORARY TRAFFIC CONTROL

10-16-20

12-1 GENERAL

12-1.01 GENERAL

Section 12-1 includes general specifications for providing temporary traffic control.

Temporary traffic control, including flagging, apparel, temporary traffic control devices, and equipment for flaggers, must comply with the *California MUTCD,* Part 6, "Temporary Traffic Control."

12-1.02 MATERIALS

Not Used

12-1.03 CONSTRUCTION

Assign flaggers to:

1. Control traffic
2. Warn the public of any dangerous conditions resulting from the work activities
3. Provide for the passage of traffic through the work as specified for the passage of traffic for public convenience and public safety

Maintain flagging apparel, traffic control devices, and equipment for flaggers in good repair.

12-1.04 PAYMENT

Not Used

12-2 RESERVED

12-3 TEMPORARY TRAFFIC CONTROL DEVICES

12-3.01 GENERAL

12-3.01A General

12-3.01A(1) Summary

Section 12-3.01 includes general specifications for providing temporary traffic control devices.

Providing temporary traffic control devices includes installing, placing, maintaining, repairing, replacing, and removing temporary traffic control devices.

SAMPLE NOT FOR BIDDING

Do not use different types of channelizing devices on the same alignment. The types include plastic drums, portable delineators, channelizers, tubular markers, traffic cones, and Type I and Type II barricades.

12-3.01A(2) Definitions

Category 1 temporary traffic control devices: Small devices weighing less than 100 lb certified as crashworthy by crash testing or crash testing of similar devices. Category 1 temporary traffic control devices include traffic cones, plastic traffic drums, portable delineators, and channelizers.

Category 2 temporary traffic control devices: Small devices weighing less than 100 lb that are not expected to produce significant changes in vehicular velocity but could cause harm to impacting vehicles. Category 2 temporary traffic control devices include barricades and portable sign supports.

Category 3 temporary traffic control devices: Devices weighing 100 lb or more that are expected to produce significant changes in the vehicular velocity of impacting vehicles. Category 3 temporary traffic control devices include crash cushions, impact attenuator vehicles, temporary railing, temporary barrier, and end treatments for temporary railings and barriers.

orange: Orange, red-orange, fluorescent orange, or fluorescent red-orange.

useable shoulder area: Any longitudinal paved or unpaved contiguous surface adjacent to the traveled way with:

1. Enough weight-bearing capacity to support temporary traffic control devices, such as flashing arrow signs, PCMSs, and impact attenuator vehicles
2. Slope not greater than 6:1 (horizontal:vertical)

12-3.01A(3) Submittals

At least 5 business days before starting any work using the devices or within 2 business days after the request if the devices are already in use, submit as informational submittals:

1. Self-certification for crashworthiness of Category 1 temporary traffic control devices. Either you or the manufacturer must perform the self-certification. Include:
   1.1. Date
   1.2. Federal aid number for a federal-aid contract
   1.3. Contract number, district, county, route, and post miles of the project limits
   1.4. Company name, street address, city, state, and zip code of the certifying vendor
   1.5. Printed name, signature, and title of the certifying person
   1.6. Types of Category 1 temporary traffic control devices
2. List of proposed Category 2 temporary traffic control devices

Obtain a standard form for self-certification from the Engineer.

Submit a sample of the type of portable delineator that you will be using before placing the delineators on the job site.

12-3.01A(4) Quality Assurance

Reserved

12-3.01B Materials

The condition of temporary traffic control devices must comply with the most current edition of the American Traffic Safety Services Association publication *Quality Guidelines for Temporary Traffic Control Devices and Features*.

Category 2 temporary traffic control devices must be on FHWA's list of acceptable crashworthy Category 2 hardware for work zones. For this list, go to FHWA's Safety Program website.

Category 2 temporary traffic control devices must be labeled with the FHWA acceptance letter code and the name of the manufacturer. The label must be legible and permanently affixed to the temporary traffic control device by the manufacturer.

SAMPLE NOT FOR BIDDING

Category 3 temporary traffic control devices must be on the Authorized Material List for highway safety features.

Retroreflectivity for the following materials must comply with Table 2A-3, "Minimum Maintained Retroreflectivity Levels," of the *California MUTCD* and be on the Authorized Material List for signing and delineation materials:

1. Retroreflective sheeting for barricades
2. Retroreflective bands for portable delineators
3. Retroreflective sheeting for construction area signs
4. Retroreflective sheeting for channelizers
5. Reflectors for Type K temporary railing
6. Retroreflective cone sleeves
7. White and orange retroreflective stripes for plastic traffic drums

The following temporary traffic control devices must be visible from 1,000 feet during the hours of darkness under an illumination of legal high-beam headlights by persons with 20/20 vision or vision corrected to 20/20:

1. Retroreflective bands on portable delineators
2. Retroreflective sheeting on channelizers
3. Retroreflective cone sleeves on traffic cones

12-3.01C Construction

Perform all layout work necessary to place channelizing devices:

1. On the proper alignment
2. Uniformly at the location and spacing described
3. Straight on a tangent alignment
4. On a true arc in a curved alignment

If temporary traffic control devices are damaged, displaced, or stop operating or functioning as described from any cause during the progress of the work, immediately repair, repaint, or replace the components and restore them to their original locations and positions.

If ordered, furnish and place additional temporary traffic control devices. This work is change order work unless the temporary traffic control devices are being furnished and placed for public safety or public convenience.

Level and plumb a portable system.

Delineate the location of a trailer mounted system with a taper consisting of 9 traffic cones placed 25 feet apart, except where the system is placed within a lane closure or behind a barrier or guardrail.

When a portable system is not in use, remove it from the job site, place it behind a barrier or guardrail, or move it to an area at least 15 feet from the edge of the traveled way.

12-3.01D Payment

Not Used

12-3.02 TRAFFIC CONES

12-3.02A General

Section 12-3.02 includes specifications for placing traffic cones.

12-3.02B Materials

A traffic cone must be flexible, orange, and manufactured from commercial-quality material designed for the intended purpose.

The outer section of the portion above the base of the traffic cone must be translucent and fabricated of a highly pigmented, orange, PV compound. The overall height of a traffic cone must be at least 28 inches and the bottom inside diameter of the traffic cone must be at least 10.5 inches.

SAMPLE NOT FOR BIDDING

During the hours of darkness, a traffic cone must have a retroreflective cone sleeve.

Retroreflective cone sleeves must be permanently affixed, double-band, sleeves consisting of 2 white retroreflective bands. The top band must be 6 inches wide and placed a maximum of 4 inches from the top of the cone. The lower band must be 4 inches wide and placed 2 inches below the bottom of the top band. You may use traffic cones with double-band retroreflective cone sleeves during daylight hours.

12-3.02C Construction

Use the same type of retroreflective cone sleeve for all cones used on the project.

Anchor the base of a traffic cone if it does not have enough size and weight to keep the cone in an upright position.

12-3.02D Payment

Not Used

12-3.03 PLASTIC TRAFFIC DRUMS

12-3.03A General

12-3.03A(1) Summary

Section 12-3.03 includes specifications for placing plastic traffic drums.

12-3.03A(2) Definitions

Reserved

12-3.03A(3) Submittals

Submit a certificate of compliance for plastic traffic drums.

12-3.03A(4) Quality Assurance

Reserved

12-3.03B Materials

A plastic traffic drum must comply with the manufacturer's instructions for weight and ballast.

A plastic traffic drum must:

1. Be orange LDPE
2. Be flexible and collapsible upon vehicle impact
3. Have a weighted base to maintain an upright position and prevent displacement by passing traffic
4. Have a height such that the top of the drum is at least 36 inches above the traveled way

The weighted base must:

1. Be detachable
2. Be shaped to prevent rolling upon impact
3. Have a 38-inch maximum outside diameter
4. Have a 4-inch maximum height above the ground surface

12-3.03C Construction

Use 1 type of plastic traffic drum on the project.

Use the same type and brand of retroreflective sheeting for all plastic traffic drums used on the project.

Do not use sandbags or comparable ballast.

Moving plastic traffic drums from location to location if ordered after initial placement is change order work.

12-3.03D Payment

Not Used

SAMPLE NOT FOR BIDDING

12-3.04 PORTABLE DELINEATORS

12-3.04A General

Section 12-3.04 includes specifications for placing portable delineators.

12-3.04B Materials

A portable delineator, including its base, must be made of a material that has enough rigidity to remain upright when unattended and must be flexible or collapsible upon impact by a vehicle. The base must be (1) shaped to prevent rolling after impact and (2) anchored or weigh enough to keep the delineator in an upright position. Ballast for a portable delineator must comply with the manufacturer's instructions.

A portable delineator must be a minimum of 36 inches in height. The vertical portion of a portable delineator must be predominantly orange. The post must be not less than 3 inches in width or diameter. Retroreflectorization of a portable delineator that has a height of less than 42 inches must be provided by two 3-inch-wide white bands placed a maximum of 2 inches from the top with a maximum of 6 inches between the bands. Retroreflectorization of a portable delineator that has a height of 42 inches or more must be provided by four 4- to 6-inch-wide alternating orange and white stripes with the top stripe being orange.

12-3.04C Construction

Use only 1 type of portable delineator on the project.

12-3.04D Payment

Not Used

12-3.05 CHANNELIZERS

12-3.05A General

Section 12-3.05 includes specifications for placing channelizers.

12-3.05B Materials

A channelizer must be on the Authorized Material List for signing and delineation materials.

Its post must be orange.

A channelizer must be affixed with 3-by-12-inch, retroreflective, white sheeting.

12-3.05C Construction

Install channelizers on clean, dry surfaces.

Cement the channelizer bases to the pavement as specified for cementing pavement markers to the pavement in section 81-3.

When no longer required for the work, remove the channelizers and the underlying adhesive used to cement the channelizer bases to the pavement.

Do not remove channelizers that are shown to be left in place at the time of work completion.

12-3.05D Payment

Not Used

12-3.06–12-3.09 RESERVED

12-3.10 BARRICADES

12-3.10A General

Section 12-3.10 includes specifications for placing barricades.

12-3.10B Materials

Markings for barricade rails must be alternating orange and white retroreflective stripes.

Orange retroreflective sheeting must match color PR no. 6, Highway Orange, of the FHWA Color Tolerance Chart.

SAMPLE NOT FOR BIDDING

The interface between the rail surface and the retroreflective sheeting must be free of air bubbles or voids.

The predominant color of barricade components other than the rails must be white or unpainted galvanized metal or aluminum.

You may use a Type III barricade as a sign support if the barricade has been successfully crash tested under *NCHRP Report 350* criteria or the Manual for Assessing Safety Hardware (MASH) crash testing guidelines as a single unit with an attached sign panel of the size and type to be used.

A sign panel for a construction area sign or marker panel to be mounted on a barricade must comply with section 12-3.11B(2).

Do not imprint an owner identification on the retroreflective face of any rail.

12-3.10C Construction

Place each barricade such that the stripes slope downward in the direction road users are to pass.

Place each sand-filled bag near the ground level on the lower parts of the frame or stays to serve as ballast for the barricades. Do not place ballast on top of barricades or over any retroreflective barricade rail face that is facing traffic.

Do not remove barricades that are shown to be left in place at the time of work completion.

Moving a barricade from location to location is change order work if ordered after initial placement of the barricade.

12-3.10D Payment

Not Used

12-3.11 CONSTRUCTION AREA SIGNS

12-3.11A General

12-3.11A(1) Summary

Section 12-3.11 includes specifications for placing construction area signs.

04-17-20

Construction area signs include general information signs and all temporary signs and object markers required for the direction of traffic within the project limits.

10-18-19

12-3.11A(2) Definitions

background: Dominant sign color.

legend: Letters, numerals, tildes, bars, arrows, route shields, symbols, logos, borders, artwork, and miscellaneous characters that are intended to convey specific meanings on traffic signs.

12-3.11A(3) Submittals

Reserved

12-3.11A(4) Quality Assurance

Reserved

12-3.11B Materials

12-3.11B(1) General

04-17-20

Construction area sign must be the product of a commercial sign manufacturer.

10-18-19

The style, font, size, and spacing of the legend must comply with the *Standard Alphabets* published in the FHWA's Standard Highway Signs Book.

SAMPLE NOT FOR BIDDING

The sign must be visible from 500 feet and legible from 300 feet at noon on a cloudless day and during the hours of darkness under an illumination of legal low-beam headlights by persons with 20/20 vision or vision corrected to 20/20. A fabric sign panel on a portable sign is not subject to the visibility and legibility requirements for headlight illumination during the hours of darkness.

04-17-20

Construction area sign must have a black legend on a retroreflective, fluorescent orange background. W10-1 advance warning sign for highway-rail grade crossings must have a black legend on a retroreflective fluorescent yellow background.

10-18-19

12-3.11B(2) Stationary-Mounted Signs

04-17-20

Stationary-mounted sign must comply with section 82-2 and must have Type XI retroreflective sheeting.

10-18-19

A temporary sign support of any type placed within 15 feet from the edge of the traveled way must comply with the specifications for a Category 2 temporary traffic control device.

The sign post must be good, sound wood posts with the breakaway feature as shown for a roadside sign.

Fastening hardware and back braces must be commercial-quality materials.

12-3.11B(3) Portable Signs

Each portable sign must consist of a base, standard or framework, and a sign panel. Units delivered to the job site must be capable of being placed into immediate operation.

A sign panel for a portable sign must comply with the specifications for a stationary-mounted sign panel or be fabricated from one of the following materials:

1. Type VI, retroreflective, elastomeric roll-up fabric
2. Nonretroreflective, cotton, drill fabric
3. Nonretroreflective, flexible, industrial, nylon fabric
4. Another type of fabric if authorized

Do not use nonretroreflective portable signs during the hours of darkness.

The bottom of the portable sign panel must be at least 1 foot above the edge of the traveled way.

12-3.11B(4) Temporary Object Markers

A temporary object marker must be mounted on a stationary wood or metal post and must comply with section 82.

A marker panel for a Type N (CA), Type P (CA), or Type R (CA) object marker must comply with the specifications for a marker panel for a stationary sign panel in section 12-3.11B(2).

A target plate, post, and the hardware for a Type K (CA) and Type L (CA) temporary object marker must comply with the specifications for these items in section 82.

12-3.11B(5) General Information Signs

10-16-20

12-3.11B(5)(a) General

Not Used

12-3.11B(5)(b) Construction Project Funding Identification Signs

Construction project funding identification sign must:

1. Comply with:
   1.1. Section 6F.109(CA) of the California MUTCD
   1.2. Section 82-2.02E
   1.3. Specifications on the Department's Traffic Operations website
2. Be 48 by 30 inches for local roadways

SAMPLE NOT FOR BIDDING

3. Be 96 by 60 inches for conventional highways & local roads
4. Be 132 by 78 inches for freeways and expressways

10-18-19

12-3.11C Construction

12-3.11C(1) General

Place all construction area signs outside of the traveled way. Do not block a bicycle or pedestrian pathway with a construction area sign.

Place, install, maintain, and remove temporary object markers shown as construction area signs as specified for construction area signs.

Maintain accurate information on construction area signs. Immediately replace or correct signs that convey inaccurate information.

During the progress of work, immediately cover or remove unneeded signs.

Cover each unneeded sign such that the message cannot be seen. Securely fasten the cover to prevent movement from wind.

Check each covered sign daily for damage to the cover and immediately replace any cover if needed.

Clean each construction area sign panel at the time of installation and at least once every 4 months thereafter.

Be prepared to furnish additional construction area sign panels, posts, and mounting hardware or portable sign mounts on short notice due to changing traffic conditions or damage caused by traffic or other conditions. Maintain an inventory of commonly required items at the job site or make arrangements with a supplier who is able to furnish the items daily on short notice.

Replace any damaged construction area sign or repair the sign if authorized.

Remove any sign panel that exhibits irregular luminance, shadowing, or dark blotches at nighttime under vehicular headlight illumination.

SAMPLE NOT FOR BIDDING

12-3.11C(2) Stationary-Mounted Signs

Install stationary-mounted signs as described for the installation of roadside signs except:

1. Back braces and blocks for sign panels are not required for signs 48 inches or smaller in width and diamond-shaped signs 48 by 48 inches or smaller.
2. Bottom of the sign panel must be at least 7 feet above the edge of the traveled way.
3. You may install a construction area sign on an above-ground, temporary platform sign support or on an existing lighting standard or other support if authorized. Do not make holes in a standard to support the sign if it is installed on an existing lighting standard.
4. Post embedment must be at least 2.5 feet if the post hole is backfilled around the post with commercial-quality concrete. The concrete must contain at least 295 pounds of cementitious material per cubic yard.

The Engineer determines the post size and number of posts if the type of sign installation is not shown.

Excavate each post hole by hand methods without the use of power equipment. You may use power equipment where you determine that subsurface utilities are not present in the area of the proposed post hole if authorized. The post-hole diameter must be at least 4 inches greater than the longest cross-sectional dimension of the post if it is backfilled with commercial-quality concrete.

Furnishing, installing, maintaining, moving, and removing any additional construction area signs if ordered is change order work.

12-3.11C(3) General Information Signs

10-16-20

12-3.11C(3)(a) General

Not Used

12-3.11C(3)(b) Construction Project Funding Identification Signs

Do not add information to a construction project funding identification sign unless authorized.

Install C48(CA) construction project funding identification signs within 5 working days of contract approval.

Install C47A(CA) and C47B(CA) construction project funding identification signs before starting major work activities visible to highway users.

Mount construction project funding identification signs on a wood posts under section 82-3.

Dispose of construction project funding identification signs upon completion of the project if authorized.

10-18-19

12-3.11D Payment

Not Used

12-3.12 TELESCOPING FLAG TREES

12-3.12A General

Section 12-3.12 includes specifications for placing telescoping flag trees.

12-3.12B Materials

Telescoping flag trees must be manufactured from commercial-quality material designed for the intended purpose and capable of maintaining an upright position at all times while in use.

12-3.12C Construction

Not Used

12-3.12D Payment

Not Used

12-3.13–12-3.19 RESERVED

12-3.20 TYPE K TEMPORARY RAILING

12-3.20A General

12-3.20A(1) Summary

Section 12-3.20 includes specifications for placing Type K temporary railing and Type K temporary terminal sections.

Type K temporary railing must consist of interconnected PC concrete barrier panels.

You may have your name or logo on each panel of Type K temporary railing. The name or logo must not be more than 4 inches in height and must be located not more than 12 inches above the bottom of the rail panel.

Reinforcing steel must comply with section 52.

12-3.20A(2) Definitions

Reserved

12-3.20A(3) Submittals

Submit a certificate of compliance for Type K temporary railing not cast at the job site.

12-3.20A(4) Quality Assurance

Reserved

SAMPLE
NOT FOR BIDDING

12-3.20B Materials

12-3.20B(1) General

Concrete must comply with the specifications for minor concrete except load tickets and a certificate of compliance are not required.

Steel bars to receive bolts at the ends of the concrete panels must comply with ASTM A36/A36M. The bolts must comply with ASTM A307.

You may substitute a round bar of the same diameter for the end-connecting bolt shown. If a round bar is used, the round bar must:

1. Comply with ASTM A36/A36M
2. Have a minimum length of 26 inches
3. Have a 3-inch-diameter, 3/8-inch-thick plate welded on the upper end using a 3/16-inch fillet weld

The final surface finish of the railing must comply with section 51-1.03F(2).

Cure the exposed surfaces of the railing by the water method, the forms-in-place method, or the curing compound method using curing compound no. 1.

12-3.20B(2) Type K Temporary Terminal Section

The closure plate for a Type K temporary terminal section must be a white, commercial-quality steel plate shaped to conform to the cross section of the barrier. The mechanical expansion anchors for connecting the closure plate to the railings must comply with section 75-3 for concrete anchorage devices.

12-3.20C Construction

12-3.20C(1) General

Before placing Type K temporary railing on the job site, paint the exposed surfaces of the railing with white paint complying with the specifications for acrylic emulsion paint for exterior masonry. The repainting of the units is change order work if it is ordered after the units are in place.

Place Type K temporary railing on a firm, stable foundation. Grade the foundation to provide a uniform bearing surface throughout the entire length of the railing.

Structure excavation and backfill must comply with section 19-3 except compaction of earth fill placed behind Type K temporary railing in a curved layout is not required.

Place and maintain the abutting ends of PC concrete units in alignment without substantial offset from each other.

The drilling of holes and bonding of threaded rods or dowels must comply with the specifications for drilling and bonding dowels in section 51-1.

Install a reflector on the top or face of the rail of each rail unit placed within 10 feet of a traffic lane. Apply adhesive for mounting the reflector under the reflector manufacturer's instructions.

Install a Type P marker panel at each end of railing placed adjacent to a 2-lane, two-way highway and at the end facing traffic for railing installed adjacent to a one-way roadbed. If the railing is placed on a skew, install the marker at the end of the skew nearest the traveled way. Type P marker panels must comply with section 82 except you must furnish the marker panels.

After removing Type K temporary railing:

1. Restore the area to its previous condition or construct it to its planned condition if temporary excavation or embankment was used to accommodate the railing.
2. Remove all threaded rods or dowels to a depth of at least 1 inch below the surface of the concrete. Fill the resulting holes with mortar under section 51-1 except cure the mortar by the water method or by the curing compound method using curing compound no. 6.

If the Engineer orders a lateral move of Type K temporary railing and repositioning is not shown, the lateral move is change order work and the railing is not measured in the new position.

SAMPLE NOT FOR BIDDING

12-3.20C(2) Type K Temporary Terminal Section

When the Type K temporary terminal section is no longer required, remove the anchor bolts connecting the closure plate to the concrete barrier or cut the bolts flush with the face of the barrier. If the anchor bolts are removed, fill the holes with grout.

12-3.20D Payment

The payment quantity for temporary railing (Type K) is the length measured along the top of the railing.

12-3.21 TEMPORARY TRAFFIC SCREENS

12-3.21A General

Section 12-3.21 includes specifications for installing temporary traffic screens.

12-3.21B Materials

Temporary traffic screen panels must be one of the following:

1. CDX grade or better plywood
2. Weather-resistant strand board
3. Plastic

Plastic temporary traffic screen panels must be on the Authorized Material List for temporary traffic screen.

Wale boards for use with plywood or strand board must be Douglas fir, rough sawn, construction grade or better.

Pipe screen supports must be schedule 40, galvanized steel pipe.

Nuts, bolts, and washers must be cadmium plated.

Screws must be black or cadmium-plated flat head, cross-slotted, with full-thread length.

Temporary traffic screen panels must be CDX grade or better, plywood or weather-resistant strand board.

Wale boards must be Douglas fir, rough sawn, construction grade or better.

Pipe screen supports must be schedule 40, galvanized steel pipe.

Nuts, bolts, and washers must be cadmium plated.

Screws must be black or cadmium-plated flat head, cross-slotted screws with full-thread length.

SAMPLE NOT FOR BIDDING

12-3.21C Construction

Install and anchor temporary traffic screens to the top of the Type K temporary railing. The temporary traffic screen must have 3-foot-long openings spaced at 200-foot intervals.

A lateral move of Type K temporary railing with attached temporary traffic screen is change order work if ordered and repositioning is not shown.

12-3.21D Payment

The payment quantity for temporary traffic screen is the length measured along the line of the screen with no deductions for openings in the temporary traffic screen.

12-3.22 TEMPORARY CRASH CUSHION MODULES

12-3.22A General

Section 12-3.22 includes specifications for placing sand-filled temporary crash cushion modules in groupings or arrays.

If activities expose traffic to a fixed obstacle, protect the traffic from the obstacle with a sand-filled temporary crash cushion. The crash cushion must be in place before opening traffic lanes adjacent to the obstacle.

12-3.22B Materials

Each sand-filled temporary crash cushion module must be manufactured after March 31, 1997 and be on the Authorized Material List for highway safety features.

The color of each module must be standard yellow with black lids as furnished by the manufacturer. Each module must be free from structural flaws and objectionable surface defects.

For a module requiring a seal, the top edge of the seal must be securely fastened to the wall of the module by a continuous strip of heavy-duty tape.

Fill each module with sand under the manufacturer's instructions and to the sand capacity in pounds for each module shown. Sand for filling the modules must be clean, commercial-quality, washed concrete sand. When sand is placed in a module, the sand must contain no more than 7 percent water when tested under California Test 226.

12-3.22C Construction

Use the same type of crash cushion module for a single grouping or array.

Temporary crash cushion arrays must not encroach on the traveled way.

Secure the sand-filled modules in place before starting an activity requiring a temporary crash cushion.

Maintain sand-filled temporary crash cushions in place at each location, including times when work is not actively in progress. You may remove the crash cushions during the work shift for access to the work if the exposed fixed obstacle is 15 feet or more from the nearest lane carrying traffic. Reset the crash cushion before the end of the work shift.

Immediately repair sand-filled temporary crash cushion modules damaged due to your activities. Remove and replace any module damaged beyond repair. Repair and replacement of temporary crash cushion modules damaged by traffic are change order work.

You may place sand-filled temporary crash cushion modules on movable pallets or frames complying with the dimensions shown. The pallets or frames must provide a full-bearing base beneath the modules. Do not move the modules and supporting pallets or frames by sliding or skidding along the pavement or bridge deck.

Attach a Type R or Type P marker panel to the front of the temporary crash cushion if the closest point of the crash cushion array is within 12 feet of the traveled way. Firmly fasten the marker panel to the crash cushion with commercial quality hardware or by other authorized methods. Attach the Type R marker panel such that the top of the panel is 1 inch below the module lid. Attach the Type P marker panel such that the bottom of the panel rests upon the pallet or roadway surface if pallets are not used.

A lateral move of a temporary crash cushion module is change order work if ordered and the repositioning is not shown.

Remove sand-filled temporary crash cushion modules, including sand, pallets or frames, and marker panels, at Contract acceptance. Do not install sand-filled temporary crash cushion modules in the permanent work.

12-3.22D Payment

The payment quantity for temporary crash cushion module does not include:

1. Modules placed for public safety
2. Modules placed in excess of the number described
3. Repositioned modules

12-3.23 IMPACT ATTENUATOR VEHICLES

12-3.23A General

12-3.23A(1) Summary

Section 12-3.23 includes specifications for using impact attenuator vehicles.

SAMPLE NOT FOR BIDDING

12-3.23A(2) Definitions

impact attenuator vehicle: Support truck towing a deployed attenuator mounted to a trailer or a support truck with a deployed attenuator mounted to the support truck.

12-3.23A(3) Submittals

Submit a certificate of compliance for each attenuator.

12-3.23A(4) Quality Assurance

Before using an impact attenuator vehicle, conduct a meeting with the Engineer, subcontractors, and other parties involved with traffic control to discuss the operation of the impact attenuator vehicle during moving lane closures and when placing and removing components of a stationary traffic control system.

Schedule the location, time, and date for the meeting with all participants. Furnish a meeting facility located within 5 miles of the job site or at another location if authorized.

12-3.23B Materials

An impact attenuator vehicle must be on the Authorized Material List for highway safety features. The vehicle must comply with Veh Code Div 12.

Each attenuator must be individually identified with the manufacturer's name, address, attenuator model number, and a specific serial number. The name and number must be a minimum 1/2 inch high and located on the left, street side, lower front corner.

An impact attenuator vehicle must comply with the following test levels as specified in the National Cooperative Highway Research Program Report 350:

1. Test level 3 if the preconstruction posted speed limit is 50 mph or more
2. Test level 2 or 3 if the preconstruction posted speed limit is 45 mph or less

The impact attenuator vehicle must comply with the attenuator manufacturer's instructions for:

1. Support truck except the weight of the support truck must be within the allowable vehicle weight limits shown on the Authorized Material List for highway safety features and the manufacturer's instructions
2. Trailer-mounted attenuator
3. Truck-mounted attenuator

A flashing arrow sign must comply with section 12-3.30 except you may use a PCMS instead of a flashing arrow sign. A PCMS used as a flashing arrow sign must comply with the specifications for an arrow board in the *California MUTCD*.

Each impact attenuator vehicle must have:

1. Inverted V chevron pattern placed across the entire rear of the attenuator composed of alternating 4-inch-wide, nonreflective black stripes and 4-inch-wide, yellow retroreflective stripes sloping at 45 degrees
2. Type II flashing arrow sign
3. Flashing or rotating amber light
4. Operable 2-way communication system for maintaining contact with workers

12-3.23C Construction

Do not use an impact attenuator vehicle until authorized.

Monitor the placement and use of the attenuator vehicle on a regular basis and adjust the use of the attenuator to match changing field conditions as construction progresses.

After placing the components of a stationary traffic control system, you may place the impact attenuator vehicle in advance of the work area or at another authorized location to protect traffic and workers.

Secure objects, including equipment, tools, and ballast, on impact attenuator vehicles to prevent their loosening upon impact by an errant vehicle.

SAMPLE NOT FOR BIDDING

Do not use a damaged attenuator in the work. Replace any attenuator damaged from an impact during work activities.

12-3.23D Payment

Not Used

12-3.24–12-3.29 RESERVED

12-3.30 FLASHING ARROW SIGNS

12-3.30A General

Section 12-3.30 includes specifications for placing flashing arrow signs.

12-3.30B Materials

A flashing arrow sign must comply with the requirements shown in the following table:

Flashing Arrow Sign Requirements

Type	Panel size (min, inches)	Number of panel lights (min)	Legibility distance[a] (min, miles)
I	48 x 96	15	1
II	36 x 72	13	3/4

[a]The legibility distance is the distance that a flashing arrow sign must be legible at noon on a cloudless day and during the hours of darkness by persons with 20/20 vision or vision corrected to 20/20.

SAMPLE NOT FOR BIDDING

A flashing arrow sign must be finished with commercial-quality nonreflective black enamel and must be equipped with yellow or amber lamps that form arrows or arrowheads. Each lamp must be equipped with a visor and the lamps must be controlled by an electronic circuit that provides from 30 to 45 complete operating cycles per minute for each of the displays and modes specified. The control must be capable of dimming the lamps by reducing the voltage to 50 ± 5 percent for nighttime use. Type I signs must have both manual and automatic photoelectric-dimming controls. Dimming in both modes must be continuously variable over the entire dimming range.

A flashing arrow sign must be capable of operating in the following display modes:

1. Pass left display
2. Pass right display
3. Simultaneous display
4. Caution display or alternating diamond

A flashing arrow sign must be capable of operating in the flashing arrow mode or the sequential mode.

In the flashing arrow mode, all lamps forming the arrowhead and shaft must flash on and off simultaneously.

In the sequential mode, either arrowheads or arrows must flash sequentially in the direction indicated.

In the simultaneous display mode, the lamps forming both the right and left arrowheads and the lamps forming the arrow shaft or center 3 lamps for Type I signs must flash simultaneously. For Type II signs, the lamps forming the right and left arrowhead, but not the center lamp, may be illuminated continuously; the lamps forming the shaft and the center lamp of the arrowheads must flash on and off simultaneously.

In the caution display mode, a combination of lamps not resembling any other display or mode must flash.

Each flashing arrow sign must be:

1. Mounted on a truck or trailer
2. Capable of operating when the vehicle is moving
3. Capable of being placed and maintained in operation at locations described

A Type II flashing arrow sign must be controllable by the operator of the vehicle while the vehicle is in motion.

The bottom of the flashing arrow sign must be a minimum of 7 feet above the roadway when mounted.

The trailer for a flashing arrow sign must be equipped with (1) devices to level and plumb the sign and (2) a supply of electrical energy capable of operating the sign.

12-3.30C Construction

Not Used

12-3.30D Payment

Not Used

12-3.31 PORTABLE FLASHING BEACONS

12-3.31A General

Section 12-3.31 includes specifications for placing, maintaining, and removing portable flashing beacons.

12-3.31B Materials

Each portable flashing beacon must have:

1. Standard and base
2. Signal section
3. Flasher unit
4. Battery power source

The components must be assembled to form a complete, self-contained, portable flashing beacon that can be delivered to the job site and placed into immediate operation.

The portable flashing beacon must be weatherproof and operate a minimum of 150 hours between battery recharging and routine maintenance.

The signal section must be yellow and comply with section 86-1.02R(4)(a), except it must be rated for 25 W at 12 V.

The flash rate for the flashing unit must comply with chapter 4L, "Flashing Beacons," of the *California MUTCD*.

The standard must be adjustable to allow variable mounting of the signal section from 6 to 10 feet, from the bottom of the base to the center of the lens, and be capable of being secured at the desired height. The standard must be securely attached to the base and have a length of multiconductor, neoprene-jacketed cable long enough for the full vertical height.

The base must be (1) large enough to accommodate at least two 12 V automotive-type storage batteries and (2) a shape and weight such that the beacon will not roll if struck by a vehicle or pushed over.

12-3.31C Construction

Remove portable flashing beacons from the traveled way at the end of each night's work. You may store the flashing beacon at selected central locations within the highway where designated by the Engineer.

Moving portable flashing beacons from location to location if ordered after initial placement is change order work.

10-16-20

12-3.31D Payment

The payment quantity for portable flashing beacons (ea) is the number of portable flashing beacon locations with each location counting as 1 measurement unit.

10-18-19

12-3.32 PORTABLE CHANGEABLE MESSAGE SIGNS

12-3.32A General

12-3.32A(1) Summary

Section 12-3.32A includes specifications for placing, maintaining, and removing portable changeable message signs.

SAMPLE NOT FOR BIDDING

12-3.32A(2) Definitions

Reserved

12-3.32A(3) Submittals

If requested, submit a certificate of compliance for each PCMS.

Submit your cell phone number before starting the first activity that requires a PCMS.

12-3.32A(4) Quality Assurance

Reserved

12-3.32B Materials

Each PCMS consists of a sign panel, a controller unit, a power supply, and a structural support system.

The PCMS must:

1. Be assembled to form a complete self-contained unit that can be delivered to the job site and placed into immediate operation.
2. Operate at an ambient air temperature from -4 to 158 degrees F.
3. Not be affected by mobile radio transmissions other than those required to control the PCMS.
4. Be capable of displaying a 3-line message with at least 7 characters per line.
5. Provide a complete alphanumeric selection.
6. Be internally or externally illuminated during the hours of darkness, when non-illuminated pixels are used.
7. Have a dimming control that automatically adjusts the character light intensity to provide optimum character visibility and legibility under all ambient lighting conditions. The dimming control must have a minimum 3 manual dimming modes of different intensities.

A message with 18-inch high characters or 15-inch high characters must be visible from a distance of 1,500 feet and legible from a distance of at least 750 feet at noon on a cloudless day and during the night by persons with 20/20 vision or vision corrected to 20/20.

A message with 10-inch high characters must be legible from a distance of at least 650 feet at noon on a cloudless day and during the night by persons with 20/20 vision or vision corrected to 20/20.

The controller must:

1. Be an all solid-state unit.
2. Include at least 5 preprogrammed messages.
3. Have a user adjustable display rate.
4. Have a user adjustable flashing-off time.
5. Include a screen to review the messages before being displayed on the sign.
6. Include a keyboard message entry system. The keyboard must be equipped with a security lockout feature.
7. Have nonvolatile memory to store an infinite number of user created messages.
8. Be installed at a location that allows the user to perform all the functions from a single position.

12-3.32C Construction

Use a PCMS with characters:

1. At least 18 inches in height where the useable shoulder area is 15 feet wide or more
2. At least 12 inches in height where the useable shoulder area is less than 15 feet wide
3. At least 10 inches in height if the PCMS is:
   3.1. Mounted on a service patrol truck or incident response vehicle
   3.2. Used for traffic control where the posted speed limit is less than 40 mph

Place a PCMS as far from the traveled way as practicable where it is legible to approaching traffic without encroaching on the traveled way. Where the vertical roadway curvature restricts the sight distance of approaching traffic, place the sign on or before the crest of the curvature where it is most visible to the approaching traffic. Where the horizontal roadway curvature restricts the sight distance of approaching

SAMPLE NOT FOR BIDDING

traffic, place the sign at or before the curve where it is most visible to approaching traffic. Where practicable, place the sign behind guardrail or Type K temporary railing.

If multiple signs are needed, place each sign on the same side of the road at least 1,000 feet apart on freeways and expressways and at least 500 feet apart on other types of highways.

Operate the PCMS under the manufacturer's instructions.

When in operation, place the bottom of a PCMS at least 7 feet above the roadway in areas where pedestrians are anticipated and 5 feet above the roadway elsewhere. Place the top of the PCMS no more than 14.5 feet above the roadway.

If more than one PCMS is simultaneously visible to traffic, only one sign may display a sequential message at any time. Do not use dynamic message displays, such as animation, rapid flashing, dissolving, exploding, scrolling, horizontal movement, or vertical movement of messages. The message must be centered within each line of the display.

You may use an additional PCMS if more than 2 phases are needed to display a message.

Display only messages shown or ordered.

Repeat the entire message continuously in not more than 2 phases of at least 3 seconds per phase. The sum of the display times for both of the phases must be a maximum of 8 seconds. If more than 2 phases are needed to display a message, use an additional PCMS.

You must be available by cell phone during activities that require a sign. Be prepared to immediately change the displayed message if ordered. You may operate the sign with a 24-hour timer control or remote control if authorized.

Keep the PCMS clean to provide maximum visibility.

After the initial placement, move a sign from location to location as ordered.

12-3.32D Payment

Not Used

12-3.33 PORTABLE SIGNAL SYSTEMS

12-3.33A General

Section 12-3.33 includes specifications for installing, maintaining, and removing portable signal systems, including installing lighting and flashing beacons for traffic control.

A portable signal system must comply with section 87-20, except it must be trailer mounted.

12-3.33B Materials

Not Used

12-3.33C Construction

If the portable signal system is out of operation, provide flaggers to control the traffic until the traffic signals are in operation.

12-3.33D Payment

Not Used

12-3.34 TEMPORARY FLASHING BEACON SYSTEMS

12-3.34A General

Section 12-3.34 includes specifications for installing, maintaining, and removing temporary flashing beacon systems.

A temporary flashing beacon system must comply with section 87-20.

12-3.34B Materials

The sign panels installed on a temporary flashing beacon system must comply with section 12-3.11.

SAMPLE NOT FOR BIDDING

12-3.34C Construction

Not Used

12-3.34D Payment

Not Used

12-3.35 AUTOMATED WORK ZONE INFORMATION SYSTEMS

12-3.35A General

12-3.35A(1) Summary

Section 12-3.35 includes specifications for installing automated work zone information systems.

12-3.35A(2) Definitions

Reserved

12-3.35A(3) Submittals

Reserved

12-3.35A(4) Quality Assurance

Assign an on-site system coordinator. The coordinator must be available locally to service, maintain, and relocate system components as necessary. The coordinator must be accessible 24–7 while the system is deployed. If the system fails to perform as specified, perform any necessary remedial work and replace any failed components within 24 hours of notification of a system or component failure.

12-3.35B Materials

12-3.35B(1) General

The AWIS must be a proven system that has been successfully deployed and operated in actual work zones or congested areas.

The system must acquire traffic data throughout the work zone and automatically display predetermined information to motorists without operator intervention after system initialization.

Real-time information must be displayed to motorists using a PCMS. The sign must comply with section 12-3.32.

The system must be controlled either locally or remotely by a dedicated controller or computer.

Authorized users must be able to both locally and remotely override motorist information messages.

Traffic sensors must not require adjustments after the initial deployment.

12-3.35B(2) General System Function Requirements

The general system functions of the AWIS must be capable of:

1. Preventing any unauthorized users or systems from gaining access to the PCMSs through an industry authentication and encryption standard level of security.
2. Providing current operational status locally and remotely. Operational status must include current traffic data and messages, communications system, and power status.
3. Delivering notifications either by telephone, voice, or text messages to alert support staff of trouble conditions.
4. Generating trouble alerts for conditions such as (1) low roadside equipment power or voltage, (2) system communications failure, (3) low speed traffic detected, and (4) excessive delay detected.
5. Adjusting the thresholds of reduced speed and congestion-induced delay at which the system initiates a trouble alert.
6. Allowing programming of the hours during which the trouble condition alerting subsystem initiates notification to authorized users.
7. Measuring periodically and automatically the power levels of all equipment. Alert support staff, locally and remotely via a telephone message, in time to provide supplemental power before the system ceases to operate.
8. Displaying preprogrammed messages based on the time of day and day of week.

SAMPLE NOT FOR BIDDING

12-3.35B(3) Motorist Information Message Requirements

The AWIS must be capable of:

1. Displaying predetermined speed, delay, diversion, and closure messages to motorists when user-adjustable thresholds are exceeded.
2. Updating its speed and delay advisory messages at least once per minute. The actual message updates must be consistent with traffic conditions.
3. Selecting messages for each PCMS independently, based on the traffic conditions downstream of the sign.
4. Recording motorist information messages in a comma-separated values file with time and date stamps, including message overrides with user ID.
5. Displaying default messages when traffic conditions, system algorithms, and user parameters do not dictate that an advisory message should be displayed.
6. Displaying separate, independent, default messages on each PCMS.
7. Analyzing traffic parameters in work zones in which there are multiple speed limits.

The following parameters for the selection and presentation of information messages must be adjustable by the user:

1. Message update frequency
2. Minimum delay necessary to trigger a delay advisory message
3. Persistence of delay before a delay message is displayed
4. Level of delay required to trigger a diversion message
5. Change in delay needed to cause a delay advisory message update
6. Change in downstream speed at which a speed advisory message update occurs

12-3.35B(4) System Communication Requirements

The wireless communications subsystem of the AWIS must:

1. Operate independently of the public cellular phone system for receiving data to ensure reliable communications
2. Communicate independent of the line of sight or distance
3. Incorporate an error detection and correction mechanism to ensure the integrity of all traffic condition data and motorist information messages
4. Configure automatically during system initialization

12-3.35B(5) Traffic Data Acquisition Requirements

The AWIS must collect accurate traffic data using a speed measurement technique with an accuracy of ±5 mph, allowing specific information messages. The system must collect data during reduced visibility conditions, including precipitation, fog, darkness, excessive dust, and road debris.

The system must (1) archive the data with time and date stamps and (2) aggregate the data in operator-definable time increments, accessible 24–7 to the Engineer in a comma-separated values file.

12-3.35B(6) User Interface

The system must have a user interface to control the AWIS PCMS communications. The interface must be (1) software compatible with a Windows environment or (2) a web service accessed by a web browser.

Provide any software on a CD or other Engineer-authorized data-storage device for installation at the Department's Transportation Management Center.

The user interface must, at a minimum, provide the user with a list of AWIS PCMSs in the field, location information for each AWIS PCMS, and a real-time on-board display of the message in the field. Control options must, at a minimum, provide the user the ability to change the on-board messages and flash rate.

12-3.35C Construction

Obtain authorization for the message content and the threshold used for triggering the message before displaying any message on a PCMS.

Provide complete setup and support for the AWIS PCMS communications.

SAMPLE
NOT FOR BIDDING

12-3.35D Payment

Not Used

12-3.36 PORTABLE TRANSVERSE RUMBLE STRIPS

Reserved

10-16-20

12-3.37 PORTABLE RADAR SPEED FEEDBACK SIGN SYSTEMS

12-3.37A General

Section 12-3.37 includes specifications for placing, maintaining, and removing portable radar speed feedback sign systems.

12-3.37B Materials

A portable radar speed feedback sign system must comply with the requirements for a temporary radar speed feedback sign system, except it must be trailer mounted.

12-3.37C Construction

Not Used

12-3.37D Payment

Not Used

10-18-19

12-3.38 AUTOMATED FLAGGER ASSISTANCE DEVICES

12-3.38A General

12-3.38A(1) Summary

Section 12-3.38 includes specifications for placing, maintaining, and removing automated flagger assistance devices (AFADs).

12-3.38A(2) Definitions

automated flagger assistance devices: Devices that enable a flagger to be positioned out of the lane of traffic and are used to control motorists through work zones. They are designed to be remotely operated either by a single flagger at one end of the work zone or at a central location, or by separate flaggers near the devices.

12-3.38A(3) Submittals

Submit a copy of the manufacturer's operating instructions for the automated flagger assistance devices.

12-3.38A(4) Quality Assurance

Reserved

12-3.38B Materials

04-17-20

The automated flagger assistance device must comply with the *California MUTCD,* Section 6E.04, and Section 6E.06, "Red/Yellow Lens Automated Flagger Assistance Devices."

10-18-19

The device must:

1. Be equipped with a gate arm, which must not extend into the opposing lane
2. Alternately display a steadily illuminated circular red lens and a flashing circular yellow lens to control traffic
3. Have a fail-safe device that prevents the operator from inadvertently actuating a simultaneous flashing circular yellow lens at both ends of the work zone
4. Have a device that monitors for malfunctions and prevents the display of conflicting indication
5. Have a 24-by-30-inch R10-6 STOP HERE ON RED sign mounted on the trailer

SAMPLE NOT FOR BIDDING

The device must continuously monitor the wireless communication links and verify transmission and reception of data between the devices. If communication is lost, the devices must immediately display the circular red/stop indication and lower the gate arms.

12-3.38C Construction

The devices must:

1. Be placed where a flagger station is shown with an unobstructed view from the operator
2. Be placed outside of the traveled lane
3. Be attended by the operator when in use
4. Have a minimum of 9 cones placed on a taper in advance of the device and along the edge of shoulder or edge of the traveled way at 25-foot intervals to a point not less than 25 feet past the device
5. Be clearly visible to approaching traffic and illuminated during the hours of darkness

If any device unit becomes inoperative, do one of the following:

1. Replace the unit with the same type and model.
2. Revert to human flagging operations.
3. Terminate all construction activities requiring the use of the devices.

Incorporate the devices into the traffic control using one of the following methods:

1. Method 1: Place one device at each end of the closure.
2. Method 2: Place one device at one end of the closure and a flagger at the opposite end of the closure.

Use two operators for both methods, except you may use a single operator if:

1. Operator has an unobstructed view of the devices
2. Operator has an unobstructed view of approaching traffic in both directions
3. Second flagger is on-site to assist with manual flagging should the device malfunction, or to direct traffic when drivers fail to comply with the devices

When AFADs are in operation:

1. Use portable transverse rumble strips at your discretion
2. Do not use the 48-inch-by-48-inch C9A (CA) sign
3. Do not use the gate cones

12-3.38D Payment

If automated flagger assistance devices bid item is not shown on the Bid Item List, providing AFADS is change order work.

10-16-20

12-3.39 TEMPORARY RADAR SPEED FEEDBACK SIGN SYSTEMS

12-3.39A General

Section 12-3.39 includes specifications for placing, maintaining, and removing temporary radar speed feedback sign systems.

12-3.39B Materials

A temporary radar speed feedback sign system must comply with the requirements under section 87-20.

12-3.39C Construction

Place the system:

1. As far from the traveled way as practicable where it is visible and legible to approaching traffic. Where practicable, place the sign behind a barrier or guardrail.
2. At or before the crest of roadway vertical curvatures that restrict sight distance.
3. At or before the curve of horizontal roadway curvatures that restrict sight distance.

SAMPLE NOT FOR BIDDING

Install a G20-5aP WORK ZONE plaque.

12-3.39D Payment

Not Used

10-18-19

12-3.40 RESERVED

12-4 MAINTAINING TRAFFIC

12-4.01 GENERAL

12-4.01A General

Section 12-4.01 includes general specifications for maintaining traffic through construction work zones.

If local authorities regulate traffic, notify them at least 5 business days before the start of job site activities. Cooperate with the local authorities to handle traffic through the work zone and to make arrangements to keep the work zone clear of parked vehicles.

12-4.01B Materials

Not Used

12-4.01C Construction

Not Used

12-4.01D Payment

Not Used

12-4.02 TRAFFIC CONTROL SYSTEMS

12-4.02A General

12-4.02A(1) Summary

Section 12-4.02 includes specifications for providing a traffic control system to close traffic lanes, shoulders, ramps, and connectors.

A traffic control system for a closure includes flagging and the temporary traffic control devices described as part of the traffic control system. Temporary traffic control devices must comply with section 12-3.

12-4.02A(2) Definitions

Construction Zone Enhanced Enforcement Program (COZEEP): Program that provides California Highway Patrol officers to monitor the movement of traffic within the work zone.

10-16-20

Buffer lane: Closed lane that separates a lane carrying traffic from the work area to enhance safety of workers and allow errant vehicles to recover safely.

10-18-19

designated holidays: Designated holidays are shown in the following table:

Designated Holidays

Holiday	Date observed
New Year's Day	January 1st
Washington's Birthday	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4th
Labor Day	1st Monday in September
Veterans Day	November 11th
Thanksgiving Day	4th Thursday in November
Christmas Day	December 25th

SAMPLE NOT FOR BIDDING

If a designated holiday falls on a Sunday, the following Monday is a designated holiday. If November 11th falls on a Saturday, the preceding Friday is a designated holiday.

12-4.02A(3) Submittals

12-4.02A(3)(a) General

Submit a request for a minor deviation from the specified work hours. For a project in District 7, submit the request at least 15 days before the proposed closure date. Your request may be authorized if (1) the Department does not accrue a significant cost increase and (2) the work can be expedited and better serve the traffic.

If a closure is not opened to traffic by the specified time, submit a work plan that ensures that future closures will be opened to traffic by the specified time. Allow 2 business days for review.

Submit closure schedule requests and closure schedule amendments using LCS to show the locations and times of the requested closures.

Submit a traffic break request using LCS to show the location and time of the requested traffic break.

12-4.02A(3)(b) Closure Schedules

Every Monday by noon, submit a closure schedule request for planned closures for the next week.

Except for a project in District 7, the next week is defined as Sunday at noon through the following Sunday at noon.

For a project in District 7, the next week is defined as Friday at noon through the following Friday at noon.

Submit a closure schedule request from 25 days to 125 days before the anticipated start of any job site activity that reduces:

1. Horizontal clearances of traveled ways, including shoulders, to 2 lanes or fewer due to activities such as temporary barrier placement and paving
2. Vertical clearances of traveled ways, including shoulders, due to activities such as pavement overlays, overhead sign installation, or falsework girder erection

Submit closure schedule changes, including additional closures, by noon at least 3 business days before a planned closure.

Cancel closure requests using LCS at least 48 hours before the start time of the closure.

The Department notifies you through LCS of authorized and unauthorized closures and closures that require coordination with other parties as a condition for authorization.

12-4.02A(3)(c) Contingency Plans for Closures

Submit a contingency plan for an activity that could affect a closure if a contingency plan is specified in the special provisions or if a contingency plan is requested.

If a contingency plan is requested, submit the contingency plan within 1 business day of the request.

The contingency plan must identify the activities, equipment, processes, and materials that may cause a delay in the opening of a closure to traffic. The plan must include:

1. List of additional or alternate equipment, materials, or workers necessary to ensure continuing activities and on-time opening of closures if a problem occurs. If the additional or alternate equipment, materials, or workers are not on the job site, specify their location, the method for mobilizing these items, and the required time to complete mobilization.
2. General time-scaled logic diagram displaying the major activities and sequence of the planned activities. For each activity, identify the critical event that will activate the contingency plan.

Submit revisions to a contingency plan at least 3 business days before starting the activity requiring the contingency plan. Allow 2 business days for review.

SAMPLE NOT FOR BIDDING

12-4.02A(3)(d) Traffic Break Schedule

Every Monday by noon, submit a traffic break request for the next week. Support for a traffic break is based on local California Highway Patrol staffing levels and may not be available for the date or time requested.

Traffic break requests are limited to the hours when a shoulder or lane closure is allowed.

Cancel a traffic break request using LCS at least 48 hours before the start time of the traffic break.

The Department notifies you through LCS of authorized and unauthorized traffic breaks.

The Department does not adjust time or payment if (1) a California Highway Patrol officer is unavailable for the requested date or time or (2) your request is not authorized.

12-4.02A(4) Quality Assurance

Reserved

12-4.02B Materials

Not Used

12-4.02C Construction

12-4.02C(1) General

Work that interferes with traffic is limited to the hours when closures are allowed.

Do not reduce an open traffic lane width to less than 10 feet. If traffic cones or delineators are used for temporary edge delineation, the side of the base of the cones or delineators nearest to traffic is considered the edge of the traveled way.

Do not simultaneously close consecutive ramps in the same direction of travel servicing 2 consecutive local streets unless authorized.

Notify the Engineer of delays in your activities caused by the denial of either (1) an authorized closure or (2) a closure schedule request for the specified time frame allowed for closures.

Discuss the contingency plan for any activity that could affect the closure schedule with the Engineer at least 5 business days before starting the activity requiring the plan.

If you do not open a closure to traffic by the specified time, suspend work and submit a work plan. No further closures are allowed until your work plan has been authorized.

If the Engineer orders you to remove a closure before the time designated in the authorized closure schedule, any delay caused by this order is an excusable delay.

The Engineer may reschedule a closure that was canceled due to unsuitable weather.

You may use automated flagger assistance devices to enhance the traffic control system for a lane closure on a two-lane convention highway, except if a bid item for automated flagger assistance devices is shown in the Bid Item List, the use of AFADs is required.

Do not use automated flagger assistance devices:

1. On multi-lane highways
2. As a substitute or a replacement for a temporary traffic control signal
3. If the devices impair access for pedestrians and bicycles, unless alternate access is provided
4. If the usable shoulder area is not wide enough to place a trailer mounted device
5. If the distance between the devices is more than 800 feet, except when each device is controlled by a separate operator and radio communication is available between the AFAD operators

12-4.02C(2) Lane Closure System

12-4.02C(2)(a) General

The Department provides LCS training. Request the LCS training at least 30 days before submitting the 1st closure request. The Department provides the training within 15 days after your request.

SAMPLE NOT FOR BIDDING

LCS training is web-based or held at a time and location agreed upon by you and the Engineer. For web-based training, the Engineer provides you the website address to access the training.

Within 5 business days after completion of the training, the Department provides LCS accounts and user IDs to your assigned, trained representatives.

Each representative must maintain a unique password and current user information in the LCS.

The project is not accessible in LCS after Contract acceptance.

12-4.02C(2)(b) Status Updates for Authorized Closures

Update the status of authorized closures using the LCS Mobile web page.

For a stationary closure on a traffic lane, use code:

1. 10-97 immediately before you place the 1st cone on the traffic lane
2. 10-98 immediately after you remove all of the cones from the traffic lane

For a stationary closure on the shoulder, use code:

1. 10-97 immediately before you place the 1st cone after the last advance warning sign
2. 10-98 immediately after you remove the last cone before the advance warning signs

For a moving closure, use code:

1. 10-97 immediately before the actual start time of the closure
2. 10-98 immediately after the actual end time of the closure

For closures not needed on the authorized date, use code 10-22 within 2 hours after the authorized start time.

If you are unable to access the LCS Mobile web page, immediately notify the Engineer of the closure's status.

SAMPLE
NOT FOR BIDDING

12-4.02C(3) Closure Requirements and Charts

12-4.02C(3)(a) General

10-16-20

Where two or more lanes in the same direction of travel and on the same side are adjacent to the work area, closures must comply with the buffer lane requirements.

10-18-19

12-4.02C(3)(b) Complete Freeway or Expressway Closure Requirements

Reserved

12-4.02C(3)(c) HOV, Express, and Bus Lane Closure Requirements

Reserved

12-4.02C(3)(d) City Street Closure Requirements

Reserved

12-4.02C(3)(e) Closure Restrictions for Special Events and Venues

Reserved

12-4.02C(3)(f) Closure Restrictions for Designated Holidays and Special Days

Reserved

12-4.02C(3)(g) Freeway or Expressway Lane Requirement Charts

Reserved

12-4.02C(3)(h) Complete Freeway or Expressway Closure Hour Charts

Reserved

12-4.02C(3)(i) Complete Connector Closure Hour Charts and Connector Lane Requirement Charts

Reserved

12-4.02C(3)(j) Complete Ramp Closure Hour Charts and Ramp Lane Requirement Charts

Reserved

12-4.02C(3)(k) Conventional Highway Lane Requirement Charts

Reserved

12-4.02C(3)(l) Complete Conventional Highway Closure Hour Charts

Reserved

12-4.02C(3)(m) City Street Closure Hour Charts and City Street Lane Requirement Charts

Reserved

12-4.02C(3)(n) Concrete Slab and Approach Slab Replacement Closure Hours Table

Reserved

12-4.02C(3)(o)–12-4.02C(3)(s) Reserved

10-16-20

12-4.02C(4) Buffer Lanes

Where two or more lanes are adjacent to a work area, including work on shoulders, you must close the lane adjacent to the work area in accordance with the lane requirement charts as follows:

1. Work is on the traveled way within 6 feet of the adjacent traffic lane.
2. Work is off the traveled way but within 6 feet of the edge of the traveled way, and the posted speed is 45 mph or greater.
3. Work is off the traveled way but within 3 feet of the edge of the traveled way, and the posted speed is less than 45 mph.

Closure of the adjacent traffic lane is not required for:

1. Workers protected by a permanent or temporary barrier
2. Installation, maintenance, or removal of traffic control devices except for temporary railing

For time periods at the beginning or end of work when the lane requirement charts do not allow the closure of the adjacent traffic lane, the following construction activities are allowed without a buffer lane:

1. Paving.
2. Parking, positioning, loading, unloading vehicles, or storing equipment or materials necessary for the work being performed.
3. Placing, removing or maintaining traffic stripes, pavement marking, or pavement markers.
4. Operations not performed by workers on foot such as grinding, grooving, planing, sweeping, applying a tack coat, or operating a crane.
5. Operations where workers on foot are protected, at each work location, within the same closure by an impact attenuator vehicle in the lane adjacent to live traffic.

Do not perform work activities or store equipment, vehicles, or materials within the buffer lane.

10-18-19

12-4.02C(5)–12.4.02C(6) Reserved

12-4.02C(7) Traffic Control System Requirements

12-4.02C(7)(a) General

Control traffic using stationary closures.

SAMPLE NOT FOR BIDDING

If components of the traffic control system are displaced or cease to operate or function as specified, immediately repair them to their original condition or replace them and place them back in their original locations.

Vehicles equipped with attenuators must comply with section 12-3.23.

Each vehicle used to place, maintain, and remove components of a traffic control system on a multilane highway must have a Type II flashing arrow sign that must operate whenever the vehicle is used for placing, maintaining, or removing the components. For a stationary closure, vehicles with a Type II flashing arrow sign not involved in placing, maintaining, or removing the components must display only the caution display mode. If a flashing arrow sign is required for a closure, activate the sign before the closure is in place.

12-4.02C(7)(b) Stationary Closures

Except for channelizing devices placed along open trenches or excavations adjacent to the traveled way, remove the components of the traffic control system for a stationary closure from the traveled way and shoulders at the end of each work period. You may store the components at authorized locations within the limits of the highway.

If a traffic lane is closed with channelizing devices for excavation work, move the devices to the adjacent edge of the traveled way when not excavating. Space the devices as shown for the lane closure.

12-4.02C(7)(c) Moving Closures

For a moving closure, use a PCMS that complies with section 12-3.32 except the sign must be truck mounted. The full operational height to the bottom of the sign may be less than 7 feet above the ground but must be as high as practicable.

If you use a flashing arrow sign in a moving closure, the sign must be truck mounted. Operate the flashing arrow sign in the caution display mode if it is being used on a 2-lane, two-way highway.

12-4.02C(7)(d) Traffic Breaks

You may request a traffic break for special operations such as:

1. Installation, removal, or replacement of an overhead power line or other utility cable across the highway
2. Installation or removal of traffic control devices in areas without a standard-width shoulder
3. Transportation of large equipment across the highway
4. Access to median areas for workers or equipment

If the Department authorizes the traffic break, the Engineer notifies you and arranges the traffic break with the California Highway Patrol through COZEEP. The duration of a traffic break must not exceed 5 minutes or as authorized.

Two California Highway Patrol officers per vehicle are required for traffic breaks occurring any time from 2200 to 0600 hours.

A minimum of 2 California Highway Patrol vehicles will be assigned to conduct a traffic break.

Place a PCMS approximately 2,000 feet upstream of the work area or as agreed upon by the Engineer. The PCMS must comply with section 12-3.32 except the PCMS must not be trailer mounted. Monitor the traffic during the traffic break. If a queue develops, reposition the PCMS truck far enough upstream of the traffic break to provide real-time notification to motorists before they approach the traffic queue.

12-4.02C(8) Traffic Control System Signs

12-4.02C(8)(a) General

Traffic control system signs must comply with section 12-3.11.

12-4.02C(8)(b) Connector and Ramp Closure Signs

Inform motorists of a temporary closing of a (1) connector or a (2) freeway or expressway entrance or exit ramp using:

1. SC6-3(CA) (Ramp Closed) sign for closures of 1 day or less

SAMPLE NOT FOR BIDDING

2. SC6-4(CA) (Ramp Closed) sign for closures of more than 1 day

SC6-3(CA) and SC6-4(CA) signs must be stationary mounted at the locations shown and must remain in place and visible to motorists during the connector or ramp closure.

Notify the Engineer at least 2 business days before installing the sign and install the sign from 7 to 15 days before the closure.

12-4.02C(9) Flagging

12-4.02C(9)(a) General

12-4.02C(9)(a)(i) Summary

Section 12-4.02C(9) includes specifications for flaggers, AFAD operators, additional flaggers, advance flaggers and flagger stations.

12-4.02C(9)(a)(ii) Definitions

04-17-20

AFAD operator: Flagger certified by the manufacturer to operate the specific automated flagger assistance device.

10-18-19

additional flagger: Flagger that controls the flow of traffic at intermediate locations within the limits of a closure with reversible control, at intersections, driveways and other traffic merging points.

advance flagger: Flagger positioned upstream of the traffic control system, who warns approaching traffic of road work ahead and potentially stopped traffic within the advance warning signs.

04-17-20

incidental flagger: Flagger that performs flagging that is not part of a traffic control system.

12-4.02C(9)(a)(iii) Submittals

Submit as informational submittals:

1. Flagger certification for each flagger including AFAD operators. The submittal must include:
   1.1. Name of the individual receiving certification.
   1.2. Name of entity providing certification.
   1.3. Date of certification.
   1.4. Certification expiration date.
2. AFAD manufacturer certification for each AFAD operator. The submittal must include:
   2.1. Name of the manufacturer's authorized trainer.
   2.2. Name of the trainee.
   2.3. Description of device type and model for which training was provided.
   2.4. Date when the training was provided.
3. Training qualifications for each incidental flagger.

SAMPLE NOT FOR BIDDING

12-4.02C(9)(a)(iv) Quality Assurance

Flaggers must be at least 18 years of age and maintain a valid government issued identification and must possess proof of certification during flagging operations.

Effective July 1, 2020, flaggers that are part of a traffic control system must be certified by an authorized flagger training provider. The authorized flagger training provider list is available at the Department's Division of Construction website.

In addition, AFAD operators must be certified by the AFAD manufacturer on:

1. Device type and model to be used on the project
2. Installation procedures
3. Local and remote-controlled operation
4. Maintenance of the device

Incidental flaggers must be trained under 8 CA Code of Regs § 1599.

10-18-19

12-4.02C(9)(b) Materials

Not Used

12-4.02C(9)(c) Construction

12-4.02C(9)(c)(i) General

Not Used

12-4.02C(9)(c)(ii) Flaggers

12-4.02C(9)(c)(ii)(A) General

Flaggers should stand in a conspicuous place and be visible to approaching vehicles.

10-16-20

Flaggers must wear a hard hat, safety glasses, and Class 3, high-visibility, safety apparel under ANSI/ISEA 107-2004, or equivalent subsequent revisions.

04-17-20

Flaggers must be equipped with a 24-by-24-inch "STOP/SLOW" paddle with a rigid staff tall enough to maintain the bottom of the paddle a minimum of 6 feet above the pavement.

10-18-19

12-4.02C(9)(c)(ii)(B) Automated Flagger Assistance Device Operators

When AFADs are in operation, the AFAD operators must:

1. Be positioned away from the traveled way
2. Be positioned where they have an unobstructed line of sight to approaching vehicles and to the devices
3. Keep a backup hand held AFAD remote control readily available

A pilot car driver must not operate a device and must not be considered as one of the flaggers present on-site available to operate a device.

SAMPLE NOT FOR BIDDING

10-16-20

12-4.02C(9)(c)(ii)(C) Additional Flaggers

Provide additional flaggers at any of the following locations:

1. At high-volume intersections and driveways between the two flagger stations as described
2. At Multi-lane and circular intersections

For other intersections and driveways, place a C37(CA) sign.

Additional flaggers use the STOP/SLOW sign paddle to control vehicles merging into the closure with reversible control.

If additional flaggers are not described, providing additional flaggers is change order work.

10-18-19

12-4.02C(9)(c)(ii)(D) Advance Flaggers

Provide advance flaggers when any of the following conditions exist:

1. Queued traffic reaches the W20-4 (One Lane Road Ahead) sign.
2. When the horizontal roadway curvature restricts the sight distance of approaching traffic.
3. When the vertical roadway curvature restricts the sight distance of approaching traffic.

Advance flaggers use the SLOW sign paddle to warn approaching vehicles of the flagging operation ahead and signals the drivers to slow down. If the STOP/SLOW paddle is used, the STOP side must be covered.

10-16-20

If advance flaggers are not described, providing advance flaggers is change order work.

10-18-19

12-4.02C(9)(c)(iii) Flagger Stations

Place flagger stations such that approaching vehicles have sufficient distance to react and follow the flagger's instructions.

Place a minimum of four cones at 50 feet intervals in advance of flagger stations.

During the hours of darkness, illuminate flagger stations under 8 CA Regs § 1523. Do not start flagging until flagger stations are illuminated.

Place advance warning signs W20-1, C9A(CA), and W3-4 upstream of the additional flagger station at intersections as shown.

Place advance warning signs W20-1, C9A(CA), and W3-4 upstream of the advance flagger station.

10-16-20

Remove the W20-1 sign from all flagger stations downstream from the advance flagger station furthest from the work area.

If the distance between advance flagger station and the W20-4 sign is 1,000 feet or more, place a SW60(CA) sign 500 feet downstream from the advance flagger stations. Place an additional SW60(CA) sign for every additional 1,000 feet of separation, space the signs at 1,000-foot intervals.

10-18-19

You may use a PCMS in place of an advance flagger. The PCMS must alternately display the messages "Prepare to Stop" and "Flagger Ahead". If the PCMS must be placed outside the project limits before the W20-1 construction area sign, place a portable W20-1 sign 500 feet in advance of the PCMS.

12-4.02C(9)(d) Payment

Not Used

10-16-20

12-4.02C(10) End of Queue Monitoring and Warning with Truck Mounted Changeable Message Sign

Reserved

12-4.02C(11) Traffic Control Technician

12-4.02C(11)(a) General

12-4.02C(11)(a)(i) Summary

Section 12-4.02C(11) includes specifications for training, certification, and responsibilities for traffic control technicians.

The traffic control technician:

1. Is responsible for the installation, maintenance, and removal of traffic control devices
2. Must have the authority to assign and direct flagging operations
3. Must be knowledgeable about:
   - 3.1. Section 7-1.03 "Public Convenience"
   - 3.2. Section 7-1.04 "Public Safety"
   - 3.3. Section 12 "Temporary Traffic Control"
   - 3.4. Traffic control system Standard Plans
   - 3.5. Traffic handling plans and detour plans

Effective July 1, 2021, assign a traffic control technician to each closure.

12-4.02C(11)(a)(ii) Definitions

Reserved

SAMPLE NOT FOR BIDDING

12-4.02C(11)(a)(iii) Submittals

12-4.02C(11)(a)(iii)(A) General

Every Monday by noon, submit traffic control daily reports for the previous week as an informational submittal.

12-4.02C(11)(a)(iii)(B) Quality Assurance Submittals

Submit the following as informational submittals:

1. Traffic control technician certification and flagger certification for each traffic control technician and each alternate traffic control technician. The certification must include:
   1.1. Name of the individual receiving certification
   1.2. Name of entity providing certification
   1.3. Date of certification
   1.4. Certification expiration date
2. Contact information for each traffic control technician and each alternate traffic control technician. The submittal must include the name, phone number and email address.
3. Traffic control daily reports for each closure. The traffic control daily report must include:
   3.1. Date
   3.2. Name of traffic control technician
   3.3. Location of traffic control. Provide description, County, Route, Postmile or Station and Direction
   3.4. Reference to traffic control standard plan or project plan sheet
   3.5. For closure information include:
      3.5.1. Lane requirement chart number, start time, and end time
      3.5.2. Facility type: conventional highway, freeway, expressway, on ramp, off ramp, or connector, street
      3.5.3. Number of lanes closed, which lanes are closed, or shoulder closure
      3.5.4. Names of flaggers, if applicable
      3.5.5. Use of construction work zone speed limit reduction, buffer lanes, or COZEEP support, if applicable
   3.6. Documentation of:
      3.6.1. LCS Mobile web page status confirmation for 1097 and 1098, or 1022
      3.6.2. Verification that closure is in compliance with the contract requirements
      3.6.3. Modifications to the traffic control including, a description of the change, the reason for the change, time when the change is implemented
      3.6.4. Traffic control system monitoring including, time of inspection and observations
      3.6.5. Incidents that occur while the traffic control system is in place

12-4.02C(11)(a)(iv) Quality Assurance

12-4.02C(11)(a)(iv)(A) General

The traffic control technician must coordinate with the Engineer the implementation of traffic control systems and traffic handling plans prior to construction, and before major changes in traffic control.

12-4.02C(11)(a)(iv)(B) Training and Certifications

A traffic control technician must be certified as a flagger and as a traffic control technician. Department authorized traffic control technician and flaggers training providers list is available at:

https://dot.ca.gov/programs/construction/safety-traffic/safety-training-courses

12-4.02C(11)(a)(iv)(C) Quality Control

The traffic control technician must:

1. Ensure safe, convenient, and effective passage of motorists, bicyclists, pedestrians, workers, and first responders, through or around the construction work zone
2. Inspect the condition of traffic control devices on a regular basis for compliance with the quality requirements in the American Traffic Safety Services Association publication *Quality Guidelines for Temporary Traffic Control Devices and Features*
3. Ensure the labor, equipment, and materials are available to immediately correct deficiencies in the traffic control system
4. Ensure workers performing flagging operations meet the flagger's certificate requirements

SAMPLE NOT FOR BIDDING

5. Ensure the status of closures is reported using the LCS Mobile web page
6. Verify that all closures comply with the contract requirements and that traffic control devices, including PCMS, arrow boards and radar speed feedback signs, are functioning after traffic control installation

12-4.02C(11)(b) Material

Not Used

12-4.02C(11)(c) Construction

For each traffic control system, a traffic control technician must be present during the installation, operation, and removal of the traffic control system.

Notify the Engineer of the assigned traffic control technician for each closure 1 business day before the closure.

Notify the Engineer before an alternate traffic control technician assumes the duties of the assigned traffic control technician.

Traffic control technicians must be available by:

1. Cellular telephone
2. Two-way radio
3. Mobile internet access

Traffic control technician must:

1. Mark the locations for traffic control devices before installation of closures
2. Monitor work zone traffic control activities and operations, including detours, to ensure the traffic control is functioning properly

When monitoring work zone traffic control, if an imminent danger is identified, take immediate corrective action and notify the Engineer. Notify the Engineer of modifications needed to the traffic control system plans or traffic handling plans if the traffic control is not functioning as required due to changes in traffic or site conditions. Do not implement any changes to the traffic control system plans or traffic handling plans until the proposed revisions are authorized.

SAMPLE
NOT FOR BIDDING

12-4.02C(11)(d) Payment

Not Used

12-4.02C(12) Construction Work Zone Speed Limit Reduction

Reserved

12-4.02C(13) Traffic Control Supervision

Reserved

12-4.02C(14)–12-4.02C(25) Reserved

10-18-19

12-4.02D Payment

The Department pays for change order work for a traffic control system by force account for increased traffic control and uses a force account analysis for decreased traffic control.

The Department does not pay for furnishing, placing, relocating, and removing PCMSs used for a traffic break.

The Department deducts the full cost of COZEEP support provided for the traffic break.

The hourly rate for each California Highway Patrol officer providing COZEEP support is $115. This rate includes full compensation for each hour or portion thereof that the officer provides the support. Markups are not added to any expenses associated with COZEEP support.

The minimum number of hours for an officer is 4 hours, except if a closure is already in place and the Engineer authorizes your request for an on-duty officer to conduct a traffic break, the minimum number of hours for an officer is 1 hour.

For a cancellation less than 48 hours before the scheduled start time of COZEEP support, except for a cancellation due to adverse weather or extenuating circumstances, the Department deducts:

1. Minimum of $50 per California Highway Patrol officer if the officer is notified before the start time
2. Maximum of 4 hours of pay per officer if the officer is not notified before the start time

12-4.03 FALSEWORK OPENINGS

04-17-20

12-4.03A General

Section 12-4.03 includes specifications for providing falsework openings.

12-4.03B Materials

Not Used

12-4.03C Construction

12-4.03C(1) General

Reserved

12-4.03C(2) Temporary Railing

Install Type K temporary railing on both sides of vehicular openings through falsework. If ordered, install temporary railing at other falsework less than 12 feet from the edge of a traffic lane. This is change order work.

Temporary railings for vehicular openings must start 150 feet in advance of the falsework and extend past the falsework in the direction of adjacent traffic flow. For 2-way traffic openings, temporary railing must extend at least 60 feet past the falsework in the direction of adjacent traffic flow.

Install temporary crash cushion modules as shown at the approach end of temporary railings located less than 15 feet from the edge of a traffic lane. For 2-way traffic openings install temporary crash cushion modules at the departing end of temporary railings located less than 6 feet from the edge of a traffic lane.

The Engineer determines the exact location and length of railing and the type of flare to be used.

Install temporary railing for protecting the falsework before erecting it. Do not remove temporary railing until authorized.

12-4.03D Payment

Not Used

SAMPLE NOT FOR BIDDING

10-18-19

12-4.04 TEMPORARY PEDESTRIAN ACCESS ROUTES

12-4.04A General

12-4.04A(1) Summary

Section 12-4.04 includes specifications for providing, maintaining, and removing temporary pedestrian access routes.

A temporary pedestrian access route includes temporary traffic control devices as shown except for Type K temporary railing and temporary crash cushions.

12-4.04A(2) Definitions

Reserved

12-4.04A(3) Submittals

If work activities require the closure of a pedestrian route and a temporary pedestrian access route is not shown, submit a work plan for a temporary pedestrian access route. The work plan must:

1. Describe the activities, processes, equipment, and materials that will be used to provide the temporary access route
2. Show the locations of the routes and the placement of traffic control devices for each stage of work
3. Include a time-scaled logic diagram displaying the sequence and duration of the planned activities for each stage of work
4. Be sealed and signed by an engineer who is registered as a civil engineer in the State

Submit "Temporary Pedestrian Access Route Contractor Compliance Report," within 2 business days after construction of a temporary pedestrian access route.

Submit "Temporary Pedestrian Access Route Contractor Weekly Report," within 2 business days of completing a weekly inspection.

12-4.04A(4) Quality Assurance

12-4.04A(4)(a) General

Reserved

12-4.04A(4)(b) Quality Control

Perform a review of the temporary pedestrian access route after it is constructed and document compliance on the "Temporary Pedestrian Access Route Contractor Compliance Report."

The Department will conduct a verification inspection after receiving the compliance report.

For a temporary pedestrian access route in use perform a weekly review and document compliance on the "Temporary Pedestrian Access Route Contractor Weekly Report."

12-4.04B Materials

The walkway surface must be slip resistant and surfaced with minor HMA or commercial-quality, bituminous material, commercial-quality concrete, or wood.

A handrail with a circular cross section must have an outer diameter from 1-1/4 to 2 inches. A handrail with a noncircular cross section must have a perimeter from 4 to 6-1/4 inches and a maximum cross-section dimension of 2-1/4 inches.

Fasteners must be rounded to prevent injury to a pedestrian's fingers, hands, and arms and to eliminate sharp edges that could catch on clothing.

A detectable warning surface must be on the Authorized Material List for detectable warning surfaces and match yellow color no. 33538 of AMS.Std.595.

Temporary traffic control devices used to channelize pedestrians must:

1. Be free of sharp or rough edges
2. Have a continuous detectable edging at least 6 inches high and at no more than 2 inches above the walkway surface
3. Be at least 32 inches in height
4. Have smooth connection points between devices to allow for a handrail
5. Have a top and bottom surface in the same vertical plane

12-4.04C Construction

Notify the Engineer 5 business days before closing an existing pedestrian route. Do not close the route until authorized.

If work activities require the closure of a pedestrian route and a temporary pedestrian access route is not shown, provide a temporary pedestrian access route near the traveled way. You may route pedestrians using the existing sidewalk or by constructing a temporary access route.

If a bid item for a temporary pedestrian access route is not shown on the Bid Item List, then constructing a temporary pedestrian access route is change order work, except when the closure is a result of your means and methods.

Construct a temporary pedestrian access route such that:

SAMPLE NOT FOR BIDDING

1. Walkway surface is firm and stable and free of irregularities
2. Cross slope of the pedestrian route is at most 50:1 (horizontal:vertical)
3. Longitudinal slope of the pedestrian route is at most 20:1 (horizontal:vertical)
4. Walkway, landings, blended transitions, and curb ramps are at least 60 inches wide except where not feasible, the width must be at least 48 inches wide with a 60-by-60-inch passing space at least every 200 feet
5. Lateral joints or gaps between surfaces are less than 1/2 inch wide
6. Discontinuities in surface heights are less than 1/2 inch and beveled if greater than 1/4 inch with a slope no greater than 2:1 (horizontal:vertical)
7. Ramps have:
   7.1. Longitudinal slope of at most 12:1 (horizontal:vertical)
   7.2. Rise less than 30 inches
   7.3. Protective edging at least 2 inches high on each side and handrails at a height from 34 to 38 inches above the walkway surface if the rise is greater than 6 inches
8. Curb ramps have:
   8.1. Longitudinal slope of at most 12:1 (horizontal:vertical)
   8.2. Protective edging at least 2 inches high on each side if the curb ramp does not have flares and the rise is greater than 6 inches
9. Pedestrians are channelized when routed off existing pedestrian routes

Construct handrails such that they are continuous, smooth and free of sharp or rough edges.

Provide an overhead covering to protect pedestrians from falling objects and drippings from overhead structures.

If the temporary access route is next to traffic or work activities, place a temporary barrier to separate the route from vehicles and equipment.

Install a detectable warning surface at locations where a curb ramp, landing, or blended transition connects to a street. Install the warning surface such that it extends a minimum of 36 inches in the direction of travel and for the full width of the landing, blended transition, or curb ramp, excluding the flares.

Maintain the temporary pedestrian access route clear of obstructions. Do not allow traffic control devices, equipment, or construction materials to protrude into the walkway. Maintain a continuous unobstructed path connecting all pedestrian routes, parking lots, and bus stops located within the project limits.

Remove the temporary pedestrian access route when the Engineer determines it is no longer needed.

Provide a temporary pedestrian access route through falsework under section 16-2.02.

SAMPLE NOT FOR BIDDING

12-4.04D Payment

Not Used

12-4.05 BRIDGE CLEANING AND PAINTING ACTIVITIES

12-4.05A General

Section 12-4.05 includes specifications for maintaining traffic during bridge cleaning and painting activities.

Signs must comply with section 12-3.11.

12-4.05B Materials

Not Used

12-4.05C Construction

For bridge cleaning and painting activities, place the signs as shown in the following table in addition to those shown on the plans:

Sign no.	Sign description	Requirement
W20-1	Road Work Ahead	Place portable 30-by-30-inch signs at locations where traffic approaches a bridge with work underway. If the approach speed is greater than 50 mph, the sign must be 48 by 48 inches. The sign panel base material must not be plywood. Attach 2 orange, 16 sq in flags to each sign.
--	Cleaning and Painting Operations	Place a 48-by-48-inch sign near each W20-1 sign. Use 4-inch-high black lettering and include your name, address, and telephone number on an orange background.

The Engineer determines the exact locations of the signs. Do not use signs until needed. Maintain the signs in place during bridge cleaning and painting activities. Remove the signs at the end of each work shift.

After each day's bridge cleaning and painting activities, remove obstructions from the roadway to allow for free passage for traffic. Remove blast cleaning residue from the traveled way before opening the area to traffic.

You may lay supply lines along the top of curbs adjacent to railing posts if the lines do not interfere with traffic. Remove the lines when work is not in progress.

12-4.05D Payment

Not Used

12-4.06 TOLL BRIDGES

Reserved

12-4.07–12-4.10 RESERVED

12-5 RESERVED

12-6 TEMPORARY PAVEMENT DELINEATION

12-6.01 GENERAL

Section 12-6 includes specifications for placing temporary pavement delineation except for delineation on a seal coat project.

Temporary painted traffic stripes and painted pavement markings used for temporary delineation must comply with section 84-2.

Temporary signs for no-passing zones must comply with section 12-3.11.

12-6.02 MATERIALS

12-6.02A General

The following types of temporary pavement delineation must be on the Authorized Material List for signing and delineation materials:

1. Temporary pavement markers for long term day/night use (180 days or less)
2. Temporary pavement markers for short term day/night use (14 days or less)
3. Temporary (removable) striping and pavement marking tape (180 days or less)
4. Permanent traffic striping and pavement marking tape
5. Channelizers

12-6.02B Temporary Pavement Markers

Temporary pavement markers must be the same color as the lane line or centerline markers being replaced.

Temporary pavement markers must be for long-term day or night use, 180 days or less, except you may use temporary pavement markers for short-term day or night use, 14 days or less, if you place the permanent pavement delineation before the end of the 14 days.

SAMPLE NOT FOR BIDDING

12-6.02C Channelizers

Channelizers used for temporary edge line delineation must be orange and surface mounted.

12-6.03 CONSTRUCTION

12-6.03A General

If work activities obliterate pavement delineation, place temporary or permanent pavement delineation before opening the traveled way to traffic. The temporary pavement delineation must consist of a lane line and centerline pavement delineation for traveled ways open to traffic. On multilane roadways, freeways, expressways, and 2-lane roadways with shoulders 4 feet or more in width, the temporary pavement delineation must also include edge line delineation for traveled ways open to traffic.

Establish the alignment for temporary pavement delineation, including the required lines or markers. Surfaces to receive an application of paint or removable traffic tape must be dry and free from dirt and loose material. Do not apply temporary pavement delineation over existing pavement delineation or any other temporary pavement delineation. Maintain temporary pavement delineation until no longer needed or replace it with a new striping detail of temporary or permanent pavement delineation.

When the Engineer determines the temporary pavement delineation is no longer required for the direction of traffic, remove the temporary pavement delineation, including any underlying adhesive for temporary pavement markers, from the final layer of surfacing and from the pavement to remain in place. Remove temporary pavement delineation that conflicts with any subsequent or new traffic pattern for the area.

12-6.03B Temporary Lane Line and Centerline Delineation

If lane lines or centerlines are obliterated and temporary pavement delineation to replace the lines is not shown, the minimum lane line and centerline delineation must consist of temporary pavement markers placed longitudinally at 24-foot maximum intervals.

For temporary lane line or centerline delineation consisting entirely of temporary pavement markers for short-term day or night use, 14 days or less, do not use the markers for more than 14 days on lanes opened to traffic. Place the permanent pavement delineation before the end of the 14 days. If the permanent pavement delineation is not placed within 14 days, replace the temporary pavement markers with additional temporary pavement delineation equivalent to the pattern described for the permanent pavement delineation for the area.

SAMPLE NOT FOR BIDDING

If no-passing centerline pavement delineation is obliterated, install the following temporary no-passing zone signs before opening lanes to traffic:

1. W20-1 (Road Work Ahead) sign from 1,000 to 2,000 feet in advance of the no-passing zone
2. R4-1 (Do Not Pass) sign at the beginning of the no-passing zone and at 2,000-foot maximum intervals within the no-passing zone
3. W7-3a (Next _ Miles) plaque beneath the W20-1 sign for continuous zones longer than 2 miles
4. R4-2 (Pass With Care) sign at the end of the no-passing zone

The Engineer determines the exact location of temporary no-passing zone signs. Maintain the temporary no-passing zone signs in place until you place the permanent no-passing centerline pavement delineation.

Remove the temporary no-passing zone signs when the Engineer determines they are no longer required for the direction of traffic.

12-6.03C Temporary Edge Line Delineation

On multilane roadways, freeways, expressways, and 2-lane roadways with shoulders 4 feet or more in width open to traffic where edge lines are obliterated and temporary pavement delineation to replace those edge lines is not shown, provide temporary pavement delineation for:

1. Right edge lines consisting of any of the following:
   1.1. Solid 6-inch-wide traffic stripe tape of the same color as the stripe being replaced.
   1.2. Traffic cones placed longitudinally at 100-foot maximum intervals.
   1.3. Portable delineators or channelizers placed longitudinally at 100-foot maximum intervals.
2. Left edge lines consisting of any of the following:
   2.1. Solid 6-inch-wide traffic stripe tape of the same color as the stripe being replaced.

2.2. Traffic cones placed longitudinally at 100-foot maximum intervals.
2.3. Portable delineators or channelizers placed longitudinally at 100-foot maximum intervals.
2.4. Temporary pavement markers placed longitudinally at 6-foot maximum intervals.

You may apply temporary traffic stripe paint of the same color as the stripe being replaced instead of solid 6-inch-wide temporary traffic stripe tape where the removal of the temporary traffic stripe is not required.

The Engineer determines the lateral offset for traffic cones, portable delineators, and channelizers used for temporary edge line delineation. If traffic cones or portable delineators are used for temporary edge line delineation, maintain the cones or delineators during the hours of the day when they are in use.

Cement the bases of channelizers used for temporary edge line delineation to the pavement with hot melt bituminous adhesive as specified in section 81-3 for cementing pavement markers to pavement.

12-6.03D Temporary Traffic Stripe, Pavement Marking, and Pavement Markers

12-6.03D(1) General

Reserved

12-6.03D(2) Temporary Traffic Stripe Tape

Except where the temporary traffic stripe is used for 14 days or less, apply temporary removable traffic stripe tape under the manufacturer's instructions and as follows:

1. Slowly roll the tape with a rubber-tired vehicle or roller to ensure complete contact with the pavement surface.
2. Apply the tape straight on a tangent alignment and on a true arc on a curved alignment.
3. Do not apply the tape when the ambient air or pavement temperature is less than 50 degrees F unless otherwise authorized.

For temporary traffic stripe tape used for 14 days or less, apply the temporary removable traffic stripe tape under the manufacturer's instructions.

12-6.03D(3) Temporary Traffic Stripe Paint

Apply temporary traffic stripe paint under section 84-2.03, except you may apply 1 or 2 coats of the temporary traffic stripe paint for new or existing pavement.

You are not required to remove painted temporary traffic stripe that will be covered by paving work.

12-6.03D(4) Temporary Pavement Marking Tape

Apply temporary removable pavement marking tape as specified for applying temporary removable traffic stripe tape in section 12-6.03D(2).

12-6.03D(5) Temporary Pavement Marking Paint

Apply temporary pavement marking paint under section 84-2.03, except you may apply 1 or 2 coats of the temporary pavement marking paint.

You are not required to remove of painted temporary pavement markings that will be covered by paving work.

You may use permanent or temporary removable pavement marking tape instead of temporary pavement marking paint.

12-6.03D(6) Temporary Pavement Markers

Place temporary pavement markers under the manufacturer's instructions. Cement temporary markers to the surfacing with the manufacturer's recommended adhesive except do not use epoxy adhesive in areas where the removal of the pavement markers is required.

You may use retroreflective pavement markers instead of temporary pavement markers for long-term day or night use, 180 days or less, except to simulate patterns of broken traffic stripe. Retroreflective pavement markers used for temporary pavement markers must comply with section 81-3, except the waiting period before placing pavement markers on new asphalt concrete surfacing as specified in

SAMPLE NOT FOR BIDDING

section 81-3.03 does not apply. Do not use epoxy adhesive to place pavement markers in areas where the removal of the pavement markers is required.

12-6.04 PAYMENT

The Department does not pay for additional temporary pavement delineation used to replace temporary pavement markers.

Temporary traffic stripe is measured as specified for traffic stripe in section 84.

Temporary pavement marking is measured as specified for pavement marking in section 84.

12-7 TEMPORARY PAVEMENT DELINEATION FOR SEAL COATS

12-7.01 GENERAL

Section 12-7 includes specifications for placing temporary pavement delineation for a seal coat project.

Temporary signs for no-passing zones must comply with section 12-3.11.

12-7.02 MATERIALS

Temporary raised pavement markers for seal coat applications must be temporary pavement markers for short-term day or night use, 14 days or less, on the Authorized Material List for signing and delineation materials.

12-7.03 CONSTRUCTION

Before applying binder that will obliterate existing traffic stripes, place temporary raised pavement markers on the existing traffic stripes except for right edge lines at 24-foot maximum intervals. Place 2 markers side by side on double traffic stripes with 1 marker placed on each stripe longitudinally at 24-foot maximum intervals. Place temporary raised pavement markers under the manufacturer's instructions. Before opening the lanes to uncontrolled traffic, remove the covers from the temporary raised pavement markers.

If you obliterate no-passing centerline pavement delineation, install the following temporary no-passing zone signs before opening lanes to traffic:

1. W20-1 (Road Work Ahead) sign from 1,000 to 2,000 feet in advance of the no-passing zone
2. R4-1 (Do Not Pass) sign at the beginning of the no-passing zone and at 2,000-foot maximum intervals within the no-passing zone
3. W7-3a (Next _ Miles) plaque beneath the W20-1 sign for continuous zones longer than 2 miles
4. R4-2 (Pass With Care) sign at the end of the no-passing zone

The Engineer determines the exact location of the temporary no-passing zone signs. Maintain the temporary no-passing zone signs in place until you place the permanent no-passing centerline pavement delineation. Remove the temporary no-passing zone signs when the Engineer determines they are no longer required for the direction of traffic.

Maintain temporary pavement delineation until you replace it with the permanent pavement delineation.

12-7.04 PAYMENT

Not Used

12-8-12-10 RESERVED

^^

SAMPLE NOT FOR BIDDING

13 WATER POLLUTION CONTROL

10-16-20

Replace the 3rd paragraph of section 13-1.01A with:

10-16-20

You may view these manuals at the Stormwater and Water Pollution Control Information link at the Department's Division of Construction website.

Add to the end of section 13-1.01C(1):

04-17-20

Submittals for additional or new WPC practices to manage run-on, run-off, and stormwater conveyance must:

1. Describe the activities, processes, equipment, and materials that will be used to manage the run-on, run-off, and stormwater conveyance through the job site
2. Show the locations of the management practices
3. Include a time-scaled logic diagram displaying the sequence and duration of the management practices for each stage of work
4. Be sealed and signed by an engineer who is registered as a civil engineer in the State

Add after the 2nd paragraph of section 13-1.01C(5):

04-19-19

For partial listing of disposal facilities and their waste acceptance list, go to SWRCB website.

Replace the 3rd paragraph of section 13-1.01D(3) with:

04-17-20

Training for assistant WPC managers who inspect, repair, and maintain WPC practices, collect water quality samples, and record water quality data must include:

1. Review of the sampling and analysis plan and the *Construction Site Monitoring Program Guidance Manual*
2. Health and safety review
3. Sampling simulations

The training for assistant WPC managers must comply with the requirements described under "WPC Manager Training," and includes:

1. Obtaining a certificate by completing the 8-hour WPC manager training
2. Reviewing updates, revisions, and amendments to the training

For training requirements, go to the Construction Storm Water and Water Pollution Control website.

Replace the 1st paragraph of section 13-1.01D(4)(a) with:

04-17-20

Assign a WPC manager to implement the WPCP or SWPPP. Assign an alternate WPC manager to

perform the responsibilities of the WPC manager in the manager's absence. The alternate WPC manager must have the same qualifications as the WPC manager. You may assign an assistant WPC manager to act under the supervision of the WPC manager to inspect, repair, and maintain WPC practices, collect water quality samples, and record water quality data. You may have more than one assistant WPC manager.

Replace the 1st paragraph of section 13-1.01D(4)(b) with:

04-17-20

The WPC manager must:

SAMPLE NOT FOR BIDDING

1. Comply with the requirements provided in the Construction General Permit for QSP
2. Comply with the requirements described under "WPC Manager Training," including:
   2.1. Obtaining a certificate by completing the 8-hour training
   2.2 Reviewing updates, revisions, and amendments to the training

For the requirements, go to the Construction Storm Water and Water Pollution Control website.

04-19-19

Delete item 2.6.3 in the list of section 13-1.01D(4)(c).

Replace item 7 in the list in the 1st paragraph of section 13-1.01D(4)(c) with:

04-17-20

7. Revise the WPCP or recommend changes to the SWPPP

Replace the 3rd sentence in the 4th paragraph of section 13-1.03A with:

04-17-20

Additional WPC work is change order work except when the additional WPC practices are a result of your means and methods.

Replace the 1st paragraph of section 13-2.01C with:

04-19-19

Within 7 days after Contract approval, submit one printed copy and an electronic copy on a read-only CD, DVD, or other authorized data-storage device of your WPCP unless different quantities are ordered at the preconstruction conference. You may assign a QSP other than the WPC manager to develop the WPCP.

Replace item 4 in the list in the 2nd paragraph of section 13-2.01C with:

04-19-19

4. Show the locations and types of temporary WPC practices that will be used in the work for whichever has the longest duration in the first:
   4.1. 60 days
   4.2. Construction phase

Replace item 7 in the list in the 2nd paragraph of section 13-2.01C with:

10-16-20

7. Include a copy of each permit obtained by the Department, such as the Department of Fish and

   Wildlife permits, US Army Corps of Engineers permits, RWQCB 401 certifications, Docket No. ESPO-SMA 15/16-001 Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils with the DTSC (ADL Agreement), ADL Agreement notification, and RWQCB waste discharge requirements for reuse of aerially deposited lead

Replace the 4th paragraph of section 13-2.01C with:

04-19-19

After the Engineer authorizes the WPCP, submit one printed copy and an electronic copy on a read-only CD, DVD, or other Engineer-authorized data-storage device of the authorized WPCP.

SAMPLE
NOT FOR BIDDING

04-19-19

Delete the row for Annual Certification in the table in section 13-3.01C(1).

Replace the 1st paragraph of section 13-3.01C(2)(a) with:

04-17-20

Within 15 days of Contract approval, submit 1 printed copy and an electronic copy on a read-only CD, DVD, or other authorized data-storage device of your SWPPP unless different quantities are ordered at the preconstruction conference.

You must assign a QSD to develop and revise the SWPPP.

Replace item 4 in the list in the 2nd paragraph of section 13-3.01C(2)(a) with:

04-19-19

4. Include a schedule showing when:

    4.1. Work activities that could cause the discharge of pollutants into stormwater will be performed
    4.2. WPC practices, including soil stabilization and sediment control, that will be used in the work for whichever has the longest duration in the first:
        4.2.1. 60 days
        4.2.2. Construction phase

Replace item 5 in the list in the 2nd paragraph of section 13-3.01C(2)(a) with:

10-16-20

5. Include a copy of each permit obtained by the Department, such as the Department of Fish and

    Wildlife permits, US Army Corps of Engineers permits, RWQCB 401 certifications, Docket No. ESPO-SMA 15/16-001 Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils with the DTSC (ADL Agreement), ADL Agreement notification, and RWQCB waste discharge requirements for aerially deposited lead reuse

SAMPLE NOT FOR BIDDING

Replace the 4th paragraph of section 13-3.01C(2)(a) with:

04-19-19

Submit an electronic copy on a read-only CD, DVD, or other Engineer-authorized data-storage device and 4 printed copies of the authorized SWPPP unless fewer quantities are authorized at the preconstruction conference.

Replace the introductory clause in the 7th paragraph of section 13-3.01C(2)(a) with:

04-19-19

Submit a revised SWPPP annually before September 15th and any time:

Add after the 7th paragraph of section 13-3.01C(2)(a):

04-19-19

Revise the SWPPP through amendment. The annual SWPPP amendment must include an annual winterization plan.

The annual winterization plan must describe the preparation for the upcoming rainy season including:

1. Updated schedule
2. Materials and labor
3. Management of stormwater through the job site including:
    3.1. Run-on
    3.2. Run-off

3.3. Conveyance downslope
4. Management of areas within the job site including:
   4.1. Areas where work is suspended
   4.2. Areas of soil stabilization
   4.3. New disturbed soil areas
5. Changes to monitoring locations
6. Slope stabilization

04-19-19

Delete section 13-3.01C(5).

Replace the 2nd paragraph of section 13-6.02A with:

10-16-20

Fiber rolls, compost socks, rope, stakes, gravel-filled bags, and foam barriers must comply with section 13-10.02.

Add to the list in the 1st paragraph of section 13-10.01C:

10-16-20

6. Compost socks

Replace section 13-10.03J with:

10-16-20

13-10.03J Temporary Compost Sock

Install temporary compost sock under section 21-2.03Q.

Temporary compost sock must not be installed upstream of a nutrient-impaired water body.

^^

14 ENVIRONMENTAL STEWARDSHIP

11-19-20

Add between the 3rd and 4th paragraphs of section 14-10.01:

04-19-19

If ordered, remove solid waste from illegal dumping on the project site. This work is change order work. Illegal dumping is:

1. Third party nonhazardous residential or commercial waste
2. Greater than 1.0 cubic yard per event

Replace section 14-11.05A with:

10-18-19

14-11.05A General

Do not stockpile material containing hazardous waste or contamination unless authorized in your excavation and transportation plan. Stockpiles containing hazardous waste or contamination must not be placed where affected by surface run-on or run-off. Cover stockpiles with a minimum 12-mils-thick plastic sheeting. Do not place stockpiles in ESAs. Stockpiled material must not enter storm drains, inlets, or waters of the State.

SAMPLE NOT FOR BIDDING

Replace section 14-11.14 with:

11-19-20

14-11.14 TREATED WOOD WASTE

Reserved

Replace *Reserved* in section 14-11.15 with:

04-17-20

14-11.15A General

Section 14-11.15 includes specifications for disposing of electrical equipment containing hazardous materials.

14-11.15B Submittals

14-11.15B(1) General

Reserved

14-11.15B(2) Identification of Disposal Facilities

Thirty days before starting work submit the name and address of the appropriately permitted facilities where electrical equipment containing hazardous materials will be taken to dispose or recycle them.

14-11.15C Waste Management

14-11.15C(1) General

When you mishandle and damage electrical equipment you are the generator of resulting hazardous waste and are responsible for cleanup, management, and disposal of this hazardous waste and the associated costs for the work under section 14-11.06.

14-11.15C(2) Universal Waste

14-11.15C(2)(a) General

Universal wastes include removed:

1. Light bulbs
2. E-waste including, electronic devices as described in 22 CA Code Regs § 66273.3(a), containing:
   2.1. Circuit boards, including controller boxes and LED lights
   2.2. Computer screens or video screens
   2.3. Computer keyboards
   2.4. Cathode ray tube devices
3. Batteries as described in 22 CA Code Regs § 66273.2
4. Mercury-containing equipment as described in section 22 CA Code Regs §66273.4(a); such as lamps, timers, and switches
5. Fluorescent tubes, bulbs, and lamps

Manage and dispose of universal waste under 22 CA Code Regs § 66261.9. Transport universal wastes to an appropriately permitted recycling or disposal facility.

14-11.15C(2)(b) Undamaged Lithium Thionyl Chloride batteries

Package removed equipment containing undamaged lithium thionyl chloride batteries and place the packages in US DOT approved sealed shipping containers. Transport the containers to a recycling or disposal facility. Notify the receiving facility 48 hours before delivery. Affix a label to containers of intact units identifying the contents as "Universal Waste: Lithium Thionyl Chloride Batteries."

Ship lithium thionyl chloride batteries that are separated from the electrical equipment units they powered to a recycling or disposal facility under 49 CFR 173.185. Package the batteries such that contact between them and resulting short circuits are avoided. Prevent accidental contact between batteries by:

1. Covering terminal ends to prevent them from touching each other
2. Placing batteries in a sealed plastic bag packed with loose fill, such as vermiculite

SAMPLE NOT FOR BIDDING

The outer packaging must comply with 49 CFR 173.24 and 173.24a. Transport lithium thionyl chloride batteries to an approved hazardous waste recycling or disposal facility. For a partial list of facilities, go to:

http://www.calrecycle.ca.gov/Electronics/Recovery/Approved/Default.htm

14-11.15C(3) Damaged Lithium Thionyl Chloride batteries

Damaged Lithium thionyl chloride batteries are designated as an extremely hazardous waste under 22 CA Code of Regs, Div 4.5, Ch 11, Art 5, App 10.

When lithium thionyl chloride batteries are damaged by your mishandling you are the generator of the resulting hazardous waste and responsible for cleanup, management, and disposal of this hazardous waste and the associated costs for the work under section 14-11.06.

Lithium thionyl chloride batteries found damaged are Department-generated hazardous waste under section 14-11.07. Management of this Department-generated hazardous waste is change order work.

Use a hazardous waste manifest to transport this damaged equipment to an appropriately permitted disposal facility.

14-11.15C(4) Electrical Equipment Containing PCBs

14-11.15C(4)(a) General

PCBs are found in electrical equipment produced before 1979 such as transformers, capacitors, and fluorescent light ballasts.

14-11.15C(4)(b) Transformers and Capacitors

Manage and dispose of transformers and capacitors containing PCBs under 40 CFR Part 761 and 22 CA Code of Regs Div 4.5.

14-11.15C(4)(c) Undamaged Fluorescent Light Ballasts

Manage and dispose of fluorescent light ballasts containing PCBs under 22 CA Code of Regs § 67426.1 et seq. Fluorescent light ballasts containing PCBs must be packaged and transported by a hauler with a current DTSC registration certificate and documentation of compliance with the CA Highway Patrol Basic Inspection of Terminals Program. The hauler must transport the fluorescent light ballasts containing PCBs to a facility permitted for hazardous waste disposal by DTSC.

14-11.15C(4)(d) Damaged Fluorescent Light Ballasts

Damaged fluorescent light ballasts containing PCBs are designated as extremely hazardous waste by DTSC.

When fluorescent light ballasts containing PCBs are damaged by your mishandling you are the generator of the resulting hazardous waste and responsible for cleanup, management, and disposal of this hazardous waste and the associated costs for the work under section 14-11.06.

Fluorescent light ballasts containing PCBs found damaged are Department-generated hazardous waste under section 14-11.07. Management of this Department-generated hazardous waste is change order work.

Use a hazardous waste manifest to transport damaged equipment to an appropriately permitted disposal facility.

14-11.15C(5) Lead Acid Batteries

Removed lead acid batteries are Department-generated hazardous waste. Manage hazardous waste lead acid batteries under 22 CA Code Regs § 66266.80 and 66266.81. Do not dispose of or attempt to dispose of, a lead-acid battery on or in any land, including dumpsters, landfills, lakes, streams, or the ocean.

Upon removal immediately place batteries upright in non-reactive, structurally-secure, closed containers such as polyethylene buckets or drums for transport. Package the batteries under 49 CFR 172.101 and 49 CFR 173.59. Prevent accidental contact between batteries by:

1. Covering terminal ends to prevent them from touching each other
2. Placing batteries in a sealed plastic bag packed with loose fill, such as vermiculite

SAMPLE NOT FOR BIDDING

Label the container with the date the first battery is placed in it and identify the contents as "Lead-acid Batteries."

Use a:

1 Bill of lading under 13 CCR § 1161 for shipments of 9 or less batteries.
2. Hazardous waste manifest for shipments of 10 batteries or more. The Engineer provides the Department's EPA Generator Identification Number for hazardous waste shipment. The Engineer signs the hazardous waste manifests. Notify the Engineer 5 business days before the manifests are to be signed.

Outer packaging must comply with 49 CFR 173.24. Transport batteries to a DTSC permitted recycling facility.

14-11.15C(6) Photovoltaic Panels

Removed photovoltaic panels are Department-generated hazardous waste due to heavy metals content. Manage and dispose of photovoltaic panels under section 14-11.07.

^^

15 EXISTING FACILITIES

10-16-20

Replace item 1.3 in the list in the 7th paragraph of section 15-1.03B with:

10-16-20

1.3. Buried at least 10 feet from the dripline of trees or highway facilities

^^^

DIVISION III EARTHWORK AND LANDSCAPE

19 EARTHWORK

10-16-20

Replace section 19-3.01C(4) with:

04-17-20

19-3.01C(4) Ground Anchor and Soil Nail Walls

Submit shop drawings for earthwork for each ground anchor wall and soil nail wall under section 46-1.01C(2).

10-16-20

Delete the 5th paragraph of section 19-3.02C.

Replace the 1st paragraph of section 19-3.03E(1) with:

10-19-18

Place structure backfill in uniform layers. Bring backfill up uniformly on all sides of structures or drainage facilities. Backfill layer thickness must not exceed 0.67 foot before compacting. If you perform compaction by ponding and jetting, the thickness of the backfill layer must not exceed 4 feet.

SAMPLE NOT FOR BIDDING

Replace the 1st sentence in the 3rd paragraph of section 19-3.03E(1) with:

10-19-18

Do not place structure backfill until footings or other parts of structures or drainage facilities are authorized.

Replace section 19-3.03E(2) with:

10-16-20

19-3.03E(2) Reserved

Replace the 2nd paragraph of section 19-3.03K with:

10-16-20

Clean the excavated face of loose materials, mud, rebound, and other materials that prevent or reduce the shotcrete from bonding to soil nails and the receiving surface.

Replace the 3rd sentence in the 6th paragraph of section 19-3.03K with:

10-16-20

Take authorized remedial measures to stabilize the areas.

Add between the 6th and 7th paragraphs of section 19-3.03K:

10-16-20

Reset anchor if soil ravels, sloughs, or shows measurable displacement. Do not remove ground anchor excess tendon length until all lift-off tests for the ground anchor are complete.

Replace the list in the 9th paragraph of section 19-3.03K with:

10-16-20

1. Soil nails or ground anchors are installed and grouted.
2. Reinforced concrete facing if shown is constructed.
3. Grout and concrete facing if shown have cured for at least 72 hours.
4. Soil nail facing anchorages are attached or ground anchors are locked off.

SAMPLE NOT FOR BIDDING

^^

20 LANDSCAPE

10-16-20

Add to section 20-1.01D:

04-17-20

20-1.01D(3) Reserved

Replace item 2 in the list in the 1st paragraph of section 20-1.03C(1) with:

10-18-19

2. Controlling weeds and pests

Replace the 2nd paragraph of section 20-2.01A(4)(d) with:

10-19-18

In the presence of the Engineer, perform a functional test for each system that demonstrates:

1. Components of the system are functioning and integrated with one another.

10-18-19

2. Controller programming is complete including external weather, learned flow, and other system data inputs required to operate the system in the automatic mode.

10-19-18

3. Watering schedule is appropriate for the plants, current weather, season, and site conditions.
4. System has complete sprinkler coverage of the site.

Perform the test for each system:

1. Before planting the plants
2. After irrigation system repair work
3. Annually during plant establishment work
4. Not more than 30 days prior to contract acceptance
5. When ordered

10-19-18

Delete section 20-2.01A(4)(e).

Replace the 1st paragraph of section 20-2.01B(5) with:

10-19-18

Pull boxes must comply with section 86-1.02C and be no. 5 or larger. Pull boxes for low voltage conductors must not have side openings.

Replace the 2nd paragraph of section 20-2.01B(5) with:

04-19-19

Pull box covers used for control and neutral conductors for irrigation equipment operated by the irrigation controller must be marked *SPRINKLER CONTROL*.

04-19-19

Add to section 20-2.01B:

20-2.01B(9) Woven Wire Cloth and Gravel

Woven wire cloth must be galvanized and manufactured with a minimum diameter of 19-gauge wire and have square openings from 1/4 to 1/2 inches.

Gravel must be 3/4-inch gravel or crushed rock. Gravel or crushed rock must be clean, washed, dry, and free from clay or organic material.

Replace the 1st paragraph of section 20-2.01C(2) with:

10-19-18

Perform trenching and backfilling under section 87-1.03E(2).

04-19-19

Replace the introductory clause to the list in the 1st paragraph of section 20-2.01C(3) with:

10-19-18

Install pull boxes under section 87-1.03C at the following locations:

Add to section 20-2.01C(4):

Install valve boxes on woven wire cloth and gravel or crushed rock.

SAMPLE NOT FOR BIDDING

Add to the end of section 20-2.01C(4):

04-17-20

Space remote control valve boxes at least 2 feet from the edge of the adjacent valve box.

Replace the 1st paragraph of section 20-2.04A(4) with:

10-19-18

Perform field tests on control and neutral conductors. Field tests must comply with the specifications in section 87-1.01D(2)(a).

Replace the 1st and 2nd paragraphs of section 20-2.04B with:

10-19-18

Control and neutral conductors must comply with the provisions for conductors and cables in section 86-1.02F.

Electrical conduit and fittings must comply with section 86-1.02(B).

Replace the 1st paragraph of section 20-2.04C(4) with:

04-19-19

Splice conductors with a UL-listed connector manufactured for copper wire, direct burial irrigation

systems. Connector must be prefilled with a moisture sealing compound that encapsulates and protects the splice in a waterproof housing. Connector must be sized for the number and gauge of the conductors at the splice.

SAMPLE
NOT FOR BIDDING

Add to the end of the 4th paragraph of section 20-2.06B(2)(a):

10-18-19

Notify the Engineer at least 10 business days before accessing the network communications to integrate new irrigation controllers into the network.

Replace the introductory clause of the 1st paragraph of section 20-2.06B(3) with:

10-19-18

The irrigation controller enclosure cabinet must comply with section 86-1.02Q and must:

Add to the beginning of section 20-2.06C:

10-19-18

Install the irrigation controller enclosure cabinet under 87-1.03Q(1).

Replace the paragraph of section 20-2.07B(3) with:

10-18-19

Corrugated HDPE pipe must comply with ASTM F667 or be Type S complying with AASHTO M252 or AASHTO M294. Couplings and fitting must be as recommended by the pipe manufacturer.

Replace the 3rd paragraph of section 20-2.09B(1) with:

04-19-19

Threaded nipples for swing joints and risers must be schedule 80, PVC 1120 or PVC 1220 pipe, and comply with ASTM D1785.

Add to the end of section 20-2.10B(6):

10-18-19

Flanged adapters used to connect pipe to gate valves must be metal.

Replace section 20-2.10B(7) with:

04-17-20

Each pressure regulating valve used on the downstream side of the control valves must be:

1. Threaded type with outflow pressure clearly marked on the regulator
2. Plastic body with a working pressure of 125 psi or greater
3. Stainless-steel compression spring

Each pressure regulating valve used on the upstream side of the control valves must be:

1. Flanged or threaded and manufactured of brass or bronze
2. Capable of withstanding a working pressure of 300 psi or greater
3. Adjustable with a stainless-steel spring and seat
4. Tapped and plugged for a pressure gauge and if shown with a gauge installed

SAMPLE NOT FOR BIDDING

Replace the table in the 3rd paragraph of section 20-3.01B(2)(a) with:

10-19-18

Plant group designation	Description	Container size (cu in)
A	No. 1 container	152–251
B	No. 5 container	785–1242
C	Balled and burlapped	--
E	Bulb	--
F	In flats	--
H	Cutting	--
I	Pot	--
K	24-inch box	5775–6861
M	Liner[a]	--
O	Acorn	--
P	Plugs[a, b]	--
S	Seedling[c]	--
U	No. 15 container	2768–3696
Z	Palm Tree	--

[a]Do not use containers made of biodegradable material.
[b]Grown in individual container cells.
[c]Bare root.

Replace the introductory clause of the 1st paragraph of section 20-3.01B(4)(b) with:

10-19-18

Slow-release fertilizer must be a pelleted or granular form with a nutrient release over a 3 to 4 month period and be within the chemical analysis ranges shown in the following table:

Replace section 20-3.01C(3) with:

10-19-18

Water plants as needed to keep the plants in a healthy growing condition.

Replace item 3 in the list in the 2nd paragraph of section 20-4.01A with:

10-18-19

3. Controlling weeds and pests

Replace the 1st paragraph of section 20-4.03G with:

10-18-19

Operate the electric irrigation systems utilizing external weather, learned flow, and other system data inputs required to operate the system in the automatic mode, unless otherwise authorized.

10-19-18

Delete the 3rd paragraph of section 20-4.03G.

Replace the 1st paragraph of section 20-5.03A(2) with:

10-18-19

Preemergent must be granular oxadiazon.

Replace the paragraph of section 20-5.03A(3)(c) with:

10-18-19

After compaction, apply preemergent at the maximum label rate. Do not apply preemergent more than 12 inches beyond the inert ground cover limits. Complete the preemergent application and inert ground cover placement within the same day.

Replace section 20-5.03B(2)(b) with:

10-16-20

20-5.03B(2)(b) Concrete

Concrete must be minor concrete. Aggregate size must be from 3/8 to 3/4 inch.

Add to the end of section 20-5.03B(3):

10-19-18

If you are ordered to remove existing concrete below ground within the limits of the rock blanket, saw cut the concrete before removal. This work is change order work.

Replace the 1st paragraph of section 20-5.03C(3) with:

10-16-20

Place gravel and compact.

Replace section 20-5.04B(6) with:

10-16-20

20-5.04B(6) Pine Needle Mulch

Pine needle mulch must:

SAMPLE NOT FOR BIDDING

1. Be derived from pine needles
2. Be a blend of pine needles and not more than 25 percent by volume of bark, cones and small twigs
3. Contain at least 95 percent by volume pine needles from 4 to 12 inches in length
4. Not be crushed

Add between the 6th and 7th paragraphs of section 20-5.04C:

10-16-20

Place pine needle mulch uniformly without clumping.

Replace item 1 in the list in the 1st paragraph of section 20-10.03A(3) with:

10-19-18

1. Transplanting trees. The work plan must include methods of lifting, transporting, storing, planting, guying, watering and maintaining each tree to be transplanted. Include the root ball size, method of root ball containment, and a maintenance program for each tree.

Replace item 2 in the list in the 1st paragraph of section 20-10.03A(3) with:

10-18-19

2. Maintain existing planted areas. The work plan must include controlling the weeds, fertilizing, mowing and trimming of turf areas, watering, and controlling pests.

Replace item 6 in the list in the 2nd paragraph of section 20-10.03A(4) with:

10-18-19

6. Pests

SAMPLE NOT FOR BIDDING

Add to the end of section 20-10.03C(3):

10-19-18

Water transplanted trees immediately after planting and as needed to keep it in a healthy growing condition until contract acceptance.

Add to the end of section 20-10.03C(4):

10-19-18

Water existing plants as needed to keep them in a healthy growing condition until contract acceptance.

^^

21 EROSION CONTROL

10-16-20

Replace section 21-2.01C(3) with:

10-18-19

At least 60 days before seed application, submit proof that the purchase order for seed required for the Contract has been placed and accepted by the seed vendor. Include the seed's botanical names, quantity ordered, and the anticipated date of delivery on the purchase order.

Submit a copy of the supplier's seed analysis report and seed label for each seed species before application.

Seed analysis report must show:

1. Seed variety including botanical name and common name
2. Percent pure live seed
3. Percent by weight inert matter
4. Percent by weight other crop seed
5. Percent by weight weed seed
6. Name of restricted noxious weed seed by number per pound of seed
7. Germination test results
8. Name and address of the supplier or grower
9. Name and address of the seed laboratory
10. Date of the analysis

Seed labels must show:

1. Seed variety including botanical name and common name
2. Lot number or other lot identification
3. Origin
4. Net weight
5. Percent pure live seed
6. Percent total viability
7. Percent by weight inert matter
8. Percent by weight other crop seed
9. Percent by weight weed seed
10. Name of restricted noxious weed seed by number per pound of seed
11. Name and address of the supplier or grower
12. Date the seed was labeled

SAMPLE
NOT FOR BIDDING

Replace section 21-2.01D(3) with:

10-18-19

Seed must be tested for purity and germination by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists. Seed test must be performed for germination within 12 months before application.

Replace item 1 in the list in the paragraph of section 21-2.02C with:

10-16-20

1. Consist of fertile, friable soil of loamy character with a pH range from 6 to 7 that contains organic matter in quantities natural to the region and capable of sustaining healthy plant life

Replace the 2nd paragraph of section 21-2.03J with:

04-19-19

Do not incorporate materials within 3 feet of the pavement edge.

04-19-19

Delete the 4th paragraph of section 21-2.03J

Replace item 2 in the list in the 2nd paragraph of section 21-2.03Q with:

10-18-19

2. Secure compost sock to soil surface with Type 1 installation. Do not construct a furrow.

Replace the 1st paragraph of section 21-2.04 with:

04-17-20

The payment quantity for bid items paid for by area is the area measured parallel to the ground surface except overlaps and key trenches.

^^

DIVISION IV SUBBASES AND BASES

28 CONCRETE BASES

10-16-20

Replace the 1st paragraph of section 28-2.01D(1)(a) with:

04-19-19

The cylinders for compressive strength testing under ASTM C31 or ASTM C192 must be 6 by 12 inches.

Replace the 1st paragraph of section 28-2.02B with:

04-19-19

The SCM content requirements in the 4th paragraph of section 90-1.02B(3) do not apply to LCB.

Replace the 1st paragraph of section 28-3.02C with:

04-17-20

Asphaltic emulsion must be Grade SS1.

Replace section 28-5.02C with:

10-16-20

28-5.02C Curing Seal

The curing seal must be asphaltic emulsion Grade SS1.

^^

SAMPLE NOT FOR BIDDING

30 RECLAIMED PAVEMENT

10-16-20

Replace Section 30-4 with:

10-16-20

30-4 FULL DEPTH RECLAMATION—CEMENT

30-4.01 GENERAL

30-4.01A Summary

Section 30-4 includes specifications for constructing a reclaimed pavement base using FDR—cement.

Constructing an FDR—cement base includes:

1. Pulverizing existing asphalt concrete pavement and underlying materials
2. Mixing with water, cement, and if specified, supplementary aggregate
3. Grading and compacting the mixture
4. Applying asphaltic emulsion and sand cover

30-4.01B Definitions

Lot: 1,000 sq yd of FDR—cement

30-4.01C Submittals

30-4.01C(1) General

With the QC plan, submit the mix design.

Submit quality control test results along with the daily reports.

Submit QC test results to fdr@dot.ca.gov.

30-4.01C(2) Quality Assurance Submittals

30-4.01C(2)(a) General

Reserved

30-4.01C(2)(b) Mix Design

Submit each FDR—cement mix design at least 2 weeks before starting FDR—cement operations. Each mix design submittal must be sealed and signed by an engineer who is registered as a civil engineer in the State.

You may submit multiple mix designs to optimize the cement content and adjust for varying underlying materials.

Each mix design submittal must include:

1. Area represented by the mix design by beginning and ending stations.
2. Gradation of the mixture before addition of cement.
3. Cement content in percent by weight of the dry mixture and in lb/sq yd surface application rate.
4. Supplementary aggregate in percent by weight of the dry mixture, if supplementary aggregate is specified.
5. Moisture content of the material when mixing, relative to OMC.
6. Test results and any worksheets, photographs, and graphs.
7. Unconfined compressive strength test results.
8. Moisture-density curve of the material at the specified cement content.
9. Certificate of compliance for cement.

SAMPLE NOT FOR BIDDING

30-4.01C(2)(c) Quality Control Reporting

With the daily report, submit the following based on the testing frequencies specified:

1. General Information:
   - 1.1. Weather:
     - 1.1.1. Ambient air temperature before starting daily FDR—cement activities, including time of temperature reading.
     - 1.1.2. Road surface temperature before starting daily FDR—cement activities, including time of temperature reading.
2. Average forward speed of pulverizing equipment
3. FDR—cement quality control test results for unconfined compressive strength
4. Depth of pulverization

With the daily report, submit the test results for the quality characteristics within the times after sampling shown in the following table:

FDR—Cement Quality Characteristic Test Result Reporting Time Allowances

Quality characteristic	Maximum reporting time allowance
Water sulfates	Before work starts
Water chlorides	
Aggregate gradation	24 hours
Moisture content	
Laboratory maximum wet density	
Relative compaction	
Unconfined compressive strength	24 hours after testing specimens

30-4.01D Quality Assurance

30-4.01D(1) General

Relative compaction must be determined under California Test 231 and the following:

1. For a reclaimed layer 0.5-foot thick and less, perform 1 relative density test at mid layer. For thickness greater than 0.5-foot, test at every 0.5-foot intervals from 2 inches above the bottom of the FDR—cement layer.
2. Sample must contain no more than 5 percent retained on the 2-inch sieve and 15 percent retained on the 1-1/2-inch sieve.
3. Correction for oversize material does not apply.
4. Use the laboratory wet test maximum density closest in proximity to the lot to determine relative compaction. If the relative compaction for a lot is less than 95 percent in accordance with ASTM D1557 requirements, perform California Test 216 and California Test 226 for each noncompliant lot and recalculate the relative compaction.

The Engineer tests each test strip under section 30-4.01D(4).

30-4.01D(2) Mix Design

Develop a mix design for each materials sampling location. The mix design must produce FDR—cement with an unconfined compressive strength from 300 to 600 psi, determined at 7 days under ASTM D1633, Method A, with the exceptions shown in FDR—Cement Quality Characteristic Requirements table under section 30-4.02A.

Notify the Engineer at least 2 business days before sampling.

Use materials from the specified FDR—cement mixing depth. If any portion of existing asphalt concrete pavement is to be removed before pulverizing, remove that portion of asphalt concrete pavement from the samples used in the mix design. If additional samples of subgrade material are needed, sampling locations can be excavated outside the edge of pavement to variable dimensions. Characterize and record sampling location features such as layer thicknesses and types, distresses, interlayers, thin or thick areas, digouts, and adhesion to the base. Use the sampled material to determine the mix design represented by the sampling location, according to the proportions of the pavement structure shown.

Before opening the mix design sampling locations to traffic, backfill sampling locations by replacing and compacting with an authorized material or minor HMA that complies with section 39-2.07. Backfill and compact to the existing grade and thickness of asphalt concrete pavement, in the Engineer's presence.

30-4.01D(3) Quality Control

30-4.01D(3)(a) General

Reserved

30-4.01D(3)(b) Sampling, and Testing

Assign a ground supervisor whose sole purpose is to monitor the FDR—cement activities, advise project personnel, and interface with the quality control testing personnel. The ground supervisor must not have any sampling or testing duties.

Test the quality characteristics of FDR—cement shown in the following table:

SAMPLE
NOT FOR BIDDING

FDR—Cement Quality Characteristic Sampling Locations and Testing Frequencies

Quality characteristic	Test method	Minimum sampling and testing frequency	Sampling location
Aggregate gradation	California Test 202	Test strip and 1 per 2 lots	Loose mix after pulverizing and mixing
Moisture content	California Test 226	Test strip and 2 per day[a]	Loose mix after pulverizing and mixing[b]
Unconfined compressive strength	ASTM D1633	Test strip and 1 per 2 lots	
Laboratory maximum wet density	California Test 216	Test strip and 2 per day	Same location as California Test 231
Relative compaction[c]	California Test 231	Test strip and 1 per lot	Compacted mix

[a]If test fails, minimum test frequency is 1 per lot.
[b]Sample immediately after mixing is complete.
[c]Verify the moisture content reading made under California Test 231 with California Test 226.

Measure and record the actual cut depth at both ends of the pulverizing drum at least once every 300 feet along the cut length. Take measurements in the Engineer's presence.

30-4.01D(4) Department Acceptance

The Department accepts FDR—cement based on:

1. Visual inspection for the following:
   1.1. No segregation, raveling, or loose material
   1.2. Variance must not be more than 0.05 foot measured from the lower edge of a 12-foot straightedge
   1.3. Uniform surface texture throughout the work limits

2. Compliance with the quality characteristics shown in the following table:

FDR—Cement Requirements for Acceptance

Quality characteristic	Test method	Value
Cement application rate (lb/sq yd)	Calibrated tray or equal	Mix design rate ± 5%
Relative compaction (min, %, wet density)	California Test 231	95

3. FDR—cement thickness for each lot. The thickness must be within 0.05 foot of the thickness shown. Verify the thickness at a location determined by, and in the presence of the engineer by one of the following methods:
   3.1. Excavate a test pit that is at least 1 by 1-foot and use phenolphthalein
   3.2. Survey equipment

30-4.02 MATERIALS

30-4.02A General

The quality characteristics for the FDR—cement must comply with the requirements shown in the following table:

SAMPLE NOT FOR BIDDING

FDR—Cement Quality Characteristic Requirements

Quality characteristic	Test method	Requirement
Aggregate gradation (%, passing)[a] Sieve Size: 3 inch 2 inch 1-1/2 inch	California Test 202	 100 95–100 85–100
Moisture content (%)	California Test 226	Mix design ± 2 percent
Unconfined compressive strength (psi)	ASTM D1633[b]	Specified in section 30-4.01D(2)
Laboratory maximum wet density (lb/cu ft)	California Test 216	Use for relative compaction calculation
Relative compaction (min, %, wet density)[c]	California Test 231	95

[a] Perform aggregate gradation on samples collected from full recycled depth.

[b]Method A, except:

1. Test specimens must be compacted under ASTM D1557, Method A or B.
2. Test specimens must be cured by sealing each specimen with 2 layers of plastic at least 4-mil thick. The plastic must be tight around the specimen. Seal all seams with duct tape to prevent moisture loss. Sealed specimens must be placed in an oven for 7 days at 100 ± 5 degrees F. At the end of the cure period, specimens must be removed from the oven and air-cooled. Duct tape and plastic wrap must be removed before capping. Specimens must not be soaked before testing.

[c]Verify the moisture content reading made under California Test 231 with California Test 226.

30-4.02B Cement

Reserved

30-4.02C Water

Reserved

30-4.02D Supplementary Aggregate

If supplementary aggregate is specified, supplementary aggregate must comply with the specifications for Class 2 aggregate base in section 26.

30-4.02E Asphaltic Emulsion

Asphaltic emulsion must be Grade SS-1h or CSS-1h.

Notify the Engineer if you dilute the asphaltic emulsion with water. The ratio by weight of added water to asphaltic emulsion must not exceed 1 to 1.

Measure added water weight.

30-4.02F Sand Cover

Sand used for sand cover must comply with the material specifications for fine aggregate under section 90-1.02C(3). Sand must not contain more than 2 percent moisture by dry weight of sand.

30-4.02G Test Pit Backfill Material

Backfill for test pits must be FDR—cement treated material.

30-4.03 CONSTRUCTION

30-4.03A General

Do not start FDR—cement activities if the ambient air temperature is below 40 degrees F or the road surface is below 40 degrees F. If the ambient air temperature falls below 40 degrees F during FDR—cement activities, you may only compact and finish FDR—cement.

Backfill test pits and compact to 95 percent under California Test 231. After compaction, the repair area must not vary more than 0.05 foot from the adjacent FDR—cement surface.

SAMPLE NOT FOR BIDDING

30-4.03B Equipment

The FDR—cement mixing machine must have independent and interlocked systems for water and must include the following:

1. Digital electronic controller system
2. Pumping system
3. Spray bar system

The cement distributor must have a vacuum or dust suppressant system to minimize airborne cement during spreading of the cement on the grade.

Storage equipment for water must not leak and must be attached to the FDR—cement mixing machine with a tow bar and hose. The hose must be attached to the bar and must not touch the ground at any time.

Grading and compacting equipment must be self-propelled and reversible. The frequency and amplitude of vibrating rollers must be adjustable and exceed a force of 15 tons in vibratory mode.

30-4.03C Pulverizing

Unless otherwise authorized, do not pulverize more material than can be mixed with cement and compacted in one day.

Do not leave a wedge where the pulverizing drum cuts into the existing material. The 1st cut width must use the full width of the pulverizing drum. Subsequent cuts must overlap at least 4 inches. Do not leave a gap of unpulverized material between cuts. If an overlap is less than 4 inches, immediately back up and pulverize the deviation along the correct cut line.

Mark the existing pavement where the center of the pulverizing drum stops. Start the following cut on this alignment at least 2 feet behind the mark.

30-4.03D Spreading Materials

Spread cement uniformly over the full roadway surface width. Do not spread cement more than 30 minutes before mixing. Do not apply dry cement in windy conditions that will result in dust outside the FDR—cement area. The spread rate must be the mix design rate or the ordered rate in lb/sq yd ± 5 percent.

Do not spread cement and supplementary aggregate before pulverizing.

30-4.03E Mixing

The overlap requirements in section 30-4.03C apply to mixing. With each cut, adjust the quantity of water proportionally to the actual cut width. If an overlap is less than 4 inches, immediately back up and pulverize the deviation along the correct line without adding water or cement.

Water must be injected through the mixing machine. The injection rate of mixing water must be sufficient to produce the FDR—cement material mixing moisture content described in the mix design.

Mark where the center of the pulverizing drum stops. Start the following cut on this alignment at least 2 feet behind the mark.

30-4.03F Compacting and Grading

Immediately after pulverizing and mixing, compact FDR—cement to the minimum relative compaction. Do not allow more than 2 hours between final mixing of the pulverized material with cement and completion of compaction. Check thickness of compacted FDR material in test pit with phenolphthalein prior to final compaction and grading.

During grading and final compaction with vibratory steel drum rollers, add water to maintain the mixing moisture content as described in the mix design. After final compaction, do not place cement treated soil to fill low areas in the grade.

SAMPLE
NOT FOR BIDDING

30-4.03G Finishing

Immediately after compaction, apply water and roll with pneumatic-tired rollers or steel drum roller with no vibration. The finished surface must be free of ruts, bumps, indentations, segregation, raveling, and any loose material.

Keep the compacted surface damp by lightly watering until asphaltic emulsion is applied.

Apply a diluted asphaltic emulsion to the finished surface when it is damp but free of standing water at the end of the day. The application rate of asphaltic emulsion must be from 0.13 to 0.25 gal/sq. yd. Do not water after applying asphaltic emulsion.

Spread sand cover after asphaltic emulsion is applied under section 37-4.03C. Remove excess sand from the surface by sweeping before opening to traffic.

During the period from 48 to 56 hours after compaction, microcrack the surface by applying 2 to 3 single passes using a 12-ton vibratory steel drum roller at maximum amplitude travelling from 2 to 3 mph.

Maintain the FDR—cement surface free of ruts, bumps, indentations, raveling, and segregation. Repair damaged FDR—cement material with minor HMA.

Determine the finished FDR—cement thickness before placing HMA. If FDR—cement thickness is less than the specified thickness by more than 0.05 foot, excavate a test pit at least 1 by 1-foot in the vicinity of the noncompliant test pit to determine the extent of the deficient thickness. Remove the FDR—cement material deficient in thickness by cold planing to a depth of 0.2 foot below the finished FDR—cement grade. Replace the planed FDR—cement with the HMA specified for the project and compact under section 39-2.01C.

For each lot of FDR—cement, the HMA layer must be placed within 7 days from final compaction of the FDR—cement base unless otherwise authorized.

Immediately before placing HMA, apply asphaltic emulsion at a rate from 0.03 to 0.05 percent residual binder content.

Do not place HMA until authorized.

30-4.04 PAYMENT

Not Used

SAMPLE NOT FOR BIDDING

^^

DIVISION V SURFACINGS AND PAVEMENTS

37 BITUMINOUS SEALS

10-16-20

Add to section 37-1.01D(1):

10-16-20

Take samples under California Test 125.

Replace item 1 in the list in the 1st paragraph of section 37-2.01A(3) with:

10-16-20

1. Samples for:
   - 1.1. Asphaltic emulsion chip seal, two 1-quart samples of asphaltic emulsion
   - 1.2. Polymer modified asphaltic emulsion chip seal, two 1-quart samples of polymer modified asphaltic emulsion
   - 1.3. Asphalt rubber binder chip seal, two 1-quart samples of base asphalt binder
   - 1.4. Asphalt rubber binder chip seal, five 1-quart samples of asphalt rubber binder

Replace section 37-2.02A(3) with:

10-16-20

37-2.02A(3) Submittals

Immediately after sampling, submit two 1-quart samples of asphaltic emulsion taken in the presence of the Engineer.

Replace the 1st paragraph of section 37-2.02A(4)(b)(ii) with:

10-16-20

Take two 1-quart samples for Department acceptance testing.

Replace section 37-2.03A(3) with:

10-16-20

37-2.03A(3) Submittals

Immediately after sampling, submit two 1-quart samples of polymer modified asphaltic emulsion taken in the presence of the Engineer.

Replace the 1st paragraph of section 37-2.03A(4)(b)(ii) with:

10-16-20

Take two 1-quart samples for Department acceptance testing.

Replace the 2nd paragraph of section 37-2.03B(2) with:

04-17-20

A polymer modified asphaltic emulsion must be either Grade PMCRS-2 or PMCRS-2h. Polymer content in percent by weight does not apply.

Replace the 1st paragraph of section 37-2.04A(4)(c)(iv) with:

10-16-20

For Department acceptance testing, take two 1-quart samples and one 1-gallon sample of asphalt rubber binder in the presence of the Engineer for every 5 lots or once a day, whichever is greater.

Replace item 1 in the list in the 1st paragraph of section 37-3.01A(3) with:

10-16-20

1. Samples for:
   1.1. Asphaltic emulsion slurry seal, two 1-quart samples of asphaltic emulsion
   1.2. Polymer modified asphaltic emulsion slurry seal, two 1-quart samples of polymer modified asphaltic emulsion
   1.3. Micro-surfacing, two 1-quart samples of micro-surfacing emulsion

Replace section 37-3.02A(3) with:

10-16-20

37-3.02A(3) Submittals

Immediately after sampling, submit two 1-quart samples of asphaltic emulsion or polymer modified asphaltic emulsion taken in the presence of the Engineer.

SAMPLE
NOT FOR BIDDING

Replace section 37-3.02A(4)(b)(i) with:

10-16-20

37-3.02A(4)(b)(i) General

Take two 1-quart samples of asphaltic emulsion and polymer modified asphaltic emulsion for Department acceptance testing.

Replace section 37-3.02B(3) with:

04-17-20

37-3.02B(3) Polymer Modified Asphaltic Emulsions

A polymer modified asphaltic emulsion must be grade PMCQS-1h.

A polymer modified asphaltic emulsion must consist of an elastomeric polymer mixed with an asphaltic material uniformly emulsified with water and an emulsifying or stabilization agent.

A polymer modified asphaltic emulsion must use either neoprene polymer or butadiene and styrene copolymer. The polymer must be homogeneous and milled into the asphaltic emulsion at the colloid mill.

Replace section 37-3.03A(3) with:

10-16-20

37-3.03A(3) Submittals

Immediately after sampling, submit two 1-quart samples of micro-surfacing emulsion taken in the presence of the Engineer.

SAMPLE
NOT FOR BIDDING

Replace the 1st paragraph of section 37-3.03A(4)(b)(ii) with:

10-16-20

Take two 1-quart samples of micro-surfacing emulsion for Department acceptance testing.

Replace section 37-3.03B(2) with:

37-3.03B(2) Micro-surfacing Emulsions 04-17-20

A micro-surfacing emulsion must be grade MSE.

A micro-surfacing emulsion must be a homogeneous mixture of asphalt, an elastomeric polymer, and an emulsifier solution.

Add an elastomeric polymer modifier to asphalt or emulsifier solution before emulsification. An elastomeric polymer solid must be a minimum of 3 percent by weight of the residual asphalt in the micro-surfacing emulsion.

Replace item 1 in the paragraph of section 37-4.01A(3) with:

10-16-20

1. Two 1-quart samples of asphaltic emulsion

Add to section 37-4.01A:

10-16-20

37-4.01A(4) Quality Assurance

Reserved

Replace section 37-4.02A(3) with:

10-16-20

37-4.02A(3) Submittals

Immediately after sampling, submit two 1-quart samples of asphaltic emulsion taken in the presence of the Engineer.

Replace the 1st paragraph of section 37-4.02A(4)(b)(ii) with:

10-16-20

Take two 1-quart samples for Department acceptance testing.

Replace the 6th paragraph of section 37-5.01C with:

10-16-20

Immediately after sampling, submit two 1-quart samples of parking area seal taken in the presence of the Engineer.

^^

39 ASPHALT CONCRETE

10-16-20

10-16-20

Replace *AASHTO T 324 (Modified)* and *AASHTO T 324* at each occurrence in section 39 with:

04-17-20

California Test 389

04-17-20

Delete the row for *AASHTO T 324* in the table in the 5th paragraph of section 39-2.01A(1).

Add to the table in the 5th paragraph of section 39-2.01A(1):

10-16-20

ASTM D5095	2007

Replace the 1st and 2nd paragraphs of section 39-2.01A(3)(d) with:

04-19-19

If ordered, submit QC test results within 3 business days of a request.

04-17-20

Delete the 1st paragraph of section 39-2.01A(4)(a).

Replace the 2nd paragraph of section 39-2.01A(4)(a) with:

10-16-20

Take samples under California Test 125. Reduce samples of HMA to testing size under California Test 306.

SAMPLE NOT FOR BIDDING

Replace item 2 in the list in the 2nd paragraph of section 39-2.01A(4)(b) with:

10-16-20

2. Asphalt binder. Take at least two 1-qt samples. If the asphalt binder is modified or rubberized, the asphalt binder must be sampled with the components blended in the proportions to be used.

Replace the 1st sentence in the 2nd paragraph of section 39-2.01A(4)(h)(i) with:

04-17-20

Condition each at-the-plant sample of HMA mixture for testing under AASHTO 283 in compliance with sections 7.1.2, 7.1.3, and 7.1.4 of AASHTO R 30.

Add to section 39-2.01A(4)(h)(v):

10-16-20

California Test 389 and AASHTO T 283 are not required if production start-up evaluation is within 45 days of the date the Hot Mix Asphalt Verification form is signed.

If production stops for more than 60 days, perform a production start-up evaluation. If production stops for more than 30 days but less 60 days, perform a reduced production start-up evaluation. Reduced production start-up evaluation is production start-up evaluation without California Test 389 and AASHTO T 283.

If production start-up evaluation fails, do not begin production.

Add between the 3rd and 4th paragraphs of section 39-2.01A(4)(i)(i):

04-19-19

You must assist in collecting Engineer acceptance samples. Sample in the presence of the Engineer. Split the Engineer acceptance samples into at least 4 parts. Engineer retains 3 parts and you keep 1 part.

Replace the 1st sentence in the 5th paragraph of section 39-2.01A(4)(i)(i) with:

04-17-20

The Engineer conditions each at-the-plant sample of HMA mixture for testing under AASHTO 283 in compliance with sections 7.1.2, 7.1.3, and 7.1.4 of AASHTO R 30.

Replace the 1st through 3rd paragraphs of section 39-2.01A(4)(i)(iv) with:

04-19-19

You and the Engineer must work together to avoid potential conflicts and to resolve disputes regarding test result discrepancies. You and the Engineer may only dispute each other's test results if one party's test results pass and the other party's test results fail.

If there is a dispute, submit your test results and copies of paperwork including worksheets used to determine the disputed test results within 3 business day of receiving Engineer's test results. An independent third party performs referee testing. Before the third party participates in a dispute resolution, it must be qualified under AASHTO re:source program and the Department's Independent Assurance Program. The independent third party must have no prior direct involvement with this Contract. By mutual agreement, the independent third party is chosen from:

1. Department laboratory in a district or region not in the district or region the project is located
2. Transportation Laboratory
3. Laboratory not currently employed by you or your HMA producer

If the Department's portion of the split acceptance samples are not available, the independent third party uses any available material agreed by you and the Engineer as representing the disputed HMA for evaluation.

SAMPLE
NOT FOR BIDDING

Replace the 1st paragraph of section 39-2.01B(2)(b) with:

04-17-20

If the proposed JMF indicates that the aggregate is being treated with dry lime or lime slurry with marination, or the HMA with liquid antistrip, then testing the untreated aggregate under AASHTO T 283 and California Test 389 is not required.

Replace section 39-2.01B(5) with:

10-16-20

39-2.01B(5) Liquid Antistrip Treatment

Do not use liquid antistrip as a substitute for asphalt binder.

Total amine value for amine-based liquid antistrip must be a minimum of 325 when tested under ASTM D2074. Dosage for amine-based liquid antistrip must be from 0.25 to 1.00 percent by weight of asphalt.

Nonvolantile content of organosaline-based liquid antistrip must be 40 percent minimum when tested under ASTM D5095. Dosage for organosaline-based liquid antistrip must be from 0.05 to 0.15 percent by weight of asphalt.

Use only 1 liquid antistrip type or brand at a time. Do not mix liquid antistrip types or brands.

Store and mix liquid antistrip under the manufacturer's instructions.

SAMPLE NOT FOR BIDDING

Replace the table in the 3rd paragraph of section 39-2.01C(3)(f) with:

Tack Coat Application Rates for HMA

04-17-20

HMA over:	Minimum residual rates (gal/sq yd)		
	CSS-1/CSS-1h, SS-1/SS-1h, and QS-1h/CQS-1h asphaltic emulsion	CRS-1/CRS-2 and QS-1/CQS-1 asphaltic emulsion	Asphalt binder and PMCRS-2/PMCRS-2h asphaltic emulsion
New HMA (between layers)	0.02	0.03	0.02
Concrete pavement and existing asphalt concrete surfacing	0.03	0.04	0.03
Planed pavement	0.05	0.06	0.04

Replace the 2nd paragraph of section 39-2.02A(4)(b)(iii) with:

10-18-19

When tested under AASHTO T 308, the uncorrected binder content of the combined RAP sample must be within ±2.00 percent of the average uncorrected asphalt binder content reported on page 4 of your Contractor Hot Mix Asphalt Design Data form. If a new processed RAP stockpile is required, the average uncorrected binder content of the new processed RAP stockpile tested under AASHTO T 308 must be within ±2.00 percent of the average uncorrected binder content reported on page 4 of your Contractor Hot Mix Asphalt Design Data form. You must use the same ignition oven used to determine the uncorrected asphalt binder content reported on page 4 of your Contractor Hot Mix Asphalt Design Dataform.

Replace item 2 in the 4th paragraph of section 39-2.02A(4)(b)(iii)with:

10-18-19

2. Moisture content at least once a day

04-17-20

Replace footnote a in the table in item 1 in the list in the paragraph of section 39-2.02A(4)(e) with:

10-18-19

[a]The Engineer determines combined aggregate gradations containing RAP under California Test 384. The Engineer uses the correlation factor from Contractor Hot Mix Asphalt Design Data form and mathematically combines the virgin and corrected RAP aggregate gradations at the correct proportions to obtain the combined gradation.

Replace the table in item 2 in the list in the paragraph of section 39-2.02A(4)(e) with:

10-18-19

Reclaimed Asphalt Pavement Quality

Quality characteristic	Test method	Requirement
Uncorrected binder content (% within the average value reported[a])	AASHTO T 308	±2.00
Specific gravity (within the average value reported[b])	AASHTO T 209	±0.06

[a]Average uncorrected binder content of three ignition oven tests performed at JMF verification. Engineer must use the same ignition oven used to determine the average uncorrected binder content at JMF verification.
[b]Average maximum specific gravity reported on page 4 of Contractor Hot Mix Asphalt Design Data form.

SAMPLE NOT FOR BIDDING

Replace the row for *Moisture susceptibility (min, psi, dry strength)* in the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e) with:

04-19-19

For RAP substitution equal to or less than 15% moisture susceptibility (min, psi, dry strength)	AASHTO T 283	100
For RAP substitution greater than 15% moisture susceptibility (psi, dry strength)	AASHTO T 283	100-300[h]

Replace the row for *Hamburg wheel track (min number of passes at inflection point)* in the table in item 3 in the paragraph of section 39-2.02A(4)(e) with:

04-17-20

Hamburg wheel track (number of passes at inflection point)	California Test 389	Report only

Replace the row for *Moisture susceptibility (min, psi, wet strength)* in the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e) with:

10-16-20

Moisture susceptibility (min, psi, wet strength)	AASHTO T 283[i]	70

Add a footnote to the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e):

04-19-19

[h]Not required in the following areas:

1. Southern San Luis Obispo or Santa Barbara County in District 5.
2. Kern County in District 6.
3. Kings County in District 6: route 5, post mile 0 to 17; route 33, post mile 0 to 19; route 41, post mile 0 to 16.
4. Tulare County in District 6: route 65, post mile 0 to 10; route 99, post mile 0 to 10; route 43, post mile 0 to 15.

Add footnote *i* to the table in item 3 in the list in the paragraph of section 39-2.02A(4)(e):

10-16-20

[i]Freeze thaw required

Replace the row for *Hamburg wheel track (min number of passes at inflection point)* in the 1st paragraph of section 39-2.02B(2) with:

04-17-20

Hamburg wheel track (number of passes at inflection point)	California Test 389[c]	Report only

Replace the row for *Moisture susceptibility, dry strength* in the table in the 1st paragraph of section 39-2.02B(2) with:

04-19-19

For RAP substitution equal to or less than 15% moisture susceptibility (min, psi, dry strength)	AASHTO T 283	100
For RAP substitution greater than 15% moisture susceptibility (psi, dry strength)	AASHTO T 283	100-300[e]

Add a footnote to the table in the 1st paragraph of section 39-2.02B(2):

04-19-19

[e]Not required in the following areas:

1. Southern San Luis Obispo or Santa Barbara County in District 5.
2. Kern County in District 6.
3. Kings County in District 6: route 5, post mile 0 to 17; route 33, post mile 0 to 19; route 41, post mile 0 to 16.
4. Tulare County in District 6: route 65, post mile 0 to 10; route 99, post mile 0 to 10; route 43, post mile 0 to 15.

Replace the 3rd and 4th paragraphs of section 39-2.02B(2) with:

04-19-19

For RAP substitution of 15 percent or less, the grade of the virgin binder must be the specified grade of asphalt binder for Type A HMA.

For RAP substitution greater than 15 percent and not exceeding 25 percent, the grade of the virgin binder must be the specified grade of asphalt binder for Type A HMA with the upper and lower temperature classification reduced by 6 degrees C. Hamburg wheel track requirements are based on the grade of asphalt binder specified for Type A HMA.

SAMPLE NOT FOR BIDDING

Replace the 2nd sentence in the 2nd paragraph of section 39-2.02B(11) with:

04-19-19

For RAP substitution of 15 percent or less, RAP must be within ±3 of RAP percentage shown in your Contractor Job Mix Formula Proposal form without exceeding 15 percent. For RAP substitution of greater than 15 percent, RAP must be within ±3 of RAP percentage shown in your Contractor Job Mix Formula Proposal form without exceeding 25 percent.

Replace the row for *Hamburg wheel track (min number of passes at 0.5-inch rut depth)* in the table in item 2 in the paragraph of section 39-2.03A(4)(e)(i) with:

04-17-20

Hamburg wheel track (min number of passes at 0.5-inch rut depth) Base binder grade: PG 64 or lower PG 70	California Test 389	 15,000 20,000

Replace the row for *Hamburg wheel track (min number of passes at inflection point)* in the table in item 2 in the paragraph of section 39-2.03A(4)(e)(i) with:

04-17-20

Hamburg wheel track (number of passes at inflection point)	California Test 389	Report only

Replace the row for *Moisture susceptibility (min, psi, wet strength)* in the table in item 2 in the list in the paragraph of section 39-2.03A(4)(e)(i) with:

10-16-20

Moisture susceptibility (min, psi, wet strength)	AASHTO T 283[g]	70

Add footnote *g* to the table in item 2 in the list in the paragraph of section 39-2.03A(4)(e)(i):

10-16-20

[g]Freeze thaw required

Replace the row for *Hamburg wheel track (min number of passes at 0.5-inch rut depth)* in the table in 1st paragraph of section 39-2.03B(2) with:

04-17-20

Hamburg wheel track (min number of passes at 0.5-inch rut depth) Base binder grade: PG 64 or lower PG 70	California Test 389[d]	 15,000 20,000

SAMPLE NOT FOR BIDDING

Replace the row for *Hamburg wheel track (min number of passes at inflection point)* in the table in 1st paragraph of section 39-2.03B(2) with:

04-17-20

Hamburg wheel track (number of passes at inflection point)	California Test 389[d]	Report only

Replace the table in the 3rd paragraph of section 39-2.04C with:
Tack Coat Application Rates for OGFC

04-17-20

OGFC over:	Minimum residual rates (gal/sq yd)		
	CSS-1/CSS-1h, SS-1/SS-1h, and QS-1h/CQS-1h asphaltic emulsion	CRS-1/CRS-2 and QS-1/CQS-1 asphaltic emulsion	Asphalt binder and PMCRS-2/PMCRS-2h asphaltic emulsion
New HMA	0.03	0.04	0.03
Concrete pavement and existing asphalt concrete surfacing	0.05	0.06	0.04
Planed pavement	0.06	0.07	0.05

NOT SAMPLE FOR BIDDING

Replace the 8th and 9th paragraphs of section 39-2.04C with:

04-19-19

For RHMA-O and RHMA-O produced with WMA water injection technology, and RHMA-O-HB and RHMA-O-HB produced with WMA water injection technology:

1. Spread and compact if the ambient air temperature is at least 55 degrees F and the surface temperature is at least 60 degrees F
2. Complete the 1st coverage using 2 rollers before the surface temperature drops below 280 degrees F
3. Complete compaction before the surface temperature drops below 250 degrees F

For RHMA-O produced with WMA additive technology and RHMA-O-HB produced with WMA additives technology:

1. Spread and compact if the ambient air temperature is at least 45 degrees F and the surface temperature is at least 50 degrees F
2. Complete the 1st coverage using 2 rollers before the surface temperature drops below 270 degrees F
3. Complete compaction before the surface temperature drops below 240 degrees F

Spread sand at a rate from 1 to 2 lb/sq yd on RHMA-O and RHMA-O-HB with or without WMA technology pavement after finish rolling activities are complete. Keep traffic off the pavement until spreading of the sand is complete.

Replace the 2nd paragraph of section 39-2.05A(1)(a) with:

04-17-20

Placing a BWC consists of applying a bonded wearing course asphaltic emulsion and placing the specified HMA in a single pass with an integrated paving machine.

Replace the 1st paragraph of section 39-2.05A(1)(d)(ii) with:

10-16-20

Take two 1-gallon samples of BWC.

Replace the row for *Penetration at 25 °C* in the table in the 1st paragraph of section 39-2.05A(1)(d)(iii) with:

04-17-20

Penetration at 25 °C (dmm)	AASHTO T 49	70–150

Replace the paragraph of section 39-2.05A(2)(b) with:

04-17-20

The asphaltic emulsion must be bonded wearing course asphaltic emulsion.

^^

40 CONCRETE PAVEMENT

10-16-20

10-16-20

Delete *full-depth crack* and its definition in section 40-1.01B.

Replace *working crack* and its definition in section 40-1.01B with:

10-16-20

working crack: Crack parallel to and within 4 inches of a planned JPCP contraction joint.

Add to section 40-1.01B:

10-16-20

uncontrolled crack: Any crack in JPCP that is not a working crack.

Replace the 2nd paragraph of section 40-1.01C(4) with:

04-17-20

At least 15 days before starting field qualification, submit the proposed concrete mix proportions, the corresponding mix identifications, and laboratory test reports, including measurements of the modulus of rupture and compressive strength, for each trial mixture at 3, 7, 10, 21, 28, and 42 days.

Replace the 2nd paragraph of section 40-1.01C(9) with:

10-19-18

Submit your coefficient of thermal expansion test data at:

https://dime.dot.ca.gov/

Replace the 3rd paragraph of section 40-1.01D(1) with:

04-17-20

Provide material, labor and equipment that meets initial curing requirement to assist the Engineer in

fabricating, curing and handling test beams for the Department's modulus of rupture testing. Failure to maintain the proper curing environment during initial cure will not be basis for rejection of samples, dispute resolution, or claim against the Department. The initial curing equipment must be capable of being locked, using a Department provided padlock. Ensure that the initial curing equipment is secured at all times and protected against theft and damage.

SAMPLE NOT FOR BIDDING

Replace the row for *Density* in the table in the 1st paragraph of section 40-1.01D(7)(a) with:

04-17-20

Unit weight	California Test 518	1 per 4 hours

Add to the list in the 4th paragraph of section 40-1.01D(7)(a):

04-17-20

6. Unit weight

Replace item 2 in the list in the 8th paragraph of section 40-1.01D(7)(a) with:

04-17-20

2. 1 point falls outside the suspension limit line for individual penetration, unit weight or air content measurements

Replace n_v in the 1st paragraph of section 40-1.01D(8)(b)(ii) with:

04-17-20

n_v = number of Department's tests (minimum of 3 required)

Replace the 4th paragraph of section 40-1.01D(8)(b)(ii) with:

04-17-20

If your QC test results are not verified, core at least 3 specimens from the concrete pavement under section 40-1.03M. For dispute resolution, the Engineer selects the core locations and the Department contracts with an independent testing laboratory or uses the Department's laboratory to test these specimens for air content under ASTM C457. The Engineer compares these test results with your QC test results using the t-test method. If your QC test results are verified based on this comparison, the Engineer uses your QC test results for acceptance of concrete pavement for air content, otherwise, the Engineer uses the test results from the dispute resolution process and you pay for the independent testing.

Replace the note *b* in the table in the 1st paragraph of section 40-1.01D(8)(c)(i) with:

04-17-20

[b]Average of the individual test results of 3 test beams.

Replace the 1st sentence of section 40-1.01D(8)(c)(iii) with:

04-17-20

The Department verifies and accepts pavement smoothness based on the results of your inertial profiler testing under Section 36-3.

Replace section 40-1.01D(8)(c)(v) with:

04-17-20

40-1.01D(8)(c)(v) Determining Modulus of Rupture from Pavement Cores

For each approved mix design, a correlation between flexural beam strength and compressive core strength may be developed to evaluate low modulus of rupture results from projects. If the average 28-day modulus of rupture is below 570 psi, you may use compressive strength results from pavement cores to determine the equivalent 28-day modulus of rupture.

In the presence of engineer:

SAMPLE NOT FOR BIDDING

1. From the test strip, fabricate an additional 3 beams, and take a total of 15 cores under ASTM C42 to test 3 cores at each age of 28, 42, 56, 70, and 91 days.
2. If test strip is not constructed, fabricate additional 3 beams on the first day of production and placement of concrete pavement, and take total 15 cores under ASTM C42 to test 3 cores at each age of 28, 42, 56, 70, and 91 days.
3. Break 3 beams at 28 days and take the average.
4. Break 3 cores at each age of 28, 42, 56, 70, and 91 days under ASTM C 39 and take the average at each age.

Use the following formula to calculate the equivalent 28-day modulus of rupture:

$MOR = MORs \times [Cp(t)/Cs(t)]^{1/2}$

where:

MOR = equivalent 28-day modulus of rupture in psi
MORs = average modulus of rupture in psi of 3 beams taken from the test strip at 28 days
Cs(t) = average compressive strength in psi of 3 cores taken from the test strip at (t): 28, 42, 56, 70, or 91 days under ASTM C39
Cp(t) = average compressive strength in psi of 3 cores taken from the pavement project at (t): 28, 42, 56, 70, or 91 days under ASTM C39

Submit all test results to engineer on the same date of completion of testing.

If the 28-day modulus of rupture is below 570 psi, select an age equal to one of the test ages from the test strip and drill 3 concrete cores under ASTM C42 of same diameter as the test strip from the area not complying to the acceptance strength requirement and test in presence of engineer for compressive strength under ASTM C39. The average compressive strength of 3 concrete cores will be used to determine the equivalent 28-day modulus of rupture.

SAMPLE NOT FOR BIDDING

Replace introductory clause in the 4th paragraph of section 40-1.03J with:

04-17-20

Do not allow traffic or use equipment on concrete pavement before the concrete has attained a modulus of rupture of 550 psi based on the Department's testing unless:

Add to the list in the 4th paragraph of section 40-1.03J:

04-17-20

2.5 You must monitor for damage and immediately discontinue access and suspend operations if any damage becomes apparent

Replace section 40-1.03N with:

10-16-20

40-1.03N Spall and Ravel Repair

Repair spalled or raveled areas that are any of the following:

1. Deeper than 0.05 foot
2. Wider than 0.10 foot
3. Longer than 0.30 foot

Repair spalls or ravels under section 41-4 and complete the repairs before opening a lane or lanes to traffic. Remove and replace JPCP slabs that have combined raveled areas more than 5 percent of the total slab area or a single raveled area more than 4 sq ft.

Replace section 40-2 with:

10-18-19

40-2 CONTINUOUSLY REINFORCED CONCRETE PAVEMENT

40-2.01 GENERAL

40-2.01A Summary

Section 40-2 includes specifications for constructing continuously reinforced concrete pavement.

Constructing continuously reinforced concrete pavement includes terminal joints and expansion joints.

40-2.01B Definitions

Reserved

40-2.01C Submittals

For field qualification, submit the test data for the coefficient of thermal expansion of the concrete.

If you request to use plastic chairs to support the transverse bars, submit a sample of the plastic chair, including:

1. Manufacturer's instructions for the applicable use and load capacity
2. Chair spacing
3. Your calculation for the load on a chair for the area of bar reinforcement it supports

During production, submit the test data for the coefficient of thermal expansion as an informational submittal.

40-2.01D Quality Assurance

For field qualification, test the coefficient of thermal expansion of the concrete under AASHTO T 336. The coefficient of thermal expansion must not exceed 6.0 microstrain/degree F.

During the evaluation of the test strip, the Engineer visually checks the reinforcement and dowel and tie bar placement.

During production, test the coefficient of thermal expansion of the concrete at a frequency of 1 test for each 5,000 cu yd of paving but not less than 1 test for a project with less than 5,000 cu yd of concrete.

40-2.02 MATERIALS

40-2.02A General

Reserved

40-2.02B Transverse Bar Assembly

Transverse bar assemblies may be used to support longitudinal bars instead of transverse bars and other support devices.

40-2.02C Intermediate Transverse Bars

Intermediate transverse bars do not need to be epoxy-coated for a project not shown to be in a high desert or any mountain climate region.

40-2.02D Joints

Joint seals for transverse expansion joints must comply with section 51-2.02.

Geosynthetic bond breaker for expansion joint support slabs must comply with section 36-2.

40-2.03 CONSTRUCTION

40-2.03A General

Reserved

40-2.03B Bar Reinforcement

Place bar reinforcement under section 52-1.03D except you may request to use plastic chairs. Plastic chairs will be considered only for support directly under the transverse bars. You must demonstrate the

SAMPLE NOT FOR BIDDING

vertical and lateral stability of the bar reinforcement and plastic chairs during the construction of the test strip.

For a transverse bar in a curve with a radius under 2,500 feet, place the reinforcement in a single continuous straight line across the lanes and aligned with the radius point as shown.

Lap splice bar reinforcement under section 52-6. For low carbon, chromium-steel bar reinforcement, the length of lap splice must be at least 30 inches.

40-2.03C Construction Joints

Transverse construction joints must be perpendicular to the lane line. Construct the joints so that the nearest longitudinal bar splice is at least 42 inches away from each side of the joint.

Clean joint surfaces before placing concrete against the surfaces. Remove laitance, curing compound, and other foreign materials.

40-2.03D Correcting Noncompliant Pavement Work

40-2.03D(1) General

The specifications for repairing cracks in section 40-1.03N do not apply to CRCP. Do not apply high-molecular-weight methacrylate to cracks in CRCP.

CRCP that develops raveling areas of 6 by 6 inches or greater requires partial depth repair.

40-2.03D(2) Partial Depth Repair

Partial depth repair must comply with section 41-4 except:

1. Determine a rectangular boundary which extends 6 inches beyond the damaged area. The depth of the saw cut must be between 2 inches from the surface to 1/2 inch above the longitudinal bars.
2. Provide additional reinforcement if each length of the repair boundaries is equal to or greater than 3 feet.

40-2.03D(3) Full-Depth Repair

40-2.03D(3)(a) General

Remove the full-depth of CRCP except for the portion of reinforcement to remain in place. Provide continuity of the reinforcement. For low carbon, chromium-steel bar reinforcement, the length of lap splice must be at least 30 inches. Splicing must comply with section 52-6. Do not damage the base, concrete, and reinforcement to remain in place. Place concrete in the area where you removed CRCP.

40-2.03D(3)(b) Transverse Cracks

Make initial full-depth transverse saw cuts normal to the lane line a distance of 3 feet on each side of the transverse crack.

40-2.03D(3)(c) Longitudinal Cracks

Remove the cracked area normal to the lane line for the full width of the lane a distance of 1 foot beyond each end of the crack. You may propose alternate limits with your repair plan.

40-2.03E Reserved

40-2.04 PAYMENT

Not Used

Add to the end of section 40-4.03B:

10-16-20

Replace JPCP for 4.5 feet on both sides of a joint with a rejected dowelbar.

Replace section 40-4.03C with:

10-16-20

40-4.03C Correcting Cracks

Correct JPCP cracks as follows:

SAMPLE NOT FOR BIDDING

1. Repair working cracks.
2. Remove and replace JPCP slabs that have uncontrolled cracks from joint to joint or edge to edge.
3. For other uncontrolled cracks, stop production, notify the Engineer, and submit a Corrective Action Plan for approval.

The Corrective Action Plan must include the following:

1. Root-cause analysis
2. Details for location, orientation, width, and depth of cracks
3. Proposed procedures for treatment or replacement
4. Details for demonstrating compliance with approved treatment procedures
5. Corrective steps to prevent reoccurrence

If the joints are sealed, repair working cracks by routing and sealing. Use a router mounted on wheels with a vertical shaft and a routing spindle that moves along the crack on its caster wheels. Form a reservoir 3/4-inch deep by 3/8-inch wide in the crack and fill with sealant. The equipment must not cause raveling or spalling.

Treat the contraction joint adjacent to the working crack by either of the following methods:

1. Applying epoxy resin under ASTM C881/C881M, Type IV, Grade 2
2. Pressure injecting epoxy resin under ASTM C881/C881M, Type IV, Grade 1

^^

41 EXISTING CONCRETE PAVEMENT

04-17-20

Replace the 2nd paragraph of section 41-10.01C with:

04-17-20

At least 15 days before delivery of the chemical adhesive to the job site, submit the SDS and the manufacturer's instructions for:

1. Handling and storage
2. Installation procedures
3. Minimum cure time
4. Use of chemical adhesive

SAMPLE
NOT FOR BIDDING

Replace the 3rd paragraph of section 41-10.02A with:

04-17-20

Each chemical adhesive system container must clearly and permanently show the:

1. Manufacturer's name
2. Material name
3. Lot or batch number
4. Expiration date
5. Evaluation report number
6. Directions for use
7. Storage requirement
8. Warnings or precautions required by State and federal laws and regulations

Replace section 41-10.03A with:

04-17-20

41-10.03A General

Drill holes for bars as shown without damaging the adjacent concrete. Clean drilled holes under the chemical adhesive manufacturer's installation instructions. Holes must be dry at the time of placing the chemical adhesive and bars. Immediately after inserting the bar into the chemical adhesive, support the bar to prevent movement until chemical adhesive has cured the minimum time recommended by the manufacturer.

Use a grout retention ring when drilling and bonding dowel bars. Apply dowel bar lubricant to the entire exposed portion of the dowel bar.

If the Engineer rejects a bar installation: stop paving, drilling, and bonding activities. Adjust your procedures and obtain the verbal authorization before resuming paving, drilling, and bonding.

Cut the rejected bar flush with the pavement joint surface and coat the exposed end of the bar with chemical adhesive. Offset the new hole 3 inches horizontally from the rejected hole's center.

^^

DIVISION VI STRUCTURES

46 GROUND ANCHORS AND SOIL NAILS

10-16-20

Replace section 46-1.01C(2) with:

SAMPLE NOT FOR BIDDING

04-17-20

46-1.01C(2) Shop Drawings

46-1.01C(2)(a) General

Submit shop drawings and supporting calculations to OSD, Documents Unit for initial review. Notify the Engineer of the submittal. Include in the notification the date and contents of the submittal.

Submit 6 copies of the general project information, 5 copies of the fabricators plan, and 3 copies of the construction plan.

Shop drawings and calculations must be sealed and signed by an engineer who is registered as a civil engineer in the State.

Allow 30 days for the Department's review.

After review, submit from 6 to 12 copies of final shop drawings and supporting calculations, as requested, for authorization and use during construction.

46-1.01C(2)(b) General Project Information Plan

General project information plan must include:

1. Name, address, emailaddress, and phone number of the contractor or subcontractor performing the work.
2. Wall construction schedule with construction sequence.
3. Wall construction staging schedule.
4. Table of lengths, tendon sizes, centralizers, and drilled-holediameters.
5. For ground anchors, calculations for determining the bonded length and assumed bonded strength. Do not rely on any capacity from the grout-to-ground bond within the unbonded length.
6. Procedures for installing verification and proof test nails.
7. Bench width requirements for installation equipment.
8. Excavation lift height and maximum duration of exposure for each wall zone, including:
   - 8.1. Methods to stabilize the exposed excavated face if face is not maintaining its integrity
   - 8.2. Supporting calculations

46-1.01C(2)(c) Fabrication Plan

Fabrication plan must include:

1. Details and specifications for:
   1.1. Ground anchors and anchorage system
   1.2. Production and test soil nails
2. Corrosion protection details and repair procedure for:
   2.1. Damaged sheathing
   2.2. Couplers
3. Testing equipment including jacking frame and appurtenant bracing.
4. For ground anchors, details for the transition between the corrugated plastic sheathing and the anchorage assembly. If shims are used during lock-off, include:
   4.1. Shim thickness
   4.2. Supporting calculations

You may start fabrication early by requesting an authorization of the fabrication plan portion before the complete shop drawings submittal is authorized. If the early fabrication plan is authorized, you are fully responsible for any changes that may occur after starting fabrication.

46-1.01C(2)(d) Construction Plan

Construction plan must include:

1. Methods of excavation for the staged lifts and types of excavation equipment.
2. Details for measuring the movement of the excavated face and the wall during stability testing and construction.
3. Measures to ensure wall and slope stability during construction.
4. Details for providing the bonded and unbonded length. If packers or other similar devices are used, include the type.
5. For soil nails, details for isolating installed proof test soil nails during shotcrete application.
6. Dewatering plan to divert, control, and dispose of surface and groundwater during construction
7. Drilling methods and equipment, including:
   7.1. Size of drilled hole
   7.2. Space requirements
8. Grout mix design and testing procedures.
9. Grout placement equipment and procedures, including minimum required cure time.
10. Testing equipment including method and equipment for measuring movement during testing.
11. For soil nails, include procedure for extracting grouted soil nails.

SAMPLE NOT FOR BIDDING

Add to the list in the 1st paragraph of section 46-1.01C(3):

10-19-18

12. Digital photo logs of extracted test soil nails

Replace the 2nd paragraph of section 46-1.01C(3) with:

10-19-18

Submit the test data in electronic and hard copy format within 1 business day after testing is complete. Upon completion of the wall, send an email of the soil nail test results as a tabulated spreadsheet to the Engineer and Geotechnical.Data@dot.ca.gov. Include the contract number and Department's structure number of the wall in the subject line of the email.

Replace *Not Used* in section 46-1.01D(1) with:

10-19-18

Welding must comply with AWS D1.1.

Add to the end of section 46-1.03A:

10-19-18

Shotcrete must comply with section 53-2.

10-19-18

Delete the 3rd paragraph of section 46-1.03B.

Replace the 1st paragraph of 46-2.02B with:

04-17-20

Strand tendons, bar tendons, and bar couplers must comply with section 50-1.02B and must be on the Authorized Material List for post-tensioning systems.

Replace the 1st sentence in the 2nd paragraph of section 46-2.02B with:

10-19-18

The anchorage enclosure and the steel tube and bearing plate of the anchorage assembly must be galvanized steel and comply with sections 55-1.02D(1) and 55-1.02E(1).

Replace item 9 in the list in the 3rd paragraph of section 46-2.02D with:

10-19-18

9. Have the physical properties shown in Table 4.1 of *Recommendations for Prestressed Rock and Soil Anchors* published by the Post-Tensioning Institute

Replace the 4th paragraph of section 46-2.03D with:

10-19-18

Immediately after lock-off, perform a lift-off test to verify that the lock-off load has been attained. The lift-off load must be within 10 percent of the specified lock-off load. If necessary adjust the shim thickness to achieve the lock-off load. If the load is not within 10 percent of the specified lock-off load, the anchorage must be reset and another lift-off load reading must be made. Repeat the process until the specified lock-off load is obtained.

Replace the 2nd paragraph of section 46-3.01A with:

10-19-18

A soil nail consists of a solid steel bar with an anchorage assembly that is placed in a drilled hole and then grouted.

Replace section 46-3.01D(2)(b)(ii)(1) with:

10-19-18

46-3.01D(2)(b)(ii)(1) General

Determine the test load using the following equation:

$T = Lb \times Qb$

where:
T = test load, pounds
Lb = soil nail bonded length, feet, 10 feet minimum
Qb = test load per unit length of bond, pounds/foot

SAMPLE NOT FOR BIDDING

Replace the 8th paragraph of section 46-3.01D(2)(b)(ii)(2) with:

04-19-19

If the Engineer revises soil nail lengths or test load per unit length of bond values, any additional verification test soil nails are change order work.

Replace section 46-3.02A with:

04-19-19

46-3.02A General

Each production soil nail must be either a solid steel bar encapsulated full length in a grouted corrugated plastic sheathing or an epoxy-coated prefabricated solid steel bar partially encapsulated in a grouted corrugated plastic sheathing as shown.

Epoxy-coated prefabricated solid steel bars must comply with the specifications for epoxy-coated prefabricated reinforcement in section 52-2.03, except the average coating thickness after curing must be from 10 to 15 mils.

Solid steel bar for test soil nails is not required to be epoxy coated or encapsulated in grouted plastic sheathing.

Replace the heading of section 46-3.02B with:

10-19-18

Anchorage Assemblies

Replace the 2nd paragraph of section 46-3.02B with:

10-16-20

Concrete anchors on bearing plates must comply with the specifications for studs in clause 9 of AWS D1.1.

Replace section 46-3.02C with:

10-19-18

46-3.02C Solid Steel Bars

Solid steel bars must be either:

1. Threaded bars with spirally-deformed, ribbed threads continuous along the entire length of the bar.
2. Deformed reinforcing bars with at least a 6-inch length of thread cut into the bar on the anchorage end. Use coarse threading and the next larger reinforcing bar size.

Solid steel bars must comply with ASTM A615/A615M or A706/A706M, Grade 60 or ASTM A615/A615M, Grade 75.

Splicing must be authorized.

Epoxy coating at the anchorage end of epoxy-coated bars may be omitted for a maximum of 6 inches. Metal surfaces of assembled splices of epoxy-coated bars must be epoxy coated.

Choose the solid steel bar size and grade for test soil nails. Test soil nail bars must not be smaller than the production soil nails they represent.

Replace the 1st paragraph of section 46-3.03A with:

10-19-18

Determine the drilled-hole diameter and installation method required to achieve the test load per unit length of bond values shown.

SAMPLE NOT FOR BIDDING

Replace the introductory clause to the list in the 3rd paragraph of section 46-3.03B with:

10-19-18

Install verification test soil nails by any of the following means:

Replace the 7th and 8th paragraphs of section 46-3.03B with:

10-19-18

Remove each verification and proof test soil nail to 6 inches behind the front face of the shotcrete after testing is complete. Fill the voids with grout.

If ordered, extract verification and proof test soil nails selected by the Engineer. Fill the voids with grout. Photograph the extracted test nails in 5-foot section intervals.

Replace the 3rd paragraph of section 46-3.03C with:

10-19-18

Splice the solid steel bar only where shown on the authorized shop drawings or at the end of a soil nail that is ordered to be lengthened.

Replace the 1st sentence in the 7th paragraph of section 46-3.03C with:

10-19-18

Hand tighten the nut on the end of the production soil nail bar before shotcrete hardening begins. Ensure the bearing plate is fully seated on the shotcrete.

^^

SAMPLE
NOT FOR BIDDING

47 EARTH RETAINING SYSTEMS

10-16-20

Replace section 47-3 with:

10-16-20

47-3 RESERVED

^^

48 TEMPORARY STRUCTURES

10-16-20

Replace *signed* at each occurrence in section 48 with:

04-17-20

sealed and signed

Replace section 48-1.01 with:

04-17-20

48-1.01 GENERAL

48-1.01A Summary

Section 48-1 includes general specifications for constructing temporary structures.

If a railroad company is involved, falsework, temporary supports, and jacking support systems must comply with any additional requirements of the railroad company.

48-1.01B Definitions

frame: Portion of a bridge between expansion joints.

jacking: Positioning of new or existing structures or portions thereof, by jacks or other mechanical methods.

previously welded splice: Splice made in a temporary-structure member in compliance with AWS D1.1 or other recognized welding standard, before contract award.

temporary-structure adjustment: Grading or adjusting of temporary structures.

48-1.01C Submittals

48-1.01C(1) General

Submit 6 copies of shop drawings and 2 copies of calculations for:

1. Falsework
2. Temporary supports
3. Temporary decking
4. Jacking
5 Adjustment

48-1.01C(2) Temporary-Structure Inspection Report

Temporary-structure inspection reports must be:

1. Prepared daily during jacking and temporary-structure adjustment activities. Reports must be submitted:
   1.1. By close of business the following business day
   1.2. Before opening the roadway on or under the temporary structure to traffic
2. Prepared before placing concrete

The temporary-structure inspection report must be prepared, sealed, and signed by the temporary-structure engineer.

The temporary-structure inspection report must include:

1. Description of the progress of the jacking and adjustment activities
2. Description and evaluation of the condition of the temporary structure and supported structure
3. Inspection findings and the certifications listed in section 48-1.01D(2) that are completed by the temporary-structure engineer

48-1.01C(3) Adjustment Plan Shop Drawings

Submit adjustment plan shop drawings if the falsework or temporary supports are to be adjusted more than 1/2 inch.

The adjustment plan shop drawings and calculations must be sealed and signed by the temporary-structure engineer.

Adjustment plan shop drawings and calculations must include:

1. Methods and sequencing for the adjustment.
2. Descriptions of equipment to be used.
3. Location of jacks or other adjustment equipment.
4. Detailed sequence for releasing of bracing.
5. Details and calculations for the stability and adjustment of the falsework or temporary supports during all stages of the adjustment including any additional required temporary bracing.
6. Calculations that include stresses, deflections, and loads in all load carrying members, bracing, and equipment as well as any redistributed loads resulting from the adjustment. Calculations must also include the effect of the adjustment sequence.

SAMPLE NOT FOR BIDDING

48-1.01D Quality Assurance

48-1.01D(1) General

Reserved

48-1.01D(2) Temporary-Structure Engineer

The temporary-structure engineer must:

1. Be registered as a civil engineer in the State.
2. Have experience in temporary structure design or temporary structure construction inspection.
3. Seal and sign the shop drawings.
4. Be present during all jacking and adjustment activities.
5. Prepare, seal, and sign a daily temporary-structure inspection report during jacking and temporary-structure adjustment activities.
6. The temporary-structure engineer must inspect and certify that:
   - 6.1. Temporary structure is stable before jacking activities or adjustments and before concrete is placed.
   - 6.2. Temporary structure complies with the authorized shop drawings.
   - 6.3. Materials and workmanship are satisfactory for the work.
7. Stop activity if any unanticipated issues occur.
8. Propose revisions to the authorized shop drawings to address any issues. Do not resume temporary structure activities until the proposed revisions are authorized.

The temporary-structure engineer may assign a representative to perform the temporary structure activities specified in section 48-1.01D. The temporary-structure engineer must submit a letter that is sealed and signed certifying that the representative:

1. Is registered as a civil engineer in the State
2. Has experience in temporary structure design or temporary structure construction inspection
3. Is familiar with the authorized shop drawings and the stresses the members are required to sustain
4. Will attend at least 1 job site visit with the Engineer and your temporary-structure superintendent to discuss the authorized shop drawings

SAMPLE NOT FOR BIDDING

Add to list in the 2nd paragraph of section 48-2.01A:

04-17-20

5. Includes illumination for vehicular and pedestrian traffic

Add to the end of section 48-2.01A:

04-17-20

Falsework used as temporary supports must comply with section 48-3.

Replace section 48-2.01B with:

04-17-20

48-2.01B Definitions

independent support system: Support system that is in addition to a falsework removal system that employs methods of holding falsework from above by winches, hydraulic jacks with prestressing steel, HS steel rods, or cranes.

falsework release: Lowering of falsework to the point that it no longer supports the loads imposed by the permanent structure, or any element, that the falsework was designed to support during construction. Falsework release includes blowing sand from sand jacks, turning screws on screw jacks, and removing wedges.

falsework removal: Releasing, lowering, and disposing of the falsework.

Add between the 1st and 2nd paragraphs of section 48-2.01C(1):

10-16-20

Submit a certificate of compliance for the timber used to construct falsework. The certificate of compliance must verify the grade and species of the timber.

Replace the last paragraph of section 48-2.01C(1) with:

04-17-20

Submit a falsework lighting plan at least 10 days before starting construction on falsework containing openings for vehicular traffic, pedestrians, or railroad.

The plan must include:

1. Location, spacing, and mounting heights of luminaires
2. Types of luminaires
3. Calculations of illumination levels used to determine placement of luminaries
4. Plot of illumination points used to demonstrate compliance with the illumination levels requirements
5. Lighting circuit diagrams

Replace section 48-2.01C(2) with:

04-17-20

48-2.01C(2) Shop Drawings

Submit shop drawings and calculations for falsework.

The falsework shop drawings and calculations must be sealed and signed by the temporary-structure engineer for any of the following conditions:

1. Height of any portion of the falsework measured from the ground line to the soffit of the superstructure is more than 14 feet
2. Any individual falsework clear span is more than 16 feet
3. Falsework contains openings for vehicular, pedestrian, or railroad traffic
4. Falsework removal systems support falsework from above by winches, hydraulic jacks with prestressing steel, HS rods or cranes

10-16-20

Shop drawings and calculations for falsework piles with a calculated nominal resistance greater than 100 tons must be sealed and signed by an engineer who is registered as a civil or geotechnical engineer in the State.

04-17-20

Falsework shop drawings and calculations must include:

1. Details of erection and removal activities.
2. Methods and sequences of erection and removal, including equipment.
3. Maximum falsework adjustment height.
4. Details for the stability of falsework during all stages of erection and removal activities.
5. Superstructure placing diagram showing concrete placing sequence and construction joint locations. If a schedule for placing concrete is shown, no deviation is allowed.
6. Assumed soil bearing values for falsework footings.
7. Maximum horizontal distance falsework piles may be pulled for placement under caps.
8. Maximum deviation of falsework piles from vertical.
9. Anticipated total falsework and formwork settlements, including footing settlement and joint take-up.
10. Grade, species, and type of any timber or structural composite lumber. Include manufacturer's tabulated working stress values for composite lumber.

SAMPLE NOT FOR BIDDING

11. Design calculations that include stresses and deflections in load carrying members.
12. Provisions for complying with temporary bracing requirements.
13. Welding standard used for welded members, including previously welded splices.
14. The following information for falsework removal systems employing methods of holding falsework from above by winches, hydraulic jacks with prestressing steel, HS steel rods, or cranes:
    14.1. Design code used for the analysis of the structural members of the independent support system
    14.2. Provisions for complying with current Cal/OSHA requirements
    14.3. Load tests and ratings within 1 year of intended use of hydraulic jacks and winches
    14.4. Location of the winches, hydraulic jacks with prestressing steel, HS steel rods, or cranes
    14.5. Analysis showing that the bridge deck and overhang are capable of supporting all loads at all time
    14.6. Analysis showing that winches will not overturn or slide during all stages of loading
    14.7. Location of deck and soffit openings if openings are needed
    14.8. Details of repair for the deck and soffit openings after falsework removal

Submit separate falsework shop drawings and calculations for each:

1. Single bridge or portion of bridge
2. Frame for multi-frame bridges

Add to section 48-2.01D:

04-17-20

48-2.01D(3) Falsework Lighting

After the installation of falsework lighting, measure the illumination levels in the presence of the Engineer, during the hours of darkness. For pavement and pedestrian walkway lighting, the measurements must be taken at ground level with the meter sensor pointing upward. For portal lighting, measurements must be taken at the face of the surface areas specified with the meter sensor perpendicular to the surface areas.

Falsework lighting must comply with the illumination levels shown in the following table:

Illumination Levels

Illumination Area	Average Illuminance (fc) (E_{avg})	Uniformity (E_{avg}/E_{min})
Pavement	0.6	4.0
Portal	1.0	4.0
Pedestrian Walkway	2.0	4.0

SAMPLE NOT FOR BIDDING

Replace the 1st paragraph of section 48-2.01D(2) with:

04-17-20

Except for previously welded splices, welding must comply with AWS D1.1. Welding of bar reinforcement must comply with AWS D1.4.

Replace the 2nd paragraph of section 48-2.01D(2) with:

10-16-20

Perform NDT on welded splices using UT or RT. Each weld and any repair made to a previously welded splice must be tested. You must select locations for testing. The length of a splice weld where NDT is to be performed must be a cumulative weld length equal to 25 percent of the original splice weld length. The cover pass must be ground smooth at test locations. Acceptance criteria must comply with the specifications for cyclically loaded nontubular connections subject to tensile stress in clause 8 of AWS D1.1. If repairs are required in a portion of the weld, perform additional NDT on the repaired sections. The NDT method chosen must be used for an entire splice evaluation, including any repairs.

Replace *Reserved* in section 48-2.02A with:

04-17-20

Wood must comply with the NDS. Timber used for falsework construction must be seasoned with moisture content not to exceed 19 percent.

Add to the end of section 48-2.02B(1):

04-17-20

Where falsework for multiple level bridges is supported on the deck of a structure:

1. Falsework must bear directly on either:
   1.1. Girder stems, bent caps, or end diaphragms of the supporting structure.

   1.2. Falsework sills that transmit the load to the girder stems, bent caps, or end diaphragms without applying any stress to the deck slab.
2. Additional falsework must be in place beneath the supporting structure when construction loads are imposed on the supporting structure. Design and construct additional falsework to support all construction loads imposed on the supporting structure from the upper structure.

Design the falsework lighting, for pavement, portals, and pedestrian walkways at or under falsework openings, to illuminate:

1. Falsework portals during the hours of darkness
2. Pavement, with portals less than 150 feet apart, during the hours of darkness
3. Pavement, with portals 150 feet or more apart, 24 hours a day
4. Pedestrian walkways 24 hours a day

Lighting branch circuits must not exceed 20 A.

SAMPLE NOT FOR BIDDING

Replace the 2nd sentence in the 1st paragraph of section 48-2.02B(2) with:

04-17-20

The minimum total design load for any falsework for combined live and dead load is 100 psf, including members that support walkways.

Replace the 4th paragraph of section 48-2.02B(2) with:

10-19-18

The assumed horizontal load the falsework bracing system must resist must be the sum of the actual horizontal loads due to equipment, construction sequence or other causes, and a wind loading. The assumed horizontal load in any direction must be at least 2 percent of the total dead load.

Replace the table in the 7th paragraph of section 48-2.02B(2) with:

04-17-20

Height zone, H (feet above ground)	Wind pressure value	
	Shores or columns adjacent to traffic (psf)	At other locations (psf)
H≤30	20	15
30<H≤50	25	20
50<H≤100	30	25
H>100	35	30

Replace the table in the 8th paragraph of section 48-2.02B(2) with:

04-17-20

Height zone, H (feet above ground)	Wind pressure value	
	For members over and bents adjacent to traffic opening (psf)	At other locations (psf)
H≤30	2.0 *Q*	1.5 *Q*
30<H≤50	2.5 *Q*	2.0 *Q*
50<H≤100	3.0 *Q*	2.5 *Q*
H>100	3.5 *Q*	3.0 *Q*

NOTE:

$Q = 1 + 0.2W$, but not more than 10

where:

W = width of the falsework system in feet, measured in the direction of the wind force

Replace section 48-2.02B(3)(b) with:

04-17-20

48-2.02B(3)(b) Timber

Design stresses for timber and timber connections must not exceed stresses specified in the current NDS.

Adjustment factors used to determine allowable stresses for timber members and connections must comply with NDS for the appropriate condition of use and species.

Deflection due to concrete loading only must not exceed 1/240 of the span length.

Pile design load for timber piles must not exceed 45 tons.

SAMPLE NOT FOR BIDDING

Replace the 1st and 2nd paragraphs of section 48-2.02B(3)(c) with:

04-17-20

Except for flexural compressive stresses, the design load for identified grades of steel must not exceed the allowable strength specified in the AISC *Steel Construction Manual*.

Except for flexural compressive stresses, the design load for unidentified steel must not exceed the allowable strength specified for steel complying with ASTM A36/A36M in the AISC *Steel Construction Manual* or as shown in the following table:

Quality characteristic	Requirement
Tension, axial and flexural (psi)	22,000
Compression, axial (psi)	$16{,}000 - 0.38(L/r)^{2a}$
Shear on gross section of web of rolled shapes (psi)	14,500
Web yielding for rolled shapes (psi)	27,000
Modulus of elasticity (E) (psi)	30×10^6

NOTES:

L = unsupported length, inches

r = radius of gyration of the member, inches

[a] L/r must not exceed 120

Replace the table in the 3rd paragraph of section 48-2.02B(3)(c) with:

10-19-18

Quality characteristic	Requirement
Compression, flexural (psi)	$12{,}000{,}000/[(L \times d)/(b \times t)]^a$
Deflection due to concrete loading only	1/240 of the span
Modulus of elasticity (E) (psi)	30×10^6

NOTES:

L = unsupported length, inches
d = least dimension of rectangular columns or the width of a square of equivalent cross-sectional area for round columns, or the depth of beams, inches
b = width of the compression flange, inches
t = thickness of the compression flange, inches
F_y = specified minimum yield stress in psi

[a]Not to exceed (1) 22,000 psi for unidentified steel, (2) 22,000 psi for steel complying with ASTM A36/A36M, or (3) $0.6F_y$ for other identified steel

Add to section 48-2.02:

04-17-20

48-2.02C Falsework Lighting

48-2.02C(1) General

A falsework luminaire must:

1. Be commercially available
2. Include brackets and locking screws

48-2.02C(2) Pavement Illumination

Not Used

48-2.02C(3) Portal Illumination

Portal illumination includes plywood clearance guides 4 feet wide by 8 feet high and luminaires.

48-2.02C(4) Pedestrian Walkway Illumination

Not Used

SAMPLE NOT FOR BIDDING

04-17-20

Delete the 3rd paragraph of section 48-2.03A.

Add to section 48-2.03A:

04-17-20

During concrete placement, if (1) events occur that the Engineer determines will result in a structure that does not comply with the structure as described or (2) settlement variance is greater than 3/8-inch from the values shown on shop drawings, stop concrete placement and apply corrective measures. If the measures are not provided before initial concrete set occurs, stop concrete placement at the location ordered.

Detour traffic from the lanes over which falsework is being erected, released, adjusted, or removed.

Replace the 3rd paragraph of the section 48-2.03B with:

04-17-20

Falsework piles must be driven and assessed under section 49. The actual nominal driving resistance must be at least twice the falsework pile design load. For pile acceptance, the required number of hammer blows in the last foot of driving is determined using the formula in 49-2.01A(4)(c).

Add between the 2nd and 3rd paragraphs of section 48-2.03C:

10-19-18

Falsework erection includes adjustments or removal of components that contribute to the horizontal stability of the falsework system.

04-17-20

Delete the 8th paragraph of section 48-2.03C.

Replace section 48-2.03D with:

04-17-20

48-2.03D Removal

Release and remove falsework such that portions of falsework to be removed remain stable.

Falsework release includes blowing sand from sand jacks, turning screws on screw jacks, and removing wedges.

Except for concrete above the deck, do not release falsework supporting any span of a:

1. Simple span bridge before 10 days after the last concrete has been placed
2. Continuous or rigid frame bridge before 10 days after the last concrete has been placed:
   2.1. In that span
   2.2. In adjacent portions of each adjoining span for a length equal to one-half of the span where falsework is to be released
3. Simple span, continuous, or rigid frame bridge until the supported concrete has attained a compressive strength of 2,880 psi or 80 percent of the specified strength, whichever is greater

Do not release falsework for prestressed portions of structures until prestressing steel has been tensioned.

Do not release falsework supporting any span of a continuous or rigid frame bridge until all required prestressing is complete (1) in that span and (2) in adjacent portions of each adjoining span for a length equal to at least one half of the span where falsework is to be released.

Release falsework supporting spans of CIP girders, slab bridges, or culverts before constructing or installing railings or barriers on the spans, unless authorized.

Release falsework for arch bridges uniformly and gradually. Start at the crown and work toward the springing. Release falsework for adjacent arch spans concurrently.

Do not release falsework that supports overhangs, deck slabs between girders, or girder stems that slope 45 degrees or more from vertical before 7 days after deck concrete has been placed.

You may release falsework supporting the sides of girder stems that slope less than 45 degrees from vertical before placing deck concrete if you install lateral supports. Lateral supports must be:

1. Designed to resist rotational forces on the girder stem, including forces due to concrete deck placement
2. Installed immediately after each form panel is removed
3. Installed before releasing supports for the adjacent form panel

Do not release falsework for bent caps supporting steel or PC concrete girders before 7 days after placing bent cap concrete.

Release falsework for structural members subject to bending as specified for simple span bridges.

Do not release falsework for box culverts and other structures with decks lower than the roadway pavement and span lengths of 14 feet or less until the last placed concrete has attained a compressive

SAMPLE NOT FOR BIDDING

strength of 1,600 psi. Curing of the concrete must not be interrupted. Falsework release for other box culverts must comply with the specifications for the release of bridge falsework.

Do not release falsework for arch culverts sooner than 40 hours after concrete has been placed.

Remove falsework piling to at least 2 feet below the original ground or streambed. Remove falsework piling driven within ditch or channel excavation limits to at least 2 feet below the bottom and side slopes of the excavated areas.

Falsework removal systems employing methods of holding falsework by winches, hydraulic jacks with prestressing steel, HS steel rods, or cranes must also be supported by an independent support system when the falsework is over vehicular, pedestrian, or railroad traffic openings open to traffic.

Bridge deck and soffit openings used to facilitate falsework removal activities must:

1. Have a 6-inch maximum diameter opening.
2. Be located away from the wheel paths for deck openings.
3. Be formed with corrugated HDPE pipe complying with section 20-2.07B(3).

Before filling the bridge deck and soffit openings with concrete:

1. Trim HDPE pipes 1 inch from the exposed surface of the top of deck, bottom overhand, and soffit
2. Clean and roughen concrete surfaces of opening. Fill the opening with rapid setting concrete complying with section 60-3.02B(2) or with a concrete mix of equal or higher strength than the deck. Finish surface must comply with section 51-10.3F(2).

Falsework removal over roadways with a vertical traffic opening of less than 20 feet must start within 14 days after the falsework is eligible to be released and must be completed within 45 days after it is eligible to be released.

SAMPLE NOT FOR BIDDING

Replace section 48-2.03E with:

04-17-20

48-2.03E Falsework Lighting

48-2.03E(1) General

Notify the Engineer at least 5 business days before the installation of the falsework lighting.

Fasten power cables to the supporting structure at a minimum 3-foot intervals and within 12 inches from every box. Encase cables within 8 feet of the ground in a minimum 1/2-inch Type 1 conduit.

Enclose splices in junction boxes.

Provide power for the falsework lighting under section 87-20.

Energize lighting circuits immediately after supporting structures have been erected.

48-2.03E(2) Pavement Illumination

Provide pavement illumination on roadways beneath falsework structures.

Install luminaires:

1. Along the sides of the opening not more than 4 feet behind or 2 feet in front of the roadway face of the temporary railing
2. 12 to 16 feet above the roadway surface without obstructing the light pattern on the pavement
3. Aimed to avoid glare to motorists
4. Spaced to comply with the illumination levels table
5. At the ends no more than 10 feet inside portal faces

Measure the illumination levels at a minimum two points per lane, one on each side within one-quarter of the lane width from the lane stripe. Use this pattern to start the measurements at both ends of the falsework and then at 15-foot intervals through the length of the pavement under the falsework.

48-2.03E(3) Portal Illumination

Provide portal illumination on the sides facing traffic. Install luminaires and clearance guides immediately after falsework vertical members are erected.

Fasten clearance guides:

1. To the vertical support adjacent to the traveled way, facing traffic
2. Vertically with the bottom of the clearance guide from 3 to 4 feet above the roadway
3. With the center located approximately 3 feet horizontally behind the railing face on the roadway side

Paint clearance guides before each installation with not less than 2 applications of flat white paint.

If ordered, repainting is change order work.

Install luminaires on the structure directly over the vertical support, approximately 16 feet above the pavement and 6 feet in front of the guides. Aim the luminaires to illuminate the exterior falsework beam, the clearance guides, and the overhead clearance sign and comply with the illumination levels table.

Measure the illumination levels at the center and four corners of the clearance guides, at the exterior falsework beam, and at the overhead clearance sign.

48-2.03E(4) Pedestrian Walkway Illumination

Provide pedestrian walkway illumination immediately after the protective overhead covering is erected.

Install the luminaires a minimum 8 feet clearance in the protective overhead covering and center them over the pedestrian walkway. Space the luminaires through the pedestrian walkway as needed to comply with the illumination levels table. Install luminaires at the ends no more than 7 feet inside the pedestrian walkway openings.

Measure the illumination levels at a minimum two points, one on each side within one-quarter of the walkway width from the edge. Use this pattern to start the measurements at both ends of the falsework and then at 10-foot intervals through the length of the pedestrian walkway.

SAMPLE
NOT FOR BIDDING

Replace section 48-3.01A with:

10-16-20

48-3.01A Summary

Section 48-3 includes specifications for providing temporary supports for structures during retrofit, reconstruction, erection, and removal activities.

Jacking assemblies, accessories, and activities required to jack and support structures must comply with section 48-5.

Falsework must comply with section 48-2.

Replace section 48-3.01B with:

10-16-20

48-3.01B Definitions

Reserved

Replace the 2nd paragraph of section 48-3.01C(1) with:

10-16-20

Submit a copy of the displacement monitoring record after completing the work.

Replace the 1st and 2nd paragraphs of section 48-3.01C(2) with:

10-16-20

Submit the following:

1. Descriptions and values of all loads, including construction equipment loads.
2. Descriptions of equipment to be used.
3. Details and calculations for jacking and supporting the structure.
4. Stress sheets, anchor bolt layouts, shop details, erection plans, and removal plans for the temporary supports.
5. Assumed soil bearing values and design stresses for temporary support footings, including anticipated foundation settlement.
6. Maximum distance temporary-support piles may be pulled for placement under footing caps.
7. Maximum deviation of temporary-support piles from a vertical line through the point of fixity.
8. Details for use of permanent piles. Include any additional loads imposed on the piles.
9. Details for additional bracing required during erection and removal of temporary supports.
10. Details of the displacement monitoring system, including equipment, location of control points, and methods and schedule for taking measurements.
11. Mitigation plan for jacking the structure if settlement occurs in the temporary supports.

Calculations must show a summary of computed stresses in (1) temporary supports, (2) connections between temporary supports and the structure, and (3) load-supporting members. The computed stresses must include the effect of the jacking sequence. Calculations must include a lateral stiffness assessment of the temporary support system.

10-19-18

Delete the 4th paragraph of section 48-3.01C(2).

Replace section 48-3.01D with:

10-16-20

48-3.01D Quality Assurance

48-3.01D(1) General

Welding, welder qualification, and welding inspection for temporary supports must comply with AWS D1.1.

48-3.01D(2) Quality Control

Reserved

Replace section 48-3.02B with:

04-17-20

48-3.02B Design Criteria

The Engineer does not authorize temporary support designs based on allowable stresses or design load greater than those specified in section 48-2.02B(3).

If falsework loads are imposed on temporary supports, the temporary supports must also satisfy the deflection criteria in section 48-2.02B(3).

The temporary support system must support the initial jacking loads and the minimum temporary support design loads and forces shown. As a minimum, the horizontal load to be resisted in any direction by the temporary support system must be (1) the sum of actual horizontal loads due to equipment, construction sequence, or other causes plus an allowance for wind and (2) not less than 5 percent of the total supported dead load at the location being considered. Adjust vertical design loads for the weight of the temporary supports and jacking system, construction equipment loads, and additional loads imposed by jacking activities. Construction equipment loads must be at least 20 psf of deck surface area of the frame involved.

SAMPLE NOT FOR BIDDING

10-16-20

For column repair or removal, the temporary supports must resist the described lateral design forces applied at the point where the column to be removed meets the superstructure. Stiffness of temporary supports must match the described minimum stiffness. If the temporary support stiffness exceeds the described minimum stiffness, increase the lateral design forces to be compatible with the temporary support lateral stiffness.

04-17-20

Place temporary supports, that are resisting transverse lateral loads, within 1/2 of the span length from the existing bent. Place temporary supports, that are resisting longitudinal lateral loads, within the frame where columns are to be removed.

You may use the permanent piles as part of the temporary support foundation. Do not move or adjust permanent piles from the locations shown. If you install permanent piles longer than described to support the temporary supports above the top of the footing and later cut off the piles at their final elevation, you must use shear devices adequate to transfer all pile reactions into the footing.

Design temporary support footings to carry the loads imposed without exceeding the estimated soil bearing values or anticipated settlements. You must determine soil bearing values.

Where temporary supports are placed on the deck of an existing structure:

1. Temporary supports must bear either:
   1.1. Directly on girder stems, bent caps, or end diaphragms of the supporting structure
   1.2. On falsework sills that transmit the load to the stems, bent cap, or end diaphragms without overstressing any member of the new or existing structure
2. Temporary supports must not induce permanent forces into the completed structure or produce cracking.
3. Place additional temporary supports beneath the existing structure where temporary support loads are imposed on the existing structure. Design and construct the additional temporary supports to support all loads from the upperstructure and construction activities.

Provide additional bracing as required to withstand all imposed loads during each phase of temporary support erection and removal. Include wind loads complying with section 48-2.02B(2) in the design of additional bracing.

Mechanically connect (1) the structure to the temporary supports and (2) the temporary supports to their foundations. Mechanical connections must be capable of resisting the lateral design forces. Friction forces developed between the structure and temporary supports (1) are not considered an effective mechanical connection and (2) must not be used to reduce lateral forces.

Design mechanical connections to accommodate movement resulting from adjustments made to the temporary supports.

If the concrete is to be prestressed, design temporary supports to support changes to the loads caused by prestressing forces.

Temporary supports must comply with the specifications for falsework in section 48-2.02B(4).

Replace section 48-3.03 with:

10-16-20

48-3.03 CONSTRUCTION

Where described, install temporary crash cushion modules under section 12-3.22 before starting temporary support activities. Remove crash cushion modules when authorized.

Construct and remove temporary supports under the specifications for falsework in section 48-2.03.

If traffic is carried on the structure on temporary supports, do not release temporary supports until the supported concrete has attained 100 percent of the described strength.

SAMPLE NOT FOR BIDDING

Remove attachments from the existing structure. Restore concrete surfaces to original conditions except where permanent alterations are shown.

Replace section 48-4.01 with:

04-17-20

48-4.01 GENERAL

48-4.01A Summary

Section 48-4 includes specifications for temporary decking for joint or deck reconstruction.

Temporary decking must consist of a steel plate system that spans the incomplete work.

Concrete anchorage devices and nonskid surface must comply with section 75-3.

48-4.01B Definitions

Reserved

48-4.01C Submittals

Submit shop drawings and calculations for temporary decking.

Shop drawings and calculations for temporary decking must be sealed and signed by an engineer who is registered as a civil engineer in the State.

Temporary decking shop drawings and calculations must include:

1. Storage location of equipment and materials that allows for 1 shift of work and placement of temporary decking within the time allowed
2. Construction sequence and schedule details
3. Cure time for concrete to be placed under temporary decking
4. Details for removing temporary decking and restoring the existing structure

If temporary decking is not shown, shop drawings and calculations must also include:

1. Design calculations, including the description, location, and value, of all loads
2. Details of the connection between the temporary decking and the existing or new structure

Submit a certificate of compliance for temporary decking materials.

Sections 48-1.01C(2), 48-1.01C(3), and 48-1.01D(2) do not apply for temporary decking.

48-4.01D Quality Assurance

Reserved

SAMPLE NOT FOR BIDDING

Replace *Not Used* in section 48-4.02 with:

04-17-20

48-4.02A General

Yield strength of steel plate must be greater than or equal to 36 ksi.

Bolts must comply with ASTM F3125, Grade A325.

Nuts must comply with ASTM A563/563M.

Material for temporary tapers must be rapid setting concrete or polyester concrete complying with section 60-3.02B(2) or 60-3.04B(2).

48-4.02B Design Criteria

If temporary decking is not shown, the temporary decking design must:

1. Comply with the unfactored permit loads, braking force, and HL93 loads except lane load from the current *AASHTO LRFD Bridge Design Specifications* with *California Amendments*.

2. Not exceed the allowable stresses or design loads specified in section 48-2.02B(3).
3. Have live load deflection not exceeding 1/300 of the temporary decking span for the design load.
4. Provide for temporary decking with a uniform surface with a coefficient of friction of at least 0.35 when measured under California Test 342.
5. Provide for temporary decking that is mechanically connected to the existing structure and adjacent approaches. If a steel plate spans a joint, the mechanical connection must accommodate at least 50 percent of the movement rating shown for that joint.
6. Not overstress, induce permanent forces into, or produce cracking in the existing structure.

Replace section 48-4.03 with:

04-17-20

48-4.03 CONSTRUCTION

For bolted connections, drill the holes without damaging the adjacent concrete. Do not damage existing reinforcement.

If the temporary decking does not extend the entire width of the roadway, taper the sides of the temporary decking at a 12:1 (horizontal: vertical) ratio.

Cure temporary tapers at least 3 hours before allowing traffic on the temporary decking.

If unanticipated displacements, cracking, or other damage occurs to the existing structure or to any new components installed in or adjacent to the deck, stop work on the deck and perform corrective measures.

Edges of steel plate systems must be in full contact with the existing deck and the adjacent approach slab. If used, shims must be securely attached to the plate.

Do not allow traffic on deck concrete until it has attained the compressive strength shown.

When temporary decking is no longer needed, immediately remove temporary decking materials and connections from the existing structure. Patch holes with rapid setting concrete complying with section 60-3.02. Remove modifications to the existing structure except where permanent alterations are shown.

SAMPLE
NOT FOR BIDDING

Replace section 48-5 with:

10-16-20

48-5 JACKING

48-5.01 GENERAL

48-5.01A Summary

Section 48-5 includes specifications for jacking the bridge superstructure using a jacking support system.

48-5.01B Definitions

Reserved

48-5.01C Submittals

The submittal for shop drawings and calculations must include:

1. Descriptions, locations, and values of all loads, including construction equipment loads
2. Jacking construction sequence including staging areas for equipment and materials for jacking support systems
3. Type, model number, and weight of equipment to be used including:
   3.1. Jack capacity
   3.2. Certified calibration chart for each jack
   3.3. Certified indicator to determine jacking force
4. Details and calculations with the load paths for jacking and supporting the structure including a redundant system of supports to ensure stability of the jacking system during jacking activities
5. Stress sheets, anchor bolt layouts, shop drawing details, and erection and removal plans for the jacking support system

6. Assumed soil bearing values and design stresses for support footings, including anticipated foundation settlement
7. Details for bracing required during erection and removal
8. Details of the displacement monitoring system, including equipment, location of control points, and methods and schedule of taking measurements
9. Any additions or modifications to the structure in connection with the jacking support systems including:
   9.1. Temporary strengthening and stiffening members
   9.2. Permanent stiffening members
10. Mitigation plan for jacking the structure if settlement occurs

Calculations must show a summary of computed stresses in the jacking support system and the connections between the jacking support system and the bridge superstructure. The computed stresses must include the effect of the jacking sequence.

Shop drawings and calculations must be sealed and signed by an engineer who is registered as a civil engineer in the State.

Submit the displacement monitoring records.

48-5.01D Quality Assurance

48-5.01D(1) General

Calibrate each jack within 6 months of use and after each repair. Each jack and its gauge must (1) be calibrated as a unit with the cylinder extension in the approximate position that it will be at the final jacking force and (2) accompanied by a certified calibration chart. Each load cell must be calibrated. Calibration must be performed by an authorized laboratory.

48-5.01D(2) Displacement Monitoring

Perform an initial survey to record the location of the existing structure before starting work. Monitor and record vertical and horizontal displacements of the jacking support system and the existing structure. Use vandal-resistant displacement monitoring equipment. Perform monitoring continuously during jacking activities. Make monitoring records available at the job site during normal work hours. Monitoring records must be sealed and signed by an engineer who is registered as a civil engineer in the State.

As a minimum, monitor the existing structure at the supported bent and at the midspan of both adjoining spans. Locate control points at each location near the center and at both edges of the superstructure. As a minimum, record elevations at the following times:

1. Before starting jacking activities
2. Immediately after completing jacking
3. After completing bridge removal
4. Before connecting the superstructure to the substructure
5. After removing the jacking support system

48-5.02 MATERIALS

48-5.02A General

Reserved

48-5.02B Design Criteria

The jacking support system must resist the structure dead load and lateral design forces shown, plus any additional loads from jacking equipment and activities. As a minimum, the horizontal load to be resisted in any direction for the jacking support system and temporary bracing must be (1) the sum of actual horizontal loads due to equipment, construction sequence, or other causes plus an allowance for wind as specified in section 48-2.02B(2) and (2) not less than 5 percent of the total dead load of the structure being jacked. If the jacking support system lateral stiffness exceeds the described minimum stiffness, increase the lateral design forces to be compatible with the jacking support system lateral stiffness.

Systems involving modifications to the bridge that impair the structural integrity, intended serviceability, or design capacity of the bridge are not allowed.

SAMPLE NOT FOR BIDDING

48-5.03 CONSTRUCTION

Equip each jack with a pressure gauge or load cell for determining the jacking force. Each pressure gauge must have an accurately reading dial at least 6 inches in diameter. Each load cell must be provided with an indicator to determine the jacking force.

Provide a redundant system of supports to ensure stability of the jacking system during jacking activities.

Stop jacking activities if unanticipated displacements, cracking, or other damage occurs. Corrective measures must be authorized and implemented before resuming jacking activities.

Before starting jacking activities at a location being supported, the jacking support system must (1) apply a force to the structure that is equal to the initial jacking load or the dead load shown and (2) hold that load until all initial compression and settlement of the system is completed.

During jacking activities, apply loads simultaneously. Control and monitor jacking operations to prevent distortion and stresses that would damage the structure. Maintain total vertical displacements at control points to less than 1/4 inch from elevations recorded before jacking or as authorized.

Jack the superstructure uniformly to the position described. Distribute the load uniformly across each hinge, abutment, bent, or span. If authorized, place galvanized shims as necessary to provide uniform loading at bearing pads.

After reconstruction activities, the monitored control points must not deviate by more than 1/4 inch from the initial vertical survey elevations or other authorized elevations.

Remove attachments required for jacking from the superstructure and apply the described finish to concrete surfaces.

48-5.04 PAYMENT

Not Used

SAMPLE
NOT FOR BIDDING

Add to the end of section 48-6.01C(1):

04-17-20

Sections 48-1.01C(2), 48-1.01C(3), and 48-1.01D(2) do not apply for temporary wood poles.

Replace Reserved in section 48-6.01D(1) with:

04-17-20

A temporary-structure engineer is not required.

04-17-20

Delete the 3rd paragraph of section 48-6.02B.

^^

49 PILING

10-16-20

Replace the 6th paragraph of section 49-1.01D(4) with:

10-19-18

Except for load test piles and anchor piles, drive the 1st production pile in the control zone. Do not install any additional production piles until dynamic monitoring has been performed, and the Engineer provides you with the bearing acceptance criteria curves for any piles represented by the dynamically monitored piles.

Replace the 3rd paragraph of section 49-2.01D with:

10-19-18

The payment quantity for furnish piling is the length measured along the longest side of the pile from the specified tip elevation shown to the plane of pile cutoff, except for dynamically monitored piles. For dynamically monitored piles, the payment quantity for furnish piling includes an additional length of 2 times the largest cross-sectional dimension of the pile plus 2 feet.

Add to the end of section 49-2.02A(2):

10-19-18

longitudinal weld length: The length of a continuous longitudinal weld.

circumferential weld length: The length of a continuous weld around the circumference of the pipe pile.

spiral weld length: The length of one full 360-degree spiral weld revolution around the circumference of the pipe pile.

Replace the 3rd paragraph of section 49-2.02A(4)(b)(iii)(B) with:

10-19-18

For welding performed under AWS D1.1:

1. Perform NDT on 25 percent of each longitudinal, circumferential, or spiral weld length using RT or UT.
2. If repairs are required in a portion of the tested weld:
   2.1. Perform additional NDT on untested areas on each end of the initial portion tested. The length of additional NDT on each end must equal 10 percent of the weld length. If it is not possible to perform 10 percent of the weld length on one end, perform the remaining percentage on the other end.
   2.2. After this additional 20 percent of NDT is performed, determine and record the total cumulative repair lengths from all NDT for each weld length. If the cumulative weld repair length is equal to or more than 10 percent of the weld length, then perform NDT on the entire weld length.
   2.3. Perform NDT on the repaired portion plus 2 inches on each end of the repaired weld excavation.

SAMPLE
NOT FOR BIDDING

Replace the 2nd paragraph of section 49-2.02A(4)(b)(iii)(C) with:

10-19-18

Perform NDT on 25 percent of the weld length performed by each welder, using RT or UT at locations selected by the Engineer. The Engineer may select several locations on a given splice. The cover pass must be ground smooth at locations to be tested.

Replace the 4th paragraph of section 49-2.02A(4)(b)(iii)(C) with:

10-19-18

If repairs are required in a portion of the tested weld:

1. Perform additional NDT on untested areas on each end of the initial portion tested. The length of additional NDT on each end must equal 10 percent of the pipe's outside circumference. If it is not possible to perform 10 percent of the weld length on one end, perform the remaining percentage on the other end.
2. After this additional 20 percent of NDT is performed, determine and record the total cumulative repair lengths from all NDT for each weld length. If the cumulative weld repair length is equal to or more than 10 percent of the pipe's outside circumference, then perform NDT on the entire weld length.
3. Perform NDT on the repaired portion plus 2 inches on each end of the repaired weld excavation.

Replace the 5th paragraph of section 49-2.02B(1)(a) with:

10-16-20

For welding and prequalifying base metal under Table 5.3 of AWS D1.1, treat steel pipe piles complying with ASTM A252 as either ASTM A572/572M, Grade 50, or ASTM A709/709M, Grade 50.

Replace the 7th paragraph of section 49-2.02B(1)(a) with:

10-16-20

For groove welds using submerged arc welding from both sides without backgouging, qualify the WPS under Table 6.5 of AWS D1.

Replace the 5th paragraph of section 49-2.02B(1)(b) with:

10-16-20

If splicing steel pipe piles using a circumferential weld, the piles must comply with the fit-up requirements of clause 10.23.1 of AWS D1.1.

Replace *clause 4.9.4* in item 2.3 in the list in the 2nd paragraph of section 49-2.02B(2) with:

10-16-20

Clause 6.10.4

Replace section 49-3.01B(2) with:

04-19-19

49-3.01B(2) Mass Concrete

Section 49-3.01B(2) applies to CIP concrete piles with a diameter greater than 8 feet.

For piles with a diameter greater than 8 feet and less than or equal to 14 feet:

1. The specifications for SCM content in the 4th paragraph of section 90-1.02B(3) do not apply.
2. The SCM content of the concrete must comply with the following:
   2.1. Any combination of portland cement and fly ash satisfying:

   Equation 1:

   $(12 \times FM)/MC \geq X$

   where:
   FM = fly ash complying with AASHTO M 295, Class F, with a CaO content of up to 10 percent, including the quantity in blended cement, lb/cu yd
   MC = minimum quantity of cementitious material specified, lb/cu yd
   $X = 3.0$ for $8 < D \leq 10$, where D = pile diameter in feet
   $X = 4.0$ for $10 < D \leq 14$, where D = pile diameter in feet

   Equation 2:

   $MC - MSCM - PC \geq 0$

   where:
   MC = minimum quantity of cementitious material specified, lb/cu yd
   MSCM = minimum sum of SCMs that satisfies equation 1, lb/cu yd
   PC = quantity of portland cement, including the quantity in blended cement, lb/cu yd

   2.2. You may replace any portion of the portland cement with any SCM complying with section 90-1.02B(3) if equations 1 and 2 are satisfied as specified above.

SAMPLE NOT FOR BIDDING

For piles with a diameter greater than 14 feet, the concrete must comply with the specifications for mass concrete in section 51-6.

Add to the end of section 49-3.02C(1):

04-19-19

You may construct CIDH concrete piles 24 inches in diameter or larger by excavating and depositing concrete under slurry.

Replace the 3rd paragraph of section 49-3.02C(7) with:

10-16-20

Section 49-2.01A(4)(c) and the 5th through 7th paragraphs of section 49-2.01C(5) do not apply to permanent casings specified in section 49-3.02C(7).

04-19-19

Delete the 2nd paragraph of section 49-3.02C(8).

Replace section 49-4.01 with:

04-19-19

49-4.01 GENERAL

49-4.01A Summary

Section 49-4 includes specifications for drilling holes and installing steel soldier piles in the holes.

Steel soldier piles must comply with section 49-2.03.

49-4.01B Definitions

Reserved

49-4.01C Submittals

Reserved

49-4.01D Quality Assurance

Reserved

SAMPLE NOT FOR BIDDING

Replace the 1st paragraph of section 49-4.02 with:

10-16-20

Concrete anchors must comply with the specifications for studs in clause 9 of AWS D1.1.

^^

51 CONCRETE STRUCTURES

10-16-20

Add to the beginning of section 51-1.01C(1):

If ordered, submit concrete form design and materials data for each forming system. 04-19-19

Replace section 51-1.01C(5) with:

04-17-20

51-1.01C(5) Drill and Bond Dowel—Chemical Adhesive

For each lot or batch of chemical adhesive used for drill and bond dowel chemical-adhesive systems, submit the following:

1. Certificate of compliance, including the material name and lot or batch number
2. Manufacturer's installation procedures, including the minimum cure time
3. SDS

For each chemical adhesive, submit 1 test sample for every 100 cartridges or fraction thereof to be used. The test sample must consist of 1 cartridge of chemical adhesive, 1 mixing nozzle, and 1 retaining nut. Submit test samples to METS at least 25 days before use.

Each test sample must clearly and permanently show the following:

1. Manufacturer's name
2. Material name
3. Lot or batch number
4. Expiration date
5. Evaluation report number
6. Directions for use
7. Storage requirements
8. Warnings or precautions required by State and federal laws and regulations

SAMPLE NOT FOR BIDDING

Add to the end of section 51-1.01D(3):

04-17-20

51-1.01D(3)(c) Drill and Bond Dowel—Chemical Adhesive

The Department will verify the chemical adhesive used in the drill and bond dowel chemical adhesive system is chemically consistent with the chemical adhesive material on the Authorized Materials List.

Add to the end of section 51-1.02B:

10-18-19

Concrete for concrete bridge decks or PCC deck overlays must contain:

1. Polymer fibers. Each cubic yard of concrete must contain at least 1 pound of microfibers and at least 3 pounds of macrofibers.
2. Shrinkage reducing admixture. Each cubic yard of concrete must contain at least 3/4 gallon of a shrinkage reducing admixture. If you use the maximum dosage rate shown on the Authorized Material List for the shrinkage reducing admixture, your submitted shrinkage test data does not need to meet the shrinkage limitation specified in section 90-1.02A.

Replace section 51-1.02D with:

04-17-20

51-1.02D Rapid Strength Concrete

For bridge decks or PCC deck overlays:

1. RSC must have a minimum 28-day compressive strength of 4,500 psi
2. RSC must contain at least 675 pounds of cementitious material per cubic yard

10-16-20

3. If your RSC shrinkage test results are 0.024 percent or less without the use of a shrinkage reducing admixture:

04-17-20

   3.1 Use of shrinkage reducing admixture is not required

3.2 Fibers are not required
4. If you use the maximum dosage rate shown on the Authorized Material List for shrinkage reducing admixture, your shrinkage test results must be 0.032 percent or less

RSC must have a minimum 28-day compressive strength of 4,000 psi.

If you use chemical admixtures or SCMs, the same proportions must be used when testing.

If you use aggregate that is not on the Authorized Material List for innocuous aggregate, the cement in your proposed mix design must comply with one of the following:

1. Any hydraulic cement, with or without any proposed SCM, must have an expansion ratio of less than 0.10 percent when tested with glass aggregate under ASTM C1260. Test specimens must be prepared using proportions of ingredients under ASTM C441.
2. For Portland cement, the quantity of SCM in your proposed mix design must satisfy equation 1 of section 90-1.02B(3).

The specifications for a reduction in the operating range and contract compliance for cleanness value and sand equivalent specified in section 90-1.02C(2) and section 90-1.02C(3) for aggregate, do not apply to RSC used for a bridge element.

Replace the 1st paragraph of section 51-1.02H with:

04-17-20

Chemical adhesives for bonding dowels must be on the Authorized Material List for chemical adhesives and must be appropriate for the installation conditions of the project.

10-18-19

Delete the 5th paragraph of section 51-1.03C(2)(b).

Replace section 51-1.03D(2) with:

10-16-20

51-1.03D(2) Concrete Bridge Decks and Diaphragms

For decks on structural steel, install cross frames the entire width of the bridge before placing the deck concrete.

For concrete decks placed on bridges composed of continuous steel girders, place the portion of deck over the supports last.

For bridges composed of simple span PC concrete girders made continuous, place the deck (1) at least 5 days after placing the intermediate diaphragms or (2) after intermediate diaphragm concrete has attained a concrete compressive strength of at least 3,000 psi. Place end diaphragms with the portion of the deck over the supports last.

For bridges composed of simple span PC concrete girders not made continuous, place the deck (1) at least 5 days after placing the intermediate and end diaphragms or (2) after diaphragm concrete has attained a concrete compressive strength of at least 3,000 psi.

Deck closure pours must comply with the following:

1. During primary deck placement and for at least 24 hours after completing the deck placement, reinforcing steel protruding into the closure space must be free from any connection to reinforcing steel, concrete, forms, or other attachments of the adjacent structure.
2. Closure pour forms must be supported from the superstructure on both sides of the closure space.

SAMPLE NOT FOR BIDDING

Replace the 1st paragraph of section 51-1.03E(1) with:

10-16-20

Where shown, paint the structure name, bridge number, year constructed, and other bridge identification information. Painting concrete must comply with section 78-4.03C(3).

Bridge identification on the bridge barrier must comply with section 83-1.03D.

Bridge identification on the bridge substructure must be (1) painted at each structure approach facing and (2) visible to approaching traffic. At bents or piers, paint identification 10 feet above roadway finish grade elevation or water surface elevation.

Add to the end of section 51-1.03E(1):

04-17-20

Repair rejected holes, that will not be encased in concrete, with bonding material complying with section 51-1.02C.

Replace the 2nd paragraph of section 51-1.03E(3) with:

04-17-20

If reinforcement is encountered during drilling before the specified depth is attained, notify the Engineer. Unless coring through the reinforcement is authorized. Drill a new hole adjacent to the rejected hole to the depth shown.

Replace section 51-1.03E(5) with:

04-17-20

51-1.03E(5) Drill and Bond Dowel—Chemical Adhesive

Install dowels for the drill and bond dowel chemical adhesive system under the manufacturer's instructions. When installing dowels in new concrete, install after the concrete has cured for at least 28 days.

Drill the holes without damaging the adjacent concrete. Remove all loose dust and concrete particles from the hole and protect the hole from deleterious materials until the anchor is installed.

If reinforcement is encountered during drilling before the specified depth is attained, notify the Engineer. Unless coring through the reinforcement is authorized. Drill a new hole adjacent to the rejected hole to the depth shown.

Immediately after inserting the dowel into the chemical adhesive, support the dowel as necessary to prevent movement until the chemical adhesive has cured the minimum time specified in the manufacturer's instructions. Dowels must not be adjusted by bending. The adhesive must be fully cured before the dowel is put into service.

Replace dowels that fail to bond or are damaged.

Replace the 2nd paragraph of section 51-1.03H with:

10-18-19

Cure the top surface of bridge decks by (1) misting and (2) the water method using a curing medium under section 90-1.03B(2). After strike-off, immediately and continuously mist the deck with an atomizing nozzle that forms a mist and not a spray. Continue misting until the curing medium has been placed and the application of water for the water method has started. At the end of the curing period, remove the curing medium and apply curing compound on the top surface of the bridge deck during the same work shift under section 90-1.03B(3). The curing compound must be curing compound no. 1.

SAMPLE NOT FOR BIDDING

10-18-19

Delete the 4th paragraph of section 51-1.03H.

Add to section 51-1.03:

51-1.03J Temporary Decking 10-19-18

If you are unable to complete bridge reconstruction activities before the bridge is to be opened to traffic, furnish and maintain temporary decking under section 48-4 until that portion of the work is complete.

Add to the end of section 51-2.01A(1):

10-18-19

The specifications for (1) shrinkage in section 90-1.02A, (2) shrinkage reducing chemical admixture in section 51-1.02B, and (3) polymer fibers in section 51-1.02B do not apply to concrete used to fill blocked-out recesses for joint seal assemblies.

Replace the 2nd paragraph of section 51-4.01C(1) with:

04-19-19

For PC PS concrete girders and deck panels, submit an erection work plan. The work plan must be signed by an engineer who is registered as a civil engineer in the State and include procedures, details, and sequences for:

1. Unloading
2. Lifting
3. Erecting
4. Temporary bracing installation

SAMPLE NOT FOR BIDDING

Replace the 1st paragraph of section 51-4.01C(2)(a) with:

04-19-19

Submit shop drawings for PC concrete members to the OSD Documents Unit unless otherwise specified.

Replace *Reserved* in section 51-4.01C(2)(e) with:

04-19-19

For PC deck panels, shop drawings must include:

1. Panel materials, shapes, and dimensions.
2. Deck panel layout identifying the locations of each panel.
3. Reinforcing, joint, and connection details.
4. Complete details of the methods, materials, and equipment used in prestressing and precasting work.
5. Type of texture and method of forming the textured finish.
6. Methods and details for lifting, bracing, and erection.
7. Method of support and grade adjustment.
8. Methods of sealing against concrete leaks.

Replace the 2nd paragraph of section 51-4.02B with:

04-19-19

Handle, store, transport, and erect PC members in a position such that the points of support and directions of the reactions with respect to the member are approximately the same as when the member is in its final position.

Replace *Reserved* in section 51-4.02D(7) with:

04-19-19

Clearly label the top surface of each panel with the word *TOP* as shown on the deck panel layout using waterproof paint or other authorized means.

Apply a coarse texture to at least 90 percent of the deck panel top surface area by brooming with a stiff bristled broom or by other suitable devices that results in uniform scoring parallel with the prestressing strands. The top surface texture must have a maximum 1/8-inch texture.

Each camber strip must:

1. Consist of high density expanded polystyrene with a minimum compressive strength of 55 psi.
2. Consist of a single layer and extend continuously under each deck panel.
3. Achieve a height that accounts for roadway profile, cross slope, and girder camber.
4. Have 1/4-inch v-notches or 1/2 by 1/2-inch slots cut into the top surface on 4-foot centers.

Camber strip dimensions must comply with the following table:

Polystyrene Camber Strip Dimensions

Height (H) (inches)	Width (W) (inches)
1 to 2.5	1.5
Greater than 2.5 and less than or equal to 3.5	1.75
Greater than 3.5 and less than or equal to 4	2

Chemical adhesive must be suitable for use with concrete and polystyrene.

For the concrete deck pour, the aggregate must comply with the 1/2-inch maximum or the 3/8-inch maximum combined aggregate gradation specified in section 90-1.02C(4)(d).

SAMPLE NOT FOR BIDDING

Add between the 5th and 6th paragraphs of section 51-4.03B:

10-19-18

Erect steel or PC girders onto the supporting concrete, such as bent caps or abutments, after the concrete attains a compressive strength of 2,880 psi or 80 percent of the specified strength, whichever is greater.

Replace *Reserved* in section 51-4.03G with:

04-19-19

Construct the deck panel system in the following sequence:

1. After girders and diaphragms are in place, place each polystyrene camber strip along the top of each girder. Apply a continuous bead of chemical adhesive to the top and bottom of each camber strip to prevent gaps between the camber strip and concrete members.
2. Place each deck panel as shown on the deck panel layout such that each panel bears uniformly on the camber strips.
3. Abrasive blast clean deck panel and girder surfaces before placing deck reinforcement. Remove all surface laitance, curing compound, and other foreign materials. Thoroughly clean under the edges of each panel to ensure removal of construction debris before the stage 1 deck pour.
4. Place deck reinforcement.
5. Place deck concrete in a two-stage continuous pour:
   5.1. Place and vibrate stage 1 concrete over the girders by completely filling the area between the camber strips in from 15 to 30 feet longitudinal sections ahead of the stage 2 concrete deck pour. Check slots or holes in camber strips to ensure removal of air voids and full consolidation during concrete placement.
   5.2. Place stage 2 concrete deck over stage 1 concrete and deck panels as to not result in a cold joint between the two stages.

If required, install temporary bracing between the ends of each deck panel to prevent transverse panel movement that could lead to loss of bearing on the camber strips.

Loads placed on deck panels during construction must not exceed 50 psf.

Replace the row for *Apparent elongation* in the table in the 2nd paragraph of section 51-5.02B with:

04-19-19

Apparent elongation (max, percent)	ASTM D4632	35

^^

52 REINFORCEMENT

10-16-20

Replace the definition for *affected zone* of section 52-1.01B with:

10-16-20

Any weld and the greater of 1 inch or 1 bar diameter adjacent to the weld, or portion of the reinforcing bar where any properties of the bar, including the physical, metallurgical, or material characteristics, have been changed by either:

1. Fabrication or installation of a splice
2. Manufacturing process for headed bar reinforcement

SAMPLE NOT FOR BIDDING

Add to section 52-1.01B:

10-16-20

group: Set of 5 or fewer consecutive lots after the 1st lot.

Replace the 2nd paragraph of section 52-1.01C(3) with:

10-16-20

Submit the following:

1. Copy of the certified mill test report for each heat and size of reinforcing steel showing:
   1.1. Physical and chemical analysis
   1.2. Manufacturing location
2. Two copies of a list of all reinforcement before starting reinforcement placement

Replace the 1st paragraph of section 52-1.02B with:

10-16-20

Reinforcing bars must be deformed bars complying with ASTM A706/A706M, Grade 60, except you may use:

1. Deformed bars complying with ASTM A615/A615M, Grade 60, in:
   1.1. Junction structures
   1.2. Sign and signal foundations
   1.3. Minor structures
   1.4. Mechanically-stabilized-embankment concrete panels
2. Deformed or plain bars complying with ASTM A615/A615M, Grade 40 or 60, in:
   2.1. Slope and channel paving

2.2. Concrete barriers Type 50 and 60
3. Plain bars for spiral or hoop reinforcement in structures and concrete piles

Add to the list in the 2nd paragraph of section 52-1.02B:

10-16-20

10. Drainage inlets

Replace section 52-1.02E with:

04-17-20

52-1.02E Dowels

52-1.02E(1) General

Reinforcing steel dowels must be deformed bars complying with section 52-1.02B.

Threaded rods used as dowels must comply with section 75-1.02A.

52-1.02E(2) Dowels for Drill and Bond Dowel—Chemical Adhesive

Dowels for drill and bond dowel chemical-adhesive systems must be one of the following:

1. Threaded rods complying with ASTM F1554, Grade 36
2. Deformed bar reinforcement complying with section 52-1.02B
3. Stainless steel reinforcement complying with ASTM A955/A955M, Grade 60, UNS Designation S31653, S32304, S32205, or S31803

Replace the 2nd paragraph of section 52-2.02A(3)(c) with:

10-16-20

Submit a certificate of compliance for the patching material and one of the following:

1. Certification that the patching material is compatible with the epoxy powder to be used.

2. Copy of the patching material container label showing the patching material is compatible with the epoxy powder to be used.

SAMPLE NOT FOR BIDDING

10-16-20

Delete the 3rd paragraph of section 52-2.02A(3)(c).

Replace the 1st paragraph of section 52-2.02A(4)(b) with:

10-16-20

Test samples must comply with the requirements for coating thickness specified in ASTM A775/A775M for bar reinforcement or ASTM A884/A884M Class A, Type 1 for wire reinforcement, as follows:

1. If both test samples comply with the requirements, the Department accepts all epoxy-coated reinforcement represented by the test.
2. If both test samples do not comply with the requirements, the Department performs 1 additional test on the reinforcement of the same size from the same shipment. This additional test consists of testing 2 test samples, randomly selected by the Engineer, for coating thickness. If both test samples do not comply with the specified requirements, the Department rejects all epoxy-coated reinforcement represented by the test.

Replace the 1st paragraph of section 52-2.03A(4)(b) with:

10-16-20

Test samples must comply with the requirements for coating thickness specified in ASTM A934/A934M for bar reinforcement or ASTM A884/A884M Class A, Type 2 for wire reinforcement, as follows:

1. If both test samples comply with the requirements, the Department accepts all epoxy-coated reinforcement represented by the test.
2. If both test samples do not comply with the requirements, the Department performs 1 additional test on the reinforcement of the same size from the same shipment. This additional test consists of testing 2 test samples, randomly selected by the Engineer, for coating thickness. If both test samples do not comply with the specified requirements, the Department rejects all epoxy-coated reinforcement represented by the test.

Replace the 2nd paragraph of section 52-5.01D(3) with:

10-16-20

After receiving notification that lots are ready for QC testing, the Engineer randomly selects department acceptance test samples and places tamper-proof markings or seals on the test samples. Test samples must be removed from:

1. First QC lot
2. Each subsequent group of QC lots

Replace the introductory clause in the 2nd paragraph of section 52-5.01D(4)(b) with:

10-16-20

Headed bar reinforcement test samples are tested for necking under Necking Option I as specified in CT 670 and tensile tested:

Replace the 2nd paragraph of section 52-5.02 with:

10-16-20

At fracture, headed bar reinforcement must comply with:

1. Tensile requirements of ASTM A970/A970M, Class A.

2. Necking requirements under CT 670 by showing signs of visible necking in the reinforcing bar. The visible necking must be located outside the affected zone.

Replace section 52-6.01B with:

10-16-20

52-6.01B Definitions

Reserved

Replace item 10.2. in the list in the 2nd paragraph of section 52-6.01C(4)(b) with:

10-16-20

10.2. Strain measured on the side without the fracture

Replace item 6 in the list in the 1st paragraph of section 52-6.01C(6)(c) with:

10-16-20

6. Manufacturer's QC Process Manual that details the production process and the frequency of QC measures

SAMPLE NOT FOR BIDDING

Replace the 2nd and 3rd paragraphs of section 52-6.01D(2)(b) with:

10-16-20

Each operator must prepare 4 prequalification splice test samples for each bar size of each splice coupler model type and position to be used.

Splice test samples for operator and procedure prequalification must have been prepared and tested no more than 2 years before the submittal of the splice prequalification report.

Replace the 1st paragraph of section 52-6.01D(3)(b) with:

10-16-20

After completing the ultimate butt splices in a lot, including any required epoxy coating, notify the

Engineer that the splices are ready for testing. The Engineer selects splice test samples at the job site or PC plant. For hoops, the Engineer selects splice test samples from the completed lot at the job site, PC plant, or fabrication plant.

Replace the 4th paragraph of section 52-6.01D(4)(b)(iv) with:

10-16-20

For splices made vertically at the jobsite in or above their final positions for bar reinforcement of columns or CIP concrete piles, you may prepare test samples as specified for service splice test samples in section 52-6.01D(4)(b)(iii) if authorized. Test the splice test samples as specified for ultimate butt splice test samples.

Replace the 1st paragraph of section 52-6.01D(5) with:

10-16-20

The Department tests and accepts service splices and ultimate butt splices as specified for QC testing in section 52-6.01D(4).

Replace the 3rd paragraph of section 52-6.02B(1) with:

10-16-20

Mechanical couplers must be on the Authorized Material List for steel reinforcing couplers. Resistance welding fabricators must be on the Authorized Material List for resistance welding fabricators.

Replace the introductory clause in the 3rd paragraph of section 52-6.03B with:

10-16-20

For uncoated and galvanized reinforcing bars complying with ASTM A615/A615M, Grade 60, ASTM A706/A706M, ASTM A1035/A1035M, or ASTM A767/A767M, Class 1, the length of lap splices must be at least:

Replace the introductory clause in the 4th paragraph of section 52-6.03B with:

10-16-20

For epoxy-coated reinforcing bars and alternatives to epoxy-coated reinforcing bars complying with ASTM A775/A775M, ASTM A934/A934M, or ASTM A1055/A1055M, the length of lap splices must be at least:

SAMPLE
NOT FOR BIDDING

Replace the 3rd through 5th paragraphs of section 52-6.03C(4) with:

10-16-20

Make butt welds with multiple weld passes without an appreciable weaving motion using a stringer bead having a width at most 2.5 times the diameter of the electrode when using shielded metal arc welding. Remove slag between each weld pass. Weld reinforcement must not exceed 0.16 inch in convexity.

Electrodes for welding must have a minimum CVN impact value of 20 ft-lb at 0 degrees F.

For welding of bars complying with ASTM A 615/A 615M, Grade 40 or 60, the requirements of Table 7.2 of AWS D1.4 are superseded by the following: The minimum preheat and interpass temperatures must be 400 degrees F for Grade 40 bars and 600 degrees F for Grade 60 bars. Immediately after completing the welding, cover at least 6 inches of the bar on each side of the splice with insulated wrapping to control the rate of cooling. The insulated wrapping must remain in place until the bar has cooled below 200 degrees F.

^^

53 SHOTCRETE

10-18-19

Replace the 1st paragraph of section 53-1.01A with:

10-18-19

Section 53-1 includes general specifications for applying shotcrete.

Replace section 53-1.01B with:

10-18-19

53-1.01B Definitions

shotcrete: Concrete pneumatically projected at high velocity onto a surface to achieve compaction.

dry-mix shotcrete: Dry aggregates and cementitious materials are mixed before entering the delivery hose. Mixing water is added at the nozzle.

wet-mix shotcrete: Dry aggregates, cementitious materials, and water are mixed before entering the delivery hose. If used, accelerator may be added at the nozzle.

rebound: Aggregate coated with cement paste that ricochets away from the surface against which the shotcrete is being applied.

Replace *Reserved* in section 53-1.01D with:

10-18-19

Air pressure and shotcrete supply at the nozzle must be uniform and provide a steady, continuous flow of shotcrete. Inspect nozzles and nozzle body components before each work shift. Replace nozzles and components under the manufacturer's instructions.

Replace the introductory clause to the list in the 2nd paragraph of section 53-1.02 with:

10-18-19

For dry-mix shotcrete:

Replace the introductory clause to the list in the 3rd paragraph of section 53-1.02 with:

10-18-19

For wet-mix shotcrete:

SAMPLE NOT FOR BIDDING

Replace the 1st sentence in item 2 in the list in the 3rd paragraph of section 53-1.02 with:

10-18-19

2. You may substitute a maximum of 40 percent coarse aggregate for the fine aggregate.

Replace section 53-1.03B with:

10-18-19

53-1.03B Preparing Receiving Surfaces

Evenly grade the receiving surface before applying shotcrete. No point on the graded slope may be above the slope plane shown.

Thoroughly compact the receiving surface. The receiving surface must contain enough moisture to provide a firm foundation and prevent excess absorption of water from the shotcrete. The receiving surface must be free of surface water.

Forms must comply with section 51-1.03C(2). Reinforce, secure, and brace forms to maintain form alignment against distortion from shotcrete operations. Install and maintain alignment control means at corners or offsets not established by forms or shotcrete operations.

Use ground wires to establish thickness, surface planes, and finish lines. Use temporary coverings to protect adjacent surfaces from the nozzle stream.

SAMPLE NOT FOR BIDDING

Replace section 53-1.03C with:

10-18-19

53-1.03C Applying Shotcrete

Dry-mix or wet-mix shotcrete must be applied by the nozzle.

Apply shotcrete using small circular motions of the nozzle while building the required thickness. Direct the nozzle perpendicular to the receiving surface with the nozzle held at such a distance to produce maximum consolidation and full encapsulation of the reinforcement. Shotcrete must completely encase reinforcement and other obstructions.

Apply shotcrete first in corners, voids, and areas where rebound or overspray cannot easily escape. Do not incorporate rebound or overspray in the work.

Before applying subsequent layers of shotcrete:

1. Allow shotcrete to stiffen sufficiently. Remove hardened overspray and rebound from adjacent surfaces, including exposed reinforcement.
2. Use a cutting rod, compressed air blowpipe, or other authorized methods to remove all loose material, overspray, laitance, or other deleterious materials that may compromise the bond of the subsequent layers of shotcrete.
3. Bring the receiving surface to a saturated surface-dry condition immediately before applying subsequent layer.

For dry-mix shotcrete:

1. Adjust air volume, material feed volume, and distance of the nozzle from the work as necessary to encase reinforcement.
2. Maintain uniform water pressure at the nozzle of at least 15 psi greater than the air pressure at the machine.
3. Do not use aggregate and cementitious materials that have been mixed for more than 45 minutes.

For wet-mix shotcrete:

1. Transport shotcrete under section 90-1.02G(3).
2. Apply ground wires at approximately 7-foot centers.

3. Select a slump range that will effectively encapsulate reinforcement within the work but not cause shotcrete to sag or slough during application.

Replace section 53-1.03D with:

10-18-19

53-1.03D Finishing Shotcrete

Apply shotcrete to the line and grade shown. Leave finished shotcrete surface as gun finish unless otherwise described.

Do not initiate cutting or finishing until the shotcrete has set sufficiently to avoid sloughing or sagging. The finished surface must be smooth and uniform for the type of work involved.

Remove and replace loose areas of shotcrete.

Cure shotcrete for at least 7 days by any of the methods specified in section 90-1.03B. If the curing compound method is used for a gun or roughened surface, apply the curing compound at twice the specified rate. If you add a coloring agent to the shotcrete and you use the curing compound method for curing the shotcrete, use curing compound no. 6.

Protect shotcrete under section 90-1.03C.

Replace the 2nd paragraph of section 53-1.04 with:

10-18-19

The Department does not pay for shotcrete applied outside the dimensions shown or to fill low areas of receiving surfaces.

Replace the paragraph of section 53-2.01A with:

10-18-19

Section 53-2 includes specifications for applying structural shotcrete. Structural shotcrete must be applied using wet-mix shotcrete.

Replace *qualifications* in item 1.1 in the list in the 1st paragraph of section 53-2.01C with:

10-18-19

certifications

Replace the paragraph of section 53-2.01D(2) with:

10-18-19

Nozzlemen performing the work must hold current ACI CPP 660.1-17 certification as a nozzleman for wet-mix shotcrete. Nozzlemen performing overhead shotcrete work must hold current qualifying ACI CPP 660.1-17 certification in the overhead shooting orientation for wet-mix shotcrete.

Replace the 2nd paragraph of section 53-2.01D(3) with:

10-18-19

Each nozzleman performing the work must construct 1 unreinforced test panel and 1 reinforced test panel for each proposed mix design. The test panel orientation must match the orientation of the work.

SAMPLE NOT FOR BIDDING

Replace the 1st sentence in the 1st paragraph of section 53-2.01D(4)(b) with:

10-18-19

Obtain at least four 3-inch-diameter test cores from each 50 cu yd, or portion thereof, of shotcrete applied.

Add between the 1st and 2nd paragraphs of section 53-2.01D(4)(b):

10-19-18

For soil nail walls, do not core through waler bars.

Replace section 53-2.02 with:

10-18-19

53-2.02 MATERIALS

Shotcrete must comply with the specifications for concrete in section 90-1.

Shotcrete must have a minimum compressive strength of 3,600 psi, unless otherwise described.

Mortar and alternative filler material must comply with section 60-3.05B(2).

10-18-19

Delete the 2nd paragraph of section 53-2.03.

Add between the 3rd and 4th paragraphs of section 53-2.03:

Before applying shotcrete, reinforcement must be: 10-18-19

1. Free from loose rust, oil, curing compound, overspray, or other material deleterious to the bond between concrete and steel.
2. Lapped separated by one of the following:
   2.1. Three times the diameter of the largest reinforcing bar.
   2.2. Three times the maximum size aggregate.
   2.3. Two inches, whichever is least, unless otherwise specified. Lapped bars must be in the same plane and parallel to the shooting direction.
3. Securely tied to minimize movement or vibration.

The temperature of reinforcement and receiving surfaces must be below 90 degrees F before applying shotcrete.

Apply the wet-mix shotcrete continuously removing accumulations of rebound and overspray using a compressed air blowpipe. Ensure the nozzleman and the blowpipe operator work together and the nozzleman does not get ahead of the blowpipe operator.

10-18-19

Delete the 4th paragraph of section 53-2.03.

Replace the 7th paragraph of section 53-2.03 with:

10-18-19

If a finish coat is used, clean the surface before applying the finish coat. Wash receiving surface with an air-water blast to remove all loose material, laitance, overspray, or other material that may compromise the bond of subsequent layers of shotcrete.

SAMPLE NOT FOR BIDDING

10-18-19

Delete the 8th paragraph of section 53-2.03.

Replace the 12th paragraph of section 53-2.03 with:

10-18-19

After removing field QC test cores, fill the holes with mortar or alternative filler material. If using mortar, apply mortar under section 51-1.03E(2). If using an alternative filler material, apply a bonding epoxy before placing the filler material. Apply the alternative filler material under the manufacturer's instructions.

^^

55 STEEL STRUCTURES

10-16-20

Replace the 3rd paragraph of section 55-1.02E(7)(a) with:

10-16-20

Dimensional details and workmanship for welded joints in tubular and pipe connections must comply with clause 10 of AWS D1.1.

^^

56 OVERHEAD SIGN STRUCTURES, STANDARDS, AND POLES

10-16-20

Replace section 56-1.01D(2)(b)(i) with:

04-19-19

56-1.01D(2)(b)(i) General

Perform NDT of steel members under AWS D1.1 and the requirements shown in the following tables:

SAMPLE
NOT FOR BIDDING

Nondestructive Testing for Steel Standards and Poles

Weld location	Weld type	Minimum required NDT
Circumferential splices around the perimeter of tubular sections, poles, and arms	CJP groove weld with backing ring	100% UT or RT
Longitudinal seam	CJP or PJP groove weld	Random 25% MT
Longitudinal seam within 6 inches of a circumferential weld	CJP groove weld	100% UT or RT
Welds attaching base plates, flange plates, pole plates, or mast arm plates to poles or arm tubes	CJP groove weld with backing ring and reinforcing fillet	t≥ 1/4 inch: 100% UT and 100% MT t< 1/4 inch: 100% MT after final weld pass
	External (top) fillet weld for socket-type connections	100% MT
Hand holes and other appurtenances	Fillet and PJP welds	MT full length on random 25% of all standards and poles
Longitudinal seam on the telescopic female end, designated slip-fit length plus 6 inches	CJP groove weld	100% UT or RT

NOTE: t = pole or arm thickness

SAMPLE
NOT FOR BIDDING

Nondestructive Testing for Overhead Sign Structures

Weld location	Weld type	Minimum required NDT
Base plate to post	CJP groove weld with backing ring and reinforcing fillet	100% UT and 100% MT
Base plate to gusset plate	CJP groove weld	100% UT
Circumferential splices of pipe or tubular sections	CJP groove weld with backing ring	100% UT or RT
Split post filler plate welds	CJP groove weld with backing bar	100% UT or RT
Longitudinal seam weld for pipe posts	CJP groove weld	t < 1/4 inch: 25% MT t ≥ 1/4 inch: 25% UT or RT
	PJP groove weld	Random 25% MT
Chord angle splice weld	CJP groove weld with backing bar	100% UT or RT
Truss vertical, diagonal, and wind angles to chord angles	Fillet weld	Random 25% MT
Upper junction plate to chord (cantilever type truss)	Fillet weld	Random 25% MT
Bolted field splice plates (tubular frame type)	CJP groove weld	100% UT and 100% MT
Cross beam connection plates (lightweight extinguishable message sign)	Fillet weld	Random 25% MT
Arm connection angles (lightweight extinguishable message sign)	Fillet weld	100% MT
Mast arm to arm plate (lightweight extinguishable message sign)	CJP groove weld with backing ring	t ≥ 1/4 inch: 100% UT and 100% MT t < 1/4 inch: 100% MT after final weld pass
Post angle to post (lightweight extinguishable message sign)	Fillet weld	100% MT
Hand holes and other appurtenances	Fillet and PJP welds	MT full length on random 25% of all sign structures

NOTE: t = pole or arm thickness

SAMPLE NOT FOR BIDDING

Replace section 56-1.01D(2)(b)(ii) with:

04-19-19

56-1.01D(2)(b)(ii) Ultrasonic Testing

10-16-20

For UT of welded joints with any members less than 5/16-inch thick or tubular sections less than 24 inches in diameter, the acceptance and repair criteria must comply with Clause 10.26.1.1 of AWS D1.1.

When performing UT, use an authorized procedure under AWS D1.1, Clause 2.

For UT of other welded joints, the acceptance and repair criteria must comply with Table 8.3 of AWS D1.1 for cyclically loaded nontubular connections

After galvanization, perform additional inspection for toe cracks along the full length of all CJP groove welds at tube-to-transverse base plate connections using UT.

Replace section 56-2.02F with:

04-17-20

56-2.02F Pipe Posts

Pipe posts must be welded or seamless steel pipes. The maximum ultimate tensile strength of pipe posts must not exceed 90 ksi. Manufactured pipe posts must comply with one of the following:

1. ASTM A53/A53M, Grade B
2. ASTM A106/A106M, Grade B
3. ASTM A1085, Grade A
4. API Specification 5L PSL2 Grades B, X42R, X42M, X52M or Grade X52N, using nominal pipe sizes for threaded end pipe

You may fabricate pipe posts from structural steel complying with ASTM A36/A36M, ASTM A709/A709M, Grade 36, or ASTM A572/A572M, Grades 42 or 50.

Spiral seam welds are not allowed.

^^

57 WOOD AND PLASTIC LUMBER STRUCTURES

10-16-20

SAMPLE NOT FOR BIDDING

10-16-20

Delete the 4th paragraph of section 57-2.01B(3).

Replace the 5th paragraph of section 57-2.01B(3) with:

10-16-20

Timber and lumber treated with waterborne preservatives must be dried after treatment and have no visual evidence of preservative on the surface.

Replace the 7th paragraph of section 57-2.01B(3) with:

10-16-20

Manually applied wood preservative must comply with AWPA Standard M4.

10-16-20

Delete the 2nd paragraph of section 57-2.01C(3)(a).

Replace the 3rd paragraph of section 57-2.01C(3)(a) with:

10-16-20

Chromated copper arsenate must not be used for handrails or other applications with possible direct exposure to the public.

Replace the introductory clause of the 7th paragraph of section 57-2.01C(3)(a) with:

10-16-20

For lumber treated with ammoniacal copper zinc arsenate, alkaline copper quaternary ammonium compound, or copper azole:

Replace the 3rd paragraph of section 57-2.01C(3)(b) with:

10-16-20

If treated timber is framed, cut, or bored after treatment, thoroughly swab each cut, dap, or hole with 2 applications of a preservative as specified in AWPA Standard M4.

10-16-20

Delete the 2nd paragraph of section 57-2.02B.

Add to section 57-2.02B:

04-19-19

HDPE shims must be commercial quality.

Replace section 57-2.02C with:

10-18-19

57-2.02C Construction

Install lagging members 4 inches thick or less with a 3/8-inch gap between members. Install lagging members greater than 4 inches thick with a 1/2-inch gap between members.

Replace the table in the 4th paragraph of section 57-3.02C with:

10-19-18

Quality characteristic	Test method	Requirement
Density of concrete core (kg/m³, min)	ASTM D792	1,762
28-day compressive strength of concrete core (psi, min)	ASTM C579	5,000
Structural strength of shell: Tensile strength, tensile modulus (percent loss) Flexural strength, flexural modulus (percent loss)	ASTM D638 ASTM D790	Less than 10 after UV deterioration test specified for plastic lumber
Dry film thickness of coating (mils, min)	--	15
Color change of coating	ASTM D4587, Test Cycle 2	No visible color change when tested for 800 hours
Initial adhesion of coating (psi, min)	ASTM D4541, Test Method D, E, or F and Protocol 2	150
Decrease in initial adhesion of coating, decrease (percent)	ASTM D4541, Test Method D, E, or F and Protocol 2 ASTM D1183, Test Condition D[a]	No more than 10 following 2 exposure cycles

[a]Use a low temperature phase at 4 ± 5 °F and high temperature phase at 140 ± 5 °F.

^^

SAMPLE NOT FOR BIDDING

59 STRUCTURAL STEEL COATINGS

10-19-18

Replace the 2nd paragraph in section 59-1.01D with:

10-19-18

Measure coating adhesion strength with a self-aligning adhesion tester under ASTM D4541, Test Method D, E, or F and Protocol 2.

Replace the 2nd paragraph of section 59-1.02C with:

10-19-18

Coatings selected for use must comply with the volatile organic compound concentration limits specified for the air quality district where the coating is applied. The undercoats and finish or final coats selected for use must be compatible with each other.

Add after the paragraph of section 59-2.01A(3)(a):

10-19-18

If requested by the Engineer, submit documentation from the coating manufacturer verifying the compatibility of the undercoats and finish or final coats selected for use.

^^

60 EXISTING STRUCTURES

10-16-20

Replace section 60-2.02B with:

04-19-19

60-2.02B Materials

Design criteria for temporary support shoring and temporary bracing must comply with section 48-3.02B.

Add to section 60-3.01A:

10-19-18

If you are unable to complete bridge reconstruction activities before the bridge is to be opened to traffic, furnish and maintain temporary decking under section 48-4 until that portion of the work is complete.

Replace the 3rd and 4th paragraphs of section 60-3.02C(3) with:

04-19-19

Remove asphalt concrete surfacing by cold milling under the following conditions:

1. If a membrane seal is shown:
   1.1. Remove the seal by cold milling
   1.2. Do not remove more than 1/2 inch of the existing concrete slab

2. If a membrane seal is not shown:
   2.1. Remove asphalt concrete surfacing until a 1/2-inch minimum of surfacing remains on top of existing concrete slab
   2.2. Use other authorized means to remove the remaining asphalt concrete without damage to the concrete slab

SAMPLE NOT FOR BIDDING

Add to section 60-3.02C(3):

04-19-19

Where a portion of the asphalt concrete surfacing is to remain, saw cut a 2-inch-deep true line along the edge to remain in place before removing asphalt concrete. Remove the asphalt concrete without damaging the surfacing to remain in place.

04-19-19

Delete the 3rd paragraph of section 60-3.04B(3)(a).

Replace the 9th paragraph of section 60-3.04B(3)(c) with:

04-19-19

Protect the overlay from moisture and do not allow traffic or equipment on the overlay (1) for a minimum of 4 hours cure time after final finishing and (2) until each rebound test result for the final finish shows a reading of at least 28 when tested under ASTM C805. The cure time must be extended if ordered. The rebound test may not be used to reduce the 4-hour cure time of the overlay.

Replace the 10th paragraph of section 60-4.09B(2)(a) with:

10-19-18

Steel parts must comply with ASTM A36/A36M or A576, Grade 1030 and must not be rimmed or capped steel.

Replace section 60-4.10 with:

10-16-20

60-4.10 BRIDGE SEAT EXTENDERS FOR RETROFITS

60-4.10A General

60-4.10A(1) Summary

Section 60-4.10 includes specifications for fabricating and installing bridge seat extenders.

Bridge seat extenders must comply with the specifications for miscellaneous bridge metal in section 75-3.

60-4.10A(2) Definitions

Reserved

60-4.10A(3) Submittals

Submit a work plan showing the method of grouting pipe seat extenders to prevent grout from entering the hinge area.

60-4.10A(4) Quality Assurance

Inspect bridge seat extender materials at the fabrication site.

Notify the Engineer:

1. When materials have been delivered to the fabrication site
2. At least 10 days before starting fabrication

60-4.10B Materials

60-4.10B(1) General

Reserved

60-4.10B(2) Pipe Seat Extenders

Pipe seat extenders must consist of double extra-strong steel pipes, HS threaded rods, nuts, and washers.

SAMPLE NOT FOR BIDDING

Double-extra strong steel pipe must comply with ASTM A53/A53M, Grade B. HS threaded rods, nuts, and washers must comply with section 55-1.02D(1).

Galvanize double-extra strong steel pipe under section 75-1.02B. After galvanizing, any alterations resulting in new exposed surfaces, including holes or cut ends, must be coated as specified for repairing damaged galvanized surfaces under section 75-1.02B.

Grout for bonding the pipe to the cored hole must comply with section 60-4.06B(2). Any filler materials or seals must not restrict joint movement.

60-4.10B(3) Slab Bridge Seat Extenders

Slab bridge seat extenders must consist of steel plates, support tubes, bolts, bars, nuts, washers, pins, and elastomeric bearing pads.

Slab bridge seat extender must comply with section 55. Elastomeric bearing pads must comply with section 51-3.02. The support tubes must comply with ASTM A500/A500M, Grade B.

Galvanize seat extender under section 75-1.02B. After galvanizing, any alterations resulting in new exposed surfaces, including holes or cut ends, must be coated as specified for repairing damaged galvanized surfaces under section 75-1.02B.

Epoxy mortar must consist of a mixture of epoxy binder and aggregate. The epoxy mortar must comply with section 95-1.02C. The mix proportions of epoxy mortar must be 1-part binder to 1-part aggregate by volume. Aggregate must consist of a combination of 1-part material passing the no. 30 sieve and 3-parts material passing the no. 20 sieve.

60-4.10C Construction

60-4.10C(1) General

Reserved.

60-4.10C(2) Pipe Seat Extenders

Reserved

60-4.10C(3) Slab Bridge Seat Extenders

Place epoxy mortar under section 95-1.03.

Place elastomeric bearing pads under section 51-3.02C. Bond elastomeric bearing pads to steel support tubes with adhesive complying with Federal Specification MMM-A-121.

60-4.10D Payment

The payment quantity for seat extender does not include the weight of nonmetallic materials used in constructing the seat extenders.

SAMPLE NOT FOR BIDDING

^^

DIVISION VII DRAINAGE FACILITIES

Replace section 62 with:

04-17-20

62 STORMWATER TREATMENT

04-17-20

62-1 GENERAL

62-1.01 GENERAL

62-1.01A Summary

Section 62-1 includes general specifications for constructing permanent stormwater treatment best management practices.

Earthwork must comply with section 19.

Concrete and joint seals must comply with section 51.

Sealant must comply with section 41-5.

Reinforcement must comply with section 52.

Underdrain must comply with section 68-2.

Miscellaneous metal must comply with section 75.

Cable railing must comply with section 83-2.07.

62-1.01B Definitions

Reserved**62-1.01C Submittals**

At least 5 business days before placing permeable material, submit a certificate of compliance for the gradation of the material from the source.

No more than 5 business days after placing permeable material, submit:

1. At least one ASTM D6913 test on permeable material sampled at:
   1.1. Job site
   1.2. Authorized location
2. Verification that the permeable materials testing results meet the gradation requirements

62-1.01D Quality Assurance

Submit verification that the placed material complies with the gradation for the Class 4 and Class 5 permeable materials.

Submit verification of the uniformity coefficient for Class 5 permeable material.

For Department acceptance, the depth of the permeable material will be measured after the in-place washing is complete.

SAMPLE
NOT FOR BIDDING

62-1.02 MATERIALS

62-1.02A General

Not Used

62-1.02B Class 4 Permeable Material

Class 4 permeable material must consist of sand, gravel, or crushed stone that is hard, durable, and clean. The material must be free from organic material, clay balls, or other deleterious substances.

The percentage composition by weight of Class 4 permeable material in place must comply with the gradation requirements shown in the following table:

Class 4 Permeable Material Gradation Requirements

Sieve size	Percentage passing
2"	100
1-1/2"	95–100
3/4"	50–100
3/8"	15–55
No. 4	0–25
No. 8	0–5
No. 100	0

Class 4 permeable material must have a durability index of not less than 40.

62-1.02C Class 5 Permeable Material

Reserved

62-1.02D Miscellaneous Metal

Fabricate the parts shown in the table below from the corresponding materials shown:

Miscellaneous Metal Parts

Part	Material
Ladders	Steel
Handrails	Steel
Trash screen	Steel
Components of riser support brackets	Stainless steel complying with ASTM A276, Grade 304 CIP inserts must be ferrule loop type

62-1.02E Filter Fabric

Class D filter fabric must comply with the requirements shown in the following table:

Class D Filter Fabric

Quality characteristic	Test method	Requirement
Permittivity (min and max, sec^{-1})	ASTM D4491	1.6–1.8
Apparent opening size, average roll value (min and max, US standard sieve size)	ASTM D4751	60–80
Grab breaking load, 1-inch grip, in each direction (min, lb)	ASTM D4632	120
Apparent elongation, in each direction (min, %)	ASTM D4632	50
UV resistance, retained grab breaking load, 500 hours (min, %)	ASTM D4355	70

SAMPLE NOT FOR BIDDING

62-1.02F–62-1.02I Reserved

62-1.03 CONSTRUCTION

62-1.03A General

Placing filter fabric must comply with section 68-1.03B.

62-1.03B Permeable Material

62-1.03B(1) General

Before placement, wash permeable material:

1. To remove silt and clay particles
2. With potable water equal to at least 4 times the volume of the material being placed

After placement, wash permeable material:

1. With potable water
2. Until the discharged water has a turbidity reading of:
   2.1. 30 NTU or less for a project within the Tahoe Hydrologic Unit
   2.2. 200 NTU or less for a project outside the Tahoe Hydrologic Unit

Capture the wash water. Handle the wash water by any of the following means:

1. Dispose of
2. Use as dust control
3. Disperse onsite in an authorized location other than the BMP

62-1.03B(2) Class 5 Permeable Material

Place Class 5 permeable material:

1. In a way that does not damage or displace the filter fabric
2. Using methods that produce a finished surface as shown

62-1.03C–62-1.03H Reserved

62-1.04 Payment

Not Used

62-2 DESIGN POLLUTION PREVENTION INFILTRATION AREA

Reserved

62-3 INFILTRATION TRENCH

Reserved

62-4 INFILTRATION BASIN

Reserved

62-5 INFILTRATION GALLERY

Reserved

62-6 RESERVED

62-7 BIORETENTION

Reserved

62-8 DETENTION BASIN

Reserved

62-9 AUSTIN EARTH BERM

Reserved

62-10 AUSTIN VAULT SAND FILTER

Reserved

62-11 DELAWARE SAND FILTER

Reserved

62-12 GROSS SOLIDS REMOVAL DEVICE

Reserved

62-13 MULTI-CHAMBER TREATMENT TRAIN

Reserved

62-14 TRACTION SAND TRAP

Reserved

62-15–62-24 RESERVED

62-25 EXISTING STORMWATER TREATMENT

Reserved

SAMPLE
NOT FOR BIDDING

^^

64 PLASTIC PIPE

04-17-20

Add to section 64-2.01C:

04-17-20

If recycled resin is used for corrugated polyethylene pipe, submit the percent of recycled resin.

Replace the 2nd and 3rd paragraphs of section 64-2.02C with:

04-17-20

Type C and Type S corrugated polyethylene pipe must comply with AASHTO M 294.

HDPE compounds used in the manufacture of corrugated polyethylene pipe and fittings must comply with AASHTO M 294 except the mix must contain from 2 to 4 percent well-dispersed carbon black and at least 49 percent virgin resin.

^^

65 CONCRETE PIPE

10-16-20

Replace the 2nd paragraph of section 65-2.01D(3) with:

10-16-20

Pipes 24 inches in nominal diameter and smaller do not need to be tested to the load to produce a 0.01-inch-wide crack if the pipe is subjected to a load equivalent to the ultimate test load and complies with section 65-2.02. Instead of broken pipe pieces obtained as specified above, cores weighing at least 2.2 pounds from pipe sections selected by the Engineer may be used for the absorption test. Pipe sections that have been tested to the actual 0.01-inch-wide crack will not be load-tested further, and those sections that comply with or exceed the required strength and workmanship standards may be used in the work if authorized.

Replace the 2nd paragraph of section 65-2.01D(5) with:

10-16-20

Oval shaped reinforced concrete pipe 24 inches in nominal diameter and smaller does not need to be tested to the load to produce a 0.01-inch-wide crack if the pipe is subjected to a load equivalent to the ultimate test load and complies with section 65-2.02. Instead of broken pipe pieces obtained as specified above, cores weighing at least 2.2 pounds from pipe sections selected by the Engineer may be used for the absorption test. Pipe sections that have been tested to the actual 0.01-inch-wide crack will not be load-tested further, and those sections that comply with or exceed the required strength and workmanship standards may be used in the work if authorized.

Replace the 2nd paragraph of section 65-2.02A with:

10-16-20

The concrete for reinforced concrete pipe must contain at least 470 pounds of cementitious material per cubic yard and have a water to cementitious material ratio that does not exceed 0.40 by weight. You may use SCM. Circumferential reinforcement must have a minimum cover of 1 inch, except pipes with a nominal diameter of 18 inches or less must have a minimum cover of 3/4 inch.

^^

SAMPLE NOT FOR BIDDING

66 CORRUGATED METAL PIPE

10-19-18

Replace the 1st paragraph in section 66-1.02D with:

10-19-18

Coupling bands for corrugated metal pipe must comply with either section 66-1.02D or section 61-2.01D(2)(b).

Replace the 6th paragraph in section 66-1.02D with:

10-19-18

Joints for siphons and joints for pipes shown as watertight must be watertight under pressure and all conditions of expansion, contraction, and settlement, and must comply with section 61-2.01D(2)(a) for watertightness.

Replace the 4th paragraph of section 66-2.03 with:

10-19-18

Place cement treated structure backfill for slotted corrugated steel pipe as shown and under section 19-3.02F(3) for soil cement beddings. Cover the completed cement treated structure backfill with a curing seal of asphaltic emulsion, Grade SS1 or CSS1.

^^

71 EXISTING DRAINAGE FACILITIES

04-17-20

Replace section 71-3.01A(4)(b) with:

04-17-20

71-3.01A(4)(b) Preconstruction Meetings

71-3.01A(4)(b)(i) General

Reserved

71-3.01A(4)(b)(ii) Prerehabilitation Meeting

Before starting cleaning and preparation work, you must schedule and attend a prerehabilitation meeting with the Engineer. Include any subcontractors, manufacturers and other parties involved in the culvert work. Provide a meeting facility that is within 5 miles of the job site or at another location accepted by the Engineer.

71-3.01A(4)(b)(iii) Pregrouting Meeting

Before starting grouting work, you must schedule and conduct a grouting meeting with the Engineer and your personnel involved in the grouting work, including your:

1. Project superintendent
2. Supervisory personnel
3. Grouting foreman
4. Grouting subcontractors

Provide a meeting facility that is within 5 miles of the job site or at another location accepted by the Engineer.

SAMPLE
NOT FOR BIDDING

Replace section 71-3.01A(4)(c) with:

04-17-20

71-3.01A(4)(c) Quality Control

71-3.01A(4)(c)(i) General

Reserved

71-3.01A(4)(c)(ii) Annular Space Grouting

The grout cast density at the point of placement must be from 53 to 68 lb/cu ft and the minimum compressive strength must be 300 psi at 28 days.

Test the grout for compressive strength under ASTM C495 except that specimens must be moist cured before the 28-day compressive strength test and not be oven dried. If the grouting plan shows multiple stages, the grouting plan must include test results that verify that the grout stiffness is adequate for placement of multiple lifts.

For each batch of grout, perform density and viscosity tests under ASTM C138 and ASTM C939 in the presence of the Engineer. Grout density must be within 3 lb/cu ft of the density in the authorized grout plan with mix design. The time of efflux (outflow) must not exceed 20 seconds as specified in ASTM C939 unless otherwise authorized.

For pipeliners with a stiffness of less than 29 psi, the grout pump's pressure measured at the point of injection must not exceed either of the following:

1. 5 psi
2. Manufacturer's instruction

For pipeliners with a stiffness of at least 29 psi, the grout pump's pressure measured at the point of injection must not exceed 7.25 psi.

The pipeliner must be able to withstand a static head of grout that is 6 inches above the highest crown elevation. The maximum grout pressure for a static grout head must not exceed the grout pump's maximum allowable pressure.

Install a grout pressure gauge and recorder immediately adjacent to each injection port. Continuously record on paper with ink the actual grouting pressure versus time. Record grout pressure to an accuracy of ±0.5 psi. Attach a gauge to a saddle-type diaphragm seal to prevent clogging with grout.

71-3.01A(4)(c)(iii) CCTV Recording

CCTV recordings must be made and submitted in high quality electronic media such as CD or DVD.

The CCTV equipment must include:

1. CCTV camera with articulating head
2. Transporter adapted for conditions of the culvert
3. Television monitor
4. Lighting
5. Cables and power sources

CCTV equipment must:

1. Be specifically designed and constructed for pipe inspection
2. Have camera lighting for minimizing reflective glare
3. Have an adjustable focal-distance range from 6 inches to infinity
4. Produce a minimum resolution of 356 lines per inch for both the camera and monitor
5. Have a remote-reading meter counter accurate to 1 percent over the length of the particular section being inspected

Verify the accuracy of the distance meter in the CCTV with a walking meter, roll-a-tape, or other authorized device.

Where human entry is possible for the entire length of the culvert, you may use a handheld video camera with lighting as an alternative to CCTV. Video and audio content must comply with the requirements for CCTV. Inspect at a rate that is not more than 30 feet per minute.

SAMPLE
NOT FOR BIDDING

71-3.01A(4)(c)(iv) Photographs

Use a digital camera and lighting. Lighting and photo quality must be suitable to provide clear and focused photographs of the entire culvert surface under all conditions.

71-3.01A(4)(c)(v) Monitoring of Annular Space Grouting

Wherever a pipeliner with annular space grouting is described, monitor the grouting and record pressures throughout the grouting process. Verify compliance with the manufacturer's instructions for each phase of the grouting process. Gauges must comply with ANSI B40, Grade 2A. The pressure gauges, recorder, and field equipment must be calibrated by an independent testing agency.

71-3.01A(4)(c)(vi) Pipeliners

Pipeliners must be continuous over the entire length of the culvert and must have no visual defect such as foreign inclusions, concentrated ridges, discoloration, pitting, pin holes, cracking or other deformities. The pipeliner must not be over-deflected. There must not be segregation or voids in the grout.

71-3.01A(4)(c)(vii) Deflection Testing of Pipeliners

If a pipeliner with annular space grouting is described, test the pipeliner for deflection. Test after grouting and in the presence of the Engineer.

For pipeliners with a nominal inside diameter of 36 inches or less, either pull a mandrel through the pipeliner by hand or use another authorized method. The mandrel must be:

1. Rigid and nonadjustable
2. Comprised of at least 9 legs and have an odd number of total legs
3. Longer than it is wide
4. Made of steel
5. Fitted with pulling rings at each end
6. Stamped or engraved on some segment other than a runner indicating pipeliner material specification, nominal size, and mandrel outside diameter (e.g., HDPE F 714-SDR 26- 36" – 31.569")
7. Furnished in a suitable carrying case labeled with the same data as stamped on the mandrel
8. Authorized before use

For pipeliners with a nominal inside diameter greater than 36 inches, determine the deflection using a 1-inch diameter, rigid, nonadjustable metal bar; a minimum-radius rigid template; or other authorized method.

The pipeliner must not be over-deflected. For pipeliners 36 inches or less in nominal diameter, the mandrel must pass through the entire pipeliner. For pipeliners greater than 36 inches in nominal diameter, the deflection must be the lesser of either of the following:

1. 5 percent greater than the actual dimension of the pipeliner in place. This actual dimension includes the pipe joint system.
2. 6-1/2 percent of the nominal pipeliner dimension.

If more than 8 percent of the nominal pipeliner dimension is over-deflected, the pipeliner is rejected. If 8 percent or less of the nominal pipeliner dimension is over-deflected, the pipeliner may remain in place and the Department deducts 20 percent of the bid amount for that pipeliner.

SAMPLE
NOT FOR BIDDING

Replace item 2 in the list in the first paragraph of section 71-3.01B(2) with:

04-17-20

2. Not less than 590 lb of cementitious material per cubic yard

Replace section 71-5.03B with:

04-17-20

71-5.03B Frames, Covers, and Grates

Adjust frames, covers, and grates must comply with section 78-23.03.

04-17-20

Delete the 2nd through 5th paragraphs of section 71-5.04.

^^

DIVISION VIII MISCELLANEOUS CONSTRUCTION

73 CONCRETE CURBS AND SIDEWALKS

04-17-20

Replace the 3rd paragraph of section 73-1.02A with:

04-17-20

Preformed expansion joint filler must comply with ASTM D1751. As an alternative, a semi-rigid, closed-cell polypropylene foam, preformed joint filler that complies with ASTM D8139 may be used.

Replace the paragraph of section 73-1.02B with:

04-17-20

Detectable warning surface must be on the Authorized Material List for detectable warning surfaces and must match yellow color no. 33538 of AMS-STD-595.

^^

75 MISCELLANEOUS METAL

04-17-20

Replace the last paragraph in section 75-3.02B with:

10-18-19

Thread-locking systems must (1) consist of a cleaner, primer, and anaerobic thread-locking adhesive and (2) be on the Authorized Material List for anaerobic thread-locking systems. Apply all components of the system under the manufacturer's instructions.

SAMPLE NOT FOR BIDDING

04-17-20

Delete the 3rd paragraph of section 75-3.02C(2).

Replace section 75-3.02C(3) with:

04-17-20

75-3.02C(3) Resin Capsule Anchors

Reserved

04-17-20

Delete the 3rd paragraph of section 75-3.02C(4).

^^

78 INCIDENTAL CONSTRUCTION

10-16-20

Replace section 78-4.03 with:

04-19-19

78-4.03 PAINTING CONCRETE

78-4.03A General

78-4.03A(1) Summary

Section 78-4.03 includes specifications for preparing and painting concrete surfaces.

78-4.03A(2) Definitions

Reserved

78-4.03A(3) Submittals

Submit the coating manufacturer's application instructions at least 7 days before use.

78-4.03A(4) Quality Assurance

Reserved

78-4.03B Materials

Coatings for concrete must comply with the specifications for acrylic emulsion paint for exterior masonry in section 91-4.02B.

Coatings must be white.

78-4.03C Construction

78-4.03C(1) General

Reserved

78-4.03C(2) Surface Preparation

Before painting, surfaces must be:

1. At least 28 days old.
2. Prepared under SSPC-SP 13/NACE no. 6. Pressure rinse the prepared surfaces before applying the paint.
3. Thoroughly dry. You may use artificial drying methods if authorized.

78-4.03C(3) Application

Apply at least 2 coats under the manufacturer's instructions and SSPC-PA 7. Protect adjacent surfaces during painting using an authorized method.

10-16-20

Paint text on structures and barriers in 2-1/2-inch high black letters. Black text must contrast with the background. If ordered, adjust text size and paint color to accommodate for paint location.

04-19-19

78-4.03D Payment

Not Used

SAMPLE
NOT FOR BIDDING

Replace section 78-4.04 with:

04-19-19

78-4.04 STAINING CONCRETE AND SHOTCRETE

78-4.04A General

78-4.04A(1) Summary

Section 78-4.04 includes specifications for preparing and staining concrete and shotcrete surfaces.

78-4.04A(2) Definitions

acid stain: non-tintable, transparent stain that contains dilute acid.

water-based stain: semi-transparent or solid water-based coating in an acrylic emulsion vehicle, that can be tinted to match an AMS-STD-595 color.

78-4.04A(3) Submittals

78-4.04A(3)(a) General

Submit the stain and sealer manufacturer's product data and application instructions at least 7 days before starting staining activities.

78-4.04A(3)(b) Contractor Qualifications

Submit the following documentation at least 10 days before the prestaining meeting:

1. Summary of the staining contractor's experience that demonstrates compliance with section 78-4.04A(4)(c).
2. List of at least 3 projects completed in the last 5 years that demonstrate the staining contractor's ability to stain surfaces similar to the surfaces for this project. For each project include:
   2.1. Project description
   2.2. Name and phone number of the owner
   2.3. Staining completion date
   2.4. Color photos of the completed stained surface

78-4.04A(3)(c) Staining Quality Work Plan

Submit a staining quality work plan at least 10 days before the prestaining meeting. The work plan must include details for preparing and staining the surfaces to achieve the required color, and for sealing the surfaces, including:

1. Number of applications that will be used to apply the stain
2. For each application of the stain, a description of:
   2.1. Manufacturer, color, finish, and percentage strength mixture of the stain that will be applied
   2.2. Proposed methods and tools for applying the stain
3. Proposed methods for protecting adjacent surfaces during staining
4. Proposed methods and tools for applying the sealer

For acid stains, the work plan must also include a rinse water collection plan for containing all liquid, effluent, and residue resulting from preparing and staining the surfaces.

78-4.04A(4) Quality Assurance

78-4.04A(4)(a) General

Reserved

78-4.04A(4)(b) Test Panels

Stain the authorized test panel complying with section 51-1.01D(2)(c) or section 53-3.01D(3).

The test panel must be:

1. Stained using the same personnel, materials, equipment, and methods to be used in the work
2. Accessible for viewing
3. Displayed in an upright position near the work
4. Authorized for staining before starting the staining work

If ordered, construct additional test panels until a satisfactory color is attained. The preparing and staining of additional test panels is change order work.

The Engineer uses the authorized stained test panel to determine the acceptability of the stained surface.

Dispose of the test panels after the staining work is complete and authorized. Notify the Engineer before disposing of the test panels.

78-4.04A(4)(c) Contractor Qualifications

The staining contractor must have experience staining surfaces to simulate the appearance of natural rock formations or stone masonry, and must have completed at least 3 projects in the past 5 years involving staining of surfaces similar to the surfaces for this project.

78-4.04A(4)(d) Prestaining Meeting

Before starting staining activities, conduct a meeting to discuss the staining quality work plan. Meeting attendees must include the Engineer and all staining contractors.

SAMPLE NOT FOR BIDDING

78-4.04B Materials

78-4.04B(1) General

Reserved

78-4.04B(2) Stain

78-4.04B(2)(a) General

The stain must be:

1. Commercially available product designed specifically for exterior applications
2. Specifically manufactured for staining concrete surfaces

78-4.04B(2)(b) Acid Stain

Acid stain must:

1. Contain dilute acid that penetrates and etches the surfaces
2. Be a water-based solution of inorganic metallic salts
3. Produce abrasion-resistant color deposits

78-4.04B(2)(c) Water-based Stain

Water-based stain must be:

1. Acrylic emulsion
2. Non-fading and UV resistant
3. Capable of producing irregular, mottled tones

78-4.04B(3) Sealer

The sealer must be as recommended by the stain manufacturer, clear and colorless, and have a matte finish when dry.

78-4.04B(4) Joint Sealing Compound

Reserved

78-4.04C Construction

78-4.04C(1) General

At locations where there is exposed metal adjacent to the surfaces to be stained, seal the joint between the surfaces to be stained and the exposed metal with a joint sealing compound before applying the stain.

78-4.04C(2) Surface Preparation

Test surfaces for acceptance of the stain before applying the stain. Clean surfaces that resist accepting the stain and retest until passing.

Before staining, the surfaces must be:

1. At least 28 days old
2. Prepared under SSPC-SP 13/NACE no. 6
3. Thoroughly dry

78-4.04C(3) Application

78-4.04C(3)(a) General

Apply the stain under the manufacturer's instructions. Protect adjacent surfaces during staining. Drips, puddles, or other irregularities must be worked into the surface.

Apply the sealer under the manufacturer's instructions.

78-4.04C(3)(b) Acid Stain

Work the acid stain into the concrete using a nylon bristle brush in a circular motion.

After the last coat of stain has dried, rinse the stained surfaces with water and wet scrub them with a stiff-bristle nylon brush until the rinse water runs clear. Collect all rinse water.

SAMPLE
NOT FOR BIDDING

78-4.04D Payment

Not Used

Replace section 78-23 with:

04-17-20

78-23 ADJUST UTILITY FRAMES, COVERS, AND MANHOLES

78-23.01 GENERAL

Section 78-23 includes specifications for adjusting utility access box frames, covers, and manholes.

Work performed on existing utility frames, covers, grates and manholes must comply with section 15.

78-23.02 MATERIALS

Not Used

78-23.03 CONSTRUCTION

Lower and raise utility frames, covers, grates and manholes by lowering before cold planing and raising after paving or surfacing. Before opening the lane to traffic, either (1) complete permanent paving or surfacing or (2) temporarily fill any depressions with HMA.

Do not adjust to final grade until the adjacent pavement or surfacing is complete.

For a structure that is to be raised, remove the cover or frame and trim the top of the structure to provide a suitable foundation for the new material.

Instead of using new materials similar in character to those in the existing structure, you may use raising devices to adjust a manhole to grade. Before starting paving work, measure and fabricate raising devices. Raising devices must:

1. Comply with the specifications for section 75 except that galvanizing is not required
2. Have a shape and size that matches the existing frame
3. Be match marked by painting identification numbers on the device and corresponding structure
4. Result in an installation that is equal to or better than the existing one in stability, support, and nonrocking characteristics
5. Be fastened securely to the existing frame without projections above the surface of the road or into the clear opening

Where manholes are to be lowered, remove the top portion to 3.5 feet below finished grade or to an authorized depth. Adjust the manhole using the taper needed to match the finished grade.

If a manhole cover is unstable or noisy under traffic, place a coil of asphalt-saturated rope, a plastic washer, or asphaltic compound on the cover seat. Before placement, obtain authorization for use of the material.

78-23.04 PAYMENT

Not Used

^^

80 FENCES

10-18-19

Replace the 1st paragraph of section 80-2.02B with:

10-18-19

Line posts must comply with ASTM A702 except packaging of posts is not required. You may omit the anchor plate if the post is set in a concrete footing with a minimum cross-sectional dimension of 6 inches and a depth equal to the full penetration of the post.

SAMPLE NOT FOR BIDDING

Replace item 3 in the list in the 1st paragraph of section 80-2.02D with:

10-18-19

3. Be one of the following:
   3.1. 12-1/2 gauge, Class 3
   3.2. 13-1/2 gauge, Class 3
   3.3. 14 gauge, Class 3
   3.4. 15-1/2 gauge, Class 3

Replace the 2nd paragraph of section 80-3.02B with:

10-19-18

Posts and braces must comply with the strength requirements in ASTM F1043 for one of the following:

1. Group IA, regular grade, for round pipes
2. Group IC, 50,000 psi yield, for round pipes
3. Group II-L for roll-formed posts and braces

Replace the list in section 80-4.02B(1)(b) with:

10-19-18

1. Comply with ASTM A1064 and have a Class 1 zinc coating complying with ASTM A641
2. Be welded or woven galvanized steel wire fabric
3. Be made of at least 16-gauge wire
4. Be 36 inches wide

SAMPLE NOT FOR BIDDING

Replace the paragraph in section 80-4.02B(2) with:

10-19-18

The materials for a temporary desert tortoise fence must comply with section 80-4.02B(1).

Replace the 2nd sentence in the 1st paragraph of section 80-4.02C(2) with:

10-19-18

Embed the posts at maximum 10-foot intervals into the ground.

^^

DIVISION IX TRAFFIC CONTROL DEVICES

82 SIGNS AND MARKERS

10-16-20

Replace the list in the 1st paragraph of section 82-2.01C with:

04-19-19

1. Aluminum sheeting
2. Retroreflective sheeting
3. Color imaging methods and film
4. Protective-overlay film

Replace section 82-2.02C with:

04-17-20

82-2.02C Retroreflective Sheeting

Retroreflective sheeting used for the background and legend must comply with ASTM D4956-13 and must be on the Authorized Material List for signing and delineation materials.

Retroreflective sheeting must be Type XI, except for white background signs, it must be Type VIII or IX.

Warning sign plaques and panels must be retroreflective fluorescent orange or fluorescent yellow background.

Type VIII, IX, and XI retroreflective sheeting must have Class 1, 3, or 4 adhesive backing. Adhesive backing must be pressure sensitive and fungus resistant.

Retroreflective sheeting must be applied to sign panels at the fabrication plant under the retroreflective sheeting manufacturer's instructions without appreciable stretching, tearing, or other damage.

Orientation of the legend must comply with the retroreflective sheeting manufacturer's instructions.

Retroreflective sheeting on a sign panel with a minor dimension of 48 inches or less must be a single, contiguous sheet without splices except for the splices produced during the manufacture of the retroreflective sheeting. Sign panel with a minor dimension greater than 48 inches may have 1 horizontal splice in the retroreflective sheeting other than the splices produced during the manufacture of the retroreflective sheeting.

Unless the retroreflective sheeting manufacturer's instructions require a different method, splices in the retroreflective sheeting must overlap by at least 1 inch. The retroreflective sheeting on either side of a splice must not exhibit a color difference under incident and reflected light.

SAMPLE
NOT FOR BIDDING

Replace section 82-2.02D with:

04-19-19

82-2.02D Color Imaging Methods and Film

The material used for color imaging methods, film, and protective-overlay must be recommended by the retroreflective sheeting manufacturer.

Colored retroreflective sheeting must be used for the background.

Signs with green, red, blue, or brown backgrounds may use reverse-screened-process color on white retroreflective sheeting for the background color. The coefficient of retroreflection must be at least 70 percent of the coefficient of retroreflection specified in ASTM D4956 for the corresponding color of retroreflective sheeting.

The sign must have outdoor weatherability characteristics equivalent to those specified for the corresponding color of retroreflective sheeting in ASTM D4956.

Replace the 2nd paragraph of section 82-3.01A with:

04-17-20

Roadside signs include ground-mounted signs and Type N (CA), Type P (CA), and Type R (CA) marker panels.

Add to section 82-3.01B:

04-17-20

ground-mounted sign: Roadside sign or signs with a wide-flange metalpost.

Replace section 82-3.01D with:

10-16-20

82-3.01D Quality Assurance

When delivered to the job site, treated posts must:

1. Comply with the specified grading requirements
2. Be dry
3. Have no visual evidence of preservative on the surface

Add to section 82-3.02B:

04-17-20

Mounting for a ground-mounted sign must be a wide-flange metal post fabricated from structural steel complying with ASTM A36/A36M. Nuts, bolts, and washers for the breakaway connections of a wide-flange steel post must comply with ASTM A325.

10-16-20

Delete the 3rd paragraph of section 82-3.02C.

Replace the 4th paragraph of section 82-3.02C with:

10-16-20

Posts must be treated under section 57-2.01B(3) and under AWPA U1, Use Category UC4A, Commodity Specification A. Posts must be incised, and the minimum retention of preservative must comply with AWPA requirements.

SAMPLE
NOT FOR BIDDING

Replace section 82-5.01A with:

10-19-18

Section 82-5 includes specifications for fabricating and installing markers, including milepost markers.

Replace the 2nd paragraph in section 82-5.02E with:

10-19-18

A target plate for milepost marker or Type L-1 (CA) or Type L-2 (CA) object marker installed on a metal post must be manufactured from an aluminum sheet or zinc-coated steel sheet.

Replace section 82-5.02H with:

10-19-18

82-5.02H Milepost Markers

Letters and numerals on a milepost marker must be made with opaque black paint or film. The paint and film must have an equivalent outdoor weatherability as the retroreflective sheeting specified in ASTM D4956. Nonreflective, opaque, black film must be vinyl or acrylic material.

Film for letters and numerals must be computer cut and have pressure-sensitive adhesive.

Replace the 5th paragraph of section 82-5.03 with:

10-19-18

Use stencils to paint letters and numerals on milepost markers.

Add to the end of section 82-9.03:

04-17-20

82-9.03F Installation of Sign Panels on Existing Posts

Install roadside sign panels on existing posts with fastening hardware under section 82-2.03A.

Replace the 1st paragraph of section 82-9.04 with:

04-17-20

Payment for furnishing sign panels of any type is not included in the payment for install sign panel on existing frame and post.

Payment for removing existing sign panel is included in the payment for install roadside sign panel on existing post.

^^

83 RAILINGS AND BARRIERS

10-16-20

Add to the end of section 83-1.03:

10-16-20

83-1.03D Miscellaneous Construction

Where shown, paint the structure name, bridge number, year constructed, and other bridge identification information. Painting concrete must comply with section 78-4.03C(3).

Bridge identification on the bridge barrier must be (1) painted at each structure approach, (2) visible to approaching traffic, and (3) located near the paving notch, if applicable.

For open bridge barrier rails, paint bridge identification on the widest rail element.

For structures with adjacent retaining walls or approaches where metal beam bridge railings extend beyond the structure, paint bridge identification on the concrete end block of the barrier.

For bents and piers, paint bridge identification corresponding to the name and number shown, on the face of the bridge barrier directly above the centerline of each bent or pier.

SAMPLE NOT FOR BIDDING

Replace section 83-2.01A(3) with:

04-19-19

For midwest guardrail systems and thrie beam barrier, install steel foundation tubes and soil plates in soil.

Replace section 83-2.02C(1)(c) with:

10-16-20

83-2.02C(1)(c) Bolt Holes and Cuts in Wood Posts and Blocks

If copper naphthenate, Alkaline Copper Quaternary ammonium compound, or copper azole is used to treat wood posts and blocks, before inserting the bolts, fill the bolt holes with grease.

You may field bore the 2-3/8-inch-diameter holes shown for wood guardrail terminal posts and wood rail tensioning assembly posts.

If you perform field cutting or boring after treatment, manually treat with preservative under section 57-2.01C(3)(b).

Replace the 4th paragraph of section 83-2.03C with:

04-19-19

If median barrier delineation is shown, match the barrier marker spacing to the raised pavement marker spacing on the adjacent median edge line pavement delineation.

Replace the 3rd paragraph of section 83-2.05B(3) with:

10-16-20

Stud bolts must comply with the specifications for studs in clause 9 of AWS D1.1.

Replace the paragraph of section 83-3.03A(11) with:

04-19-19

Where concrete barrier markers are shown, cement the markers to the barrier under the manufacturer's instructions. Match the barrier marker spacing to the raised pavement marker spacing on the adjacent median edge line pavement delineation.

^^

84 MARKINGS

10-18-19

Replace section 84-2 with:

10-19-18

84-2 TRAFFIC STRIPES AND PAVEMENT MARKINGS

84-2.01 GENERAL

84-2.01A Summary

Section 84-2 includes specifications for applying traffic stripes and pavement markings.

Traffic stripes and pavement markings must comply with ASTM D6628 for daytime and nighttime color.

Retroreflectivity must be measured under ASTM E1710 and the sampling protocol specified in ASTM D7585.

84-2.01B Definitions

10-18-19

pavement marking: Transverse marking which includes shoulder or gore marking, traffic island marking, word or numeral or symbol marking, arrow, limit line, stop line, yield line, crosswalk marking, speed measurement marking, speed reduction marking, speed hump marking, parking space marking, and route shield marking.

10-19-18

traffic stripe: Longitudinal centerline or lane line used for separating traffic lanes in the same direction of travel or in the opposing direction of travel or a longitudinal edge line marking the edge of the traveled way or the edge of a lane at a gore area separating traffic at an exit or entrance ramp. A traffic stripe is shown as a traffic line.

84-2.01C Submittals

For each lot or batch of traffic stripe material, primer, and glass beads, submit:

1. Certificate of compliance, including the material name, lot or batch number, and manufacture date
2. METS notification letter stating that the material is authorized for use, except for thermoplastic and primer
3. SDS
4. Manufacturer's Instructions

SAMPLE NOT FOR BIDDING

For each lot or batch of thermoplastic, submit a manufacturer's certificate of compliance and the following test results from the California Test 423:

1. Brookfield Thermosel viscosity
2. Hardness
3. Yellowness index, white only
4. Daytime luminance factor
5. Yellow color, yellow only
6. Glass bead content
7. Binder content

The date of the test must be within 1 year of use.

Submit test results for each lot of beads specifying the EPA test methods used and tracing the lot to the specific test sample. The testing for lead and arsenic content must be performed by an independent testing laboratory.

Submit the thermoplastic test stripe to the Engineer.

Submit the retroreflectivity test result within 5 days of testing the traffic stripes and pavement markings. The data must include the retroreflectivity, time, date, and GPS coordinates for each measurement.

84-2.01D Quality Assurance

84-2.01D(1) General

Reserved

84-2.01D(2) Quality Control

Before starting permanent application of methyl methacrylate and two component paint traffic stripes and pavement markings, apply a test stripe on roofing felt or other suitable material in the presence of the Engineer. The test stripe section must be at least 50 feet in length.

Upon request, apply a thermoplastic test stripe on suitable material in the presence of the Engineer during the application of thermoplastic traffic stripes or markings. The test stripe must be at least 1 foot in length.

Remove loose glass beads before measuring the retroreflectivity. Obtain authorization to proceed with the application of traffic stripes and pavement markings.

Within 30 days of application, test the traffic stripes and pavement markings under the test methods and frequencies shown in the following table:

Traffic Stripe Testing Frequency

Quality characteristic	Test method	Minimum sampling and testing frequency
Initial retroreflectivity (min, $mcd \cdot m^{-2} \cdot lx^{-1}$) White Yellow	ASTM E1710	ASTM D7585[a]

[a]Use the referee evaluation protocol for project length less than 10 miles. For project lengths greater than or equal to 10 miles, add one evaluation for every additional mile.

Verify the glass bead application rate by stabbing the glass bead tank with a calibrated rod.

84-2.01D(3) Department Acceptance

The Engineer will perform a nighttime, drive-through, visual inspection of the retroreflectivity of the traffic stripes and pavement markings and notify you of any locations with deficient retroreflectivity. Test the retroreflectivity of the deficient areas to confirm striping and pavement markings meets the requirements.

The thermoplastic test stripe will be tested for yellow color, daytime luminance factor, and yellowness index requirements by METS.

SAMPLE NOT FOR BIDDING

84-2.02 MATERIALS

84-2.02A General

Reserved

84-2.02B Glass Beads

Each lot of glass beads must comply with EPA Test Method 3052 and 6010B or 6010C. Glass beads must contain less than 200 ppm each of arsenic and lead.

Type 1 glass beads must comply with AASHTO M 247.

Type 2 glass beads must comply with AASHTO M 247. At least 75 percent of the beads by count must be true spheres that are colorless and do not exhibit dark spots, air inclusions, or surface scratches when viewed under 20X magnification.

High-performance glass beads must be on the Authorized Material List for high-performance glass beads.

Large-gradation glass beads must be on the Authorized Material List for two component traffic paint.

Glass beads for methyl methacrylate must be on the Authorized Material List for methyl methacrylate traffic striping and pavement marking.

Glass beads for paint must comply with State Specification 8010-004.

Glass beads must be surface treated, according to the bead and the material manufacturer's instructions, to promote adhesion with the specified material.

84-2.02C Thermoplastic

Thermoplastic must comply with State Specification PTH-02HYDRO, or PTH-02ALKYD.

Sprayable thermoplastic must comply with State Specification PTH-02SPRAY.

Each lot or batch of thermoplastic must be tested under California Test 423.

84-2.02D Methyl Methacrylate

Methyl methacrylate traffic paint must:

1. Be on the Authorized Material List for methyl methacrylate traffic striping and pavement marking
2. Be Category 2

84-2.02E Traffic Striping and Pavement Marking Tape

Traffic striping and pavement marking tape must be on the Authorized Material List for signing and delineation materials.

04-19-19

White tape must have an initial retroreflectivity of a minimum 700 mcd/m2.

Yellow tape must have an initial retroreflectivity of a minimum 500 mcd/m2.

10-19-18

When contrast is required for traffic stripping and pavement marking tape, the tape must be pre-formed and retroreflective, consisting of a white film with retroreflective beads and a contrasting black film border. The contrasting black border must be a nonreflective film bonded on each side of the white film to form a continuous roll. Each black border must be a minimum of 2 inches wide. The width of the tape must be at least 4 inches wider than the stripe width.

84-2.02F Two-Component Paint

Two-component traffic paint must be on the Authorized Material List for two component traffic paint.

84-2.02G Paint

Paint must comply with the requirements shown in following table:

SAMPLE NOT FOR BIDDING

Paint Specifications

Paint type	Color	Specification
Waterborne traffic line	White, yellow, and black	State Specification PTWB-01R2
Waterborne traffic line for the international symbol of accessibility and other curb markings	Blue, red, and green	Federal Specification TT-P-1952E

84-2.02H–84-2.02L Reserved

84-2.03 CONSTRUCTION

84-2.03A General

Establish the alignment for traffic stripes and the layouts for pavement markings with a device or method that will not conflict with other traffic control devices.

Protect existing retroreflective pavement markers during work activities.

Remove existing pavement markers that are coated or damaged by work activities and replace with an equivalent marker on the Authorized Material List for signing and delineation materials.

A completed traffic stripe or pavement marking must:

1. Have well defined edges
2. Be uniform
3. Be free from runs, bubbles, craters, drag marks, stretch marks, and debris

A completed traffic stripe must:

1. Be straight on a tangent alignment
2. Be a true arc on a curved alignment
3. Not deviate from the width shown by more than:
   3.1. 1/4 inch on a tangent alignment
   3.2. 1/2 inch on a curved alignment

The length of the gaps and individual stripes that form a broken traffic stripe must not deviate by more than 2 inches from the lengths shown. The gaps and stripes must be uniform throughout the entire length of the traffic stripe.

Protect newly placed traffic stripes and pavement markings from traffic and work activities until the traffic stripes and pavement markings are dry or hard enough to bear traffic.

Use mechanical methods to remove dirt, contaminants, and loose material from the pavement surface before applying the traffic stripe or pavement marking.

Use abrasive blast cleaning to remove laitance and curing compound from the surface of new concrete pavement before applying the traffic stripe or pavement marking.

Construct recesses as shown in the following table:

Recess Depth Requirements

Material	Requirement	
	Depth (mils)	Depth (in)
Thermoplastic	375	3/8
Two component traffic paint	250	1/4
Methyl methacrylate traffic paint	250	1/4

Construct recesses for double traffic stripes in a single pass.

Before applying the traffic stripes and pavement markings:

1. Allow wet ground recesses to dry a minimum of 24 hours

SAMPLE NOT FOR BIDDING

2. Remove all powdery residue from dry recess
3. Keep the recesses dry and free from debris

Apply traffic stripes and pavement markings before the end of the same work shift.

84-2.03B Application of Traffic Stripes and Pavement Markings

84-2.03B(1) General

Apply material for a pavement marking with a stencil or a preformed marking.

Immediately remove drips, overspray, improper markings, or material tracked by traffic, using an authorized method.

Apply a traffic stripe or a pavement marking only to a clean, dry surface during a period when the pavement surface temperature is above 50 degrees F.

Apply traffic stripe or pavement marking and glass beads in a single pass. You may apply the glass beads by hand on pavement markings.

Embed glass beads to a depth of 1/2 their diameters.

Distribute glass beads uniformly on traffic stripe and pavement markings.

Glass beads with integral color must match the color of the stripe or pavement marking.

Apply glass beads with two separate applicator guns when two gradations are specified.

Allow enough overlap distance between new and existing striping patterns to ensure continuity at the start and end of the transition.

The retroreflectivity of applied traffic stripes and pavement markings must comply with the requirements shown in the following table:

Retroreflectivity Requirements

Traffic stripe material	White (min, $mcd \cdot m^{-2} \cdot lx^{-1}$)	Yellow (min, $mcd \cdot m^{-2} \cdot lx^{-1}$)
Paint	250	125
Thermoplastic	250	125
Thermoplastic with wet night enhanced visibility	700	500
Two component	250	125
Methyl methacrylate	500	300
Tape	700	500

SAMPLE NOT FOR BIDDING

84-2.03B(2) Thermoplastic

84-2.03B(2)(a) General

Apply primer or surface preparation adhesive under the manufacturer's instructions:

1. To all roadway surfaces except for asphaltic surfaces less than 6 months old
2. At a minimum rate of 1 gallon per 300 square feet
3. To allow time for the thermoplastic primer to dry and become tacky before application of the thermoplastic

Do not thin the primer.

Preheat thermoplastic using preheaters with mixers having a 360-degree rotation.

Apply thermoplastic in a single uniform layer by spray or extrusion methods.

Completely coat and fill voids in the pavement surface with the thermoplastic.

Apply recessed thermoplastic at a thickness so that the top is 0 to 1/16 inch below the pavement surface.

84-2.03B(2)(b) Extruded Thermoplastic

Apply extruded thermoplastic at a temperature of 400 to 425 degrees F or as recommended by the manufacturer.

Apply extruded thermoplastic for a traffic stripe at a rate of at least 0.36 lb of thermoplastic per foot of 6-inch-wide solid stripe. The applied traffic stripe must be at least 0.060 inch thick.

Apply extruded thermoplastic pavement markings at a thickness from 0.100 to 0.150 inch.

Apply Type 2 glass beads to the surface of the molten thermoplastic at a rate of at least 8 lb of beads per 100 sq ft.

84-2.03B(2)(c) Sprayable Thermoplastic

Apply sprayable thermoplastic at a temperature of 350 to 400 degrees F.

Apply sprayable thermoplastic for a traffic stripe at a rate of at least 0.24 lb of thermoplastic per foot of 6-inch-wide solid stripe. The applied stripe must be at least 0.040 inch thick.

84-2.03B(2)(d) Thermoplastic with Enhanced Wet-Night Visibility

Apply a thermoplastic traffic stripe or pavement marking with enhanced wet-night visibility in a single pass and in the following order:

1. Uniform layer of extruded thermoplastic
2. Layer of high-performance glass beads
3. Layer of Type 2 glass beads

Apply thermoplastic with enhanced wet-night visibility at a maximum speed of 8 mph.

Apply thermoplastic with enhanced wet-night visibility for a traffic stripe at a rate of at least 0.47 lb of thermoplastic per foot of 6-inch-wide solid stripe. The applied stripe must be at least 0.090 inch thick.

Apply thermoplastic with enhanced wet-night visibility for a pavement marking at a rate of at least 1.06 lb of thermoplastic per square foot of marking. The applied pavement marking must be at least 0.100 inch thick.

Apply high-performance glass beads at a rate of at least 6 lb of glass beads per 100 sq ft of stripe or marking. Apply Type 2, glass beads at a rate of at least 8 lb of glass beads per 100 sq ft of stripe or marking.

84-2.03B(3) Methyl Methacrylate

Apply the methyl methacrylate when the pavement surface and atmospheric temperatures are from 40 to 104 degrees F.

Apply methyl methacrylate paint at a minimum thickness of 0.090 inch.

Apply recessed methyl methacrylate paint at a minimum thickness of 0.200 inch.

Apply the glass beads recommended by the methyl methacrylate manufacturer.

84-2.03B(4) Traffic Striping and Pavement Marking Tape

Do not use traffic stripe and pavement marking tape on existing open graded friction course or chip seal.

Prepare pavement surface and use primer under the traffic tape manufacturer's written instructions. Apply tape to clean and dry pavement surface. Roll or tamp the traffic tape in place.

84-2.03B(5) Two-Component Paint

Apply a two-component painted traffic stripe or pavement marking in a single pass and in the following order:

1. Coat of two-component paint
2. Application of large gradation glass beads recommended by the two-component paint manufacturer
3. Application of Type 1 glass beads

SAMPLE NOT FOR BIDDING

Apply two-component paint when the pavement surface temperature is above 39 degrees F and the atmospheric temperature is above 36 degrees F. The temperature of the paint must comply with the paint manufacturer's instructions.

Apply two-component paint and glass beads at a maximum speed of 10 mph.

Apply large-gradation glass beads at a minimum rate of 11.7 lb of beads per gallon of paint.

Apply Type 1 glass beads at a minimum rate of 8.3 lb of beads per gallon of paint.

Apply two-component paint for the traffic stripes and pavement markings at the thickness and application rates shown in the following table:

Type of pavement	Stripe thickness (min, inch)	Application rate (min, sq ft/gal)
HMA open graded/chip seal	0.025	64
HMA dense graded	0.020	80
Concrete	0.020	80

Apply recessed two-component paint at a thickness between 0.020 and 0.025 inch.

84-2.03B(6) Paint

Do not apply paint if:

1. Fresh paint could become damaged by rain, fog, or condensation
2. Atmospheric temperature could drop below 50 degrees F during the drying period

Do not thin paint.

Use mechanical means to paint traffic stripes and pavement markings and to apply glass beads for traffic stripes.

The striping machine must be capable of superimposing successive coats of paint on the 1st coat and on existing stripes at a minimum speed of 5 mph.

Where the configuration or location of a traffic stripe is such that the use of a striping machine is not practicable, you may apply the traffic paint and glass beads by other methods and equipment if authorized.

Apply traffic stripes and pavement markings in 1 coat on existing pavement surfaces, at an approximate rate of 107 sq ft/gal.

Apply traffic stripes and pavement markings in 2 coats on a new pavement surface. The 1st coat of paint must be dry before applying the 2nd coat.

Apply 2-coat paint at the approximate rate of 215 sq ft/gal for each coat.

Paint a 1-coat, 3-inch-wide black stripe between the two 6-inch-wide yellow stripes of a double traffic stripe. If the two 6-inch-wide yellow stripes are applied in 2 coats, apply the black stripe concurrently with the 2nd coat of the yellow stripes.

On 2-lane highways:

1. If the 1st coat of the centerline stripe is applied in the same direction as increasing post miles, use the right-hand spray gun of the 3 spray guns to apply a single yellow stripe
2. If the 1st coat of the centerline stripe is applied in the same direction as decreasing post miles, use the left-hand spray gun of the 3 spray guns to apply a single yellow stripe
3. Apply the 2nd coat of centerline striping in the opposite direction of the 1st coat

Apply glass beads at an approximate rate of 5 lb of beads per gallon of paint.

SAMPLE NOT FOR BIDDING

Verify the application rate of paint by stabbing the paint tank with a calibrated rod. If the striping machine has paint gauges, the Engineer may measure the volume of paint using the gauges instead of stabbing the paint tank with a calibrated rod.

84-2.03B(7) Contrast Striping

04-19-19

Contrast striping consists of black striping placed on each side of a white stripe.

10-19-18

You may use permanent tape instead of paint or thermoplastic.

Apply contrast stripe paint in one coat.

Do not use glass beads or other reflective elements in contrast striping material.

04-19-19

84-2.03B(8)–84-2.03B(10) Reserved

10-19-18

84-2.04 PAYMENT

The payment quantity for a traffic stripe is the length measured along the line of the traffic stripe without deductions for gaps in the broken traffic stripe.

The payment quantity for a pavement marking is the area covered.

A double traffic stripe consisting of two-6-inch-wide yellow stripes are measured as 2 traffic stripes except for painted traffic stripes and sprayable thermoplastic traffic stripes.A double sprayable thermoplastic traffic stripe consisting of two 6-inch-wide yellow stripes are measured as single traffic stripe.

A double painted traffic stripe consisting of two 6-inch-wide yellow stripes separated by a 3-inch-wide black stripe is measured as a single traffic stripe.

The payment quantity for contrast striping is the length measured along the line of the traffic stripe without deductions for gaps in the broken traffic stripe.

SAMPLE
NOT FOR BIDDING

Replace section 84-9 with:

10-19-18

84-9 EXISTING MARKINGS

84-9.01 GENERAL

84-9.01A Summary

Section 84-9 includes specifications for removing existing markings.

Work performed on existing markings must comply with section 15.

84-9.01B Definitions

Reserved

04-19-19

84-9.01C Submittals

10-19-18

Submit your proposed method for removing traffic stripes and pavement markings at least 7 days before starting the removal work. Allow 2 business days for the review.

84-9.02 MATERIALS

Not Used

84-9.03 CONSTRUCTION

84-9.03A General

Remove existing traffic stripes before making any changes to the traffic pattern.

Remove existing traffic stripes and pavement markings before applying the following materials:

1. Traffic stripe and pavement marking tape
2. Two component traffic stripes and pavement markings
3. Methyl methacrylate traffic stripes and pavement markings

04-19-19

Remove contrast stripes, traffic stripes and pavement markings, including any paint in the gaps, by methods that do not remove pavement to a depth of more than 1/8 inch.

10-19-18

Remove pavement markings such that the old message cannot be identified. Make any area removed by grinding rectangular. Water must not puddle in the ground areas. Fog seal ground areas on asphalt concrete pavement.

Sweep up or vacuum any residue before it can (1) be blown by traffic or wind, (2) migrate across lanes or shoulders, or (3) enter a drainage facility.

84-9.03B Remove Traffic Stripes and Pavement Markings Containing Lead

Reserved

84-9.03C–84-9.03J Reserved

84-9.04 PAYMENT

The payment quantity for remove traffic stripe is the measured length multiplied by:

1. 0.67 for a single 4-inch-wide traffic stripe
2 1.34 for a single 8-inch-wide traffic stripe
3. 2 for a double traffic stripe

The payment quantity for remove traffic stripe does not include the gaps in broken traffic stripes. Payment for removal of paint evident in a gap is included in the payment for remove traffic stripe of the type involved.

10-18-19

If no bid item is shown on the Bid Item List for remove pavement marking, remove pavement marking is paid for as remove traffic stripe of the types shown in the Bid Item List and the payment quantity for 1 square foot of pavement marking is 2 linear feet.

^^

SAMPLE NOT FOR BIDDING

DIVISION X ELECTRICAL WORK

86 GENERAL

10-16-20

Replace section 86-1.01B with:

10-19-18

86-1.01B Definitions

accessible pedestrian signal: Accessible pedestrian signal as defined in the *California MUTCD*.

accessible walk indication: Activated audible and vibrotactile action during the walk interval.

actuation: Actuation as defined in the *California MUTCD*.

ambient sound level: Background sound level in dB at a given location.

ambient sound sensing microphone: Microphone that measures the ambient sound level in dB and automatically adjusts the accessible pedestrian signal speaker's volume.

audible speech walk message: Audible prerecorded message that communicates to pedestrians which street has the walk interval.

CALiPER: Commercially Available LED Product Evaluation and Reporting. A U.S. Department of Energy program that individually tests and provides unbiased information on the performance of commercially available LED luminaires and lights.

controller assembly: Assembly for controlling a system's operations, consisting of a controller unit and auxiliary equipment housed in a waterproof cabinet.

controller unit: Part of the controller assembly performing the basic timing and logic functions.

correlated color temperature: Absolute temperature in kelvin of a blackbody whose chromaticity most nearly resembles that of the light source.

detector: Detector as defined in the *California MUTCD*.

electrolier: Assembly of a lighting standard and luminaire.

flasher: Device for opening and closing signal circuits at a repetitive rate.

illuminance gradient: Ratio of the minimum illuminance on a 1-foot square of sign panel to that on an adjacent 1-foot square of sign panel.

inductive loop detector: Detector capable of being actuated by an inductance change caused by a vehicle passing or standing over the loop. An inductive loop detector includes a loop or group of loops installed in the roadway and a lead-in cable installed and connected inside a controller cabinet.

junction temperature: Temperature of the electronic junction of the LED device. The junction temperature is critical in determining photometric performance, estimating operational life, and preventing catastrophic failure of the LED.

L70: Extrapolated life in hours of the luminaire when the luminous output depreciates 30 percent from the initial values.

lighting standard: Pole and mast arm supporting the luminaire.

link: Part of a system which provides a data connection between a transmitter and receiver.

LM-79: Test method from the Illumination Engineering Society of North America specifying the test conditions, measurements, and report format for testing solid state lighting devices, including LED luminaires.

LM-80: Test method from the Illumination Engineering Society of North America specifying the test conditions, measurements, and report format for testing and estimating the long-term performance of LEDs for general lighting purposes.

luminaire: Assembly that houses the light source and controls the light emitted from the light source.

mid-span access method: Procedure in which fibers from a single buffer tube are accessed and spliced to a multi buffer tube cable without cutting the unused fibers in the buffer tube, or disturbing the remaining buffer tubes in the cable.

National Voluntary Laboratory Accreditation Program: U.S. Department of Energy program that accredits independent testing laboratories.

optical time domain reflectometer: Fiber optic test equipment that is used to measure the total amount of power loss between two points and over the corresponding distance. It provides a visual and printed display of the relative location of system components such as fiber sections, splices and connectors as well as the losses that are attributed to each component and or defects in the fiber.

pedestrian change interval: Pedestrian change interval as defined in the *California MUTCD*.

powder coating: Coating applied electrostatically using exterior-grade, UV-stable, polymer powder.

power factor: Ratio of the real power component to the complex power component.

SAMPLE
NOT FOR BIDDING

power meter: Portable fiber optic test equipment that, when coupled with a light source, is used to perform end-to-end attenuation testing. Its display indicates the amount of power injected by the light source at the designed wavelength of the system under testing that arrives at the receiving end of the link.

pretimed controller assembly: Assembly operating traffic signals under a predetermined cycle length.

programming mechanism: Device to program the accessible pedestrian signal operation.

pull box: Box with a cover that is installed in an accessible place in a conduit run to facilitate the pulling in of wires or cables.

push button information message: Push button information message as defined in the *California MUTCD*.

push button locator tone: Push button locator tone as defined in the *California MUTCD*.

segment: Continuous cable terminated by 2 splices, 2 connectors or 1 splice and 1 connector.

signal face: Signal face as defined in the *California MUTCD*.

signal head: Signal head as defined in the *California MUTCD*.

signal indication: Signal indication as defined in the *California MUTCD*.

signal section: Signal section as defined in the *California MUTCD*.

signal standard: Pole with or without mast arms carrying 1 or more signal faces.

street side lumens: Lumens from a luminaire directed to light up areas between the fixture and the roadway, such as traveled ways and freeway lanes.

surge protection device: Subsystem or component that protects equipment against short-duration voltage transients in power line.

total harmonic distortion: Ratio of the rms value of the sum of the squared individual harmonic amplitudes to the rms value of the fundamental frequency of a complex waveform.

traffic-actuated controller assembly: Assembly for operating traffic signals under the varying demands of traffic as registered by detector actuation.

traffic phase: Traffic phase as defined in the *California MUTCD*.

vehicle: Vehicle as defined in the *California Vehicle Code*.

vibrotactile pedestrian device: Vibrotactile pedestrian device as defined in the *California MUTCD*.

SAMPLE
NOT FOR BIDDING

10-19-18

Delete the 9th and 10th paragraphs of section 86-1.01C(1).

Replace section 86-1.01C(3) with:

10-19-18

86-1.01C(3) Luminaires

Submit for a luminaire:

1. Maximum power in watts
2. Maximum designed junction temperature
3. Heat sink area in square inches
4. Designed junction-to-ambient thermal resistance calculation with thermal resistance components clearly defined
5. L70 in hours when extrapolated for the average nighttime operating temperature
6. Life expectancy based on the junction temperature

7. Manufacturer's data sheet for the power supply, including the rated life

Submit the manufacturer's QC test data for luminaires as an informational submittal.

Replace section 86-1.01C(4) with:

10-19-18

86-1.01C(4) Reserved

Replace the 3rd paragraph of section 86-1.02B(1) with:

04-19-19

Conduit used for horizontal directional drilling must be high density polyethylene Type IPS, SDR 9 and comply with ASTM F2160.

Replace the 8th paragraph of section 86-1.02B(1) with:

10-19-18

High density polyethylene for innerduct must:

1. Comply with ASTM D3485, D3035, D2239, and D2447, and NEMA TC7 and TC2
2. Have a minimum tensile yield strength of 3300 psi under ASTM D638

04-19-19

3. Have a density of 59.6187 lb/ft^3 ± 0.3121 lb/ft^3 under ASTM D1505

SAMPLE NOT FOR BIDDING

Replace the 9th paragraph of section 86-1.02B(1) with:

04-19-19

Tracer wire must be a minimum no. 12 solid copper conductor with orange insulation Type TW, THW, RHW, or USE. For direct burial, the tracer wire insulation must be Type UF.

Replace section 86-1.02C with:

10-18-19

86-1.02C Pull Boxes

86-1.02C(1) General

A pull box cover must have a marking on the top that is:

1. Clearly defined
2. Uniform in depth
3. Parallel to the longer side
4. From 1 to 3 inches in height

The cover marking must include *CALTRANS* and one of the following:

1. *SERVICE* for service circuits from a service equipment enclosure to a subpanel
2. *SERVICE IRRIGATION* for circuits from a service equipment enclosure to an irrigation controller
3. *SERVICE BOOSTER PUMP* for circuits from a service equipment enclosure to the booster pump
4. *TDC POWER* for circuits from a service equipment enclosure to telephone demarcation cabinet
5. *LIGHTING* for a lighting system
6. *SIGN ILLUMINATION* for a sign illumination system
7. *SIGNAL AND LIGHTING* for a signal and lighting system
8. *RAMP METER* for a ramp metering system
9. *TMS* for a traffic monitoring station
10. *FLASHING BEACON* for a flashing beacon system
11. *CMS* for a changeable message sign system

12. *INTERCONNECT* for an interconnect conduit and cable system
13. *FIBER OPTIC* for fiber optic cable system
14. *ELECTRICAL SYSTEMS* if more than one system is shared in the same pull box

The cover marking must not include *CALTRANS*, only the following:

1. *ELECTRICAL SERVICE* for circuits from an electrical utility to a service equipment enclosure
2. *TELEPHONE* SERVICE for circuits from a telephone utility to a telephone demarcation cabinet

A metal pull box cover must include a fitting for a bonding conductor.

The hardware must be stainless steel containing 18 percent chromium and 8 percent nickel.

86-1.02C(2) Roadway Pull Boxes

86-1.02C(2)(a) General

A pull box cover must have a nonskid surface.

The pull boxes and covers must not have exposed fibers or reinforcement on the finish surfaces that are exposed.

The load rating must be:

1. Stenciled or stamped on the inside and outside of the pull box
2. Stamped on the outside of the cover

If a transformer or other device is to be placed in the pull box, include recesses for a hanger.

Hold-down bolts must:

1. Be a Penta Head 1/2-13UNC
2. Have a thread lock material
3. Withstand a torque from 55 to 60 ft-lb
4. Withstand a minimum pull-out strength of 750 lb

The opening in which the cover sets must have length and width dimensions 1/8 inch greater than the cover.

SAMPLE NOT FOR BIDDING

86-1.02C(2)(b) Nontraffic Pull Boxes

A nontraffic 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.

An extended pull box must be a minimum 22 inches deep and may be a single box or a box with an extension made of the same material as the pull box. The extension may be another pull box if the bottom edge of the pull box fits into the opening for the cover.

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

The pull box must have a 1/2-13 coarse-thread insert with drainage hole, to secure the hold down bolts.

The cover must have a 1/2 inches by 4 inches pull slot with a 3/16-inch center pin.

The cover markings must be cast in the mold of the cover or be engraved on a metal or UV resistant ABS plate secured to the cover with stainless steel screws.

86-1.02C(2)(c) Traffic Pull Boxes

A traffic pull box and cover must comply with AASHTO HS20-44 and load tested under AASHTO M 306.

A traffic pull box must be reinforced with a galvanized steel Z bar welded frame. The frame must be anchored to the box with 2-1/4-inch-long concrete anchors with a 1/4-inch diameter. The pull box must have 4 concrete anchors, one in each corner, and two near the middle one on each of the longer sides, except for a no. 3-1/2(T) pull box.

The frame must have nuts fabricated with the frame or spot welded to the underside of the frame, to secure the hold down bolts.

The nuts must be zinc-plated carbon steel, vibration-resistant, and have a wedge ramp at the root of the thread.

The cover must:

1. Be steel, reinforced and galvanized post fabrication.
2. Be countersunk approximately 1/4 inch to accommodate the bolt head. When tightened, the hold down bolt head must be no more than 1/8 inch above the top of the cover.
3. Have a 1/2-inch by 2-inch pull slot with a guard under the cover to prevent entry of more than 3 inches below the bottom surface of the cover without deflection.

Before galvanizing a steel cover, the manufacturer must apply the cover marking by one of the following methods:

1. Use a cast iron strip at least 1/4-inch thick with letters raised a minimum of 1/16 inch. Fasten the strip to the cover with 1/4-inch, flathead, stainless steel machine bolts and nuts. Peen the bolts after tightening.
2. Use a sheet steel strip at least 0.027-inch thick with letters raised a minimum of 1/16 inch. Fasten the strip to the cover by spot welding, tack welding, or brazing with 1/4-inch stainless steel rivets or 1/4-inch, roundhead, stainless steel machine bolts and nuts. Peen the bolts after tightening.
3. Bead weld the letters on the cover such that the letters are raised a minimum of 3/32 inch.

86-1.02C(2)(d) Tamper Resistant Pull Boxes

86-1.02C(2)(d)(i) General

Not Used

86-1.02C(2)(d)(ii) Tamper-Resistant Nontraffic Pull Box

86-1.02C(2)(d)(ii)(A) General

A tamper resistant nontraffic pull box must include a pull box with one of the following:

1. Anchored cover
2. Lockable cover
3. Pull box insert

86-1.02C(2)(d)(ii)(B) Anchored Cover

The anchored cover must:

1. Be of 1/2-inch-thick mild steel, hot dip galvanized, post fabrication.
2. Have spikes removed from the galvanized surfaces.
3. Have a center space for a top lock nut that must be torqued to 200 ft-lb.
4. Have a center opening for a stainless-steel threaded cap to cover the lock nut.
5. Weigh a minimum of 85 lb.
6. Include an all-around security skirt of 1/4-inch thick steel. The skirt must be sized to encase a nontraffic pull box or sized to fit within a traffic pull box.
7. Be welded to the skirt.

86-1.02C(2)(d)(ii)(C) Lockable Cover

The lockable cover must:

1. Be manufactured from minimum 3/16-inch-thick galvanized steel or a polymer of minimum strength equal to 3/16-inch steel.
2. Be secured to the pull box with a locking mechanism of equal or greater strength than the manufactured material.
3. Have 1/2-by-2-inch slot holes for lifting.
4. Have dimensions complying with one of the following:
   4.1. Department's standards for pull box covers as shown if the lockable cover is secured to the inside lip of the pull box.

SAMPLE NOT FOR BIDDING

4.2. Department's standards for the length and width as shown for pull box covers if the lockable cover is secured to the top of the pull box.

86-1.02C(2)(d)(ii)(D) Pull Box Insert

The pull box insert must:

1. Be made of minimum 3/16-inch-thick or 10 gauge mild hot-dipped galvanized steel
2. Have a minimum of 2 mounting brackets that rest under the side or end wall
3. Be lockable with a padlock having a minimum 3/8-inch shackle
4. Have dimensions complying with the Department's standards for the length and width as shown for pull box covers

86-1.02C(2)(d)(iii) Tamper Resistant Traffic Pull Box

A tamper resistant traffic pull box must include a pull box with an anchored cover.

86-1.02C(3) Structure Pull Boxes

A no. 7 pull box must:

1 Be 12 by 12 by 12 inches.
2. Be manufactured with 0.075-inch sheet steel.
3, Have 3/4-inch flanges on the top and bottom.
4. Have one 1-inch and one 1-1/2-inch knockouts on each side, except for the covers

10-16-20

5. Have drilled and tapped holes on the top and the bottom flanges for the cover screws. The hole pattern and spacing must be the same at the top and bottom.

10-18-19

6. Have covers that secure to the box with eight 1/4-inch diameter, 20NC brass machine screws.

A no. 8 pull box must:

1 Be 12 by 12 by 12 inches.
2. Be manufactured with 0.135-inch sheet steel.
3. Mount to the structure with three 3/8-inch diameter machine screws per side.
4. Have 1-1/2-inch knockouts on each side, except the cover.

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5. Have drilled and tapped holes on the sides and the bottom for the cover screws. The holes must be reinforced with a 1-by-1-by-0.135-inch bar inside the box.

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6. Have a cover with 3/4-inch flanges on the sides and bottom with the corners welded at the bottom. The cover must secure to the box with, three 1/4-inch diameter by 1/2-inch long cadmium plated brass or stainless steel, machine screws.

A no. 9 pull box must:

1 Be 24 by 9-1/2 by 6-1/4 inches.
2. Be manufactured with 0.075-inch sheet steel.
3. Have a rain tight hood.
4, Have a 1-1/2-by-4-1/2-by-0.135-inch strap welded to the back of the box at each corner, parallel to the long side. The strap must have a 1/4-inch hole on the exposed end.
5. Have a 1-inch lip around the opening.

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6. Have drilled and tapped holes with a minimum 1/4-inch thread length, at the ends of the bottom lip for the cover screws.

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7. Have a 3-inch knockout on each side at the bottom and at the center of the bottom.
8. Have a 2-inch knockout on each side at the top and at both ends of the bottom.
9. Have an L 5/8-by-7/8-by-0.075-inch formed angle spot welded to the inside of the top on both sides and on the bottom.

SAMPLE NOT FOR BIDDING

10. Have a cover manufactured with 0.125-inch steel, that secures to the box with two 3/8-inch diameter by 3/4-inch long stainless-steel flathead screws with 11/16-inch diameter countersink holes. The cover must include a 1/16-inch neoprene gasket.

A no. 9A pull box must:

1 Be 20 by 8 by 8-1/2 inches.
2. Be manufactured with 0.075-inch sheet steel.
3. Have 3/4-inch flanges on the top.
4, Have drilled holes on the short sides for the cover screws. The holes must have a stainless-steel hex nut or a 1/4-by-5/8-by-8-inch bar spot welded to the bottom of the flange.
5. Have a 3-inch knockout on each side at the top and at the center of the bottom.
6. Have a 2-inch knockout on each side at the bottom and at both ends of the bottom.
7. Have a cover manufactured with 0.105-inch steel, that secures to the box with four 3/8-inch diameter stainless steel hex head cap screws, two on each short side. The cover must have a rain tight hood and include a 1/16-inch neoprene gasket.

Pull box corner joints must be lapped and spot welded or riveted.

Concentric and eccentric multiple size knockouts are not be allowed.

Replace section 86-1.02D(3) with:

10-19-18

86-1.02D(3) Warning Tape

Warning tape must be orange color polyolefin film, minimum elongation of 500 percent before breakage, water and corrosion resistant, and comply with requirements shown in the following table:

Warning Tape Requirements

Quality characteristic	Requirement
Thickness (min, mil)	4
Width (in)	4
Tensile strength of material (min, psi)	2800
Message spacing intervals (ft)	3

The warning tape must have a printed message that reads: *CAUTION: CALTRANS FACILITIES BELOW.*

The printed text height and color must be 1 inch, black color text over bright orange background.

Replace the 2nd paragraph of section 86-1.02E with:

10-19-18

Each sensor must:

1. Have a dissipation factor less than 0.04 nF when measured in the 20 nF range
2. Have resistance greater than 20 Megaohms
3. Be 1/4 inch wide by 6 feet long by 1/16 inch thick
4. Have a RG-58C/U coaxial screen transmission cable, jacketed with high-density polyethylene, rated for direct burial and resistant to nicks and cuts
5. Operate over a temperature range from -40 to 160 degrees F
6. Have a signal to noise ratio equal to or greater than 10 to 1
7. Have an output signal of a minimum 250 mV ± 20 percent for a wheel load of 400 lb at 55 mph and 70 degrees F
8. Have an insulation resistance greater than 500 MΩ
9. Have a life cycle of a minimum 25 million equivalent single axle loadings

SAMPLE NOT FOR BIDDING

Replace section 86-1.02F(1) with:

10-19-18

86-1.02F(1) General

Conductors and cables must be clearly and permanently marked the entire length of their outer surface with:

1. Manufacturer's name or trademark
2. Insulation-type letter designation
3. Conductor size
4. Voltage
5. Number of conductors for a cable

The minimum insulation thickness and color code requirements must comply with NEC.

Replace the 2nd paragraph of section 86-1.02F(2)(a) with:

10-19-18

Conductors must be identified as shown in the following table:

Conductor Identification

04-17-20

Circuit	Signal phase or function	Identification			
		Insulation color		Band symbols	Copper size
		Base	Stripe[a]		

SAMPLE NOT FOR BIDDING

Signals (vehicle)[a,b]	2, 6	Red, yellow, brown	Black	2, 6	14
	4, 8	Red, yellow, brown	Orange	4, 8	14
	1, 5	Red, yellow, brown	None	1, 5	14
	3, 7	Red, yellow, brown	Purple	3, 7	14
	Ramp meter 1	Red, yellow, brown	None	No band required	14
	Ramp meter 2	Red, yellow, brown	Black	No band required	14
Pedestrian signals	2p, 6p	Red, brown	Black	2p, 6p	14
	4p, 8p	Red, brown	Orange	4p, 8p	14
	1p, 5p	Red, brown	None	1p, 5p	14
	3p, 7p	Red, brown	Purple	3p, 7p	14
Push button assembly or accessible pedestrian signal	2p, 6p	Blue	Black	P-2, P-6	14
	4p, 8p	Blue	Orange	P-4, P-8	14
	1p, 5p	Blue	None	P-1, P-5	14
	3p, 7p	Blue	Purple	P-3, P-7	14
Traffic signal controller cabinet	Ungrounded circuit conductor	Black	None	CON-1	6
	Grounded circuit conductor	White	None	CON-2	6
Highway lighting pull box to luminaire	Ungrounded - line 1	Black	None	No band required	14
	Ungrounded - line 2	Red	None	No band required	14
	Grounded	White	None	No band required	14
Multiple highway lighting	Ungrounded - line 1	Black	None	ML1	10
	Ungrounded - line 2	Red	None	ML2	10
	Ungrounded - line 3	White	None	ML3	10
Lighting control	Ungrounded - Photoelectric unit	Black	None	C1	14
	Switching leg from Photoelectric unit or SM transformer	Red	None	C2	14
Service	Ungrounded - line 1 (signals)	Black	None	No band required	6
	Ungrounded - line 2 (lighting)	Red	None	No band required	8
Sign lighting	Ungrounded - line 1	Black	None	SL-1	10
	Ungrounded - line 2	Red	None	SL-2	10
Flashing beacons	Ungrounded between flasher and beacons	Red or yellow	None	FB-Location.[c]	14
Grounded circuit conductor	Push button assembly or accessible pedestrian signal	White	Black	No band required	14
	Signals and multiple lighting	White	None	No band required	10
	Flashing beacons and sign lighting	White	None	No band required	12
	Lighting control	White	None	C-3	14
	Service	White	None	No band required	14

SAMPLE NOT FOR BIDDING

Spares		Black	None	No band required	14

Notes:
[a]On overlaps, the insulation is striped for the 1st phase in the designation, e.g., phase (2+3) conductor is striped as for phase 2.
[b]Band for overlap and special phases as required
[c]Flashing beacons having separate service do not require banding.

10-19-18

Delete the 4th paragraph of section 86-1.02F(2)(a).

Replace the 2nd paragraph of section 86-1.02F(2)(c)(ii) with:

10-19-18

An equipment grounding conductor must be insulated.

Replace the 3rd paragraph of section 86-1.02F(3)(d)(ii) with:

10-19-18

Cable must comply with the requirements shown in the following table:

Cable type	Conductor quantity and type	Cable jacket thickness (mils)		Maximum nominal outside diameter (inch)	Conductor color code
		Average	Minimum		

SAMPLE NOT FOR BIDDING

3CSC	3 no. 14	44	36	0.40	Blue/black stripe, blue/orange stripe, white/black stripe
5CSC	5 no. 14	44	36	0.50	Red, yellow, brown, black, white
9CSC	1 no. 12 8 no. 14	60	48	0.65	No. 12 - white, No. 14 - red, yellow, brown, black, red/black stripe, yellow/black stripe, brown/black
12CSC	1 no. 12 11 no. 14	60	48	0.80	No. 12 - white No. 14 - red, yellow, brown, black, red/black stripe, yellow/black stripe, brown/black stripe, black/red stripe, black/white stripe, red/white stripe, brown/white stripe
28CSC	1 no. 10 27 no. 14	80	64	0.90	No. 10 - white No. 14 - red/black stripe, yellow/black stripe, brown/black stripe, red/orange stripe, yellow/orange stripe, brown/orange stripe, red/silver stripe, yellow/silver stripe, brown/silver stripe, red/purple stripe, yellow/purple stripe, brown/purple stripe, red/2 black stripes, brown/2 black stripes, red/2 orange stripes, brown/2 orange stripes, red/2 silver stripes, brown/2 silver stripes, red/2 purple stripes, brown/2 purple stripes, blue/black stripe, blue/orange stripe, blue/silver stripe, blue/purple stripe, white/black stripe, black/red stripe, black

SAMPLE
NOT FOR BIDDING

Replace section 86-1.02F(3)(d)(iv) with:

04-17-20

86-1.02F(3)(d)(iv) Railroad Preemption Cables

A railroad preemption cable must be a 19-conductor cable having a polyvinyl chloride or polyethylene jacket. The cable jacket must be rated for 600 V(ac) and 75 degrees C.

The railroad preemption cable color code must be as shown in the following table:

Railroad Preemption Cable Color Code

Conductor no.	Color Code
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue
7	White/black stripe
8	Red/black stripe
9	Green/black stripe
10	Orange/black stripe
11	Blue/black stripe
12	Black/white stripe
13	Red/white stripe
14	Green/white stripe
15	Blue/white stripe
16	Black/red stripe
17	White/red stripe
18	Orange/red stripe
19	Blue/red stripe

SAMPLE
NOT FOR BIDDING

The individual conductors in the cable must:

1. Be stranded and comply with ASTM B286
2. Have Type THW insulation
3. Be 16 AWG

Replace the 3rd paragraph of section 86-1.02G with:

10-19-18

The self-adhesive reflective labels must:

1. Be from 3 to 5 mils thick
2. Have all black capital characters on a white background
3. Extend beyond the character by a minimum of 1/4 inch

Replace the 4th paragraph of section 86-1.02H with:

10-19-18

PVC electrical tape must have a minimum thickness of 6 mils.

Replace section 86-1.02K with:

04-17-20

86-1.02K Luminaires

86-1.02K(1) General

A luminaire must:

1. Be self-contained, not requiring assembly.
2. Comply with UL 1598 for luminaires in wet locations.
3. Have a power supply with ANSI/IEC 60529 rating of at least IP65.
4. Weigh less than 35 lb.
5. Have a minimum 60,000 hours L70 rating under LM-80 and TM-21 at an ambient temperature of 25 degrees C.
6. Operate over a temperature range from -40 to 130 degrees F.
7. Be operationally compatible with photoelectric controls.
8. Have a nominal correlated color temperature of 3000 K under ANSI C78.377 and a color rendering index of 70 or greater.
9. Have a maximum effective projected area of 1.4 sq ft when viewed from either side or end.
10. Comply with ANSI C136.31.
11. Have a power factor of 0.90 or greater. The total harmonic distortion, current, and voltage induced into a power line by a luminaire must not exceed 20 percent. Test voltage will be at 120 V(ac), 240 V(ac), or 480 V(ac).
12. Comply with the maximum power consumption and isofootcandle curves as shown.
13. Be on the Authorized Material List for LED luminaires or must be submitted and passed testing for addition to the AML.

A luminaire must include a surge protection device to withstand high-repetition noise transients caused by utility line switching, lightning strikes, and other interferences. The device must protect the luminaire from damage and failure due to transient voltages and currents as defined in Tables 1 and 4 of ANSI/IEEE C64.41.2 for location category C-High. The surge protection device must comply with UL 1449 and ANSI/IEEE C62.45 based on ANSI/IEEE C62.41.2 definitions for standard and optional waveforms for location category C-High.

The luminaire must operate over the voltage range:

1. From 95 to 277 V(ac) for luminaires rated 120, 240, or 277 V(ac)
2. From 347 to 480 V(ac) for luminaires rated 480 V(ac)

The fluctuations of line voltage must have no visible effect on the luminous output.

The luminaire's housing, external bolts, screws, hinges, hinge pins, and door closure devices must withstand a 1008 hour cyclic salt fog spray/UV test under ASTM D5894 and an evaluation under ASTM D714 with a blister rating of 8 or greater and no more than medium density.

The luminaire's housing must be marine-grade alloy with less than 0.2 percent copper or die cast aluminum.

The housing must be designed to prevent the buildup of water on its top surface. Exposed heat sink fins must be oriented to allow water to run off the luminaire and carry dust and other accumulated debris away from the unit. The optical assembly of the luminaire must be protected against dust and moisture intrusion to at least an ANSI/IEC 60529 rating of IP66. The power supply enclosure must be protected to at least an ANSI/IEC 60529 rating of IP43.

If the components are mounted on a down-opening door, the door must be hinged and secured to the luminaire's housing separately from other components. The door must be secured to the housing to prevent accidental opening. A safety cable must mechanically connect the door to the housing.

A luminaire must have a barrier-type terminal block secured to the housing to connect field wires. The terminal screws must be captive and equipped with wire grips for conductors up to no. 6.

Terminals must be identified and marked.

SAMPLE NOT FOR BIDDING

If needed, each refractor or lens must be made of UV-inhibiting high-impact plastic, such as acrylic or polycarbonate, or heat and impact-resistant glass. The refractor or lens must be resistant to scratching. Polymeric materials, except for the lenses of enclosures containing either the power supply or electronic components of the luminaire, must be made of UL94 V-0 flame-retardant materials.

The luminaire must be permanently marked inside the unit and outside of its packaging box. Marking consists of:

1. Manufacturer's name or trademark
2. Month and year of manufacture
3. Model, serial, and lot numbers
4. Rated voltage, wattage, and power in VA

An LED luminaire must:

1. Comply with Class A emission limits under 47 CFR 15(B) for unintentional radiators.
2. Have a power supply with:
   2.1. 2 leads to accept standard 0-10 V(dc) control.
   2.2. Dimming control compatible with IEC 60929, Annex E. If the control leads are open or the analog control signal is lost, the circuit must default to 100-percent power.
   2.3. Case temperature self-rise of 77 degrees F or less above ambient temperature in free air with no additional heat sinks.
3. Not be cooled by fans or other menchanical devices.

86-1.02K(2) Roadway Luminaires

A roadway luminaire must:

1. Have a housing color that matches a color no. 26152 to 26440, 36231 to 36375, or 36440 of AMS-STD-595
2. Have an ANSI C136.41-compliant, locking-type, photocontrol receptacle with dimming connections and a watertight shorting cap
3. Have an uplight rating of "U0" per IES TM-15-11
4. Have equipment identification character labels outside the unit on the side that will face the road. Equipment identification characters consist of:
   4.1. R1 for Roadway 1, R2 for Roadway 2, R3 for Roadway 3, and R4 for Roadway 4
   4.2. Rated wattage

The luminaire's housing must have a slip fitter that must:

1. Fit on mast arms with outside diameters from 1-5/8 to 2-3/8 inches
2. Be adjustable to a minimum of ±5 degrees from the axis of the tenon in a minimum of 5 steps: +5, +2.5, 0, -2.5, -5
3. Have clamping brackets that:
   3.1. Are made of corrosion-resistant materials or treated to prevent galvanic reactions
   3.2. Do not bottom out on the housing bosses when adjusted within the designed angular range
   3.3. Do not permanently set more than 1/32 inch when tightened

86-1.02K(3) Overhead Sign Luminaires

An overhead sign luminaire must:

1. Have a uniformity average to minimum ratio of 10:1 for the distribution of light reflected on a 16' wide by 12' high sign panel
2. Not allow more than 2.5 percent of the rated lumens to project above 65 degrees measured up from the horizontal plane in the direction of the sign panel
3. Mount at a maximum height of 12 inches above the top of the mounting rails
4. Mount directly to the sign structure as shown or with a mounting adapter that meets the material requirements of the luminaire's housing

SAMPLE NOT FOR BIDDING

Replace section 86-1.02M with:

10-19-18

86-1.02M Photoelectric Controls

Photoelectric control types are as shown in the following table:

Photoelectric Control Types

Control type	Description
I	Pole-mounted photoelectric unit. Test switch and a 15-A circuit breaker per ungrounded conductor, housed in an enclosure.
II	Pole-mounted photoelectric unit. Contactor, a 15-A circuit breaker per ungrounded conductor, and test switch located in a service equipment enclosure.
III	Pole-mounted photoelectric unit. Contactor, a 15-A circuit breaker per ungrounded conductor, and a test switch housed in an enclosure.
IV	A photoelectric unit that plugs into a NEMA twist-lock receptacle, integral with the luminaire.
V	A photoelectric unit, contactor, a 15-A circuit breaker per ungrounded conductor, and test switch located in a service equipment enclosure.

The pole-mounted adaptor for Type I, II, and III photoelectric controls must include a terminal block and cable supports or clamps to support the wires.

Photoelectric unit must:

1. Have a screen to prevent artificial light from causing cycling.
2. Have a rating of 60 Hz, 105-130 V(ac), 210-240 V(ac), or 105-240 V(ac).
3. Operate at a temperature range from -20 to 55 degrees C.
4. Consume less than 10 W.
5. Be a 3-prong, twist-lock type with a NEMA IP 65 rating, ANSI C136.10-compliant.
6. Have a fail-on state.
7. Fit into a NEMA-type receptacle.
8. Turn on from 1 to 5 footcandles and turn off from 1.5 to 5 times the turn-on level. Measurements must be made by procedures in *EEI-NEMA Standards for Physical and Electrical Interchangeability of Light-Sensitive Control Devices Used in the Control of Roadway Lighting.*

Type I, II, III, and V photoelectric controls must have a test switch to allow manual operation of the lighting circuit. Switch must be:

1. Single-hole mounting, toggle type
2. 15 A, single pole and single throw
3. Labeled *Auto-Test* on a nameplate

Photoelectric control's contactor must be:

1. Normally open
2. Mechanical-armature type with contacts of fine silver, silver alloy, or equal or better material
3. Installed to provide a minimum space of 2-1/2 inches between the contactor terminals and the enclosure's sides

The terminal blocks must be rated at 25 A, 600 V(ac), molded from phenolic or nylon material, and be the barrier type with plated-brass screw terminals and integral marking strips.

SAMPLE
NOT FOR BIDDING

Replace section 86-1.02N with:

10-19-18

86-1.02N Fused Splice Connectors

The fused splice connector for 240 and 480 V(ac) circuits must simultaneously disconnect both ungrounded conductors. The connector must not have exposed metal parts except for the head of the

stainless steel assembly screw. The head of the assembly screw must be recessed a minimum of 1/32 inch below the top of the plastic boss that surrounds the head.

The connector must protect the fuse from water or weather damage. Contact between the fuse and fuse holder must be spring loaded.

Fuses must:

1. Be standard, midget, ferrule type
2. Have a nontime-delay feature
3. Be 13/32 by 1-1/2 inches

Fuse ratings for luminaires are shown in the following table:

Fuse Current Rating Requirements

Circuit voltage	Fuse voltage rating	Soffit and roadway luminaires
120 V(ac)	250 V(ac)	5 A
240 V(ac)	250 V(ac)	5 A
480 V(ac)	500-600 V(ac)	5 A

Fuse ratings for transformers are shown in the following table:

Fuse Current Rating Requirements

Circuit voltage	Fuse voltage rating	Fuse current rating for Single phase (two wires) Transformers (primary side)		
		1 kVA	2 kVA	3 kVA
120 V(ac)	250 V(ac)	10 A	20 A	30 A
240 V(ac)	250 V(ac)	6 A	10 A	20 A
480 V(ac)	500-600 V(ac)	3 A	6 A	10 A

SAMPLE NOT FOR BIDDING

Replace section 86-1.02P(1) with:

10-19-18

86-1.02P(1) General

The enclosures must be rated NEMA 3R and include a dead front panel and a hasp with a 7/16-inch-diameter hole for a padlock.

Except for a service equipment enclosure, an enclosure must:

1. Be manufactured from steel and either galvanized, cadmium plated, or powdercoated
2. Mount to a standard, pole, post, or sign structural frame
3. Provide a minimum space of 2-1/2 inches between the internal components and the enclosure's sides

The enclosure's machine screws and bolts must not protrude outside the cabinet wall.

The fasteners on the exterior of an enclosure must be vandal resistant and not be removable. The exterior screws, nuts, bolts, and washers must be stainless steel.

Replace the 1st paragraph of section 86-1.02P(2) with:

04-19-19

Service equipment enclosure must:

1. Comply with the Electric Utility Service Equipment Requirements Committee
2. Meet the requirements of the service utility
3. Be watertight

4. Be factory wired and manufactured from steel and galvanized or have factory-applied, rust-resistant prime and finish coats, except Types II and III
5. Be marked as specified in NEC to warn of potential electric-arc flash hazards

04-19-19

Delete the 5th paragraph of 86-1.02P(2).

Add between 6th and 7th paragraphs of section 86-1.02P(2):

10-19-18

Service equipment enclosure must have the meter view windows located on the front side of the enclosure for Types III-AF, BF, CF and DF.

Service equipment enclosure must have the meter view windows located on the back side of the enclosure for Types III-AR, BR, CR and DR.

Replace the 7th paragraph of section 86-1.02P(2) with:

04-19-19

The meter area must have a sealable, lockable, weather-tight cover that can be removed without the use of tools.

04-19-19

Delete the 2nd sentence of the 9th paragraph of section 86-1.02P(2).

10-19-18

Delete section 86-1.02P(3).

Replace the 1st paragraph of section 86-1.02Q(2) with:

04-17-20

A Department-furnished controller assembly consists of a controller cabinet with a controller unit and all auxiliary equipment required to operate the system. The Department does not furnish anchor bolts.

Replace section 86-1.02Q(4)(a) with:

10-19-18

86-1.02Q(4)(a) General

The doors of a telephone demarcation cabinet must be attached using continuous aluminum steel piano hinges.

Replace section 86-1.02Q(5) with:

10-16-20

86-1.02Q(5) Battery Backup System Cabinets

A battery backup system includes the cabinet, batteries, and the Department-furnished electronics assembly.

The electronics assembly includes the inverter/charger unit, manual bypass, and the battery harness.

The cabinet for a battery backup system must:

1. Comply with TEES
2. Be submitted and pass testing for addition to the Authorized Material List

SAMPLE NOT FOR BIDDING

Add between the 2nd and 3rd paragraphs of section 86-1.02R(2):

10-19-18

Bracket arms must be long enough to allow proper alignment of signals and backplate installation.

Add to the end of section 86-1.02R(3):

04-17-20

Backplates for signal and lighting systems must have a 2-inch retroreflective strip on the face around the perimeter. The strip must be Type XI fluorescent yellow retroreflective sheeting on the Authorized Material List for signing and delineation materials.

Replace item 2 in the list in the 5th paragraph of section 86-1.02R(4)(a)(iii) with:

10-19-18

2. Be a black color throughout, including the door, matching color no. 17038, 27038, or 37038 of AMS-STD-595

Replace section 86-1.02S(3)(c) with:

04-17-20

86-1.02S(3)(c) LED Countdown Pedestrian Signal Face Modules

An LED countdown PSF module must:

1. Comply with ITE publication ST-055-E, Pedestrian Traffic Control Signal Indicators: Light Emitting Diode (LED) Signal Modules.
2. Be manufactured with materials that comply with ASTM D3935.
3. Have circuit boards that comply with TEES, chapter 1, section 6.
4. Have symbols that are at least 9 inches high and 5-1/4 inches wide each. The 2-digit countdown display, *Upraised Hand*, and *Walking Person* indications must be electronically isolated from each other. The 3 indications must not share a power supply or interconnect circuitry.
5. Use ultra-bright-type LED rated for 60,000 hours of continuous operation. Individual LEDs must be wired such that a loss or failure of 1 LED will not result in a loss of more than 5 percent of the module's light output. Failure of an individual LED in a string must not result in a loss of an entire string or other indication.
6. Have a manual control to turn on and off the 2-digit countdown display.
7. Have the lot number, month, and year of manufacture permanently marked on the back.
8. Have prominent and permanent vertical markings for accurate indexing and orientation within the pedestrian signal housing. Markings must be a minimum of 1 inch in height and include an up arrow and the word *up* or *top.*

Upon initial testing at 25 degrees C, the module must have at least the luminance values shown in the following table:

Luminance Values

PSF module symbol	Luminance (fL)
Upraised hand and 2-digit countdown timer	1,094
Walking person	1,547

The module must not exceed the power consumption requirements shown in the following table:

SAMPLE NOT FOR BIDDING

Maximum Power Consumption Requirements

PSF module display	At 24 °C	At 74 °C
Upraised Hand	10.0 W	12.0 W
Walking Person	9.0 W	12.0 W
2-digit countdown timer	6.0 W	8.0 W

If the pedestrian change interval is interrupted, then the 2-digit countdown timer and display must reset to the full pedestrian change interval before being initiated the next time. The 2-digit countdown display on the PSF module must go dark within a second after displaying "0".

Add to the beginning of section 86-1.02T:

04-19-19

Accessible pedestrian signal must be on the Authorized Material List for Accessible Pedestrian Signals.

04-17-20

Delete the 2nd paragraph of section 86-1.02T.

Replace the 5th and 6th paragraphs of section 86-1.02T with:

10-19-18

The color of a metallic housing must match color no. 33538 of AMS-STD-595.

The color of a plastic housing must match color no. 17038, 27038, or 37038 of AMS-STD-595.

Replace the 7th paragraph of section 86-1.02T with:

04-19-19

Accessible pedestrian signal must:

1. Have controllable and programmable volume level and messaging
2. Be weatherproof and shockproof

SAMPLE NOT FOR BIDDING

Replace the 11th paragraph of section 86-1.02T with:

10-19-18

The cable between the accessible pedestrian signal assembly and the pedestrian signal head must be rated for outdoor use and have a:

1. Minimum four no. 18 stranded or larger tinned copper conductors with a minimum insulation thickness of 15 mils
2. Cable jacket with a minimum thickness of 20 mils and rated for a minimum:
   2.1. 300 V(ac)
   2.2. 80 degrees C
3. Nominal outside diameter less than 350 mils
4. Conductor color code of black, white, red and green

Replace the 1st paragraph of section 86-1.02U with:

10-19-18

The housing for a push button assembly must be made of die-cast aluminum, permanent mold-cast aluminum, or UV-stabilized self-extinguishing structural plastic.

The housing must have a uniform color that matches color no. 17038, 27038, or 37038 of AMS-STD-595.

Replace the 2nd paragraph of section 86-1.02W(4) with:

10-19-18

The cured hot-melt rubberized asphalt sealant must comply with the requirements shown in the following table:

Cured Hot-Melt Rubberized Asphalt Sealant Requirements

Quality characteristic	Test method	Requirement
Cone penetration, 25 °C, 150 g, 5 s (max, 1/10 mm)	ASTM D5329	35
Flow, 60 °C, 5 hr (max, mm)		5
Resilience, 25 °C (min, %)		25
Softening point (min, °C)	ASTM D36	82
Ductility, 25 °C, 5 cm/min (min, cm)	ASTM D113	30
Flash point, Cleveland Open Cup (min, °C)	ASTM D92	288
Viscosity, no. 27 spindle, 20 rpm, 190 °C (Pa•s)	ASTM D4402	2.5–3.5

Replace the 2nd paragraph of section 86-1.02Y with:

10-19-18

A transformer must be a dry type designed for operation on a 60 Hz supply. The transformer must have a decal showing a connection diagram. The diagram must show either color coding or wire tagging with primary (H1, H2) or secondary (X1, X2) markers and the primary and secondary voltage and volt-ampere rating. A transformer must comply with the electrical requirements shown in the following table:

Transformer Electrical Requirements

Quality characteristic	Requirement
Rating (V(ac))	120/240, 120/480, 240/120, 240/480, 480/120, or 480/240
Efficiency (%)	> 95
Secondary voltage regulation and tolerance from half load to full load (%)	±3

SAMPLE NOT FOR BIDDING

^^

87 ELECTRICAL SYSTEMS

10-16-20

Replace *Reserved* in section 87-1.01C with:

10-19-18

Submit a digital file for geographic information system mapping for:

1. Conduit
2. Pull boxes
3. Cabinets
4. Service equipment enclosures
5. Standards

The digital file must consist of:

1. Longitudinal and latitude coordinates, under the WGS84 reference coordinate system. The coordinates must be in decimal format having 6 significant figures after the decimal point. Coordinates must be read at the center of pull boxes, cabinet, standards, and service equipment enclosures; and on top of conduit at 20-foot intervals before backfill.
2. Type, depth and size for conduits.

3. Type for pull boxes, standards, cabinets, and service equipment enclosures.

Replace item 4 in the list in the 1st paragraph of section 87-1.01D(2)(a) with:

10-19-18

4. Luminaires

Replace the 2nd paragraph of section 87-1.01D(2)(a) with:

10-18-19

Submit a sample size as shown in the following table:

Electrical Material Sampling

Contract quantity	Test sample size
1–8	1
9–15	2
16–25	3
26–90	5
91–150	8
151–280	13
281–500	20
501–1200	32

SAMPLE NOT FOR BIDDING

Replace the 2nd paragraph of section 87-1.01D(2)(c) with:

10-16-20

Test the battery backup system in the presence of the Engineer by turning off the service power to the electrical system to be powered by the battery backup system. The electrical system must remain in full continuous operation for 30 minutes. If the test fails, correct the problem and retest the system. After successful completion of the test, turn on the service power for the electrical system.

Replace section 87-1.01D(2)(d) with:

10-19-18

87-1.01D(2)(d) Piezoelectric Axle Sensors

Piezoelectric axle sensors test consists of:

1. Demonstrating for each sensor:
   1.1. Capacitance is within 20 percent of the value shown on the sensor's data sheet
   1.2. Dissipation factor is less than 0.04 nF when measured in the 20 nF range
   1.3. Resistance is greater than 20 Megaohms
2. Collecting a minimum of 100 vehicle records for each lane and demonstrating:
   2.1. Volume is within ±3 percent accuracy
   2.2. Vehicle classification is within 95 percent accuracy by type

Replace the 7th paragraph of section 87-1.03A with:

10-19-18

Notify the Engineer immediately if an existing facility is damaged by your activities:

1. Damaged existing traffic signal systems must be repaired or replaced within 24 hours. If the system cannot be fixed within 24 hours or it is located on a structure, provide a temporary system until the system can be fixed.

2. Damaged existing lighting systems must be repaired or replaced by nightfall. If the system cannot be fixed by nightfall, provide a temporary system until the system can be fixed.

Add to the end of section 87-1.03A:

10-19-18

Collect the geographic information system mapping data.

Replace the 12th paragraph of section 87-1.03B(1) with:

10-19-18

For Type 1, 2, and 5 conduits, use threaded bushings and bond them using a jumper. For other types of conduit, use nonmetallic bushings or end bell.

Replace the 3rd paragraph of section 87-1.03B(3)(a) with:

10-19-18

Place a minimum of 2 inches of sand bedding in a trench before installing the conduit and 18 inches of slurry cement over the conduit before placing additional backfill material.

10-18-19

The slurry must be pigmented to match color no. 21105 of AMS-STD-595.

Replace the 1st sentence in the 6th paragraph of section 87-1.03B(3)(c) with:

10-19-18

Backfill trench with slurry concrete under section 19-3.02E.

Replace the 9th paragraph of section 87-1.03B(3)(c) with:

10-19-18

Install innerducts as one continuous unit between vaults. Innerducts may be interrupted inside pull boxes located between vaults and cabinets.

Replace section 87-1.03C with:

10-18-19

87-1.03C Installation of Pull Boxes

87-1.03C(1) General

Install pull boxes no more than 200 feet apart.

Place the cover on the box when not working in it.

87-1.03C(2) Roadway Pull Boxes

87-1.03C(2)(a) General

You may install larger pull boxes than specified or shown and additional pull boxes to facilitate the work except in structures.

10-16-20

Where a roadway pull box is adjacent to a post or standard, place the pull box within 5 feet from the post or standard on the downstream side of traffic when practical.

10-18-19

Install a pull box on a minimum 6-inch deep bed of crushed rock and grout it before installing conductors. The grout must be from 0.5 to 1 inch thick and sloped toward the drain hole. Place a layer of roofing

SAMPLE NOT FOR BIDDING

paper between the grout and the crushed rock sump. Make a 1-inch drain hole through the grout at the center of the pull box.

Set the pull box such that the top is 1-1/4 inches above the surrounding grade in unpaved areas and leveled with the finished grade in sidewalks and other paved areas.

Grout around conduits that are installed through the sides of the pull box.

Bond and ground the metallic conduit before installing conductors and cables in the conduit.

Bond metallic conduits in a nonmetallic pull box using bonding bushings and bonding jumpers.

Do not install pull boxes in concrete pads, curb ramps, or driveways.

Reconstruct the sump of a pull box if disturbed by your activities. If the sump was grouted, remove and replace the grout.

87-1.03C(2)(b) Nontraffic Pull Boxes

For a buried nontraffic pull box, install the electronic marker and set the box such that the top is from 6 to 8 inches below the surrounding grade. Place a 20-mil-thick plastic sheet made of HDPE or PVC virgin compounds to prevent water from entering the box.

When a pull box is in a structure, modify the base as required.

Place mortar between a nontraffic pull box and a pull box extension.

Where a nontraffic pull box is in the vicinity of a curb in an unpaved area, place the box adjacent to the back of the curb if practical.

If you replace the cover on a nontraffic pull box, anchor it to the box.

Perform the electronic marker test.

87-1.03C(2)(c) Traffic Pull Boxes

Place minor concrete around and under a traffic pull box as shown.

Bolt the steel cover to the box when not working in it.

Bond the steel cover to the conduit with a minimum 3-foot-long jumper and bolt it down after installing the conductors and cables.

87-1.03C(2)(d) Tamper-Resistant Pull Boxes

Install the tamper-resistant pull boxes under the manufacturer's instructions.

87-1.03C(3) Structure Pull Boxes

Install structure pull boxes parallel to the structure.

After removing the knockouts, flatten the surrounding area.

Bond conduit to a structure pull box using locknuts on the inside and outside of the box.

Cover pull boxes with a 1/4-inch plywood during pouring of PCC. For a no. 9 pull box, the upper edge of the plywood must fit against the lower edge of the rain tight hood.

Install no. 7 pull box with bottom flanges flush with the bottom of the box girder. Place top and bottom covers and seal the pull box during PCC pouring.

For no. 9 and 9A pull boxes:

1. Form a 1:1 chamfer around the cover
2. Use the drain hole in the center if the box is horizontal and the low end drain hole if the box is inclined
3. Mounted in a sloping parapet, drill a 1/2-inch elongated drain hole in the center if the box is horizontal or the low end if the box is inclined

SAMPLE NOT FOR BIDDING

Replace section 87-1.03D with:

10-16-20

87-1.03D Battery Backup System Cabinets

Install the battery backup system cabinet to the right side of the controller cabinet. If installation on the right side is not possible, obtain authorization for installation on the left side.

Construct access opening between controller cabinet and battery backup cabinet using:

1. 2-inch nylon-insulated, steel chase nipple
2. 2-inch steel sealing locknut
3. 2-inch nylon-insulated, steel bushing

Remove the jumper between the terminals labeled *BBS-1* and *UBS-1* and the jumper between the terminals labeled *BBS-2* and *UBS-2* in the 7-position terminal block in the controller cabinet before connecting the Department-furnished electronics assembly.

Install the electronics assembly and batteries in the battery backup system cabinet. Obtain authorization for installation of the electronics assembly in the controller cabinet.

Replace section 87-1.03E(2) with:

04-19-19

Dig a trench for the electrical conduits or direct burial cables. Do not excavate until the installation of the conduit or direct burial cables.

Place excavated material in a location that will not interfere with traffic or surface drainage.

After placing the conduit or direct burial cable, backfill the trench.

Compact the backfill to a minimum relative compaction of:

1. 95 percent when placed within the hinge points and in areas where pavement is to be constructed
2. 90 percent when placed outside the hinge points and not under pavement

Restore the sidewalks, pavement, and landscaping at a location before starting excavation at another location.

SAMPLE
NOT FOR BIDDING

Replace section 87-1.03E(3) with:

10-19-18

87-1.03E(3) Concrete Pads, Foundations, and Pedestals

Construct foundations for standards, poles, metal pedestals, and posts under section 56-3.

Construct concrete pads, foundations, and pedestals for controller cabinets, telephone demarcation cabinets, and service equipment enclosures on firm ground.

Install anchor bolts using a template to provide proper spacing and alignment. Moisten the forms and ground before placing the concrete. Keep the forms in place until the concrete sets for at least 24 hours to prevent damage to the surface.

Use minor concrete for pads, foundations, and pedestals.

Construct a pad in front of a Type III service equipment enclosure. The pad must be 24 inches in length, 4 inches in thickness, and must match the width of the foundation.

In unpaved areas, place the top of the foundation 6 inches above the surrounding grade, except place the top:

1. 1 foot 6 inches above the grade for 336L cabinets

2. 1 foot 8 inches above the grade for Type C telephone demarcation cabinets
3. 2 inches above the grade for Type III service equipment enclosures

The pad must be 2 inches above the surrounding grade in unpaved areas.

In and adjacent to the sidewalk and other paved areas, place the top of the foundation 4 inches above the surrounding grade, except place the top:

1. 1 foot 6 inches above the grade for 336L cabinets
2. 1 foot 8 inches above the grade for Type C telephone demarcation cabinets
3. Level with the finished grade for Type G and Type A cabinets and Type III service equipment enclosures

The pad must be level with the finished grade in paved areas.

Apply an ordinary surface finish under section 51-1.03F.

Allow the foundation to cure for at least 7 days before installing any equipment.

Add between the 3rd and 4th paragraphs of section 87-1.03F(1):

04-17-20

Provide conductor and cable slack to comply with the requirements shown in the following table:

Conductor and Cable Slack Requirements

Location	Slack (feet)
Signal standard	1
Lighting standard	1
Signal and lighting standard	1
Pull box	3
Splice	3
Controller cabinet	6
Standards with slip base	0

SAMPLE NOT FOR BIDDING

Replace the last paragraph of section 87-1.03F(1) with:

04-19-19

Install a tracer wire.

Replace section 87-1.03F(2) with:

04-17-20

87-1.03F(2) Cables

87-1.03F(2)(a) General

Reserved

87-1.03F(2)(b) Communication Cables

87-1.03F(2)(b)(i) General

Terminate the ends of the communication cables as shown.

87-1.03F(2)(b)(ii) Category 5E and 6 Cables

Do not splice category 5E and 6 cables.

87-1.03F(2)(b)(iii) Telephone Cables

Do not splice telephone cables between the telephone demarcation point and the controller cabinet.

87-1.03F(2)(c) Copper Cables

87-1.03F(2)(c)(i) General

Reserved

87-1.03F(2)(c)(ii) Detector Lead-in Cables

Install a Type B or C detector lead-in cable in conduit.

Seal the ends of the lead-in cable before installing it in the conduit to prevent moisture from entering the cable.

Splice loop conductors for each direction of travel for the same phase, terminating in the same pull box, to a separate lead-in cable running from the pull box adjacent to the loop detector to a sensor unit mounted in the controller cabinet. Install the lead-in cable without splices except at the pull box when connecting to loop wire.

Verify in the presence of the Engineer that the loops are operational before making the final splices between loop conductors and the lead-in cable.

Identify and tag each lead-in cable with the detector designation at the cabinet and pull box adjacent to the loops.

87-1.03F(2)(c)(iii) Conductors Signal Cables

Do not splice signal cables except for a 28-conductor cable.

Provide identification at the ends of terminated conductors in a cable as shown.

Provide identification for each cable in each pull box showing the signal standard to which it is connected except for the 28-conductor cable.

Connect conductors in a 12-conductor cable as shown in the following table:

12CSC Color Code and Functional Connection

Color code	Termination	Phase
Red	Red signal	2, 4, 6, or 8
Yellow	Yellow signal	2, 4, 6, or 8
Brown	Green signal	2, 4, 6, or 8
Red/black stripe	Red signal	1, 3, 5, or 7
Yellow/black stripe	Yellow signal	1, 3, 5, or 7
Brown/black stripe	Green signal	1, 3, 5, or 7
Black/red stripe	Spare or as required for red or *DONT WALK*	--
Black/white stripe	Spare or as required for yellow	--
Black	Spare or as required for green or *WALK*	--
Red/white stripe	Pedestrian signal *DONT WALK*	--
Brown/white stripe	Pedestrian signal *WALK*	--
White	Terminal block	Neutral

SAMPLE NOT FOR BIDDING

Provide identification for each 28-conductor cable C1 or C2 in each pull box. The cable labeled *C1* must be used for signal phases 1, 2, 3, and 4. The cable labeled *C2* must be used for signal phases 5, 6, 7, and 8.

Connect conductors in a 28-conductor cable as shown in the following table:

28CSC Color Code and Functional Connection

Color code	Termination	Phase
Red/black stripe	Red signal	2 or 6
Yellow/black stripe	Yellow signal	2 or 6
Brown/black stripe	Green signal	2 or 6
Red/orange stripe	Red signal	4 or 8
Yellow/orange stripe	Yellow signal	4 or 8
Brown/orange stripe	Green signal	4 or 8
Red/silver stripe	Red signal	1 or 5
Yellow/silver stripe	Yellow signal	1 or 5
Brown/silver stripe	Green signal	1 or 5
Red/purple stripe	Red signal	3 or 7
Yellow/purple stripe	Yellow signal	3 or 7
Brown/purple stripe	Green signal	3 or 7
Red/2 black stripes	Pedestrian signal *DONT WALK*	2 or 6
Brown/2 black stripes	Pedestrian signal *WALK*	2 or 6
Red/2 orange stripes	Pedestrian signal *DONT WALK*	4 or 8
Brown/2 orange stripes	Pedestrian signal *WALK*	4 or 8
Red/2 silver stripes	Overlap A, C	OLA[a], OLC[a]
Brown/2 silver stripes	Overlap A, C	OLA[c], OLC[c]
Red/2 purple stripes	Overlap B, D	OLB[a], OLD[a]
Brown/2 purple stripes	Overlap B, D	OLB[c], OLD[c]
Blue/black stripe	Pedestrian push button	2 or 6
Blue/orange stripe	Pedestrian push button	4 or 8
Blue/silver stripe	Overlap A, C	OLA[b], OLC[b]
Blue/purple stripe	Overlap B, D	OLB[b], OLD[b]
White/black stripe	Pedestrian push button common	--
Black/red stripe	Spare	--
Black	Spare	--
White	Terminal block	Neutral

OL = Overlap; A, B, C, and D = Overlapping phase designation
[a]For red phase designation
[b]For yellow phase designation
[c]For green phase designation

SAMPLE NOT FOR BIDDING

Use the neutral conductor only with the phases associated with that cable. Do not intermix neutral conductors from different cables except at the signal controller.

87-1.03F(2)(c)(iv) Signal Interconnect Cable

Do not splice the cable unless authorized.

If splices are authorized, insulate the conductor splices with heat-shrink tubing and overlap the insulation at least 0.6 inch. Cover the splice area of the cable with heat-shrink tubing and overlap the cable jacket at least 1-1/2 inches. Provide a minimum of 3 feet of slack at each splice.

87-1.03F(2)(c)(v) Railroad Preemption Cables

Do not splice railroad preemption cable from controller cabinet to railroad cabinet.

Terminate individual conductors with ferrule connectors in the controller cabinet.

Provide identification on both ends of the cable and connect the cable end in the controller cabinet as shown in the following table:

Color Code and Functional Connection

Conductor no.	Color Code	Controller Cabinet Field Terminal Connections	Conductor Identification
1	Black	Not Used	Spare
2	White	Not Used	Spare
3	Red	FT8-A145	Health Status DC+
4	Green	Not Used	Spare
5	Orange	FT7-A134	Simultaneous DC-
6	Blue	FT7-A131	Advance DC-
7	White/black stripe	Not Used	Spare
8	Red/black stripe	FT8-A144	Gate Down/Island
9	Green/black stripe	Feld Terminal FT8-A142	Advance Pedestrian Preemption
10	Orange/black stripe	FT7-A135	Simultaneous Primary
11	Blue/black stripe	FT7-A132	Advance Primary
12	Black/white stripe	Not Used	Spare
13	Red/white stripe	FT8-A143	Gate Down/Island DC-
14	Green/white stripe	FT8-A141	Advance Pedestrian Preemption DC-
15	Blue/white stripe	FT7-A133	Advance Secondary
16	Black/red stripe	Not Used	Spare
17	White/red stripe	FT8-A146	Health Status DC-
18	Orange/red stripe	FT7-A136	Simultaneous Secondary
19	Blue/red stripe	Not Used	Spare

Keep all exposed conductors the same length and individually insulate spare conductors against each other.

Provide a minimum 6 feet of slack in the pull box adjacent to the railroad cabinet.

Connect the cable end in the railroad cabinet as directed by the railroad agency representative.

SAMPLE NOT FOR BIDDING

04-17-20

Delete the 4th paragraph of 87-1.03F(3)(a).

Replace the 1st paragraph of section 87-1.03F(3)(c)(ii) with:

10-19-18

Install a Type 1 or 2 inductive loop conductor except use Type 2 for Type E and F loop detectors.

10-19-18

Delete the last paragraph of section 87-1.03G.

Replace the 4th paragraph of section 87-1.03H(2) with:

10-19-18

Use Method B as follows:

1. Cover the splice area completely with an electrical insulating coating and allow it to dry.
2. Apply 3 layers of half-lapped, PVC electrical tape.
3. Apply 2 layers of butyl-rubber, stretchable tape with liner.
4. Apply 3 layers of half-lapped, PVC, pressure-sensitive, adhesive tape.
5. Cover the entire splice with an electrical insulating coating and allow it to dry.

Replace section 87-1.03N with:

10-19-18

87-1.03N Fused Splice Connectors

Install a fuse splice connector with a fuse in each ungrounded conductor for luminaires, except for overhead sign luminaires. The connector must be located in the pull box adjacent to the luminaires.

If the pull box for the roadway luminaire is tamper resistant, install a fuse splice connector with 10 A fuse in the pull box and an additional fuse splice connector with a 5 A fuse in the handhole.

Install a fuse splice connector with a fuse on primary side of transformer.

Crimp the connector terminals onto the ungrounded conductors using a tool under the manufacturer's instructions. Insulate the terminals and make them watertight.

Add to the end of section 87-1.03T:

10-19-18

When replacing an existing accessible pedestrian signal, the housing color must match the color of the existing housing.

Add to the end of section 87-1.03U:

10-19-18

When replacing an existing push button assembly, the housing color must match the color of the existing housing.

04-17-20

Delete the 9th paragraph for section 87-1.03V(2).

Add between the 1st and 2nd paragraphs of section 87-1.03Y:

04-19-19

Use a submersible type transformer inside pull boxes.

Replace the 2nd paragraph of section 87-2.03A with:

Tighten the cap screws of the luminaire's clamping bracket to 10 ft-lb for roadway luminaires. 10-19-18

Replace section 87-3 with:

10-19-18

87-3 SIGN ILLUMINATION SYSTEMS

87-3.01 GENERAL

Section 87-3 includes specifications for constructing sign illumination systems.

Sign illumination system includes:

1. Foundations
2. Pull boxes
3. Conduit
4. Conductors
5. Overhead sign luminaires
6. Service equipment enclosure

SAMPLE NOT FOR BIDDING

7. Photoelectric control

The components of a sign illumination system are shown on the project plans.

87-3.02 MATERIALS

Reserved

87-3.03 CONSTRUCTION

Perform the conductor test.

Install overhead sign luminaires under the manufacturer's instructions.

Do not modify the sign structure or mounting channels.

Perform the operational tests for the system.

87-3.04 PAYMENT

Not Used

Replace section 87-4 with:

04-17-20

87-4 SIGNAL AND LIGHTING SYSTEMS

87-4.01 GENERAL

Section 87-4 includes specifications for constructing signal and lighting systems.

Signal and lighting system includes:

1. Foundations
2. Pull boxes
3. Conduit
4. Conductors and cables
5. Standards
6. Signal heads
7. Service equipment enclosure
8. Department-furnished controller assembly
9. Detectors
10. Telephone demarcation cabinet
11. Accessible pedestrian signals
12. Push button assemblies
13. Pedestrian signal heads
14. Luminaires
15. Photoelectric control
16. Fuse splice connectors
17. Battery backup system
18. Flashing beacons
19. Flashing beacon control assembly

SAMPLE NOT FOR BIDDING

The components of a signal and lighting system are shown on the project plans.

87-4.02 MATERIALS

87-4.02A General

Not used

87-4.02B Railroad Preemption

A wire jumper for railroad preemption must be:

1. Stranded
2. 14 AWG
3. White with red stripes

87-4.03 CONSTRUCTION

87-4.03A General

Set the foundation for a standard such that the mast arm is perpendicular to the centerline of the roadway.

Tighten the cap screws of the roadway luminaire's clamping bracket to 10 ft-lb.

Label the month and year of the installation inside the luminaire housing's door.

Perform the conductor and operational tests for the system.

87-4.03B Railroad Preemption

Connect the C16 harness plug to the C16 socket on the Output File no. 2LX in the controller cabinet.

Connect the terminated conductors of the C16 harness to terminal block TB9 on input panel no.1 in the controller cabinet as shown in the following table:

Input Panel No. 1 Connections

Pin	Label	TB9
1	J-12D	4
2	J-12J	5
3	J-13D	7
4	J-13J	8
5	J-14D	10
6	J-14J	11

Terminate wire jumpers with spade connectors on both ends.

Connect three wire jumpers approximately 4 feet in length as show in the following table:

Jumper Connections

Jumper	Bus	TB9
1	DC-	6
2	DC-	9
3	DC-	12

Connect three wire jumpers approximately 2 inches in length as show in the following table:

Jumper Connections

Jumper	Terminal Block	Pin	Pin
1	TB-12	5	7
2	TB-13	5	7
3	TB-14	5	7

SAMPLE NOT FOR BIDDING

87-4.04 PAYMENT

Not Used

Replace section 87-7.02 with:

10-19-18

87-7.02 MATERIALS

Flashing beacon control assembly includes:

1. Enclosure.
2. Barrier-type terminal blocks rated for 25 A, 600 V(ac), made of molded phenolic or nylon material and have plated-brass screw terminals and integral marking strips.

3. Solid state flasher complying with section 8 of NEMA standards publication no. TS 1 for 10 A, dual circuits.
4. 15-A, circuit breaker per ungrounded conductor.
5. Single-hole-mounting toggle type, single-pole, single-throw switches rated at 12-A, 120 V(ac). Switches must be furnished with an indicating nameplate reading *Auto - Test.* A 15-A circuit breaker may be used in place of the toggle switch.

Replace section 87-8 with:

10-16-20

87-8 PEDESTRIAN HYBRID BEACON SYSTEMS

87-8.01 GENERAL

87-8.01A Summary

Section 87-8 includes specifications for constructing pedestrian hybrid beacon system.

A pedestrian hybrid beacon system includes:

1. Foundations
2. Pull boxes
3. Conduit
4. Conductors and cables
5. Standards
6. Pedestrian hybrid beacon face
7. Pedestrian signal heads
8. Service equipment enclosure
9. Department-furnished controller assembly
10. Accessible pedestrian signals
11. Push button assemblies
12. Luminaires
13. Fuse splice connectors
14. Battery backup system

SAMPLE
NOT FOR BIDDING

The components of a pedestrian hybrid beacon system are shown on the project plans.

87-8.01B Definitions

Reserved

87-8.01C Submittals

Reserved

87-8.01D Quality Assurance

87-8.01D(1) General

Reserved

87-8.01D(2) Quality Control

Verify the sequence for the pedestrian hybrid beacon system per California *MUTCD*, Chapter 4F, Figure 4F-3 "Sequence for a Pedestrian Hybrid Beacon" during the operational test.

Test the battery backup system.

87-8.02 MATERIALS

87-8.02A General

The pedestrian hybrid beacon system must comply with California *MUTCD*, Chapter 4F.

87-8.02B Pedestrian Hybrid Beacon Face

A pedestrian hybrid beacon face consists of two red indications on the top and one yellow indication on the bottom.

87-8.03 CONSTRUCTION

Install pedestrian hybrid beacon system under sections 87-4.03A.

Install battery backup system.

87-8.04 PAYMENT

Not Used

Replace the 1st paragraph of section 87-12.03 with:

10-19-18

Install changeable message sign on sign structure under section 56-2.

Add to the list in the 2nd paragraph of section 87-14.01A:

10-16-20

8. Signs

Replace section 87-14.02 with:

10-19-18

87-14.02 MATERIALS

87-14.02A General

Vehicle speed feedback sign consists of a housing, display window, and radar unit.

Sign must:

1. Comply with the California MUTCD, Chapter 2B
2. Have an operating voltage of 120 V(ac) for permanent installations
3. Have a maximum weight of 45 lb
4. Have a wind load rating of 90 mph
5. Have an operating temperature range from -34 to 165 degrees F
6. Have a retroreflective white sheeting background

SAMPLE NOT FOR BIDDING

87-14.02B Housings

Housing must:

1. Be weatherproof (NEMA 3R or better) and vandal resistant
2. Be made of 0.09-inch-gauge welded aluminum with the outer surfaces being UV resistant
3. Have the manufacturer's name, model number, serial number, date of manufacture, rated voltage and rated current marked inside
4. Have the internal components easily accessible for field repair without removal of the sign

87-14.02C Display Windows

Display window consists of a cover, LED character display, and dimming control. Character display and cover must deflect together without damage to the internal electronics and speed detection components.

Cover must be:

1. Vandal resistant and shock absorbent
2. Field replaceable with the removal of external stainless-steel, tamper proof fasteners

Cover must be made of a minimum 0.25-inch-thick, shatter-resistant polycarbonate.

LED character display must:

10-16-20

1. Consist of two 7-segment, solid-state, numeric characters, which must:

1.1. Be a minimum:
  1.1.1. 18 inches in height for freeways and expressways
  1.1.2. 14 inches in height for conventional highways
1.2. Have a width-to-height ratio between 0.7 and 1.0
1.3. Have a stroke width-to-height ratio of 0.2
1.4. Be visible from a minimum distance of 1500 feet and legible from a minimum distance of 750 feet
1.5. Consist of a minimum 16 LEDs, which must:
  1.5.1. Be amber and have a wavelength from 590 to 600 nm and rated for minimum 60,000 hours
  1.5.2. Maintain a minimum 85 percent of the initial light output after 48 months of continuous use over the temperature range

10-19-18

2. Be capable of displaying the detected vehicle speed within 1 second
3. Remain blank when no vehicles are detected within the radar detection zone
4. Have the option to flash the pre-set speed limit when the detected vehicle speed is 5 miles higher than the pre-set speed
5. Be viewable only by the approaching traffic

Dimming control must:

1. Automatically adjust the character light intensity to provide optimum character visibility and legibility under all ambient lighting conditions
2. Have minimum 3 manual dimming modes of different intensities

87-14.02D Radar Units

Radar unit must:

1. Be able to detect up to 3 lanes of approaching traffic
2. Operate with an internal, low power, 24.159 GHz (K-band)
3. Be FCC approved Part 15 certified
4. Have a speed accuracy of ±1 mph
5 Have a maximum 15 W power consumption

SAMPLE NOT FOR BIDDING

Add between the 1st and 2nd paragraphs of section 87-14.03:

10-16-20

Install R2-1 SPEED LIMIT sign.

Add to the list in the 2nd paragraph of section 87-18.01:

4. 12 position terminal block

10-18-19

Replace section 87-18.02 with:

10-18-19

87-18.02 MATERIALS

Terminal block must comply with TEES, chapter 1, section 3.

Replace the 2nd paragraph of section 87-18.03 with:

10-18-19

Install the terminal block on the input panel in the controller cabinet.

Connect the signal interconnect cable to the terminal block as shown on the following table:

Signal Interconnect Termination

Terminal Block	Color
1	BLUE
2	BLACK
3	RED
4	BLACK
5	BROWN
6	BLACK
7	GREEN
8	BLACK
9	YELLOW
10	BLACK
11	WHITE
12	BLACK

Replace 87-19 with:

10-19-18

87-19 FIBER OPTIC CABLE SYSTEMS

87-19.01 GENERAL

87-19.01A Summary

Section 87-19 includes specifications for constructing fiber optic cable systems.

A fiber optic cable system includes:

1. Conduit and accessories
2. Vaults
3. Warning tape
4. Fiber optic cables
5. Fiber optic splice enclosures
6. Fiber distribution units
7. Fiber optic markers
8. Fiber optic connectors and couplers

The components of a fiber optic system are shown on the project plans.

SAMPLE NOT FOR BIDDING

87-19.01B Definitions

Reserved

87-19.01C Submittals

At least 15 days before cable installation, submit:

1. Manufacturer's procedures for pulling fiber optic cable
2. Test reports from a laboratory accredited to International Standards Organization/International Electrotechnical Commission 17025 by the American Association for Laboratory Accreditation (A2LA) or the ANSI-ASQ National Accreditation Board (ANAB) for:
   - 2.1. Water penetration
   - 2.2. Cable temperature cycling
   - 2.3. Cable impact
   - 2.4. Cable tensile loading and fiber strain
   - 2.5. Cable compressive loading
   - 2.6. Compound flow
   - 2.7. Cyclic flexing
3. Proof of calibration for the test equipment including:
   - 3.1. Name of calibration facility
   - 3.2. Date of calibration

3.3. Type of equipment, model number and serial number
3.4. Calibration result

Submit optical time-domain reflectometer data files for each test in a Microsoft Excel format.

After performing the optical time-domain reflectometer test and the power meter and light source test, submit within 4 business days a hard copy and electronic format:

1. Cable Verification Worksheet
2. Segment Verification Worksheet
3. Link Loss Budget Worksheet

The worksheets are available at the Division of Construction website.

87-19.01D Quality Assurance

87-19.01D(1) General

Reserved

87-19.01D(2) Quality Control

Notify the Engineer 4 business days before performing field tests. Include exact location of the system or components to be tested. Do not proceed with the testing until authorized. Perform each test in the presence of the Engineer.

The optical time-domain reflectometer test consists of:

1. Inspecting the cable segment for physical damage.
2. Measuring the attenuation levels for wavelengths of 1310 and 1550 nm in both directions for each fiber using the optical time-domain reflectometer.
3. Comparing the test results with the data sheet provided with the shipment. If there are attenuation deviations greater than 5 percent, the test will be considered unsatisfactory and the cable segment will be rejected. The failure of any single fiber is a cause for rejection of the entire segment. Replace any rejected cable segments and repeat the test.

The power meter and light source test consists of:

1. Testing each fiber in a link using a light source at one end of the link and a power meter at the other end
2. Measuring and recording the power loss for wavelengths of 1310 and 1550 nm in both directions

Index matching gel is not allowed.

Installation and splicing of the fiber optic cable system must be performed by a certified fiber optic installer.

The optical time-domain reflectometer test and the power meter and light source test must be performed by a certified fiber optic technician.

The certification for the fiber optic installer and fiber optic technician must be from an organization recognized by the International Certification Accreditations Council and must be current throughout the duration of the project.

87-19.02 MATERIALS

87-19.02A General

All metal components of the fiber optic cable system must be corrosion resistant.

All connectors must be factory-installed and tested.

Patch cords, pigtails, and connectors must comply with ANSI/TIA-568.

Pigtails must have a minimum 80 N pull out strength.

A splice cassette may be used in place of a pigtail and a splice tray.

SAMPLE NOT FOR BIDDING

Each cable reel must have a weatherproof label or tag with information specified in ANSI/ICEA S-87-640 including:

1. Contractor's name
2. Contract number
3. Number of fibers
4. Cable attenuation loss per fiber at 1310 and 1550 nm

The labeled or tagged information must also be in a shipping record in a weatherproof envelope. The envelope must be removed only by the Engineer.

87-19.02B Vaults

A vault must:

1. Comply with section 86-1.02C and AASHTO HS 20-44, and load tested under AASHTO M306.
2. Be a minimum:
   2.1. 4 feet wide by 4 feet high by 4 feet long nominal inside dimensions for box type.
   2.2. 4 feet high by 4 feet outside diameter for round type.
3. Have a minimum access of:
   3.1. 30 inches diameter for round type.
   3.2. 3 feet wide by 3 feet long for box type.
4. Be precast either modular or monolithic.
5. Have cable racks installed on the interior sides. A rack must:
   5.1. Be fabricated from ASTM A36 steel plate.
   5.2. Support a minimum of 100 pounds per rack arm.
   5.3. Support a minimum of 4 splice enclosures and a minimum of 4 cables with a minimum slack of 50 feet each.
   5.4. Be hot-dip galvanized after manufacturing.
   5.5. Be bonded and grounded.
6. Have a minimum:
   6.1. Two 4-inch diameter knockouts on each side for box type.
   6.2. Two 4-inch diameter knockouts placed every 90 degrees for round type.
7. Have a minimum 2-inch-diameter drain hole at the center of base.

Entry points for knockouts must not cause the cable to exceed its maximum bend radius.

The access cover must:

1. Be a two-piece torsion-assisted sections or a minimum 30-inch-diameter cast iron.
2. Have inset lifting pull slots.
3. Have markings *CALTRANS* and *FIBER OPTIC*.

SAMPLE
NOT FOR BIDDING

87-19.02C Fiber Optic Cable

The fiber optic cable must:

1. Comply with 7 CFR parts 1755.900, 1755.901, and 1755.902, and ANSI/ICEA S-87-640
2. Be a singlemode, zero-dispersion, and have non-gel loose type buffer tubes
3. Have no splices
4. Have a Type H or Type M outer jacket
5. Be shipped on a reel
6. Have 10 feet of length on each end of the cable accessible for testing

87-19.02D Fiber Optic Splice Enclosures

A fiber optic splice enclosure must:

1. Not exceed 36 inches in length, 8 inches in width, and 8 inches in height
2. Be made of thermoplastic material, weather proof, chemical and UV resistant, and re-sealable
3. Accommodate a minimum of 8 internal splice trays
4. Have from 1/4 to 1 inch in diameter cable entry ports
5. Have brackets, clips and cable ties

6. Have means to anchor the dielectric member of the fiber optic cable
7. Include grounding hardware

87-19.02E Fiber Distribution Units

The fiber distribution unit consists of a housing, a patch panel, a 12-multicolor pigtail, and a splice tray.

The fiber distribution unit must be self-contained and pre-assembled.

The housing must:

1. Be a 19-inch rack-mountable modular-metal enclosure
2. Be a one rack unit
3. Have cable clamps to secure buffer tube to the chassis
4. Have cable accesses with rubber grommets or similar material to prevent the cable from coming in contact with the bare metal
5. Be weatherproof
6. Have a hinged top door with a latch or thumbscrew to hold it in the closed position

A patch panel must have a minimum of 12-singlefiber type connector sleeves.

A pigtail must:

1. Be a simplex single mode fiber in a 900 µm tight buffer with a 12-inch-outer-diameter PVC jacket
2. Have a fiber optic connector attached on one end and bare fiber on the other end
3. Be at least 3 feet in length
4. Have the manufacturer's part number on the jacket

Pigtails must be single-fiber or ribbon type.

87-19.02F Patch Cords

Patch cords must:

1. Be a singlemode fiber in a 900 µm tight buffer with a 0.12-inch-outer-diameter PVC jacket
2. Have fiber optic connectors attached on both ends
3. Be at least 6 feet in length
4. Have manufacturer's part number on the jacket

Duplex patch cords must be of round cable structure, and not have zip-cord structure.

87-19.02G Splice Trays

Splice trays must:

1. Have brackets to spool incoming fibers a minimum of 2 turns.
2. Have means to secure and protect incoming buffer tubes, pigtails, and a minimum of 12 heat shrink fusion splices.
3. Be stackable.
4. Have a snap-on or hinged cover. The cover may be transparent.

87-19.02H Fiber Optic Markers

Fiber optic markers must be:

1. Type K-2 (CA) object markers for vaults or pull boxes.
2. Disk markers for paved areas and transition points from unpaved to paved areas. The disk marker must be metallic, lead free and 4 inches in diameter, and must have a mounting stem at the center of the disk. The mounting stem must be a minimum 3 inches long and a minimum 0.70 inch in diameter.
3. Non-reflective Class 1, Type F, flexible post delineators for unpaved areas.

87-19.02I Fiber Optic Connectors and Couplers

Connectors must be:

SAMPLE NOT FOR BIDDING

1. 0.1-inch ceramic ferrule pre-radiused type
2. Capped when not used

Couplers must be made of the same material as the connector's housing and have ceramic sleeves.

Singlemode fiber optic connectors must have a yellow strain relief boot or a yellow base.

87-19.03 CONSTRUCTION

87-19.03A General

Perform the optical time-domain reflectometer test:

1. On the fiber optic cable upon its arrival to the job site and before its installation. Complete the Cable Verification Worksheet. Do not install the fiber optic cable until the Engineer's written approval is received.
2. After the fiber optic cable segments have been pulled, but before breakout and termination. Complete the Segment Verification Worksheet.
3. Once the passive cabling system has been installed and is ready for activation. If the measured individual fusion splice losses exceed -0.30 dB, re-splice and retest. At the conclusion of the optical time-domain reflectometer test, perform the power meter and light source test. If the measured link loss exceeds the calculated link loss, replace the unsatisfactory cable segments or splices and retest. Complete the Link Loss Budget Worksheet.

87-19.03B Vaults Installation

Install a vault as shown and with the side facing the roadway a minimum of 2 feet from the edge of pavement or back of dike, away from traffic.

Install the top of the vault flush with surrounding grade in paved areas and 2 inches above the surrounding grade in unpaved areas.

Place 6 inches of minor concrete around vaults. In unpaved areas, finish top of concrete at a 2 percent slope away from cover. In paved areas, finish top of concrete to match existing slope.

Bolt the steel cover to the vault when not working in it.

87-19.03C Fiber Optic Cable Installation

Install fiber optic cable by a certified installer or a representative from the fiber optic cable manufacturer during installation.

When using mechanical aids to install fiber optic cable:

1. Maintain a cable bend radius at least twenty times the outside diameter of the cable
2. Use cable grips having a ball bearing swivel
3. Use a pulling force on a cable not to exceed 500 pound-foot or manufacturer's recommended pulling tension, whichever is less

When installing the cable using the air blown method, the cable must withstand a static air pressure of 110 psi.

Lubricate the cable using a lubricant recommended by the cable manufacturer.

Install fiber optic cable without splices except where shown.

Provide a minimum of 65 feet of slack for each fiber optic cable at each vault. Divide the slack equally on each side of the splice enclosure.

04-17-20

Install tracer wires in the fiber optic conduits and innerducts as shown. Provide a minimum 3 feet of slack tracer wire in each pull box and splice vault from each direction. You may splice tracer wire at intervals of not less than 500 feet and only inside splice vaults or pull boxes.

SAMPLE NOT FOR BIDDING

If a fiber optic cable and tracer wire is installed in an innerduct, pulling a separate fiber optic cable into a spare duct to replace damaged fiber will not be allowed.

Apply a non-hygroscopic filling compound to fiber optic cable openings.

Seal the ends of conduit and innerducts after cables are installed.

Install strain relief for fiber optic cable entering a fiber optic enclosure.

Identify fibers and cables by direct labeling, metal tags, or bands fastened in such a way that they will not move. Use mechanical methods for labeling.

Provide identification on each fiber optic cable or each group of fiber optic cables in each vault and at the end of terminated fibers. Fiber optic cable must be identified as shown in the following table:

SAMPLE
NOT FOR BIDDING

Cable Identification[a]

Sequence order	Description	Code	Numbers of characters
1	Fiber type	S: Singlemode	1
2	Fiber count	###: Example 048	3
3	Begin point	T: TMC H: Hub V: Video Node D: Data Node C: Cable Node TV: Camera CM: CMS E: Traffic Signal RM: Ramp Meter TM: Traffic Monitoring/ Count Station/Vehicle Count Station (VDS, TMS) HA: Highway Advisory Radio EM: Extinguishable Message Sign RW: Roadway Weather Information System WM: Weigh In Motion WS: Weigh-Station Bypass System SV: Vault SC: Splice Cabinet	1 or 2
4	Begin point county abbreviation	AA or AAA: Examples: Orange (ORA), San Mateo (SM)	2 or 3
5	Begin point route number	###: Examples: 005, 082, 114	3
6	Begin point post mile	#####: 02470 (example 024.70): Actual PM value to the 1/100 value	5
7	End Point	In the same way as for Begin Point	1 or 2
8	End point county abbreviation	In the same way as for Begin Point County Abbreviation	2 or 3
9	End point route number	In the same way as Begin Point Route Number	3
10	End point post mile	In the same way as Begin Point Post Mile	5

[a]Cable identification example: The cable code S 048 SV SM 084 02470 SV SC 082 02510 describes a singlemode, 48 strand, cable starting at a fiber optic vault in San Mateo County on Route 84 at post mile 24.70, and ending at another fiber optic vault in Santa Clara County on Route 82 at post mile 25.10.

SAMPLE NOT FOR BIDDING

Place labels on the cables at the following points:

1. Fiber optic vault and pull box entrances and exits
2. Splice enclosures entrance and exit
3. Fiber distribution unit entrance

Lace fiber optic cable inside controller cabinets and secure to the cage.

Support the fiber optic cable within 6 inches from a termination and every 2 feet.

Secure fiber optic cables to the cable racks. Store excess cable in a figure 8 fashion.

87-19.03D Fiber Optic Cable Splices

Use fusion splicing for fiber optic cables.

Splice single-buffer tube cable to multi-buffer tube cable using the mid-span access method under manufacturer's instructions. Any mid-span access splice or fiber distribution unit termination must involve only those fibers being spliced as shown.

Place fiber splices in the splice enclosures installed in the vaults.

87-19.03E Splice Enclosures Installation

Maintain an equal amount of slack on each side of the splice enclosure.

Secure the fiber optic splices in splice tray.

Secure the splice trays to the inner enclosure.

Label cables and buffer tubes.

Do not seal fiber splice enclosure until authorized and the power meter and light source test is performed. Seal the enclosure under manufacturer's instructions.

Flash test the outer enclosure under manufacturer's instructions in the presence of the Engineer. Visually inspect the enclosure. If bubbles are present, identify the locations where the bubbles are present, take corrective actions and repeat the flash test until no bubbles are present.

Attach the splice enclosure to the side wall of a vault or hub with a minimum 2 feet distance between the ground and the bottom of the enclosure.

Secure fiber optic cables to the chassis using cable clamps for fiber optic units.

Connect a minimum of one bonding conductor to a grounding electrode after mounting the fiber optic enclosure to the wall. If there are multiple bonding conductors, organize the conductors in a neat way.

87-19.03F Fiber Optic Distribution Unit Installation

Spool incoming buffer tubes 2 feet in the splice tray and expose 1 foot of individual fibers.

Maintain a minimum 2-inch-bend radius during and after installation in the splice tray.

Splice incoming fibers in the splice tray.

Restrain each fiber in the splice tray. Do not apply stress on the fiber when located in its final position.

Secure buffer tubes near the entrance of the splice tray.

Secure splice trays under manufacturer's instructions.

Label splice tray after splicing is completed.

Install patch cords in fiber distribution units and patch panels. Permanently label each cord and each connector in the panel with the system as shown.

87-19.03G Fiber Optic Markers Installation

Install fiber optic markers at 12-inch offset on the side furthest away from the edge of travel way:

1. For fiber optic cable at 500 feet apart in areas where the distance between vaults or pull boxes is greater than 500 feet
2. Adjacent to vaults and pull boxes
3. For fiber optic cable turns at:
    3.1. Beginning of the turn
    3.2. Middle of the arc
    3.3. End of the turn

When a fiber optic cable crosses a roadway or ramp, install a disk marker over the conduit trench on:

SAMPLE NOT FOR BIDDING

1. Every shoulder within 6 inches from the edge of pavement
2. Delineated median
3. Each side of a barrier

Install markers under section 81 except each retroreflective face must be parallel to the road centerline and facing away from traffic.

87-19.04 PAYMENT

Not Used

Replace section 87-20 with:

04-17-20

87-20 TEMPORARY ELECTRICAL SYSTEMS

87-20.01 GENERAL

Section 87-20 includes specifications for providing, maintaining, and removing temporary electrical systems.

Temporary systems may be mounted on wood posts or trailers.

Obtain the Department's authorization for the type of temporary electrical system and its installation method.

A temporary system must operate on a continuous, 24-hour basis.

A temporary electrical system must have a primary power source and a back-up power source from:

1. Commercial utility company
2. Generator system
3. Photovoltaic system

SAMPLE NOT FOR BIDDING

87-20.02 MATERIALS

87-20.02A General

Temporary wood poles must comply with section 48-6.

The components of a temporary system are shown on the project plans.

If you use Type UF-B cable, the minimum conductor size must be no. 12.

A back-up power source must:

1. Have an automatic transfer switch
2. Start automatically and transfer the system load upon reaching the operating voltage in the event of a power source failure

A trailer must be equipped with devices to level and plumb the temporary system.

87-20.02B Generators

A generator must:

1. Be 120 V(ac) or 120/240 V(ac), 60 Hz, 2.5 kW minimum, continuous-duty type
2. Be powered by a gasoline, LPG, or diesel engine operating at approximately 1,800 rpm with an automatic oil feed
3. Be equipped to provide automatic start-stop operation with a 12 V starting system
4. Have generator output circuits that have overcurrent protection with a maximum setting of 15 A
5. Have a spark arrester complying with Pub Cont Code § 4442

87-20.02C Automatic Transfer Switches

An automatic transfer switch must provide:

1. Line voltage monitoring in the event of a power outage that signals the back-up power source to start
2. Start delay, adjustable from 0 to 6 seconds, to prevent starting if the power outage is only momentary and a stop delay, adjustable from 0 to 8 minutes, to allow the back-up power source to unload
3. Transfer delay from 0 to 120 seconds to allow the back-up power source to stabilize before connecting to the load and retransfer delay from 0 to 32 minutes to allow the line voltage to stabilize
4. Mechanical interlock to prevent an application of power to the load from both sources and to prevent backfeeding from the back-up power source to the primary power source

87-20.02D–87-20.02G Reserved

87-20.02H Temporary Flashing Beacon Systems

A temporary flashing beacon system consists of a flashing beacon system, wood pole, and a power source.

The system must comply with the specifications for flashing beacon systems in section 87-7.

87-20.02I Temporary Lighting Systems

A temporary lighting system consists of a lighting system, a power source, and wood poles.

The system must comply with the specifications for lighting systems in section 87-2.

87-20.02J Temporary Signal Systems

A temporary signal system consists of a signal and lighting system, wood poles and posts, and a power source.

The system must comply with the specifications for signal and lighting systems in section 87-4, except signal heads may be mounted on a wood pole, mast arm, tether wire, or a trailer.

87-20.02K Temporary Radar Speed Feedback Sign Systems

A temporary radar speed feedback sign system must comply with the specifications for a radar speed feedback sign system in section 87-14, except, the LED character display must remain blank when no vehicles are detected or when the detected vehicle speed is 10 miles less than the preset speed.

87-20.03 CONSTRUCTION

87-20.03A General

Provide electrical and telecommunication services for temporary systems. Do not use existing services unless authorized.

Provide power for the temporary electrical systems.

Commercial power must be 120 V(ac) or 120/240 V(ac) single phase. Make arrangements with the utility company for providing service. Protect the power source in a locked enclosure. Provide keys to all locks to the Engineer.

Install conductors and cables in a conduit, suspended from wood poles at least 25 feet above the roadway, or use direct burial conductors and cables.

Install conduit outside the paved area at a minimum of 12 inches below grade for Type 1 and 2 conduit and at a minimum of 18 inches below grade for Type 3 conduit.

Install direct burial conductors and cables outside the paved area at a minimum depth of 24 inches below grade.

Place the portions of the conductors installed on the face of wood poles in either Type 1, 2, or 3 conduit between the point 10 feet above grade at the pole and the pull box. The conduit between the pole and the pull box must be buried at a depth of at least 18 inches below grade.

Place conductors across structures in a Type 1, 2, or 3 conduit. Attach the conduit to the outside face of the railing.

Mount the photoelectric unit at the top of the standard or wood post.

SAMPLE NOT FOR BIDDING

You may abandon in place conductors and cables in sawed slots or in conduit installed below the ground surface.

87-20.03B–87-20.03G Reserved

87-20.03H Temporary Flashing Beacon Systems

Protect each flashing beacon with a fused splice connector on the line side. Wherever conductors are run overhead, install the fused splice connector in the line side outside of the control assembly.

87-20.03I Temporary Lighting Systems

Protect each luminaire with a fused splice connector on the line side. Wherever conductors are run overhead, install the fused splice connectors in the line side before entering the mast arm.

87-20.03J Temporary Signal Systems

You may splice conductors that run to a terminal compartment or a signal head on a pole to the through conductors of the same phase in a pull box adjacent to the pole. Do not splice conductors or cables except in a pull box or in a NEMA 3R enclosure.

The Department provides the timing for the temporary signal.

Maintain the temporary signal except for the Department-furnished controller assembly.

87-20.03K Reserved

87-20.04 PAYMENT

Not Used

Add between the 1st and 2nd paragraphs of section 87-21.03A:

04-17-20

Remove foundation under section 56-3.01C(2)(a).

Add to section 87-21.03A:

04-17-20

Remove electrical equipment, designated as a hazardous waste.

Replace item 7 in the list in the 2nd paragraph of section 87-21.03B(2) with:

10-19-18

7. Camera system

SAMPLE NOT FOR BIDDING

^^

DIVISION XI MATERIALS

90 CONCRETE

10-16-20

Add to section 90-1.01B:

10-18-19

CIP structural concrete members: CIP components of bridge structures, piling, retaining walls, sound walls, box culverts, drainage inlets, approach slabs, bridge railing, and bridge barriers.

Replace section 90-1.01C(6) with:

10-18-19

90-1.01C(6) Mix Design

90-1.01C(6)(a) General

Submit the concrete mix design before using the concrete in the work and before changing the mix proportions or an aggregate source.

90-1.01C(6)(b) Cast-In-Place Structural Concrete Members

10-16-20

For CIP structural concrete members, submit with your mix design results from the tests specified in 90-1.01D(10)(b)(iv) and the results from the tests shown in the following table:

10-18-19

Quality characteristic	Test method
Specific gravity and absorption of coarse aggregate	ASTM C127
Specific gravity and absorption of fine aggregate	ASTM C128
Durability index for fine aggregate	California Test 229
Soundness	California Test 214
Resistance to degradation	ASTM C131
Organic impurities	California Test 213
Chloride concentration of water for washing aggregates and mixing concrete	California Test 422
Sulfate concentration of water for washing aggregates and mixing concrete	California Test 417
Impurities in water for washing aggregates and mixing concrete	ASTM C191 or ASTM C266 and ASTM C109

SAMPLE NOT FOR BIDDING

Replace section 90-1.01C(8) with:

10-18-19

90-1.01C(8) Testing

90-1.01C(8)(a) General

If the concrete is tested for shrinkage, submit the test data with the mix design.

If prequalification is specified, submit certified test data or trial batch test reports under section 90-1.01D(5)(b).

If 56 days are allowed for the concrete to attain the compressive strength described, submit test results under section 90-1.01D(5)(a).

90-1.01C(8)(b) Cast-In-Place Structural Concrete Members

For CIP structural concrete members, submit test results within 3 business days after completing each QC test. For submittal of test results, go to:

http://dime.dot.ca.gov/

For CIP structural concrete members, include the following with the test results:

1. Contract number
2. Mix design number
3. Test sample identification number
4. Date and time of test
5. Batch plant
6. Batch number
7. Bridge number and description of element
8. Supporting data and calculations
9. Name, certification number, and signature of the QC tester

If additional compressive strength test results are needed for CIP structural concrete members to facilitate your schedule, submit a plot of the strength projection curve.

Add to the end of section 90-1.01C:

10-18-19

90-1.01C(11) Quality Control Plan for Cast-In-Place Structural Concrete Members

Section 90-1.01C(11) applies to CIP structural concrete members.

Submit 3 copies of the QC plan for review.

Submit an amended QC plan or an addendum to the QC plan when there are any changes to:

1. Concrete plants
2. Testing laboratories
3. Plant certification or laboratory accreditation status
4. Tester or inspector qualification status
5. QC personnel
6. Procedures and equipment
7. Material sources
8. Material testing

Allow the Department 5 business days to review an amended QC plan or an addendum to the QC plan.

90-1.01C(12) Concrete Materials Quality Control Summary Report for Cast-In-Place Structural Concrete Members

Section 90-1.01C(12) applies to CIP structural concrete members.

During concrete production for CIP structural concrete members, submit a concrete materials QC summary report at least once a month. The report must include:

1. Inspection reports.
2. Test results.
3. Documentation of:
   - 3.1. Test result evaluation by the QC manager
   - 3.2. Any discovered problems or deficiencies and the corrective actions taken
   - 3.3. Any testing of repair work performed
   - 3.4. Any deviations from the specifications or regular practices with explanation

10-16-20

4. Certificate of compliance for the structural concrete material signed by the QC manager. The certificate must state that the information contained in the report is accurate, the minimum testing frequencies specified in section 90-1.01D(10)(b)(iv) are met, and the materials comply with the Contract.

10-18-19

90-1.01C(13) Polymer Fibers

For concrete used in concrete bridge decks or PCC deck overlays, submit:

1. Fiber manufacturer's product data and application instructions
2. Certificate of compliance for each shipment and type of fiber

Replace the 3rd paragraph of section 90-1.01D(5)(a) with:

10-18-19

If the concrete is designated by compressive strength, the strength of concrete that is not steam cured is determined from cylinders cured under Method 1 of California Test 540.

SAMPLE NOT FOR BIDDING

Add to the end of section 90-1.01D:

10-18-19

90-1.01D(7) Qualifications for Cast-In-Place Structural Concrete Members

Section 90-1.01D(7) applies to CIP structural concrete members.

QC laboratory testing personnel must have an ACI Concrete Laboratory Testing Technician, Level 1 certification or an ACI Aggregate Testing Technician, Level 2 certification, whichever certification includes the test being performed.

QC field testing personnel and field and plant inspection personnel must have an ACI Concrete Field Testing Technician, Grade I certification.

90-1.01D(8) Certifications for Cast-In-Place Structural Concrete Members

Each concrete plant used for CIP structural concrete members must have a current:

1. Certification for ready mixed concrete production facilities from the National Ready Mixed Concrete Association. Plant Certification Checklist and supporting documentation must be available upon request.
2. Authorization under the Department's MPQP.

Each QC testing laboratory must be an authorized laboratory with current accreditation from the AASHTO Accreditation Program for the tests performed.

90-1.01D(9) Preconstruction Meeting for Cast-In-Place Structural Concrete Members

Section 90-1.01D(9) applies to CIP structural concrete members.

Before concrete placement, hold a meeting to discuss the requirements for structural concrete QC. The meeting attendees must include the Engineer, the QC manager, and at least 1 representative from each concrete plant performing CIP structural concrete activities for the Contract.

90-1.01D(10) Quality Control

90-1.01D(10)(a) General

Reserved

90-1.01D(10)(b) Cast-In-Place Structural Concrete Members

90-1.01D(10)(b)(i) General

Section 90-1.01D(10)(b) applies to CIP structural concrete members.

Develop, implement, and maintain a QC program that includes inspection, sampling, and testing of structural concrete materials for CIP structural concrete members.

Perform all sampling, testing, and inspecting required to control the process and to demonstrate compliance with the Contract and the authorized QC plan.

Provide a QC field inspector at the concrete delivery point while placement activities are in progress.

Provide a testing laboratory and the testing personnel for QC testing.

The QC inspector and the QC manager must be fully authorized by the Contractor to reject material.

QC testers and inspectors must be your employees or must be hired by a subcontractor providing only QC services. QC testers and inspectors must not be employed or compensated by a subcontractor or by other persons or entities hired by subcontractors who will provide other services or materials for the project.

If lightweight concrete, RSC, or SCC is used as structural concrete, you must also comply with the sampling and testing specifications of that section.

90-1.01D(10)(b)(ii) Quality Control Plan

The QC plan must detail the methods used to ensure the quality of the work and provide the controls to produce concrete. The QC plan must include:

SAMPLE NOT FOR BIDDING

1. Names and documentation of certification or accreditation of the concrete plants and testing laboratories to be used
2. Names, qualifications, and copies of certifications for the QC manager and all QC testing and inspection personnel to be used
3. Organization chart showing QC personnel and their assigned QC responsibilities
4. Example forms, including forms for certificates of compliance, hard copy test result submittals, and inspection reports
5. Methods and frequencies for performing QC procedures, including inspections and material testing
6. Procedures to control quality characteristics, including standard procedures to address properties outside of the specified operating range or limits, and example reports to document nonconformances and corrective actions taken
7. Procedures for verifying:
   7.1. Materials are properly stored during concrete batching operations
   7.2. Batch plants have the ability to maintain the concrete consistency during periods of extreme heat and cold
   7.3. Admixture dispensers deliver the correct dosage within the accuracy requirements specified
   7.4. Delivery trucks have a valid National Ready Mixed Concrete Association certification card
8. Procedures for verifying that the weighmaster certificate for each load of concrete shows:
   8.1. Concrete as batched complies with the authorized concrete mix design weights
   8.2. Moisture corrections are being accurately applied to the aggregates
   8.3. Cementitious materials are from authorized sources
   8.4. Any water that is added after batching at the plant
9. Procedures for visually inspecting the concrete during discharge operations

Allow the Department 5 business days to review an amended QC plan or an addendum to the QC plan.

90-1.01D(10)(b)(iii) Quality Control Manager

Assign a QC manager. The QC manager must have one of the following qualifications:

1. Civil engineering license in the State
2. ACI Concrete Laboratory Testing Technician, Level 1 certification
3. NICET Level II concrete certification
4. ICC Reinforced Concrete Special Inspector certification
5. ASQ Certified Manager of Quality/Organizational Excellence with the qualifying 10 years of experience and body of knowledge in the field of concrete

During concrete placement, the QC manager must be at the plant or job site within 3 hours of receiving notification from the Engineer.

90-1.01D(10)(b)(iv) Quality Control Testing Frequencies

For each mix design used to produce CIP structural concrete, perform sampling and testing in compliance with the following tables:

Aggregate QC Tests

Quality characteristic	Test method	Minimum testing frequency
Aggregate gradation	California Test 202	Once per each day of pour
Sand equivalent	California Test 217	
Cleanness value	California Test 227	
Moisture content of fine aggregate	California Test 226	1–2 times per each day of pour, depending on conditions

SAMPLE NOT FOR BIDDING

Concrete QC Tests

Quality characteristic	Test method	Minimum testing frequency
Slump	ASTM C143/C143M	Once per 100 cu yd or each day of pour, whichever is more frequent, and when requested by the Engineer
Uniformity[a]	ASTM C143/C143M, California Test 533, and California Test 529	When ordered by the Engineer
Air content, (freeze-thaw area)	California Test 504[b]	If concrete is air entrained, once per 30 cu yd or each day of pour, whichever is more frequent
Air content, (non-freeze-thaw area)	California Test 504[b]	If concrete is air entrained, once per 100 cu yd or each day of pour, whichever is more frequent
Temperature	California Test 557	Once per 100 cu yd or each day of pour, whichever is more frequent
Density	California Test 518	
Compressive strength[c,d]	California Test 521	

[a]As specified in section 90-1.01D(4).
[b]Use ASTM C173/C173M for lightweight concrete.
[c]Mark each cylinder with the Contract number, the date and time of sampling, and the weighmaster certificate number.
[d]You may need additional test samples to facilitate your schedule.

SAMPLE NOT FOR BIDDING

90-1.01D(10)(b)(v) Inspection Reports

Document each inspection performed by a QC inspector in an inspection report that includes:

1. Contract number
2. Mix design number
3. Date and time of inspection
4. Plant location
5. Concrete placement location
6. Batch number
7. Reviewed copies of weighmaster certificates
8. Description of the inspection performed
9. Name, certification number, and signature of the QC inspector

90-1.01D(10)(b)(vi) Rejection of Material

If any of the QC concrete test results fail to comply with the specified requirements, the batch of concrete must not be incorporated in the work. Notify the Engineer. Repeat the QC concrete tests on each subsequent batch until the test results comply with the specified requirements.

If 3 consecutive batches fail to comply with the specified requirements, (1) revise concrete operations as necessary to bring the concrete into compliance and (2) increase the frequency of QC testing. The revisions must be authorized before resuming production. After production resumes, you must receive authorization before returning to the QC testing frequency authorized in the QC plan.

90-1.01D(11) Department Acceptance

90-1.01D(11)(a) General

Reserved

90-1.01D(11)(b) Cast-In-Place Structural Concrete Members

The Department accepts concrete incorporated into CIP structural concrete members based on only the Department's test results. QC test results will not be used for Department acceptance.

Replace the table in the 1st paragraph of section 90-1.02A with:

10-18-19

Type of work	Maximum length change of laboratory cast specimens at 28 days drying (average of 3) (percent)
Paving and approach slab concrete	0.050
Bridge deck concrete	0.032

Add to the end of section 90-1.02A:

10-18-19

For new bridge decks or PCC deck overlays, fibers must comply with ASTM D7508. Microfibers must be from 1/2 to 2 inches long. Macrofibers must be from 1 to 2-1/2 inches long.

Replace the table in section 90-1.02G(6) with:

04-19-19

Type of work	Nominal		Maximum	
	Penetration (in)	Slump (in)	Penetration (in)	Slump (in)
Concrete pavement	0–1	--	1.5	--
Nonreinforced concrete members	0–1.5	--	2	--
Reinforced concrete structures with:				
Sections over 12 inches thick	0–1.5	1–3	2.5	5
Sections 12 inches thick or less	0–2	1–4	3	6
Concrete placed under water	--	6–8	--	9
CIP concrete piles	2.5–3.5	5–7	4	8

SAMPLE NOT FOR BIDDING

Replace the introductory clause of the 6th paragraph of section 90-1.02H with:

04-19-19

For pavement, the total cementitious material must be composed of one of the following options, by weight:

Add after the 6th paragraph of section 90-1.02H:

04-19-19

For structures, the total cementitious material must be composed of one of the following options, by weight:

1. 25 percent natural pozzolan or fly ash with a CaO content of up to 10 percent and 75 percent portland cement.
2. 20 percent natural pozzolan or fly ash with a CaO content of up to 10 percent, 5 percent silica fume, and 75 percent portland cement.
3. 12 percent silica fume, metakaolin, or UFFA, and 88 percent portland cement.
4. 50 percent GGBFS and 50 percent portland cement.
5. 25 to 50 percent fly ash with a CaO content of up to 10 percent, and no natural pozzolan. The remaining portion of the cementitious material must be portland cement or a combination of portland cement and UFFA, metakaolin, GGBFS, or silica fume.

Replace section 90-1.03B(2) with:

04-19-19

90-1.03B(2) Water Method

The water method must consist of keeping the concrete continuously wet by applying water for a curing period of at least 7 days after the concrete is placed.

Keep the concrete surface wet by applying water with an atomizing nozzle that forms a mist until the surface is covered with curing media. Do not allow the water to flow over or wash the concrete surface. At the end of the curing period, remove curing media.

Use any of the following curing media to retain moisture:

1. Mats, rugs, or carpets
2. Earth or sand blankets
3. Sheeting materials complying with the durability and water vapor transmission rate specified in section 5 of ASTM C171

To ensure proper coverage during curing:

1. Cover the entire concrete surface with the curing media
2. Secure the curing media joints to retain moisture
3. Keep the curing media within 3 inches of the concrete at all points along the surface being cured

Monitor concrete surface temperature during curing. Ensure that surface temperature is maintained at 140 degrees F or below. If the surface temperature exceeds 140 degrees F, determine cause and provide alternative curing methods to the Engineer for authorization.

SAMPLE NOT FOR BIDDING

Add to section 90-3.01D:

10-16-20

90-3.01D(5) Shrinkage

Items 2 and 3 in the 1st paragraph of section 90-1.01D(3) do not apply.

Test the RSC for shrinkage as specified in section 90-1.01D(3) except:

1. Remove each specimen from the mold at the time of 1 hour +/- 15 min before the initial comparator reading and place the specimen in lime-saturated water at 73 ± 3 degrees F until the initial comparator reading
2. Take a comparator reading at an age of 10 times the final set time or 24 hours, whichever is earlier, and record it as the initial reading

10-19-18

Delete the 2nd paragraph of section 90-3.02A.

Replace the 7th paragraph of section 90-3.02B(4) with:

10-16-20

The volumetric mixer must be equipped such that accuracy checks can be made. Recalibrate the proportioning devices at a minimum of every 90 days or when you change the source or type of any ingredient.

Replace the 2nd paragraph of section 90-4.01A with:

10-18-19

The specifications for (1) shrinkage in section 90-1.02A, (2) shrinkage reducing chemical admixture in section 51-1.02B, and (3) polymer fibers in section 51-1.02B do not apply to PC concrete members.

Add to section 90-4.01C(1):

04-19-19

Submit your QC test results for the tests performed under section 90-4.01D as an informational submittal. The QC test results must be submitted electronically through the Data Interchange for Materials Engineering website within 3 business days of completion of each QC test and must include the concrete mix design number.

^^

92 ASPHALT BINDERS

10-16-20

Add to the beginning of section 92-1.01D(3):

10-16-20

Take samples of asphalt binder under California Test 125.

10-16-20

Delete the 2nd sentence in the 3rd paragraph of section 92-1.01D(3).

^^

94 ASPHALTIC EMULSIONS

10-16-20

Replace section 94 with:

04-17-20

94-1.01 GENERAL

94-1.01A Summary

Section 94 includes specifications for furnishing asphaltic emulsions.

94-1.01B Definitions

Reserved

94-1.01C Submittals

Submit an SDS for each shipment of asphaltic emulsion to the job site.

If you use the asphaltic emulsion before the Department's sampling and testing is complete, submit a certificate of compliance for each shipment to the job site. The certificate of compliance must include:

1. Shipment number and date
2. Source asphalt emulsion plant, consignee, and destination
3. Type and description of material with specific gravity and quantity
4. Contract or purchase order number
5. Signature by the manufacturer of the material
6. Certified test results

If no certificate of compliance is submitted, do not use asphaltic emulsion until authorized.

94-1.01D Quality Assurance

10-16-20

Take samples of asphaltic emulsion under California Test 125.

SAMPLE NOT FOR BIDDING

Store samples in clean and airtight sealed containers. Samples taken must be placed in wide mouth plastic containers and taken in the presence of the Engineer. Samples must be stored at temperatures from 40 to 120 degrees F until submitted for testing.

94-1.02 MATERIALS

94-1.02A General

Asphaltic emulsions must be composed of a bituminous material uniformly emulsified with water and an emulsifying or a stabilizing agent. Polymer-modified asphaltic emulsion must contain a polymer.

Rapid-setting asphaltic emulsions must be tested within 7 days after delivery to job site. All other asphaltic emulsions must be tested within 14 days of delivery to job site. The asphaltic emulsion must be homogeneous after thorough mixing and not separated by freezing. Asphaltic emulsion separated by freezing will not be tested.

94-1.02B Slow-Setting Anionic Asphaltic Emulsions

Slow-setting anionic asphaltic emulsion must comply with the requirements shown in the following table:

Slow-Setting Anionic Asphaltic Emulsion Requirements

Quality characteristic	Test method	Requirement	
		Grade SS-1	Grade SS-1h
Saybolt Furol viscosity, at 25 °C (Saybolt Furol seconds)	AASHTO T 59	20–100	
Storage stability test, 1 day (max, %)		1	
Cement mixing test (max, %)		2.0	
Sieve test (max, %)		0.10	
Residue from distillation or evaporation test (min, %)[a]		57	
Tests on residue:			
Penetration, 25 °C (dmm)	AASHTO T 49	100–200	40–90
Ductility, 25 °C (min, mm)	AASHTO T 51	400	400
Solubility in trichloroethylene (min, %)	AASHTO T 44	97.5	97.5

[a]Distillation is the defining test if there is a conflict with evaporation.

SAMPLE NOT FOR BIDDING

94-1.02C Slow-Setting Cationic Asphaltic Emulsions

Slow-setting cationic asphaltic emulsion must comply with the requirements shown in the following table:

Slow-Setting Cationic Asphaltic Emulsion Requirements

Quality characteristic	Test method	Requirement	
		Grade CSS-1	Grade CSS-1h
Saybolt Furol viscosity, at 25 °C (Saybolt Furol seconds)	AASHTO T 59	20–100	
Storage stability test, 1 day (max, %)		1	
Particle charge[a]		Positive	
Cement mixing test (max, %)		2.0	
Sieve test (max, %)		0.10	
Residue from distillation or evaporation test (min, %)[b]		57	
Tests on residue:			
Penetration, 25 °C (dmm)	AASHTO T 49	100–250	40–90
Ductility, 25 °C (min, mm)	AASHTO T 51	400	400
Solubility in trichloroethylene (min, %)	AASHTO T 44	97.5	97.5

[a]Must comply with a pH requirement of 6.7 maximum under ASTM E70 if the particle charge test result is inconclusive.
[b]Distillation is the defining test if there is a conflict with evaporation.

94-1.02D Rapid-Setting Cationic Asphaltic Emulsions

Rapid-setting cationic asphaltic emulsion must comply with the requirements shown in the following table:

Rapid-Setting Cationic Asphaltic Emulsion Requirements

Quality characteristic	Test method	Requirement			
		Grade CRS-1	Grade CRS-2	Grade CRS-1h	Grade CRS-2h
Saybolt Furol viscosity, at 50 °C (Saybolt Furol seconds)	AASHTO T 59	20–100	100–400	20–100	100–400
Storage stability test, 1 day (max, %)		1			
Demulsibility (min, %)[a]		40			
Particle charge[b]		Positive			
Sieve test (max, %)		0.10			
Residue from distillation or evaporation test (min, %)[c]		60	65	60	65
Tests on residue:					
Penetration, 25 °C (dmm)	AASHTO T 49	100–250		40–90	
Ductility, 25 °C, 50 mm/minute (min, mm)	AASHTO T 51	400		400	
Solubility in trichloroethylene (min, %)	AASHTO T 44	97.5		97.5	

[a]Use 35 ml of 0.8% sodium dioctyl sulfosuccinate solution.
[b]Must comply with a pH requirement of 6.7 maximum under ASTM E70 if the particle charge test result is inconclusive.
[c]Distillation is the defining test if there is a conflict with evaporation.

94-1.02E Cationic Emulsified Recycling Agent

Cationic emulsified recycling agent for cold-in-place recycling must comply with the requirements shown in the following table:

Cationic Emulsified Asphalt Requirements

Quality characteristic	Test method	Requirement Emulsified recycling agent
Sieve test (max, %)	AASHTO T 59	0.10
Residue from distillation or evaporation test (min, %)[a]		63
Sieve test (max, %)		Positive
Tests on residue:		
Penetration, 25 °C (dmm)	AASHTO T 49	40–120
Ductility, 25 °C (min, mm)	AASHTO T 51	400
Creep stiffness:	AASHTO T 313	
Test temperature (°C)		-12
S-value (max, MPa)		300
M-value (min)		0.300

[a]Distillation is the defining test if there is a conflict with evaporation.
[b]Must comply with a pH requirement of 6.7 maximum under ASTM E70 if the particle charge test result is inconclusive.

SAMPLE NOT FOR BIDDING

94-1.02F Rapid-Setting Polymer-Modified Asphaltic Emulsions

Rapid-setting polymer-modified asphaltic emulsion must comply with the requirements shown in the following table:

Rapid-Setting Polymer-Modified Asphaltic Emulsion Requirements

Quality characteristic	Test method	Requirement	
		Grade PMCRS-2	Grade PMCRS-2h
Saybolt Furol viscosity, at 50 °C (Saybolt Furol seconds)	AASHTO T 59[e]	100–400	
Storage stability test, 1 day (max, %)		1	
Sieve test (max, %)		0.30	
Demulsibility (min, %)[a]		40[b]	
Particle charge[b]		Positive	
Residue from distillation or evaporation test (min, %)[c]		65	
Tests on residue:			
Penetration, 25 °C (dmm)	AASHTO T 49	100–200	40–90
Ductility, 25 °C (min, mm)	AASHTO T 51	400	400
Torsional recovery (min, %)[d] or Elastic recovery, 25 °C (min, %)[d]	California Test 332 AASHTO T 301	20 65	20 65
Penetration, 4 °C, 200 g for 60 seconds (min, dmm)	AASHTO T 49	6	6
Ring and Ball Softening Point (min,°C)	AASHTO T 53	57	57

[a]Use 35 ml of 0.8% sodium dioctyl sulfosuccinate solution.
[b]Must comply with a pH requirement of 6.7 maximum under ASTM E70 if the particle charge test result is inconclusive.
[c]Distillation is the defining test if there is a conflict with evaporation.
[d]Elastic recovery is the defining test if there is a conflict with torsional recovery.
[e]Distillation temperature of 350 °F.

SAMPLE NOT FOR BIDDING

94-1.02G Bonded Wearing Course Asphaltic Emulsions

Bonded wearing course asphaltic emulsion must comply with the requirements shown in the following table:

Bonded Wearing Course Asphaltic Emulsion Requirements

Quality characteristic	Test method	Requirement
Saybolt Furol viscosity, at 25 °C (Saybolt Furol seconds)	AASHTO T 59[c]	20–100
Storage stability test, 1 day (max, %)		1
Sieve test (max, %)		0.05
Particle charge[a]		Positive
Residue from distillation or evaporation test (min, %)[b]		63
Tests on residue:		
Penetration, 25 °C (dmm)	AASHTO T 49	70–150
Torsional recovery (min, %)[d]	California Test 332	40

[a]Must comply with a pH requirement of 6.7 maximum under ASTM E70 if the particle charge test result is inconclusive.
[b]Distillation is the defining test if there is a conflict with evaporation.
[c]Distillation temperature of 350 °F.
[d]Measure the entire arc of recovery at 25 °C.

94-1.02H Rapid-Setting Polymer-Modified Rejuvenating Asphaltic Emulsions

Rapid-setting polymer-modified rejuvenating asphaltic emulsion must comply with the requirements shown in the following table:

Rapid-Setting Polymer-Modified Rejuvenating Asphaltic Emulsion Requirements

Quality characteristic	Test method	Requirement Grade PMRE
Saybolt Furol viscosity, at 50 °C (Saybolt Furol seconds)	AASHTO T 59[d]	50–350
Storage stability test, 1 day (max, %)		1
Sieve (max, %)		0.30
Oil distillate (max, %)		0.5
Particle charge[a]		Positive
Demulsibility (min, %)[b]		40
Residue from distillation or evaporation test (min, %)[c]		65
pH	ASTM E70	2.0–5.0
Tests on residue:		
Viscosity, at 60 °C (max, Pa-s)	AASHTO T 202[e, f]	5000
Penetration, 4 °C (dmm)	AASHTO T 49	40–70
Elastic recovery, 25 °C (min, %)	AASHTO T 301[g]	60

[a]Must comply with a pH requirement of 6.7 maximum under ASTM E70 if the particle charge test result is inconclusive.
[b]If the product is to be diluted, demulsibility is waived.
[c]Distillation is the defining test if there is a conflict with evaporation.
[d]Distillation temperature of 350 °F.
[e]If it is suspected that a sample may contain solid material, strain the melted sample into the container through a No. 50 (300-µm) sieve conforming to Specification E 11.
[f]Use an AI- 200 glass capillary tube to run the test. If the viscosity is 4000 or above, use an AI 400 instead.
[g]Elastic recovery, hour glass sides, pull to 20 cm, hold 5 minutes then cut, let sit 1 hour.

SAMPLE NOT FOR BIDDING

Rejuvenating agent for rapid-setting polymer-modified rejuvenating asphaltic emulsion must comply with the requirements shown in the following table:

Rejuvenating Agent Requirements

Quality characteristic	Test method	Requirement
Tests on rejuvenating agent:		
Viscosity, at 60 °C (cSt)	AASHTO T 201	50–175
Flash point (min, °C)	AASHTO T 48	193
Saturate (max, % by weight)	ASTM D2007	30
Asphaltenes (max)	ASTM D2007	1.0
Tests on rejuvenating agent Rolling Thin-Film Oven Test residue:		
Weight change (max, %)	AASHTO T 240	6.5
Viscosity ratio (max)[a]		3

[a]Rolling Thin-Film Oven Test (RTFOT) viscosity divided by the original viscosity.

94-1.02I Quick-Setting Asphaltic Emulsions

Quick-setting asphaltic emulsion must comply with the requirements shown in the following table:

Quick-Setting Asphaltic Emulsion Requirements

Quality characteristic	Test method	Requirement			
		Anionic		Cationic	
		Grade QS-1	Grade QS-1h	Grade CQS-1	Grade CQS-1h
Saybolt Furol viscosity, at 25 °C (Saybolt Furol seconds)	AASHTO T 59	15–90			
Storage stability test, 1 day (max, %)		1			
Particle charge[a]		--		Positive	
Sieve test (max, %)		0.30			
Residue from distillation or evaporation test (min, %)[b]		57			
Tests on residue:					
Penetration, 25 °C (dmm)	AASHTO T 49	100–200	40–90	100–200	40–90
Ductility, 25 °C (min, mm)	AASHTO T 51	400	400	400	400
Solubility in trichloroethylene (min, %)	AASHTO T 44	97.5	97.5	97.5	97.5

[a]If the result of the particle charge test is inconclusive; the asphaltic emulsion must be tested for pH under ASTM E70. Grade QS-1h asphaltic emulsion must have a minimum pH of 7.3. Grade CQS-1h asphaltic emulsion must have a maximum pH of 6.7.
[b]Distillation is the defining test if there is a conflict with evaporation.

94-1.02J Quick-Setting Polymer-Modified Cationic Asphaltic Emulsions

Quick-setting polymer-modified cationic asphaltic emulsion must comply with the requirements shown in the following table:

Quick-Setting Polymer-Modified Cationic Asphaltic Emulsions

Quality characteristic	Test method	Requirement Grade PMCQS-1h
Saybolt Furol viscosity, at 25 °C (Saybolt Furol seconds)	AASHTO T 59[d]	15–90
Storage stability test, 1 day (max, %)		1
Sieve test (max, %)		0.30
Particle charge[a]		Positive
Residue from distillation or evaporation test (min, %)[b]		60
Tests on residue:		
Penetration, 25 °C (dmm)	AASHTO T 49	40–90
Ductility, 25 °C (min, mm)	AASHTO T 51	400
Torsional recovery (min, %)[c]	California Test 332	18
or		
Elastic recovery, 25 °C (min, %)[c]	AASHTO T 301	60

[a]If the result of the particle charge test is inconclusive; the asphaltic emulsion must be tested for pH under ASTM E70.
[b]Distillation is the defining test if there is a conflict with evaporation.
[c]Elastic recovery is the defining test if there is a conflict with torsional recovery.
[d]Distillation temperature of 350 °F.

94-1.02K Micro Surfacing Emulsions

Micro surfacing emulsion must comply with the requirements shown in the following table:

SAMPLE NOT FOR BIDDING

Micro Surfacing Emulsion Requirements

Quality characteristic	Test method	Requirement Grade MSE
Saybolt Furol viscosity, at 25 °C (Saybolt Furol seconds)	AASHTO T 59[c]	15–90
Storage stability test, 1 day (max, %)		1
Sieve test (max, %)		0.30
Particle charge[a]		Positive
Residue from distillation or evaporation test (min, %)[b]		62
Tests on residue:		
Penetration, 25 °C (dmm)	AASHTO T 49	40–90
Softening point (min, °C)	AASHTO T 53	57
Torsional recovery (min, %)[d]	California Test 332	20
or		
Elastic recovery, 25 °C (min, %)[d]	AASHTO T 301	65

[a]If the result of the particle charge test is inconclusive; the asphaltic emulsion must be tested for pH under ASTM E70.
[b]Distillation is the defining test if there is a conflict with evaporation.
[c]Distillation temperature of 350 °F.
[d]Elastic recovery is the defining test if there is a conflict with torsional recovery.

SAMPLE NOT FOR BIDDING

94-1.03 CONSTRUCTION

Not Used

94-1.04 PAYMENT

The quantity of asphaltic emulsion is the weight determined before the addition of any water.

The weight of asphaltic emulsion is determined from volumetric measurements if:

1. Partial loads are used
2. Scale is not available within 20 miles
3. Asphaltic emulsion is delivered in:
   3.1. Trucks with each tank calibrated and accompanied by its measuring stick and calibration card
   3.2. Trucks equipped with a vehicle tank meter and a calibrated thermometer that determines the asphalt temperature at delivery

For volumetric measurements, the measured volume of asphaltic emulsion is reduced to the volume the material would occupy at 60 degrees F. One ton of asphaltic emulsion at 60 degrees F equals 240 gal. One gallon of asphaltic emulsion at 60 degrees F equals 8.33 lb.

Convert volume to weight using the factors shown in the following table:

Conversion Table

t	M	t	M	t	M	t	M
60	1.00000	83	0.99425	106	0.98850	129	0.98275
61	0.99975	84	0.99400	107	0.98825	130	0.98250
62	0.99950	85	0.99375	108	0.98800	131	0.98225
63	0.99925	86	0.99350	109	0.98775	132	0.98200
64	0.99900	87	0.99325	110	0.98750	133	0.98175
65	0.99875	88	0.99300	111	0.98725	134	0.98150
66	0.99850	89	0.99275	112	0.98700	135	0.98125
67	0.99825	90	0.99250	113	0.98675	136	0.98100
68	0.99800	91	0.99225	114	0.98650	137	0.98075
69	0.99775	92	0.99200	115	0.98625	138	0.98050
70	0.99750	93	0.99175	116	0.98600	139	0.98025
71	0.99725	94	0.99150	117	0.98575	140	0.98000
72	0.99700	95	0.99125	118	0.98550	141	0.97975
73	0.99675	96	0.99100	119	0.98525	142	0.97950
74	0.99650	97	0.99075	120	0.98500	143	0.97925
75	0.99625	98	0.99050	121	0.98475	144	0.97900
76	0.99600	99	0.99025	122	0.98450	145	0.97875
77	0.99575	100	0.99000	123	0.98425	146	0.97850
78	0.99550	101	0.98975	124	0.98400	147	0.97825
79	0.99525	102	0.98950	125	0.98375	148	0.97800
80	0.99500	103	0.98925	126	0.98350	149	0.97775
81	0.99475	104	0.98900	127	0.98325	150	0.97750
82	0.99450	105	0.98875	128	0.98300	151	0.97725

t = observed temperature in degrees F
M = multiplier for reducing volumes to the basis of 60 °F

SAMPLE NOT FOR BIDDING

^^

95 EPOXY

04-17-20

Replace section 95-1.02E with:

04-17-20

95-1.02E Epoxy Adhesive for Pavement Markers

Epoxy adhesive for bonding pavement markers to concrete and HMA must comply with ASTM

C881/C881M, Type IV, Grade 3, Class B or C except the gel time for epoxy adhesive may be less than 30 minutes.

Use Class B whenever the surface temperature is from 40 to 60 degrees F. Use Class C whenever the surface temperature is above 60 degrees F.

Replace section 95-1.02F with:

04-17-20

95-1.02F Reserved

04-17-20

Delete the 2nd paragraph of section 95-1.02G.

Replace section 95-1.02H with:

04-17-20

95-1.02H Epoxy Resin Adhesive for Pressure Injection Grouting of Concrete Pavement

Epoxy resin pressure injected into concrete must comply with ASTM C881/C881M, Type IV, Grade 1 except the epoxy must have a minimum bond strength of 3000 psi at 14 days.

^^

96 GEOSYNTHETICS

04-17-20

Replace the row for *Apparent opening size* in the table in the 2nd paragraph of section 96-1.02B with:

04-17-20

Apparent opening size, average roll value (max, µm(US Sieve))	ASTM D4751	425(40)	250(60)	212(70)

Replace the row for *Apparent opening size* in the table in the 1st paragraph of section 96-1.02E with:

04-17-20

Apparent opening size, average roll value (max, µm(US Sieve))	ASTM D4751	600(30)	300(50)

Replace the row for *Apparent opening size* in the table in the 1st paragraph of section 96-1.02F with:

04-17-20

Apparent opening size, average roll value (max, µm(US Sieve))	ASTM D4751	425(40)

Replace the row for *Apparent opening size* in the table in the 1st paragraph of section 96-1.02G with:

04-17-20

Apparent opening size, average roll value (max, µm(US Sieve))	ASTM D4751	600(30)	300(50)

Replace the row for *Apparent opening size* in the table in the 1st paragraph of section 96-1.02H with:

04-17-20

Apparent opening size, average roll value (max, µm(US Sieve))	ASTM D4751	600(30)	300(50)

SAMPLE NOT FOR BIDDING

Replace the row for *Apparent opening size* in the table in the 3rd paragraph of section 96-1.02I with:

04-17-20

Apparent opening size (min and max, µm(US Sieve))	ASTM D4751	150(100)–212(70)	150(100)–212(70)

Replace the row for *Apparent opening size* in the table in the 2nd paragraph of section 96-1.02O with:

04-17-20

Apparent opening size (max, µm(US Sieve))	ASTM D4751	300(50)	300(50)	600(30)	300(50)	300(50)

Replace the 3rd table in the 3rd paragraph of section 96-1.02R with:

10-19-18

Cushion Fabric

Quality characteristic	Test method	Requirement					
		Class 10	Class 12	Class 16	Class 24	Class 32	Class 60
Mass per unit area (oz/sq yd)	ASTM D5261	10	12	16	24	32	60
Grab tensile break strength (min, lb)	ASTM D4632	230	300	370	450	500	630
Grab tensile break elongation (min, %)	ASTM D4632	50					
Puncture strength (min, lb)	ASTM D6241	700	800	900	1100	1700	2400
Trapezoidal tear strength (min, lb)	ASTM D4533	95	115	145	200	215	290
UV resistance (min, %)	ASTM D7238	70					

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

APPENDIX B

FEDERAL GENERAL PREVAILING WAGE RATES

CA 20210007 02/19/2021 CA9

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

"General Decision Number: CA20210007 02/19/2021

Superseded General Decision Number: CA20200007

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

Counties: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Marin, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sonoma, Sutter, Tehama, Trinity, Yolo and Yuba Counties in California.

BUILDING CONSTRUCTION PROJECTS (excluding Amador County only); DREDGING CONSTRUCTION PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); AND HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate,if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

SAMPLE NOT FOR BIDDING

Modification Number	Publication Date
0	01/01/2021
1	01/08/2021
2	01/15/2021
3	01/22/2021
4	02/05/2021

ASBE0016-001 01/01/2020

AREA 1: MARIN, NAPA, SAN BENITO, SAN FRANCISCO, SOLANO, & SONOMA COUNTIES

AREA 2: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHEMA, TRINITY, YOLO, & YUBA COUNTIES

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, Protective Coverings, Coatings, and Finishes to all types of mechanical systems)		
Area 1	$ 71.16	23.39
Area 2	$ 54.26	23.39

ASBE0016-007 01/01/2019

AREA 1 : ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES

AREA 2: MARIN & NAPA COUNTIES

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)		
AREA 1	$ 30.81	22.71
AREA 2	$ 36.53	9.27

BOIL0549-002 10/01/2016

	Rates	Fringes
BOILERMAKER		
(1) Marin & Solano Counties.	$ 43.28	37.91

SAMPLE NOT FOR BIDDING

(2) Remaining Counties.....$ 39.68 35.71

BRCA0003-001 08/01/2020

	Rates	Fringes
MARBLE FINISHER	$ 36.53	17.08

BRCA0003-004 05/01/2019

AREA 1: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SUTTER, TEHAMA, YOLO AND YUBA COUNTIES

AREA 2: MARIN, NAPA, SISKIYOU, SOLANO, SONOMA AND TRINITY COUNTIES

	Rates	Fringes
BRICKLAYER		
AREA 1	$ 43.24	21.63
AREA 2	$ 45.92	26.70

SPECIALTY PAY:
(A) Underground work such as tunnel work, sewer work, manholes, catch basins, sewer pipes and telephone conduit shall be paid $1.25 per hour above the regular rate. Work in direct contact with raw sewage shall receive $1.25 per hour in addition to the above.
(B) Operating a saw or grinder shall receive $1.25 per hour above the regular rate.
(C) Gunite nozzle person shall receive $1.25 per hour above the regular rate.

BRCA0003-008 07/01/2019

	Rates	Fringes
TERRAZZO FINISHER	$ 37.58	17.33
TERRAZZO WORKER/SETTER	$ 48.53	26.84

BRCA0003-010 04/01/2019

	Rates	Fringes
TILE FINISHER		
Area 1	$ 27.31	14.75
Area 2	$ 27.10	16.50
Area 3	$ 29.94	16.38
Area 4	$ 28.06	15.82
Tile Layer		
Area 1	$ 45.51	17.64

SAMPLE NOT FOR BIDDING

Area 2.....$ 45.15 19.06
Area 3.....$ 49.90 19.16
Area 4.....$ 46.77 19.08

AREA 1: Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehema, Yolo, Yuba
AREA 2: Alpine, Amador
AREA 3: Marin, Napa, Solano, Siskiyou
AREA 4: Sonoma

BRCA0003-014 08/01/2020

	Rates	Fringes
MARBLE MASON	$ 51.30	28.47

CARP0034-001 07/01/2020

	Rates	Fringes
Diver		
Assistant Tender, ROV Tender/Technician	$ 51.90	34.02
Diver standby	$ 58.09	34.02
Diver Tender	$ 57.09	34.02
Diver wet	$ 101.42	34.02
Manifold Operator (mixed gas)	$ 62.09	34.02
Manifold Operator (Standby)	$ 57.09	34.02

DEPTH PAY (Surface Diving):
050 to 100 ft $2.00 per foot
101 to 150 ft $3.00 per foot
151 to 220 ft $4.00 per foot
221 ft.-deeper $5.00 per foot

SATURATION DIVING:
The standby rate shall apply until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. The diver rate shall be paid for all saturation hours.

DIVING IN ENCLOSURES:
Where it is necessary for Divers to enter pipes or tunnels, or other enclosures where there is no vertical ascent, the following premium shall be paid: Distance traveled from entrance 26 feet to 300 feet: $1.00 per foot. When it is necessary for a diver to enter any pipe, tunnel or other enclosure less than 48"" in height, the premium will be $1.00 per foot.

SAMPLE NOT FOR BIDDING

WORK IN COMBINATION OF CLASSIFICATIONS:
Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

CARP0034-003 07/01/2020

	Rates	Fringes
Piledriver	$ 51.90	34.02

CARP0035-001 08/01/2020

AREA 1: MARIN, NAPA, SOLANO & SONOMA

AREA 3: SACRAMENTO, WESTERN EL DORADO (Territory west of an including highway 49 and the territory inside the city limits of Placerville), WESTERN PLACER (Territory west of and including highway 49), & YOLO

AREA 4: ALPINE, BUTTE, COLUSA, EASTERN EL DORADO, GLENN, LASSEN, MODOC, NEVADA, EASTERN PLACER, PLUMAS, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, & YUBA

	Rates	Fringes
Drywall Installers/Lathers:		
Area 1	$ 52.65	31.26
Area 3	$ 47.27	31.26
Area 4	$ 45.92	31.26
Drywall Stocker/Scrapper		
Area 1	$ 26.33	18.22
Area 3	$ 23.64	18.22
Area 4	$ 22.97	18.22

CARP0035-009 07/01/2020

Marin County

	Rates	Fringes
CARPENTER		
Bridge Builder/Highway Carpenter	$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 52.80	30.82
Journeyman Carpenter	$ 52.65	30.82
Millwright	$ 52.75	32.41

SAMPLE NOT FOR BIDDING

CARP0035-010 07/01/2020

AREA 1: Marin, Napa, Solano & Sonoma Counties

AREA 2: Monterey, San Benito and Santa Cruz

AREA 3: Alpine, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yolo & Yuba counties

	Rates	Fringes
Modular Furniture Installer		
Area 1		
Installer	$ 28.76	22.53
Lead Installer	$ 32.21	23.03
Master Installer	$ 36.43	23.03
Area 2		
Installer	$ 26.11	22.53
Lead Installer	$ 29.08	23.03
Master Installer	$ 32.71	23.03
Area 3		
Installer	$ 25.16	22.53
Lead Installer	$ 27.96	23.03
Master Installer	$ 31.38	23.03

CARP0046-001 07/01/2020

El Dorado (West), Placer (West), Sacramento and Yolo Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 46.92	30.82
Journeyman Carpenter	$ 46.77	30.82
Millwright	$ 49.27	32.41

Footnote: Placer County (West) includes territory West of and including Highway 49 and El Dorado County (West) includes territory West of and including Highway 49 and territory inside the city limits of Placerville.

CARP0046-002 07/01/2020

Alpine, Colusa, El Dorado (East), Nevada, Placer (East),

SAMPLE NOT FOR BIDDING

Sierra, Sutter and Yuba Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 45.57	30.82
Journeyman Carpenter	$ 45.42	30.82
Millwright	$ 47.92	32.41

CARP0152-003 07/01/2020

Amador County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 45.57	30.82
Journeyman Carpenter	$ 45.42	30.82
Millwright	$ 47.92	32.41

CARP0180-001 07/01/2020

Solano County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 52.80	30.82
Journeyman Carpenter	$ 52.65	30.82
Millwright	$ 52.75	32.41

CARP0751-001 07/01/2020

Napa and Sonoma Counties

SAMPLE NOT FOR BIDDING

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 52.80	30.82
Journeyman Carpenter	$ 52.65	30.82
Millwright	$ 52.75	32.41

CARP1599-001 07/01/2020

Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama and Trinity Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 45.57	30.82
Journeyman Carpenter	$ 45.42	30.82
Millwright	$ 47.92	32.41

ELEC0180-001 06/01/2020

NAPA AND SOLANO COUNTIES

	Rates	Fringes
CABLE SPLICER	$ 58.51	24.74
ELECTRICIAN	$ 52.01	24.54

ELEC0180-003 12/01/2020

NAPA AND SOLANO COUNTIES

	Rates	Fringes
Sound & Communications		
Installer	$ 42.11	22.41
Technician	$ 48.43	22.60

SCOPE OF WORK INCLUDES-
SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call, Telephone); FIRE ALARM SYSTEMS [excluding fire alarm work

SAMPLE NOT FOR BIDDING

when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs],
TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS SYSTEMS that transmit or receive information and/or control systems that are intrinsic to the above.

EXCLUDES-
Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

ELEC0340-002 02/01/2018

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, NEVADA, PLACER, PLUMAS, SACRAMENTO, TRINITY, YOLO, YUBA COUNTIES

	Rates	Fringes
Communications System		
Sound & Communications Installer	$ 29.35	3%+15.35
Sound & Communications Technician	$ 33.75	3%+15.35

SCOPE OF WORK

Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for the following TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.

A. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS
Background foreground music Intercom and telephone interconnect systems, Telephone systems, Nurse call systems, Radio page systems, School intercom and sound systems, Burglar alarm systems, Low voltage master clock systems, Multi-media/multiplex systems, Sound and musical entertainment systems, RF systems, Antennas and Wave Guide.

B. FIRE ALARM SYSTEMS
Installation, wire pulling and testing

SAMPLE NOT FOR BIDDING

C. TELEVISION AND VIDEO SYSTEMS Television monitoring and surveillance systems, Video security systems, Video entertainment systems, Video educational systems, Microwave transmission systems, CATV and CCTV

D. SECURITY SYSTEMS Perimeter security systems Vibration sensor systems Card access systems Access control systems Sonar/infrared monitoring equipment

E. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO THE ABOVE LISTED SYSTEMS SCADA (Supervisory Control and Data Acquisition) PCM (Pulse Code Modulation) Inventory Control Systems Digital Data Systems Broadband and Baseband and Carriers Point of Sale Systems VSAT Data Systems Data Communication Systems RF and Remote Control Systems Fiber Optic Data Systems WORK EXCLUDED Raceway systems are not covered (excluding Ladder-Rack for the purpose of the above listed systems). Chases and/or nipples (not to exceed 10 feet) may be installed on open wiring systems. Energy management systems. SCADA (Supervisory Control and Data Acquisition) when not intrinsic to the above listed systems (in the scope). Fire alarm systems when installed in raceways (including wire and cable pulling) shall be performed at the electrician wage rate, when either of the following two (2) conditions apply:
1. The project involves new or major remodel building trades construction.
2. The conductors for the fire alarm system are installed in conduit.

SAMPLE NOT FOR BIDDING

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* ELEC0340-003 02/01/2021

ALPINE (West of Sierra Mt. Watershed), AMADOR, BUTTE, COLUSA, EL DORADO (West of Sierra Mt. Watershed), GLENN, LASSEN, NEVADA (West of Sierra Mt. Watershed), PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA (West of Sierra Mt. Watershed), SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES

	Rates	Fringes
ELECTRICIAN		
Remaining area	$ 41.56	32.49
Sierra Army Depot, Herlong	$ 48.83	18.54
Tunnel work	$ 41.01	18.54

CABLE SPLICER: Receives 110% of the Electrician basic hourly rate.

ELEC0401-005 07/01/2020

ALPINE (east of the main watershed divide), EL DORADO (east of the main watershed divide), NEVADA (east of the main watershed), PLACER (east of the main watershed divide) and SIERRA (east of the main watershed divide) COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 41.50	20.17

ZONE RATE:

70-90 miles - $8.00 per hour
91+ miles - $10.00 per hour

ELEC0551-004 06/01/2020

MARIN AND SONOMA COUNTIES

	Rates	Fringes
ELECTRICIAN	$ 52.40	3%+23.31

ELEC0551-005 12/21/2020

MARIN & SONOMA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer	$ 42.11	22.41
Technician	$ 48.43	22.60

SCOPE OF WORK INCLUDES-
SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call, Telephone); FIRE ALARM SYSTEMS [excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs],
TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS SYSTEMS that transmit or receive information and/or control systems that are intrinsic to the above.

EXCLUDES-
Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

SAMPLE
NOT FOR BIDDING

ELEC0659-006 01/01/2021

DEL NORTE, MODOC and SISKIYOU COUNTIES

	Rates	Fringes
ELECTRICIAN	$ 38.49	17.74

ELEC0659-008 02/01/2019

DEL NORTE, MODOC & SISKIYOU COUNTIES

	Rates	Fringes
Line Construction		
(1) Cable Splicer	$ 59.09	20.22
(2) Lineman, Pole Sprayer, Heavy Line Equipment Man	$ 52.76	19.96
(3) Tree Trimmer	$ 31.10	11.32
(4) Line Equipment Man	$ 52.76	19.96
(5) Powdermen, Jackhammermen	$ 33.80	13.35
(6) Groundman	$ 33.24	14.79

ELEC1245-004 06/01/2020

ALL COUNTIES EXCEPT DEL NORTE, MODOC & SISKIYOU

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer	$ 59.14	20.78
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment)	$ 47.24	19.59
(3) Groundman	$ 36.12	19.19
(4) Powderman	$ 51.87	18.79

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

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ELEV0008-001 01/01/2021

	Rates	Fringes

SAMPLE NOT FOR BIDDING

ELEVATOR MECHANIC.....$ 72.10 35.825+a+b

FOOTNOTE:
a. PAID VACATION: Employer contributes 8% of regular hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
b. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

ENGI0003-008 07/20/2020

	Rates	Fringes
Dredging: (DREDGING: CLAMSHELL & DIPPER DREDGING; HYDRAULIC SUCTION DREDGING:)		
AREA 1:		
(1) Leverman	$ 49.88	34.35
(2) Dredge Dozer; Heavy duty repairman	$ 44.92	34.35
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator	$ 43.80	34.35
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler	$ 40.50	34.35
AREA 2:		
(1) Leverman	$ 51.88	34.35
(2) Dredge Dozer; Heavy duty repairman	$ 46.92	34.35
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator	$ 45.80	34.35
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler	$ 42.50	34.35

SAMPLE NOT FOR BIDDING

AREA DESCRIPTIONS

AREA 1: ALAMEDA,BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2: MODOC COUNTY

THE REMAINGING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:
Area 1: Remainder
Area 2: Eastern part

COLUSA COUNTY:
Area 1: Eastern part
Area 2: Remainder

ELDORADO COUNTY:
Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY:
Area 1: Remainder
Area 2: Eastern part

GLENN COUNTY:
Area 1: Eastern part
Area 2: Remainder

LASSEN COUNTY:
Area 1: Western part along the Southern portion of border with Shasta County
Area 2: Remainder

MADERA COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

MARIPOSA COUNTY
Area 1: Except Eastern part
Area 2: Eastern part

MONTERREY COUNTY
Area 1: Except Southwestern part
Area 2: Southwestern part

NEVADA COUNTY:
Area 1: All but the Northern portion along the border of Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: Al but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:

SAMPLE
NOT FOR BIDDING

Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:
Area 1: All but the Western border with Mendocino & Trinity Counties
Area 2: Remainder

TRINITY COUNTY:
Area 1: East Central part and the Northeastern border with Shasta County
Area 2: Remainder

TUOLUMNE COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

ENGI0003-019 06/29/2020

SEE AREA DESCRIPTIONS BELOW

	Rates	Fringes
OPERATOR: Power Equipment (LANDSCAPE WORK ONLY)		
GROUP 1		
AREA 1	$ 39.95	30.28
AREA 2	$ 41.95	30.28
GROUP 2		
AREA 1	$ 36.35	30.28
AREA 2	$ 38.35	30.28
GROUP 3		
AREA 1	$ 31.74	30.28
AREA 2	$ 33.74	30.28

GROUP DESCRIPTIONS:

GROUP 1: Landscape Finish Grade Operator: All finish grade work regardless of equipment used, and all equipment with a rating more than 65 HP.

SAMPLE NOT FOR BIDDING

GROUP 2: Landscape Operator up to 65 HP: All equipment with a manufacturer's rating of 65 HP or less except equipment covered by Group 1 or Group 3. The following equipment shall be included except when used for finish work as long as manufacturer's rating is 65 HP or less: A-Frame and Winch Truck, Backhoe, Forklift, Hydragraphic Seeder Machine, Roller, Rubber-Tired and Track Earthmoving Equipment, Skiploader, Straw Blowers, and Trencher 31 HP up to 65 HP.

GROUP 3: Landscae Utility Operator: Small Rubber-Tired Tractor, Trencher Under 31 HP.

AREA DESCRIPTIONS:

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:
Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

COLUSA COUNTY:
Area 1: Eastern part
Area 2: Remainder

DEL NORTE COUNTY:
Area 1: Extreme Southwestern corner
Area 2: Remainder

ELDORADO COUNTY:
Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY
Area 1: Except Eastern part
Area 2: Eastern part

GLENN COUNTY:
Area 1: Eastern part
Area 2: Remainder

HUMBOLDT COUNTY:

SAMPLE
NOT FOR BIDDING

Area 1: Except Eastern and Southwestern parts
Area 2: Remainder

LAKE COUNTY:
Area 1: Southern part
Area 2: Remainder

LASSEN COUNTY:
Area 1: Western part along the Southern portion of border with Shasta County
Area 2: Remainder

MADERA COUNTY
Area 1: Remainder
Area 2: Eastern part

MARIPOSA COUNTY
Area 1: Remainder
Area 2: Eastern part

MENDOCINO COUNTY:
Area 1: Central and Southeastern parts
Area 2: Remainder

MONTEREY COUNTY
Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:
Area 1: All but the Northern portion along the border of Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:

SAMPLE
NOT FOR BIDDING

Area 1: All but the Northwestern corner
Area 2: Reaminder

TEHAMA COUNTY:
Area 1: All but the Western border with mendocino & Trinity Counties
Area 2: Remainder

TRINITY COUNTY:
Area 1: East Central part and the Northeaster border with Shasta County
Area 2: Remainder

TULARE COUNTY;
Area 1: Remainder
Area 2: Eastern part

TUOLUMNE COUNTY:
Area 1: Remainder
Area 2: Eastern Part

ENGI0003-038 06/29/2020

""AREA 1"" WAGE RATES ARE LISTED BELOW

""AREA 2"" RECEIVES AN ADDITIONAL $2.00 PER HOUR ABOVE AREA 1 RATES.

SEE AREA DEFINITIONS BELOW

SAMPLE NOT FOR BIDDING

	Rates	Fringes
OPERATOR: Power Equipment (AREA 1:)		
GROUP 1	$ 51.42	31.15
GROUP 2	$ 49.89	31.15
GROUP 3	$ 48.41	31.15
GROUP 4	$ 47.03	31.15
GROUP 5	$ 45.76	31.15
GROUP 6	$ 44.44	31.15
GROUP 7	$ 43.30	31.15
GROUP 8	$ 42.16	31.15
GROUP 8-A	$ 39.95	31.15
OPERATOR: Power Equipment (Cranes and Attachments - AREA 1:)		
GROUP 1		
Cranes	$ 52.30	31.15
Oiler	$ 43.79	31.15
Truck crane oiler	$ 46.08	31.15
GROUP 2		
Cranes	$ 50.54	31.15

Oiler.....$ 42.83 31.15
Truck crane oiler.....$ 45.07 31.15
GROUP 3
Cranes.....$ 48.80 31.15
Hydraulic.....$ 44.44 31.15
Oiler.....$ 42.55 31.15
Truck crane oiler.....$ 44.83 31.15
GROUP 4
Cranes.....$ 45.76 31.15
OPERATOR: Power Equipment (Piledriving - AREA 1:)
GROUP 1
Lifting devices.....$ 52.64 31.15
Oiler.....$ 43.38 31.15
Truck Crane Oiler.....$ 45.66 31.15
GROUP 2
Lifting devices.....$ 50.82 31.15
Oiler.....$ 43.11 31.15
Truck Crane Oiler.....$ 45.41 31.15
GROUP 3
Lifting devices.....$ 49.14 31.15
Oiler.....$ 42.89 31.15
Truck Crane Oiler.....$ 45.12 31.15
GROUP 4
Lifting devices.....$ 47.37 31.15
GROUP 5
Lifting devices.....$ 44.73 31.15
GROUP 6
Lifting devices.....$ 42.50 31.15
OPERATOR: Power Equipment (Steel Erection - AREA 1:)
GROUP 1
Cranes.....$ 53.27 31.15
Oiler.....$ 43.72 31.15
Truck Crane Oiler.....$ 45.95 31.15
GROUP 2
Cranes.....$ 51.50 31.15
Oiler.....$ 43.45 31.15
Truck Crane Oiler.....$ 45.73 31.15
GROUP 3
Cranes.....$ 50.02 31.15
Hydraulic.....$ 45.07 31.15
Oiler.....$ 43.23 31.15
Truck Crane Oiler.....$ 45.46 31.15
GROUP 4
Cranes.....$ 48.00 31.15
GROUP 5
Cranes.....$ 46.70 31.15
OPERATOR: Power Equipment (Tunnel and Underground Work - AREA 1:)
SHAFTS, STOPES, RAISES:
GROUP 1.....$ 47.52 31.15
GROUP 1-A.....$ 49.99 31.15

SAMPLE NOT FOR BIDDING

GROUP 2	$ 46.26	31.15
GROUP 3	$ 44.93	31.15
GROUP 4	$ 43.79	31.15
GROUP 5	$ 42.65	31.15
UNDERGROUND:		
GROUP 1	$ 47.42	31.15
GROUP 1-A	$ 49.89	31.15
GROUP 2	$ 46.16	31.15
GROUP 3	$ 44.83	31.15
GROUP 4	$ 43.69	31.15
GROUP 5	$ 42.55	31.15

FOOTNOTE: Work suspended by ropes or cables, or work on a Yo-Yo Cat: $.60 per hour additional.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Operator of helicopter (when used in erection work); Hydraulic excavator, 7 cu. yds. and over; Power shovels, over 7 cu. yds.

GROUP 2: Highline cableway; Hydraulic excavator, 3-1/2 cu. yds. up to 7 cu. yds.; Licensed construction work boat operator, on site; Power blade operator (finish); Power shovels, over 1 cu. yd. up to and including 7 cu. yds. m.r.c.

GROUP 3: Asphalt milling machine; Cable backhoe; Combination backhoe and loader over 3/4 cu. yds.; Continuous flight tie back machine assistant to engineer or mechanic; Crane mounted continuous flight tie back machine, tonnage to apply; Crane mounted drill attachment, tonnage to apply; Dozer, slope brd; Gradall; Hydraulic excavator, up to 3 1/2 cu. yds.; Loader 4 cu. yds. and over; Long reach excavator; Multiple engine scraper (when used as push pull); Power shovels, up to and including 1 cu. yd.; Pre-stress wire wrapping machine; Side boom cat, 572 or larger; Track loader 4 cu. yds. and over; Wheel excavator (up to and including 750 cu. yds. per hour)

GROUP 4: Asphalt plant engineer/box person; Chicago boom; Combination backhoe and loader up to and including 3/4 cu. yd.; Concrete batch plant (wet or dry); Dozer and/or push cat; Pull- type elevating loader; Gradesetter, grade checker (GPS, mechanical or otherwise); Grooving and grinding machine; Heading shield operator; Heavy-duty drilling equipment, Hughes, LDH, Watson 3000 or similar; Heavy-duty repairperson and/or welder; Lime spreader; Loader under 4 cu. yds.; Lubrication and service engineer (mobile and grease rack); Mechanical finishers or spreader machine (asphalt, Barber-Greene and similar); Miller Formless M-9000 slope paver or similar; Portable crushing and screening plants; Power blade support; Roller operator,

SAMPLE NOT FOR BIDDING

asphalt; Rubber-tired scraper, self-loading (paddle-wheels, etc.); Rubber- tired earthmoving equipment (scrapers); Slip form paver (concrete); Small tractor with drag; Soil stabilizer (P & H or equal); Spider plow and spider puller; Tubex pile rig; Unlicensed constuction work boat operator, on site; Timber skidder; Track loader up to 4 yds.; Tractor-drawn scraper; Tractor, compressor drill combination; Welder; Woods-Mixer (and other similar Pugmill equipment)

GROUP 5: Cast-in-place pipe laying machine; Combination slusher and motor operator; Concrete conveyor or concrete pump, truck or equipment mounted; Concrete conveyor, building site; Concrete pump or pumpcrete gun; Drilling equipment, Watson 2000, Texoma 700 or similar; Drilling and boring machinery, horizontal (not to apply to waterliners, wagon drills or jackhammers); Concrete mixer/all; Person and/or material hoist; Mechanical finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types); Mechanical burm, curb and/or curb and gutter machine, concrete or asphalt); Mine or shaft hoist; Portable crusher; Power jumbo operator (setting slip-forms, etc., in tunnels); Screed (automatic or manual); Self-propelled compactor with dozer; Tractor with boom D6 or smaller; Trenching machine, maximum digging capacity over 5 ft. depth; Vermeer T-600B rock cutter or similar

GROUP 6: Armor-Coater (or similar); Ballast jack tamper; Boom- type backfilling machine; Assistant plant engineer; Bridge and/or gantry crane; Chemical grouting machine, truck-mounted; Chip spreading machine operator; Concrete saw (self-propelled unit on streets, highways, airports and canals); Deck engineer; Drilling equipment Texoma 600, Hughes 200 Series or similar up to and including 30 ft. m.r.c.; Drill doctor; Helicopter radio operator; Hydro-hammer or similar; Line master; Skidsteer loader, Bobcat larger than 743 series or similar (with attachments); Locomotive; Lull hi-lift or similar; Oiler, truck mounted equipment; Pavement breaker, truck-mounted, with compressor combination; Paving fabric installation and/or laying machine; Pipe bending machine (pipelines only); Pipe wrapping machine (tractor propelled and supported); Screed (except asphaltic concrete paving); Self- propelled pipeline wrapping machine; Tractor; Self-loading chipper; Concrete barrier moving machine

GROUP 7: Ballast regulator; Boom truck or dual-purpose A-frame truck, non-rotating - under 15 tons; Cary lift or similar; Combination slurry mixer and/or cleaner; Drilling equipment, 20 ft. and under m.r.c.; Firetender (hot plant); Grouting machine operator; Highline cableway signalperson; Stationary belt loader (Kolman or similar); Lift slab machine (Vagtborg and similar types); Maginnes internal full slab vibrator; Material hoist (1 drum); Mechanical

SAMPLE NOT FOR BIDDING

trench shield; Pavement breaker with or without compressor combination); Pipe cleaning machine (tractor propelled and supported); Post driver; Roller (except asphalt); Chip Seal; Self-propelled automatically applied concrete curing mahcine (on streets, highways, airports and canals); Self-propelled compactor (without dozer); Signalperson; Slip-form pumps (lifting device for concrete forms); Tie spacer; Tower mobile; Trenching machine, maximum digging capacity up to and including 5 ft. depth; Truck- type loader

GROUP 8: Bit sharpener; Boiler tender; Box operator; Brakeperson; Combination mixer and compressor (shotcrete/gunite); Compressor operator; Deckhand; Fire tender; Forklift (under 20 ft.); Generator; Gunite/shotcrete equipment operator; Hydraulic monitor; Ken seal machine (or similar); Mixermobile; Oiler; Pump operator; Refrigeration plant; Reservoir-debris tug (self-propelled floating); Ross Carrier (construction site); Rotomist operator; Self-propelled tape machine; Shuttlecar; Self-propelled power sweeper operator (includes vacuum sweeper); Slusher operator; Surface heater; Switchperson; Tar pot firetender; Tugger hoist, single drum; Vacuum cooling plant; Welding machine (powered other than by electricity)

GROUP 8-A: Elevator operator; Skidsteer loader-Bobcat 743 series or smaller, and similar (without attachments); Mini excavator under 25 H.P. (backhoe-trencher); Tub grinder wood chipper

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ALL CRANES AND ATTACHMENTS

GROUP 1: Clamshell and dragline over 7 cu. yds.; Crane, over 100 tons; Derrick, over 100 tons; Derrick barge pedestal-mounted, over 100 tons; Self-propelled boom-type lifting device, over 100 tons

GROUP 2: Clamshell and dragline over 1 cu. yd. up to and including 7 cu. yds.; Crane, over 45 tons up to and including 100 tons; Derrick barge, 100 tons and under; Self-propelled boom-type lifting device, over 45 tons; Tower crane

GROUP 3: Clamshell and dragline up to and including 1 cu. yd.; Cranes 45 tons and under; Self-propelled boom-type lifting device 45 tons and under;

GROUP 4: Boom Truck or dual purpose A-frame truck, non-rotating over 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) over 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar

SAMPLE NOT FOR BIDDING

(boom truck) - under 15 tons;

PILEDRIVERS

GROUP 1: Derrick barge pedestal mounted over 100 tons; Clamshell over 7 cu. yds.; Self-propelled boom-type lifting device over 100 tons; Truck crane or crawler, land or barge mounted over 100 tons

GROUP 2: Derrick barge pedestal mounted 45 tons to and including 100 tons; Clamshell up to and including 7 cu. yds.; Self-propelled boom-type lifting device over 45 tons; Truck crane or crawler, land or barge mounted, over 45 tons up to and including 100 tons; Fundex F-12 hydraulic pile rig

GROUP 3: Derrick barge pedestal mounted under 45 tons; Self-propelled boom-type lifting device 45 tons and under; Skid/scow piledriver, any tonnage; Truck crane or crawler, land or barge mounted 45 tons and under

GROUP 4: Assistant operator in lieu of assistant to engineer; Forklift, 10 tons and over; Heavy-duty repairperson/welder

GROUP 5: Deck engineer

GROUP 6: Deckhand; Fire tender

STEEL ERECTORS

GROUP 1: Crane over 100 tons; Derrick over 100 tons; Self-propelled boom-type lifting device over 100 tons

GROUP 2: Crane over 45 tons to 100 tons; Derrick under 100 tons; Self-propelled boom-type lifting device over 45 tons to 100 tons; Tower crane

GROUP 3: Crane, 45 tons and under; Self-propelled boom-type lifting device, 45 tons and under

GROUP 4: Chicago boom; Forklift, 10 tons and over; Heavy-duty repair person/welder

GROUP 5: Boom cat

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TUNNEL AND UNDERGROUND WORK

GROUP 1-A: Tunnel bore machine operator, 20' diameter or more

SAMPLE
NOT FOR BIDDING

GROUP 1: Heading shield operator; Heavy-duty repairperson; Mucking machine (rubber tired, rail or track type); Raised bore operator (tunnels); Tunnel mole bore operator

GROUP 2: Combination slusher and motor operator; Concrete pump or pumpcrete gun; Power jumbo operator

GROUP 3: Drill doctor; Mine or shaft hoist

GROUP 4: Combination slurry mixer cleaner; Grouting Machine operator; Motorman

GROUP 5: Bit Sharpener; Brakeman; Combination mixer and compressor (gunite); Compressor operator; Oiler; Pump operator; Slusher operator

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AREA DESCRIPTIONS:

POWER EQUIPMENT OPERATORS, CRANES AND ATTACHMENTS,TUNNEL AND UNDERGROUND [These areas do not apply to Piledrivers and Steel Erectors]

AREA 1: DEL NORTE, HUMBOLDT, LAKE, MENDOCINO
AREA 2 -NOTED BELOW

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

DEL NORTE COUNTY:
Area 1: Extreme Southwest corner
Area 2: Remainder

HUMBOLDT COUNTY:
Area 1: Except Eastern and Southwestern parts
Area 2: Remainder

LAKE COUNTY:
Area 1: Southern part
Area 2: Remainder

MENDOCINO COUNTY:
Area 1: Central and Southeastern Parts
Area 2: Remainder

IRON0433-006 07/01/2020

	Rates	Fringes
IRONWORKER		
Fence Erector	$ 34.58	24.81

SAMPLE NOT FOR BIDDING

Ornamental, Reinforcing
and Structural.....$ 41.00 33.45

PREMIUM PAY:

$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland,
Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

SAMPLE NOT FOR BIDDING

LABO0067-001 06/29/2020

AREA ""A"" - MARIN COUNTY

AREA ""B"" - ALPINE, AMADOR, BUTTE COLUSA EL DORADO, GLENN, LASSEN, MODOC, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

	Rates	Fringes
Asbestos Removal Laborer	$ 25.05	12.00
LABORER (Lead Removal)		
Marin County	$ 33.07	25.30
Remaining Counties	$ 32.07	25.30

LABO0067-005 06/27/2017

AREA ""A"" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA ""B"" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENDOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SANCREMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SIERRA, SHASTA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YOUBA

COUNTIES

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person		
Area A	$ 29.54	22.17
Area B	$ 28.54	22.17
Traffic Control Person I		
Area A	$ 29.84	22.17
Area B	$ 28.84	22.17
Traffic Control Person II		
Area A	$ 27.34	22.17
Area B	$ 26.34	22.17

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LABO0185-002 07/01/2020

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
LABORER		
Mason Tender-Brick	$ 32.84	23.71

LABO0185-005 06/25/2018

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1	$ 37.82	24.11
GROUP 2	$ 37.59	24.11
GROUP 3	$ 37.34	24.11
GROUP 4	$ 36.89	24.11
GROUP 5	$ 36.35	24.11
Shotcrete Specialist	$ 38.34	24.11

SAMPLE NOT FOR BIDDING

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Gunite & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LABO0185-006 06/25/2018

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHIASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO, YUBA COUNTIES

SAMPLE
NOT FOR BIDDING

	Rates	Fringes
LABORER (CONSTRUCTION CRAFT LABORERS - AREA B:)		
Construction Specialist Group	$ 30.49	23.20
GROUP 1	$ 29.79	23.20
GROUP 1-a	$ 30.01	23.20
GROUP 1-c	$ 30.01	23.20
GROUP 1-e	$ 30.34	23.20
GROUP 1-f	$ 30.37	23.20
GROUP 2	$ 29.64	23.20
GROUP 3	$ 29.54	23.20
GROUP 4	$ 23.23	23.20

See groups 1-b and 1-d under laborer classifications.

LABORER (GARDENERS, HORTICULTURAL & LANDSCAPE LABORERS - AREA B:)		
(1) New Construction	$ 29.54	23.20
(2) Establishment Warranty		

Period	$ 23.23	23.20
LABORER (GUNITE - AREA B:)		
GROUP 1	$ 29.75	22.31
GROUP 2	$ 29.25	22.31
GROUP 3	$ 28.66	22.31
GROUP 4	$ 28.54	22.31
LABORER (WRECKING - AREA B:)		
GROUP 1	$ 29.79	23.20
GROUP 2	$ 29.64	23.20

FOOTNOTES:
Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive $0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker; Chainsaw; Laser beam in connection with laborers' work; Cast-in- place manhole form setter; Pressure pipelayer; Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller; Multiple unit drill; Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and bucker; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2"" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precast-manhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun;

SAMPLE NOT FOR BIDDING

Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive $4.00 per day above Group 1 wage rates. ""Sewer cleaner"" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shal receive $5.00 per day above Group 1 wage rates.

SAMPLE NOT FOR BIDDING

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive $ .25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work);

Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, hand-held, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification ""material cleaner"" is to be utilized under the following conditions:
A: at demolition site for the salvage of the material.
B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job.
C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of ""form stripping, cleaning and oiling and moving to the next point of erection"".

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

GROUP 2: Nozzleman, Gunman, Potman, Groundman

GROUP 3: Reboundman

GROUP 4: Gunite laborer

WRECKING WORK LABORER CLASSIFICATIONS

GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)

SAMPLE NOT FOR BIDDING

GROUP 2: Semi-skilled wrecker (salvaging of other building materials)

LABO0185-008 07/01/2018

	Rates	Fringes
Plasterer tender	$ 32.02	23.00

Work on a swing stage scaffold: $1.00 per hour additional.

LABO0261-002 06/25/2018

MARIN COUNTY

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person	$ 30.54	23.65
Traffic Control Person I	$ 30.84	23.65
Traffic Control Person II	$ 28.34	23.65

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

SAMPLE NOT FOR BIDDING

LABO0261-004 06/25/2018

MARIN COUNTY

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1	$ 37.82	24.11
GROUP 2	$ 37.59	24.11
GROUP 3	$ 37.34	24.11
GROUP 4	$ 36.89	24.11
GROUP 5	$ 36.35	24.11
Shotcrete Specialist	$ 38.34	24.11

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Gunite & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LABO0261-007 07/01/2018

MARIN AND NAPA COUNTIES

	Rates	Fringes
LABORER		
Mason Tender-Brick	$ 32.45	22.20

LABO0261-010 06/25/2018

MARIN COUNTY

	Rates	Fringes
LABORER (CONSTRUCTION CRAFT LABORERS - AREA A:)		
Construction Specialist Group	$ 31.49	23.20
GROUP 1	$ 30.79	23.20
GROUP 1-a	$ 31.01	23.20
GROUP 1-c	$ 30.84	23.20
GROUP 1-e	$ 31.34	23.20
GROUP 1-f	$ 31.37	23.20
GROUP 2	$ 30.64	23.20
GROUP 3	$ 30.54	23.20
GROUP 4	$ 24.23	23.20

See groups 1-b and 1-d under laborer classifications.

LABORER (GARDENERS, HORTICULTURAL & LANDSCAPE LABORERS - AREA A:)		
(1) New Construction	$ 30.54	23.20
(2) Establishment Warranty Period	$ 24.23	23.20

SAMPLE NOT FOR BIDDING

LABORER (GUNITE - AREA A:)

GROUP 1	$ 30.75	22.31
GROUP 2	$ 30.25	22.31
GROUP 3	$ 29.66	22.31
GROUP 4	$ 29.54	22.31

LABORER (WRECKING - AREA A:)

GROUP 1	$ 30.79	23.20
GROUP 2	$ 30.64	23.20

FOOTNOTES:

Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive $0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker; Chainsaw; Laser beam in connection with laborers' work; Cast-in- place manhole form setter; Pressure pipelayer; Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller; Multiple unit drill; Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and bucker; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2"" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precast-manhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of

SAMPLE NOT FOR BIDDING

sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive $4.00 per day above Group 1 wage rates. ""Sewer cleaner"" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shal receive $5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive $ .25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and

SAMPLE NOT FOR BIDDING

grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, hand-held, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification ""material cleaner"" is to be utilized under the following conditions:
A: at demolition site for the salvage of the material.
B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job.
C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of ""form stripping, cleaning and oiling and moving to the next point of erection"".

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

GROUP 2: Nozzleman, Gunman, Potman, Groundman

GROUP 3: Reboundman

GROUP 4: Gunite laborer

WRECKING WORK LABORER CLASSIFICATIONS

GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)

SAMPLE NOT FOR BIDDING

GROUP 2: Semi-skilled wrecker (salvaging of other building materials)

LABO0261-015 07/01/2018

	Rates	Fringes
Plasterer tender	$ 32.02	23.00

Work on a swing stage scaffold: $1.00 per hour additional.

LABO0324-004 06/25/2018

NAPA, SOLANO, AND SONOMA, COUNTIES

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person	$ 29.54	23.65
Traffic Control Person I	$ 29.84	23.65
Traffic Control Person II	$ 27.34	23.65

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LABO0324-008 06/25/2018

NAPA, SOLANO, AND SONOMA COUNTIES

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1	$ 37.82	24.11
GROUP 2	$ 37.59	24.11
GROUP 3	$ 37.34	24.11
GROUP 4	$ 36.89	24.11
GROUP 5	$ 36.35	24.11
Shotcrete Specialist	$ 38.34	24.11

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

SAMPLE NOT FOR BIDDING

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Gunite & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LABO0324-010 07/01/2018

SOLANO AND SONOMA COUNTIES

	Rates	Fringes
LABORER		
Mason Tender-Brick	$ 31.45	22.20

LABO0324-013 06/25/2018

NAPA, SOLANO, AND SONOMA COUNTIES

	Rates	Fringes
LABORER (CONSTRUCTION CRAFT LABORERS - AREA B:)		
Construction Specialist Group	$ 30.49	23.20
GROUP 1	$ 29.79	23.20
GROUP 1-a	$ 30.01	23.20
GROUP 1-c	$ 29.84	23.20
GROUP 1-e	$ 30.34	23.20
GROUP 1-f	$ 29.37	23.20
GROUP 2	$ 29.64	23.20
GROUP 3	$ 29.54	23.20
GROUP 4	$ 23.23	23.20

See groups 1-b and 1-d under laborer classifications.

LABORER (GARDENERS, HORTICULTURAL & LANDSCAPE LABORERS - AREA B:)		
(1) New Construction	$ 29.54	23.20
(2) Establishment Warranty Period	$ 23.23	23.20
LABORER (GUNITE - AREA B:)		

SAMPLE NOT FOR BIDDING

GROUP 1	$ 29.75	22.31
GROUP 2	$ 29.25	22.31
GROUP 3	$ 28.66	22.31
GROUP 4	$ 28.54	22.31
LABORER (WRECKING - AREA B:)		
GROUP 1	$ 29.79	23.20
GROUP 2	$ 29.64	23.20

FOOTNOTES:
Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive $0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker; Chainsaw; Laser beam in connection with laborers' work; Cast-in- place manhole form setter; Pressure pipelayer; Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller; Multiple unit drill; Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and bucker; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2"" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precast-manhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and

SAMPLE NOT FOR BIDDING

similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive $4.00 per day above Group 1 wage rates. ""Sewer cleaner"" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shal receive $5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive $ .25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

SAMPLE NOT FOR BIDDING

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender,

chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, hand-held, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification ""material cleaner"" is to be utilized under the following conditions:
A: at demolition site for the salvage of the material.
B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job.
C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of ""form stripping, cleaning and oiling and moving to the next point of erection"".

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

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WRECKING WORK LABORER CLASSIFICATIONS

GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)

GROUP 2: Semi-skilled wrecker (salvaging of other building

SAMPLE NOT FOR BIDDING

materials)

LABO0324-019 07/01/2018

	Rates	Fringes
Plasterer tender	$ 32.02	23.00

Work on a swing stage scaffold: $1.00 per hour additional.

PAIN0016-004 01/01/2019

MARIN, NAPA, SOLANO & SONOMA COUNTIES

	Rates	Fringes
Painters:	$ 42.67	24.03

PREMIUMS:
EXOTIC MATERIALS - $0.75 additional per hour.
SPRAY WORK: - $0.50 additional per hour.
INDUSTRIAL PAINTING - $0.25 additional per hour
[Work on industrial buildings used for the manufacture and processing of goods for sale or service; steel construction (bridges), stacks, towers, tanks, and similar structures]

HIGH WORK:
over 50 feet - $2.00 per hour additional
100 to 180 feet - $4.00 per hour additional
Over 180 feet - $6.00 per houir additional

PAIN0016-005 06/01/2020

ALPINE, BUTTE, COLUSA, EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Hwy. 395, excluding Honey Lake); MARIN, MODOC, NAPA, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains), PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
DRYWALL FINISHER/TAPER	$ 47.38	25.99

PAIN0016-007 01/01/2019

ALPINE, AMADOR, BUTTE, COLUSA. EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Highway 395, excluding Honey Lake), MODOC, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains),

SAMPLE NOT FOR BIDDING

PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES

	Rates	Fringes
Painters:	$ 33.68	20.24

SPRAY/SANDBLAST: $0.50 additional per hour.
EXOTIC MATERIALS: $1.00 additional per hour.
HIGH TIME: Over 50 ft above ground or water level $2.00 additional per hour. 100 to 180 ft above ground or water level $4.00 additional per hour. Over 180 ft above ground or water level $6.00 additional per hour.

PAIN0016-008 01/01/2019

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER	$ 48.60	27.43

PAIN0169-004 07/01/2020

MARIN , NAPA & SONOMA COUNTIES; SOLANO COUNTY (west of a line defined as follows: Hwy. 80 corridor beginning at the City of Fairfield, including Travis Air Force Base and Suisun City; going north of Manakas Corner Rd., continue north on Suisun Valley Rd. to the Napa County line; Hwy. 80 corridor south on Grizzly Island Rd. to the Grizzly Island Management area)

	Rates	Fringes
GLAZIER	$ 52.17	30.55

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* PAIN0567-001 07/01/2020

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
Painters:		
Brush and Roller	$ 29.80	13.44
Spray Painter & Paperhanger	$ 31.29	13.44

SAMPLE NOT FOR BIDDING

PREMIUMS:
Special Coatings (Brush), and Sandblasting = $0.50/hr
Special Coatings (Spray), and Steeplejack = $1.00/hr
Special Coating Spray Steel = $1.25/hr
Swing Stage = $2.00/hr

*A special coating is a coating that requires the mixing of 2 or more products.

PAIN0567-007 07/01/2020

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains) AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
SOFT FLOOR LAYER	$ 31.01	15.48

PAIN0567-010 07/01/2020

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
Drywall		
(1) Taper	$ 35.20	14.02
(2) Steeplejack - Taper, over 40 ft with open space below	$ 36.70	14.02

PAIN0767-004 07/01/2020

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO (Remainder), SUTTER, TEHAMA, TRINITY, YOLO, YUBA

	Rates	Fringes
GLAZIER	$ 40.61	30.76

PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr. Day,

SAMPLE NOT FOR BIDDING

President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

Employee rquired to wear a body harness shall receive $1.50 per hour above the basic hourly rate at any elevation.

PAIN1176-001 07/01/2020

HIGHWAY IMPR0VEMENT

	Rates	Fringes
Parking Lot Striping/Highway Marking:		
GROUP 1	$ 38.48	16.88
GROUP 2	$ 32.71	16.88
GROUP 3	$ 33.09	16.88

CLASSIFICATIONS

GROUP 1: Striper: Layout and application of painted traffic stripes and marking; hot thermo plastic; tape, traffic stripes and markings

GROUP 2: Gamecourt & Playground Installer

GROUP 3: Protective Coating, Pavement Sealing

PAIN1237-001 06/01/2020

ALPINE; COLUSA; EL DORADO (west of the Sierra Nevada Mountains); GLENN; LASSEN (west of Highway 395, beginning at Stacey and including Honey Lake); MODOC; NEVADA (west of the Sierra Nevada Mountains); PLACER (west of the Sierra Nevada Mountains); PLUMAS; SACRAMENTO; SHASTA; SIERRA (west of the Sierra Nevada Mountains); SISKIYOU; SUTTER; TEHAMA; TRINITY; YOLO AND YUBA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER	$ 39.61	22.59

PLAS0300-003 07/01/2018

	Rates	Fringes
PLASTERER		
AREA 295: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas,		

SAMPLE NOT FOR BIDDING

Sacramento, Shasta,
Sierra, Siskiyou, Solano,
Sutter, Tehema, Trinity,
Yolo & Yuba Counties.....$ 32.70 31.68
AREA 355: Marin.....$ 36.73 31.68
AREA 355: Napa & Sonoma
Counties.....$ 32.70 31.68

PLAS0300-005 07/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 33.49	23.67

PLUM0038-002 07/01/2020

MARIN AND SONOMA COUNTIES

	Rates	Fringes
PLUMBER (Plumber, Steamfitter, Refrigeration Fitter)		
(1) Work on wooden frame structures 5 stories or less excluding high-rise buildings and commercial work such as hospitals, prisons, hotels, schools, casinos, wastewater treatment plants, and resarch facilities as well as refrigeration pipefitting, service and repair work - MARKET RECOVERY RATE	$ 64.86	43.54
(2) All other work - NEW CONSTRUCTION RATE	$ 76.30	45.27

PLUM0038-006 07/01/2019

MARIN & SONOMA COUNTIES

	Rates	Fringes
Landscape/Irrigation Fitter (Underground/Utility Fitter)	$ 63.04	31.48

PLUM0228-001 01/01/2021

BUTTE, COLUSA, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY & YUBA COUNTIES

SAMPLE
NOT FOR BIDDING

	Rates	Fringes
PLUMBER	$ 42.00	35.14

PLUM0343-001 07/01/2020

NAPA AND SOLANO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER		
Light Commercial	$ 30.85	20.40
All Other Work	$ 54.00	38.74

DEFINITION OF LIGHT COMMERICIAL:
Work shall include strip shopping centers, office buildings, schools and other commercial structures which the total plumbing bid does not exceed Two Hundred and Fifty Thousand ($250,000) and the total heating and cooling does not exceed Two Hundred Fifty Thousand ($250,000); or Any projects bid in phases shall not qualify unless the total project is less than Two Hundred Fifty Thousand ($250,000) for the plumbing bid; and Two Hundred Fifty Thousand ($250,000) for the heating and cooling bid. Excluded are hospitals, jails, institutions and industrial projects, regardless size of the project

FOOTNOTES: While fitting galvanized material: $.75 per hour additional. Work from trusses, temporary staging, unguarded structures 35' from the ground or water: $.75 per hour additional. Work from swinging scaffolds, boatswains chairs or similar devices: $.75 per hour additional.

SAMPLE NOT FOR BIDDING

PLUM0350-001 08/01/2019

EL DORADO COUNTY (Lake Tahoe area only); NEVADA COUNTY (Lake Tahoe area only); AND PLACER COUNTY (Lake Tahoe area only)

	Rates	Fringes
PLUMBER/PIPEFITTER	$ 45.84	13.81

PLUM0355-001 07/01/2020

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

	Rates	Fringes

Underground Utility Worker
/Landscape Fitter.....$ 29.90 16.30

PLUM0442-003 07/01/2020

AMADOR (South of San Joaquin River) and ALPINE COUNTIES

	Rates	Fringes
PLUMBER	$ 45.50	31.89

PLUM0447-001 07/01/2020

AMADOR (north of San Joaquin River), EL DORADO (excluding Lake Tahoe area), NEVADA (excluding Lake Tahoe area); PLACER (excluding Lake Tahoe area), SACRAMENTO AND YOLO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER		
Journeyman	$ 54.37	25.75
Light Commercial Work	$ 36.23	17.72

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* ROOF0081-006 08/01/2020

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
Roofer	$ 44.62	19.36

ROOF0081-007 08/01/2020

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN,LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

	Rates	Fringes
Roofer	$ 39.73	19.11

SFCA0483-003 07/29/2019

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers)	$ 65.52	32.67

SFCA0669-003 01/01/2021

SAMPLE NOT FOR BIDDING

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
SPRINKLER FITTER	$ 40.87	26.29

SHEE0104-006 06/29/2020

MARIN, NAPA, SOLANO SONOMA & TRINITY COUNTIES

	Rates	Fringes
Sheet Metal Worker		
Mechanical Contracts		
$200,000 or less	$ 55.92	45.29
All other work	$ 64.06	46.83

SHEE0104-009 07/01/2020

AMADOR, COLUSA, EL DORADO, NEVADA, PLACER, SACRAMENTO, SUTTER, YOLO AND YUBA COUNTIES

	Rates	Fringes
SHEET METAL WORKER	$ 46.60	40.21

SHEE0104-010 07/01/2020

AlPINE COUNTY

	Rates	Fringes
SHEET METAL WORKER	$ 43.50	37.42

SHEE0104-011 07/01/2020

BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, YOLO AND YUBA COUNTIES

	Rates	Fringes
Sheet Metal Worker (Metal decking and siding only)	$ 44.45	35.55

SHEE0104-014 07/01/2020

MARIN, NAPA, SOLANO, SONOMA AND TRINITY COUNTIES

SAMPLE
NOT FOR BIDDING

	Rates	Fringes
SHEET METAL WORKER (Metal Decking and Siding only)	$ 44.45	35.55

SHEE0104-019 07/01/2020

BUTTE, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU AND TEHAMA COUNTIES

	Rates	Fringes
SHEET METAL WORKER		
Mechanical Jobs $200,000 & under	$ 35.16	35.88
Mechanical Jobs over $200,000	$ 46.60	40.21

TEAM0094-001 07/01/2018

	Rates	Fringes
Truck drivers:		
GROUP 1	$ 31.68	27.86
GROUP 2	$ 31.98	27.86
GROUP 3	$ 32.28	27.86
GROUP 4	$ 32.63	27.86
GROUP 5	$ 32.98	27.86

FOOTNOTES:

Articulated dump truck; Bulk cement spreader (with or without auger); Dumpcrete truck; Skid truck (debris box); Dry pre-batch concrete mix trucks; Dumpster or similar type; Slurry truck: Use dump truck yardage rate.

Heater planer; Asphalt burner; Scarifier burner; Industrial lift truck (mechanical tailgate); Utility and clean-up truck: Use appropriate rate for the power unit or the equipment utilized.

SAMPLE NOT FOR BIDDING

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Dump trucks, under 6 yds.; Single unit flat rack (2-axle unit); Nipper truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump machine; Fork lift and lift jitneys; Fuel and/or grease truck driver or fuel person; Snow buggy; Steam cleaning; Bus or personhaul driver; Escort or pilot car driver; Pickup truck; Teamster oiler/greaser and/or serviceperson; Hook tender (including loading and unloading); Team driver; Tool room attendant (refineries)

GROUP 2: Dump trucks, 6 yds. and under 8 yds.; Transit mixers, through 10 yds.; Water trucks, under 7,000 gals.; Jetting trucks, under 7,000 gals.; Single-unit flat rack (3-axle unit); Highbed heavy duty transport; Scissor truck; Rubber-tired muck car (not self-loaded); Rubber-tired truck jumbo; Winch truck and ""A"" frame drivers; Combination winch truck with hoist; Road oil truck or bootperson; Buggymobile; Ross, Hyster and similar straddle carriers; Small rubber-tired tractor

GROUP 3: Dump trucks, 8 yds. and including 24 yds.; Transit mixers, over 10 yds.; Water trucks, 7,000 gals. and over; Jetting trucks, 7,000 gals. and over; Vacuum trucks under 7500 gals. Trucks towing tilt bed or flat bed pull trailers; Lowbed heavy duty transport; Heavy duty transport tiller person; Self- propelled street sweeper with self-contained refuse bin; Boom truck - hydro-lift or Swedish type extension or retracting crane; P.B. or similar type self-loading truck; Tire repairperson; Combination bootperson and road oiler; Dry distribution truck (A bootperson when employed on such equipment, shall receive the rate specified for the classification of road oil trucks or bootperson); Ammonia nitrate distributor, driver and mixer; Snow Go and/or plow

GROUP 4: Dump trucks, over 25 yds. and under 65 yds.; Water pulls - DW 10's, 20's, 21's and other similar equipment when pulling Aqua/pak or water tank trailers; Helicopter pilots (when transporting men and materials); Lowbedk Heavy Duty Transport up to including 7 axles; DW10's, 20's, 21's and other similar Cat type, Terra Cobra, LeTourneau Pulls, Tournorocker, Euclid and similar type equipment when pulling fuel and/or grease tank trailers or other miscellaneous trailers; Vacuum Trucks 7500 gals and over and truck repairman

GROUP 5: Dump trucks, 65 yds. and over; Holland hauler; Low bed Heavy Duty Transport over 7 axles

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their

SAMPLE NOT FOR BIDDING

own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that

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classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

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APPENDIX C

STATE GENERAL PREVAILING WAGE RATES

DETERMINATION 2021-1

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GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Asbestos Removal Worker (Laborer)

Determination:
NC-102-67-1-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[a]	Training	Other	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2X)[c]
Asbestos Removal Specialist II	$29.54	$5.84	$8.70	$3.00	$0.46	$0.18	8.0	$47.72	$62.49	$77.26
Asbestos Removal Specialist I	$28.16	$5.84	$3.21	$3.00	$0.46	$0.18	8.0	$40.85	$54.93	$69.01
Asbestos Removal Worker	$25.05	$5.84	$2.70	$3.00	$0.46	$0.18	8.0	$37.23	$49.755	$62.28

SAMPLE NOT FOR BIDDING

Determination:
NC-102-67-1-2020-2A

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[a]	Training	Other	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2X)[c]
Lead Removal Worker[d]	$33.07	$9.50	$12.40	$2.75	$0.65	$0.22	8.0	$58.59	$75.125	$91.66
Lead Removal Worker[e]	$32.07	$9.50	$12.40	$2.75	$0.65	$0.22	8.0	$57.59	$73.625	$89.66

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Note:
Asbestos Removal Workers must be trained and the work conducted according to the Code of Federal Regulations 29 CFR 1926.58, the California Labor Code 6501.5 and the California Code of Regulations, Title 8, Section 5208. Contractors must be certified by the Contractors' State License Board and registered with the Division of Occupational Safety and Health (DOSH). For further information, contact the Asbestos Contractors Abatement Registration Unit, DOSH at (916) 574-2993.

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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[a] Includes an amount for Supplemental Dues.
[b] Rate applies to the first 4 overtime hours in any workday or 40 hours in a workweek, and for the first 8 hours worked on the 7th consecutive day of work in a workweek. All work on Saturdays and Sundays shall be paid at the rate of one and one-half (1 1/2) times the regular rate of pay, unless the Saturday and Sunday work is part of an established workweek.
[c] Rate applies to Holidays and to all hours worked in excess of 12 hours in any workday and for all hours worked in excess of 8 hours on the 7th consecutive day of work in a workweek.
[d] Rate applies to all localities within Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara Counties.
[e] Rate applies to all localities within Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Monterey, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo and Yuba Counties.

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GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Asbestos Removal Worker (Laborer)

Determination:
NC-102-67-1-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[a]	Training	Other	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2X)[c]
Asbestos Removal Specialist II	$29.54	$5.84	$8.70	$3.00	$0.46	$0.18	8.0	$47.72	$62.49	$77.26
Asbestos Removal Specialist I	$28.16	$5.84	$3.21	$3.00	$0.46	$0.18	8.0	$40.85	$54.93	$69.01
Asbestos Removal Worker	$25.05	$5.84	$2.70	$3.00	$0.46	$0.18	8.0	$37.23	$49.755	$62.28

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Determination:
NC-102-67-1-2020-2A

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[a]	Training	Other	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2X)[c]
Lead Removal Worker[d]	$33.07	$9.50	$12.40	$2.75	$0.65	$0.22	8.0	$58.59	$75.125	$91.66
Lead Removal Worker[e]	$32.07	$9.50	$12.40	$2.75	$0.65	$0.22	8.0	$57.59	$73.625	$89.66

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Note:
Asbestos Removal Workers must be trained and the work conducted according to the Code of Federal Regulations 29 CFR 1926.58, the California Labor Code 6501.5 and the California Code of Regulations, Title 8, Section 5208. Contractors must be certified by the Contractors' State License Board and registered with the Division of Occupational Safety and Health (DOSH). For further information, contact the Asbestos Contractors Abatement Registration Unit, DOSH at (916) 574-2993.

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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[a] Includes an amount for Supplemental Dues.
[b] Rate applies to the first 4 overtime hours in any workday or 40 hours in a workweek, and for the first 8 hours worked on the 7th consecutive day of work in a workweek. All work on Saturdays and Sundays shall be paid at the rate of one and one-half (1 1/2) times the regular rate of pay, unless the Saturday and Sunday work is part of an established workweek.
[c] Rate applies to Holidays and to all hours worked in excess of 12 hours in any workday and for all hours worked in excess of 8 hours on the 7th consecutive day of work in a workweek.
[d] Rate applies to all localities within Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara Counties.
[e] Rate applies to all localities within Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Monterey, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo and Yuba Counties.

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GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Asbestos Worker, Heat and Frost Insulator#

Determination:
NC-3-16-1-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
July 31, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
Zone 1: All localities within Alameda, Contra Costa, Marin, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties

Zone 2: All localities within Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Mono, Monterey, Nevada, Placer, Plumas, Sacramento, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate[a]	Health and Welfare	Pension[b]	Vacation and Holiday[c]	Training	Other[d]	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[e]	Overtime Hourly Rate (2 X)[f]
Mechanic (Zone 1)	$74.16	$14.50	$7.72	$0.00	$1.35	$0.34	8.0	$98.07	$135.15	$172.23
Mechanic (Zone 2)	$56.71	$14.50	$7.72	$0.00	$1.35	$0.34	8.0	$80.62	$108.98	$137.33

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Determination:
NC-3-16-3-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
April 3, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for the new rates after ten days after the expiration date if no subsequent determination is issued.

Localities:
Mono and all Northern California Counties

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate[g]	Health and Welfare	Pension	Vacation and Holiday	Training	Other	Hours[h]	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[i]	Overtime Hourly Rate (2 X)[j]
Hazardous Material Handler Mechanic	$37.03	$8.06	$2.25	$0.00[c]	$0.30	$0.08[k]	8.0	$47.72	$66.24	$84.75
Hazardous Material Handler Worker[l]	$27.31	$8.06	$1.50	$0.00	$0.30	$0.06[m]	8.0	$37.23	$50.89	$64.54

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Note:
Asbestos Removal Workers must be trained and the work conducted according to the Code of Federal Regulations 29 CFR 1926.58, the California Labor Code 6501.5 and the California Code of Regulations, Title 8, Section 5208. Contractors must be certified by the Contractors' State License Board and registered with the Division of Occupational Safety and Health (DOSH). For further information, contact the Asbestos Contractors Abatement Registration Unit, DOSH at (510) 286-7362.

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing

Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] Includes an amount withheld for dues check off and for vacation.

[b] Pursuant to Labor Code sections 1773.1 and 1773.8, the amount paid for this employer payment may vary resulting in a lower taxable basic hourly wage rate, but the total hourly rates for straight time and overtime may not be less than the general prevailing rate of per diem wages.

[c] Included in the straight-time hourly rate.

[d] Includes $0.30 per hour worked for Industry Promotion, $0.01 per hour worked for Occupational Health and Research, $0.02 per hour worked for Vacation/Holiday Administration and $0.01 per hour worked for Preservation Trust.

[e] 1 ½ times the basic straight-time hourly rate for the first 2 hours of overtime, Monday through Friday and for the first 10 hours on Saturdays. All other overtime is paid at the double time rate.

[f] $246.39 (ZONE 1) and $194.04 (ZONE 2) per hour for work on Labor Day.

[g] Includes amount withheld for dues check off.

[h] The 6th consecutive day in the same work week may be worked at straight-time if job is shut down during the normal work week due to inclement weather, major mechanical breakdown or lack of materials beyond the control of the employer.

[i] Rate applies to the first 4 overtime hours in any workday or 40 hours in a workweek, and for the first 8 hours worked on the 7th consecutive day of work in a workweek.

[j] Rate applies to work on any recognized holiday, all hours worked in excess of 12 hours in any workday, and for all hours worked in excess of 8 hours on the 7th consecutive day of work in a workweek.

[k] Includes amount for Vacation/Holiday Administration and Industry Promotion.

[l] A maximum of fourteen (14) Hazardous Material Handler Workers is allowed for each Hazardous Material Handler Mechanic.

[m] Includes amount for Industry Promotion.

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GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Carpenter[#]

Determination:
NC-23-31-1-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
Area 1: All localities within Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.
Area 2: All localities within Monterey, San Benito, and Santa Cruz Counties.
Area 3: All localities within El Dorado[a], Placer[a], Sacramento, San Joaquin and Yolo Counties.
Area 4: All localities within Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado[a], Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Nevada, Placer[a], Plumas, Shasta, Sierra, Siskiyou, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d e]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Carpenter (Area 1)	$52.65	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$83.76	$110.085	$136.41	$110.085	$136.41	$136.41

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Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d e]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 1)	$52.80	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$83.91	$110.31	$136.71	$110.31	$136.71	$136.71
Carpenter (Area 2)	$46.77	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$77.88	$101.265	$124.65	$101.265	$124.65	$124.65
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 2)	$46.92	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$78.03	$101.49	$124.95	$101.49	$124.95	$124.95
Carpenter (Area 3)	$46.77	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$77.88	$101.265	$124.65	$101.265	$124.65	$124.65

SAMPLE NOT FOR BIDDING

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d e]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 3)	$46.92	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$78.03	$101.49	$124.95	$101.49	$124.95	$124.95
Carpenter (Area 4)	$45.42	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$76.53	$99.24	$121.95	$99.24	$121.95	$121.95
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 4)	$45.57	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$76.68	$99.465	$122.25	$99.465	$122.25	$122.25

SAMPLE NOT FOR BIDDING

Wages and Employer Payments (2nd Shift[i]):

Classification (Journeyperson) (2nd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Carpenter (Area 1)	$56.16	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$87.27	$110.09	$136.41	$110.09	$136.41	$136.41
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 1)	$56.32	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$87.43	$110.31	$136.71	$110.31	$136.71	$136.71
Carpenter (Area 2)	$49.89	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$81.00	$101.27	$124.65	$101.27	$124.65	$124.65
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 2)	$50.05	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$81.16	$101.49	$124.95	$101.49	$124.95	$124.95
Carpenter (Area 3)	$49.89	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$81.00	$101.27	$124.65	$101.27	$124.65	$124.65

SAMPLE NOT FOR BIDDING

Classification (Journeyperson) (2nd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 3)	$50.05	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$81.16	$101.49	$124.95	$101.49	$124.95	$124.95
Carpenter (Area 4)	$48.45	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$79.56	$99.24	$121.95	$99.24	$121.95	$121.95
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 4)	$48.61	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$79.72	$99.47	$122.25	$99.47	$122.25	$122.25

Wages and Employer Payments (3rd Shift[i]):

Classification (Journeyperson) (3rd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Carpenter (Area 1)	$60.17	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$91.28	$110.09	$136.41	$110.09	$136.41	$136.41

SAMPLE NOT FOR BIDDING

Classification (Journeyperson) (3rd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 1)	$60.34	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$91.45	$110.31	$136.71	$110.31	$136.71	$136.71
Carpenter (Area 2)	$53.45	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$84.56	$101.27	$124.65	$101.27	$124.65	$124.65
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 2)	$53.62	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$84.73	$101.49	$124.95	$101.49	$124.95	$124.95
Carpenter (Area 3)	$53.45	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$84.56	$101.27	$124.65	$101.27	$124.65	$124.65
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 3)	$53.62	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$84.73	$101.49	$124.95	$101.49	$124.95	$124.95

SAMPLE
NOT FOR BIDDING

Classification (Journeyperson) (3rd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Carpenter (Area 4)	$51.91	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$83.02	$99.24	$121.95	$99.24	$121.95	$121.95
Hardwood Floorlayer, Power Saw Operator, Saw Filer, Shingler, Steel Scaffold And Steel Shoring Erector (Area 4)	$52.08	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$83.19	$99.47	$122.25	$99.47	$122.25	$122.25

SAMPLE NOT FOR BIDDING

Determination:
NC-23-31-1-2020-1A

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All Localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours.	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d e]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday / Holiday Overtime Hourly Rate (2 X) [d h]
Bridge Builder/ Highway Carpenter	$52.65	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$83.76	$110.085	$136.41	$110.085	$136.41	$136.41
Bridge Builder/ Highway Carpenter (Special Single Shift)	$59.23	$11.70	$10.65	$5.09	$1.03	$2.64	8.0	$90.34	$119.955	$149.57	$119.955	$149.57	$149.57

Wages and Employer Payments (2nd Shift[i]):

Classification (Journeyperson) (2nd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Bridge Builder/Highway Carpenter	$56.16	$11.70	$10.65	$5.09	$1.03	$2.64	7.5	$87.27	$110.09	$136.41	$110.09	$136.41	$136.41

Wages and Employer Payments (3rd Shift[i]):

Classification (Journeyperson) (3rd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [c]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]

SAMPLE NOT FOR BIDDING

Bridge Builder/Highway Carpenter	$60.17	$11.70	$10.65	$5.09	$1.03	$2.64	7.0	$91.28	$110.09	$136.41	$110.09	$136.41	$136.41

Determination:
NC-23-31-1-2020-1B

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

Localities:
Area 1: All localities within Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.
Area 2: All localities within Monterey, San Benito, and Santa Cruz Counties.
Area 3: All localities within El Dorado[a], Placer[a], Sacramento, San Joaquin and Yolo Counties.
Area 4: All localities within Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado[a], Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Nevada, Placer[a], Plumas, Shasta, Sierra, Siskiyou, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [i]	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [de]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [dfg]	Saturday Overtime Hourly Rate (2X) [df]	Sunday / Holiday Overtime Hourly Rate (2 X) [dh]
Millwright (Area 1)	$52.75	$11.70	$10.65	$5.18	$1.03	$4.15	8.0	$85.46	$111.835	$138.21	$111.835	$138.21	$138.21
Millwright (Area 2)	$49.27	$11.70	$10.65	$5.18	$1.03	$4.15	8.0	$81.98	$106.615	$131.25	$106.615	$131.25	$131.25
Millwright (Area 3)	$49.27	$11.70	$10.65	$5.18	$1.03	$4.15	8.0	$81.98	$106.615	$131.25	$106.615	$131.25	$131.25
Millwright (Area 4)	$47.92	$11.70	$10.65	$5.18	$1.03	$4.15	8.0	$80.63	$104.59	$128.55	$104.59	$128.55	$128.55

Wages and Employer Payments (2nd Shift[i]):

Classification (Journeyperson) (2nd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [l]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Millwright (Area 1)	$56.27	$11.70	$10.65	$5.18	$1.03	$4.15	7.5	$88.98	$111.84	$138.21	$111.84	$138.21	$138.21
Millwright (Area 2)	$52.55	$11.70	$10.65	$5.18	$1.03	$4.15	7.5	$85.26	$106.62	$131.25	$106.62	$131.25	$131.25
Millwright (Area 3)	$52.55	$11.70	$10.65	$5.18	$1.03	$4.15	7.5	$85.26	$106.62	$131.25	$106.62	$131.25	$131.25
Millwright (Area 4)	$51.11	$11.70	$10.65	$5.18	$1.03	$4.15	7.5	$83.82	$104.59	$128.55	$104.59	$128.55	$128.55

Wages and Employer Payments (3rd Shift[i]):

Classification (Journeyperson) (3rd Shift)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [b]	Training	Other [l]	Hours [j]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [d k]	Daily Overtime Hourly Rate (2 X) [d]	Saturday Overtime Hourly Rate (1 ½ X) [d f g]	Saturday Overtime Hourly Rate (2X) [d f]	Sunday/ Holiday Overtime Hourly Rate (2 X) [d h]
Millwright (Area 1)	$60.29	$11.70	$10.65	$5.18	$1.03	$4.15	7.0	$93.00	$111.84	$138.21	$111.84	$138.21	$138.21
Millwright (Area 2)	$56.31	$11.70	$10.65	$5.18	$1.03	$4.15	7.0	$89.02	$106.62	$131.25	$106.62	$131.25	$131.25
Millwright (Area 3)	$56.31	$11.70	$10.65	$5.18	$1.03	$4.15	7.0	$89.02	$106.62	$131.25	$106.62	$131.25	$131.25
Millwright (Area 4)	$54.77	$11.70	$10.65	$5.18	$1.03	$4.15	7.0	$87.48	$104.59	$128.55	$104.59	$128.55	$128.55

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the

Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] Area 3 includes the portion of Placer County west of and including Highway 49 and the portion of El Dorado County west of and including Highway 49 and the territory inside the city limits of Placerville. Area 4 includes the portions of Placer and El Dorado Counties not covered in Area 3.

[b] Includes an amount per hour worked for Work Fees. The Vacation amount is $2.95 per hour worked for Carpenter; $2.85 per hour worked for Millwright.

[c] Includes Annuity Trust Fund, Industry Promotion, Carpenters International Training Fund, Work Preservation, Carpenter Employers Contract Administration, and Vacation/Holiday/Sick Leave Admin.

[d] The overtime rates for shift work are based on the non-shift overtime rates.

[e] For building construction, rate applies to the first 4 hours daily overtime. For all heavy, highway and engineering construction overtime worked, Monday through Friday, rate applies to the first 4 hours daily overtime.

[f] In the event that work cannot be performed Monday through Friday because of inclement weather or major mechanical breakdown, employees may voluntarily make up such day on Saturday and shall be paid at the applicable straight time rates.

[g] Rate applies to the first 8 hours for building construction and for the first 10 hours worked on heavy, highway and engineering construction.

[h] Time and one-half shall be paid for the first eight (8) hours worked on the four (4) days of each year selected by the Union as designated off/holidays listed in the Holiday Provision.

[i] Does not apply to tenant improvement or renovation projects in occupied buildings with a total contract value of $5 million or less.

[j] Daily overtime applies after 7 ½ hours worked at the straight-time rate for second shift and after 7 hours worked at the straight-time rate for third shift.

[k] For building construction, rate applies to the first 2 hours prior to the start of the regular or approved day, or the first 4 hours after the end of the approved or regular work day, not to exceed a total of 4 hours in any 1 work day. For heavy, highway and engineering construction rate applies to the first 4 hours prior to the start of the regular or approved day, or the first 4 hours after the end of the approved or regular work day, not to exceed a total of 4 hours in any 1 work day

[l] Millwright Annuity Trust Fund, Industry Promotion, Carpenters International Training Fund, Work Preservation, and Vacation/Holiday/Sick Leave Admin.

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Cement Mason[#]

Determination:
NC-23-203-1-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[a]	Training	Other	Hours[b]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[cd]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Cement Mason	$39.20	$8.60	$11.41	$5.95	$0.60	$0.10	8.0	$65.86	$85.46	$85.46	$105.06
Mastic Magnesite Gypsum, Epoxy, Polyester, Resin and all composition masons, swing or slip form scaffolds	$40.20	$8.60	$11.41	$5.95	$0.60	$0.10	8.0	$66.86	$86.96	$86.96	$107.06

SAMPLE NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Cement Mason (Special Single Shift)#

Determination:
NC-23-203-1A-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

SAMPLE
NOT FOR BIDDING

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday [a]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X) [cd]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Cement Mason	$42.20	$8.60	$11.41	$5.95	$0.60	$0.10	8.0	$68.86	$89.96	$89.96	$111.06
Mastic Magnesite Gypsum, Epoxy, Polyester, Resin and all composition masons, swing or slip form scaffolds	$43.20	$8.60	$11.41	$5.95	$0.60	$0.10	8.0	$69.86	$91.46	$91.46	$113.06

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] Includes an amount for supplemental dues.
[b] Where multiple shifts are worked, the day shift shall work eight (8) hours and for such work they shall be paid the regular straight time rate for eight (8) hours; the second (2nd) shift shall work seven and one-half (7 ½) hours, and for such work they shall be paid the regular straight time rate for eight (8) hours; if a third (3rd) shift is worked, they shall work seven (7) hours and for such work they shall be paid eight (8) hours regular straight time pay. No multiple shift shall be started for less than five (5) consecutive days.
[c] Saturdays in the same work week may be worked at straight time if a job is shut down during the normal work week due to inclement weather or major mechanical breakdown (limited to curb and gutter machine, concrete pump, and concrete plant).
[d] Rate applies to the first 8 hours of work on Saturday. All other hours worked on Saturday are paid at the Sunday/Holiday rate.

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: DREDGER OPERATING ENGINEER#

(CLAMSHELL AND DIPPER DREDGING AND HYDRAULIC SUCTION DREDGING)

Determination:
NC-63-3-12-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
July 31, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties

AREA 1 - Alameda, Butte, Contra Costa, Kings, Marin, Merced, Napa, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Yolo and Yuba counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tulare, and Tuolumne Counties (Portions of counties falling in each area detailed on the Operating Engineer - Heavy and Highway Work Determination).

Wages and Employer Payments (Area 1):

Classification[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[b]	Vacation and Holiday[c]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate[d] (1½ X)	Saturday Overtime Hourly Rate[de] (1½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 1	$49.88	$13.88	$15.23	$6.06	$0.49	$0.33	8	$85.87	$110.81	$110.81	$135.75
Group 2	$44.92	$13.88	$15.23	$6.06	$0.49	$0.33	8	$80.91	$103.37	$103.37	$125.83
Group 3	$43.80	$13.88	$15.23	$6.06	$0.49	$0.33	8	$79.79	$101.69	$101.69	$123.59
Group 4	$40.50	$13.88	$15.23	$6.06	$0.49	$0.33	8	$76.49	$96.74	$96.74	$116.99

SAMPLE NOT FOR BIDDING

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tulare, and Tuolumne Counties (Portions of counties falling in each area detailed on the Operating Engineer - Heavy and Highway Work Determination).

Wages and Employer Payments (Area 2):

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[b]	Vacation and Holiday[c]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate[d] (1½ X)	Saturday Overtime Hourly Rate[de] (1½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 1	$51.88	$13.88	$15.23	$6.06	$0.49	$0.33	8	$87.87	$113.81	$113.81	$139.75
Group 2	$46.92	$13.88	$15.23	$6.06	$0.49	$0.33	8	$82.91	$106.37	$106.37	$129.83
Group 3	$45.80	$13.88	$15.23	$6.06	$0.49	$0.33	8	$81.79	$104.69	$104.69	$127.59
Group 4	$42.50	$13.88	$15.23	$6.06	$0.49	$0.33	8	$78.49	$99.74	$99.74	$120.99

Recognized holidays
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: DREDGER OPERATING ENGINEER#
(SPECIAL SINGLE AND SECOND SHIFT)

(CLAMSHELL AND DIPPER DREDGING AND HYDRAULIC SUCTION DREDGING)

Determination:
NC-63-3-12-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
July 31, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties

AREA 1 - Alameda, Butte, Contra Costa, Kings, Marin, Merced, Napa, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Yolo and Yuba counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tulare, and Tuolumne Counties (Portions of counties falling in each area detailed on the Operating Engineer - Heavy and Highway Work Determination).

Wages and Employer Payments (Area 1 – Special Single & Second Shift):

Classification[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[b]	Vacation and Holiday[c]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate[d] (1½ X)	Saturday Overtime Hourly Rate[de] (1½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 1	$56.12	$13.88	$15.23	$6.06	$0.49	$0.33	8	$92.11	$120.17	$120.17	$148.23
Group 2	$50.54	$13.88	$15.23	$6.06	$0.49	$0.33	8	$86.53	$111.80	$111.80	$137.07
Group 3	$49.28	$13.88	$15.23	$6.06	$0.49	$0.33	8	$85.27	$109.91	$109.91	$134.55

SAMPLE NOT FOR BIDDING

Classification[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[b]	Vacation and Holiday[c]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate[d] (1½ X)	Saturday Overtime Hourly Rate[de] (1½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 4	$45.56	$13.88	$15.23	$6.06	$0.49	$0.33	8	$81.55	$104.33	$104.33	$127.11

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tulare, and Tuolumne Counties (Portions of counties falling in each area detailed on the Operating Engineer - Heavy and Highway Work Determination).

Wages and Employer Payments (Area 2 – Special Single & Second Shift):

Classification[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[b]	Vacation and Holiday[c]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate[d] (1½ X)	Saturday Overtime Hourly Rate[de] (1½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 1	$58.12	$13.88	$15.23	$6.06	$0.49	$0.33	8	$94.11	$123.17	$123.17	$152.23
Group 2	$52.24	$13.88	$15.23	$6.06	$0.49	$0.33	8	$88.53	$114.80	$114.80	$141.07
Group 3	$51.28	$13.88	$15.23	$6.06	$0.49	$0.33	8	$87.27	$112.91	$112.91	$138.55
Group 4	$47.56	$13.88	$15.23	$6.06	$0.49	$0.33	8	$83.55	$107.33	$107.33	$131.11

SAMPLE NOT FOR BIDDING

Recognized holidays
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Classifications:

Group 1

Chief Engineer
Day Mate (Captain)
Leverman/Operator

Group 2
Dredge Dozer
HDR/Welder

Group 3
Booster Pump Operator
Deck Engineer
Deck Mate
Dredge Tender
Watch Engineer
Welder
Winch Man

Group 4
Bargeman
Deckhand
Fireman
Leveehand
Oiler

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] For classifications within each group, see Page 5.
[b] Includes an amount for Annuity Trust Fund.
[c] Includes an amount for Supplemental Dues.
[d] Rate applies to the first 4 daily overtime hours Monday thru Friday and the first 12 hours on Saturday. All other time worked is paid at the Sunday and Holiday overtime rate.
[e] Saturday in the same workweek may be worked at straight-time if a job is shut down during the normal workweek due to inclement weather.

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Drywall Installer/Lather (Carpenter)#

Determination:
NC-31-X-16-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
Area 1: All localities within Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.
Area 2: All localities within Monterey, San Benito, and Santa Cruz Counties.
Area 3: All localities within El Dorado[a], Placer[a], Sacramento, San Joaquin and Yolo Counties.
Area 4: All localities within Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado[a], Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Nevada, Placer[a], Plumas, Shasta, Sierra, Siskiyou, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, and Yuba Counties.

SAMPLE NOT FOR BIDDING

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[c]	Saturday Overtime Hourly Rate (1 ½ X)[c]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Drywall Installer/Lather (Area 1)	$52.65	$11.70	$13.40[d]	$5.09	$0.97	$1.11	8.0	$84.92	$111.245	$111.245	$137.57
Stocker/Scrapper (Area 1)[e]	$26.33	$11.70	$5.91[d]	$5.04	$0.00	$0.10	8.0	$49.08	$62.245	$62.245	$75.41
Stocker/Scrapper (Area 1)	$26.33	$11.70	$1.48	$5.04	$0.00	$0.10	8.0	$44.65	$57.815	$57.815	$70.98
Drywall Installer/Lather (Area 2)	$46.77	$11.70	$13.40[d]	$5.09	$0.97	$1.11	8.0	$79.04	$102.425	$102.425	$125.81
Stocker/Scrapper (Area 2)[e]	$23.39	$11.70	$5.91[d]	$5.04	$0.00	$0.10	8.0	$46.14	$57.835	$57.835	$69.53
Stocker/Scrapper (Area 2)	$23.39	$11.70	$1.48	$5.04	$0.00	$0.10	8.0	$41.71	$53.405	$53.405	$65.10
Drywall Installer/Lather (Area 3)	$47.27	$11.70	$13.40[d]	$5.09	$0.97	$1.11	8.0	$79.54	$103.175	$103.175	$126.81
Stocker/Scrapper (Area 3)[e]	$23.64	$11.70	$5.91[d]	$5.04	$0.00	$0.10	8.0	$46.39	$58.21	$58.21	$70.03
Stocker/Scrapper (Area 3)	$23.64	$11.70	$1.48	$5.04	$0.00	$0.10	8.0	$41.96	$53.78	$53.78	$65.60
Drywall Installer/Lather (Area 4)	$45.92	$11.70	$13.40[d]	$5.09	$0.97	$1.11	8.0	$78.19	$101.150	$101.150	$124.11

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[c]	Saturday Overtime Hourly Rate (1 ½ X)[c]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Stocker/Scrapper (Area 4)[e]	$22.97	$11.70	$5.91[d]	$5.04	$0.00	$0.10	8.0	$45.72	$57.205	$57.205	$68.69
Stocker/Scrapper (Area 4)	$22.97	$11.70	$1.48	$5.04	$0.00	$0.10	8.0	$41.29	$52.775	$52.775	$64.26

Wages and Employer Payments (2nd Shift):

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours[f]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[g]	Saturday Overtime Hourly Rate (1 ½ X)[g]	Sunday/ Holiday Overtime Hourly Rate (2 X)[h]
Drywall Installer/Lather (Area 1)	$56.16	$11.70	$13.40[d]	$5.09	$0.97	$1.11	7.5	$88.43	$116.510	$116.510	$144.59
Stocker/Scrapper (Area 1)[e]	$28.09	$11.70	$5.91[d]	$5.04	$0.00	$0.10	7.5	$50.84	$64.885	$64.885	$78.93
Stocker/Scrapper (Area 1)	$28.09	$11.70	$1.48	$5.04	$0.00	$0.10	7.5	$46.41	$60.455	$60.455	$74.50
Drywall Installer/Lather (Area 2)	$49.89	$11.70	$13.40[d]	$5.09	$0.97	$1.11	7.5	$82.16	$107.105	$107.105	$132.05
Stocker/Scrapper (Area 2)[e]	$24.95	$11.70	$5.91[d]	$5.04	$0.00	$0.10	7.5	$47.70	$60.175	$60.175	$72.65
Stocker/Scrapper (Area 2)	$24.95	$11.70	$1.48	$5.04	$0.00	$0.10	7.5	$43.27	$55.745	$55.745	$68.22
Drywall Installer/Lather (Area 3)	$50.42	$11.70	$13.40[d]	$5.09	$0.97	$1.11	7.5	$82.69	$107.90	$107.90	$133.11
Stocker/Scrapper (Area 3)[e]	$25.22	$11.70	$5.91[d]	$5.04	$0.00	$0.10	7.5	$47.97	$60.58	$60.58	$73.19
Stocker/Scrapper (Area 3)	$25.22	$11.70	$1.48	$5.04	$0.00	$0.10	7.5	$43.54	$56.15	$56.15	$68.76
Drywall Installer/Lather (Area 4)	$48.98	$11.70	$13.40[d]	$5.09	$0.97	$1.11	7.5	$81.25	$105.74	$105.74	$130.23
Stocker/Scrapper (Area 4)[e]	$24.50	$11.70	$5.91[d]	$5.04	$0.00	$0.10	7.5	$47.25	$59.50	$59.50	$71.75
Stocker/Scrapper (Area 4)	$24.50	$11.70	$1.48	$5.04	$0.00	$0.10	7.5	$42.82	$55.07	$55.07	$67.32

SAMPLE NOT FOR BIDDING

Wages and Employer Payments (3rd Shift):

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours[f]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X) [i]	Saturday Overtime Hourly Rate (1 ½ X) [i]	Sunday/ Holiday Overtime Hourly Rate (2 X)[j]
Drywall Installer/Lather (Area 1)	$60.17	$11.70	$13.40 [d]	$5.09	$0.97	$1.11	7.0	$92.44	$122.525	$122.525	$152.61
Stocker/Scrapper (Area 1) [e]	$30.09	$11.70	$5.91 [d]	$5.04	$0.00	$0.10	7.0	$52.84	$67.885	$67.885	$82.93
Stocker/Scrapper (Area 1)	$30.09	$11.70	$1.48	$5.04	$0.00	$0.10	7.0	$48.41	$63.455	$63.455	$78.50
Drywall Installer/Lather (Area 2)	$53.45	$11.70	$13.40 [d]	$5.09	$0.97	$1.11	7.0	$85.72	$112.445	$112.445	$139.17
Stocker/Scrapper (Area 2) [e]	$26.73	$11.70	$5.91 [d]	$5.04	$0.00	$0.10	7.0	$49.48	$62.845	$62.845	$76.21
Stocker/Scrapper (Area 2)	$26.73	$11.70	$1.48	$5.04	$0.00	$0.10	7.0	$45.05	$58.415	$58.415	$71.78
Drywall Installer/Lather (Area 3)	$54.02	$11.70	$13.40 [d]	$5.09	$0.97	$1.11	7.0	$86.29	$113.30	$113.30	$140.31
Stocker/Scrapper (Area 3) [e]	$27.02	$11.70	$5.91 [d]	$5.04	$0.00	$0.10	7.0	$49.77	$63.28	$63.28	$76.79
Stocker/Scrapper (Area 3)	$27.02	$11.70	$1.48	$5.04	$0.00	$0.10	7.0	$45.34	$58.85	$58.85	$72.36
Drywall Installer/Lather (Area 4)	$52.48	$11.70	$13.40 [d]	$5.09	$0.97	$1.11	7.0	$84.75	$110.99	$110.99	$137.23
Stocker/Scrapper (Area 4) [e]	$26.25	$11.70	$5.91 [d]	$5.04	$0.00	$0.10	7.0	$49.00	$62.125	$62.125	$75.25
Stocker/Scrapper (Area 4)	$26.25	$11.70	$1.48	$5.04	$0.00	$0.10	7.0	$44.57	$57.695	$57.695	$70.82

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] Area 3 includes the portion of Placer County west of and including Highway 49 and the portion of El Dorado County west of and including Highway 49 and the territory inside the city limits of Placerville. Area 4 includes the portions of Placer and El Dorado Counties not covered in Area 3.
[b] Includes an amount for Work Fees.
[c] Rate applies to the first 4 overtime hours Monday through Friday and the first 8 hours on Saturday. All other time is paid at the Sunday and Holiday overtime rate. Saturdays may be worked at straight time if job is shut down during Monday through Friday due to inclement weather or major mechanical breakdown.
[d] Includes an amount for Annuity Trust Fund.
[e] Employed by the same contractor for 2000 hours (consecutively or cumulatively).
[f] Daily overtime applies after 7 ½ hours worked at the straight-time rate for second shift and after 7 hours worked at the straight-time rate for third shift.
[g] Rate applies to the first 4 overtime hours Monday through Friday and the first 7.5 hours on Saturday. All other time is paid at the Sunday and Holiday overtime rate. Saturdays may be worked at straight time if job is shut down during Monday through Friday due to inclement weather or major mechanical breakdown.
[h] Time and one-half shall be paid for the first 7.5 hours worked on the four (4) days of each year selected by the Union as designated off/holidays listed in the Holiday Provision.
[i] Rate applies to the first 4 overtime hours Monday through Friday and the first 7 hours on Saturday. All other time is paid at the Sunday and Holiday overtime rate. Saturdays may be worked at straight time if job is shut down during Monday through Friday due to inclement weather or major mechanical breakdown.
[j] Time and one-half shall be paid for the first 7 hours worked on the four (4) days of each year selected by the Union as designated off/holidays listed in the Holiday Provision.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Elevator Constructor#

Determination:
NC-62-X-1-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
December 31, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All Localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Inyo, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Mono, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties. Portions of Kern, San Bernardino and San Luis Obispo are detailed below.[a]

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[b]	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[c]	Saturday Overtime Hourly Rate (1 ½ X)[c]	Sunday/ Holiday Overtime Hourly Rate (2 X)[d]
Mechanic	$72.10	$15.875	$19.31	$4.33	$0.64	$0.54	8.0	$112.795	$148.845	$148.845	$184.895
Mechanic (Employed in industry more than 5 years)	$72.10	$15.875	$19.31	$5.77	$0.64	$0.54	8.0	$114.235	$150.285	$150.285	$186.335
Helper[e]	$50.47	$15.875	$19.31	$3.03	$0.64	$0.54	8.0	$89.865	$115.100	$115.100	$140.335
Helper (Employed in industry more than 5 years)	$50.47	$15.875	$19.31	$4.04	$0.64	$0.54	8.0	$90.875	$116.110	$116.110	$141.345

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the

Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] Applies to that portion of these counties north of the Tehachapi Line. For more information contact the Office of the Director - Research Unit.
[b] Includes an amount for Annuity Trust Fund.
[c] For Contract Service work only. All other overtime is paid at the Sunday/Holiday rate.
[d] For paid holidays recognized in the collective bargaining agreement employees are paid for 8 hours at straight time in addition to the Holiday rate for all hours worked.
[e] Ratio: The total number of Helpers employed shall not exceed the number of Mechanics on any one job. For more information on the use of Helpers contact the Office of the Director - Research Unit.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Building/Construction Inspector and Field Soils and Material Tester[#]

Determination:
NC-63-3-9-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for the new rates after ten days after the expiration date if no subsequent determination is issued.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo and Yuba counties.

Wages and Employer Payments:

Classification[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare[b]	Pension	Vacation/ Holiday	Training	Other Payments	Hours	Total Hourly Rate	Daily Overtime Hourly Rate[c] (1 ½ X)	Saturday Overtime Hourly Rate[c] (1 ½ X)	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1	$52.05	$13.88	$10.82	$6.62	$1.13	$0.24	8	$84.74	$110.765	$110.765	$136.79
Group 2	$50.05	$13.88	$10.82	$6.62	$1.13	$0.24	8	$82.74	$107.765	$107.765	$132.79
Group 3	$42.84	$13.88	$10.82	$6.62	$1.13	$0.24	8	$75.53	$96.95	$96.95	$118.37
Group 4	$36.87	$13.88	$10.82	$6.62	$1.13	$0.24	8	$69.56	$87.995	$87.995	$106.43

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Building/Construction Inspector and Field Soils and Material Tester (Second Shift)#

Determination:
NC-63-3-9-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for the new rates after ten days after the expiration date if no subsequent determination is issued.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo and Yuba counties.

SAMPLE
NOT FOR BIDDING

Wages and Employer Payments:

Classification[a] (Journeyperson) Group	Basic Hourly Rate	Health and Welfare[b]	Pension	Vacation/ Holiday	Training	Other Payments	Hours	Total Hourly Rate	Daily Overtime Hourly Rate[c] (1 ½ X)	Saturday Overtime Hourly Rate[c] (1 ½ X)	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1	$58.56	$13.88	$10.82	$6.62	$1.13	$0.24	8	$91.25	$120.53	$120.53	$149.81
Group 2	$56.31	$13.88	$10.82	$6.62	$1.13	$0.24	8	$89.00	$117.155	$117.155	$145.31
Group 3	$48.20	$13.88	$10.82	$6.62	$1.13	$0.24	8	$80.89	$104.99	$104.99	$129.09
Group 4	$41.48	$13.88	$10.82	$6.62	$1.13	$0.24	8	$74.17	$94.91	$94.91	$115.65

CLASSIFICATIONS:

GROUP 1
ASNT Level II-III
DSA Masonry
DSA Shotcrete
Lead Inspector
NICET Level IV
NDT Level Two

GROUP 2
AWS-CWI
ICC Certified Structural Inspector
NICET Level III
Shear Wall/Floor System Inspector
Building/Construction Inspector

GROUP 3
Geotechnical Driller
Soils/Asphalt
Earthwork Grading
Excavation and Backfill
NICET Level II

GROUP 4
ACI
Drillers Helper
ICC Fireproofing
NICET Level I
Proofload Testing
Torque Testing
NACE
NDT Level One

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE NOT FOR BIDDING

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] For classifications within each group, see page 3.
[b] Amount shall be paid for all hours worked up to 173 hours per month.
[c] Rate applies to the first 4 daily overtime hours, Monday through Friday, and the first 8 hours on Saturday. All other overtime is paid at the Sunday/Holiday overtime rate.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE
DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE
PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: LABORER AND RELATED CLASSIFICATIONS#

Determination:
NC-23-102-1-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Marin, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Alameda, Contra Costa, Marin, San Francisco, San Mateo, And Santa Clara Counties.

AREA 2 - Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo And Yuba Counties.

SAMPLE
NOT FOR BIDDING

WAGE RATES AND TOTAL HOURLY RATES (AREA 1):

Classification[a] (Journeyperson)	Basic Hourly Rate[b]	Hours[c]	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate[d]	Sunday/ Holiday Overtime Hourly Rate
Construction Specialist	$33.50	8	$59.29	$76.04	$92.79
Group 1; Group 1(B)[e]	$32.80	8	$58.59	$74.99	$91.39
Group 1 (A)	$33.02	8	$58.81	$75.32	$91.83
Group 1 (C)	$32.85	8	$58.64	$75.07	$91.49
Group 1 (E)	$33.35	8	$59.14	$75.82	$92.49
Group 1 (G)	$33.00	8	$58.79	$75.29	$91.79
Group 2	$32.65	8	$58.44	$74.77	$91.09
Group 3; Group 3 (A)	$32.55	8	$58.34	$74.62	$90.89
Group 4; Group 6 (B)	$26.24	8	$52.03	$65.15[f]	$78.27[f]
Group 6	$33.76	8	$59.55	$76.43	$93.31
Group 6 (A)	$33.26	8	$59.05	$75.68	$92.31
Group 6 (C)	$32.67	8	$58.46	$74.80	$91.13
Group 6 (D)	$33.38	8	$59.17	$75.86	$92.55
Group 6 (E)	$32.40	8	$58.19	$74.39	$90.59
Group 7 – Stage 1 (1st 6 months)	$22.79	8	$48.58	$59.97	$71.37
Group 7 – Stage 2 (2nd 6 months)	$26.04	8	$51.83	$64.85	$77.87
Group 7 – Stage 3 (3rd 6 months)	$29.30	8	$55.09	$69.73	$84.39

WAGE RATES AND TOTAL HOURLY RATES (AREA 2):

Classification[a] (Journeyperson)	Basic Hourly Rate[b]	Hours[c]	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate[d]	Sunday/ Holiday Overtime Hourly Rate
Construction Specialist	$32.50	8	$58.29	$74.54	$90.79
Group 1; Group 1(B)[e]	$31.80	8	$57.59	$73.49	$89.39
Group 1 (A)	$32.02	8	$57.81	$73.82	$89.83
Group 1 (C)	$31.85	8	$57.64	$73.57	$89.49
Group 1 (E)	$32.35	8	$58.14	$74.32	$90.49
Group 2	$31.65	8	$57.44	$73.27	$89.09
Group 3; Group 3 (A)	$31.55	8	$57.34	$73.12	$88.89
Group 4; Group 6 (B)	$25.24	8	$51.03	$63.65[f]	$76.27[f]
Group 6	$32.76	8	$58.55	$74.93	$91.31
Group 6 (A)	$32.26	8	$58.05	$74.18	$90.31
Group 6 (C)	$31.67	8	$57.46	$73.30	$89.13
Group 6 (D)	$32.38	8	$58.17	$74.36	$90.55
Group 6 (E)	$31.40	8	$57.19	$72.89	$88.59
Group 7 – Stage 1 (1st 6 months)	$22.09	8	$47.88	$58.92	$69.97
Group 7 – Stage 2 (2nd 6 months)	$25.24	8	$51.03	$63.65	$76.27
Group 7 – Stage 3 (3rd 6 months)	$28.40	8	$54.19	$68.38	$82.59

EMPLOYER PAYMENTS:

Type of Fund	Amount per Hour Worked
Health & Welfare	$9.00
Pension	$12.96
Vacation and Holiday	$3.05
Training	$0.50
Other	$0.28

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE
DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE
PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: LABORER AND RELATED CLASSIFICATIONS (Special Single and Second Shift)#

Determination:
NC-23-102-1-2020-2A

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Marin, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Alameda, Contra Costa, Marin, San Francisco, San Mateo, And Santa Clara Counties.

AREA 2 - Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo And Yuba Counties.

WAGE RATES AND TOTAL HOURLY RATES (AREA 1):

Classification[a] (Journeyperson)	Basic Hourly Rate[b]	Hours	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate[d]	Sunday/ Holiday Overtime Hourly Rate
Construction Specialist	$36.50	8	$62.29	$80.54	$98.79
Group 1; Group 1(B)[e]	$35.80	8	$61.59	$79.49	$97.39
Group 1 (A)	$36.02	8	$61.81	$79.82	$97.83
Group 1 (C)	$35.85	8	$61.64	$79.57	$97.49
Group 1 (E)	$36.35	8	$62.14	$80.32	$98.49
Group 1 (G)	$36.00	8	$61.79	$79.79	$97.79
Group 2	$35.65	8	$61.44	$79.27	$97.09
Group 3; Group 3 (A)	$35.55	8	$61.34	$79.12	$96.89
Group 4; Group 6 (B)	$29.24	8	$55.03	$69.65[f]	$84.27[f]
Group 6	$36.76	8	$62.55	$80.93	$99.31
Group 6 (A)	$36.26	8	$62.05	$80.18	$98.31
Group 6 (C)	$35.67	8	$61.46	$79.30	$97.13
Group 6 (D)	$36.38	8	$62.17	$80.36	$98.55
Group 6 (E)	$35.40	8	$61.19	$78.89	$96.59
Group 7 – Stage 1 (1st 6 months)	$25.79	8	$51.58	$64.47	$77.37
Group 7 – Stage 2 (2nd 6 months)	$29.04	8	$54.83	$69.35	$83.87
Group 7 – Stage 3 (3rd 6 months)	$32.30	8	$58.09	$74.23	$90.39

SAMPLE NOT FOR BIDDING

WAGE RATES AND TOTAL HOURLY RATES (AREA 2):

Classification[a] (Journeyperson) Group	Basic Hourly Rate[b]	Hours	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate[d]	Sunday/ Holiday Overtime Hourly Rate
Construction Specialist	$35.50	8	$61.29	$79.04	$96.79
Group 1; Group 1(B)[e]	$34.80	8	$60.59	$77.99	$95.39
Group 1 (A)	$35.02	8	$60.81	$78.32	$95.83
Group 1 (C)	$34.85	8	$60.64	$78.07	$95.49
Group 1 (E)	$35.35	8	$61.14	$78.82	$96.49
Group 2	$34.65	8	$60.44	$77.77	$95.09
Group 3; Group 3 (A)	$34.55	8	$60.34	$77.62	$94.89
Group 4; Group 6 (B)	$28.24	8	$54.03	$68.15[f]	$82.27[f]
Group 6	$35.76	8	$61.55	$79.43	$97.31
Group 6 (A)	$35.26	8	$61.05	$78.68	$96.31
Group 6 (C)	$34.67	8	$60.46	$77.80	$95.13
Group 6 (D)	$35.38	8	$61.17	$78.86	$96.55
Group 6 (E)	$34.40	8	$60.19	$77.39	$94.59
Group 7 – Stage 1 (1st 6 months)	$25.09	8	$50.88	$63.42	$75.97
Group 7 – Stage 2 (2nd 6 months)	$28.24	8	$54.03	$68.15	$82.27
Group 7 – Stage 3 (3rd 6 months)	$31.40	8	$57.19	$72.88	$88.59

EMPLOYER PAYMENTS:

Type of Fund	Amount per Hour Worked
Health & Welfare	$9.00
Pension	$12.96
Vacation and Holiday	$3.05
Training	$0.50
Other	$0.28

SAMPLE
NOT FOR BIDDING

CLASSIFICATIONS

Construction Specialist

ASPHALT IRONERS AND RAKERS
CHAINSAW
CONCRETE DIAMOND CHAINSAW
LASER BEAM IN CONNECTION WITH LABORER'S WORK
MASONRY AND PLASTER TENDER
MECHANICAL PIPE LAYER-ALL TYPES REGARDLESS OF TYPE OR METHOD OF POWER
CAST IN PLACE MANHOLE FORM SETTERS
PRESSURE PIPELAYERS
DAVIS TRENCHER – 300 OR SIMILAR TYPE (AND ALL SMALL TRENCHERS)
STATE LICENSED BLASTERS AS DESIGNATED
DIAMOND DRILLERS
DIAMOND CORE DRILLER
MULTIPLE UNIT DRILLS
HIGH SCALERS (INCLUDING DRILLING OF SAME)
HYDRAULIC DRILLS
CERTIFIED WELDER

GROUP 1 (FOR CONTRA COSTA COUNTY ONLY, USE GROUP 1 (G) FOR SOME OF THE FOLLOWING CLASSIFICATIONS)
ASPHALT SPREADER BOXES (ALL TYPES)
BARKO, WACKER AND SIMILAR TYPE TAMPERS
BUGGYMOBILE
CAULKERS, BANDERS, PIPEWRAPPERS, CONDUIT LAYERS, PLASTIC PIPE LAYERS
CERTIFIED ASBESTOS AND MOLD REMOVAL WORKER
CERTIFIED HAZARDOUS WASTE WORKER (INCLUDING LEAD ABATEMENT)
COMPACTORS OF ALL TYPES
CONCRETE AND MAGNESITE MIXER AND ½ YARD
CONCRETE PAN WORK
CONCRETE SANDERS, CONCRETE SAW
CRIBBERS AND/OR SHORING
CUT GRANITE CURB SETTER
DRI PAK-IT MACHINE
FALLER, LOGLOADER AND BUCKER
FORM RAISERS, SLIP FORMS
GREEN CUTTERS
HEADERBOARD MEN, HUBSETTERS, ALIGNERS BY ANY METHOD
HIGH PRESSURE BLOW PIPE (1-1/2" OR OVER, 100 LBS. PRESSURE/OVER)
HYDRO SEEDER AND SIMILAR TYPE
JACKHAMMER OPERATORS
JACKING OF PIPE OVER 12 INCHES
JACKSON AND SIMILAR TYPE COMPACTORS
KETTLEMEN, POTMEN, AND MEN APPLYING ASPHALT, LAY KOLD, CREOSOTE, LIME, CAUSTIC AND SIMILAR TYPE MATERIALS (APPLYING MEANS APPLYING DIPPING, OR HANDLING OF SUCH MATERIALS)
LAGGING, SHEETING, WHALING, BRACING, TRENCH-JACKING, LAGGING HAMMER
MAGNESITE, EPOXY RESIN, FIBER GLASS AND MASTIC WORKERS (WET/DRY)
NO JOINT PIPE AND STRIPPING OF SAME, INCLUDING REPAIR OF VOIDS
PAVEMENT BREAKERS AND SPADERS, INCLUDING TOOL GRINDER
PERMA CURBS
PRECAST-MANHOLE SETTERS
PIPELAYERS (INCLUDING GRADE CHECKING IN CONNECTION WITH PIPELAYING)
PRESSURE PIPE TESTER
POST HOLE DIGGERS-AIR, GAS, AND ELECTRIC POWER BROOM SWEEPERS
POWER TAMPERS OF ALL TYPES, EXCEPT AS SHOWN IN GROUP 2
RAM SET GUN AND STUD GUN
RIPRAP-STONEPAVER AND ROCK-SLINGER, INCLUDING PLACING OF SACKED CONCRETE AND/OR SAND (WET OR DRY) AND GABIONS AND SIMILAR TYPE
ROTARY SCARIFIER OR MULTIPLE HEAD CONCRETE CHIPPING SCARIFIER
ROTO AND DITCH WITCH
ROTOTILLER
SAND BLASTERS, POTMEN, GUNMEN, AND NOZZLEMEN
SIGNALING AND RIGGING
SKILLED WRECKER (REMOVING AND SALVAGING OF SASH, WINDOWS, DOORS, PLUMBING AND ELECTRIC FIXTURES)
TANK CLEANERS
TREE CLIMBERS
TRENCHLESS TECHNOLOGY LABORER- PIPE INSTALLATION, BURSTING, RELINING, OR SIMILAR
TRENCHLESS LABORER'S WORK, CAMERA CONTROLLER, CCTV
TURBO BLASTER
VIBRA-SCREED-BULL FLOAT IN CONNECTION WITH LABORER'S WORK

SAMPLE NOT FOR BIDDING

VIBRATORS

GROUP 1 (A)
ALL WORK OF LOADING, PLACING AND BLASTING OF ALL POWDER & EXPLOSIVES OF WHATEVER TYPE, REGARDLESS OF METHOD USED FOR LOADING AND PLACING
JOY DRILL MODEL TWM-2A
GARDENER-DENVER MODEL DH 143 AND SIMILAR TYPE DRILLS
TRACK DRILLERS
JACK LEG DRILLERS
WAGON DRILLERS
MECHANICAL DRILLERS-ALL TYPES REGARDLESS OF TYPE OR METHOD OF POWER
BLASTERS AND POWDERMAN
TREE TOPPER
BIT GRINDER

GROUP 1 (B) -- SEE GROUP 1 RATES
SEWER CLEANERS (ANY WORKMEN WHO HANDLE OR COME IN CONTACT WITH RAW SEWAGE IN SMALL DIAMETER SEWERS) SHALL RECEIVE $4.00 PER DAY ABOV GROUP 1 WAGE RATES. THOSE WHO WORK INSIDE RECENTLY ACTIVE, LARGE DIAMETER SEWERS, AND ALL RECENTLY ACTIVE SEWER MANHOLES SHALL RECEIVE $5.00 PER DAY ABOVE GROUP 1 WAGE RATES.

GROUP 1 (C)
BURNING AND WELDING IN CONNECTION WITH LABORER'S WORK
SYNTHETIC THERMOPLASTICS AND SIMILAR TYPE WELDING

GROUP 1 (D)
SEE FOOTNOTE A ON PAGE 8

GROUP 1 (E)
WORK ON AND/OR IN BELL HOLE FOOTINGS AND SHAFTS THEREOF, AND WORK ON AND IN DEEP FOOTINGS (DEEP FOOTINGS IS A HOLE 15 FEET OR MORE IN DEPTH)
SHAFT IS AN EXCAVATION OVER FIFTEEN (15) FEET DEEP OF ANY TYPE

GROUP 1 (G) APPLIES ONLY TO WORK IN CONTRA COSTA COUNTY
PIPELAYERS (INCLUDING GRADE CHECKING IN CONNECTION WITH PIPELAYING), CAULKERS, BANDERS, PIPEWRAPPERS, CONDUIT LAYERS, PLASTIC PIPE LAYER, PRESSURE PIPE TESTER, NO JOINT PIPE AND STRIPPING OF SAME, INCLUDING REPAIR OF VOIDS, PRECAST MANHOLE SETTERS, CAST IN PLACE MANHOLE FORM SETTERS IN CONTRA COSTA COUNTY ONLY

GROUP 1(H)
SEE FOOTNOTE A ON PAGE 8

GROUP 2
ASPHALT SHOVELERS
CEMENT DUMPERS AND HANDLING DRY CEMENT OR GYPSUM
CHOKE-SETTER AND RIGGER (CLEARING WORK)
CONCRETE BUCKET DUMPER AND CHUTEMAN
CONCRETE CHIPPING AND GRINDING
CONCRETE LABORERS (WET OR DRY)
DRILLERS HELPER, CHUCK TENDER, NIPPER (ONE CHUCKTENDER ON SINGLE MACHINE OPERATION WITH MINIMUM OF ONE CHUCKTENDER FOR EACH TWO MACHINES ON MULTIPLE MACHINE OPERATION. JACKHAMMERS IN NO WAY INVOLVED IN THIS ITEM.)
GUINEA CHASER (STAKEMAN), GROUT CREW
HIGH PRESSURE NOZZLEMAN, ADDUCTORS
HYDRAULIC MONITOR (OVER 100 LBS. PRESSURE)
LOADING AND UNLOADING, CARRYING AND HANDLING OF ALL RODS AND MATERIALS FOR USE IN REINFORCING CONCRETE CONSTRUCTION
PITTSBURGH CHIPPER, AND SIMILAR TYPE BRUSH SHREDDERS
SEMI-SKILLED WRECKER (SALVAGING OF OTHER BUILDING MATERIALS) – SEE ALSO SKILLED WRECKER (GROUP 1)
SLOPER
SINGLEFOOT, HAND HELD, PNEUMATIC TAMPER
ALL PNEUMATIC, AIR, GAS AND ELECTRIC TOOLS NOT LISTED IN GROUPS 1 THROUGH 1 (F)
JACKING OF PIPE-UNDER 12 INCHES

SAMPLE NOT FOR BIDDING

GROUP 3
CONSTRUCTION LABORERS INCLUDING BRIDGE LABORERS, GENERAL LABORERS AND CLEANUP LABORERS
DEMOLITION WORKER
DUMPMAN, LOAD SPOTTER
FLAGPERSON/PEDESTRIAN MONITOR
FIRE WATCHER
FENCE ERECTORS, INCLUDING TEMPORARY FENCING
GUARDRAIL ERECTORS
GARDENER, HORTICULTURAL AND LANDSCAPE LABORERS (SEE GROUP 4, FOR LANDSCAPE MAINTENANCE ON NEW CONSTRUCTION DURING PLANT ESTABLISHMENT PERIOD)
JETTING
LIMBERS, BRUSH LOADERS, AND PILERS
PAVEMENT MARKERS (BUTTON SETTERS)
PAVERS/INTERLOCKING PAVERS (ALL TYPES) AND INTERLOCKING PAVER MACHINES
MAINTENANCE, REPAIR TRACKMEN AND ROAD BEDS
STREETCAR AND RAILROAD CONSTRUCTION TRACK LABORERS
TEMPORARY AIR AND WATER LINES, VICTAULIC OR SIMILAR
TOOL ROOM ATTENDANT (JOBSITE ONLY)
TREE REMOVAL
WHEELBARROW, INCLUDING POWER DRIVEN

GROUP 3 (A) -- SEE GROUP 3 RATES
COMPOSITE CREW PERSON (OPERATION OF VEHICLES, WHEN IN CONJUNCTION WITH LABORER'S DUTIES)

GROUP 4
ALL FINAL CLEANUP OF DEBRIS, GROUNDS AND BUILDINGS NEAR THE COMPLETION OF THE PROJECT INCLUDING BUT NOT LIMITED TO STREET CLEANERS (NOT APPLICABLE TO ENGINEERING OR HEAVY HIGHWAY PROJECTS)
CLEANING AND WASHING WINDOWS (NEW CONSTRUCTION ONLY), SERVICE LANDSCAPE LABORERS (SUCH AS GARDENER, HORTICULTURE, MOWING, TRIMMING, REPLANTING, WATERING DURING PLANT ESTABLISHMENT PERIOD) ON NEW CONSTRUCTION
BRICK CLEANERS (JOB SITE ONLY)
MATERIAL CLEANERS (JOB SITE ONLY)

NOTE: AN ADDITIONAL DETERMINATION FOR LANDSCAPE MAINTENANCE WORK AFTER THE PLANT ESTABLISHMENT PERIOD OR WARRANTY PERIOD IS PUBLISHED IN THE NORTHERN CALIFORNIA LANDSCAPE MAINTENANCE LABORER DETERMINATION.

GROUP 6
STRUCTURAL NOZZLEMAN

GROUP 6 (A)
NOZZLEMAN (INCLUDING GUNMAN, POTMAN)
RODMAN
GROUNDMAN

GROUP 6 (B) -- SEE GROUP 4 RATES GUNITE TRAINEE (ONE GUNITE LABORER SHALL BE ALLOWED FOR EACH THREE (3) JOURNEYMAN (GROUP 6, 6A, 6C, OR GENERAL LABORER) ON A CREW. IN THE ABSENCE OF THE JOURNEYMAN, THE GUNITE TRAINEE RECEIVES THE JOURNEYMAN SCALE.).
NOTE: THIS RATIO APPLIES ONLY TO WORK ON THE SAME JOB SITE.

GROUP 6 (C)
REBOUNDMAN

GROUP 6 (D)
ALIGNER OF WIRE WINDING MACHINE IN CONNECTION WITH GUNITING OR SHOT CRETE

GROUP 6 (E)
ALIGNER HELPER OF WIRE WINDING MACHINE IN CONNECTION WITH GUNITING OR SHOT CRETE

GROUP 7
ENTRY LEVEL LANDSCAPE LABORER (RATIO FOR ENTRY LEVEL IS ONE IN THREE. AT LEAST ONE SECOND PERIOD ENTRY LEVEL AND AT LEAST ONE THIRD PERIOD ENTRY LEVEL MUST BE EMPLOYED BEFORE EMPLOYING ANOTHER FIRST PERIOD TRAINEE).
NOTE: THIS RATIO APPLIES ONLY TO WORK ON THE SAME JOB SITE

SAMPLE FOR BIDDING NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] GROUP 1(D) - MAINTENANCE OR REPAIR TRACKMEN AND ROAD BEDS AND ALL EMPLOYEES PERFORMING WORK COVERED BY THIS CLASSIFICATION SHALL RECEIVE $0.25 PER HOUR ABOVE THEIR REGULAR RATE FOR ALL WORK PERFORMED ON UNDERGROUND STRUCTURES NOT SPECIFICALLY COVERED HEREIN. THIS SHALL NOT APPLY TO WORK BELOW GROUND LEVEL IN OPEN CUT. THIS SHALL APPLY TO CUT AND COVER WORK OF SUBWAY CONSTRUCTION AFTER TEMPORARY COVER HAS BEEN PLACED.

GROUP 1(H) - ALL LABORERS WORKING OFF OR WITH OR FROM BOS'N CHAIRS, SWINGING SCAFFOLDS, BELTS RECEIVE $0.50 PER HOUR ABOVE THEIR APPLICABLE WAGE RATE. THIS SHALL NOT APPLY TO LABORERS ENTITLED TO RECEIVE THE WAGE RATE SET FORTH IN GROUP 1(A).

[b] ZONE PAY AT THREE DOLLARS ($3.00) PER HOUR, FACTORED AT THE APPLICABLE OVERTIME MULTIPLE, WILL BE ADDED TO THE BASE RATE FOR WORK PERFORMED OUTSIDE THE FREE ZONE DESCRIBED BY THE BOUNDARIES ALONG TOWNSHIP AND RANGE LINES. PLEASE SEE TRAVEL AND SUBSISTENCE PROVISION FOR MAP DESCRIPTION AND EXCEPTIONS.

[c] WHEN THREE SHIFTS ARE EMPLOYED FOR FIVE (5) OR MORE CONSECUTIVE DAYS, SEVEN AND ONE-HALF (7 ½) CONSECUTIVE HOURS (EXCLUSIVE OF MEAL PERIOD), SHALL CONSTITUTE A DAY OF WORK, FOR WHICH EIGHT (8) TIMES THE STRAIGHT TIME HOURLY RATE SHALL BE PAID AT THE NON-SHIFT WAGE RATE FOR THE SECOND SHIFT. THE THIRD SHIFT SHALL BE SEVEN (7) HOURS OF WORK FOR EIGHT (8) HOURS PAY AT THE NON-SHIFT WAGE RATE.

[d] SATURDAYS IN THE SAME WORK WEEK MAY BE WORKED AT STRAIGHT-TIME IF JOB IS SHUT DOWN DURING THE NORMAL WORK WEEK DUE TO INCLEMENT WEATHER, MAJOR MECHANICAL BREAKDOWN OR LACK OF MATERIALS BEYOND THE CONTROL OF THE EMPLOYER.

[e] GROUP 1(B) RECEIVES AN ADDITIONAL AMOUNT EACH DAY. SEE PAGE 6 FOR DETAILS

[f] SERVICE LANDSCAPE LABORER ON NEW CONSTRUCTION MAY WORK ANY FIVE (5) DAYS WITHIN A WEEK.

PENDING
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

Craft: Landscape Maintenance Laborer
(Applies Only to Routine Landscape Maintenance Work, Not New Landscape Construction) [1]

Determination:
NC-LML-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
March 31, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director -- Research Unit (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Wages and Employer Payments:

Locality	Basic Hourly Rate	Health and Welfare	Pension	Vacation	Holiday	Training	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)
Alameda	$14.00	$0.43	$0.00	$0.14[a]	$0.24	$0.00	8.0	$14.81[b]	$21.81[b]
Alpine, El Dorado	$14.00	$0.00	$0.00	$0.12	$0.14	$0.00	8.0	$14.26	$21.26
	$14.00	$0.00	$0.00	$0.14	$0.16	$0.00	8.0	$14.30	$21.30
Amador	$14.00	$0.00	$0.00	$0.16	$0.06	$0.00	8.0	$14.22	$21.22
Butte, Glenn and Plumas	$14.00	$0.16	$0.00	$0.13[c]	$0.05	$0.00	8.0	$14.34[b]	$21.34[b]
Calaveras	$14.00	$0.00	$0.00	$0.10	$0.12	$0.00	8.0	$14.22	$21.22
Colusa and Sutter	$14.00	$0.00	$0.00	$0.12	$0.14	$0.00	8.0	$14.26	$21.26
	$14.00	$0.00	$0.00	$0.14	$0.16	$0.00	8.0	$14.30	$21.30
Contra Costa	$14.00	$0.00	$0.00	$0.00	$0.12	$0.00	8.0	$14.12	$21.12
Del Norte and Humboldt	$14.00	$0.00	$0.00	$0.25	$0.07	$0.00	8.0	$14.32	$21.32
Fresno	$14.00	$0.00	$0.00	$0.11	$0.00	$0.00	8.0	$14.11	$21.11
	$14.00	$0.00	$0.00	$0.19[d]	$0.19	$0.00	8.0	$14.38[b]	$21.38[b]
Kings	$14.00	$0.00	$0.00	$0.25[e]	$0.25	$0.00	8.0	$14.50[b]	$21.50[b]
Lake and Mendocino	$14.00	$0.00	$0.00	$0.13[f]	$0.03	$0.00	8.0	$14.16[b]	$21.16[b]
	$14.00	$0.00	$0.00	$0.14[g]	$0.03	$0.00	8.0	$14.17[b]	$21.17[b]
Lassen, Modoc, Shasta, Siskiyou and Trinity	$14.00	$0.00	$0.00	$0.31	$0.09	$0.00	8.0	$14.40	$21.40
Madera, Mariposa and Merced	$14.00	$0.00	$0.00	$0.115	$0.115	$0.00	8.0	$14.23	$21.23
Marin	$14.00	$0.00	$0.00	$0.00	$0.12	$0.00	8.0	$14.12	$21.12
Monterey	$14.00	$0.00	$0.00	$0.14	$0.22	$0.00	8.0	$14.36	$21.36
	$14.00	$0.00	$0.00	$0.16	$0.25	$0.00	8.0	$14.41	$21.41

SAMPLE NOT FOR BIDDING

Locality	Basic Hourly Rate	Health and Welfare	Pension	Vacation	Holiday	Training	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)
Napa	$14.00	$0.00	$0.00	$0.11[h]	$0.14	$0.00	8.0	$14.25	$21.25
Nevada and Sierra	$14.00	$0.00	$0.00	$0.16	$0.19	$0.00	8.0	$14.35	$21.35
Placer	$14.00	$0.00	$0.00	$0.12	$0.14	$0.00	8.0	$14.26	$21.26
Sacramento	$14.00	$0.00	$0.00	$0.16	$0.00	$0.00	8.0	$14.16	$21.16
	$14.00	$0.00	$0.00	$0.15	$0.00	$0.00	8.0	$14.15	$21.15
San Benito	$14.00	$0.00	$0.00	$0.15[i]	$0.18	$0.00	8.0	$14.33[b]	$21.33[b]
San Francisco	$14.00	$0.00	$0.00	$0.17	$0.17	$0.00	8.0	$14.34	$21.34
San Joaquin	$14.00	$0.37	$0.00	$0.12[j]	$0.12	$0.00	8.0	$14.61[b]	$21.61[b]
San Mateo	$14.00	$0.43	$0.00	$0.12[k]	$0.14	$0.00	8.0	$14.69[b]	$21.69[b]
	$14.00	$0.00	$0.00	$0.13[l]	$0.17	$0.00	8.0	$14.30[b]	$21.30[b]
Santa Clara	$14.00	$0.03	$0.00	$0.13[m]	$0.18	$0.00	8.0	$14.34[b]	$21.34[b]
Santa Cruz	$14.00	$0.00	$0.00	$0.16	$0.00	$0.00	8.0	$14.16	$21.16
	$14.00	$0.00	$0.00	$0.19	$0.00	$0.00	8.0	$14.19	$21.19
Solano	$14.00	$0.00	$0.00	$0.00	$0.07	$0.00	8.0	$14.07	$21.07
Sonoma	$14.00	$0.00	$0.00	$0.13[n]	$0.16	$0.00	8.0	$14.29[b]	$21.29[b]
	$14.00	$0.38	$0.00	$0.15[o]	$0.19	$0.00	8.0	$14.72[b]	$21.72[b]
Stanislaus and Tuolumne	$14.00	$0.00	$0.00	$0.115	$0.14	$0.00	8.0	$14.225	$21.225
	$14.00	$0.00	$0.00	$0.13[p]	$0.11	$0.00	8.0	$14.24[b]	$21.24[b]
Tehama	$14.00	$0.00	$0.00	$0.12	$0.19	$0.00	8.0	$14.31	$21.31
Tulare	$14.00	$0.69	$0.00	$0.12[q]	$0.00	$0.00	8.0	$14.81[b]	$21.81[b]
Yolo	$14.00	$0.00	$0.00	$0.00	$0.14	$0.00	8.0	$14.14	$21.14
	$14.00	$0.00	$0.00	$0.00	$0.19	$0.00	8.0	$14.19	$21.19
Yuba	$14.00	$0.00	$0.00	$0.14	$0.16	$0.00	8.0	$14.30	$21.30

SAMPLE
NOT FOR BIDDING

NOTE:
If there are two rates, the first rate is for routine work, the second rate is for complex work.

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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[1] This determination does not apply to work of a landscape laborer employed on landscape construction (work incidental to construction or post-construction maintenance during the plant installation and establishment period). The following is a description of the landscape work cover under this determination:

ROUTINE – mowing, watering, pruning, trimming, weeding, spraying, occasional planting and replacement of plants and janitorial work incidental to such landscape maintenance.

COMPLEX – servicing of irrigation and sprinkler systems, repairing of equipment use in such landscape maintenance.

[a] $0.20 after 3 years of service; $0.27 after 5 years of service.
[b] Computation is based on first years of employment. This rate should be increased by any applicable vacation increase as stated in other footnotes.
[c] $0.25 after 7 years of service.
[d] $0.38 after 3 years of service.
[e] $0.37 after 5 years of service; $0.49 after 15 years of service.
[f] $0.19 after 1 year of service; $0.25 after 2 years of service.
[g] $0.22 after 1 year of service; $0.29 after 2 years of service.
[h] $0.23 after 7 years of service.
[i] $0.31 after 5 years of service.
[j] $0.24 after 5 years of service.
[k] $0.23 after 2 years of service; $0.35 after 6 years of service.
[l] $0.26 after 1 years of service; $0.39 after 5 years of service.
[m] $0.27 after 1 years of service; $0.40 after 5 years of service.
[n] $0.26 after 7 years of service.
[o] $0.31 after 3 years of service; $0.46 after 7 years of service.
[p] $0.27 after 1 years of service; $0.40 after 5 years of service.
[q] $0.23 after 2 years of service.

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Modular Furniture Installer (Carpenter) #

Determination:
NC-23-31-15-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All Localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

SAMPLE NOT FOR BIDDING

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[a]	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[c]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Master Installer (Area 1)[d]	$36.43	$10.55	$7.80	$4.33	$0.25	$0.42	8.0	$59.78	$77.995	$77.995	$96.21
Lead Installer (Area 1)[d]	$32.21	$10.55	$7.80	$4.33	$0.25	$0.42	8.0	$55.56	$71.665	$71.665	$87.77
Installer (Area 1)[d]	$28.76	$10.55	$7.30	$4.33	$0.25	$0.42	8.0	$51.61	$65.990	$65.990	$80.37
Master Installer (Area 2)[d]	$32.71	$10.55	$7.80	$4.33	$0.25	$0.42	8.0	$56.06	$72.415	$72.415	$88.77
Lead Installer (Area 2)[d]	$29.08	$10.55	$7.80	$4.33	$0.25	$0.42	8.0	$52.43	$66.970	$66.970	$81.51
Installer (Area 2)[d]	$26.11	$10.55	$7.30	$4.33	$0.25	$0.42	8.0	$48.96	$62.015	$62.015	$75.07
Master Installer (Area 3)[d]	$31.38	$10.55	$7.80	$4.33	$0.25	$0.42	8.0	$54.73	$70.420	$70.420	$86.11
Lead Installer (Area 3)[d]	$27.96	$10.55	$7.80	$4.33	$0.25	$0.42	8.0	$51.31	$65.290	$65.290	$79.27
Installer (Area 3)[d]	$25.16	$10.55	$7.30	$4.33	$0.25	$0.42	8.0	$48.01	$60.590	$60.590	$73.17

Ratio:
The ratio of employees shall be based on the increments of eight (8) employees. It is understood that the employee ratio shall apply on a company-wide basis. For every eight (8) employees, the employer shall employ one (1) Master Installer, two (2) Lead Installers, and five (5) Installers. For crew size of over eight (8) employees, please contact the Office of the Director – Research Unit at (415) 703-4774.

Note:
All drapery installation shall be performed by employees at the Installer level or above.

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] Includes an amount for Annuity Trust Fund.
[b] Includes an amount for Work Fee.
[c] Rate applies for the first 10 hours only. All hours worked in excess of ten hours on Saturdays shall be paid at double time (2X).

[d] **Area 1:** Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.
Area 2: Monterey, San Benito, and Santa Cruz Counties.
Area 3: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Sierra, Siskiyou, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE
DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE
PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: OPERATING ENGINEER (BUILDING CONSTRUCTION) # [a]

Determination:
NC-23-63-1-2020-2A

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Locality: All localities within Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Butte, Kings, Merced, Napa, Sacramento, San Benito, San Joaquin, Santa Cruz, Stanislaus, Sutter, Yolo and Yuba counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed in the Operating Engineer (Heavy and Highway Work) determination)

SAMPLE NOT FOR BIDDING

Wages and total hourly rates (including employer payments) (Area 1):

Classification (Journeyperson) Classification Group[b]	Basic Hourly Rate	Hours[c]	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ x)[d]	Sunday/Holiday Overtime Hourly Rate (2 x)
Group 1	$50.00	8	$81.63	$106.63	$131.63
Group 2	$48.55	8	$80.18	$104.46	$128.73
Group 3	$47.15	8	$78.78	$102.36	$125.93
Group 4	$45.82	8	$77.45	$100.36	$123.27
Group 5	$44.61	8	$76.24	$98.55	$120.85
Group 6	$43.34	8	$74.97	$96.64	$118.31
Group 7	$42.25	8	$73.88	$95.01	$116.13
Group 8	$41.17	8	$72.80	$93.39	$113.97
Group 8-A	$39.05	8	$70.68	$90.21	$109.73
ALL CRANES & ATTACHMENTS: Group 1	$51.60	8	$83.23	$109.03	$134.83
Truck Crane Assistant to Engineer	$44.94	8	$76.57	$99.04	$121.51
Assistant to Engineer	$42.77	8	$74.40	$95.79	$117.17
Group 1-A	$50.85	8	$82.48	$107.91	$133.33
Truck Crane Assistant to Engineer	$44.19	8	$75.82	$97.92	$120.01
Assistant to Engineer	$42.02	8	$73.65	$94.66	$115.67
Group 2-A	$49.16	8	$80.79	$105.37	$129.95
Truck Crane Assistant to Engineer	$43.95	8	$75.58	$97.56	$119.53
Assistant to Engineer	$41.80	8	$73.43	$94.33	$115.23

Classification (Journeyperson) Classification Group[b]	Basic Hourly Rate	Hours[c]	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ x)[d]	Sunday/Holiday Overtime Hourly Rate (2 x)
Group 3-A	$47.52	8	$79.15	$102.91	$126.67
Truck Crane Assistant to Engineer	$43.71	8	$75.34	$97.20	$119.05
Hydraulic	$43.34	8	$74.97	$96.64	$118.31
Assistant to Engineer	$41.55	8	$73.18	$93.96	$114.73
Group 4-A	$44.61	8	$76.24	$98.55	$120.85

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed in the Operating Engineer (Heavy and Highway Work) determination)

Wages and total hourly rates (including employer payments) (Area 2):

Classification (Journeyperson) Classification Group[b]	Basic Hourly Rate	Hours[c]	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ X)[d]	Sunday/Holiday Overtime Hourly Rate (2 x)
Group 1	$52.00	8	$83.63	$109.63	$135.63
Group 2	$50.55	8	$82.18	$107.46	$132.73
Group 3	$49.15	8	$80.78	$105.36	$129.93
Group 4	$47.82	8	$79.45	$103.36	$127.27
Group 5	$46.61	8	$78.24	$101.55	$124.85
Group 6	$45.34	8	$76.97	$99.64	$122.31
Group 7	$44.25	8	$75.88	$98.01	$120.13
Group 8	$43.17	8	$74.80	$96.39	$117.97
Group 8-A	$41.05	8	$72.68	$93.21	$113.73
ALL CRANES & ATTACHMENTS: Group 1	$53.60	8	$85.23	$112.03	$138.83
Truck Crane Assistant to Engineer	$46.94	8	$78.57	$102.04	$125.51
Assistant to Engineer	$44.77	8	$76.40	$98.79	$121.17
Group 1-A	$52.85	8	$84.48	$110.91	$137.33
Truck Crane Assistant to Engineer	$46.19	8	$77.82	$100.92	$124.01
Assistant to Engineer	$44.02	8	$75.65	$97.66	$119.67
Group 2-A	$51.16	8	$82.79	$108.37	$133.95
Truck Crane Assistant to Engineer	$45.95	8	$77.58	$100.56	$123.53
Assistant to Engineer	$43.80	8	$75.43	$97.33	$119.23
Group 3-A	$49.52	8	$81.15	$105.91	$130.67
Truck Crane Assistant to Engineer	$45.71	8	$77.34	$100.20	$123.05
Hydraulic	$45.34	8	$76.97	$99.64	$122.31
Assistant to Engineer	$43.55	8	$75.18	$96.96	$118.73
Group 4-A	$46.61	8	$78.24	$101.55	$124.85

NOT SAMPLE FOR BIDDING

Employer Payments:

Type of Fund	Amount per Hour
Health and Welfare	$13.88
Pension	$10.78
Vacation and Holiday[e]	$4.77
Training	$1.07
Other	$1.13

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE
DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE
PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: OPERATING ENGINEER (BUILDING CONSTRUCTION) # a
(SPECIAL SINGLE AND SECOND SHIFT)

Determination:
NC-23-63-1-2020-2A

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Locality:
All localities within Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Butte, Kings, Merced, Napa, Sacramento, San Benito, San Joaquin, Santa Cruz, Stanislaus, Sutter, Yolo and Yuba counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed in the Operating Engineer (Heavy and Highway Work) determination)

SAMPLE NOT FOR BIDDING

Wages and total hourly rates (including employer payments) (Area 1):

Classification (Journeyperson) Classification Group [b]	Basic Hourly Rate	Hours	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ X) [d]	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1	$55.15	8	$86.78	$114.36	$141.93
Group 2	$53.51	8	$85.14	$111.90	$138.65
Group 3	$51.95	8	$83.58	$109.56	$135.53
Group 4	$50.43	8	$82.06	$107.28	$132.49
Group 5	$49.08	8	$80.71	$105.25	$129.79
Group 6	$47.64	8	$79.27	$103.09	$126.91
Group 7	$46.43	8	$78.06	$101.28	$124.49
Group 8	$45.22	8	$76.85	$99.46	$122.07
Group 8-A	$42.83	8	$74.46	$95.88	$117.29
ALL CRANES & ATTACHMENTS: Group 1	$56.86	8	$88.49	$116.92	$145.35
Truck Crane Assistant to Engineer	$49.37	8	$81.00	$105.69	$130.37
Assistant to Engineer	$46.91	8	$78.54	$102.00	$125.45

Classification (Journeyperson) Classification Group [b]	Basic Hourly Rate	Hours	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ X) [d]	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1-A	$56.11	8	$87.74	$115.80	$143.85
Truck Crane Assistant to Engineer	$48.62	8	$80.25	$104.56	$128.87
Assistant to Engineer	$46.16	8	$77.79	$100.87	$123.95
Group 2-A	$54.20	8	$85.83	$112.93	$140.03
Truck Crane Assistant to Engineer	$48.35	8	$79.98	$104.16	$128.33
Assistant to Engineer	$45.92	8	$77.55	$100.51	$123.47
Group 3-A	$52.34	8	$83.97	$110.14	$136.31
Truck Crane Assistant to Engineer	$48.08	8	$79.71	$103.75	$127.79
Hydraulic	$47.64	8	$79.27	$103.09	$126.91
Assistant to Engineer	$45.64	8	$77.27	$100.09	$122.91
Group 4-A	$49.08	8	$80.71	$105.25	$129.79

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity counties. (Portions of counties falling in each area detailed in the Operating Engineer (Heavy and Highway Work) determination)

Wages and total hourly rates (including employer payments) (Area 2):

Classification (Journeyperson) Classification Group [b]	Basic Hourly Rate	Hours	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ X) [d]	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1	$57.15	8	$88.78	$117.36	$145.93
Group 2	$55.51	8	$87.14	$114.90	$142.65
Group 3	$53.95	8	$85.58	$112.56	$139.53
Group 4	$52.43	8	$84.06	$110.28	$136.49
Group 5	$51.08	8	$82.71	$108.25	$133.79
Group 6	$49.64	8	$81.27	$106.09	$130.91
Group 7	$48.43	8	$80.06	$104.28	$128.49
Group 8	$47.22	8	$78.85	$102.46	$126.07
Group 8-A	$44.83	8	$76.46	$98.88	$121.29
ALL CRANES & ATTACHMENTS: Group 1	$58.86	8	$90.49	$119.92	$149.35
Truck Crane Assistant to Engineer	$51.37	8	$83.00	$108.69	$134.37
Assistant to Engineer	$48.91	8	$80.54	$105.00	$129.45
Group 1-A	$58.11	8	$89.74	$118.80	$147.85
Truck Crane Assistant to Engineer	$50.62	8	$82.25	$107.56	$132.87
Assistant to Engineer	$48.16	8	$79.79	$103.87	$127.95
Group 2-A	$56.20	8	$87.83	$115.93	$144.03
Truck Crane Assistant to Engineer	$50.35	8	$81.98	$107.16	$132.33
Assistant to Engineer	$47.92	8	$79.55	$103.51	$127.47
Group 3-A	$54.34	8	$85.97	$113.14	$140.31
Truck Crane Assistant to Engineer	$50.08	8	$81.71	$106.75	$131.79
Hydraulic	$49.64	8	$81.27	$106.09	$130.91
Assistant to Engineer	$47.64	8	$79.27	$103.09	$126.91
Group 4-A	$51.08	8	$82.71	$108.25	$133.79

SAMPLE NOT FOR BIDDING

Employer Payments:

Type of Fund	Amount per Hour
Health and Welfare	$13.88
Pension	$10.78
Vacation and Holiday [e]	$4.77
Training	$1.07
Other	$1.13

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE NOT FOR BIDDING

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] For total base bid project value of less than $3,000,000 only. The Operating Engineer (Heavy and Highway Work) determination is applicable for all work $3,000,000 and above. Where there is a published or advertised estimate of the construction costs of a project, such estimate shall determine the total base bid project value, for the purposes of the three million dollars ($3,000,000) threshold.

[b] For classifications within each group, see Pages 5-7 of the OPERATING ENGINEER (HEAVY AND HIGHWAY WORK).

[c] When three shifts are employed for five (5) or more consecutive days, seven and one-half (7½) consecutive hours (exclusive of meal period), shall constitute a day of work, for which eight (8) times the straight time hourly rate shall be paid at the non-shift wage rate for the second shift. The third shift shall be seven (7) hours of work for eight (8) hours of pay at the non-shift wage rate.

[d] Saturday in the same work week may be worked at straight-time if a job is shut down during the normal work week due to inclement weather.

[e] Includes an amount for supplemental dues.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE
DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE
PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: OPERATING ENGINEER (HEAVY AND HIGHWAY WORK) #

Determination:
NC-23-63-1-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Locality:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Alameda, Butte, Contra Costa, Kings, Marin, Merced, Napa, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Yolo and Yuba Counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed below)

SAMPLE
NOT FOR BIDDING

Wages and total hourly rates (including employer payments) (Area 1):

Classification (Journeyperson) Classification Group [a]	Basic Hourly Rate	Hours[b]	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ X) [c]	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1	$51.42	8	$83.05	$108.76	$134.47
Group 2	$49.89	8	$81.52	$106.47	$131.41
Group 3	$48.41	8	$80.04	$104.25	$128.45
Group 4	$47.03	8	$78.66	$102.18	$125.69
Group 5	$45.76	8	$77.39	$100.27	$123.15
Group 6	$44.44	8	$76.07	$98.29	$120.51
Group 7	$43.30	8	$74.93	$96.58	$118.23
Group 8	$42.16	8	$73.79	$94.87	$115.95
Group 8-A	$39.95	8	$71.58	$91.56	$111.53
ALL CRANES & ATTACHMENTS: Group 1	$53.05	8	$84.68	$111.21	$137.73
Truck Crane Assistant to Engineer	$46.08	8	$77.71	$100.75	$123.79
Assistant to Engineer	$43.79	8	$75.42	$97.32	$119.21
Group 1-A	$52.30	8	$83.93	$110.08	$136.23
Truck Crane Assistant to Engineer	$45.33	8	$76.96	$99.63	$122.29
Assistant to Engineer	$43.04	8	$74.67	$96.19	$117.71
Group 2-A	$50.54	8	$82.17	$107.44	$132.71
Truck Crane Assistant to Engineer	$45.07	8	$76.70	$99.24	$121.77

Classification (Journeyperson) Classification Group [a]	Basic Hourly Rate	Hours[b]	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ X) [c]	Sunday/Holiday Overtime Hourly Rate (2X)
Assistant to Engineer	$42.83	8	$74.46	$95.88	$117.29
Group 3-A	$48.80	8	$80.43	$104.83	$129.23
Truck Crane Assistant to Engineer	$44.83	8	$76.46	$98.88	$121.29
Hydraulic	$44.44	8	$76.07	$98.29	$120.51
Assistant to Engineer	$42.55	8	$74.18	$95.46	$116.73
Group 4-A	$45.76	8	$77.39	$100.27	$123.15

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed below)

Wages and total hourly rates (including employer payments) (Area 2):

Classification (Journeyperson) Classification Group [a]	Basic Hourly Rate	Hours[b]	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ X) [c]	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1	$53.42	8	$85.05	$111.76	$138.47
Group 2	$51.89	8	$83.52	$109.47	$135.41
Group 3	$50.41	8	$82.04	$107.25	$132.45
Group 4	$49.03	8	$80.66	$105.18	$129.69
Group 5	$47.76	8	$79.39	$103.27	$127.15
Group 6	$46.44	8	$78.07	$101.29	$124.51
Group 7	$45.30	8	$76.93	$99.58	$122.23
Group 8	$44.16	8	$75.79	$97.87	$119.95
Group 8-A	$41.95	8	$73.58	$94.56	$115.53
ALL CRANES & ATTACHMENTS: Group 1	$55.05	8	$86.68	$114.21	$141.73
Truck Crane Assistant to Engineer	$48.08	8	$79.71	$103.75	$127.79
Assistant to Engineer	$45.79	8	$77.42	$100.32	$123.21
Group 1-A	$54.30	8	$85.93	$113.08	$140.23
Truck Crane Assistant to Engineer	$47.33	8	$78.96	$102.63	$126.29
Assistant to Engineer	$45.04	8	$76.67	$99.19	$121.71
Group 2-A	$52.54	8	$84.17	$110.44	$136.71
Truck Crane Assistant to Engineer	$47.07	8	$78.70	$102.24	$125.77
Assistant to Engineer	$44.83	8	$76.46	$98.88	$121.29
Group 3-A	$50.80	8	$82.43	$107.83	$133.23
Truck Crane Assistant to Engineer	$46.83	8	$78.46	$101.88	$125.29
Hydraulic	$46.44	8	$78.07	$101.29	$124.51
Assistant to Engineer	$44.55	8	$76.18	$98.46	$120.73
Group 4-A	$47.76	8	$79.39	$103.27	$127.15

SAMPLE NOT FOR BIDDING

Employer Payments:

Type of Fund	Amount per Hour
Health and Welfare	$13.88
Pension	$10.78
Vacation and Holiday[d]	$4.77
Training	$1.07
Other	$1.13

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE
DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE
PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: OPERATING ENGINEER (HEAVY AND HIGHWAY WORK) #
(SPECIAL SINGLE AND SECOND SHIFT)

Determination:
NC-23-63-1-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Locality:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Alameda, Butte, Contra Costa, Kings, Marin, Merced, Napa, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Yolo and Yuba Counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed below)

SAMPLE
NOT FOR BIDDING

Wages and total hourly rates (including employer payments) (Area 1):

Classification (Journeyperson) Classification Group [a]	Basic Hourly Rate	Hours	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1 ½ X) [c]	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1	$56.75	8	$88.38	$116.76	$145.13
Group 2	$55.02	8	$86.65	$114.16	$141.67
Group 3	$53.36	8	$84.99	$111.67	$138.35
Group 4	$51.80	8	$83.43	$109.33	$135.23
Group 5	$50.38	8	$82.01	$107.20	$132.39
Group 6	$48.88	8	$80.51	$104.95	$129.39
Group 7	$47.60	8	$79.23	$103.03	$126.83
Group 8	$46.33	8	$77.96	$101.13	$124.29
Group 8-A	$43.82	8	$75.45	$97.36	$119.27
ALL CRANES & ATTACHMENTS: Group 1	$58.48	8	$90.11	$119.35	$148.59
Truck Crane Assistant to Engineer	$50.65	8	$82.28	$107.61	$132.93
Assistant to Engineer	$48.06	8	$79.69	$103.72	$127.75
Group 1-A	$57.73	8	$89.36	$118.23	$147.09
Truck Crane Assistant to Engineer	$49.90	8	$81.53	$106.48	$131.43

Classification (Journeyperson) Classification Group [a]	Basic Hourly Rate	Hours	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1 ½ X) [c]	Sunday/Holiday Overtime Hourly Rate (2X)
Assistant to Engineer	$47.31	8	$78.94	$102.60	$126.25
Group 2-A	$55.74	8	$87.37	$115.24	$143.11
Truck Crane Assistant to Engineer	$49.61	8	$81.24	$106.05	$130.85
Assistant to Engineer	$47.08	8	$78.71	$102.25	$125.79
Group 3-A	$53.78	8	$85.41	$112.30	$139.19
Truck Crane Assistant to Engineer	$49.34	8	$80.97	$105.64	$130.31
Hydraulic	$48.88	8	$80.51	$104.95	$129.39
Assistant to Engineer	$46.77	8	$78.40	$101.79	$125.17
Group 4-A	$50.38	8	$82.01	$107.20	$132.39

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed below)

Wages and total hourly rates (including employer payments) (Area 2):

Classification (Journeyperson) Classification Group [a]	Basic Hourly Rate	Hours	Total Hourly Rate	Daily/Saturday Overtime Hourly Rate (1½ X) [c]	Sunday/Holiday Overtime Hourly Rate (2X)
Group 1	$58.75	8	$90.38	$119.76	$149.13
Group 2	$57.02	8	$88.65	$117.16	$145.67
Group 3	$55.36	8	$86.99	$114.67	$142.35
Group 4	$53.80	8	$85.43	$112.33	$139.23
Group 5	$52.38	8	$84.01	$110.20	$136.39
Group 6	$50.88	8	$82.51	$107.95	$133.39
Group 7	$49.60	8	$81.23	$106.03	$130.83
Group 8	$48.33	8	$79.96	$104.13	$128.29
Group 8-A	$45.82	8	$77.45	$100.36	$123.27
ALL CRANES & ATTACHMENTS: Group 1	$60.48	8	$92.11	$122.35	$152.59
Truck Crane Assistant to Engineer	$52.65	8	$84.28	$110.61	$136.93
Assistant to Engineer	$50.06	8	$81.69	$106.72	$131.75
Group 1-A	$59.73	8	$91.36	$121.23	$151.09
Truck Crane Assistant to Engineer	$51.90	8	$83.53	$109.48	$135.43
Assistant to Engineer	$49.31	8	$80.94	$105.60	$130.25
Group 2-A	$57.74	8	$89.37	$118.24	$147.11
Truck Crane Assistant to Engineer	$51.61	8	$83.24	$109.05	$134.85
Assistant to Engineer	$49.08	8	$80.71	$105.25	$129.79
Group 3-A	$55.78	8	$87.41	$115.30	$143.19
Truck Crane Assistant to Engineer	$51.34	8	$82.97	$108.64	$134.31
Hydraulic	$50.88	8	$82.51	$107.95	$133.39
Assistant to Engineer	$48.77	8	$80.40	$104.79	$129.17
Group 4-A	$52.38	8	$84.01	$110.20	$136.39

SAMPLE NOT FOR BIDDING

Employer Payments:

Type of Fund	Amount per Hour
Health and Welfare	$13.88
Pension	$10.78
Vacation and Holiday[d]	$4.77
Training	$1.07
Other	$1.13

CLASSIFICATIONS

GROUP 1

Drill Equipment, over 200,000 lbs
Operator of Helicopter (when used in erection work)
Hydraulic Excavator 7 cu yds and over
Power Shovels, over 7 cu yds

GROUP 2

Highline Cableway
Hydraulic Excavator 3 1/2 cu yds up to 7 cu yds
Licensed Construction Work Boat Operator, On Site
Microtunneling Machine
Power Blade Operator (finish)
Power Shovels, (over 1 cu yd and up to and including 7 cu yds m.r.c.)

GROUP 3

Asphalt Milling Machine
Cable Backhoe
Combination Backhoe and Loader over ¾ cu yds
Continuous Flight Tie Back Machine
Crane Mounted Continuous Flight Tie Back Machine, tonnage to apply
Crane Mounted Drill Attachments, Tonnage to apply
Dozer, Slope Board
Drill Equipment, over 100,000 lbs up to and including 200,000 lbs
Gradall
Hydraulic Excavator up to 3 1/2 cu yds
Loader 4 cu yds and over
Long Reach Excavator
Multiple Engine Scrapers (when used as push pull)
Power Shovels, up to and including 1 cu yd
Pre-Stress Wire Wrapping machine
Side Boom Cat, 572 or larger
Track Loader 4 cu yds and over
Wheel Excavator (up to and including 750 cu yds per hour)

GROUP 4

Asphalt Plant Engineer/Boxman
Chicago Boom
Combination Backhoe and Loader up to and including ¾ cu yds
Concrete Batch Plants (wet or dry)
Dozer and/or Push Cat
Drill Equipment, over 50,000 lbs up to and including 100,000 lbs
Pull-Type Elevating Loader
Gradesetter, Grade Checker (GPS, mechanical or otherwise)
Grooving and Grinding Machine
Heading Shield Operator
Heavy Duty Drilling Equipment, Hughes, LDH, Watson 3000 or similar
Heavy Duty Repairman and/or Welder
Lime Spreader
Loader under 4 cu yds
Lubrication and Service Engineer (mobile and grease rack)
Mechanical Finishers or Spreader Machine (asphalt, Barber-Greene and similar)
Miller Formless M-9000 Slope Paver or similar
Portable Crushing and Screening plants
Power Blade Support
Roller Operator, Asphalt
Rubber-Tired Scraper, Self-Loading (paddle-wheels, etc)
Rubber-Tired Earthmoving Equipment (Scrapers)
Slip Form Paver (concrete)
Small Tractor with Drag
Soil Stabilizer (P&H or equal)
Spider Plow and Spider Puller
Timber Skidder
Track Loader up to 4 yards
Tractor Drawn Scraper
Tractor, Compressor Drill Combination
Tubex Pile Rig
Unlicensed Construction Work Boat Operator, On Site
Welder
Woods-Mixer (and other similar Pugmill equipment)

GROUP 5

Cast-In Place Pipe Laying Machine
Combination Slusher and Motor Operator
Concrete Conveyor or Concrete Pump, Truck or Equipment Mounted
Concrete Conveyor, Building Site
Concrete Pump or Pumpcrete Guns

SAMPLE NOT FOR BIDDING

Drilling Equipment, Watson 2000, Texoma 700 or similar
Drilling and Boring Machinery, Horizontal (not to apply to waterlines, wagon drills or jackhammers)
Concrete Mixers/all
Man and/or Material Hoist
Mechanical Finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types)
Mechanical Burm, Curb and/or Curb and Gutter Machine, Concrete or Asphalt
Mine or Shaft Hoist
Portable Crushers
Power Jumbo Operator (setting slip-forms, etc., in tunnels)
Screedman (automatic or manual)
Self Propelled Compactor with Dozer
Tractor with boom, D6 or smaller
Trenching Machine, maximum digging capacity over 5 ft. depth
Vermeer T-600B Rock Cutter or similar

GROUP 6

Armor-Coater (or similar)
Ballast Jack Tamper
Boom-Type Backfilling Machine
Asst. Plant Engineer
Bridge and/or Gantry Crane
Chemical Grouting Machine, truck mounted
Chip Spreading Machine Operator
Concrete Barrier Moving Machine
Concrete Saws (self-propelled unit on streets, highways, airports, and canals)
Deck Engineer
Drill Doctor
Drill Equipment, over 25,000 lbs up to and including 50,000 lbs
Drilling Equipment Texoma 600, Hughes 200 series or similar up to and including 30 ft. m.r.c.
Helicopter Radioman
Hydro-Hammer or similar
Line Master
Skidsteer Loader, Bobcat larger than 743 series or similar (with attachments)
Locomotive
Rotating Extendable Forklift, Lull Hi-Lift or similar
Assistant to Engineer, Truck Mounted Equipment
Pavement Breaker, Truck Mounted, with compressor combination
Paving Fabric Installation and/or Laying Machine
Pipe Bending Machine (pipelines only)
Pipe Wrapping Machine (Tractor propelled and supported)
Screedman, (except asphaltic concrete paving)
Self-Loading Chipper
Self Propelled Pipeline Wrapping Machine
Tractor

GROUP 7

Ballast Regulator
Cary Lift or similar
Combination Slurry Mixer and/or Cleaner
Coolant/Slurry Tanker Operator (hooked to Grooving/Grinding Machine)
Drilling Equipment, 20 ft and under m.r.c.
Drill Equipment, over 1,000 lbs up to and including 25,000 lbs
Fireman Hot Plant
Grouting Machine Operator
Highline Cableway Signalman
Stationary Belt Loader (Kolman or similar)
Lift Slab Machine (Vagtborg and similar types)
Maginnes Internal Full Slab Vibrator
Material Hoist (1 Drum)
Mechanical Trench Shield
Partsman (heavy duty repair shop parts room)
Pavement Breaker with or without Compressor Combination
Pipe Cleaning Machine (tractor propelled and supported)
Post Driver
Roller (except Asphalt), Chip Seal
Self Propelled Automatically Applied Concrete Curing Machine (on streets, highways, airports and canals)
Self Propelled Compactor (without dozer)
Signalman
Slip-Form Pumps (lifting device for concrete forms)
Super Sucker Vacuum Truck
Tie Spacer
Trenching Machine (maximum digging capacity up to and including 5 ft depth)
Truck Type Loader

GROUP 8

Bit Sharpener
Boiler Tender
Box Operator
Brakeman
Combination Mixer and Compressor (shotcrete/gunite)
Compressor Operator
Deckhand
Fireman
Generators
Gunite/Shotcrete Equipment Operator
Heavy Duty Repairman Helper
Hydraulic Monitor
Ken Seal Machine (or similar)

SAMPLE NOT FOR BIDDING

Mast Type Forklift
Mixermobile
Assistant to Engineer
Pump Operator
Refrigerator Plant
Reservoir-Debris Tug (Self-Propelled Floating)
Ross Carrier (Construction site)
Rotomist Operator
Self Propelled Tape Machine
Shuttlecar
Self Propelled Power Sweeper Operator (Includes Vacuum Sweeper)
Slusher Operator
Surface Heater
Switchman
Tar Pot Fireman
Tugger Hoist, Single Drum
Vacuum Cooling Plant
Welding Machine (powered other than by electricity)

GROUP 8-A
Articulated Dump Truck Operator
Elevator Operator
Mini Excavator under 25 H.P. (Backhoe-Trencher)
Skidsteer Loader, Bobcat 743 series or Smaller and similar (without attachments)

ALL CRANES AND ATTACHMENTS:
GROUP 1
Cranes over 350 tons
Derrick over 250 tons
Self Propelled Boom Type Lifting Device over 250 tons

GROUP 1-A
Clamshells and Draglines over 7 cu yds
Cranes over 100 tons
Derrick, over 100 tons
Derrick Barge Pedestal mounted over 100 tons
Self Propelled Boom Type Lifting Device Over 100 tons
Tower Cranes

GROUP 2-A
Clamshells and Draglines over 1 cu yds up to and including 7 cu yds
Cranes over 45 tons up to and including 100 tons
Derrick Barge 100 tons and under
Mobile Self-Erecting Tower Crane (Potain) over 3 stories
Self Propelled Boom Type Lifting Device over 45 tons

GROUP 3-A
Clamshells and Draglines up to and including 1 cu yd
Cranes 45 tons and under
Mobile Self-Erecting Tower Crane (Potain), 3 stories and under
Self Propelled Boom Type Lifting Device 45 tons and under

GROUP 4-A
Boom Truck or dual-purpose A-Frame Truck, Non-Rotating over 15 tons.
Truck Mounted Rotating Telescopic Boom Type Lifting Device, Manitex or similar (Boom Truck -over 15 tons)
Truck-Mounted Rotating Telescopic Boom Type Lifting Device, Manitex or Similar (Boom Truck), under 15 tons

SAMPLE NOT FOR BIDDING

DESCRIPTIONS FOR AREAS 1 AND 2:

Area 1 is all of Northern California within the following Township, State and/or county Boundaries:

Commencing in the Pacific Ocean on the extension of the Southerly line of Township 19S, of the Mount Diablo Base and Meridian,
Thence Easterly along the Southerly line of Township 19S, to the Northwest corner of Township 20S, Range 6E,
Thence Southerly to the Southwest corner of Township 20S, Range 6E,
Thence Easterly to the Northwest corner of Township 21S, Range 7E
Thence Southerly to the Southwest corner of Township 21S, Range 7E
Thence Easterly to the Northwest corner of Township 22S, Range 9E,
Thence Southerly to the Southwest corner of Township 22S, Range 9E,
Thence Easterly to the Northwest corner of Township 23S, Range 10E,
Thence Southerly to the Southwest corner of Township 24S, Range 10E,
Thence Easterly to the Southwest corner of Township 24S, Range 31E,
Thence Northerly to the Northeast corner of Township 20S, Range 31E,
Thence Westerly to the Southeast corner of Township 19S, Range 29E,

Thence Northerly to the Northeast corner of Township 17S, Range 29E,
Thence Westerly to the Southeast corner of Township 16S, Range 28E,
Thence Northerly to the Northeast corner of Township 13S, Range 28E,
Thence Westerly to the Southeast corner of Township 12S, Range 27E,
Thence Northerly to the Northeast corner of Township 12S, Range 27E,
Thence Westerly to the Southeast corner of Township 11S, Range 26E,
Thence Northerly to the Northeast corner of Township 11S, Range 26E,
Thence Westerly to the Southeast corner of Township 10S, Range 25E,
Thence Northerly to the Northeast corner of Township 9S, Range 25E,
Thence Westerly to the Southeast corner of Township 8S, Range 24E,
Thence Northerly to the Northeast corner of Township 8S, Range 24E,
Thence Westerly to the Southeast corner of Township 7S, Range 23E,
Thence Northerly to the Northeast corner of Township 6S, Range 23E,
Thence Westerly to the Southeast corner of Township 5S, Range 20E,
Thence Northerly to the Northeast corner of Township 5S, Range 20E,
Thence Westerly to the Southeast corner of Township 4S, Range 19E,
Thence Northerly to the Northeast corner of Township 1S, Range 19E,
Thence Westerly to the Southeast corner of Township 1N, Range 18E,
Thence Northerly to the Northeast corner of Township 3N, Range 18E,
Thence Westerly to the Southeast corner of Township 4N, Range 17E,
Thence Northerly to the Northeast corner of Township 4N, Range 17E,
Thence Westerly to the Southeast corner of Township 5N, Range 15E,
Thence Northerly to the Northeast corner of Township 5N, Range 15E,
Thence Westerly to the Southeast corner of Township 6N, Range 14E,
Thence Northerly to the Northeast corner of Township 10N, Range 14E,
Thence Easterly along the Southern line of Township 11N, to the California/Nevada State Border,
Thence Northerly along the California/Nevada State Border to the Northerly line of Township 17N,
Thence Westerly to the Southeast corner of Township 18N, Range 10E,
Thence Northerly to the Northeast corner of Township 20N, Range 10E,
Thence Westerly to the Southeast corner of Township 21N, Range 9E,
Thence Northerly to the Northeast corner of Township 21N, Range 9E,
Thence Westerly to the Southeast corner of Township 22N, Range 8E,
Thence Northerly to the Northeast corner of Township 22N, Range 8E,
Thence Westerly to the Northwest corner of Township 22N, Range 8E,
Thence Northerly to the Southwest corner of Township 27N, Range 8E,
Thence Easterly to the Southeast corner of Township 27N, Range 8E,
Thence Northerly to the Northeast corner of Township 28N, Range 8E,
Thence Westerly to the Southeast corner of Township 29N, Range 6E,
Thence Northerly to the Northeast corner of Township 32N, Range 6E,
Thence Westerly to the Northwest corner of Township 32N, Range 6E,
Thence Northerly to the Northeast corner of Township 35N, Range 5E,
Thence Westerly to the Southeast corner of Township 36N, Range 3E,
Thence Northerly to the Northeast corner of township 36N, Range 3E,
Thence Westerly to the Southeast corner of Township 37N, Range 1W,
Thence Northerly to the Northeast corner of Township 38N, Range 1W,
Thence Westerly to the Southeast corner of Township 39N, Range 2W,
Thence Northerly to the Northeast corner of Township 40N, Range 2W,
Thence Westerly to the Southeast corner of Township 41N, Range 4W,
Thence Northerly to the Northeast corner of Township 42N, Range 4W,
Thence Westerly to the Southeast corner of Township 43N, Range 5W,
Thence Northerly to the California/Oregon State Border,
Thence Westerly along the California/Oregon State Border to the Westerly Boundary of Township Range 8W,

SAMPLE
NOT FOR BIDDING

Thence Southerly to the Southwest corner of Township 43N, Range 8W,
Thence Easterly to the Southeast corner of Township 43N, Range 8W,
Thence Southerly to the Southwest corner of Township 42N, Range 7W,
Thence Easterly to the Southeast corner of Township 42N, Range 7W,
Thence Southerly to the Southwest corner of Township 41N, Range 6W,
Thence Easterly to the Northwest corner of Township 40N, Range 5W,
Thence Southerly to the Southwest corner of Township 38N, Range 5W,
Thence Westerly to the Northwest corner of Township 37N, Range 6W,
Thence Southerly to the Southwest corner of Township 35N, Range 6W,
Thence Westerly to the Northwest corner of Township 34N, Range 10W,
Thence Southerly to the Southwest corner of Township 31N, Range 10W,
Thence Easterly to the Northwest corner of Township 30N, Range 9W,
Thence Southerly to the Southwest corner of Township 30N, Range 9W,
Thence Easterly to the Northwest corner of Township 29N, Range 8W,
Thence Southerly to the Southwest corner of Township 23N, Range 8W,
Thence Easterly to the Northwest corner of Township 22N, Range 6W,
Thence Southerly to the Southwest corner of Township 16N, Range 6W,
Thence Westerly to the Southeast corner of Township 16N, Range 9W,
Thence Northerly to the Northeast corner of Township 16N, Range 9W,
Thence Westerly to the Southeast corner of Township 17N, Range 12W,
Thence Northerly to the Northeast corner of Township 18N, Range 12W,
Thence Westerly to the Northwest corner of Township 18N, Range 15W,
Thence Southerly to the Southwest corner of Township 14N, Range 15W,
Thence Easterly to the Northwest corner of Township 13N, Range 14W,
Thence Southerly to the Southwest corner of Township 13N, Range 14W,
Thence Easterly to the Northwest corner of Township 12N, Range 13W,
Thence Southerly to the Southwest corner of Township 12N, Range 13W,
Thence Easterly to the Northwest corner of Township 11N, Range 12W,
Thence Southerly into the Pacific Ocean and Commencing in the Pacific Ocean on the extension of the Humboldt Base Line,
Thence Easterly to the Northwest corner of Township 1S, Range 2E,
Thence Southerly to the Southwest corner of Township 2S, Range 2E,
Thence Easterly to the Northwest corner of Township 3S, Range 3E,
Thence Southerly to the Southwest corner of Township 5S, Range 3E,
Thence Easterly to the Southeast corner of Township 5S, Range 4E,
Thence Northerly to the Northeast corner of Township 4S, Range 4E,
Thence Westerly to the Southeast corner of Township 3S, Range 3E,
Thence Northerly to the Northeast corner of Township 5N, Range 3E,
Thence Easterly to the Southeast corner of Township 6N, Range 5E,
Thence Northerly to the Northeast corner of Township 7N, Range 5E,
Thence Westerly to the Southeast corner of Township 8N, Range 3E,
Thence Northerly to the Northeast corner of Township 9N, Range 3E,
Thence Westerly to the Southeast corner of Township 10N, Range 1E,
Thence Northerly to the Northeast corner of Township 13N, Range 1E,
Thence Westerly into the Pacific Ocean, excluding that portion of Northern California contained within the following lines:
Commencing at the Southwest corner of Township 12N, Range 11E, of the Mount Diablo Base and Meridian,
Thence Easterly to the Southeast corner of Township 12N, Range 16E,
Thence Northerly to the Northeast corner of Township 12N, Range 16E,
Thence Westerly to the Southeast corner of Township 13N, Range 15E,
Thence Northerly to the Northeast corner of Township 13N, Range 15E,
Thence Westerly to the Southeast corner of Township 14N, Range 14E,

SAMPLE NOT FOR BIDDING

Thence Northerly to the Northeast corner of Township 16N, Range 14E,
Thence Westerly to the Northwest corner of Township 16N, Range 12E,
Thence Southerly to the Southwest corner of Township 16N, Range 12E,
Thence Westerly to the Northwest corner of Township 15N, Range 11E,
Thence Southerly to the point of beginning at the Southwest corner of Township 12N, Range 11E,
Area 2 shall be all areas not part of Area 1 described above.

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] For classifications within each group, see Pages 5 – 7.

[b] When three shifts are employed for five (5) or more consecutive days, seven and one-half (7½) consecutive hours (exclusive of meal period), shall constitute a day of work, for which eight (8) times the straight time hourly rate shall be paid at the non-shift wage rate for the second shift. The third shift shall be seven (7) hours of work for eight (8) hours of pay at the non-shift wage rate.

[c] Saturday in the same work week may be worked at straight-time if a job is shut down during the normal work week due to inclement weather.

[d] Includes an amount for supplemental dues.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

FOR LANDSCAPE CONSTRUCTION PROJECTS

CRAFT: OPERATING ENGINEER#

Determination:
NC-63-3-75-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties

AREA 1 - Alameda, Butte, Contra Costa, Kings, Marin, Merced, Napa, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Yolo and Yuba counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tulare, and Tuolumne Counties (Portions of counties falling in each area detailed in the Operating Engineer (Heavy and Highway Work) determination).

Wages and Employer Payments (Area 1):

Classification[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1½ X)	Saturday Overtime Hourly Rate (1½ X)[c]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group I	$40.02	$13.88	$10.35	$4.34	$1.11	$1.03	8	$70.73	$90.74	$90.74	$110.75
Group II	$36.42	$13.88	$10.35	$4.34	$1.11	$1.03	8	$67.13	$85.34	$85.34	$103.55
Group III	$31.81	$13.88	$10.35	$4.34	$1.11	$1.03	8	$62.52	$78.425	$78.425	$94.33
Group IV	$29.10	$13.88	$10.35	$4.34	$1.11	$1.03	8	$59.81	$74.36	$74.36	$88.91

SAMPLE NOT FOR BIDDING

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tulare, and Tuolumne Counties (Portions of counties falling in each area detailed in the Operating Engineer (Heavy and Highway Work) determination).

Wages and Employer Payments (Area 2):

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1½ X)	Saturday Overtime Hourly Rate[c] (1½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group I	$42.02	$13.88	$10.35	$4.34	$1.11	$1.03	8	$72.73	$93.74	$93.74	$114.75
Group II	$38.42	$13.88	$10.35	$4.34	$1.11	$1.03	8	$69.13	$88.34	$88.34	$107.55
Group III	$33.81	$13.88	$10.35	$4.34	$1.11	$1.03	8	$64.52	$81.425	$81.425	$98.33
Group IV	$31.10	$13.88	$10.35	$4.34	$1.11	$1.03	8	$61.81	$77.36	$77.36	$92.91

Recognized holidays
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

EXEMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

FOR LANDSCAPE CONSTRUCTION PROJECTS

CRAFT: OPERATING ENGINEER#
(SPECIAL SINGLE AND SECOND SHIFT)

Determination:
NC-63-3-75-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Alameda, Butte, Contra Costa, Kings, Marin, Merced, Napa, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Yolo and Yuba counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tulare, and Tuolumne Counties (Portions of counties falling in each area detailed in the Operating Engineer (Heavy and Highway Work) determination).

Wages and Employer Payments (Area 1):

Classification[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1½ X)	Saturday Overtime Hourly Rate[c] (1½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group I	$44.43	$13.88	$10.35	$4.34	$1.11	$1.03	8	$75.14	$97.355	$97.355	$119.57
Group II	$40.38	$13.88	$10.35	$4.34	$1.11	$1.03	8	$71.09	$91.28	$91.28	$111.47
Group III	$35.19	$13.88	$10.35	$4.34	$1.11	$1.03	8	$65.90	$83.495	$83.495	$101.09
Group IV	$32.29	$13.88	$10.35	$4.34	$1.11	$1.03	8	$63.00	$79.145	$79.145	$95.29

SAMPLE
NOT FOR BIDDING

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tulare, and Tuolumne Counties (Portions of counties falling in each area detailed in the Operating Engineer (Heavy and Highway Work) determination).

Wages and Employer Payments (Area 2):

Classification[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1½ X)	Saturday Overtime Hourly Rate[c] (1½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 1	$46.43	$13.88	$10.35	$4.34	$1.11	$1.03	8	$77.14	$100.355	$100.355	$123.57
Group 2	$42.38	$13.88	$10.35	$4.34	$1.11	$1.03	8	$73.09	$94.28	$94.28	$115.47
Group 3	$37.19	$13.88	$10.35	$4.34	$1.11	$1.03	8	$67.90	$86.495	$86.495	$105.09
Group 4	$34.29	$13.88	$10.35	$4.34	$1.11	$1.03	8	$65.00	$82.145	$82.145	$99.29

Recognized holidays
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

CLASSIFICATIONS:

Group I
Landscape Finish Grade Operator. All finish grade work regardless of the equipment used, and all equipment with a horsepower rating of more than 65.

Group II
Landscape Operator up to 65 H.P. All equipment with a manufacturer's horsepower rating of 65 or less except equipment covered by Group I or Group III. The following equipment shall be included in Group II except when used for finish work so long as its manufacturer's horsepower rating is 65 or less.
A-Frame and Winch Truck
Backhoe
Forklift (Jobsite)
HDR Welder - Landscape - Operating Engineer's Equipment
Hydro Seeder Machine
Roller
Rubber-Tired and Track Earthmoving Equipment
Skiploader
Straw Blowers
Trencher - 35 Horsepower up to 65 Horsepower

Group III
Landscape Utility Operator
Small Rubber-Tired Tractor
Trencher - Under 35 Horsepower

Group IV
Assistant Landscape Utility Operator Oiler

SAMPLE
NOT FOR BIDDING

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] For classifications within each group, see Page 5.
[b] Includes an amount for Supplemental Dues.
[c] Saturday in the same workweek may be worked at straight-time if a job is shut down during the normal workweek due to inclement weather, major mechanical breakdown or shortage of materials beyond the control of the Individual Employer.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: # Parking and Highway Improvement Painter (Painter) [a]

Determination:
NC-200-X-17-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within San Joaquin, Tuolumne and Yolo Counties.

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Daily Overtime Hourly Rate (2 X)	Holiday Overtime Hourly Rate (2 X)
Striper; Layout and application of painted traffic stripes; hot thermo plastic; tape traffic stripes	$38.48[c]	$10.45	$6.33	$0.00	$0.10	$0.00	8.0	$55.36	$74.60[d]	$93.84	$93.84
Parking Lots, Gamecourts, Playgrounds	$32.71[c]	$10.45	$6.33	$0.00	$0.10	$0.00	8.0	$49.59	$65.945[d]	$82.30	$82.30
Protective Coating, Resurfacing, Pavement Sealing, Including Repair When Done in Conjunction With Pavement Sealing	$33.09[c]	$10.45	$6.33	$0.00	$0.10	$0.00	8.0	$49.97	$66.515[d]	$83.06	$83.06

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the

Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] The minimum rate of pay for traffic control work associated with parking and highway improvement projects is that of the Painter classifications for the craft of Parking and Highway Improvement Painter (Painter) in San Joaquin, Tuolumne, and Yolo Counties.
[b] Included in Basic Hourly Rate ($2.24). Rate applies to the first 9 years of employment only; $2.63 per hour worked for 10 years or more.
[c] Includes an amount withheld for Dues Check-Off.
[d] Rate applies to first 4 overtime hours in any one day and for work in excess of 40 hours in any one designated work week. All other overtime is paid at the double time rate.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY
THE DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE PART 7,
CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: PILE DRIVER (OPERATING ENGINEER-BUILDING CONSTRUCTION) # [a]

Determination:
NC-23-63-1-2020-2B1

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

Wages and total hourly rates (including employer payments):

Classification [b]	Basic Hourly Rate	Hours [c]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X) [d]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group A-1	$51.91	8	$83.54	$109.50	$109.50	$135.45
Truck Crane Assistant to Engineer	$45.26	8	$76.89	$99.52	$99.52	$122.15
Assistant to Engineer	$43.09	8	$74.72	$96.27	$96.27	$117.81
Group 1	$51.16	8	$82.79	$108.37	$108.37	$133.95
Truck Crane Assistant to Engineer	$44.51	8	$76.14	$98.40	$98.40	$120.65
Assistant to Engineer	$42.34	8	$73.97	$95.14	$95.14	$116.31
Group 2	$49.45	8	$81.08	$105.81	$105.81	$130.53
Truck Crane Assistant to Engineer	$44.28	8	$75.91	$98.05	$98.05	$120.19
Assistant to Engineer	$42.09	8	$73.72	$94.77	$94.77	$115.81
Group 3	$47.84	8	$79.47	$103.39	$103.39	$127.31
Truck Crane Assistant to Engineer	$44.01	8	$75.64	$97.65	$97.65	$119.65
Assistant to Engineer	$41.86	8	$73.49	$94.42	$94.42	$115.35
Group 4	$46.14	8	$77.77	$100.84	$100.84	$123.91
Group 6	$43.64	8	$75.27	$97.09	$97.09	$118.91
Group 8	$41.50	8	$73.13	$93.88	$93.88	$114.63

Employer Payments:

Type of Fund	Amount per Hour
Health and Welfare	$13.88
Pension	$10.78
Vacation and Holiday [e]	$4.77
Training	$1.07
Other	$1.13

NOT SAMPLE FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY
THE DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE PART 7,
CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: PILE DRIVER (OPERATING ENGINEER- BUILDING CONSTRUCTION) # a
(SPECIAL SINGLE AND SECOND SHIFT)

Determination:
NC-23-63-1-2020-2B1

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

SAMPLE
NOT FOR BIDDING

Wages and total hourly rates (including employer payments):

Classification [b]	Basic Hourly Rate	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X) [d]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group A-1	$57.20	8	$88.83	$117.43	$117.43	$146.03
Truck Crane Assistant to Engineer	$49.72	8	$81.35	$106.21	$106.21	$131.07
Assistant to Engineer	$47.28	8	$78.91	$102.55	$102.55	$126.19
Group 1	$56.45	8	$88.08	$116.31	$116.31	$144.53
Truck Crane Assistant to Engineer	$48.97	8	$80.60	$105.09	$105.09	$129.57
Assistant to Engineer	$46.53	8	$78.16	$101.43	$101.43	$124.69
Group 2	$54.51	8	$86.14	$113.40	$113.40	$140.65
Truck Crane Assistant to Engineer	$48.72	8	$80.35	$104.71	$104.71	$129.07
Assistant to Engineer	$46.25	8	$77.88	$101.01	$101.01	$124.13
Group 3	$52.72	8	$84.35	$110.71	$110.71	$137.07
Truck Crane Assistant to Engineer	$48.41	8	$80.04	$104.25	$104.25	$128.45
Assistant to Engineer	$45.98	8	$77.61	$100.60	$100.60	$123.59
Group 4	$50.79	8	$82.42	$107.82	$107.82	$133.21
Group 6	$47.98	8	$79.61	$103.60	$103.60	$127.59
Group 8	$45.59	8	$77.22	$100.02	$100.02	$122.81

Employer Payments:

Type of Fund	Amount per Hour
Health and Welfare	$13.88
Pension	$10.78
Vacation and Holiday [e]	$4.77
Training	$1.07
Other	$1.13

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] For total base bid project value of less than $3,000,000 only. The Operating Engineer (Heavy and Highway Work) determination is applicable for all work $3,000,000 and above. Where there is a published or advertised estimate of the construction costs of a project, such estimate shall determine the total base bid project value, for the purposes of the three million dollars ($3,000,000) threshold.

[b] For classifications within each group, see Pile Driver (Operating Engineer – Heavy and Highway Work).

[c] When three shifts are employed for five (5) or more consecutive days, seven and one-half (7 1/2) consecutive hours (exclusive of meal period), shall constitute a day of work, for which eight (8) times the straight time hourly rate shall be paid at the non-shift wage rate for the second shift. The third shift shall be seven (7) hours of work for eight (8) hours of pay at the non-shift wage rate.

[d] Saturday in the same work week may be worked at straight-time rates if a job is shut down during the normal work week due to inclement weather.

[e] Includes an amount withheld for supplemental dues.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY
THE DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE PART 7,
CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: PILE DRIVER (OPERATING ENGINEER-BUILDING CONSTRUCTION) # [a]

Determination:
NC-23-63-1-2020-2B1

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

NOT A SAMPLE
FOR BIDDING

Wages and total hourly rates (including employer payments):

Classification [b]	Basic Hourly Rate	Hours [c]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X) [d]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group A-1	$51.91	8	$83.54	$109.50	$109.50	$135.45
Truck Crane Assistant to Engineer	$45.26	8	$76.89	$99.52	$99.52	$122.15
Assistant to Engineer	$43.09	8	$74.72	$96.27	$96.27	$117.81
Group 1	$51.16	8	$82.79	$108.37	$108.37	$133.95
Truck Crane Assistant to Engineer	$44.51	8	$76.14	$98.40	$98.40	$120.65
Assistant to Engineer	$42.34	8	$73.97	$95.14	$95.14	$116.31
Group 2	$49.45	8	$81.08	$105.81	$105.81	$130.53
Truck Crane Assistant to Engineer	$44.28	8	$75.91	$98.05	$98.05	$120.19
Assistant to Engineer	$42.09	8	$73.72	$94.77	$94.77	$115.81
Group 3	$47.84	8	$79.47	$103.39	$103.39	$127.31
Truck Crane Assistant to Engineer	$44.01	8	$75.64	$97.65	$97.65	$119.65
Assistant to Engineer	$41.86	8	$73.49	$94.42	$94.42	$115.35
Group 4	$46.14	8	$77.77	$100.84	$100.84	$123.91
Group 6	$43.64	8	$75.27	$97.09	$97.09	$118.91
Group 8	$41.50	8	$73.13	$93.88	$93.88	$114.63

Employer Payments:

Type of Fund	Amount per Hour
Health and Welfare	$13.88
Pension	$10.78
Vacation and Holiday [e]	$4.77
Training	$1.07
Other	$1.13

GENERAL PREVAILING WAGE DETERMINATION MADE BY
THE DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE PART 7,
CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: PILE DRIVER (OPERATING ENGINEER- BUILDING CONSTRUCTION) # a
(SPECIAL SINGLE AND SECOND SHIFT)

Determination:
NC-23-63-1-2020-2B1

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

SAMPLE
NOT FOR BIDDING

Wages and total hourly rates (including employer payments):

Classification [b]	Basic Hourly Rate	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X) [d]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group A-1	$57.20	8	$88.83	$117.43	$117.43	$146.03
Truck Crane Assistant to Engineer	$49.72	8	$81.35	$106.21	$106.21	$131.07
Assistant to Engineer	$47.28	8	$78.91	$102.55	$102.55	$126.19
Group 1	$56.45	8	$88.08	$116.31	$116.31	$144.53
Truck Crane Assistant to Engineer	$48.97	8	$80.60	$105.09	$105.09	$129.57
Assistant to Engineer	$46.53	8	$78.16	$101.43	$101.43	$124.69
Group 2	$54.51	8	$86.14	$113.40	$113.40	$140.65
Truck Crane Assistant to Engineer	$48.72	8	$80.35	$104.71	$104.71	$129.07
Assistant to Engineer	$46.25	8	$77.88	$101.01	$101.01	$124.13
Group 3	$52.72	8	$84.35	$110.71	$110.71	$137.07
Truck Crane Assistant to Engineer	$48.41	8	$80.04	$104.25	$104.25	$128.45
Assistant to Engineer	$45.98	8	$77.61	$100.60	$100.60	$123.59
Group 4	$50.79	8	$82.42	$107.82	$107.82	$133.21
Group 6	$47.98	8	$79.61	$103.60	$103.60	$127.59
Group 8	$45.59	8	$77.22	$100.02	$100.02	$122.81

Employer Payments:

Type of Fund	Amount per Hour
Health and Welfare	$13.88
Pension	$10.78
Vacation and Holiday [e]	$4.77
Training	$1.07
Other	$1.13

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] For total base bid project value of less than $3,000,000 only. The Operating Engineer (Heavy and Highway Work) determination is applicable for all work $3,000,000 and above. Where there is a published or advertised estimate of the construction costs of a project, such estimate shall determine the total base bid project value, for the purposes of the three million dollars ($3,000,000) threshold.
[b] For classifications within each group, see Pile Driver (Operating Engineer – Heavy and Highway Work).
[c] When three shifts are employed for five (5) or more consecutive days, seven and one-half (7 1/2) consecutive hours (exclusive of meal period), shall constitute a day of work, for which eight (8) times the straight time hourly rate shall be paid at the non-shift wage rate for the second shift. The third shift shall be seven (7) hours of work for eight (8) hours of pay at the non-shift wage rate.
[d] Saturday in the same work week may be worked at straight-time rates if a job is shut down during the normal work week due to inclement weather.
[e] Includes an amount withheld for supplemental dues.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Pile Driver (Carpenter) #

Determination:
NC-23-31-11-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All Localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate
Pile Driver, Wharf, and Dock Builder	$51.90[a]	$11.70	$14.85[b]	$6.29[c]	$1.08	$0.35[d]	8.0	$86.17	$112.120[e]	$112.120[e]	$138.070
Diver (wet) up to 50 ft depth[f g]	$101.42	$11.70	$14.85[b]	$6.29[c]	$1.08	$0.35[d]	8.0	$135.69	$186.400[e]	$186.400[e]	$237.110
Diver's Tender[f]	$56.88	$11.70	$14.85[b]	$6.29[c]	$1.08	$0.35[d]	8.0	$91.15	$119.590[e]	$119.590[e]	$148.030
Assistant Tender	$51.90	$11.70	$14.85[b]	$6.29[c]	$1.08	$0.35[d]	8.0	$86.17	$112.120[e]	$112.120[e]	$138.070
Diver (stand-by)	$57.88	$11.70	$14.85[b]	$6.29[c]	$1.08	$0.35[d]	8.0	$92.15	$121.090[e]	$121.090[e]	$150.030

SAMPLE NOT FOR BIDDING

For "Pile Driver – Bridge Builder" – See Northern California Carpenter.

Note:
To obtain wage rate information for Saturation Diver, Manned Submersible, Manifold Operator/Life Support Technician, Remote Controlled/Operated Vehicle (RCV/ROV) Pilot/Technician, Navigator Surveyor, Bell Winch Operator & Diving Equipment Technician, please contact the Office of the Director - Research Unit at (415) 703-4774.

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] On bridges, powerhouses and dams, men working from bosun's chairs or swinging scaffolds or suspended from rope, cable, safety belts, or any device used as a substitute for or in lieu thereof (excluding piledriving rigs) shall receive $0.15 per hour above this rate.
[b] Includes an amount per hour for Annuity Trust Fund. Pursuant to Labor Code Sections 1773.1 and 1773.8, the amount paid for this employer payment may vary resulting in a lower taxable basic hourly wage rate, but the total hourly rates for straight time and overtime may not be less than the general prevailing rate of per diem wages.
[c] Includes an amount per hour for work fees.
[d] Includes Industry Promotion, Carpenters International Training Fund, Pile Drivers Employers Contract Administration, LMCC and Vacation/Holiday/Sick Leave Admin (VHSLA).
[e] Rate applies to the first 2 daily overtime hours and the first 8 hours worked on Saturdays. All other time is paid at the Sunday/Holiday overtime rate. For work associated with cast-in-place piles, drill shaft, Tubex piles, Tubex grout injection piles, geo piles, soil improvement piles, sand piles, augured cast in place piles, CISS and CIDH: Rate applies to all hours worked after 8 hours Monday-Friday and all hours worked on Saturday.
[f] Shall receive a minimum of 8 hours pay for any day or part thereof worked.
[g] For specific rates over 50 ft depth, contact the Office of the Director – Research Unit.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Slurry Seal Worker (Laborer)

Determination:
NC-23-102-1B-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
March 31, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate[a]	Health and Welfare	Pension	Vacation and Holiday	Training	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2 X)
Mixer Operator	$39.02	$9.00	$10.00	$3.05	$0.10	8.0	$61.17	$80.68	$80.68	$100.19
Shuttle/Line Driver	$33.02	$9.00	$10.00	$3.05	$0.10	8.0	$55.17	$71.68	$71.68	$88.19
Squeegee/Sealer	$31.52	$9.00	$10.00	$3.05	$0.10	8.0	$53.67	$69.43	$69.43	$85.19
Utility-Maintenance Man	$30.52	$9.00	$10.00	$3.05	$0.10	8.0	$52.67	$67.93	$67.93	$83.19

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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[a] Zone Pay at three dollars ($3.00) per hour, factored at the applicable overtime multiplier, will be added to the base rate for work performed outside the Free Zone described by the boundaries along township and range lines. Please see travel and subsistence provision for map description and exceptions.
[b] Saturdays in the same work week may be worked at straight-time if job is shut down during the normal work week due to inclement weather, major mechanical breakdown or lack of materials beyond the control of the employer.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: STEEL ERECTOR AND FABRICATOR (OPERATING ENGINEER-BUILDING CONSTRUCTION)[#a]

Determination:
NC-23-63-1-2020-2D1

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

Wages and Employer Payments:

Classification[b]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[c]	Training	Other	Hours[d]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[e]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group A-1	$52.54	$13.88	$10.78	$4.77	$1.07	$1.13	8	$84.17	$110.44	$110.44	$136.71
Truck Crane Assistant to Engineer	$45.55	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.18	$99.96	$99.96	$122.73
Assistant to Engineer	$43.41	$13.88	$10.78	$4.77	$1.07	$1.13	8	$75.04	$96.75	$96.75	$118.45
Group 1	$51.79	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.42	$109.32	$109.32	$135.21
Truck Crane Assistant to Engineer	$44.80	$13.88	$10.78	$4.77	$1.07	$1.13	8	$76.43	$98.83	$98.83	$121.23
Assistant to Engineer	$42.66	$13.88	$10.78	$4.77	$1.07	$1.13	8	$74.29	$95.62	$95.62	$116.95
Group 2	$50.08	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.71	$106.75	$106.75	$131.79
Truck Crane Assistant to Engineer	$44.58	$13.88	$10.78	$4.77	$1.07	$1.13	8	$76.21	$98.50	$98.50	$120.79
Assistant to Engineer	$42.41	$13.88	$10.78	$4.77	$1.07	$1.13	8	$74.04	$95.25	$95.25	$116.45

SAMPLE NOT FOR BIDDING

Classification[b]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[c]	Training	Other	Hours[d]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[e]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 3	$48.69	$13.88	$10.78	$4.77	$1.07	$1.13	8	$80.32	$104.67	$104.67	$129.01
Truck Crane Assistant to Engineer	$44.33	$13.88	$10.78	$4.77	$1.07	$1.13	8	$75.96	$98.13	$98.13	$120.29
Hydraulic	$43.95	$13.88	$10.78	$4.77	$1.07	$1.13	8	$75.58	$97.56	$97.56	$119.53
Assistant to Engineer	$42.18	$13.88	$10.78	$4.77	$1.07	$1.13	8	$73.81	$94.90	$94.90	$115.99
Group 4	$46.76	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.39	$101.77	$101.77	$125.15
Group 5	$45.51	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.14	$99.90	$99.90	$122.65

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: STEEL ERECTOR AND FABRICATOR (OPERATING ENGINEER-BUILDING CONSTRUCTION)#a
(SPECIAL SINGLE AND SECOND SHIFT)

Determination:
NC-23-63-1-2020-2D1

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

SAMPLE
NOT FOR BIDDING

Wages and Employer Payments:

Classification[b]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[c]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[e]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group A-1	$57.91	$13.88	$10.78	$4.77	$1.07	$1.13	8	$89.54	$118.50	$118.50	$147.45
Truck Crane Assistant to Engineer	$50.05	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.68	$106.71	$106.71	$131.73
Assistant to Engineer	$47.63	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.26	$103.08	$103.08	$126.89
Group 1	$57.16	$13.88	$10.78	$4.77	$1.07	$1.13	8	$88.79	$117.37	$117.37	$145.95
Truck Crane Assistant to Engineer	$49.30	$13.88	$10.78	$4.77	$1.07	$1.13	8	$80.93	$105.58	$105.58	$130.23
Assistant to Engineer	$46.88	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.51	$101.95	$101.95	$125.39

Classification[b]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[c]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[e]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 2	$55.24	$13.88	$10.78	$4.77	$1.07	$1.13	8	$86.87	$114.49	$114.49	$142.11
Truck Crane Assistant to Engineer	$49.04	$13.88	$10.78	$4.77	$1.07	$1.13	8	$80.67	$105.19	$105.19	$129.71
Assistant to Engineer	$46.61	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.24	$101.55	$101.55	$124.85
Group 3	$53.66	$13.88	$10.78	$4.77	$1.07	$1.13	8	$85.29	$112.12	$112.12	$138.95
Truck Crane Assistant to Engineer	$48.76	$13.88	$10.78	$4.77	$1.07	$1.13	8	$80.39	$104.77	$104.77	$129.15
Hydraulic	$48.35	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.98	$104.16	$104.16	$128.33
Assistant to Engineer	$46.33	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.96	$101.13	$101.13	$124.29
Group 4	$51.51	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.14	$108.90	$108.90	$134.65
Group 5	$50.09	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.72	$106.77	$106.77	$131.81

SAMPLE
NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] For total base bid project value of less than $3,000,000 only. The Operating Engineer (Heavy and Highway Work) determination is applicable for all work $3,000,000 and above. Where there is a published or advertised estimate of the construction costs of a project, such estimate shall determine the total base bid project value, for the purposes of the three million dollars ($3,000,000) threshold.

[b] For classifications within each group, see Steel Erector and Fabricator (Operating Engineer-Heavy And Highway Work) Determination.

[c] Includes an amount for supplemental dues.

[d] When three shifts are employed for five (5) or more consecutive days, seven and one-half (7 1/2) consecutive hours (exclusive of meal period), shall constitute a day of work, for which eight (8) times the straight time hourly rate shall be paid at the non-shift wage rate for the second shift. The third shift shall be seven (7) hours of work for eight (8) hours of pay at the non-shift wage rate.

[e] Saturday in the same work week may be worked at straight-time rates if a job is shut down during the normal work week due to inclement weather.

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: STEEL ERECTOR AND FABRICATOR (OPERATING ENGINEER-HEAVY AND HIGHWAY WORK)[#a]

Determination:
NC-23-63-1-2020-2D

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours[c]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[d]	Saturday Overtime Hourly Rate (1 ½ X)[ed]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group A-1	$54.02	$13.88	$10.78	$4.77	$1.07	$1.13	8	$85.65	$112.66	$112.66	$139.67
Truck Crane Assistant to Engineer	$46.70	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.33	$101.68	$101.68	$125.03
Assistant to Engineer	$44.47	$13.88	$10.78	$4.77	$1.07	$1.13	8	$76.10	$98.34	$98.34	$120.57
Group 1	$53.27	$13.88	$10.78	$4.77	$1.07	$1.13	8	$84.90	$111.54	$111.54	$138.17
Truck Crane Assistant to Engineer	$45.95	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.58	$100.56	$100.56	$123.53
Assistant to Engineer	$43.72	$13.88	$10.78	$4.77	$1.07	$1.13	8	$75.35	$97.21	$97.21	$119.07
Group 2	$51.50	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.13	$108.88	$108.88	$134.63
Truck Crane Assistant to Engineer	$45.73	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.36	$100.23	$100.23	$123.09
Assistant to Engineer	$43.45	$13.88	$10.78	$4.77	$1.07	$1.13	8	$75.08	$96.81	$96.81	$118.53

SAMPLE NOT FOR BIDDING

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours[c]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[d]	Saturday Overtime Hourly Rate (1 ½ X)[ed]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 3	$50.02	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.65	$106.66	$106.66	$131.67
Truck Crane Assistant to Engineer	$45.46	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.09	$99.82	$99.82	$122.55
Hydraulic	$45.07	$13.88	$10.78	$4.77	$1.07	$1.13	8	$76.70	$99.24	$99.24	$121.77
Assistant to Engineer	$43.23	$13.88	$10.78	$4.77	$1.07	$1.13	8	$74.86	$96.48	$96.48	$118.09
Group 4	$48.00	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.63	$103.63	$103.63	$127.63
Group 5	$46.70	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.33	$101.68	$101.68	$125.03

CLASSIFICATIONS

GROUP A-1
Cranes over 350 Tons
Derrick over 250 Tons
Self Propelled Boom Type Lifting Devices over 250 Tons

GROUP 1
Cranes Over 7 Cu Yds
Derrick over 100 tons
Self Propelled Boom Type Lifting Device Over 100 Tons
Tower Crane

GROUP 2
Cranes over 45 tons up to and including 100 tons
Derrick, 100 tons and under
Self Propelled Boom Type Lifting Device, Over 45 Tons

GROUP 3
Cranes, 45 tons and under
Self Propelled Boom Type Lifting Device 45 Tons And Under

GROUP 4
Chicago Boom
Forklift, 10 Tons And Over
Heavy Duty Repairman/Welder

GROUP 5
Deck Engineer
Boom Cat

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: STEEL ERECTOR AND FABRICATOR (OPERATING ENGINEER-HEAVY AND HIGHWAY WORK)#a (SPECIAL SINGLE AND SECOND SHIFT)

Determination:
NC-23-63-1-2020-2D

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

SAMPLE
NOT FOR BIDDING

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[d]	Saturday Overtime Hourly Rate (1 ½ X)[de]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group A-1	$59.57	$13.88	$10.78	$4.77	$1.07	$1.13	8	$91.20	$120.99	$120.99	$150.77
Truck Crane Assistant to Engineer	$51.34	$13.88	$10.78	$4.77	$1.07	$1.13	8	$82.97	$108.64	$108.64	$134.31
Assistant to Engineer	$48.82	$13.88	$10.78	$4.77	$1.07	$1.13	8	$80.45	$104.86	$104.86	$129.27
Group 1	$58.82	$13.88	$10.78	$4.77	$1.07	$1.13	8	$90.45	$119.86	$119.86	$149.27
Truck Crane Assistant to Engineer	$50.59	$13.88	$10.78	$4.77	$1.07	$1.13	8	$82.22	$107.52	$107.52	$132.81
Assistant to Engineer	$48.07	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.70	$103.74	$103.74	$127.77
Group 2	$56.84	$13.88	$10.78	$4.77	$1.07	$1.13	8	$88.47	$116.89	$116.89	$145.31
Truck Crane Assistant to Engineer	$50.34	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.97	$107.14	$107.14	$132.31

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[d]	Saturday Overtime Hourly Rate (1 ½ X)[de]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Assistant to Engineer	$47.79	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.42	$103.32	$103.32	$127.21
Group 3	$55.16	$13.88	$10.78	$4.77	$1.07	$1.13	8	$86.79	$114.37	$114.37	$141.95
Truck Crane Assistant to Engineer	$50.04	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.67	$106.69	$106.69	$131.71
Hydraulic	$49.61	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.24	$106.05	$106.05	$130.85
Assistant to Engineer	$47.53	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.16	$102.93	$102.93	$126.69
Group 4	$52.90	$13.88	$10.78	$4.77	$1.07	$1.13	8	$84.53	$110.98	$110.98	$137.43
Group 5	$51.43	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.06	$108.78	$108.78	$134.49

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

COMPLETE BIDDING NOT FOR BIDDING

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] For Building Construction, see Steel Erector and Fabricator (Operating Engineer-Building Construction) determination.
[b] Includes an amount for supplemental dues.
[c] When three shifts are employed for five (5) or more consecutive days, seven and one-half (7 1/2) consecutive hours (exclusive of meal period), shall constitute a day of work, for which eight (8) times the straight time hourly rate shall be paid at the non-shift wage rate for the second shift. The third shift shall be seven (7) hours of work for eight (8) hours of pay at the non-shift wage rate.
[d] Rate applies to the first 2 daily overtime hours only. All other time is paid at the double time rate.
[e] Saturday in the same work week may be worked at straight-time rates if a job is shut down during the normal work week due to inclement weather.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: TEAMSTER (APPLIES ONLY TO WORK ON THE CONSTRUCTION SITE)

Determination:
NC-23-261-1-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All Localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

SAMPLE
NOT FOR BIDDING

WAGE RATES AND TOTAL HOURLY RATES:

Classification[a] (Journeyperson)	Basic Hourly Rate	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[b]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 1	$33.95	8	$64.32	$81.30	$81.30	$98.27
Group 2	$34.25	8	$64.62	$81.75	$81.75	$98.87
Group 3	$34.55	8	$64.92	$82.20	$82.20	$99.47
Group 4	$34.90	8	$65.27	$82.72	$82.72	$100.17
Group 5	$35.25	8	$65.62	$83.25	$83.25	$100.87
Group 6	USE DUMP TRUCK YARDAGE RATE					
Group 7	USE APPROPRIATE RATE FOR THE POWER UNIT OR THE EQUIPMENT UTILIZED					
Group 8 (Trainee)[c] [d] Step I – 1st 1000 Hours [e] Step II – 2nd 1000 Hours [f] Step III – 3rd 1000 Hours						

EMPLOYER PAYMENTS:

Type of Fund	Amount per Hour Worked
Health & Welfare	$19.19
Pension	$7.35
Vacation and Holiday	$2.30
Training	$0.90
Other[9]	$0.63

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: TEAMSTER (SPECIAL SINGLE SHIFT RATE)
(APPLIES ONLY TO WORK ON THE CONSTRUCTION SITE)

Determination:
NC-23-261-1-2020-1A

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All Localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

SAMPLE
NOT FOR BIDDING

WAGE RATES AND TOTAL HOURLY RATES:

Classification[a] (Journeyperson)	Basic Hourly Rate	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[b]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 1	$35.95	8	$66.32	$84.30	$84.30	$102.27
Group 2	$36.25	8	$66.62	$84.75	$84.75	$102.87
Group 3	$36.55	8	$66.92	$85.20	$85.20	$103.47
Group 4	$36.90	8	$67.27	$85.72	$85.72	$104.17
Group 5	$37.25	8	$67.62	$86.25	$86.25	$104.87
Group 6	USE DUMP TRUCK YARDAGE RATE					
Group 7	USE APPROPRIATE RATE FOR THE POWER UNIT OR THE EQUIPMENT UTILIZED					

Classification[a] (Journeyperson)	Basic Hourly Rate	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[b]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Group 8 (Trainee)[c] [d] Step I – 1st 1000 Hours [e] Step II – 2nd 1000 Hours [f] Step III – 3rd 1000 Hours						

EMPLOYER PAYMENTS:

Type of Fund	Amount per Hour Worked
Health & Welfare	$19.19
Pension	$7.35
Vacation and Holiday	$2.30
Training	$0.90
Other[g]	$0.63

SAMPLE
NOT FOR BIDDING

CLASSIFICATIONS:

GROUP 1
Dump Trucks under 6 yards
Single Unit Flat Rack (2 axle unit)
Nipper Truck (When Flat Rack Truck is used appropriate Flat Rack shall apply)
Concrete pump truck (When Flat Rack Truck is used appropriate Flat Rack shall apply)
Concrete pump machine
Snow Buggy
Steam Cleaning
Bus or Manhaul Driver
Escort or Pilot Car Driver
Pickup Truck
Teamster Oiler/Greaser/and or Serviceman
Hook Tenders
Team Drivers
Warehouseman
Tool Room Attendant (Refineries)
Fork Lift and Lift Jitneys
Warehouse Clerk/Parts Man
Fuel and/or Grease Truck Driver or Fuelman
Truck Repair Helper
Fuel Island Attendant, or Combination Pit and/or Grease Rack and Fuel Island Attendant

GROUP 2
Dump Trucks 6 yards Under 8 yards
Transit Mixers through 10 yards
Water Trucks Under 7000 gals.
Jetting Trucks Under 7000 gals.
Single Unit flat rack (3 axle unit)
Highbed Heavy Duty Transport
Scissor Truck
Rubber Tired Muck Car (not self-loaded)
Rubber Tired Truck Jumbo
Winch Truck and "A" Frame Drivers
Combination Winch Truck With Hoist
Road Oil Truck or Bootman
Buggymobile
Ross, Hyster and similar Straddle Carrier
Small Rubber Tired Tractor
Truck Dispatcher

GROUP 3
Dump Trucks 8 yards and including 24 yards
Transit Mixers Over 10 yards
Water Trucks 7000 gals and over
Jetting Trucks 7000 gals and over
Vacuum Trucks under 7500 gals
Trucks Towing Tilt Bed or Flat Bed Pull Trailers
Heavy Duty Transport Tiller Man
Tire Repairman
Truck Mounted Self Propelled Street Sweeper with or without Self-Contained Refuse Bin and or Vacuum Unit
Boom Truck - Hydro-Lift or Swedish Type Extension or Retracting Crane
P.B. or Similar Type Self Loading Truck
Combination Bootman and Road Oiler
Dry Distribution Truck (A Bootman when employed on such equipment, shall receive the rate specified for the classification of Road Oil Trucks or Bootman)
Ammonia Nitrate Distributor, Driver and Mixer
Snow Go and/or Plow

GROUP 4
Dump Trucks over 25 yards and under 65 yards
Vacuum Trucks 7500 gals and over.
Truck Repairman
Water Pulls - DW 10s, 20s, 21s and other similar equipment when pulling Aqua/pak or Water Tank Trailers
Helicopter Pilots
Lowbed Heavy Duty Transport (up to and including 7 axles)
DW 10s, 20s, 21s and other similar Cat type, Terra Cobra, LeTourneau Pulls, Tournorocker, Euclid and similar type Equipment when pulling fuel and/or grease tank trailers or other miscellaneous trailers

SAMPLE NOT FOR BIDDING

GROUP 5
Dump Truck 65 yards and over
Holland Hauler
Lowbed Heavy Duty Transport (over 7 axles)

GROUP 6 (Use dump truck yardage rate)
Articulated Dump Truck
Bulk Cement Spreader (w/ or w/o Auger)
Dumpcrete Truck
Skid Truck (Debris Box)
Dry Pre-Batch Concrete Mix Trucks
Dumpster or Similar Type
Slurry Truck

GROUP 7 (Use appropriate Rate for the Power Unit or the Equipment Utilized)
Heater Planer
Asphalt Burner
Scarifier Burner
Fire Guard
Industrial Lift Truck (mechanical tailgate)
Utility and Clean-up Truck
Composite Crewman

GROUP 8
Trainee

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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[a] For classifications within each group, see Pages 5 and 6.
[b] Saturday in the same work week may be worked at straight-time hourly rate if a job is shut down during the normal work week due to inclement weather or major mechanical breakdown, or lack of materials beyond the control of the Employer.
[c] An individual employer may employ one (1) trainee for every four (4) journey level Teamsters actively employed. Individual employers with less than four (4) journey level Teamsters may utilize one (1) trainee; thereafter, one (1) for every four (4) journey level Teamsters.
[d] Sixty-five percent (65%) of the Journey level wage for the type of equipment operated, plus full fringes without Vacation/Holiday.
[e] Seventy-five percent (75%) of the Journey level wage for the type of equipment operated, plus full fringes without Vacation/Holiday.
[f] Eighty-five percent (85%) of the Journey level wage for the type of equipment operated, plus full fringes without Vacation/Holiday.
[g] Supplemental Dues and Contract Administration.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: # TRAFFIC CONTROL/LANE CLOSURE (LABORER)[a]
AND
 # PARKING AND HIGHWAY IMPROVEMENT PAINTER (LABORER)

Determination:
NC-23-102-13-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Alameda, Contra Costa, Marin, San Francisco, San Mateo and Santa Clara Counties.
AREA 2 - Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo and Yuba Counties.

Wages and Employer Payments (Area 1):

TRAFFIC CONTROL AND RELATED CLASSIFICATIONS	Basic Hourly Rate	Health and Welfare[b]	Pension[c]	Vacation and Holiday[d]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[e]	Saturday Overtime Hourly Rate (1 ½ X)[e,f]	Sunday/ Holiday Overtime Hourly Rate (2 X)[g]
Traffic Control Person I	$33.24	$9.00	$12.96	$3.05	$0.50	$0.28	8	$59.03	$75.650	$75.650	$97.27
Traffic Control Person II	$30.74	$9.00	$12.96	$3.05	$0.50	$0.28	8	$56.53	$71.900	$71.900	$87.27
Construction Zone Traffic Control Pilot Car, Flag Person	$32.94	$9.00	$12.96	$3.05	$0.50	$0.28	8	$58.73	$75.200	$75.200	$91.67

SAMPLE NOT FOR BIDDING

Wages and Employer Payments (Area 2):

TRAFFIC CONTROL AND RELATED CLASSIFICATIONS	Basic Hourly Rate	Health and Welfare[b]	Pension[c]	Vacation and Holiday[d]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[e]	Saturday Overtime Hourly Rate (1 ½ X)[e,f]	Sunday/ Holiday Overtime Hourly Rate (2 X)[g]
Traffic Control Person I	$32.24	$9.00	$12.96	$3.05	$0.50	$0.28	8	$58.03	$74.150	$74.150	$90.27
Traffic Control Person II	$29.74	$9.00	$12.96	$3.05	$0.50	$0.28	8	$55.53	$70.400	$70.400	$85.27
Construction Zone Traffic Control Pilot Car, Flag Person	$31.94	$9.00	$12.96	$3.05	$0.50	$0.28	8	$57.73	$73.700	$73.700	$89.67

Determination:
NC-23-102-13-2021-1A

Issue Date:
February 22, 2021

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, and Yuba Counties.

Wages and Employer Payments:

STRIPER AND RELATED CLASSIFICATIONS	Basic Hourly Rate	Health and Welfare[b]	Pension[c]	Vacation and Holiday[d]	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[e]	Saturday Overtime Hourly Rate (1 ½ X)[e,f]	Sunday/ Holiday Overtime Hourly Rate (2 X)[g]
Group 1	$36.13	$9.00	$12.35	$3.05	$0.50	$0.25	8	$61.28	$79.345	$79.345	$97.41
Group 2	$34.63	$9.00	$12.35	$3.05	$0.50	$0.25	8	$59.78	$77.095	$77.095	$94.41
Group 3	$32.88	$9.00	$12.35	$3.05	$0.50	$0.25	8	$58.03	$74.470	$74.470	$90.91
Group 4	$30.78	$9.00	$12.35	$3.05	$0.50	$0.25	8	$55.93	$71.320	$71.320	$86.71

SAMPLE NOT FOR BIDDING

Group 1
Traffic Striping Applicator

Group 2
Traffic Delineating Device Applicator
Traffic Protective System Installer
Pavement Markings Applicator
Decorative Asphalt Surfacing Applicator

Group 3
Traffic Surface Abrasive Blaster
Pot Tender

Group 4
Parking Lots, Game Courts & Playground Striping Applicator
Decorative Asphalt Surfacing Laborer

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] The rates of the Laborer classifications for the craft of Traffic Control/Lane Closure (Laborer) do not apply to traffic control work associated with parking and highway improvement projects in San Joaquin, Tuolumne, and Yolo Counties. For traffic control work associated with parking and highway improvement projects in these three counties, the minimum rate of pay is that of the Painter classifications for the craft of Parking and Highway Improvement Painter (Painter).

[b] Includes an amount for Retiree Health & Welfare.

[c] Includes an amount for the Annuity Trust Fund.

[d] Includes an amount for Supplemental Dues.

[e] One and one-half (1-1/2) the straight time hourly rate of pay shall be paid for all work performed in excess of forty hours (40) a week or eight hours (8) a day and the sixth (6th) consecutive day worked or Saturdays.

[f] Saturdays or scheduled sixth (6th) consecutive work day in the same work week may be worked at straight-time if the job is shut down during the normal work week due to inclement weather, major mechanical breakdown or lack of materials beyond the control of the employer.

[g] Two times (2x) the straight time hourly rate of pay shall be paid for all work performed on the seventh (7th) consecutive day worked, or Sundays and holidays.

SAMPLE NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Tree Maintenance (Laborer) [1]
(Applies Only to Routine Tree Maintenance Work, Not Construction and/or Landscape Construction) [2]

Determination:
NC-102-X-21-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All Localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

SAMPLE NOT FOR BIDDING

Wages and Employer Payments:

Classification(s)[a] (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[b]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Senior Tree Trimmer (Area 1)[c]	$26.85	$6.00	$1.50	$2.07	$0.00	$0.05	8.0	$36.47	$49.89	$63.32
Tree Trimmer (Area 1)[c]	$23.85	$6.00	$1.50	$1.87	$0.00	$0.05	8.0	$33.27	$45.19	$57.12
Groundsperson (Area 1)[c]	$20.85	$6.00	$1.50	$1.72	$0.00	$0.05	8.0	$30.12	$40.54	$50.97
Senior Tree Trimmer (Area 2)[c]	$22.35	$6.00	$1.50	$2.07	$0.00	$0.05	8.0	$31.97	$43.14	$54.32
Tree Trimmer (Area 2)[c]	$20.85	$6.00	$1.50	$1.87	$0.00	$0.05	8.0	$30.27	$40.69	$51.12
Groundsperson (Area 2)[c]	$18.85	$6.00	$1.50	$1.72	$0.00	$0.05	8.0	$28.12	$37.54	$46.97

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid

shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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[1] This determination does not apply to the work of a landscape laborer employed on landscape construction (work incidental to construction or post-construction maintenance during the plant installation and establishment period) or to tree trimming work involving line clearance.
[2] This determination does not apply to tree trimming, removal, or planting work performed on construction or landscape construction contracts.

[a] There shall be at least one Senior Tree Trimmer on crews of three or more.
[b] Monday thru Saturday shall constitute a workweek. Rate applies to first 4 overtime hours Monday thru Saturday, and all time worked in excess of forty (40) hours per workweek. All other time is paid at the Sunday and Holiday double-time rate.

[c] **Area 1:** Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma Counties.
Area 2: Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Sierra, Siskiyou, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Tunnel Worker (Laborer) #

Determination:
NC-23-102-11-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
June 30, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All Localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

SAMPLE
NOT FOR BIDDING

Wages and Total Hourly Rates (including employer payments):

Classification (Journeyperson)	Basic Hourly Rate	Hours[a]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[b]	Sunday/ Holiday Overtime Hourly Rate
Diamond driller, groundman, gunite or shotcrete nozzleman	$40.38	8.0	$66.63	$86.82	$86.82	$107.01
Rodman, shaft work and raise (below actual or excavated ground level)	$40.15	8.0	$66.40	$86.48	$86.48	$106.55
Bit grinder, blaster, driller, powderman-heading, cherry pickerman-where car is lifted, concrete finisher in tunnel, concrete/screed man, grout pumpman and potman, gunite and shotcrete gunman and potman, headerman, high pressure nozzleman, miner-tunnel, including top and bottom man on shaft and raise work, nipper, nozzleman on slick line, sandblaster-potman (work assignment interchangeable)	$39.90	8.0	$66.15	$86.10	$86.10	$106.05

Classification (Journeyperson)	Basic Hourly Rate	Hours[a]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[b]	Sunday/ Holiday Overtime Hourly Rate
Steel form raiser and setter, timberman, retimberman (wood or steel or substitute materials), tugger, cabletender, certified welder, chucktender, powderman-primer house	$39.90	8.0	$66.15	$86.10	$86.10	$106.05
Vibratorman, pavement breaker, bull gang-mucker, trackman, concrete crew including rodding and spreading	$39.45	8.0	$65.70	$85.43	$85.43	$105.15
Dumpman (any method), grout crew, reboundman, swamper/brakeman, watchman	$38.91	8.0	$65.16	$84.62	$84.62	$104.07

Wages and Total Hourly Rates (including employer payments) – Special Single and Second Shift:

Classification (Journeyperson)	Basic Hourly Rate	Hours[a]	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)[b]	Sunday/ Holiday Overtime Hourly Rate
Diamond driller, groundman, gunite or shotcrete nozzleman	$43.38	8.0	$69.63	$91.32	$91.32	$113.01
Rodman, shaft work and raise (below actual or excavated ground level)	$43.15	8.0	$69.40	$90.98	$90.98	$112.55
Bit grinder, blaster, driller, powderman-heading, cherry pickerman-where car is lifted, concrete finisher in tunnel, concrete/screed man, grout pumpman and potman, gunite and shotcrete gunman and potman, headerman, high pressure nozzleman, miner-tunnel, including top and bottom man on shaft and raise work, nipper, nozzleman on slick line, sandblaster-potman (work assignment interchangeable)	$42.90	8.0	$69.15	$90.60	$90.60	$112.05
Steel form raiser and setter, timberman, retimberman (wood or steel or substitute materials), tugger, cabletender, certified welder, chucktender, powderman-primer house	$42.90	8.0	$69.15	$90.60	$90.60	$112.05
Vibratorman, pavement breaker, bull gang-mucker, trackman, concrete crew including rodding and spreading	$42.45	8.0	$68.70	$89.93	$89.93	$111.15
Dumpman (any method), grout crew, reboundman, swamper/brakeman, watchman	$41.91	8.0	$68.16	$89.12	$89.12	$110.07

SAMPLE
NOT FOR BIDDING

Employer Payments (All Shifts):

Type of Fund	Amount
Health and Welfare	$9.00
Pension	$12.96
Vacation and Holiday[c]	$3.05
Training	$0.96
Other	$0.28

When designated by an employer, state licensed blaster receives $1.00 per hour above miner's rate.

Note:
Rates for tunnel workers working in compressed air as well as their support classifications are available by request. Please contact the Office of the Director - Research Unit at (415) 703-4774.

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] Saturdays in the same work week may be worked at straight-time if job is shut down during the normal workweek due to inclement weather. Excludes Alameda, Contra Costa, and San Francisco Counties.
[b] All work performed on Saturdays, Sundays and Holidays shall be paid for at double (2x) the regular time hourly rate, except maintenance work, in the counties of Alameda, Contra Costa, and San Francisco.
[c] Includes an amount for supplemental dues.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: TUNNEL/UNDERGROUND (OPERATING ENGINEER-HEAVY AND HIGHWAY WORK)#

Determination:
NC-23-63-1-2020-2C

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Alameda, Butte, Contra Costa, Kings, Marin, Merced, Napa, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Yolo and Yuba counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties.

Wages and Employer Payments (Area 1):

Classification (Journeyperson) Classification Group[a]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours[c]	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate (1½ x)[d]	Sunday/ Holiday Overtime Hourly Rate (2 x)
Underground Rate Group 1-A	$49.89	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.52	$106.47	$131.41
Underground Rate Group 1	$47.42	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.05	$102.76	$126.47
Underground Rate Group 2	$46.16	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.79	$100.87	$123.95
Underground Rate Group 3	$44.83	$13.88	$10.78	$4.77	$1.07	$1.13	8	$76.46	$98.88	$121.29
Underground Rate Group 4	$43.69	$13.88	$10.78	$4.77	$1.07	$1.13	8	$75.32	$97.17	$119.01
Underground Rate Group 5	$42.55	$13.88	$10.78	$4.77	$1.07	$1.13	8	$74.18	$95.46	$116.73
Shafts Stopes & Raises Group 1-A	$49.99	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.62	$106.62	$131.61
Shafts Stopes & Raises Group 1	$47.52	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.15	$102.91	$126.67

SAMPLE NOT FOR BIDDING

Classification (Journeyperson) Classification Group[a]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours[c]	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate (1½ x)[d]	Sunday/ Holiday Overtime Hourly Rate (2 x)
Shafts Stopes & Raises Group 2	$46.26	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.89	$101.02	$124.15
Shafts Stopes & Raises Group 3	$44.93	$13.88	$10.78	$4.77	$1.07	$1.13	8	$76.56	$99.03	$121.49
Shafts Stopes & Raises Group 4	$43.79	$13.88	$10.78	$4.77	$1.07	$1.13	8	$75.42	$97.32	$119.21
Shafts Stopes & Raises Group 5	$42.65	$13.88	$10.78	$4.77	$1.07	$1.13	8	$74.28	$95.61	$116.93

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed on the Operating Engineer (Heavy and Highway Work) page 5.

Wages and Employer Payments (Area 2):

Classification (Journeyperson) Classification Group[a]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours[c]	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate (1½ x)[d]	Sunday/ Holiday Overtime Hourly Rate (2 x)
Underground Rate Group 1-A	$51.89	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.52	$109.47	$135.41
Underground Rate Group 1	$49.42	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.05	$105.76	$130.47
Underground Rate Group 2	$48.16	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.79	$103.87	$127.95
Underground Rate Group 3	$46.83	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.46	$101.88	$125.29
Underground Rate Group 4	$45.69	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.32	$100.17	$123.01
Underground Rate Group 5	$44.55	$13.88	$10.78	$4.77	$1.07	$1.13	8	$76.18	$98.46	$120.73
Shafts Stopes & Raises Group 1-A	$51.99	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.62	$109.62	$135.61
Shafts Stopes & Raises Group 1	$49.52	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.15	$105.91	$130.67
Shafts Stopes & Raises Group 2	$48.26	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.89	$104.02	$128.15
Shafts Stopes & Raises Group 3	$46.93	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.56	$102.03	$125.49
Shafts Stopes & Raises Group 4	$45.79	$13.88	$10.78	$4.77	$1.07	$1.13	8	$77.42	$100.32	$123.21
Shafts Stopes & Raises Group 5	$44.65	$13.88	$10.78	$4.77	$1.07	$1.13	8	$76.28	$98.61	$120.93

SAMPLE
NOT FOR BIDDING

CLASSIFICATIONS

GROUP 1-A
Tunnel Bore Machine Operator - 20 feet in diameter or more

GROUP 1
Heading Shield Operator
Heavy Duty Repairman/Welder
Mucking Machine
Raised Bore Operator
Tunnel Mole Bore Operator
Tunnel Boring Machine Operator 10 ft up to 20 ft

GROUP 2
Combination Slusher and Motor Operator
Concrete Pump or Pumpcrete Guns
Power Jumbo Operator

GROUP 3
Drill Doctor
Mine or Shaft Hoist

GROUP 4
Combination Slurry Mixer Cleaner
Grouting Machine Operator
Motorman

GROUP 5
Bit Sharpener
Brakeman
Combination Mixer and Compressor (Gunite)
Compressor Operator
Assistant to Engineer
Pump Operator
Slusher Operator

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: TUNNEL/UNDERGROUND (OPERATING ENGINEER-HEAVY AND HIGHWAY WORK#
(SPECIAL SINGLE AND SECOND SHIFT)

Determination:
NC-23-63-1-2020-2C

Issue Date:
August 22, 2020

Expiration date of determination:
June 27, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties.

AREA 1 - Alameda, Butte, Contra Costa, Kings, Marin, Merced, Napa, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Yolo and Yuba counties; and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties.

Wages and Employer Payments (Area 1):

Classification (Journeyperson) Classification Group[a]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate (1½ x)[d]	Sunday/ Holiday Overtime Hourly Rate (2 x)
Underground Rate Group 1-A	$55.02	$13.88	$10.78	$4.77	$1.07	$1.13	8	$86.65	$114.16	$141.67
Underground Rate Group 1	$52.23	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.86	$109.98	$136.09
Underground Rate Group 2	$50.82	$13.88	$10.78	$4.77	$1.07	$1.13	8	$82.45	$107.86	$133.27
Underground Rate Group 3	$49.34	$13.88	$10.78	$4.77	$1.07	$1.13	8	$80.97	$105.64	$130.31
Underground Rate Group 4	$48.04	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.67	$103.69	$127.71
Underground Rate Group 5	$46.77	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.40	$101.79	$125.17
Shafts Stopes & Raises Group 1-A	$55.13	$13.88	$10.78	$4.77	$1.07	$1.13	8	$86.76	$114.33	$141.89

SAMPLE NOT FOR BIDDING

Classification (Journeyperson) Classification Group[a]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate (1½ x)[d]	Sunday/ Holiday Overtime Hourly Rate (2 x)
Shafts Stopes & Raises Group 1	$52.34	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.97	$110.14	$136.31
Shafts Stopes & Raises Group 2	$50.93	$13.88	$10.78	$4.77	$1.07	$1.13	8	$82.56	$108.03	$133.49
Shafts Stopes & Raises Group 3	$49.45	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.08	$105.81	$130.53
Shafts Stopes & Raises Group 4	$48.15	$13.88	$10.78	$4.77	$1.07	$1.13	8	$79.78	$103.86	$127.93
Shafts Stopes & Raises Group 5	$46.88	$13.88	$10.78	$4.77	$1.07	$1.13	8	$78.51	$101.95	$125.39

AREA 2 - Modoc, and portions of Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Lake, Lassen, Madera, Mariposa, Mendocino, Monterey, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Tulare, Tuolumne and Trinity Counties. (Portions of counties falling in each area detailed on the Operating Engineer (Heavy and Highway Work) page 5.

Wages and Employer Payments (Area 2):

Classification (Journeyperson) Classification Group[a]	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[b]	Training	Other	Hours	Total Hourly Rate	Daily/ Saturday Overtime Hourly Rate (1½ x)[d]	Sunday/ Holiday Overtime Hourly Rate (2 x)
Underground Rate Group 1-A	$57.02	$13.88	$10.78	$4.77	$1.07	$1.13	8	$88.65	$117.16	$145.67
Underground Rate Group 1	$54.23	$13.88	$10.78	$4.77	$1.07	$1.13	8	$85.86	$112.98	$140.09
Underground Rate Group 2	$52.82	$13.88	$10.78	$4.77	$1.07	$1.13	8	$84.45	$110.86	$137.27
Underground Rate Group 3	$51.34	$13.88	$10.78	$4.77	$1.07	$1.13	8	$82.97	$108.64	$134.31
Underground Rate Group 4	$50.04	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.67	$106.69	$131.71
Underground Rate Group 5	$48.77	$13.88	$10.78	$4.77	$1.07	$1.13	8	$80.40	$104.79	$129.17
Shafts Stopes & Raises Group 1-A	$57.13	$13.88	$10.78	$4.77	$1.07	$1.13	8	$88.76	$117.33	$145.89
Shafts Stopes & Raises Group 1	$54.34	$13.88	$10.78	$4.77	$1.07	$1.13	8	$85.97	$113.14	$140.31
Shafts Stopes & Raises Group 2	$52.93	$13.88	$10.78	$4.77	$1.07	$1.13	8	$84.56	$111.03	$137.49
Shafts Stopes & Raises Group 3	$51.45	$13.88	$10.78	$4.77	$1.07	$1.13	8	$83.08	$108.81	$134.53
Shafts Stopes & Raises Group 4	$50.15	$13.88	$10.78	$4.77	$1.07	$1.13	8	$81.78	$106.86	$131.93
Shafts Stopes & Raises Group 5	$48.88	$13.88	$10.78	$4.77	$1.07	$1.13	8	$80.51	$104.95	$129.39

SAMPLE - NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

[#] Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] For classifications within each group, see page 3.
[b] Includes an amount for supplemental dues.
[c] When three shifts are employed for five (5) or more consecutive days, seven and one-half (7½) consecutive hours (exclusive of meal period), shall constitute a day of work, for which eight (8) times the straight time hourly rate shall be paid at the non-shift wage rate for the second shift. The third shift shall be seven (7) hours of work for eight (8) hours of pay at the non-shift wage rate.
[d] Saturday in the same work week may be worked at straight-time if a job is shut down during the normal work week due to inclement weather.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Boilermaker-Blacksmith #

Determination:
C-14-X-2-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
September 30, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Division of Labor Statistics and Research at (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within the State of California

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[a]	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Boilermaker-Blacksmith (Area 1)[b]	$46.03	$8.57	$18.44[c]	$7.90[c]	$3.90	$0.74	8.0	$85.58	$121.765[d]	$121.765[d]	$157.95
Boilermaker-Blacksmith (Area 2)[b]	$49.62	$8.57	$22.30[c]	$6.00[c]	$4.40	$0.74	8.0	$91.63	$130.59[d]	$130.59[d]	$169.55
Boilermaker-Blacksmith (Area 3)[b]	$45.60	$8.57	$20.52[c]	$5.50[c]	$4.40	$0.74	8.0	$85.33	$121.14[d]	$121.14[d]	$156.95

SAMPLE NOT FOR BIDDING

Determination:
C-14-X-2-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
September 30, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Division of Labor Statistics and Research at (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within the State of California

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[a]	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Boilermaker-Blacksmith Helper[e] (Area 1)[b]	$25.32	[f]	$0.73[c]	$0.00	$3.90	$0.74	8.0	$30.69	$43.715[d]	$43.715[d]	$56.74
Boilermaker-Blacksmith Helper[e] (Area 2)[b]	$27.29	[f]	$0.73[c]	$0.00	$4.40	$0.74	8.0	$33.16	$47.17[d]	$47.17[d]	$61.18
Boilermaker-Blacksmith Helper[e] (Area 3)[b]	$25.08	[f]	$0.73[c]	$0.00	$4.40	$0.74	8.0	$30.95	$43.855[d]	$43.855[d]	$56.76

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing

Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] Includes amount for Annuity Trust Fund.

[b] **Area 1:** Imperial, Inyo, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, San Luis Obispo (only that portion that is within a 25-mile radius of the city of Santa Maria), and Ventura Counties.

Area 2: Alameda, Contra Costa, Marin, Monterey, Sacramento, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties.

Area 3: All other remaining counties.

[c] Contribution is factored at the applicable overtime multiplier for each overtime hour worked.

[d] Rate applies to the first 2 daily overtime hours and the first 10 hours worked on Saturday. All other overtime is paid at the Sunday/Holiday rate.

[e] One Helper shall be employed on each job of 5 to 10 employees.

[f] Helpers will be eligible for Health & Welfare benefits after completing 2000 hours.

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Boilermaker-Blacksmith #

Determination:
C-14-X-2-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
September 30, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Division of Labor Statistics and Research at (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within the State of California

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[a]	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Boilermaker-Blacksmith (Area 1)[b]	$46.03	$8.57	$18.44[c]	$7.90[c]	$3.90	$0.74	8.0	$85.58	$121.765[d]	$121.765[d]	$157.95
Boilermaker-Blacksmith (Area 2)[b]	$49.62	$8.57	$22.30[c]	$6.00[c]	$4.40	$0.74	8.0	$91.63	$130.59[d]	$130.59[d]	$169.55
Boilermaker-Blacksmith (Area 3)[b]	$45.60	$8.57	$20.52[c]	$5.50[c]	$4.40	$0.74	8.0	$85.33	$121.14[d]	$121.14[d]	$156.95

SAMPLE NOT FOR BIDDING

Determination:
C-14-X-2-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
September 30, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Division of Labor Statistics and Research at (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within the State of California

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension[a]	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (2 X)
Boilermaker-Blacksmith Helper[e] (Area 1)[b]	$25.32	[f]	$0.73[c]	$0.00	$3.90	$0.74	8.0	$30.69	$43.715[d]	$43.715[d]	$56.74
Boilermaker-Blacksmith Helper[e] (Area 2)[b]	$27.29	[f]	$0.73[c]	$0.00	$4.40	$0.74	8.0	$33.16	$47.17[d]	$47.17[d]	$61.18
Boilermaker-Blacksmith Helper[e] (Area 3)[b]	$25.08	[f]	$0.73[c]	$0.00	$4.40	$0.74	8.0	$30.95	$43.855[d]	$43.855[d]	$56.76

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing

Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] Includes amount for Annuity Trust Fund.

[b] **Area 1:** Imperial, Inyo, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, San Luis Obispo (only that portion that is within a 25-mile radius of the city of Santa Maria), and Ventura Counties.

Area 2: Alameda, Contra Costa, Marin, Monterey, Sacramento, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties.

Area 3: All other remaining counties.

[c] Contribution is factored at the applicable overtime multiplier for each overtime hour worked.

[d] Rate applies to the first 2 daily overtime hours and the first 10 hours worked on Saturday. All other overtime is paid at the Sunday/Holiday rate.

[e] One Helper shall be employed on each job of 5 to 10 employees.

[f] Helpers will be eligible for Health & Welfare benefits after completing 2000 hours.

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: DRIVER (ON/OFF-HAULING TO/FROM CONSTRUCTION SITE)

Determination:
C-MT-830-261-2-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
March 31, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within Glenn, Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama, and Trinity Counties.

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (1 ½ X)
Driver: Mixer Truck	$14.80	$3.46[a]	$0.00	$0.68[b]	$0.00	$0.00	8.0	$18.94	$26.34[c]	$26.34

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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* There is no predetermined increase applicable to this determination.

[a] The contribution applies to all hours until $600 is paid for the month.
[b] $0.97 after 2 years of service.
[c] Rate applies to work in excess of eight (8) hours daily and forty (40) hours weekly.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Electrical Utility Lineman #

Determination:
C-61-X-3-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
May 31, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within the State of California, except Del Norte, Modoc, and Siskiyou Counties. (For Del Norte, Modoc and Siskiyou - see determination C-61-X-8)

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (2 X)	Saturday Overtime Hourly Rate (2 X)	Sunday/ Holiday Overtime Hourly Rate
Lineman, Cable Splicer #	$59.14	$7.50	$11.21[a]	$0.30[b]	$0.65[c]	8.0	$80.57	$142.43	$142.43	$142.43
Powderman	$52.81	$7.50	$10.47[a]	$0.26[b]	$0.57[c]	8.0	$73.19	$128.41	$128.41	$128.41
Groundman	$36.12	$7.50	$10.43[a]	$0.18[b]	$0.40[c]	8.0	$55.71	$93.48	$93.48	$93.48

SAMPLE
NOT FOR BIDDING

Determination:
C-61-X-4-2020-1

Issue Date:
February 22, 2020

Expiration date of determination:
December 31, 2020* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within the State of California, except Del Norte, Imperial, Inyo, Kern, Kings, Los Angeles, Modoc, Mono, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Siskiyou, Tulare, and Ventura Counties. (For Del Norte, Modoc, and Siskiyou – see determination C-61-X-8. For Imperial, Inyo, Kern, Kings, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Tulare, and Ventura Counties– see determination C-61-X-5)

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (1 ½ X)
Pole Restoration Journeyman	$30.71	$5.75	$0.85[a]	$0.83	8.0	$39.06	$54.88	$54.88[d]	$54.88
After 1 year	$30.71	$5.75	$0.85[a]	$1.42	8.0	$39.65	$55.47	$55.47[d]	$55.47
After 3 years	$30.71	$5.75	$0.85[a]	$2.01	8.0	$40.24	$56.06	$56.06[d]	$56.06
After 6 years	$30.71	$5.75	$0.85[a]	$2.60	8.0	$40.83	$56.65	$56.65[d]	$56.65
Senior Technician[e]	$19.87	$5.75	$0.85[a]	$0.53	8.0	$27.60	$37.84	$37.84[d]	$37.84
After 1 year	$19.87	$5.75	$0.85[a]	$0.91	8.0	$27.98	$38.22	$38.22[d]	$38.22
After 3 years	$19.87	$5.75	$0.85[a]	$1.29	8.0	$28.36	$38.60	$38.60[d]	$38.60
After 6 years	$19.87	$5.75	$0.85[a]	$1.68	8.0	$28.75	$38.99	$38.99[d]	$38.99
Pole Treatment Journeyman	$27.44	$5.75	$0.85[a]	$0.74	8.0	$35.60	$49.73	$49.73[d]	$49.73
After 1 year	$27.44	$5.75	$0.85[a]	$1.27	8.0	$36.13	$50.26	$50.26[d]	$50.26
After 3 years	$27.44	$5.75	$0.85[a]	$1.80	8.0	$36.66	$50.79	$50.79[d]	$50.79
After 6 years	$27.44	$5.75	$0.85[a]	$2.32	8.0	$37.18	$51.31	$51.31[d]	$51.31
Pole Restoration and Treatment[e] Technician (First 6 months)	$15.38	$5.75	$0.85[a]	$0.41	8.0	$22.85	$30.77	$30.77[d]	$30.77

SAMPLE NOT FOR BIDDING

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (1 ½ X)
Pole Restoration and Treatment[e] Technician (After 6 months)	$15.75	$5.75	$0.85[a]	$0.42	8.0	$23.24	$31.35	$31.35[d]	$31.35

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] In addition, an amount equal to 3% of the Basic Hourly Rate is added to the Total Hourly Rate and overtime hourly rates for the National Employees Benefit Board

[b] This amount is factored at the applicable overtime rate.

[c] Includes $0.01 to LMCC; the remaining amount is factored at the applicable overtime rate.

[d] Saturdays may be scheduled as a make-up day at the regular straight time rate.

[e] The Ratio of Technicians to Journeymen may not exceed 4 to 1. However, if the Journeyman is assisted by a maximum of two Senior Technicians, three additional Technicians may be added per Senior Technician

SAMPLE NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Electrical Utility Lineman #

Determination:
C-61-X-8-2020-1

Issue Date:
February 22, 2020

Expiration date of determination:
January 31, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within Del Norte, Modoc and Siskiyou counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (2X)	Saturday Overtime Hourly Rate (2X)	Sunday/ Holiday Overtime Hourly Rate (2X)
Lineman, Heavy Line Equipment man, Certified Lineman Welder, Pole Sprayer	$53.82	$7.50	$13.51[a]	$0.81[b]	$0.14[c]	8.0	$75.78	$132.16	$132.16	$132.16
Cable Splicer	$60.28	$7.50	$13.71[a]	$0.90[b]	$0.16[c]	8.0	$82.55	$145.69	$145.69	$145.69
Line Equipment Operator	$46.29	$7.50	$10.09[a]	$0.69[b]	$0.13[c]	8.0	$64.70	$113.19	$113.19	$113.19
Powderman	$40.37	$7.40	$8.11[a]	$0.61[b]	$0.11[c]	8.0	$56.60	$98.89	$98.89	$98.89
Groundman First 1040 Hours	$21.53	$7.40	$7.55[a]	$0.32[b]	$0.06[c]	8.0	$36.86	$59.41	$59.41	$59.41
Groundman 1041-2080 Hours	$26.91	$7.40	$7.71[a]	$0.40[b]	$0.08[c]	8.0	$42.50	$70.69	$70.69	$70.69
Groundman 2081+ Hours	$33.37	$7.40	$7.90[a]	$0.50[b]	$0.09[c]	8.0	$49.26	$84.21	$84.21	$84.21
Pole Sprayer Trainee First six months	$46.12	$7.40	$8.28[a]	$0.69[b]	$0.12[c]	8.0	$62.61	$110.91	$110.91	$110.91
Pole Sprayer Trainee Second six months	$48.33	$7.40	$8.35[a]	$0.72[b]	$0.13[c]	8.0	$64.93	$115.55	$115.55	$115.55
Pole Sprayer Trainee Third six months	$49.94	$7.40	$8.40[a]	$0.75[b]	$0.13[c]	8.0	$66.62	$118.93	$118.93	$118.93

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
[a] Includes an amount equal to 3% of the Basic Hourly Rate for the National Employees Benefit Board. This amount is factored at the applicable overtime rate. Pursuant to Labor Code Sections 1773.1 and 1773.8, the amount paid for this employer payment may vary resulting in a lower taxable basic hourly wage rate, but the total hourly rates for straight time and overtime may not be less than the general prevailing rate of per diem wages.
[b] This amount is factored at the applicable overtime rate.
[c] This amount includes $0.01 for the National Labor-Management Cooperation Committee, and the remainder of the amount is for the Administrative Maintenance Fund. This amount (AMF) is factored at the applicable overtime rate.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Electrical Utility Lineman

Determination:
C-61-X-5-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
March 3, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within Imperial, Inyo, Kern, Kings, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Tulare, and Ventura Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (1 ½ X)
Pole Restoration Journeyman	$26.11	$5.00	$0.60[a]	$0.00	8.0	$32.49	$45.94	$45.94[b]	$45.94
After 6 months	$26.11	$5.00	$0.60[a]	$1.21	8.0	$33.70	$47.145	$47.145[b]	$47.145
After 3 years	$26.11	$5.00	$0.60[a]	$1.86	8.0	$34.35	$47.795	$47.795[b]	$47.795
After 6 years	$26.11	$5.00	$0.60[a]	$2.21	8.0	$34.70	$48.145	$48.145[b]	$48.145
Senior Technician [c]	$16.89	$5.00	$0.60[a]	$0.00	8.0	$23.00	$31.70	$31.70[b]	$31.70
After 6 months	$16.89	$5.00	$0.60[a]	$0.78	8.0	$23.78	$32.48	$32.48[b]	$32.48
After 3 years	$16.89	$5.00	$0.60[a]	$1.20	8.0	$24.20	$32.90	$32.90[b]	$32.90
After 6 years	$16.89	$5.00	$0.60[a]	$1.43	8.0	$24.43	$33.13	$33.13[b]	$33.13
Pole Treatment Journeyman	$23.33	$5.00	$0.60[a]	$0.00	8.0	$29.63	$41.645	$41.645[b]	$41.645
After 6 months	$23.33	$5.00	$0.60[a]	$1.08	8.0	$30.71	$42.725	$42.725[b]	$42.725
After 3 years	$23.33	$5.00	$0.60[a]	$1.66	8.0	$31.29	$43.305	$43.305[b]	$43.305
After 6 years	$23.33	$5.00	$0.60[a]	$1.97	8.0	$31.60	$43.615	$43.615[b]	$43.615
Pole Restoration and Treatment [c] Technician (First 6 months)	$14.00	$5.00	$0.60[a]	$0.65	8.0	$20.67	$27.88	$27.88[b]	$27.88

SAMPLE NOT FOR BIDDING

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (1 ½ X)
Pole Restoration and Treatment [c] Technician (After 6 months)	$14.00	$5.00	$0.60[a]	$0.65	8.0	$20.67	$27.88	$27.88[b]	$27.88
Pole Restoration and Treatment [c] Technician (After 3 years)	$14.00	$5.00	$0.60[a]	$1.00	8.0	$21.02	$28.23	$28.23[b]	$28.23
Pole Restoration and Treatment [c] Technician (After 6 years)	$14.00	$5.00	$0.60[a]	$1.18	8.0	$21.20	$28.41	$28.41[b]	$28.41

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

[a] In addition, an amount equal to 3% of the Basic Hourly Rate is added to the Total Hourly Rate and overtime hourly rates for the National Employees Benefit Board.
[b] Saturdays may be scheduled as a make-up day at the regular straight time rate.
[c] The Ratio of Technicians to Journeymen may not exceed 4 to 1. However, if the Journeyman is assisted by a maximum of two Senior Technicians, three additional Technicians may be added per Senior Technician

SAMPLE NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Iron Worker #

Determination:
C-20-X-1-2020-1

Issue Date:
August 22, 2020

Expiration date of determination:
December 31, 2020* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Division of Labor Statistics and Research at (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within the State of California

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)[a]	Saturday Overtime Hourly Rate (1 ½ X)[a]	Sunday/ Holiday Overtime Hourly Rate (2 X)
Iron Worker (Ornamental, Reinforcing, Structural) (Area 1)[b]	$42.50	$10.05	$13.32	$5.30[c]	$0.72	$4.465	8.0	$76.355	$97.605	$97.605	$118.855
Fence Erector (Area 1)[b]	$36.08	$7.88	$8.99	$3.92[c]	$0.51	$3.585	8.0	$60.965	$79.005	$79.005	$97.045
Iron Worker (Ornamental, Reinforcing, Structural) (Area 2)[b]	$41.00	$10.05	$13.32	$5.30[c]	$0.72	$4.465	8.0	$74.855	$95.355	$95.355	$115.855
Fence Erector (Area 2)[b]	$34.58	$7.88	$8.99	$3.92[c]	$0.51	$3.585	8.0	$59.465	$76.755	$76.755	$94.045

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the

Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] Rate applies to the first 2 daily overtime hours and the first 8 hours on Saturday. All other overtime is at the Sunday/Holiday rate.

[b] **Area 1:** Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara Counties.
Area 2: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Imperial, Inyo, Kern, Kings, Lake, Lassen, Los Angeles, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Mono, Monterey, Napa, Nevada, Orange, Placer, Plumas, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Ventura, Yolo, and Yuba Counties.

[c] Includes supplemental dues.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Metal Roofing Systems Installer#

Determination:
C-MR-2016-1B

Issue Date:
August 22, 2016

Expiration date of determination:

September 30, 2016* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within Butte, Lassen, Marin, Placer, Sacramento, San Joaquin, Sonoma, Yolo and Yuba Counties. (REF: 830-232-16)

Wages and Employer Payments:

Classification	Basic Hourly Rate[a]	Health and Welfare[a]	Pension[a]	Vacation and Holiday[a]	Training[a]	Other[a]	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Saturday Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (1 ½ X)
Butte, Lassen, Placer, Sacramento, Yolo and Yuba Counties: Metal Roofing Systems Installer	$34.00	$8.42	$6.05	[b]	$0.33	$0.00	8.0	$48.80	$65.80[c]	$65.80[c]	$65.80[c]
San Joaquin Counties: Metal Roofing Systems Installer	$32.71	$8.42	$5.90	[b]	$0.33	$0.00	8.0	$47.36	$63.715[c]	$63.715[c]	$63.715[c]
Marin and Sonoma Counties: Metal Roofing Systems Installer	$36.08	$8.42	$5.63	[b]	$0.85	$0.00	8.0	$50.98	$69.02[c]	$69.02[c]	$69.02[c]

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid

shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).
* There is no predetermined increase applicable to this determination.
[a] Basic Hourly Rate and Employer Payments are based on the Davis-Bacon Wage Determination.
[b] Included in straight-time hourly rate.
[c] Rate applies to all hours work in excess of 8 hours per day and 40 hours during any one week.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Stator Rewinder #

Determination:
C-738-1412-7-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
March 31, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Division of Labor Statistics and Research at (415) 703-4774 for the new rates after 10 days from the expiration date, if no subsequent determination is issued.

Localities:
All localities within the State of California

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation	Holiday	Training	Hours	Total Hourly Rate[a]	Daily Overtime Hourly Rate (1 ½ X)[ab]	Saturday Overtime Hourly Rate (1 ½ X)[a]	Sunday Overtime Hourly Rate (2 X)[a]	Holiday Overtime Hourly Rate (2 ½ X)[a]
Stator Rewinder	$15.20	$1.36[c]	$2.18[c]	$0.29[cd]	$0.58	$0.29[c]	8.0	$19.90	$29.56	$29.56	$39.22	$48.88
Stator Rewinder Helper	$14.00	$1.26[c]	$2.01[c]	$0.27[ce]	$0.54	$0.27[c]	8.0	$18.35	$27.26	$27.26	$36.16	$45.07

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing

Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Prevailing Wage Apprentice Determinations Website (http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp).

[a] Does not include any additional amount that may be required for vacation pay.

[b] Rate applies to the first 4 daily overtime hours and the first 12 hours on Saturday. After 12 hours daily, the Sunday double-time rate applies.

[c] Contributions are factored at the appropriate overtime multiplier

[d] Rate applies to the first two years of employment only: for employment over two years, $.58 per hour worked; for employment over five years, $.73 per hour worked; for employment over seven years, $.88 per hour worked; for employment over fifteen years, $1.17 per hour worked; for employment over twenty years, $1.46 per hour worked; for employment over thirty years, $1.75 per hour worked.

[e] Rates apply to the first two years of employment only: for employment over two years, $.54 per hour worked; for employment over five years, $.67 per hour worked; for employment over seven years, $.81 per hour worked; for employment over fifteen years, $1.08 per hour worked; for employment over twenty years, $1.35 per hour worked; for employment over thirty years, $1.62 per hour worked.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Telecommunications Technician

Determination:
C-422-X-10-2021-1

Issue Date:
February 22, 2021

Expiration date of determination: April 3, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Del Norte, Inyo, Mono, San Bernardino and Santa Barbara Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[a]	Training	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2 ½ X)
Telecommunications Technician	$42.80	$7.65	$3.87	$2.96	$0.00	8.0	$57.28	$78.68	$121.48

SAMPLE
NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing

[a] $3.79 for employees with 7 years of service but less than 15 years, $4.61 for 15 years but less than 25 years, $5.43 for over 25 years.
[b] Rate applies to work in excess of eight hours daily and for all hours over 40 hours in a week. Rate applies to all hours worked on Sunday.

Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Telecommunications Technician

Determination:
C-422-X-1-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
April 3, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within San Francisco, San Mateo and Santa Clara Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[a]	Training	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2 ½ X)
Telecommunications Technician	$44.93	$7.65	$4.06	$3.11	$0.00	8.0	$59.75	$82.215	$127.145

SAMPLE
NOT FOR BIDDING

[a] $3.97 for employees with 7 years of service but less than 15 years, $4.84 for 15 years but less than 25 years, $5.70 for over 25 years.
[b] Rate applies to work in excess of eight hours daily and for all hours over 40 hours in a week. Rate applies to all hours worked on Sunday.

Determination:
C-422-X-1-2021-1A

Issue Date:
February 22, 2021

Expiration date of determination:
April 3, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Contra Costa, Los Angeles, Marin, Orange, Riverside, San Diego and Ventura Counties.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[c]	Training	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2 ½ X)
Telecommunications Technician	$43.97	$7.65	$3.97	$3.04	$0.00	8.0	$58.63	$80.615	$124.585

SAMPLE
NOT FOR BIDDING

[c] $3.89 for employees with 7 years of service but less than 15 years, $4.74 for 15 years but less than 25 years, $5.58 for over 25 years.

Determination:
C-422-X-1-2021-1B

Issue Date:
February 22, 2021

Expiration date of determination:
April 3, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alpine, Amador, Butte, Calaveras, Colusa, El Dorado, Fresno, Glenn, Humboldt, Imperial, Kern, Kings, Lake, Lassen, Madera, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, San Luis Obispo, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo and Yuba.

Wages and Employer Payments:

Classification (Journeyperson)	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday[d]	Training	Hours	Total Hourly Rate	Overtime Hourly Rate (1 ½ X)[b]	Holiday Overtime Hourly Rate (2 ½ X)
Telecommunications Technician	$42.80	$7.65	$3.87	$2.96	$0.00	8.0	$57.28	$78.68	$121.48

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

[d] $3.79 for employees with 7 years of service but less than 15 years, $4.61 for 15 years but less than 25 years, $5.43 for over 25 years.

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Tree Trimmer (High Voltage Line Clearance)

Determination:
C-TT-61-1245-12-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
May 29, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kern, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties. (REF: 61-1245-12)

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare[a]	Pension[b]	Vacation	Holiday	Hours	Total Hourly Rate	Daily/Saturday/ Sunday Overtime Hourly Rate (2X)
Tree Trimmer	$36.05	$7.50	$9.90	$0.75	$0.75	8.0	$54.95	$92.08
Trimmer Trainee: Start (0-6 Months)	$25.23	$7.50	$6.49	$0.53	$0.53	8.0	$40.28	$66.27
Trimmer Trainee: 6-12 Months	$28.84	$7.50	$7.63	$0.61	$0.61	8.0	$45.19	$74.90
Trimmer Trainee: After 12 Months	$32.44	$7.50	$8.72	$0.68	$0.68	8.0	$50.02	$83.43
Ground person First 6 Months	$21.63	$7.50	$1.15	$0.46	$0.46	8.0	$31.20	$53.48
Ground person After 6 Months	$23.43	$7.50	$1.80	$0.50	$0.50	8.0	$33.73	$57.86

SAMPLE
NOT FOR BIDDING

Determination:
C-TT-61-465-5-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
May 29, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within San Diego County.

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare	Pension[b]	Vacation	Holiday	Hours	Total Hourly Rate	Daily/ Saturday/ Sunday Overtime Hourly Rate (2X)
Tree Trimmer	$36.05	$7.50	$9.90	$0.75	$0.75	8.0	$54.95	$92.08
Trimmer Trainee: Start (0-6 Months)	$25.23	$7.50	$6.49	$0.53	$0.53	8.0	$40.28	$66.27
Trimmer Trainee: 6-12 Months	$28.84	$7.50	$7.63	$0.61	$0.61	8.0	$45.19	$74.90
Trimmer Trainee: After 12 Months	$32.44	$7.50	$8.72	$0.68	$0.68	8.0	$50.02	$83.43
Ground person First 6 Months	$21.63	$7.50	$1.15	$0.46	$0.46	8.0	$31.20	$53.48
Ground person After 6 Months	$23.43	$7.50	$1.80	$0.50	$0.50	8.0	$33.73	$57.86

SAMPLE
NOT FOR BIDDING

Determination:
C-TT-61-465-5A-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
May 29, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Imperial County.

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare[a]	Pension[b]	Vacation	Holiday	Hours	Total Hourly Rate	Daily/ Saturday/ Sunday Overtime Hourly Rate (2X)
Tree Trimmer	$36.05	$7.50	$9.90	$0.75	$0.75	8.0	$54.95	$92.08
Trimmer Trainee: Start (0-6 Months)	$25.23	$7.50	$6.49	$0.53	$0.53	8.0	$40.28	$66.27
Trimmer Trainee: 6-12 Months	$28.84	$7.50	$7.63	$0.61	$0.61	8.0	$45.19	$74.90
Trimmer Trainee: After 12 Months	$32.44	$7.50	$8.72	$0.68	$0.68	8.0	$50.02	$83.43
Ground person First 6 Months	$21.63	$7.50	$1.15	$0.46	$0.46	8.0	$31.20	$53.48
Ground person After 6 Months	$23.43	$7.50	$1.80	$0.50	$0.50	8.0	$33.73	$57.86

SAMPLE
NOT FOR BIDDING

Determination:
C-TT-61-47-3-2020-2

Issue Date:
August 22, 2020

Expiration date of determination:
May 29, 2021** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

Localities:
All localities within Inyo, Los Angeles, Mono, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura Counties.

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare[a]	Pension[b]	Vacation	Holiday	Hours	Total Hourly Rate	Daily/ Saturday/ Sunday Overtime Hourly Rate (2X)
Tree Trimmer	$36.05	$7.50	$9.90	$0.75	$0.75	8.0	$54.95	$92.08
Trimmer Trainee: Start (0-6 Months)	$25.23	$7.50	$6.49	$0.53	$0.53	8.0	$40.28	$66.27
Trimmer Trainee: 6-12 Months	$28.84	$7.50	$7.63	$0.61	$0.61	8.0	$45.19	$74.90
Trimmer Trainee: After 12 Months	$32.44	$7.50	$8.72	$0.68	$0.68	8.0	$50.02	$83.43
Ground person First 6 Months	$21.63	$7.50	$1.15	$0.46	$0.46	8.0	$31.20	$53.48
Ground person After 6 Months	$23.43	$7.50	$1.80	$0.50	$0.50	8.0	$33.73	$57.86

SAMPLE
NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

[a] Includes an amount for Health Reimbursements Accounts.
[b] An amount equal to 3% of the Basic Hourly Rate is added to the total hourly rate and overtime hourly rates for the National Employees Benefit Board and is factored at the applicable overtime multiplier. Pursuant to Labor Code Sections 1773.1 and 1773.8, the amount paid for this employer payment may vary resulting in a lower taxable basic hourly wage rate, but the total hourly rates for straight time and overtime may not be less than the general prevailing rate of per diem wages. Includes amount for National Electrical Annuity Plan.

SAMPLE
NOT FOR BIDDING

SAMPLE
NOT FOR BIDDING

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

Craft: Driver (On/Off-Hauling To/From Construction Site)

Determination:
C-DT-830-261-7-2021-1

Issue Date:
February 22, 2021

Expiration date of determination:
March 30, 2021* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director - Research Unit at (415) 703-4774 for new rates after 10 days from expiration date, if no subsequent determination is issued.

Localities:
All localities within Alameda, Contra Costa, Del Norte, Humboldt, Lassen, Modoc, San Francisco, San Mateo, Santa Clara, Shasta, Siskiyou and Trinity Counties.

Wages and Employer Payments:

Classification	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Training	Other	Hours	Total Hourly Rate	Daily Overtime Hourly Rate (1 ½ X)	Sunday/ Holiday Overtime Hourly Rate (1 ½ X)
Driver: Dump Truck	$22.50	[a]	$0.00	$0.43[b]	$0.00	$0.00	8.0	$22.93	$34.18[c]	$34.18

SAMPLE NOT FOR BIDDING

Recognized holidays:
Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

Travel and/or subsistence payment:
In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Director's General Prevailing Wage Determinations Website (http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm). Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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* There is no predetermined increase applicable to this determination.
[a] Health and Welfare will increase from $0.00 to $1.16 after 90 days of service, which will be seen as an increase to the Total Hourly Rate as well.
[b] $0.78 after 90 days of service with the employer
$1.21 after 5 years of service with the employer
$1.65 after 10 years of service with the employer
[c] Rate applies to work in excess of eight (8) hours daily and forty (40) hours weekly.

SAMPLE
NOT FOR BIDDING