COVER SHEET

BOOK ONE

NOTICE TO BIDDERS AND SPECIAL PROVISIONS

BLACKIE ROAD SAFETY IMPROVEMENTS PROJECT NO. 13-140665 PROJECT NO. 13-142265

State Project No: EA 05-930075L State Project No: EA 05-930155L

Federal Aid Project No: HRRRL-5944(086) Federal Aid Project No: HRRRL-5944(091)

APPROVED AS TO FORM:

applitus of Hasson

CYNTHIA L. HASSON Deputy County Counsel

APPROVED AS TO INDEMNITY/ INSURANCE LANGUAGE:

STEVEN F. MAUCK

Risk Manager

APPROVED AS TO FISCAL TERMS:

GARY GIBONEY

Chief Deputy Auditor Controller

TITLE SHEET

BOARD OF SUPERVISORS COUNTY OF MONTEREY STATE OF CALIFORNIA

> Dave Potter, Chair Fernando Armenta Louis Calcagno Simón Salinas Jane B. Parker

Lew C. Bauman, P.E., Ph.D., County Administrative Officer Benny J. Young, P.E., Resource Management Agency Director

Paul H. Greenway, P.E., Acting Director of Public Works
Marvin A. Rose, P.E., Interim Assistant Director of Public Works
Arturo A. Adlawan, P.E., Senior Civil Engineer
Jonathan L. Pascua, P.E., Project Engineer
Barney B. Guzman, Project Manager

NOTICE TO BIDDERS AND SPECIAL PROVISIONS

BLACKIE ROAD SAFETY IMPROVEMENTS PROJECT NO. 13-140665 & 13-142265

State Project No: EA 05-930075L & EA 05-930155L Federal Aid Project No: HRRRL-5944(086) & HRRRL-5944(091)

IN

MONTEREY COUNTY

FOR USE IN CONNECTION WITH STANDARD SPECIFICATIONS, DATED MAY 2006, THE STANDARD PLANS, DATED MAY 2006, INCLUDING ISSUED AMENDMENTS THROUGH NOVEMBER 30, 2010; THE CURRENT LABOR SURCHARGE EQUIPMENT RENTAL RATES, OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, BUSINESS AND TRANSPORTATION AGENCY; THE CURRENT GENERAL PREVAILING WAGE DETERMINED BY THE DIRECTOR OF INDUSTRIAL RELATIONS IS ON FILE WITH THE DEPARTMENT OF PUBLIC WORKS.

168 W. Alisal Street 2nd Floor Salinas, CA 93901-2438 (831) 755-4800

TABLE OF CONTENTS

COVER SHEET	1
TITLE SHEET	2
TABLE OF CONTENTS	3
SIGNATURE SHEET	6
NOTICE TO BIDDERS	8
SECTION 1 – DEFINITION AND TERMS	10
1-1.01 SPECIFICATIONS AND PLANS:	
1-1.02 INTERPRETATION OF STANDARD SPECIFICATIONS:	
1-1.03 DEFINITIONS:	10
SECTION 2 - BIDDING	5 · · · · · · · · · · · · · · · · · · ·
2-1.01 GENERAL:	11
2-1.015 FEDERAL LOBBYING RESTRICTIONS:	
2-1.02 DISADVANTAGED BUSINESS ENTERPRISE (DBE):	
2-1.03 SUBCONTRACTORS LIST:	
2-1.04 JOB SITE AND DOCUMENT EXAMINATION:	
SECTION 3. CONTRACT AWARD AND EXECUTION	16
3-1.01 GENERAL:	16
3-1.02 CONTRACT BONDS (PUB. CONT. CODE 10221 AND 10222):	17
SECTION 4 - PROSECUTION AND PROGRESS	17
4-1 BEGINNING OF WORK, TIME OF COMPLETION, AND LIQUIDATED DAMAGES:	The second secon
4-2 PRE-CONSTRUCTION CONFERENCE:	18
4-3 ARCHAEOLOGICAL DISCOVERIES:	
SECTION 5 - GENERAL	18
SECTION 5-1 - MISCELLANEOUS	: 10
5-1.01 LABOR NON DISCRIMINATION:	
5-1.02 LABOR CODE REQUIREMENT: 5-1.03 GENERAL PREVAILING WAGE RATES:	
5-1.04 WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE:	
5-1.05 PUBLIC SAFETY:	
5-1.06 BUY AMERICA REQUIREMENTS:	
5-1.07 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCE:	
5-1.08 SUBCONTRACTOR AND DBE RECORDS:	
5-1.09 DBE CERTIFICATION STATUS:	
5-1.10 PERFORMANCE OF SUBCONTRACTORS:	26
5-1.11 CONTRACTOR'S LICENSING LAWS:	26
5-1.12 SUBCONTRACTING:	
5-1.13 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS:	
5-1.14 PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS:	
5-1.15 PAYMENTS:	
5-1.16 ARBITRATION:	
5-1.17 PARTNERING: 5-1.18 ENCROACHMENT PERMIT:	
5-1.18 ENCROACHMENT PERMIT: 5-1.19 INDEMNIFICATION AND INSURANCE:	31

5-1.20 AREAS FOR CONTRACTOR'S USE:	32
5_1_21_PAVROLI_RECORDS:	33
5 1 22 SURFACE MINING AND RECLAMATION ACT:	33
5-1 23 PAYMENT ADILISTMENTS FOR PRICE INDEX FLUCTUATIONS:	33
5-1.24 RELATIONS WITH CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD:	38
SECTION 6 - (BLANK)	38
SECTION 7 - (BLANK)	38
SECTION 8 - MATERIALS	38
SECTION 8-1 - MISCELLANEOUS	
8-1.01 GENERAL:	38
0.1.00 DELATIVE COMPACTION:	38
8-1.02 RELATIVE COMPACTION:	39
SECTION 8-2 - CONCRETE	46
8-2.01 PORTLAND CEMENT CONCRETE:	
SECTION 9 - DESCRIPTION OF WORK	
9-1.01 INCREASED AND DECREASED QUANTITIES:	46
SECTION 10 - CONSTRUCTION DETAILS	46
SECTION 10-1 - GENERAL	
10-1.01 ORDER OF WORK:	46
10-1 02 COOPER ATION:	47
10-1 03 PROJECT APPEARANCE:	48
10-1 04 WATER POLITION CONTROL:	48
10-1 05 CONSTRUCTION SITE MANAGEMENT:	65
10-1 06 STREET SWEEPING:	78
10-1 07 TEMPOR ARY DRAINAGE INLET PROTECTION:	79
10-1 08 TEMPORARY FENCE (TYPE ESA):	91
10-1 09 PROGRESS SCHEDULE:	94
10-1 10 ORSTRUCTIONS:	94
10-1 11 CONSTRUCTION AREA TRAFFIC CONTROL DEVICES:	95
10-1 12 CONSTRUCTION AREA SIGNS:	97
10.1.12 MAINTAINING TRAFFIC:	98
10-1 14 CLOSURE REQUIREMENTS AND CONDITIONS:	100
10-1 15 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE:	101
10-1 16 TEMPOR ARY PAVEMENT DELINEATION:	103
10-1 17 PORTABLE CHANGEABLE MESSAGE SIGN:	106
10-1 18 TEMPOR ARY CRASH CUSHION MODULE:	106
10-1 19 FXISTING HIGHWAY FACILITIES:	108
10.1.20 DELOCATE MAIL BOX:	109
10-1 21 REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE:	110
10-1,22 HOT MIX ASPHALT:	112
10-1 23 SLIRRY SEAL:	114
10-1 24 AGGREGATE BASE:	115
10-1 25 CL FARING AND GRUBBING:	115
10-1 26 FROSION CONTROL (HYDROSEED):	115
10-1 27 ROCK SLOPE PROTECTION:	120
10-1 28 PLANT FSTABLISHMENT WORK:	120
10-1 29 ROADSIDE SIGNS:	121
10-1 30 FURNISH SIGN:	122
10_1 31 PLASTIC PIPE (HDPE):	124
10-1.32 PLASTIC FLARED END SECTION:	125

10-1.33 DRAINAGE INLET WITH GRATE:	126
10-1.34 THERMOPLASTIC TRAFFIC STRIPE AND PAVEMENT MARKING:	126
10-1.35 PAVEMENT MARKERS:	126
10-1.36 RUMBLE STRIP:	127
10-1.37 RECONSTRUCT FENCE (TYPE BW):	128
SECTION 11 – ENVIRONMENTAL STEWARDSHIP	128
11-1.01 GENERAL:	128
11-1.02 NOISE AND VIBRATION:	128
11-1.03 AIR QUALITY:	129
11-1.04 ENVIRONMENTAL MITIGATION MEASURES:	129
11-1.05 TREES AND VEGETATION PROTECTION:	
SECTION 12 (BLANK)	135
SECTION 13 (BLANK)	135
SECTION 14 FEDERAL REQUIREMENTS FOR FEDERAL AID CONSTRUCTION PROJECTS	136
SECTION 15 – SAMPLE CONTRACT	152
SAMPLE CONTRACT	152
PAYMENT BOND	157
PERFORMANCE BOND	159

SIGNATURE SHEET

BOOK ONE

NOTICE TO BIDDERS AND SPECIAL PROVISIONS

BLACKIE ROAD SAFETY IMPROVEMENT PROJECT NO. 13-140665 PROJECT NO. 13-142265

> State Project No: EA 05-930075L State Project No: EA 05-930155L

Federal Aid Project No: HRRRL-5944(086) Federal Aid Project No: HRRRL-5944(091)

The Special Provisions contained herein have been prepared by or under the direction of the following registered person.

Jonathan L. Pascua

Date

STANDARD PLANS LIST

The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. The Standard Plans of May 2006, which apply to this contract, are included as attachments to these Special Provisions.

GENERAL ROAD WORK

MISCELLAN	EOUS
A10A	Acronyms and Abbreviations
A10B	Acronyms and Abbreviations
A10C	Symbols
A20A	Pavement Markers and Traffic Lines - Typical Details
A20B	Pavement Markers and Traffic Lines - Typical Details
A20C	Pavement Markers and Traffic Lines - Typical Details
A20D	Pavement Markers and Traffic Lines - Typical Details
A24A	Pavement Markings – Arrows
A24B	Pavement Markings – Arrows
A24C	Pavement Markings - Symbols and Numerals
A24D	Pavement Markings – Words
A24E	Pavement Markings - Words and Crosswalks
A73B	Markers
A74	Survey Monuments
A87A	Curbs and Driveways
A87B	Asphalt Concrete Dike

TEMPORARY FACILITIES

Curb Ramp Details

T11	Traffic Control System for Lane Closure On Multilane Conventional Highways
T12	Traffic Control System for Lane Closure On Multilane Conventional Highways
T13	Traffic Control System for Lane Closure On Two Lane Conventional Highways
T17	Traffic Control System for Moving Lane Closure On Two Lane Highways

A88A

ROADSI	DE SIGNS
RS1	Roadside Signs - Typical Installation Details No. 1
RS2	Roadside Signs - Wood Post, Typical Installation Details No. 2

COUNTY OF MONTEREY DEPARTMENT OF PUBLIC WORKS

NOTICE TO BIDDERS

Sealed bids will be received at the OFFICE OF THE COUNTY CLERK OF THE COUNTY OF MONTEREY, 168 W. ALISAL STREET 1ST FLOOR, SALINAS, CALIFORNIA 93901 (MAILING ADDRESS: P O Box 1728, SALINAS CA 93902-1728), until 2:00 p.m., on July 17, 2012, for the

BLACKIE ROAD SAFETY IMPROVEMENTS PROJECT NO. 13-140665 & 13-142265

State Project No: EA 05-930075L & EA 05-930155L Federal Aid Project No: HRRRL-5944(086) & HRRRL-5944(091)

as shown on the plans, at which time they will be publicly opened and read in the Board of Supervisors' Conference Room 1032.

The County of Monterey affirms that in any contract entered into pursuant to this advertisement, disadvantaged business enterprise will be afforded full opportunity to submit bids in response to this invitation.

The UDBE Contract Goal is 5.4 percent.

The work to be done consists, in general, of roadway widening including but not limited to existing pavement reconstruction with hot mix asphalt, shoulder construction, pavement delineation, clearing and grubbing, ditch and storm drain construction, and traffic control. The Engineers Estimate for the construction cost is \$1,272,350.

The Additive Alternate for the project consists of, but not limited to, roadway widening including but not limited to existing pavement reconstruction with hot mix asphalt, shoulder construction, pavement delineation, clearing and grubbing, ditch construction, and traffic control. The Engineer's Estimate for the Additive Alternate is \$158,859.

The Bidder shall possess either a valid Class A license or a combination of Class C-8, C-12, C-31, C-32 and C-45, licenses at the time this contract is awarded.

A bidder's bond, issued by an admitted corporate surety company in an amount equal to at least ten percent of the amount bid, must accompany the bid.

The successful bidder shall furnish a payment bond and a performance bond each in the amount of 100 percent of the Contract.

The Contract Documents are available ELECTRONICALLY and can be downloaded for free at the following Monterey County website: http://www.co.monterey.ca.us/publicworks/bids.htm. Plan holders must register before they can view or download the documents. A copy of the electronic files on compact-disc (CD) is also available at Monterey County Department of Public Works, 168 W. ALISAL STREET, 2ND FLOOR, SALINAS, CALIFORNIA 93901 for a nonrefundable fee of \$5.00. The electronic files can be used to print the project plans (full or half size), project specifications, and

other such documents at various printing companies.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county, or counties, in which the work is to be done have been determined by the Director of the California Department of Industrial Relations and are available at the Department of Public Works, 168 W. Alisal Street, 2nd Floor, Salinas, CA 93901, and available from the California Department of Industrial Relations' Internet web site at http://www.dir.ca.gov/DLSR/PWD.

Pursuant to Public Contract Code section 22300, the Contractor may substitute securities for any moneys withheld by the County to ensure performance under the contract.

Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should call the U.S. Department of Transportation (1-800-424-9071) "hotline," between 8:00am and 5:00pm, and report these activities.

The County reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding.

Date: June 19, 2012 PAUL H. GREENWAY, P.E.

ACTING DIRECTOR OF PUBLIC WORKS

COUNTY OF MONTEREY

RESOURCE MANAGEMENT AGENCY DEPARTMENT OF PUBLIC WORKS COUNTY OF MONTEREY STATE OF CALIFORNIA

SPECIAL PROVISIONS

BLACKIE ROAD SAFETY IMPROVEMENTS PROJECT NO. 13-140665 & 13-142265

State Project No: EA 05-930075L & EA 05-930155L Federal Aid Project No: HRRRL-5944(086) & HRRRL-5944(091)

SECTION 1 – DEFINITION AND TERMS

1-1.01 SPECIFICATIONS AND PLANS:

The work embraced herein shall be done in accordance with the Standard Specifications and Standard Plans, dated May 2006, of the State of California, Department of Transportation, as amended, insofar as the same may apply and in accordance with the following Special Provisions:

In case of conflict between the Standard Specifications and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions. The listing of certain salient sections from the Standard Specifications and these Special Provisions shall not in any way relieve the Contractor of complying with each and every section of the Standard Specifications.

Amendments to the Standard Specifications set forth in these special provisions shall be considered as part of the Standard Specifications for the purposes set forth in Section 5-1.04, "Contract Components" of the Standard Specifications. Whenever either the term "Standard Specifications is amended" or the term "Standard Specifications are amended" is used in the special provisions, the indented text or table following the term shall be considered an amendment to the Standard Specifications. In case of conflict between such amendments and the Standard Specifications, the amendments shall take precedence over and be used in lieu of the conflicting portions.

1-1.02 INTERPRETATION OF STANDARD SPECIFICATIONS:

For the purpose of this Contract, certain terms or pronouns in place of them used throughout the Standard Specifications, shall be interpreted as follows: Attention is directed to Section 1, "Definition and Terms," of the Standard Specifications and these Special Provisions:

1-1.03 DEFINITIONS:

The following terms defined in Section 1, "Definitions and Terms," of the Standard Specifications shall be interpreted to have the following meaning and intent:

State: County of Monterey

Department: The Monterey County Department of Public Works

Director: Chair of the Board of Supervisors

Engineer:

Director of Public Works of Monterey County, acting either directly

or through properly authorized agents, such agents acting within the

scope of the particular duties entrusted to them.

Laboratory:

Any established laboratory designated by the Engineer to test

materials and work involved in the Contract.

Attorney General:

County Counsel of Monterey County

1-1.04 DEFINITIONS IN SPECIAL PROVISIONS:

Whenever in the Special Provisions and other contract documents, the following terms, or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

Clerk of the Board:

The Clerk of the Monterey County Board of Supervisors

Director of Public Works:

The Director of Public Works of Monterey County.

SECTION 2 - BIDDING

2-1.01 GENERAL:

The bidder's attention is directed to the provisions in Section 2, "Bidding," of the Standard Specifications and these Special Provisions for the requirements and conditions which he must observe in the preparation and the submission of the bid.

The Bidder's Bond form mentioned in the last paragraph in Section 2-1.13, "Bidder's Security," of the Standard Specifications will be found in the Bid Form, Book Two. Bidder's security in the form of cashier's check or certified check shall be made payable to the County of Monterey.

In conformance with Public Contract Code Section 7106, a Non-collusion Affidavit is included in the Bid Form, Book Two. Signing the Bid shall also constitute signature of the Non-collusion Affidavit.

The contractor, sub recipient 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 Title 49 CFR (Code of Federal Regulations) part 26 in the award and administration of US 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 recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

Failure of the bidder to fulfill the requirements of the Special Provisions for submittals required to be furnished after bid opening, including but not limited to escrowed bid documents, where applicable, may subject the bidder to a determination of the bidder's responsibility in the event it is the apparent low bidder on a future public works contracts.

This Contract will require a Class "A" contractor's license or a combination of Class C-8, C-12, C-31,C-32 and C-45.

2-1.015 FEDERAL LOBBYING RESTRICTIONS:

Section 1352, Title 31, United States Code prohibits Federal funds from being expended by the recipient or any lower tier sub recipient of a Federal-aid contract to pay for any person for influencing or attempting to influence a Federal agency or Congress in connection with the awarding of any Federal-aid contract, the making of any Federal grant or loan, or the entering into of any cooperative agreement.

If any funds other than Federal funds have been paid for the same purposes in connection with this Federal-aid contract, the recipient shall submit an executed certification and, if required, submit a completed disclosure form as part of the bid documents.

A certification for Federal-aid contracts regarding payment of funds to lobby Congress or a Federal agency is included in the Bid book. Standard Form - LLL, "Disclosure of Lobbying Activities," with instructions for completion of the Standard Form is also included in the Bid book. Signing the Bid book shall constitute signature of the Certification.

The above referenced certification and disclosure of lobbying activities shall be included in each subcontract and any lower-tier contracts exceeding \$100,000. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Engineer.

The Contractor, subcontractors and any lower-tier contractors shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by the Contractor, subcontractors and any lower-tier contractors. An event that materially affects the accuracy of the information reported includes:

- (1) A cumulative increase if \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- (2) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or
- (3) A change in the officer(s), employees(s), or Member(s) contacted to influence or attempt to influence a covered Federal Action.

2-1.02 DISADVANTAGED BUSINESS ENTERPRISE (DBE):

This project is subject to Title 49 CFR 26.13(b):

The contractor, sub recipient 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 recipient deems appropriate.

Take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26).

To ensure there is equal participation of the DBE groups specified in 49 CFR 26.5, the Agency specifies a goal for Underutilized Disadvantaged Business Enterprises (UDBEs). UDBE is a

firm that meets the definition of DBE and is a member of one of the following groups:

- 1. Black Americans
- 2. Native Americans
- 3. Asian-Pacific Americans
- 4. Women

References to DBEs include UDBEs, but references to UDBEs do not include all DBEs.

Make work available to UDBEs and select work parts consistent with available UDBE subcontractors and suppliers.

Meet the UDBE goal shown in the Notice to Bidders or demonstrate that you made adequate good faith efforts to meet this goal.

It is your responsibility to verify that the UDBE firm is certified as DBE at date of bid opening. For a list of DBEs certified by the California Unified Certification Program, go to:

http://www.dot.ca.gov/hq/bep/find certified.htm

Only UDBE participation will count towards the UDBE goal. DBE participation will count towards the Agency's Annual Anticipated DBE Participation Level and the California statewide goal.

Credit for materials or supplies you purchase from UDBEs counts towards the goal in the following manner:

- 1. 100 percent counts if the materials or supplies are obtained from a UDBE manufacturer.
- 2. 60 percent counts if the materials or supplies are obtained from a UDBE regular dealer.
- 3. Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a UDBE that is neither a manufacturer or regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

You receive credit towards the goal if you employ a UDBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55.

UDBE COMMITMENT SUBMITTAL

The UDBE Goal for this contract is <u>5.4 percent</u>.

Submit UDBE information on the "Local Agency Bidder-UDBE Commitment (Construction Contracts)," Exhibit 15-G(1), form included in the Bid book. If the form is not submitted with the bid, remove the form from the Bid book before submitting your bid.

If the UDBE Commitment form is not submitted with the bid, the apparent low bidder, the 2nd low bidder, and the 3rd low bidder must complete and submit the UDBE Commitment form to the Agency. UDBE Commitment form must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

Other bidders do not need to submit the UDBE Commitment form unless the Agency requests it. If the Agency requests you to submit a UDBE Commitment form, submit the completed form within 4 days of the request.

Submit written confirmation from each UDBE stating that it is participating in the contract. Include confirmation with the UDBE Commitment form. A copy of a UDBE's quote will serve as written confirmation that the UDBE is participating in the contract.

If you do not submit the UDBE Commitment form within the specified time, the Agency finds your bid nonresponsive.

GOOD FAITH EFFORTS SUBMITTAL

If you have not met the UDBE goal, complete and submit the "UDBE Information - Good Faith Efforts," Exhibit 15-H, form with the bid showing that you made adequate good faith efforts to meet the goal. Only good faith efforts directed towards obtaining participation by UDBEs will be considered. If good faith efforts documentation is not submitted with the bid, it must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

If your UDBE Commitment form shows that you have met the UDBE goal or if you are required to submit the UDBE Commitment form, you must also submit good faith efforts documentation within the specified time to protect your eligibility for award of the contract in the event the Agency finds that the UDBE goal has not been met.

Good faith efforts documentation must include the following information and supporting documents, as necessary:

- 1. Items of work you have made available to UDBE firms. Identify those items of work you might otherwise perform with its own forces and those items that have been broken down into economically feasible units to facilitate UDBE participation. For each item listed, show the dollar value and percentage of the total contract. It is your responsibility to demonstrate that sufficient work to meet the goal was made available to UDBE firms.
- 2. Names of certified UDBEs and dates on which they were solicited to bid on the project. Include the items of work offered. Describe the methods used for following up initial solicitations to determine with certainty if the UDBEs were interested, and the dates of the follow-up. Attach supporting documents such as copies of letters, memos, facsimiles sent, telephone logs, telephone billing statements, and other evidence of solicitation. You are reminded to solicit certified UDBEs through all reasonable and available means and provide sufficient time to allow UDBEs to respond.
- 3. Name of selected firm and its status as a UDBE for each item of work made available. Include name, address, and telephone number of each UDBE that provided a quote and their price quote. If the firm selected for the item is not a UDBE, provide the reasons for the selection.
- 4. Name and date of each publication in which you requested UDBE participation for the project. Attach copies of the published advertisements.

- 5. Names of agencies and dates on which they were contacted to provide assistance in contacting, recruiting, and using UDBE firms. If the agencies were contacted in writing, provide copies of supporting documents.
- 6. List of efforts made to provide interested UDBEs with adequate information about the plans, specifications, and requirements of the contract to assist them in responding to a solicitation. If you have provided information, identify the name of the UDBE assisted, the nature of the information provided, and date of contact. Provide copies of supporting documents, as appropriate.
- 7. List of efforts made to assist interested UDBEs in obtaining bonding, lines of credit, insurance, necessary equipment, supplies, and materials, excluding supplies and equipment that the UDBE subcontractor purchases or leases from the prime contractor or its affiliate. If such assistance is provided by you, identify the name of the UDBE assisted, nature of the assistance offered, and date. Provide copies of supporting documents, as appropriate.
- 8. Any additional data to support demonstration of good faith efforts.

The Agency may consider the UDBE commitments of the 2nd and 3rd bidders when determining whether the low bidder made good faith efforts to meet the UDBE goal.

2-1.03 SUBCONTRACTORS LIST:

On the Subcontractor List, list each subcontractor to perform work in an amount in excess of one-half of one percent of the total bid or \$10,000, whichever is greater, in accordance with Section 4100 of the Public Contract Code.

The Subcontractor List must show the name, address, and work portions to be performed by each subcontractor listed. Show work portions by bid item number, description, and percentage of each bid item subcontracted. The Subcontractor List is included in the Bid book.

2-1.04 JOB SITE AND DOCUMENT EXAMINATION:

The bidder shall examine carefully the site of the work contemplated, the plans and specifications, and the proposal and contract forms therefor. The submission of a bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the general and local conditions to be encountered, as to the character, quality and scope of work to be performed, the quantities of materials to be furnished and as to the requirements of the proposal, plans, specifications and the contract.

The submission of a bid shall also be conclusive evidence that the bidder is satisfied as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information was reasonably ascertainable from an inspection of the site as well as from the plans and specifications made a part of the contract.

All bidder inquiries about the meaning or intent of the Contract Documents submitted to the Engineer shall be in writing. Replies to the inquiries will be in the form of addenda and will be mailed, faxed, or delivered to all parties recorded by the Engineer as having received the bidding documents. Issued addenda shall be considered as part of the Contract Documents. Bidder inquiries received less than ten (10) days prior to the date of bid opening will not be answered. Oral and other interpretations or clarifications will be without legal effect.

The County assumes no responsibility for conclusions or interpretations made by a bidder or

contractor based on the information or data made available by the County. The County does not assume responsibility for representation made by its officers or agents before the execution of the contract concerning surface or subsurface conditions, unless that representation is expressly stated in the contract.

No conclusions or interpretations made by a bidder or contractor from the information and data made available by the County will relieve a bidder or contractor from properly fulfilling the terms of the contract.

SECTION 3. CONTRACT AWARD AND EXECUTION

3-1.01 GENERAL:

The bidder's attention is directed to the provisions in Section 3, "Contract Award and Execution," of the Standard Specifications and these special provisions for the requirements and conditions concerning award and execution of contract.

Bidders who wish to lodge a protest as to the award of the bid must do so before 5 p.m. of the 5th business day following the notice of intent to award the contract. Failure to timely file a written protest shall constitute a waiver of right to protest. Untimely protests will not be accepted or considered. Bid protests must be submitted, in writing, to: Monterey County Department of Public Works to the attention of the Project Manager/168 W Alisal Street FL2/Salinas CA 93901-2438. Protests may be hand-delivered or sent via facsimile [(831)755-4958], certified postal mail, or E-mail to the attention of the project manager [The Project Manager's E-mail address may be obtained by calling (831) 755-4800]. Bid protests must include the project name and project number, a complete statement describing the basis for the bid protest, including a detailed statement of all legal and factual grounds for the protest, any documentation supporting the protestor's grounds for the protest, and the form of relief requested and the legal basis for such relief. The party lodging the protest must also include their contact information including mailing address, telephone number, and E-mail address.

If a valid protest is timely filed, the Department shall investigate the bid protest. The protested bidder shall have three (3) business days to respond to any Department of Public Works requests to provide additional information. The Department shall respond to the protesting party, stating its finding. The Department Director shall make a recommendation to the Board regarding the bid protest.

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose bid complies with all the requirements prescribed.

In determining the lowest "responsible" Bidder, consideration shall be given to the general competency of Bidder in regards to the work covered by the bid.

The contract shall be executed by the successful bidder and shall be returned, together with the contract bonds and insurance certificates, to the Monterey County Public Works
Department so that it is received within 10 days, not including Saturdays, Sundays and legal holidays, after the bidder has received the contract for execution. Failure to do so shall be just cause for forfeiture of the bid guaranty. The executed contract documents shall be delivered to the following address: Monterey County Department of Public Works, 168 W. Alisal St,

2ND FL, SALINAS, CA, 93901-2438.

A "Local Agency Bidder-DBE Information (Construction Contracts), Exhibit 15-G(2)" form is included in Section 15 of these special provision to be executed by the successful bidder. The purpose of the form is to collect data required under 49 CFR 26. Even if no DBE participation will be reported, the successful bidder must execute and return the form.

The successful bidder's "Local Agency Bidder- Information (Construction Contracts), Exhibit 15-G(2)" form should include the names, addresses and phone numbers of DBE firms that will participate, with a complete description of work or supplies to be provided by each, and the dollar value of each DBE transaction. When 100 percent of a contract item of work is not to be performed or furnished by a DBE, a description of the exact portion of that work to be performed or furnished by that DBE should be included in the DBE information, including the planned location of that work. A successful bidder certified as a DBE should describe the work it has committed to performing with its own forces as well as any other work that it has committed to be performed by DBE subcontractors, suppliers and trucking companies.

The successful bidder is encouraged to provide written confirmation from each DBE that the DBE is participating in the contract. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract. If a DBE is participating as a joint venture partner, the successful bidder is encouraged to submit a copy of the joint venture agreement.

The "Local Agency Bidder-DBE Information (Construction Contracts), Exhibit 15-G(2)" form shall be completed and returned to the Agency by the successful bidder with the executed contract and contract bonds.

3-1.02 CONTRACT BONDS (PUB. CONT. CODE 10221 AND 10222):

In lieu of the second paragraph in Section 3.103 of the Standard Specifications, the following shall be inserted:

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.

The two bonds shall be written by an admitted corporate surety.

SECTION 4 - PROSECUTION AND PROGRESS

4-1 BEGINNING OF WORK, TIME OF COMPLETION, AND LIQUIDATED DAMAGES:

Attention is directed to the provisions in Section 8-1.03, "Beginning of Work;" in Section 8-1.06 "Time of Completion;" and in Section 8-1.07, "Liquidated Damages;" of the Standard Specifications.

The Contractor shall begin work within 15 calendar days of the issuance of the Notice to Proceed by the County of Monterey. This work shall be diligently prosecuted to completion before the expiration of 90 WORKING DAYS.

The Contractor shall pay to the County of Monterey the sum of \$3,000 per day, for each and every calendar day's delay in finishing the work in excess of the number of working days prescribed above.

4-2 PRE-CONSTRUCTION CONFERENCE:

After the issuance of the Notice to Proceed, a pre-construction conference shall be held at the office of the Monterey County Department of Public Works, 855 E. Laurel Drive, Building D, Salinas, CA, for the purpose of discussing with the Contractor the scope of work, contract drawings, Specifications, existing conditions, materials to be ordered, equipment to be used, and all essential matters pertaining to the prosecution of and the satisfactory completion of the project as required. The Contractor's representatives at this conference shall include all major superintendents for the work and may include major subcontractors.

4-3 ARCHAEOLOGICAL DISCOVERIES:

All articles of archaeological interest that may be uncovered by the Contractor during the progress of the work shall be reported immediately to the Engineer. The further operations of the Contractor with respect to the find shall be decided under the direction of the Engineer.

SECTION 5 - GENERAL

SECTION 5-1 - MISCELLANEOUS

5-1.01 LABOR NON DISCRIMINATION:

Attention is directed to the following Notice that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations.

NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM (GOV. CODE, SECTION 12990)

Your attention is called to the "Nondiscrimination Clause", set forth in Section 7-1.01A(4), "Labor Nondiscrimination," of the Standard Specifications, which is applicable to all nonexempt state contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The Specifications are applicable to all nonexempt state construction contracts and subcontracts of \$5,000 or more.

5-1.02 LABOR CODE REQUIREMENT:

Attention is directed to Section 7-1.01A(1), "Hours of Labor," of the Standard Specifications.

5-1.03 GENERAL PREVAILING WAGE RATES:

Attention is directed to Section 7-1.01A(2), "Prevailing Wage," of the Standard Specifications.

The general prevailing wage rates determined by the Director of Industrial Relations, for the county or counties in which the work is to be done, are available on the Internet at: http://www.dir.ca.gov/dlsr/pwd/. These wage rates are not included in the Bid book for the project. Changes, if any, to the general prevailing wage rates will be available at the same location.

The general prevailing rates of per diem, holiday, and overtime wages for each craft, classification, or type of worker needed to execute the contract are determined in accordance with Section 1770, et. seq., of the Labor Code; and the contractor shall comply with all applicable sections thereof.

The general prevailing rate of per diem wages and the general prevailing rate for holiday and

overtime work are on file in the office of the Monterey County Department of Public Works or on the Internet at: http://www.dir.ca.gov/dlsr/pwd/.

The Contractor shall post the prevailing wage rates at the job site.

5-1.04 WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE:

Attention is directed to Section 7-1.12B(3), "Workers' Compensation and Employer's Liability Insurance," of the Standard Specifications.

5-1.05 PUBLIC SAFETY:

The Contractor shall provide for the safety of traffic and the public in conformance with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications and these special provisions.

5-1.06 BUY AMERICA REQUIREMENTS:

Attention is directed to the "Buy America" requirements of the Surface Transportation Assistance Act of 1982 (Section 165) and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) Sections 1041(a) and 1048(a), and the regulations adopted pursuant thereto. In conformance with the law and regulations, all manufacturing processes for steel and iron materials furnished for incorporation into the work on this project shall occur in the United States; with the exception that pig iron and processed, pelletized and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for such steel and iron materials. The application of coatings, such as epoxy coating, galvanizing, painting, and other coating that protects or enhances the value of steel or iron materials shall be considered a manufacturing process subject to the "Buy America" requirements.

A Certificate of Compliance, conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications, shall be furnished for steel and iron materials. The certificates, in addition to certifying that the materials comply with the specifications, shall specifically certify that all manufacturing processes for the materials occurred in the United States, except for the above exceptions.

The requirements imposed by the law and regulations do not prevent a minimal use of foreign steel and iron materials if the total combined cost of the materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2,500, whichever is greater. The Contractor shall furnish the Engineer acceptable documentation of the quantity and value of the foreign steel and iron prior to incorporating the materials into the work.

5-1.07 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCE:

When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications and the Contractor encounters materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe. The Contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

In conformance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos

or hazardous substance will be performed by separate contract.

If delay of work in the area, due to the presence of asbestos or hazardous substances, delays the current controlling operation, the delay will be considered as right of way delay and the Contractor will be compensated for the delay in conformance with the provisions in Section 8-1.09, "Delays," of the Standard Specifications.

The Department reserves the right to use other forces for exploratory work to identify and determine the extent of such material and for removing hazardous material from such area.

5-1.08 SUBCONTRACTOR AND DBE RECORDS:

The Contractor shall maintain records showing the name and business address of each first-tier subcontractor. The records shall also show the name and business address of every DBE subcontractor, DBE vendor of materials and DBE trucking company, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all of these firms. DBE prime contractors shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.

Upon completion of the contract, a summary of these records shall be prepared on "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First Tier Subcontractors" Form CEM-2402(F) and certified correct by the Contractor or the Contractor's authorized representative, and shall be furnished to the Engineer. The form shall be furnished to the Engineer within 90 days from the date of contract acceptance. The amount of \$10,000 will be withheld from payment until a satisfactory form is submitted.

Prior to the fifteenth of each month, the Contractor shall submit documentation to the Engineer showing the amount paid to DBE trucking companies. The Contractor shall also obtain and submit documentation to the Engineer showing the amount paid by DBE trucking companies to all firms, including owner-operators, for the leasing of trucks. If the DBE leases trucks from a non-DBE, the Contactor may count only the fee or commission the DBE receives as a result of the lease arrangement.

The Contractor shall also obtain and submit documentation to the Engineer showing the truck number, owner's name, California Highway Patrol CA number, and if applicable, the DBE certification number of the owner of the truck for all trucks used during that month. This documentation shall be submitted on "Monthly DBE Trucking Verification" Form CEM-2404(F).

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

FINAL REPORT - UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE), FIRST-TIER SUBCONTRACTORS

CEM-2402F (REV 02/2008)

The form requires specific information regarding the construction project: Contract Number, County, Route, Post Miles, Federal Aid Project number, the Administering Agency, the Contract Completion Date and the Estimated Contract Amount. It requires the prime contractor name and business address. The focus of the form is to describe who did what by contract item numbers and descriptions, asking for specific dollar values of item work completed broken down by subcontractors who performed the work, both DBE and non-DBE work forces. DBE prime contractors are required to show the date of work performed by their own forces along with the corresponding dollar value of work.

The form has a column to enter the Contract Item No. (or Item No's) and description of work performed or materials provided, as well as a column for the subcontractor name and business address. For those firms who are DBE, there is a column to enter their DBE Certification Number. The DBE should provide their certification number to the contractor and notify the contractor in writing with the date of the decertification if their status should change during the course of the project.

The form has six columns for the dollar value to be entered for the item work performed by the subcontractor.

The Non-DBE column is used to enter the dollar value of work performed for firms who are not certified DBE.

The decision of which column to be used for entering the DBE dollar value is based on what program(s) status the firm is certified. This program status is determined by the California Unified Certification Program by ethnicity, gender, ownership and control issues at time of certification. To confirm the certification status and program status, access the Department of Transportation Civil Rights website at http://www.dot.ca.gov/hq/bep or by calling (916) 324-1700 or the toll free number at (888) 810-6346.

Based on this DBE Program status, the following table depicts which column to be used:

DBE Program Status	Column to be used
If program status shows DBE only with no other programs listed.	DBE
If program status shows DBE, Black American	BA UDBE
If program status shows DBE, Asian-Pacific Islander	APA UDBE
If program status shows DBE, Native American	NA UDBE
If program status shows DBE, Woman	W UDBE

If a contractor performing work as a DBE on the project becomes decertified and still performs work after their decertification date, enter the total value performed by this contractor under the appropriate DBE identification column.

If a contractor performing work as a non-DBE on the project becomes certified as a DBE, enter the dollar value of all work performed after certification as a DBE under the appropriate identification column.

Enter the total of each of the six columns on Form CEM-2402(F).

Any changes to DBE certification must also be submitted on Form CEM-2403(F).

Enter the Date Work Completed as well as the Date of Final Payment (the date when the prime contractor made the "final payment" to the subcontractor for the portion of work listed as being completed).

The contractor and the resident engineer sign and date the form indicating that the information provided is complete and correct.

PROOF COPY

RETURN TO HQ FORMS

OK	X			
		Date	 	

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

FINAL REPORT - UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE), FIRST-TIER SUBCONTRACTORS

CEM-2402F (REV 02/2008)

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.

ADA Notice

N DATE			DATE OF FINAL PAYMENT	·											siander 1
CONTRACT COMPLETION DATE	ACT AMOUNT													BA - Black American	APA - Asian-Pacific Islander NA - Native American
CONTRAC	ESTIMATED CONTRACT AMOUNT		DATE WORK COMPLETE		····								***	BA-B	N-AN
	ESTIM	7	W	€	↔	↔	↔	₩.	↔	↔	↔	ь	€9	€	
ING AGENCY			NA UDBE	€	↔	↔	↔	↔	ø	↔	↔	↔	€	₩	
ADMINISTER		YMENTS	APA UDBE												
JECT NUMBER	A construction of the cons	CONTRACT PAYMENTS	BA UDBE	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	₩	<u> </u>
FEDERAL AID PROJECT NUMBER ADMINISTERING AGENCY			DBE	↔	↔	↔	မှ	↔	↔	↔	↔	↔	↔	€	
FED)BE	↔	↔	↔	↔	↔	↔	₩	↔	↔	↔	↔	
ွှ	ADDRESS		NON-DBE	↔	↔	€9	₩	↔	↔	₩.	φ.	↔	₩.	€	
POST MILES	BUSINESS ADDRESS	JBF.	CERT. NUMBER											TOTAL	
ROUTE			NAME S ADDRESS												
COUNTY			COMPANY NAME AND BUSINESS ADDRESS												1
CONTRACT NUMBER	PRIME CONTRACTOR	DESCRIPTION OF	WORK PERFORMED AND MATERIALS PROVIDED											ORIGINAL COMMITMENT	UDBE
CONTRA	PRIME C		NO.											ORIGINAL	A

List all First Tier Subcontractors, Disadvantaged Business Enterprises (DBEs) and underutilized DBEs (UDBEs) regardless of tier, whether or not the firms were originally listed for goal credit. If actual UDBE utilization (or item of work) was different than that approved at time of award, provide comments on back of form. List actual amount paid to each entity. I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT

CONTRACTOR REPRESENTATIVE'S SIGNATURE			BUSINESS PHONE NUMBER	DATE
The interest of the contract o	TO THE BEST OF MY INFORMATION AND B	BELIEF, THE ABOVE INFORMATION IS COMPLETE AND CORRECT	LETE AND CORRECT	
RESIDENT ENGINEER'S SIGNATURE			BUSINESS PHONE NUMBER	DATE
COPY DISTRIBUTION - Caltrans contracts:	Original - District Construction	Copy - Business Enterprise Program	Copy - Contractor	Copy - Resident Engineer
COPY DISTRIBUTION - Local Agency contracts:	Original - District Local Assistance Engineer (submitted with the Report of Expenditures)	Copy - District Local Assistance Engineer	r Copy - Local Agency file	

5-1.09 DBE CERTIFICATION STATUS:

If a DBE subcontractor is decertified during the life of the project, the decertified subcontractor shall notify the Contractor in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the project, the subcontractor shall notify the Contractor in writing with the date of certification. The Contractor shall furnish the written documentation to the Engineer.

Upon completion of the contract, "Disadvantaged Business Enterprises (DBE) Certification Status Change" Form CEM-2403(F) indicating the DBEs' existing certification status shall be signed and certified correct by the Contractor. The certified form shall be furnished to the Engineer within 90 days from the date of contract acceptance.

		i

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION STATUS CHANGE

CEM-2403(F) (REV 4/2005)

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.

CONTRACT NUMBER	SER COUNTY ROUTE	TE POST MILES		ADMINISTERING AGENCY		CONTRACT COMPLETION DATE	PLETION DATE
PRIME CONTRACTOR	TOR	_	BUSINESS ADDRESS		A S S S S S S S S S S S S S S S S S S S	ESTIMATED CONTRACT AMOUNT \$	TRACT AMOUNT
The Contractor: I accordance with t	The Contractor. List all DBE's with change in certification status (certified/decertified) while in your employ, whether or not firms were originally listed for goal credit. Attach DBE certification/decertification letter in accordance with the Special Provisions.	ation status (certified/ded	certified) while in your employ	, whether or not firms were oriq	ginally listed for goal	credit. Attach DBE certific	ation/decertification letter in
CONTRACT ITEM NO.	SUBCONTRA AND BUSINE	SUBCONTRACTOR NAME AND BUSINESS ADDRESS	BUSINESS PHONE	ONE CERTIFICATION NUMBER	N NUMBER	AMOUNT PAID WHILE CERTIFIED	CERTIFICATION/ DECERTIFICATION DATE Letter attached
COMMENTS:					•		
		I CERI	1	HE ABOVE INFORMATION IS COMPLETE AND CORRECT	RECT		
CONTRACTOR RE	CONTRACTOR REPRESENTATIVE'S SIGNATURE		TITLE		BUSINESS PHONE NUMBER		DATE
		TO THE BEST O	F MY KNOWLEDGE, THE ABOV	TO THE BEST OF MY KNOWLEDGE, THE ABOVE INFORMATION IS COMPLETE AND CORRECT	AND CORRECT		
RESIDENT ENGIN	RESIDENT ENGINEERING'S SIGNATURE				BUSINESS PHONE NUMBER		DATE
COPY DISTRIBUTION:	Oniginal - Civil Bights	Conv. Contractor	or Goov - District Construction	ction Copy - Resident Engineer	noor		

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION STATUS CHANGE

CEM-2403(F) (REV 4/2005)

The top of the form requires specific information regarding the construction project: Contract Number, County, Route, Post Miles, the Administering Agency (Caltrans), the Contract Completion Date and the Estimated Contract Amount. It requires the prime contractor name and business address. The focus of the form is to substantiate and verify the actual DBE dollar amount paid to contractors on federally funded projects that had a change in certification status during the course of the completion of the contract. The two situations that are being address by CEM 2403(F) are if a firm certified as a DBE and doing construction work on the contract during the course of the project becomes decertified, and if a non-DBE firm doing work on the contract during the course of the project becomes certified as a DBE.

The form has a column to enter the Contract Item No. (or Item No's), as well as a column for the Subcontractor name and Business Address, Business Phone and contractor's Certification Number.

The column entitled Amount Paid While Certified will be used to enter the actual dollar value of the work performed by those contractors who meet the conditions as outlined above during the time period they are certified as a DBE. This column on the CEM-2403(F) should only reflect the dollar value of work performed while the firm was certified as a DBE.

The column called Certification/Decertification Date (Letter attached) will reflect either the date of the Decertification Letter sent out by the Civil Rights or the date of the Certification Certificate mailed out by the Civil Rights. There is a box to check that support documentation is attached to the CEM-2403(F) form.

There is a comments section for any additional information that may need to be provided regarding any of the above transactions.

The CEM-2403(F) has an area at the bottom where the contractor and the resident engineer sign and date that the information provided is complete and correct.

5-1.10 PERFORMANCE OF SUBCONTRACTORS:

The subcontractors listed by you in the Bid Book shall list therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of one-half of one percent of the total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The bidder's attention is invited to other provisions of the Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

UDBEs must perform work or supply materials as listed in the "Local Agency Bidder - UDBE Commitment" form specified under Section 2, "Bidding," of these special provisions. Do not terminate a UDBE listed subcontractor for convenience and perform the work with your own forces or obtain materials from other sources without prior written authorization from the Agency.

The Agency grants authorization to use other forces or sources of materials for requests that show any of the following justifications:

- 1. Listed UDBE fails or refuses to execute a written contract based on plans and specifications for the project.
- 2. You stipulate a bond is a condition of executing the subcontract and the listed UDBE fails to meet your bond requirements.
- 3. Work requires a contractors license and listed UDBE does not have a valid license under Contractors License Law.
- 4. Listed UDBE fails or refuses to perform the work or furnish the listed materials.
- 5. Listed UDBE's work is unsatisfactory and not in compliance with the contract.
- 6. Listed UDBE delays or disrupts the progress of the work.
- 7. Listed UDBE becomes bankrupt or insolvent.

If a listed UDBE subcontractor is terminated, you must make good faith efforts to find another UDBE subcontractor to substitute for the original UDBE. The substitute UDBE must perform at least the same amount of work as the original UDBE under the contract to the extent needed to meet the UDBE goal.

The substitute UDBE must be certified as a DBE at the time of request for substitution.

The Agency does not pay for work or material unless it is performed or supplied by the listed UDBE, unless the UDBE is terminated in accordance with this section.

5-1.11 CONTRACTOR'S LICENSING LAWS:

Attention is directed to Section 7-1.01C, "Contractor's Licensing Laws," of the Standard Specifications.

5-1.12 SUBCONTRACTING:

No subcontract releases the Contractor from the contract or relieves the Contractor of their responsibility for a subcontractor's work.

If the Contractor violates Pub Cont Code § 4100 et seq., the County of Monterey may exercise the remedies provided under Pub Cont Code § 4110. The County of Monterey may refer the violation to the Contractors State License Board as provided under Pub Cont Code § 4111.

The Contractor shall perform work equaling at least 30 percent of the value of the original total bid with the Contractor's own employees and equipment, owned or rented, with or without operators.

Each subcontract must comply with the contract.

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Bus & Prof Code, § 7000 et seq.).

Submit copies of subcontracts upon request by the Engineer.

Before subcontracted work starts, submit a Subcontracting Request form.

Do not use a debarred contractor; a current list of debarred contractors is available at the Department of Industrial Relations' Web site.

Upon request by the Engineer, immediately remove and not again use a subcontractor who fails to prosecute the work satisfactorily.

Each subcontract and any lower tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contracts" in Section 14 of these special provisions. Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the contract.

5-1.13 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS:

A prime contractor or subcontractor shall pay any subcontractor not later than 7 days of receipt of each progress payment in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The 7 days is applicable unless a longer period is agreed to in writing. Any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanction and other remedies of that section. 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 prime contractor, deficient subcontract performance, or noncompliance by a subcontractor. This provision applies to both DBE and non-DBE subcontractors.

5-1.14 PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS:

No retainage will be held by the agency from progress payments due the prime contractor. Any retainage kept by the prime contractor or by a subcontractor must be paid in full to the earning subcontractor in 30 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 of the California Business and Professions 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.

5-1.15 PAYMENTS:

Attention is directed to Section 9-1.07, "Progress Payments," and 9-1.08, "Payment After Contract Acceptance," of the Standard Specifications and these special provisions.

In lieu of Section 9-1.07C, "Materials On Hand," of the Standard Specifications, the following shall be inserted:

No progress payment will be made for any materials on hand which are furnished but not incorporated in the work.

5-1.16 ARBITRATION:

Section 9-1.10, "Arbitration," as defined in the Standard Specifications, is deleted from this contract. In lieu of arbitration, the following shall apply (from the Public Contract Code):

- A. Application of article; inclusion of article in plans and specifications (Public Contracts Codes 20104):
 - 1a. This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a Contractor and the County of Monterey.
 - 1b. This article shall not apply to any claims resulting from a contract between the Contractor and the County of Monterey when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, of the Public Contract Code).
 - 2a. "Public Works" has the same meaning as in Sections 3100 and 3106 of the Civil Code.
 - 2b. "Claim" means a separate demand by the Contractor for (A) a time extension, (B) payment of money or damages arising from work done by or on behalf of the Contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.
 - 3. The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work, which may give, rise to a claim under this article.
 - 4. This article applies only to contracts entered into on or after January 1, 1991.
- B. Claims; requirements (Public Contracts Codes 20104.2):

For any claim subject to this article, the following requirements apply:

- 1. The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.
- 2a. For Claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the local agency may have against the claimant.
- 2b. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.
- 2c. The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.
- 3a. For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the local agency may have against the claimant.
- 3b. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.
- 3c. The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.
- 4. If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet-and-confer for settlement of the issues in dispute. Upon a demand, the local agency shall schedule a meet-and-confer conference within 30 days for settlement of the dispute.

- 5. If following the meet-and-confer conference the claim or any portion remains in dispute, the claimant may file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference.
- C. Procedures for civil actions filed to resolve claims (Public Contracts Codes 20104.4): The following procedures are established for all civil actions filed to resolve claims subject to this article:
 - 1. Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.
 - 2a. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding bought under this subdivision consistent with the rules pertaining to judicial arbitration.
 - 2b. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.
- D. Payment by local agency of undisputed portion of claim; interest on arbitration award or judgment (Public Contracts Codes 2104.6):
 - 1. The County of Monterey shall not fail to pay money as to any portion of a claim that is undisputed except as otherwise provided in the contract.
 - 2. In any suit filed under Section 20104.4, Monterey County shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue the date the suit is filed in a court of law.

5-1.17 PARTNERING:

The County of Monterey will promote the formation of a "Partnering" relationship with the Contractor in order to effectively complete the contract to the benefit of both parties. The purpose of this relationship will be to maintain cooperative communication and mutually resolve conflicts at the

lowest possible management level.

The Contractor may request the formation of such a "Partnering" relationship by submitting a request in writing to the Engineer after approval of the contract. If the Contractor's request for "Partnering" is approved by the Engineer, scheduling of a "Partnering" workshop, selecting the "Partnering" facilitator and workshop site, and other administrative details shall be as agreed to by both parties.

The costs involved in providing a facilitator and a workshop site will be borne equally by the County of Monterey and the Contractor. The Contractor shall pay all compensation for the wages and expenses of the facilitator, and of the expenses for obtaining the workshop site. The County's share of such costs will be reimbursed to the Contractor in a change order written by the Engineer. Markups will not be added. All other costs associated with the "Partnering" relationship will be borne separately by the party incurring the costs.

The establishment of a "Partnering" relationship will not change or modify the terms and conditions of the contract and will not relieve either party of the legal requirements of the contract.

5-1.18 ENCROACHMENT PERMIT:

Prior to start of work within the State of California's right-of-way or work affecting the State of California facilities, the contractor will be required to obtain an Encroachment Permit at the following State of California Transportation office:

California Department of Transportation District 5, Permits Branch Permit Engineer 50 Higuera Street San Luis Obispo, CA 93401

Full compensation for doing all the work involved in obtaining Encroachment Permits from the California Department of Transportation as specified in the Standard Specifications, these special provisions, and as directed by the Engineer shall be considered as included in the contract price paid for the various items of work and no additional compensation will be allowed therefor.

5-1.19 INDEMNIFICATION AND INSURANCE:

Attention is directed to Section 7-1.12, "Indemnification and Insurance," of the Standard Specifications and these Special Provisions.

In addition to all the requirements in Section 7-1.12B (4)(b) of the Standard Specifications, the following additional requirements shall be met. An Additional Insured Endorsement to the Contractor's Liability insurance policy naming the County of Monterey, their officers, agents, and employees as additional insured's in the form approved by the County of Monterey shall also be furnished. A copy of the approved endorsement form may be obtained from the County of Monterey at the address to obtain bid packages as shown in the Notice to Bidders. The insurance afforded to the additional insured's is primary insurance and if the additional insured's have other insurance that might be applicable to any loss, the amount of this insurance shall not be reduced or prorated due to the existence of such other insurance.

The contractor's insurer agrees to waive subrogation claims against the County of Monterey, their officers, agents, and employees.

Evidence of insurance (Contractual Liability insurance and Additional Insured Endorsement) in compliance with the requirements herein shall be furnished to the County of Monterey by the Contractor with the Certificate of Insurance in the form as approved by the County of Monterey. A copy of the approved certificate form may be obtained from the County of Monterey at the address to obtain bid packages as shown in the Notice to Bidders. Certificates of insurance shall, without any qualification thereto, contain the following statement:

Should any of the described policies be canceled, modified, or reduced in limits before the expiration date thereof, the issuing company will mail 30 days' advance written notice to the named certificate holders.

The insurance shall be issued by a company or companies authorized to transact business in the State of California and shall have a rating of at least A- VII in accordance with the current Best's rating.

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor for liability in excess of such coverage, nor shall it preclude the State of California or County of Monterey from taking such other actions as is available to them under any other provision of this contract (except retainage of money due to the Contractor) or otherwise in law.

Nothing in the contract is intended to create the public or any member thereof a third party beneficiary hereunder, nor is any term and condition or other provision of the contract intended to establish a standard of care owed to the public or any member thereof.

Prior to the execution of this Agreement by the County, Contractor shall file certificates of insurance with the County Contracts/Purchasing Department and with the County Director of Public Works, showing that the Contractor has in effect the insurance required by this Agreement. The Contractor shall file a new or amended certificate of insurance promptly after any change is made in any insurance policy that would alter the information of the certificate then on file. Acceptance or approval of insurance shall in no way modify or change the indemnification clause in this Agreement, which shall continue in full force and effect.

5-1.20 AREAS FOR CONTRACTOR'S USE:

Attention is directed to the requirements specified in Section 7-1.19, "Rights in Land and Improvements," of the Standard Specifications and these Special Provisions.

The County right-of-way shall be used only for purposes that are necessary to perform the required work. The Contractor shall not occupy the right-of-way, or allow others to occupy the right-of-way, for purposes that are not necessary to perform the required work.

There are no County-owned parcels adjacent to the right-of-way for the exclusive use of the Contractor within the contract limits. The Contractor shall secure at his own expense any area required for plant sites, storage of equipment or materials, or for other purposes.

Use of the Contractor's work areas and other County-owned property shall be at the Contractor's

own risk, and the County shall not be held liable for any damage to or loss of materials or equipment located within such areas.

The Contractor shall obtain encroachment permits prior to occupying County-owned parcels outside the contract limits. The required encroachment permits may be obtained from the Monterey County Department of Public Works, 168 W Alisal Street 2ND floor, Salinas, Ca 93901-2438.

Residence trailers will not be allowed within the county right-of-way.

The Contractor shall remove all equipment, materials, and rubbish from the work areas and other County-owned property, which he occupies and shall leave the areas in a presentable condition, in accordance with the provisions in Section 4-1.02, "Final Cleaning Up," of the Standard Specifications.

The Contractor shall secure at his own expense any area required for plant sites, storage of equipment or materials, or for other purposes if sufficient area is not available to him within the contract limits.

5-1.21 PAYROLL RECORDS:

The Contractor's attention is directed to Section 7- 1.01A(3), "Payroll Records," of the Standard Specifications, and to the provisions of Labor Code, Section 1776 (Stats. 1978, Chapter 1249). The Contractor shall be responsible for the compliance with these provisions by his/her Subcontractors. The Contractor shall furnish the Engineer with certified payrolls and statement of benefits.

5-1.22 SURFACE MINING AND RECLAMATION ACT:

Attention is directed to the Surface Mining and Reclamation Act of 1975, commencing in Public Resources Code, Mining and Geology, Section 2710, which establishes regulations pertinent to surface mining operations.

Material from mining operations furnished for this project shall only come from permitted sites in compliance with the Surface Mining and Reclamation Act of 1975.

The requirements of this section shall apply to all materials furnished for the project, except for acquisition of materials in conformance with Section 4-1.05, "Use of Materials Found on the Work," of the Standard Specifications.

5-1.23 PAYMENT ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS:

GENERAL

Summary

This section applies to asphalt contained in materials for pavement structural sections and pavement surface treatments such as hot mix asphalt (HMA), tack coat, asphaltic emulsions, bituminous seals, asphalt binders, and modified asphalt binders placed in the work. This section does not apply if you opted out of payment adjustment for price index fluctuations at the time of bid.

The Engineer adjusts payment if the California Statewide Crude Oil Price Index for the month the material is placed is more than 5 percent higher or lower than the price index at the time of bid.

The California Statewide Crude Oil Price Index is determined each month on or about the 1st business day of the month by the Department using the average of the posted prices in effect for the previous month as posted by Chevron, ExxonMobil, and ConocoPhillips for the Buena Vista, Huntington Beach, and Midway Sunset fields.

If a company discontinues posting its prices for a field, the Department determines the index from the remaining posted prices. The Department may include additional fields to determine the index.

For the California Statewide Crude Oil Price Index, go to:

http://www.dot.ca.gov/hq/construc/crudeoilindex/

If the adjustment is a decrease in payment, the Department deducts the amount from the monthly progress payment.

The Department includes payment adjustments for price index fluctuations when making adjustments under Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications.

If you do not complete the work within the contract time, payment adjustments during the overrun period are determined using the California Statewide Crude Oil Price Index in effect for the month in which the overrun period began.

If the price index at the time of placement increases:

- 1. 50 percent or more over the price index at bid opening, notify the Engineer.
- 2. 100 percent or more over the price index at bid opening, do not furnish material containing asphalt until the Engineer authorizes you to proceed with that work. The Department may decrease Bid item quantities, eliminate Bid items, or terminate the contract.

Submittals

Before placing material containing asphalt, submit the current sales and use tax rate in effect in the tax jurisdiction where the material is to be placed.

Submit certified weight slips for HMA, tack coat, asphaltic emulsions, and modified asphalt binders, including those materials not paid for by weight, as specified in Section 9-1.01, "Measurement of Quantities," of the Standard Specifications. For slurry seals, submit certified weight slips separately for the asphaltic emulsion.

ASPHALT QUANTITIES

General

Interpret the term "ton" as "tonne" for projects using metric units.

Hot Mix Asphalt

The Engineer calculates the quantity of asphalt in HMA using the following formula:

 $Qh = HMATT \times [Xa / (100 + Xa)]$

where:

Qh = quantity in tons of asphalt used in HMA

HMATT = HMA total tons placed

Xa = theoretical asphalt content from job mix formula expressed as percentage of the weight of dry aggregate

Modified Asphalt Binder in Hot Mix Asphalt

The Engineer calculates the quantity of asphalt in modified asphalt binder using the following formula:

 $Qmh = MHMATT \times [(100 - Xam) / 100] \times [Xmab / (100 + Xmab)]$

where:

Qmh = quantity in tons of asphalt in modified asphalt binder used in HMA

MHMATT = modified asphalt binder HMA total tons placed

Xam = specified percentage of asphalt modifier

Xmab = theoretical modified asphalt binder content from the job mix formula expressed as

percentage of the weight of dry aggregate

Hot Mix Asphalt Containing Reclaimed Asphalt Pavement (RAP)

The Engineer calculates the quantity of asphalt in HMA containing RAP using the following formulas:

 $Qrap = HMATT \times [Xaa / (100 + Xaa)]$

where:

 $Xaa = Xta - [(100 - Xnew) \times (Xra / 100)]$

and

Qrap = quantity in tons of asphalt used in HMA containing RAP

HMATT = HMA total tons placed

Xaa = asphalt content of HMA adjusted to account for the asphalt content in RAP expressed

as percentage of the weight of dry aggregate

Xta = total asphalt content of HMA expressed as percentage of the weight of dry aggregate
Xnew = theoretical percentage of new aggregate in the HMA containing RAP determined from

RAP percentage in the job mix formula

Xra = asphalt content of RAP expressed as percentage

Tack Coat

The Engineer calculates the quantity of asphalt in tack coat (Qtc) as either:

- 1. Asphalt binder using the asphalt binder total tons placed as tack coat
- 2. Asphaltic emulsion by applying the formula in "Asphaltic Emulsion" to the asphaltic emulsion total tons placed as tack coat

Asphaltic Emulsion

The Engineer calculates the quantity of asphalt in asphaltic emulsions, including fog seals and tack coat, using the following formula:

 $Qe = AETT \times (Xe / 100)$

where:

Qe = quantity in tons of asphalt used in asphaltic emulsions

AETT = undiluted asphaltic emulsions total tons placed

Xe = minimum percent residue specified in Section 94, "Asphaltic Emulsions," of the Standard Specifications based on the type of emulsion used

You may, as an option, determine "Xe" by submitting actual daily test results for asphalt residue for the asphaltic emulsion used. If you choose this option, you must:

- 1. Take 1 sample every 200 tons but not less than 1 sample per day in the presence of the Engineer from the delivery truck, at midload from a sampling tap or thief, and in the following order:
 - 1.1. Draw and discard the 1st gallon
 - 1.2. Take two separate 1/2-gallon samples
- 2. Submit 1st sample at the time of sampling
- 3. Provide 2nd sample within 3 business days of sampling to an independent testing laboratory that participates in the AASHTO Proficiency Sample Program
- 4. Submit test results from independent testing laboratory within 10 business days of sample date

Slurry Seal

The Engineer calculates the quantity of asphalt in slurry seals (Qss) by applying the formula in "Asphaltic Emulsion" to the actual quantity of asphaltic emulsion used in producing the slurry seal mix.

Modified Asphalt Binder

The Engineer calculates the quantity of asphalt in modified asphalt binder using the following formula:

 $Qmab = MABTT \times [(100 - Xam) / 100]$

where:

Qmab = quantity in tons of asphalt used in modified asphalt binder

MABTT = modified asphalt binder total tons placed Xam = specified percentage of asphalt modifier

Other Materials

For other materials containing asphalt not covered above, the Engineer determines the quantity of asphalt (Qo).

PAYMENT ADJUSTMENTS

The Engineer includes payment adjustments for price index fluctuations in progress pay estimates. If material containing asphalt is placed within 2 months during 1 estimate period, the Engineer calculates 2 separate adjustments. Each adjustment is calculated using the price index for the month in which the quantity of material containing asphalt subject to adjustment is placed in the work. The sum of the 2 adjustments is used for increasing or decreasing payment in the progress pay estimate.

The Engineer calculates each payment adjustment as follows:

$$PA = Qt \times A$$

where:

- PA = Payment adjustment in dollars for asphalt contained in materials placed in the work for a given month.
- Qt = Sum of all quantities of asphalt-contained materials in pavement structural sections and pavement surface treatments placed (Qh + Qrh + Qmh + Qrap + Qtc + Qe + Qss + Qmab + Qo).
- A = Adjustment in dollars per ton of asphalt used to produce materials placed in the work rounded to the nearest \$0.01.

For US Customary projects, use:

- A = [(Iu / Ib) 1.05] x Ib x [1 + (T / 100)] for an increase in the crude oil price index exceeding 5 percent
- $A = [(Iu / Ib) 0.95] \times Ib \times [1 + (T / 100)]$ for a decrease in the crude oil price index exceeding 5 percent

For metric projects, use:

- A = 1.1023 x [(Iu / Ib) 1.05] x Ib x [1 + (T / 100)] for an increase in the crude oil price index exceeding 5 percent
- A = $1.1023 \times [(Iu/Ib) 0.95] \times Ib \times [1 + (T/100)]$ for a decrease in the crude oil price index exceeding 5 percent

- Iu = California Statewide Crude Oil Price Index for the month in which the quantity of asphalt subject to adjustment was placed in the work.
- Ib = California Statewide Crude Oil Price Index for the month in which the bid opening for the project occurred
- T = Sales and use tax rate, expressed as a percent, currently in effect in the tax jurisdiction where the material is placed. If the tax rate information is not submitted timely, the statewide sales and use tax rate is used in the payment adjustment calculations until the tax rate information is submitted.

5-1.24 RELATIONS WITH CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD:

This project lies within the boundaries of the Central Coast Regional Water Quality Control Board (RWQCB).

The contractor shall comply with the requirements of the current statewide general permit issued by the State Water Resources Control Board (SWRCB) entitled "Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System (NPDES), Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities" that regulates discharges of storm water and non-storm water from construction activities disturbing one acre or more of soil in a common plan of development.

Addition information is available at the following website:

http://www.waterboards.ca.gov/water_issues/program/stormwater/

The NPDES permits that regulate this project, as referenced above, are collectively referred to in this section as the "permits." The Contractor shall maintain copies of the permits at the project site and shall make them available during construction.

SECTION 6 - (BLANK)

SECTION 7 - (BLANK)

SECTION 8 - MATERIALS

SECTION 8-1 - MISCELLANEOUS

8-1.01 GENERAL:

Attention is directed to Section 6, "Control of Materials," of the Standard Specifications and these Special Provisions.

All materials required to complete the work under this contract shall be furnished by the Contractor.

8-1.02 RELATIVE COMPACTION:

Wherever relative compaction is specified to be determined by Test Method No. California 216 or Test Method No. California 231 the relative compaction will be determined by Test Method No. California 231.

8-1.03 PREQUALIFIED AND TESTED SIGNING AND DELINEATION MATERIALS:

The Department of Transportation (Caltrans) maintains the following list of Prequalified and Tested Signing and Delineation Materials. The Engineer shall not be precluded from sampling and testing products on the list of Prequalified and Tested Signing and Delineation Materials.

The manufacturer of products on the list of Prequalified and Tested Signing and Delineation Materials shall furnish the Engineer a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for each type of traffic product supplied.

For those categories of materials included on the list of Prequalified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included on the list of Prequalified and Tested Signing and Delineation Materials, may be used in the work provided they conform to the requirements of the Standard Specifications and as approved by the engineer.

PAVEMENT MARKERS, PERMANENT TYPE

Retroreflective With Abrasion Resistant Surface (ARS)

- 1. Apex, Model 921AR (4" x 4")
- 2. Ennis Paint, Models C88 (4" x 4"), 911 (4" x 4") and C80FH
- 3. Ray-O-Lite, Models "AA" ARC II (4" x 4") and ARC Round Shoulder (4" x 4")
- 4. 3M Series 290 (3.5" x 4")
- 5. 3M Series 290 PSA
- 6. Glowlite, Inc Model 988AR (4" x 4")

Retroreflective With Abrasion Resistant Surface (ARS)

(for recessed applications only)

- 1. Ennis Paint, Model 948 (2.3" x 4.7")
- 2. Ennis Paint, Model 944SB (2" x 4")*
- 3. Ray-O-Lite, Model 2002 (2" x 4.6")
- 4. Ray-O-Lite, Model 2004 (2" x 4")*
 - *For use only in 4.5 inch wide (older) recessed slots

Non-Reflective, 4-inch Round

- 1. Apex Universal (Ceramic)
- 2. Apex Universal, Models 929 (ABS) and 929PP (Polypropylene)
- 3. Glowlite, Inc. (Ceramic) and PP (Polypropylene)
- 4. Hi-Way Safety, Inc., Models P20-2000W and 2001Y (ABS)
- 5. Interstate Sales, "Diamond Back" (Polypropylene)
- 6. Novabrite Models Cdot (White) Cdot-y (Yellow), Ceramic
- 7. Novabrite Models Pdot-w (White) Pdot-y (Yellow), Polypropylene
- 8. Three D Traffic Works TD10000 (ABS), TD10500 (Polypropylene)
- 9. Ray-O-Lite, Ray-O-Dot (Polypropylene)

PAVEMENT MARKERS, TEMPORARY TYPE

Temporary Markers For Long Term Day/Night Use (180 days or less)

- 1. Vega Molded Products "Temporary Road Marker" (3" x 4")
- 2. Pexco LLC, Halftrack model 25, 26 and 35

Temporary Markers For Short Term Day/Night Use (14 days or less)

(For seal coat or chip seal applications, clear protective covers are required)

- 1. Apex Universal, Model 932
- 2. Pexco LLC, Models T.O.M., T.R.P.M., and "HH" (High Heat)
- 3. Hi-Way Safety, Inc., Model 1280/1281
- 4. Glowlite, Inc., Model 932

STRIPING AND PAVEMENT MARKING MATERIAL

Permanent Traffic Striping and Pavement Marking Tape

- 1. Advanced Traffic Marking, Series 300 and 400
- 2. Brite-Line, Series 1000
- 3. Brite-Line, "DeltaLine XRP"
- 4. Swarco Industries, "Director 35" (For transverse application only)
- 5. Swarco Industries, "Director 60"
- 6. 3M, "Stamark" Series 380 and 270 ES
- 7. 3M, "Stamark" Series 420 (For transverse application only)

Temporary (Removable) Striping and Pavement Marking Tape (180 days or less)

- 1. Advanced Traffic Marking, Series 200
- 2. Brite-Line, Series 100
- 3. Garlock Rubber Technologies, Series 2000
- 4. P.B. Laminations, Aztec, Grade 102
- 5. Swarco Industries, "Director-2"
- 6. Trelleborg Industries, R140 Series
- 7. 3M Series 620 "CR", and Series 780
- 8. 3M Series A145, Removable Black Line Mask (Black Tape: for use only on Hot mix asphalt surfaces)
- 9. Advanced Traffic Marking Black "Hide-A-Line" (Black Tape: for use only on Hot mix asphalt surfaces)
- 10. Brite-Line "BTR" Black Removable Tape

(Black Tape: for use only on Hot mix asphalt surfaces)

11. Trelleborg Industries, RB-140

(Black Tape: for use only on Hot mix asphalt surfaces)

Preformed Thermoplastic (Heated in place)

- 1. Flint Trading Inc., "Hot Tape"
- 2. Flint Trading Inc., "Premark Plus"
- 3. Ennis Paint Inc., "Flametape"

Ceramic Surfacing Laminate, 6" x 6"

1. Highway Ceramics, Inc.

CLASS 1 DELINEATORS

One Piece Driveable Flexible Type, 66-inch

- 1. Pexco LLC, "Flexi-Guide Models 400 and 566"
- 2. Carsonite, Curve-Flex CFRM-400
- 3. Carsonite, Roadmarker CRM-375
- 4. FlexStake, Model 654 TM
- 5. GreenLine Model CGD1-66

Special Use Type, 66-inch

- 1. Pexco LLC, Model FG 560 (with 18-inch U-Channel base)
- 2. Carsonite, "Survivor" (with 18-inch U-Channel base)
- 3. Carsonite, Roadmarker CRM-375 (with 18-inch U-Channel base)
- 4. FlexStake, Model 604
- 5. GreenLine Model CGD (with 18-inch U-Channel base)
- 6. Impact Recovery Model D36, with #105 Driveable Base
- 7. Safe-Hit with 8-inch pavement anchor (SH248-GP1)
- 8. Safe-Hit with 15-inch soil anchor (SH248-GP2) and with 18-inch soil anchor (SH248-GP3)
- 9. Safe-Hit RT 360 Post with Soil Mount Anchor (GPS)
- 10. Shur-Tite Products, Shur-Flex Drivable

Surface Mount Type, 48-inch

- 1. Bent Manufacturing Company, Masterflex Model MFEX 180-48
- 2. Carsonite, "Channelizer"
- 3. FlexStake, Models 704, 754 TM, and EB4
- 4. Impact Recovery Model D48, with #101 Fixed (Surface-Mount) Base
- 5. Three D Traffic Works "Channelflex" ID No. 522248W
- 6. Flexible Marker Support, Flexistiff Model C-9484
- 7. Safe-Hit, SH 248 SMR

CHANNELIZERS

Surface Mount Type, 36-inch

- 1. Bent Manufacturing Company, Masterflex Models MF-360-36 (Round) MF-180-36 (Flat) and MFEX 180—36
- 2. Pexco LLC, Flexi-Guide Models FG300PE, FG300UR, and FG300EFX
- 3. Carsonite, "Super Duck" (Round SDR-336)
- 4. Carsonite, Model SDCF03601MB "Channelizer"
- 5. FlexStake, Models 703, 753 TM, and EB3
- 6. GreenLine, Model SMD-36
- 7. Hi-way Safety, Inc. "Channel Guide Channelizer" Model CGC36
- 8. Impact Recovery Model D36, with #101 Fixed (Surface-Mount) Base
- 9. Safe-Hit, Guide Post, Model SH236SMA and Dura-Post, Model SHL36SMA
- 10. Three D Traffic Works "Boomerang" 5200 Series
- 11. Flexible Marker Support, Flexistiff Model C-9484-36
- 12. Shur-Tite Products, Shur-Flex

Lane Separation System

1. Pexco LLC, "Flexi-Guide (FG) 300 Curb System"

- 2. Qwick Kurb, "Klemmfix Guide System"
- 3. Dura-Curb System
- 4. Tuff Curb
- 5. FG 300 Turnpike Curb
- 6. Shur-Tite Products, SHUR-Curb, Model No. SF0200

CONICAL DELINEATORS, 42-inch

(For 28-inch Traffic Cones, see Standard Specifications)

- 1. Bent Manufacturing Company "T-Top"
- 2. Plastic Safety Systems "Navigator-42"
- 3. TrafFix Devices "Grabber"
- 4. Three D Traffic Works "Ringtop" TD7000, ID No. 742143
- 5. Three D Traffic Works, TD7500
- 6. Work Area Protection Corp. C-42
- 7. Custom-Pak 4600 (Part No. 93005-0001)
- 8. Plasticade, Navicade, 650 R1

OBJECT MARKERS

Type "K", 18-inch

- 1. Pexco LLC, Model FG318PE
- 2. Carsonite, Model SMD 615
- 3. FlexStake, Model 701 KM
- 4. Safe-Hit, Model SH718SMA

Type "Q" Object Markers, 24-inch

- 1. Bent Manufacturing "Masterflex" Model MF-360-24
- 2. Pexco LLC, Model FG324PE
- 3. Carsonite, "Channelizer"
- 4. FlexStake, Model 701KM
- 5. Safe-Hit, Models SH824SMA WA and SH824GP3 WA
- 6. Three D Traffic Works ID No. 531702W and TD 5200
- 7. Three D Traffic Works ID No. 520896W
- 8. Safe-Hit, Dura-Post SHLQ-24 inch
- 9. Flexible Marker Support, IMC 9484-24

CONCRETE BARRIER MARKERS AND TEMPORARY RAILING (TYPE K) REFLECTORS

Impactable Type

- 1. ARTUK, "FB"
- 2. Pexco LLC, Models PCBM-12 and PCBM-T12
- 3. Duraflex Corp., "Flexx 2020" and "Electriflexx"
- 4. Hi-Way Safety, Inc., Model GMKRM100
- 5. Plastic Safety Systems "BAM" Models OM-BARR and OM-BWAR
- 6. Three D Traffic Works "Roadguide" Model TD 9300

Non-Impactable Type

1. ARTUK, JD Series

- 2. Plastic Safety Systems "BAM" Models OM-BITARW and OM-BITARA
- 3. Vega Molded Products, Models GBM and JD
- 4. Plastic Vacuum Forming, "Cap-It C400"

METAL BEAM GUARD RAIL POST MARKERS

(For use to the left of traffic)

- 1. Pexco LLC, "Mini" (3" x 10"), I-Flex
- 2. Creative Building Products, "Dura-Bull, Model 11201"
- 3. Duraflex Corp., "Railrider"
- 4. Plastic Vacuum Forming, "Cap-It C300"

CONCRETE BARRIER DELINEATORS, 16-inch

(For use to the right of traffic)

- 1. Pexco LLC, Model PCBM T-16
- 2. Safe-Hit, Model SH216RBM
- 3. Three D Traffic Works "Roadguide" Model 9400

CONCRETE BARRIER-MOUNTED MINI-DRUM (10" x 14" x 22")

1. Stinson Equipment Company "SaddleMarker"

GUARD RAILING DELINEATOR

(Place top of reflective element at 48 inches above plane of roadway)

Wood Post Type, 27-inch

- 1. Pexco LLC, FG 427 and FG 527
- 2. Carsonite, Model 427
- 3. FlexStake, Model 102 GR
- 4. GreenLine GRD 27
- 5. Safe-Hit, Model SH227GRD
- 6. Three D Traffic Works "Guardflex" TD9100
- 7. New Directions Mfg, NDM27
- 8. Shur-Tite Products, Shur-Tite Flat Mount
- 9. Glasforms, Hiway-Flex, GR-27-00

Barrier, Guardrail Visibility Enhancement

1. UltraGuard Safety System, Potters Industries, Inc.

Steel Post Type

1. Carsonite, Model CFGR-327

RETROREFLECTIVE SHEETING

Channelizers, Barrier Markers, and Delineators

- 1. Avery Dennison T-6500 Series (For rigid substrate devices only)
- 2. Avery Dennison WR-7100 Series
- 3. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
- 4. Reflexite, PC-1000 Metalized Polycarbonate
- 5. Reflexite, AC-1000 Acrylic
- 6. Reflexite, AP-1000 Metalized Polyester

- 7. Reflexite, Conformalight, AR-1000 Abrasion Resistant Coating
- 8. 3M, High Intensity

Traffic Cones, 4-inch and 6-inch Sleeves

- 1. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
- 2. Reflexite, Vinyl, "TR" (Semi-transparent) or "Conformalight"
- 3. 3M Series 3840
- 4. Avery Dennison S-9000C

Drums

- 1. Avery Dennison WR-6100
- 2. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
- 3. Reflexite, "Conformalight", "Super High Intensity" or "High Impact Drum Sheeting"
- 4. 3M Series 3810

Barricades: Type I, Medium-Intensity (Typically Enclosed Lens, Glass-Bead Element)

- 1. Nippon Carbide Industries, CN8117
- 2. Avery Dennison, W 1100 series
- 3. 3M Series CW 44

Barricades: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Avery Dennison, W-2100 Series

Vertical Clearance Signs: Structure Mounted

1. 3M Model 4061, Diamond Grade DG3, Fluorescent Yellow

Signs: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)

- 1. Avery Dennison, T-2500 Series
- 2. Nippon Carbide Industries, Nikkalite 18000

Signs: Type III, High-Intensity (Typically Encapsulated Glass-Bead Element)

- 1. Avery Dennison, T-5500A and T-6500 Series
- 2. Nippon Carbide Industries, Nikkalite Brand Ultralite Grade II
- 3. 3M 3870 and 3930 Series

Signs: Type IV, High-Intensity (Typically Unmetallized Microprismatic Element)

- 1. Avery Dennison, T-6500 Series
- 2. Nippon Carbide Industries, Crystal Grade, 94000 Series
- 3. Nippon Carbide Industries, Model No. 94847 Fluorescent Orange
- 4. 3M Series 3930 and Series 3924S

Signs: Type VI, Elastomeric (Roll-Up) High-Intensity, without Adhesive

1. Avery Dennison, WU-6014

- 2. Novabrite LLC, "Econobrite"
- 3. Reflexite "Vinyl"
- 4. Reflexite "SuperBright"
- 5. Reflexite "Marathon"
- 6. 3M Series RS20

Signs: Type VII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)

- 1. 3M Series 3924S, Fluorescent Orange
- 2. 3M LDP Series 3970

Signs: Type VIII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)

- 1. Avery Dennison, T-7500 Series
- 2. Avery Dennison, T-7511 Fluorescent Yellow
- 3. Avery Dennison, T-7513 Fluorescent Yellow Green
- 4. Avery Dennison, W-7514 Fluorescent Orange
- 5. Nippon Carbide Industries, Nikkalite Crystal Grade Series 92800
- 6. Nippon Carbide Industries, Nikkalite Crystal Grade Model 92847 Fluorescent Orange

Signs: Type IX, Very-High-Intensity (Typically Unmetallized Microprismatic Element)

- 1. 3M VIP Series 3981 Diamond Grade Fluorescent Yellow
- 2. 3M VIP Series 3983 Diamond Grade Fluorescent Yellow/Green
- 3. 3M VIP Series 3990 Diamond Grade
- 4. Avery Dennison T-9500 Series
- 5. Avery Dennison, T9513, Fluorescent Yellow Green
- 6. Avery Dennison, W9514, Fluorescent Orange
- 7. Avery Dennison, T-9511 Fluorescent Yellow

SPECIALTY SIGNS

1. Reflexite "Endurance" Work Zone Sign (with Semi-Rigid Plastic Substrate)

ALTERNATIVE SIGN SUBSTRATES

Fiberglass Reinforced Plastic (FRP) and Expanded Foam PVC

- 1. Fiber-Brite (FRP)
- 2. Sequentia, "Polyplate" (FRP)
- 3. Inteplast Group "InteCel" (0.5 inch for Post-Mounted CZ Signs, 48-inch or less)(PVC)

Aluminum Composite, Temporary Construction Signs and Permanent

Signs up to 4 foot, 7 Inches

- 1. Alcan Composites "Dibond Material, 80 mils"
- 2. Mitsubishi Chemical America, Alpolic 350
- 3. Bone Safety Signs, Bone Light ACM (temporary construction signs only)

SECTION 8-2 - CONCRETE

8-2.01 PORTLAND CEMENT CONCRETE:

Portland cement concrete shall conform to the provisions in Section 90, "Portland Cement Concrete," of the Standard Specifications and these special provisions.

SECTION 9 - DESCRIPTION OF WORK

In general, the work to be done consists of roadway widening including but not limited to existing pavement reconstruction with hot mix asphalt, shoulder construction, tree removal, pavement delineation, clearing and grubbing, ditch and storm drain construction, and traffic control.

Such other items or details, not mentioned above, that are required by the Plans, Standard Specifications, Standard Plans, or these Special Provisions, shall be performed, placed, constructed, or installed.

9-1.01 INCREASED AND DECREASED QUANTITIES:

The County reserves the right to increase, decrease or delete the quantities of items as follows:

ITEM CODE.	ITEM
152370	RELOCATE MAILBOX
152386	RELOCATE ROADSIDE SIGN-ONE POST
160120	REMOVE TREE
566011	ROADSIDE SIGN-ONE POST
641101	12" PIPE (HDPE)
641104	15" PIPE (HDPE)
641107	18" PIPE (HDPE)
750030	DRAIN INLET WITH GRATE
810116	SURVEY MONUMENT (TYPE D)

The adjustment provision in Section 4-1.03 "Changes" of the Standard Specifications shall not apply to the above items.

Such other items or details, not mentioned above, that are required by the Plans, Standard Specifications, or these Special Provisions, shall be performed, placed, constructed, or installed.

SECTION 10 - CONSTRUCTION DETAILS

SECTION 10-1 - GENERAL

10-1.01 ORDER OF WORK:

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these special provisions.

Prior to the start of the operation for cold plane asphalt concrete pavement, the contractor shall have a certified asphalt concrete plant and an approved mix design for the initial asphalt concrete paving layer.

Any area that is cold planed in a work period shall be paved with the first layer of asphalt concrete within the same work period before the area is opened to public traffic. Following spreading and compacting of the first layer of asphalt concrete, a drop-off of more than 0.15-foot will not be allowed between adjacent lanes open to public traffic.

Attention is directed to "Water Pollution Control" of these special provisions regarding the submittal and approval of the Storm Water Pollution Prevention Plan prior to performing work having potential to cause water pollution.

Attention is directed to "Maintaining Traffic" and "Temporary Pavement Delineation" of these special provisions

Before obliterating any pavement delineation (traffic stripes, pavement markings, and pavement markers) that is to be replaced on the same alignment and location, as determined by the Engineer, the pavement delineation shall be referenced by the Contractor, with a sufficient number of control points to reestablish the alignment and location of the new pavement delineation. The references shall include the limits or changes in striping pattern, including one-and 2-way barrier lines, limit lines, crosswalks and other pavement markings. Full compensation for referencing existing pavement delineation shall be considered as included in the contract prices paid for new pavement delineation and no additional compensation will be allowed therefore.

Prior to applying hot mix asphalt (type A) and tack coat, the Contractor shall cover all manholes, valve and monument covers, grates, or other exposed facilities located within the area of application, using a plastic or oil resistant construction paper secured to the facility being covered by tape or adhesive. The covered facilities shall be referenced by the Contractor, with a sufficient number of control points to relocate the facilities after the hot mix asphalt (type A) and tack coat have been placed. After completion of hot mix asphalt (type A) and tack coat operation, all covers shall be removed and disposed of in a manner satisfactory to the Engineer. Full compensation for covering manholes, valve and monument covers, grates, or other exposed facilities, referencing, and removing temporary cover shall be considered as included in the contract price paid per ton for hot mix asphalt (type A), and no additional compensation will be allowed therefor.

The Contractor shall perform clearing and grubbing activities in conformance with these special provisions prior to applying hot mix asphalt (type A) and tack coat.

10-1.02 COOPERATION:

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

Contract No.	Co-Rte-PM	Location	Type of Work
05-0161E4	Mon-101-	In and near Prunedale at	Duides and Deadway construction
03-0101E4	R91.2/99.2	various locations	Bridge and Roadway construction

Comply with Section 7-1.14, "Cooperation," of the Standard Specifications.

10-1.03 PROJECT APPEARANCE:

The Contractor shall maintain a neat appearance to the work. In any area visible to the public, the following shall apply:

- When practical, broken concrete shall be disposed of concurrently with its removal. If stock piling is necessary, the material shall be removed or disposed of weekly.
- The Contractor shall furnish trash bins for all debris from construction. Debris shall be placed in trash bins daily.

Full compensation for conforming to the provisions in this section not otherwise provided for, shall be considered in prices paid for the various contract items of work involved and no additional compensation shall be allowed therefore.

10-1.04 WATER POLLUTION CONTROL:

GENERAL

Summary

Discharges of storm water from the project must comply with NPDES General Permit for "Storm Water Discharges Associated with Construction and Land Disturbance Activities" (Order No. 2009-0009-DWQ, NPDES No. CAS000002) hereinafter called the "Permit." Manage work activities to reduce the discharge of pollutants to surface waters, groundwater, or municipal separate storm sewer systems including related work for the following:

- 1. Prepare Storm Water Pollution Prevention Plan. SWPPP preparation includes obtaining SWPPP approval, amending the SWPPP, preparing a CSMP and a SAP, and monitoring and inspecting WPC practices at the job site.
- 2. Storm Water Annual Report. Storm Water Annual Report preparation includes certifications, monitoring and inspection results, and obtaining Storm Water Annual Report acceptance.
- 3. Storm Water Sampling and Analysis Day. Storm Water Sampling and Analysis Day includes reporting of storm water quality per qualifying rain event. If specified for the risk level, the work includes preparation, collection, analysis, and reporting of storm water samples for turbidity, pH, and other constituents.
- 4. Rain Event Action Plan. If specified for the project risk level, REAP preparation includes preparing and submitting REAP forms and monitoring weather forecasts.

Do not start work until:

- 1. SWPPP is approved.
- 2. WDID is issued.

This project is Risk Level 2. proprietary ship

Definitions and Abbreviations

10-1.03 PROJECT APPEARANCE:

The Contractor shall maintain a neat appearance to the work. In any area visible to the public, the following shall apply:

- When practical, broken concrete shall be disposed of concurrently with its removal. If stock piling is necessary, the material shall be removed or disposed of weekly.
- The Contractor shall furnish trash bins for all debris from construction. Debris shall be placed in trash bins daily.

Full compensation for conforming to the provisions in this section not otherwise provided for, shall be considered in prices paid for the various contract items of work involved and no additional compensation shall be allowed therefore.

10-1.04 WATER POLLUTION CONTROL:

GENERAL

Summary

Discharges of storm water from the project must comply with NPDES General Permit for "Storm Water Discharges Associated with Construction and Land Disturbance Activities" (Order No. 2009-0009-DWQ, NPDES No. CAS000002) hereinafter called the "Permit." Manage work activities to reduce the discharge of pollutants to surface waters, groundwater, or municipal separate storm sewer systems including related work for the following:

- 1. Prepare Storm Water Pollution Prevention Plan. SWPPP preparation includes obtaining SWPPP approval, amending the SWPPP, preparing a CSMP and a SAP, and monitoring and inspecting WPC practices at the job site.
- 2. Storm Water Annual Report. Storm Water Annual Report preparation includes certifications, monitoring and inspection results, and obtaining Storm Water Annual Report acceptance.
- 3. Storm Water Sampling and Analysis Day. Storm Water Sampling and Analysis Day includes reporting of storm water quality per qualifying rain event. If specified for the risk level, the work includes preparation, collection, analysis, and reporting of storm water samples for turbidity, pH, and other constituents.
- 4. Rain Event Action Plan. If specified for the project risk level, REAP preparation includes preparing and submitting REAP forms and monitoring weather forecasts.

Do not start work until:

- 1. SWPPP is approved.
- 2. WDID is issued.

This project is Risk Level 2. proprietary ship

Definitions and Abbreviations

- 1. Storm water training records including training dates and subjects for employees and subcontractors. Include dates and subjects for ongoing training, including tailgate meetings.
- 2. Employee training records:
 - 2.1. Within 5 days of SWPPP approval for existing employees
 - 2.2. Within 5 days of training for new employees
 - 2.3. At least 2 days before subcontractors start work for subcontractor's employees

Prepare a Storm Water Annual Report for the reporting period from July 1st to June 30th. For the prior reporting period, submit the report no later than July 15th if construction occurs from July 1st through June 30th or within 5 days after contract acceptance if construction ends before June 30th.

Submit the Storm Water Annual Report as follows:

- 1. Submit 2 copies of the Storm Water Annual Report and allow 5 days for the Engineer's review. If revisions are required, the Engineer provides comments and specifies the date that the review stopped.
- 2. Change and resubmit the Storm Water Annual Report within 5 days of receipt of the Engineer's comments. The Engineer's review resumes when the complete Storm Water Annual Report is resubmitted.
- 3. When the Engineer accepts the Storm Water Annual Report, insert the WPC Manager's signed certification and the Engineer's signed certification.

Submit one electronic copy and 2 printed copies of the accepted Storm Water Annual Report.

Submit as required:

- 1. NAL Exceedance Reports
- 2. NEL Exceedance Reports
- 3. Visual Monitoring Reports
- 4. Inspection Reports
- 5. BMP Status Report

At least 5 days before operating any construction support facility, submit to the Engineer:

- 1. A plan showing the location and quantity of WPC practices associated with the construction support facility
- 2. A copy of the NOI approved by the RWQCB and the SWPPP approved by the RWQCB if you will be operating a batch plant or a crushing plant under the General Industrial Permit

Quality Control and Assurance

Training

Provide storm water training for:

- 1. Project managers
- 2. Supervisory personnel
- 3. Employees involved with WPC work

Train all employees, including subcontractor's employees, in the following subjects:

- 1. WPC rules and regulations
- 2. Implementation and maintenance for:
 - 2.1. Temporary Soil Stabilization
 - 2.2. Temporary Sediment Control
 - 2.3. Tracking Control
 - 2.4. Wind Erosion Control
 - 2.5. Material pollution prevention and control
 - 2.6. Waste management
 - 2.7. Non-storm water management
 - 2.8. Identifying and handling hazardous substances
 - 2.9. Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Employees must receive initial WPC training before working on the job site.

Conduct weekly training meetings covering:

- 1. WPC BMP deficiencies and corrective actions
- 2. BMPs that are required for work activities during the week
- 3. Spill prevention and control
- 4. Material delivery, storage, use, and disposal
- 5. Waste management
- 6. Non-storm water management procedures

Training for personnel to collect water quality samples must include:

- 1. SAP review
- 2. Health and safety review
- 3. Sampling simulations

A Storm Water Information Handout has been prepared for this contract and is available as described in "Supplemental Project Information" of these special provisions.

If you operate construction support facilities, protect storm water systems or receiving waters from the discharge of potential pollutants by using WPC practices.

Construction support facilities include:

- 1. Staging areas
- 2. Storage yards for equipment and materials
- 3. Mobile operations

- 4. Batch plants for PCC and HMA
- 5. Crushing plants for rock and aggregate
- 6. Other facilities installed for your convenience such as haul roads

If you operate a batch plant to manufacture PCC, HMA, or other material; or a crushing plant to produce rock or aggregate; obtain coverage under the General Industrial General Permit. You must be covered under the General Industrial Permit for batch plants and crushing plants located:

- 1. Outside of the job site
- 2. Within the job site that serve one or more contracts

Discharges from manufacturing facilities such as batch plants must comply with the general waste discharge requirements for Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, issued by the SWRCB for "Discharge of Stormwater Associated with Industrial Activities Excluding Construction Activities." For the General Industrial Permit, go to:

http://www.waterboards.ca.gov/

You may obtain copies of the Preparation Manual from the Publication Distribution Unit. The mailing address for the Publication Distribution Unit is:

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 WPC references are available at Caltrans' "Construction Storm Water and Water Pollution Control" Web site. For the Web site, go to:

http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm

Water Pollution Control Manager

Assign one WPC Manager to implement the SWPPP. The WPC Manager must comply with the Permit qualifications for a QSP and a QSD. You may assign a different QSD to prepare the SWPPP.

The QSD must have the following qualifications:

- 1. Department approved storm water management training described in the Department's "Construction Storm Water and Water Pollution Control" web site
- 2. Registration or certification described in the Permit

The QSP must meet the qualifications of the QSD or have the following certifications:

- 1. Department approved storm water management training described in the Department's "Construction Storm Water and Water Pollution Control" web site
- 2. Certification described in the Permit

At the job site, the WPC Manager must:

- 1. Be responsible for WPC work
- 2. Be the primary contact for WPC work
- 3. Oversee the maintenance of WPC practices
- 4. Oversee and enforce hazardous waste management practices
- 5. Have the authority to mobilize crews to make immediate repairs to WPC practices
- 6. Ensure that all employees have current water pollution control training
- 7. Implement the approved SWPPP and amend the SWPPP when required

WPC Manager must oversee:

- 1. Inspections of WPC practices identified in the SWPPP
- 2. Inspections and reports for visual monitoring
- 3. Preparation and implementation of REAPs
- 4. Sampling and analysis
- 5. Preparation and submittal of:
 - 5.1. NAL exceedance reports
 - 5.2. NEL exceedance reports
 - 5.3. SWPPP annual certification
 - 5.4. Annual reports
 - 5.5. BMP status reports

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

General

SWPPP work includes preparing a SWPPP including a CSMP, obtaining SWPPP approval, amending the SWPPP, inspecting and reporting on WPC practices at the job site. The SWPPP must comply with the Preparation Manual and the Permit. The SWPPP must be submitted in place of the water pollution control program under Section 7-1.01G, "Water Pollution," of the Standard Specifications.

The Engineer may order, changes to the WPC work. Changes may include the addition of new WPC practices.

The SWPPP must include sections as specified for the project risk level as follows:

- 1. For risk level 1:
 - 1.1. Schedule
 - 1.2. CSMP

- 2. For risk level 2:
 - 2.1. Schedule
 - 2.2. CSMP
 - 2.3. Adherence to Effluent Standards for NALs
 - 2.4. REAP
- 3. For risk level 3:
 - 3.1. Schedule
 - 3.2. CSMP
 - 3.3. Adherence to Effluent Standards for NALs and NELs
 - 3.4. REAP

The SWPPP must include WPC practices for:

- 1. Storm water and non-stormwater from areas outside of the job site related to project work activities such as:
 - 1.1. Staging areas
 - 1.2. Storage yards
 - 1.3. Access roads
- 2. Activities or mobile operations related to contractor obtained NPDES permits
- 3. Construction support facilities

The SWPPP must include a copy of permits obtained by the Department such as Fish & Game permits, US Army Corps of Engineers permits, RWQCB 401 Certifications, and RWQCB Waste Discharge Requirements for Aerially Deposited Lead Reuse.

Amend the SWPPP annually and resubmit it by July 15th.

Amend the SWPPP if:

- 1. Changes in work activities could affect the discharge of pollutants
- 2. WPC practices are added by change order work
- 3. WPC practices are added at your discretion
- 4. Changes in the amount of disturbed soil are substantial
- 5. Objectives for reducing or eliminating pollutants in storm water discharges have not been achieved
- 6. There is a Permit violation

Whenever you amend the SWPPP, follow the same process specified for SWPPP approval.

Retain a printed copy of the approved SWPPP at the job site.

SWPPP Schedule

The SWPPP schedule must:

- 1. Describe when work activities will be performed that could cause the discharge of pollutants into storm water
- 2. Describe WPC practices associated with each construction phase
- 3. Identify soil stabilization and sediment control practices for disturbed soil areas

Construction Site Monitoring Program (CSMP)

General

The QSD must prepare a CSMP as part of the SWPPP. The CSMP must be developed before starting work and be revised to reflect current construction activities as necessary.

The CSMP must include sections for the project risk level as follows:

- 1. For risk level 1:
 - 1.1. Visual Monitoring
 - 1.2. SAP for Non-Visible Pollutants
- 2. For risk level 2:
 - 2.1. Visual Monitoring
 - 2.2. SAP for Non-Visible Pollutants
 - 2.3. SAP for sediment and turbidity
 - 2.4. SAP for pH
- 3. For risk level 3:
 - 3.1. Visual Monitoring
 - 3.2. SAP for Non-Visible Pollutants
 - 3.3. SAP for sediment and turbidity
 - 3.4. SAP for pH
 - 3.5. SAP for receiving waters
 - 3.6. SAP for temporary active treatment systems

Visual Monitoring

The WPC Manager must oversee the performance of visual inspections for qualifying rain events.

For each qualifying rain event, perform visual inspections and record observations during normal working hours as follows:

- 1. Record the time, date, and rain gauge reading
- 2. Observe:

- 2.1. Within 2 days before the storm:
 - 2.1.1. Drainage areas for spills, leaks, or uncontrolled pollutants
 - 2.1.2. Proper implementation of WPC practices
 - 2.1.3. Storm water storage areas for leaks and adequate freeboard
- 2.2. Every 24 hours during the storm:
 - 2.2.1. WPC practices for effective operation
 - 2.2.2. WPC practices needing maintenance and repair
- 2.3. Within 2 days after the storm event:
 - 2.3.1. Discharge locations
 - 2.3.2. WPC practices to evaluate the design, implementation, and effectiveness
 - 2.3.3. To identify where additional WPC practices may be needed

Perform non-stormwater discharge visual inspections as follows:

- 1. At least once during each of the following periods:
 - 1.1. January through March
 - 1.2. April through June
 - 1.3. July through September
 - 1.4. October through December
- 2. Observe flowing and contained storm water for the presence of floating and suspended materials, sheen on the surface, discoloration, turbidity, odors, and sources of observed pollutants
- 3. Observe the job site for the presence of authorized and unauthorized non-stormwater discharges and their sources

The WPC Manager must prepare visual inspection reports that include the following:

- 1. Name of personnel performing the inspection, inspection date, and date inspection report completed
- 2. Storm and weather conditions
- 3. Locations and observations
- 4. Corrective actions taken

Maintain visual inspections reports at the job site as part of the SWPPP.

Sampling and Analysis Plan (SAP)

General

Include a SAP in the CSMP to monitor the effectiveness of WPC practices.

The SAP must comply with the Preparation Manual.

Assign trained personnel to collect water quality samples. Document their training in the SAP.

Describe the following water quality sampling procedures in the SAP:

- 1. Sampling equipment
- 2. Sample preparation
- 3. Collection
- 4. Field measurement methods
- 5. Analytical methods
- 6. Quality assurance and quality control
- 7. Sample preservation and labeling
- 8. Collection documentation
- 9. Sample shipping
- 10. Chain of custody
- 11. Data management and reporting
- 12. Precautions from the construction site health and safety plan
- 13. Laboratory selection and certifications

Whenever assigned field personnel take samples, comply with the equipment manufacturer's recommendation for collection, analysis methods, and equipment calibration.

Samples taken for laboratory analysis must follow water quality sampling procedures and be analyzed by a State-certified laboratory under 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants."

The SAP must identify the State-certified laboratory, sample containers, preservation requirements, holding times, and analysis method. For a list of State-certified laboratories, go to:

http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx

Include procedure for sample collection during precipitation.

Retain water quality sampling documentation and analytical results with the SWPPP at the job site.

Show pollutant sampling locations on SWPPP drawings.

If discharges or sampling locations change because of changed work activities or knowledge of site conditions, amend the SAP.

If the project is risk level 2 or risk level 3, include procedures for collecting and analyzing at least 3 samples for each day of each qualifying rain event. Describe the collection of effluent samples at all locations where the storm water is discharged off-site.

Analytical Results and Evaluation

Submit an electronic copy (in file format .xls, .txt, .csv, .dbs, or .mdb) and a printed copy of water quality analytical results, and quality assurance and quality control within 48 hours of field analysis sampling, and within 30 days for laboratory analysis. Also provide an evaluation of whether the downstream samples show levels of the tested parameter that are higher than the control sample.

Electronic water quality analysis results must have the following information:

- 1. Sample identification number
- 2. Contract number
- 3. Constituent
- 4. Reported value
- 5. Analytical method
- 6. Method detection limit
- 7. Reported limit

SAP for Non-Visible Pollutants

The SAP must include a description of the sampling and analysis strategy for monitoring non-visible pollutants.

The SAP must identify potential non-visible pollutants present at the job site associated with any of the following:

- 1. Construction materials and waste
- 2. Existing contamination due to historical site usage
- 3. Application of soil amendments, including soil stabilization materials, with the potential to change pH or contribute toxic pollutants to storm water

SWPPP drawings must show the locations planned for storage and use of potential non-visible pollutants.

The SAP must include sampling procedures for the following conditions when observed during a storm water visual inspection. For each of the following, collect at least one sample for each qualifying storm event:

- 1. Materials or waste containing potential non-visible pollutants that are not stored under watertight conditions
- 2. Materials or waste containing potential non-visible pollutants that are stored under watertight conditions, but a breach, leakage, malfunction, or spill is observed; the leak or spill has not been cleaned up before precipitation; and material or waste could discharge non-visible pollutants to surface waters or drainage system
- 3. Chemical applications, including fertilizer, pesticide, herbicide, methyl methacrylate concrete sealant, or non-pigmented curing compound used during precipitation or within 24 hours preceding precipitation, and could discharge pollutants to surface waters or drainage system
- 4. Applied soil amendments, including soil stabilization materials that could change pH levels or contribute toxic pollutants to storm water runoff and discharge pollutants to surface waters

- or drainage system, unless available independent test data indicates acceptable concentrations of non-visible pollutants in the soil amendment
- 5. Storm water runoff from an area contaminated by historical usage of the site that could discharge pollutants to surface waters or drainage systems

The SAP must provide sampling procedures and schedule for:

- 1. Sample collection during the first 2 hours of each rain event that generate runoff
- 2. Sample collection during normal working hours
- 3. Each non-visible pollutant source
- 4. Uncontaminated control sample

The SAP must identify locations for sampling downstream and control samples, and reasons for selecting those locations. Select control sample locations where the sample will not come in contact with materials, waste, or areas associated with potential non-visible pollutants or disturbed soil areas.

SAP for Sediment and Turbidity

If the project is risk level 2 or risk level 3, sample and analyze for turbidity:

Parameter	Test Method	Detection Limit (Min)	Unit
Turbidity	Field test with calibrated portable instrument	1	NTU

If the project is risk level 3 and the turbidity NEL has been exceeded, sample and analyze for SSC:

ſ	Parameter	Test Method	Detection	Unit
	į		Limit (Min)	
	SSC	ASTM Method D3977-97	5	Mg/L

SAP for pH

If the project is risk level 2 or risk level 3, sample and analyze for pH:

Parameter	Test Method	Detection Limit (Min)	Unit
pН	Field test with calibrated portable instrument	0.2	pH units

SAP for Receiving Waters

If the project is risk level 3, describe procedures for obtaining samples from representative and accessible locations:

- 1. Upstream of the discharge point
- 2. Downstream of the discharge point

Show receiving water sampling locations on SWPPP drawings.

If there are several discharge points, describe procedures for obtaining samples from a single upstream and a single downstream location.

Rain Event Action Plan (REAP)

REAP work includes preparing and submitting REAP forms and monitoring weather forecasts. The WPC Manager must submit a REAP to protect the job site at least 48 hours before a predicted rain event.

Prepare a REAP when the National Weather Service is predicting at least a 50 percent probability of precipitation within 72 hours.

For the REAP, use approved forms and include:

- 1. Site location
- 2. Risk level
- 3. Contact information including 24-hour emergency phone numbers for:
 - 3.1. WPC Manager
 - 3.2. Erosion and sediment control providers or subcontractors
 - 3.3. Storm water sampling providers or subcontractors
- 4. Storm Information
- 5. Construction phase information for:
 - 5.1. Highway Construction including active and inactive areas for work activities for building roads and structures
 - 5.2. Plant Establishment including maintenance on vegetation installed for final stabilization where areas are inactive
 - 5.3. Suspension where work activities are suspended and areas are inactive
- 6. Construction phase information including:
 - 6.1. Construction activities
 - 6.2. Subcontractors and trades on the job site
 - 6.3. Pre-storm activities including:
 - 6.3.1. Responsibilities of the WPC Manager
 - 6.3.2. Responsibilities of the crew and crew size
 - 6.3.3. Stabilization for active and inactive disturbed soil areas
 - 6.3.4. Stockpile management
 - 6.3.5. Corrective actions taken for deficiencies identified during pre-storm visual inspection
 - 6.4. Activities to be performed during storm events including:

- 6.4.1. Responsibilities of the WPC Manager
- 6.4.2. Responsibilities of the crew and crew size
- 6.4.3. BMP maintenance and repair

6.5. Description of flood contingency measures

You must have the REAP onsite at least 24 hours before a predicted rain event. A printed copy of each REAP must be at the job site as part of the SWPPP.

Implement the REAP including mobilizing crews to complete activities no later than 24 hours before precipitation occurs.

IMPLEMENTATION REQUIREMENTS

SWPPP Implementation

Obtain, install, and maintain a rain gauge at the job site. Observe and record daily precipitation.

Monitor the National Weather Service Forecast Office on a daily basis. For forecasts, go to:

http://www.srh.noaa.gov/forecast

Whenever you or the Engineer identifies a deficiency in the implementation of the approved SWPPP:

- 1. Correct the deficiency immediately, unless the Engineer agrees to a later date for making the correction
- 2. Correct the deficiency before precipitation occurs

If you fail to correct the deficiency by the agreed date or before the onset of precipitation, the Owner may correct the deficiency and deduct the cost of correcting the deficiency from payment.

Continue SWPPP implementation during any temporary suspension of work activities.

Install WPC practices within 15 days or before predicted precipitation, whichever occurs first.

Numeric Action Levels (NALs)

If the project is risk level 2 or risk level 3, then it is subject to NALs:

Parameter	Test Method	Detection Limit (Min)	Unit	Numeric Action Level
pH	Field test with calibrated portable instrument	0.2	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	Field test with calibrated portable instrument	1	NTU	250 NTU

Numeric Effluent Limits (NELs)

If the project is risk level 3, then it is subject to NELs:

Parameter	Test Method	Detection Limit (Min)	Unit	Numeric Effluent Limit
рН	Field test with calibrated portable instrument	0.2	pH units	Lower NEL = 6.0 Upper NEL = 9.0
Turbidity	Field test with calibrated portable instrument	1	NTU	500 NTU

The storm event daily average for storms up to the 5-year, 24-hour storm, must not exceed the NEL for turbidity.

The daily average sampling results must not exceed the NEL for pH.

Storm Water Sampling and Analysis Day

Storm Water Sampling and Analysis Day work includes preparation, collection, analysis, and reporting of storm water samples for turbidity, pH, and other constituents. If the project is risk level 2 or risk level 3, and there is a qualified rain event that produces runoff, comply with the project's SAP for preparation, collection, analysis, and reporting of storm water samples. Collect:

- 1. Samples for each non-visible pollutant source and a corresponding uncontaminated control sample
- 2. Samples for turbidity, pH, and other constituents as specified
- 3. At least 3 samples for each day of each qualifying rain event
- 4. Samples for all locations where the storm water is discharged off-site

Perform sample collection during:

- 1. First 2 hours of each qualified rain event that produces runoff
- 2. Normal working hours

If the project is risk level 3, obtain receiving water samples.

You are not required to physically collect samples during dangerous weather conditions such as flooding or electrical storms.

If downstream samples show increased levels, assess WPC practices, site conditions, and surrounding influences to determine the probable cause for the increase.

Inspection

The WPC Manager must oversee inspections for WPC practices identified in the SWPPP:

- 1. Before a forecasted storm
- 2. After precipitation that causes site runoff

- 3. At 24-hour intervals during extended precipitation
- 4. On a predetermined schedule, a minimum of once a week

The WPC Manager must oversee daily inspections of:

- 1. Storage areas for hazardous materials and waste
- 2. Hazardous waste disposal and transporting activities
- 3. Hazardous material delivery and storage activities
- 4. WPC practices specified under "Construction Site Management" of these special provisions

The WPC Manager must use the Storm Water Site Inspection Report provided in the Preparation Manual.

The WPC Manager must prepare BMP status reports that include the following:

- 1. Location and quantity of installed WPC practices
- 2. Location and quantity of disturbed soil for the active or inactive areas

Within 24 hours of finishing the weekly inspection, the WPC Manager must submit:

- 1. Copy of the completed site inspection report
- 2. Copy of the BMP status report

REPORTING REQUIREMENTS

Storm Water Annual Report

Storm Water Annual Report work includes certifications, monitoring and inspection results, and obtaining Storm Water Annual Report acceptance. The WPC Manager must prepare a Storm Water Annual Report. The report must:

- 1. Use an approved report format
- 2. Include project information including description and location
- 3. Include storm water monitoring information including:
 - 3.1. Summary and evaluation of sampling and analysis results including laboratory reports
 - 3.2. Analytical methods, reporting units, detections limits for analytical parameters
 - 3.3. Summary of corrective actions
 - 3.4. Identification of corrective actions or compliance activities that were not implemented
 - 3.5. Summary of violations
 - 3.6. Names of individuals performing storm water inspections and sampling
 - 3.7. Logistical information for inspections and sampling including location, date, time, and precipitation
 - 3.8. Visual observations and sample collection records
- 4. Include documentation on training for:

- 4.1. Individuals responsible for NPDES permit compliance
- 4.2. Individuals responsible for BMP installation, inspection, maintenance, and repair
- 4.3. Individuals responsible for preparing, revising, and amending the SWPPP

NAL Exceedance Report

If the project is risk level 2 or risk level 3 and an effluent sample exceeds a NAL, notify the Engineer and submit a NAL Exceedance Report no later than 48 hours after the conclusion of the storm event. The report must:

- 1. Include the following field sampling results and inspections:
 - 1.1. Analytical methods, reporting units, and detection limits
 - 1.2. Date, location, time of sampling, visual observation and measurements
 - 1.3. Quantity of precipitation of the storm event
- 2. Description of BMPs and corrective actions taken to manage NAL exceedance

NEL Violation Report

If the project is risk level 3 and an NEL is exceeded, notify the Engineer and submit a NEL Violation Report within 6 hours. The report must:

- 1. Include the following field sampling results and inspections:
 - 1.1. Analytical methods, reporting units, and detection limits
 - 1.2. Date, location, time of sampling, visual observations and measurements
 - 1.3. Quantity of precipitation of the storm event
- 2. Description of BMPs and corrective actions taken to manage NEL exceedance

If the project is risk level 2 or risk level 3, submit all sampling results to the Engineer no later than 48 hours after the conclusion of a storm event.

PAYMENT

The contract lump sum price paid for prepare storm water pollution prevention plan includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparing, obtaining approval of, and amending the SWPPP, CSMP, REAP, and SAP, inspecting water pollution control practices, implementing the SWPPP, sampling, Laboratory analysis, reporting, and complying with as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

For projects with 60 working days or less, payments for SWPPP are made as follows:

- 1. After the Engineer approves the SWPPP, the Owner includes up to 75 percent of the bid item price in the monthly progress estimate
- 2. After contract acceptance, the Owner pays for the remaining percentage of the bid item price

For projects with more than 60 working days, payments for SWPPP are made as follows:

- 1. After the Engineer approves the SWPPP, the Owner includes up to 50 percent of the bid item price in the monthly progress estimate
- 2. The Owner pays 40 percent of the bid item price over the life of the contract
- 3. After contract acceptance, the Department pays for the remaining 10 percent of the bid item

For each failure to submit a completed Storm Water Annual Report, the Owner withholds \$10,000. This withhold is in addition to other withholds under Section 9-1.07E(3) "Performance Failure Withholds," of the Amended Standard Specifications.

Each failure to comply with any part of these special provisions and each failure to implement water pollution control practices are considered separate performance failures.

<u>10-1.05 CONSTRUCTION SITE MANAGEMENT:</u>

GENERAL

Summary

This work includes controlling potential sources of water pollution before they come in contact with storm water systems or watercourses.

Control material pollution and manage waste and non-stormwater at the job site by implementing effective handling, storage, use, and disposal practices.

For information on documents specified in these special provisions, refer to the Department's Preparation Manual, Dewatering Guide, and BMP Manual.

Preparation Manual, Dewatering Guide, and BMP Manual are available from the Department's Construction Storm Water and Water Pollution Control web site at:

http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm

Definitions and Abbreviations

active and inactive areas: (1) Active areas have soil disturbing work activities occurring at least once within 14 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.

BMP Manual: The Department's Construction Site Best Management Practices (BMP) Manual.

CDPH: California Department of Public Health

Dewatering Guide: The Department's Field Guide to Construction Site Dewatering.

ELAP: Environmental Laboratory Accreditation Program

minor spills: Small quantities of oil, gasoline, paint, or other material that are small enough to be controlled by a first responder upon discovery of the spill.

MSDS: Material Safety Data Sheet

Preparation Manual: The Department's Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual.

semi-significant spills: Spills that can be controlled by a first responder with help from other personnel.

significant or hazardous spills: Spills that cannot be controlled by construction personnel.

WPC: Water Pollution Control

WPC Manager: Water Pollution Control Manager as defined under "Water Pollution Control" of these special provisions.

Submittals

Submit the following:

- 1. MSDS at least 5 days before material is used or stored
- 2. Monthly inventory records for material used or stored
- 3. Copy of written approval to discharge into a sanitary sewer system at least 5 days before beginning discharge activities

CONSTRUCTION

Spill Prevention and Control

Implement spill and leak prevention procedures for chemicals and hazardous substances stored at the job site. If you spill or leak chemicals or hazardous substances at the job site, you are responsible for all associated cleanup costs and related liability.

As soon as it is safe, contain and clean up spills of petroleum products, sanitary and septic waste substances listed under CFR Title 40, Parts 110, 117, and 302.

Minor Spills

Clean up minor spills using the following procedures:

- 1. Contain the spread of the spill
- 2. Recover the spilled material by absorption
- 3. Clean the contaminated area
- 4. Dispose of the contaminated material promptly and properly

Semi-significant Spills

Clean up semi-significant spills immediately by the following procedures:

- 1. Contain the spread of the spill
- 2. Recover the spilled material using absorption whenever a spill occurs on a paved surface or an impermeable surface
- 3. Contain the spill with an earthen dike and dig up the contaminated soil for disposal whenever a spill occurs on soil
- 4. If the spill occurs during precipitation, cover the spill with plastic or other material to prevent contaminated runoff
- 5. Dispose of the contaminated material promptly and properly

Significant or Hazardous Spills

Immediately notify qualified personnel of significant or hazardous spills. Do not let construction personnel attempt to clean up the spill until qualified staff have arrived. Do the following:

- 1. Notify the Engineer and follow up with a written report
- 2. Obtain the services of a spills contractor or hazardous material team immediately
- 3. Notify the local emergency response team by dialing 911 and county officials at the emergency phone numbers kept at the job site
- 4. Notify the Governor's Office of Emergency Services Warning Center at (805) 852-7550
- 5. Notify the National Response Center at (800) 424-8802 regarding spills of Federal reportable quantities under CFR Title 40, Parts 110, 119, and 302
- 6. Notify other agencies as appropriate, including:
 - 6.1. Fire Department
 - 6.2. Public Works Department
 - 6.3. Coast Guard
 - 6.4. Highway Patrol
 - 6.5. City Police or County Sheriff Department
 - 6.6. Department of Toxic Substances
 - 6.7. California Division of Oil and Gas
 - 6.8. Cal OSHA
 - 6.9. Regional Water Resources Control Board

Report minor, semi-significant, and significant spills to the WPC Manager. The WPC Manager must notify the Engineer immediately. The WPC Manager must oversee and enforce proper spill prevention and control measures.

Prevent spills from entering storm water runoff before and during cleanup. Do not bury spills or wash spills with water.

Keep material or waste storage areas clean, well organized, and equipped with enough cleanup supplies for the material being stored.

Material Management

General.

Material must be delivered, used, and stored for this job in a way that minimizes or eliminates discharge of material into the air, storm drain systems, and watercourses.

Implement the practices described under "Material Management" of these special provisions while taking delivery of, using, or storing any of the following materials:

- 1. Hazardous chemicals including acids, lime, glues, adhesives, paints, solvents, and curing compounds
- 2. Soil stabilizers and binders

- 3. Fertilizers
- 4. Detergents
- 5. Plaster
- 6. Petroleum materials including fuel, oil, and grease
- 7. Asphalt components and concrete components
- 8. Pesticides and herbicides

Employees trained in emergency spill cleanup procedures must be present during the unloading of hazardous materials or chemicals.

If practicable, use less hazardous materials.

Material Storage

Use the following material storage procedures:

- 1. Store liquids, petroleum materials, and substances listed in CFR Title 40, Parts 110, 117, and 302 as specified by the Department, and place them in secondary containment facilities.
- 2. Secondary containment facilities must be impervious to the materials stored there for a minimum contact time of 72 hours.
- 3. Cover secondary containment facilities during non-working days and when precipitation is predicted. Secondary containment facilities must be adequately ventilated.
- 4. Keep secondary containment facility free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, collect accumulated liquid and place into drums within 24 hours. Handle these liquids as hazardous waste under "Hazardous Waste" of these special provisions unless testing determines them to be nonhazardous.
- 5. Do not store incompatible materials, such as chlorine and ammonia, in the same secondary containment facility.
- 6. Store materials in the original containers with the original material labels maintained in legible condition. Replace damaged or illegible labels immediately.
- 7. Secondary containment facilities must 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 entire volume of the largest container within the facility, whichever is greater.
- 8. Store bagged or boxed material on pallets. Protect bagged or boxed material from wind and rain during non-working days and while precipitation is predicted.
- 9. Provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well organized, and equipped with cleanup supplies appropriate for the materials being stored.
- 10. Repair or replace perimeter controls, containment structures, covers, and liners as necessary. Inspect storage areas before and after precipitation, and at least weekly during other times.

Stockpile Management

Use the following stockpile management procedures:

1. Reduce or eliminate potential water pollution from stockpiled material including soil, paving material, and pressure treated wood.

2. Locate stockpiles:

- 2.1. If within the floodplain, at least 100 feet from concentrated flows of storm water, drainage courses, and inlets unless approved
- 2.2. If outside the floodplain, at least 50 feet from concentrated flows of storm water, drainage courses, and inlets unless approved

Install WPC practices within 15 days or before predicted precipitation, whichever occurs first.

Active and inactive soil stockpiles must be:

- 1. Covered with soil stabilization measures, plastic sheeting, or geosynthetic fabric
- 2. Surrounded with a linear sediment barrier

Portland cement concrete rubble, AC, HMA, AC and HMA rubble, aggregate base or aggregate sub-base stockpiles must be:

- 1. Covered with plastic sheeting, or geosynthetic fabric
- 2. Surrounded with a linear sediment barrier

Pressure treated wood stockpiles must be:

- 1. Placed on pallets
- 2. Covered with impermeable material

Cold mix asphalt concrete stockpiles must be:

- 1. Placed on impervious surface
- 2. Covered with impermeable material
- 3. Protected from run-on and runoff

Control wind erosion year round under Section 14-9.02, "Dust Control" of the Standard Specifications.

Repair or replace linear sediment barriers and covers as needed to keep them functioning properly. If sediment accumulates to 1/3 of the linear sediment barrier height, remove the sediment.

Waste Management

Solid Waste

Do not allow litter or debris to accumulate anywhere at the job site, including storm drain grates, trash racks, and ditch lines. Pick up and remove trash and debris from the job site at least once a week. The WPC Manager must monitor solid waste storage and disposal procedures at the job site.

If practicable, recycle nonhazardous job site waste and excess material. If recycling is not

practicable, disposal must comply with Section 7-1.13, "Disposal of Material Outside the Highway Right of Way" of the Standard Specifications.

Furnish enough closed-lid dumpsters of sufficient size to contain any solid waste generated by work activities. When the refuse reaches the fill line, empty the dumpsters. Dumpsters must be watertight. Do not wash out dumpsters at the job site. Furnish additional containers and pick up dumpsters more frequent during the demolition phase of construction.

Solid waste includes:

- 1. Brick
- 2. Mortar
- 3. Timber
- 4. Metal scraps
- 5. Sawdust
- 6. Pipe
- 7. Electrical cuttings
- 8. Non-hazardous equipment parts
- 9. Styrofoam and other packaging materials
- 10. Vegetative material and plant containers from highway planting
- 11. Litter and smoking material, including litter generated randomly by the public
- 12. Other trash and debris

Furnish and use trash receptacles at the job site yard, field trailers, and locations where workers gather for lunch and breaks.

Hazardous Waste

Use hazardous waste management practices if waste is generated at the job site from the following substances:

- 1. Petroleum products
- 2. Asphalt products
- 3. Concrete curing compound
- 4. Pesticides
- 5. Acids
- 6. Paints
- 7. Stains
- 8. Solvents
- 9. Wood preservatives and treated posts
- 10. Roofing tar
- 11. Road flares
- 12. Lime
- 13. Glues and adhesives
- 14. Materials classified as hazardous by California Code of Regulations, Title 22, Division 4.5; or listed in CFR Title 40, Parts 110, 117, 261, or 302

The WPC Manager must oversee and enforce hazardous waste management practices. Minimize

the production of hazardous materials and hazardous waste at the job site. If damaged, repair or replace perimeter controls, containment structures, and covers.

If hazardous material levels are unknown, use a laboratory certified by ELAP under CDPH to sample and test waste to determine safe methods for storage and disposal.

Separate potentially hazardous waste from nonhazardous waste at the job site. Hazardous waste must be handled, stored, and disposed of under California Code of Regulations, Title 22, Division 4.5, Section 66262.34; and in CFR Title 49, Parts 261, 262, and 263.

Store hazardous waste in sealed containers constructed and labeled with the contents and date accumulated under California Code of Regulations, Title 22, Division 4.5; and in CFR Title 49, Parts 172, 173, 178, and 179. Keep hazardous waste containers in temporary containment facilities under "Material Storage" of these special provisions.

Furnish containers with adequate storage volume at convenient locations for hazardous waste collection. Do not overfill hazardous waste containers. Do not mix hazardous waste. Do not allow potentially hazardous waste to accumulate on the ground. Store containers of dry waste that are not watertight on pallets. Store hazardous waste away from storm drains, watercourses, moving vehicles, and equipment.

Clean water based or oil based paint from brushes or equipment within a contained area and in a way that does not contaminate soil, watercourses, and storm drain systems. Handle and dispose of the following as hazardous waste: paints, thinners, solvents, residues, and sludges that cannot be recycled or reused. When thoroughly dry, dispose of the following as solid waste: dry, latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths.

Dispose of hazardous waste within 90 days of being generated. Use a licensed hazardous waste transporter to take hazardous waste to a Class I Disposal Site. Submit a copy of uniform hazardous waste manifest forms within 24 hours of transporting hazardous waste.

The WPC Manager must inspect the following daily:

- 1. Storage areas for hazardous materials and waste
- 2. Hazardous waste disposal and transporting activities
- 3. Hazardous material delivery and storage activities

Contaminated Soil

Identify contaminated soil from spills or leaks by noticing discoloration, odors, or differences in soil properties. Soil with evidence of contamination must be sampled and tested by a laboratory certified by ELAP.

If levels of contamination are found to be hazardous, handle and dispose of the soil as hazardous waste.

Prevent the flow of water, including ground water, from mixing with contaminated soil by using one or a combination of the following measures:

- 1. Berms
- 2. Cofferdams
- 3. Grout curtains
- 4. Freeze walls
- 5. Concrete seal course

If water mixes with contaminated soil and becomes contaminated, sample and test the water using a laboratory certified by ELAP. If levels of contamination are found to be hazardous, handle and dispose of the water as hazardous waste.

Concrete Waste

Use practices that will prevent the discharge of portland cement concrete, AC, or HMA waste into storm drain systems or watercourses.

Collect and dispose of portland cement concrete, AC, or HMA waste at locations where:

- 1. Concrete material, including grout, is used
- 2. Concrete dust and debris result from demolition
- 3. Sawcutting, coring, grinding, grooving, or hydro-concrete demolition of portland cement concrete, AC, or HMA creates a residue or slurry
- 4. Concrete truck or other concrete-coated equipment is cleaned at the job site

Sanitary and Septic Waste

Do not bury or discharge wastewater from sanitary or septic systems within Department right-of-way. The WPC Manager must inspect sanitary or septic waste storage and monitor disposal procedures at least weekly. Sanitary facilities that discharge to the sanitary sewer system must be properly connected and free from leaks. Place sanitary facilities at least 50 feet away from storm drains, watercourses, and flow lines.

Obtain written approval from the local health agency, city, county, and sewer district before discharging from a sanitary or septic system directly into a sanitary sewer system, and submit a copy to the Engineer. Comply with local health agency provisions while using an on-site disposal system.

Liquid Waste

Use practices that will prevent job site liquid waste from entering storm drain systems or watercourses. Liquid waste includes the following:

- 1. Drilling slurries or fluids
- 2. Grease-free or oil-free wastewater or rinse water
- 3. Dredgings, including liquid waste from drainage system cleaning
- 4. Liquid waste running off a surface including wash or rinse water
- 5. Other non-stormwater liquids not covered by separate permits

Hold liquid waste in structurally sound, leak proof containers such as:

- 1. Roll-off bins
- 2. Portable tanks

Liquid waste containers must be of sufficient quantity and volume to prevent overflow, spills and leaks.

Store containers:

- 1. At least 50 feet from moving vehicles and equipment
- 2. If within the floodplain, at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved
- 3. If outside the floodplain, at least 50 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved

Remove and dispose of deposited solids from sediment traps under "Solid Waste" of these special provisions unless the Engineer approves another method.

Liquid waste may require testing to determine hazardous material content before disposal.

Drilling fluids and residue must be disposed of outside the highway right-of-way.

If an approved location is available within the job site, fluids and residue exempt under California Code of Regulations, Title 23, Section 2511(g) may be dried by evaporation in a leak proof container. Dispose of remaining solid waste under "Solid Waste" of these special provisions.

Non-Storm Water Management

Water Control and Conservation

Manage water used for work activities to prevent erosion or discharge of pollutants into storm drain systems or watercourses. Obtain approval before washing anything at the job site with water that could discharge into a storm drain system or watercourse. Report discharges immediately.

If water is used at the job site, implement water conservation practices. Inspect irrigation areas. Adjust watering schedules to prevent erosion, excess watering, or runoff. Shut off water source to broken lines, sprinklers, or valves, and repair breaks within 24 hours. If possible, reuse water from waterline flushing for landscape irrigation. Sweep and vacuum paved areas; do not wash them with water.

Direct job site water runoff, including water from water line repair, to areas where it can infiltrate into the ground and not enter storm drain systems or watercourses. Do not allow spilled water to escape water truck filling areas. If possible, direct water from off-site sources around the job site. Minimize the contact of off-site water with job site water.

Illegal Connection and Discharge Detection and Reporting

Inspect the job site and the site perimeter before starting work for evidence of illegal connections, discharges, or dumping. After starting work, inspect the job site and perimeter on a daily schedule.

Whenever illegal connections, discharges, or dumping are discovered, notify the Engineer immediately. Take no further action unless ordered by the Engineer. Assume unlabeled or unidentifiable material is hazardous.

Look for the following evidence of illegal connections, discharges, or dumping:

- 1. Debris or trash piles
- 2. Staining or discoloration on pavement or soils
- 3. Pungent odors coming from drainage systems
- 4. Discoloration or oily sheen on water
- 5. Stains or residue in ditches, channels or drain boxes
- 6. Abnormal water flow during dry weather
- 7. Excessive sediment deposits
- 8. Nonstandard drainage junction structures
- 9. Broken concrete or other disturbances near junction structures

Vehicle and Equipment Cleaning

Limit vehicle and equipment cleaning or washing at the job site except what is necessary to control vehicle tracking or hazardous waste. Notify the Engineer before cleaning vehicles and equipment at the job site with soap, solvents, or steam. Contain and recycle or dispose of resulting waste under "Liquid Waste" or "Hazardous Waste" of these special provisions, whichever is applicable. Do not use diesel to clean vehicles or equipment, and minimize the use of solvents.

Clean or wash vehicles and equipment in a structure equipped with disposal facilities. If using a structure is not possible, clean or wash vehicles and equipment in an outside area. The outside area must be:

- 1. Paved with AC, HMA, or concrete paving
- 2. Surrounded by a containment berm
- 3. Equipped with a sump to collect and dispose of wash water
- 4. If within the floodplain, located at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved
- 5. If outside the floodplain, located at least 50 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved

When washing vehicles or equipment with water, use as little water as possible. Hoses must be equipped with a positive shutoff valve.

Discharge liquid from wash racks to a recycle system or to another approved system. Remove liquids and sediment as necessary.

The WPC Manager must inspect vehicle and equipment cleaning facilities:

- 1. Daily if vehicle and equipment cleaning occurs daily
- 2. Weekly if vehicle and equipment cleaning does not occur daily

Vehicle and Equipment Fueling and Maintenance

If practicable, perform maintenance on vehicles and equipment off the job site.

If fueling or maintenance must be done at the job site, designate a site, or sites, and obtain approval before using. Minimize mobile fueling or maintenance.

If vehicle and equipment fueling and maintenance must be done at the job site, areas for the following activities must be:

- 1. On level ground
- 2. Protected from storm water run-on
- 3. If within the floodplain, located at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved
- 4. If outside the floodplain, located at least 50 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved

Use containment berms or dikes around the fueling and maintenance area. Keep adequate quantities of absorbent spill cleanup material and spill kits in the fueling and maintenance area and on fueling trucks. Dispose of spill cleanup material and kits immediately after use. Use drip pans or absorbent pads during fueling or maintenance.

Fueling or maintenance activities must not be left unattended. Fueling nozzles must be equipped with an automatic shutoff control. Vapor recovery fueling nozzles must be used where required by the Air Quality Management District. When not in use, nozzles must be secured upright. Do not top-off fuel tanks.

Recycle or properly dispose of used batteries and tires.

The WPC Manager must inspect vehicle and equipment maintenance and fueling areas:

- 1. Daily when vehicle and equipment maintenance and fueling occurs daily
- 2. Weekly when vehicle and equipment maintenance and fueling does not occur daily

The WPC Manager must inspect vehicles and equipment at the job site for leaks and spills on a daily schedule. Operators must inspect vehicles and equipment each day of use.

If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site.

Concrete Curing

Do not overspray chemical curing compound. Minimize the drift by spraying as close to the

concrete as possible. Cover drainage inlets before applying the curing compound.

Minimize the use and discharge of water by using wet blankets or similar methods to maintain moisture while curing concrete.

Concrete Finishing

Collect and dispose of water and solid waste from high-pressure water blasting. Cover drainage inlets within 50 feet before sandblasting. Minimize drift of dust and blast material by keeping the nozzle close to the surface of the concrete. The blast residue may contain hazardous material.

Inspect concrete finishing containment structures for damage before each day of use and before predicted precipitation. Remove liquid and solid waste from containment structures after each work shift.

Sweeping

Sweeping must be done using hand or mechanical methods such as vacuuming.

Monitor paved areas and roadways within the job site for sediment and debris generating activities such as:

- 1. Clearing and grubbing
- 2. Earthwork
- 3. Trenching
- 4. Roadway structural section work
- 5. Vehicles entering and leaving the job site
- 6. Soil disturbing work
- 7. Work that causes offsite tracking of material

If sediment or debris is observed, perform sweeping:

1. Within:

- 1.1. 8 hours of predicted rain
- 1.2. 24 hours unless the Engineer approves a longer period
- 2. On paved roads at job site entrances and exit locations
- 3. On paved areas within the job site that flow to storm drains or receiving waters

You may stockpile collected material at the job site. Remove collected material including sediment from paved shoulders, drain inlets, curbs and dikes, and other drainage areas. If stockpiled, dispose of collected material at least once per week.

You may dispose of sediment within the job site that you collected during sweeping activities. Protect disposal areas against erosion.

Remove and dispose of trash collected during sweeping under Section 7-1.13, "Disposal of

Material Outside the Highway Right of Way" of the Standard Specifications.

Dewatering

Dewatering consists of discharging accumulated storm water, ground water, or surface water from excavations or temporary containment facilities.

If dewatering and discharging activities are specified under a work item such as "Temporary Active Treatment System" or "Dewatering and Discharge," perform dewatering work as specified in the section involved.

If dewatering and discharging activities are not specified under a work item and you will be performing dewatering activities, you must:

- 1. Submit to the Engineer a Dewatering and Discharge Plan under Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications and "Water Pollution Control" of these special provisions at least 2 days before starting dewatering activities. The Dewatering and Discharge Plan must include:
 - 1.1. Title sheet and table of contents
 - 1.2. Description of dewatering and discharge activities detailing locations, quantity of water, equipment, and discharge points
 - 1.3. Estimated schedule for dewatering and discharge (start and end dates, intermittent or continuous)
 - 1.4. Discharge alternatives such as dust control or percolation
 - 1.5. Visual monitoring procedures with inspection log
- 2. Conduct dewatering activities under Caltrans' "Field Guide for Construction Dewatering."
- 3. Ensure that any dewatering discharge does not cause erosion, scour, or sedimentary deposits that could impact natural bedding materials.
- 4. Discharge the water within the project limits. Dispose of the water in the same way as specified for material in Section 7-1.13 "Disposal of Material Outside the Highway Right of Way" of the Standard Specification if it cannot be discharged within project limits due to site constraints.
- 5. Do not discharge storm water or non-stormwater that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface. Notify the Engineer immediately upon discovering any such condition.

The WPC manager must inspect dewatering activities:

- 1. Daily when dewatering work occurs daily
- 2. Weekly when dewatering work does not occur daily

PAYMENT

The contract lump sum price paid for construction site management includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in spill prevention and control, sweeping, material management, waste management,

non-stormwater management, and dewatering and identifying, sampling, testing, handling, and disposing of hazardous waste resulting from your activities, as specified in the Standard Specifications and these special provisions, and as ordered by the Engineer.

10-1.06 STREET SWEEPING:

GENERAL

Summary

This work includes street sweeping. The SWPPP 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 starting clearing and grubbing, earthwork, or other activities with the potential for tracking sediment or debris, submit:

- 1. Number of sweepers described in the SWPPP
- 2. Type of sweeper technology

Quality Control and Assurance

Retain and submit records of street sweeping including:

- 1. Quantity of sweeping waste disposal
- 2. Sweeping times and locations

CONSTRUCTION

Street Sweepers

Sweepers must use one of these technologies:

- 1. Mechanical sweeper followed by a vacuum-assisted sweeper
- 2. Vacuum-assisted dry (waterless) sweeper
- 3. Regenerative-air sweeper

Operation

Street sweeping must be done at:

- 1. Paved roads at job site entrance and exit locations
- 2. Paved areas within the job site that flow to storm drains or water bodies

Street sweeping must be done:

- 1. During clearing and grubbing activities
- 2. During earthwork activities

- 3. During trenching activities
- 4. During roadway structural section activites
- 5. When vehicles are entering and leaving the job site
- 6. After soil disturbing activities
- 7. After observing offsite tracking of material

Monitor paved areas and roadway within the jobsite. Street sweeping must be done:

- 1. Within 1 hour, if sediment or debris is observed during activities that require sweeping
- 2. Within 24 hours, if sediment or debris is observed during activities that do not require sweeping

At least 1 sweeper must be on the job site at all times when sweeping work is required. The sweeper must be in good working order.

Perform street sweeping to minimize dust. If dust generation is excessive or sediment pickup is ineffective, use water or a vacuum.

You may stockpile collected material on the jobsite according to the approved SWPPP. Dispose of collected material at least once per week.

Material collected during street sweeping must be removed and disposed of under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Your WPCM must inspect paved roads at job site access points:

- 1. Daily if earthwork and other sediment or debris generating activities occur daily
- 2. Weekly if earthwork and other sediment or debris generating activities do not occur daily
- 3. When the National Weather Service predicts precipitation with a probability of at least 30 percent

MEASUREMENT AND PAYMENT

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in street sweeping, including disposal of collected material, as shown on the plans, as specified in the Standard Specifications, these special provisions, and as directed by the Engineer, shall be considered as included in the contract price paid for Construction Site Management and no additional compensation shall be allowed therefor.

10-1.07 TEMPORARY DRAINAGE INLET PROTECTION:

GENERAL

Summary

This work includes constructing, maintaining, and removing temporary drainage inlet protection. Drainage inlet protection settles and filters sediment before stormwater runoff discharges into storm drainage systems.

The SWPPP must describe and include the use of temporary drainage inlet protection as a water pollution control practice for sediment control.

Provide temporary drainage inlet protection to meet the changing conditions around the drainage inlet. Temporary drainage inlet protection must be:

- 1. Appropriate type to meet the conditions around the drainage inlet
- 2. Type 1, Type 2, Type 3A, Type 3B, Type 4, Type 4B, Type 5, Type 6A, Type 6B, or a combination

Submittals

Submit a Certificate of Compliance as specified in Section 6-1.07, "Certificates of Compliance" of the Standard Specifications for:

- 1. Erosion control blanket
- 2. Fiber rolls
- 3. Safety cap for metal posts
- 4. Silt fence fabric
- 5. Sediment filter bag
- 6. Foam barrier
- 7. Rigid plastic barrier
- 8. Gravel-filled bag fabric

If you substitute the steel wire staple with an alternative attachment device, submit a sample of the device for approval at least 5 business days before installation.

MATERIALS

Geosynthetic Fabrics

Geosynthetic fabrics for temporary drainage inlet protection must consist of one of the following:

- 1. Polyester
- 2. Polypropylene
- 3. Combined polyester and polypropylene

Geosynthetic fabrics for temporary drainage inlet must comply with the specifications for water pollution control in Section 88-1.05, "Water Pollution Control," of the Standard Specifications.

Foam barrier must comply with:

Foam Barrier

Property	ASTM	Specification
	Designation	
Grab breaking load	D 4632	
1-inch grip, lb, min. in each		
direction		200
Apparent elongation	D 4632	
percent, min., in each		
direction		15
Water Flow Rate	D 4491	
max. average roll value,		
gallons per minute/square		
foot		100-150
Permittivity	D 4491	
1/sec., min.		0.05
Apparent opening size	D 4751	
max. average roll value, U.S.		
Standard sieve size		40
Ultraviolet Degradation	D 4595	
percent of original		
unexposed grab breaking		
load 500 hr, minimum		70

Sample under ASTM D 4354, Procedure C.

Test under ASTM D 4759. All properties are based on Minimum Average Roll Value (MARV).

Identify, store, and handle under ASTM D 4873.

Erosion Control Blanket

Erosion control blanket must be:

- 1. Described as a rolled erosion control product (RECP)
- 2. Classified as temporary and degradable or long-term and non-degradable
- 3. Machine-made mats
- 4. Provided in rolled strips
- 5. Classified by the Erosion Control Technology Council (ECTC)

Erosion control blanket classified as temporary and degradable must be one of the following:

1. Double net excelsior blanket:

- 1.1. Classified as ECTC Type 2D
- 1.2. Classified as an erosion control blanket
- 1.3. Designed to last for at least one year after installation
- 1.4. With a Universal Soil Loss Equation (USLE) C-Factor of not more than 0.20 at a 2:1 (horizontal:vertical) slope
- 1.5. With 80 percent of the wood excelsior fibers being 6 inches or longer
- 1.6. Capable to withstand a maximum shear stress of 1.75 pounds per square foot under ASTM D 6460

- 1.7. With a minimum tensile strength of 75 pounds per foot under ASTM D 5035
- 1.8. With top and bottom surfaces covered with extruded photodegradable plastic netting or lightweight non-synthetic netting

2. Double net straw and coconut blanket:

- 2.1. Classified as ECTC Type 2D
- 2.2. Classified as an erosion control blanket
- 2.3. Designed to last for at least one year after installation
- 2.4. With a USLE C-Factor of not more than 0.20 at a 2:1 (horizontal:vertical) slope
- 2.5. Comprised of 70 percent straw and 30 percent coconut fiber
- 2.6. Capable to withstand a maximum shear stress of 1.75 pounds per square foot under ASTM D 6460
- 2.7. With a minimum tensile strength of 75 pounds per foot under ASTM D 5035
- 2.8. With top and bottom surfaces covered with extruded photodegradable plastic netting or lightweight non-synthetic netting

3. Jute netting:

- 3.1. Classified as ECTC Type 3B
- 3.2. Classified as an open weave textile and have from 14 to 20 strands per foot in each direction
- 3.3. Designed to last for at least one year after installation
- 3.4. With a USLE C-Factor of not more than 0.25 at a 1.5:1 (horizontal:vertical) slope
- 3.5. Comprised of 100 percent unbleached and undyed spun yarn made of jute fiber
- 3.6. With an average open area from 63 to 70 percent
- 3.7. From 48 to 72 inches in width
- 3.8. Capable to withstand a maximum shear stress of 2.0 pounds per square foot under ASTM D 6460
- 3.9. With a minimum tensile strength of 100 pounds per foot under ASTM D 5035
- 3.10. From 0.90 to 1.20 pounds per square yard in weight

4. Coir netting:

- 4.1. Classified as ECTC Type 4
- 4.2. Classified as an open weave textile and from 13 to 18 strands per foot in each direction
- 4.3. Designed to last for at least three years after installation
- 4.4. With a USLE C-Factor of not more than 0.25 at a 1:1 (horizontal:vertical) slope
- 4.5. Comprised of 100 percent unbleached and undyed spun coir yarn made of coconut fiber
- 4.6. With an average open area from 63 to 70 percent
- 4.7. From 72 to 158 inches in width
- 4.8. Capable to withstand a maximum shear stress of 2.25 pounds per square foot under ASTM D6460
- 4.9. With a minimum tensile strength of 125 pounds per foot under ASTM D 5035
- 4.10. From 1.20 to 1.67 pounds per square vard in weight

Erosion control blanket classified as long-term and non-degradable must:

- 1. Be a geosynthetic fabric
- 2. Comply with the specifications for rock slope protection fabric (Class 8) in Section 88-1.06, "Channel and Shore Protection," of the Standard Specifications

Staples

You may use an alternative attachment device such as a geosynthetic pins or plastic pegs to install erosion control blanket.

Rock

Rock must comply with:

- 1. Requirements under Section 72-2.02, "Materials," of the Standard Specifications
- 2. Following sizes:

Square Screen Size (inch)	Percentage Passing	Percentage Retained
. 6	100	0
3	0	100

Rope

Rope for fiber rolls must be:

- 1. Biodegradable, such as sisal or manila
- 2. At least 1/4 inch in diameter

Fiber Rolls

Fiber rolls must:

- 1. Last for at least one year after installation
- 2. Be Type 1 or Type 2

For Type 1, fiber rolls must be:

- 1. Made from an erosion control blanket classified as temporary and degradable
- 2. Rolled along the width
- 3. Secured with natural fiber twine every 6'-6" from each end
- 4. Finished to be either:
 - 4.1. From 8 to 10 inches in diameter, from 10 to 20 feet long, and at least 0.5 pounds per linear foot

4.2. From 10 to 12 inches in diameter, at least 10 feet long, and at least 2 pounds per linear foot

For Type 2, fiber rolls must:

- 1. Be filled with rice or wheat straw, wood excelsior, or coconut fiber
- 2. Be covered with photodegradable plastic netting, biodegradable jute, sisal, or coir fiber netting
- 3. Have netting secured tightly at each end
- 4. Be finished to be either:
 - 4.1. From 8 to 10 inches in diameter, from 10 to 20 feet long, and at least 1.1 pounds per linear foot
 - 4.2. From 10 to 12 inches in diameter, at least 10 feet long, and at least 3 pounds per linear foot

Wood Stakes

Wood stakes 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 which would render the stakes unfit for use
- 3. Pointed on the end to be driven into the ground

For fiber rolls, wood stakes must be at least:

- 1. 1" x 1" x 24" in size for Type 1 installation
- 2. 1" x 2" x 24" in size for Type 2 installation

Posts

Posts must be wood or metal.

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 4 feet long

Metal posts must:

- 1. Be made of steel.
- 2. Have a "U," "T," "L," or other cross sectional shape that can resist failure from lateral loads.
- 3. Be pointed on the end to be driven into the ground.
- 4. Weigh at least 0.75-pound per foot.

- 5. Be at least 4 feet long.
- 6. Have a safety cap attached to the exposed end. The safety cap must be orange or red plastic and fit snugly to the metal post.

Silt Fence

Silt fence must be:

- 1. Constructed with silt fence fabric, posts, and fasteners
- 2. Prefabricated or assembled at the job site

Silt fence fabric must be attached to posts using these methods:

- 1. If prefabricated silt fence is used, posts must be inserted into sewn pockets
- 2. If assembled on the job site:
 - 2.1. If wood posts are used, fasteners must be staples or nails
 - 2.2. If steel posts are used, fasteners must be tie wires or locking plastic fasteners
 - 2.3. Spacing of the fasteners must be at least 8 inches

Gravel-filled Bags

Gravel-filled bags must:

- 1. Be made from fabric.
- 2. Have inside dimensions from 24 to 32 inches in length, and from 16 to 20 inches in width.
- 3. Have the opening bound to retain the gravel. The opening must be sewn with yarn, bound with wire, or secured with a closure device.
- 4. Weigh from 30 to 50 pounds when filled with gravel.

Gravel for gravel-filled bags must be:

- 1. From 3/8 to 3/4 inch in diameter
- 2. Clean and free from clay balls, organic matter, and other deleterious materials

Sediment Filter Bag

Sediment filter bag must:

- 1. Be made of fabric
- 2. Be sized to fit the catch basin or drainage inlet
- 3. Include a high-flow bypass

Sediment filter bag may include a metal frame. Sediment filter bags that do not have a metal frame and are deeper than 18 inches must:

- 1. Include lifting loops and dump straps
- 2. Include a restraint cord to keep the sides of the bag away from the walls of the catch basin

Foam Barriers

Foam barriers must:

- 1. Be filled with a urethane foam core
- 2. Have a geosynthetic fabric cover and flap
- 3. Have a triangular, circular, or square shaped cross section
- 4. Have a vertical height of at least 5 inches after installation
- 5. Have a horizontal flap of at least 8 inches in width
- 6. Have a length of at least 4 feet per unit
- 7. Have the ability to interlock separate units into a longer barrier so that water does not flow between the units
- 8. Be secured to:
 - 8.1. Pavement with 1-inch concrete nails with 1-inch washers and solvent-free adhesive
 - 8.2. Soil with 6-inch nails with 1-inch washers

Rigid Plastic Barriers

Rigid plastic barriers must:

- 1. Have an integrated filter
- 2. Have a formed outer jacket of perforated high density polyethylene (HDPE) or polyethylene terephthalate (PET)
- 3. Have a flattened tubular shaped cross section
- 4. Be made from virgin or recycled materials
- 5. Be free from biodegradable filler materials that degrade the physical or chemical characteristics of the finished filter core or outer jacket
- 6. Have a length of at least 4 feet per unit
- 7. Have the ability to interlock separate units into a longer barrier so that water does not flow between the units
- 8. Be secured to:
 - 8.1 Pavement with 1-inch concrete nails with 1-inch washers and solvent-free adhesive, with gravel-filled bags, or a combination
 - 8.2 Soil with 6-inch nails with 1-inch washers and wood stakes
- 9. Comply with the following properties:

Specification	Requirements
Grab tensile strength of outer jacket material, pounds/square inch, min. in each	4000
direction	
ASTM D 4632*	
Break strength of outer jacket, pounds/square inch	1300
ASTM D 4632*	
Permittivity of filter core, 1/sec., min.	0.38
ASTM D 4491	
Flow rate of filter core, gallons per minute per square foot,	100 min.
ASTM D 4491	200 max.
Filter core aperture size, max., Average Opening Size (AOS), microns	425
Ultraviolet stability (outer jacket & filter core), percent tensile strength retained	90
after 500 hours, min.	
ASTM D 4355 (xenon-arc lamp and water spray weathering method)	

^{*} or appropriate test method for specific polymer

If used at a curb inlet without a grate, rigid plastic barriers must:

- 1. Have a horizontal flap of at least 6 inches with an under-seal gasket to prevent underflows
- 2. Include a high-flow bypass
- 3. Have a vertical height of at least 7 inches after installation
- 4. Be sized to fit the catch basin or drainage inlet

If used at a grated catch basin without a curb inlet, rigid plastic barriers must:

- 1. Cover the grate by at least 2 inches on each side and have an under-seal gasket to prevent underflows
- 2. Include a high-flow bypass
- 3. Have a vertical height of at least 1.5 inches after installation
- 4. Be sized to fit the catch basin or drainage inlet

If used at a curb inlet with a grate, rigid plastic barriers must:

- 1. Have a horizontal flap that covers the grate by at least 2 inches on the 3 sides away from the curb opening and have an under-seal gasket to prevent underflows
- 2. Include a high-flow bypass
- 3. Have a vertical section that covers the curb opening by at least 5 inches after installation
- 4. Be sized to fit the catch basin or drainage inlet

If used as a linear sediment barrier, rigid plastic barriers:

- 1. Must have an installed height of at least 6 inches
- 2. May have a horizontal flap of at least 4 inches

Linear Sediment Barrier

Linear sediment barriers must consist of one or more of the following:

- 1. Silt fence
- 2. Gravel-filled bags

- 3. Fiber roll
- 4. Rigid plastic barrier
- 5. Foam barrier

Flexible Sediment Barrier

Flexible sediment barriers consist of one or more of the following:

- 1. Rigid plastic barrier
- 2. Foam barrier

CONSTRUCTION

For drainage inlet protection at drainage inlets in paved and unpaved areas:

- 1. Prevent ponded runoff from encroaching on the traveled way or overtopping the curb or dike. Use linear sediment barriers to redirect runoff and control ponding.
- 2. Clear the area around each drainage inlet of obstructions including rocks, clods, and debris greater than one inch in diameter before installing the drainage inlet protection.
- 3. Install a linear sediment barrier up-slope of the existing drainage inlet and parallel with the curb, dike, or flow line to prevent sediment from entering the drainage inlet.

Erosion Control Blanket

To install erosion control blanket and geosynthetic fabric:

- 1. Secure blanket or fabric to the surface of the excavated sediment trap with staples and embed in a trench adjacent to the drainage inlet
- 2. Anchor the perimeter edge of the erosion control blanket in a trench

Silt Fence

If silt fence is used as a linear sediment barrier:

- 1. Place fence along the perimeter of the erosion control blanket, with the posts facing the drainage inlet
- 2. Install fence with the bottom edge of the silt fence fabric in a trench. Backfill the trench with soil and compact manually

Gravel Bag Berm

If gravel bag berm is used as a linear sediment barrier:

- 1. Place gravel-filled bags end-to-end to eliminate gaps
- 2. Stack bags in a way that the bags in the top row overlap the joints in the lower row

If gravel bag berms are used for Type 3A and Type 3B:

- 1. Place gravel-filled bags end-to-end to eliminate gaps
- 2. Stack bags in a way that the bags in the top row overlap the joints in the lower row
- 3. Arrange bags to create a spillway by removing one or more gravel-filled bags from the upper layer

If used within shoulder area, place gravel-filled bags behind temporary railing (Type K).

Fiber Rolls

If fiber rolls are used as a linear sediment barrier:

- 1. Place fiber rolls in a furrow.
- 2. Secure fiber rolls with stakes installed along the length of the fiber rolls. Stakes must be installed from 6 to 12 inches from the end of the rolls.

If fiber rolls are used as a linear sediment barrier for Type 4A, place them over the erosion control blanket.

Foam Barriers

If foam barriers are used as a linear sediment barrier:

- 1. Install barriers with the horizontal flap in a 3 inch deep trench and secured with nails and washers placed no more than 4 feet apart
- 2. Secure barriers with 2 nails at the connection points where separate units overlap
- 3. Place barriers without nails or stakes piercing the core

Flexible Sediment Barriers

If flexible sediment barriers are used:

- 1. Secure barriers to the pavement with nails and adhesive, gravel-filled bags, or a combination
- 2. Install barriers flush against the sides of concrete, asphalt concrete, or hot mix asphalt curbs or dikes
- 3. Place barriers to provide a tight joint with the curb or dike and anchored in a way that runoff cannot flow behind the barrier

If flexible sediment barriers are used for Type 4B:

- 1. Secure barriers to the pavement according to the angle and spacing shown on the plans
- 2. Place barriers to provide a tight joint with the curb or dike. Cut the cover fabric or jacket to ensure a tight fit

Rigid Sediment Barriers

If rigid sediment barriers are used at a grated catch basin without a curb inlet:

1. Place barriers using the gasket to prevent runoff from flowing under the barrier

2. Secure barriers to the pavement with nails and adhesive, gravel-filled bags, or a combination

If rigid sediment barriers are used for linear sediment barriers:

- 1. Install barriers in a trench. Backfill the trench with soil and compact manually
- 2. Place barrier with separate units overlapping at least 4 inches
- 3. Reinforce barriers with a wood stake at each overlap
- 4. Fasten barriers to the wood stakes with steel screws, 16 gauge galvanized steel wire, or with UV stabilized cable ties that are from 5 to 7 inches in length

Sediment Filter Bags

Install sediment filter bags for Type 5 by:

- 1. Removing the drainage inlet grate
- 2. Placing the sediment bag in the opening
- 3. Replacing the grate to secure the sediment filter bag in place

MAINTENANCE

Maintain temporary drainage inlet protection to provide sediment holding capacity and to reduce runoff velocities.

Remove sediment deposits, trash, and debris from temporary drainage inlet protection as needed or when directed by the Engineer. If removed sediment is deposited within project limits, it must be stabilized and not subject to erosion by wind or water. Trash and debris must be removed and disposed of as specified in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Maintain temporary drainage inlet protection by removing sediment from:

- 1. Behind flexible sediment barriers when sediment exceeds 1 inch in depth
- 2. Surface of the erosion control blanket when sediment exceeds 1 inch in depth
- 3. Sediment trap for Type 2 when the volume has been reduced by approximately one-half
- 4. Behind silt fence when the sediment is 1/3 the height of the silt fence fabric above ground
- 5. Sediment filter bags when filled or when the restraint cords are no longer visible

If rills and other evidence of concentrated runoff occur beneath the linear sediment barrier, repair or adjust the barrier.

If silt fence fabric becomes split, torn, or unraveled, repair or replace silt fence.

If geosynthetic fabric becomes split, torn, or unraveled, repair or replace foam barriers.

Repair or replace sagging or slumping linear sediment barriers with additional stakes. Replace broken or split wood stakes.

Reattach foam barriers and rigid plastic barriers that become detached or dislodged from the

pavement.

Repair split or torn rigid plastic barriers with 16 gauge galvanized steel wire or UV stabilized cable ties that are from 5 to 7 inches in length.

For sediment filter bags without metal frames, empty by placing one inch steel reinforcing bars through the lifting loops and then lift the filled bag from the drainage inlet. For sediment filter bags with metal frames, empty by lifting the metal frame from the drainage inlet. Rinse before replacing in the drainage inlet. When rinsing the sediment filter bags, do not allow the rinse water to enter a drain inlet or waterway.

Repair temporary drainage inlet protection within 24 hours of discovering damage unless the Engineer approves a longer period.

If your vehicles, equipment, or activities disturb or displace temporary drainage inlet protection, repair temporary drainage inlet protection 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 the temporary drainage inlet protection is not required, it must be removed and disposed of under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary drainage inlet protection must be backfilled and repaired under Section 15-1.02, "Preservation of Property," of the Standard Specifications.

PAYMENT

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the temporary drainage inlet protection, complete in place, including removal of materials, cleanup and disposal of retained sediment and debris, 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 directed by the Engineer, shall be considered as included in the contract price paid for Construction Site Management and no additional compensation shall be allowed therefor.

No additional compensation shall be made if the temporary drainage inlet protection is relocated during the course of construction.

10-1.08 TEMPORARY FENCE (TYPE ESA):

GENERAL

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.

Signs are not required for temporary fence (Type ESA).

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	ASTM D4632	260
1-inch grip, lb, Min. in each		
direction		
Apparent elongation	ASTM D4632	5
percent, Min., in each direction		
Ultraviolet Degradation	ASTM D4355	70
percent of original unexposed		
grab breaking load 500 hr,		
minimum		

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.

CONSTRUCTION

General

Install temporary fence (Type ESA):

- 1. With high visibility fabric, posts, and fasteners as follows:
 - 1.1. If wood posts are used, fasteners must be staples or nails
 - 1.2. If steel posts are used, fasteners must be tie wires or locking plastic fasteners
 - 1.3. Spacing of the fasteners must be no more than 8 inches apart
- 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 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

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, under Section 15-1.02, "Preservation of Property," of the Standard Specifications.

PAYMENT

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, shall be considered as included in the contract price paid for Construction Site Management and no additional compensation will be allowed therefor.

10-1.09 PROGRESS SCHEDULE:

Progress schedules are required for this project and must be submitted as specified in Section 8-1.04, "Progress Schedule," of the Standard Specifications and these special provisions, unless otherwise authorized in writing by the Engineer.

Full compensation for submitting the required schedules shall be considered as included in the contract prices paid for the various items of work involved, and no additional compensation shall be allowed therefor.

10-1.10 OBSTRUCTIONS:

Attention is directed to Section 15, "Existing Highway Facilities," of the Standard Specifications and these special provisions.

The Contractor shall notify in writing the following utilities and agencies five days prior to the beginning of construction:

California Water Service Co. Contact: Mark Blohm Tel: (831)757-3644 254 Commission Street Salinas Ca 93901 AT & T Broadband Contact: Al Gutierrez Tel: (408)754-8490 P.O. Box 1711 Monterey CA 93940 PG&E

Contact: David McKenna

Tel: (831)784-3295

401 Work St Salinas CA 93901 Storm – Monterey County Contact: Shawn Atkins Tel: (831)755-4924

855 E. Laurel Drive, Bldg. B

Salinas CA 93905

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety and welfare of workmen and of the public. Facilities requiring special precautions include, but are not limited to: conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases; natural gas in pipelines greater than 6 inches in diameter or pipelines operating at pressures greater than 60 psi (gage); underground electric supply system conductors or cables, with potential to ground of more than 300 volts, either directly buried or in duct or conduit which does not have concentric grounded conductors or other effectively grounded metal shields or sheaths.

As the first order of work, the contractor shall pothole all utility crossings shown on the plans and obtains measurements to the top of the pipe from a fixed recoverable point marked on the ground adjacent to the pothole.

The Contractor shall 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)	(800) 642-2444 (800) 227-2600
Western Utilities Underground Alert (Inc.)	(800) 424-3447

Full compensation for conforming to the provisions in this section not otherwise provided for, shall be considered in prices paid for the various contract items of work involved and no additional compensation shall be allowed therefor.

10-1.11 CONSTRUCTION AREA TRAFFIC CONTROL DEVICES:

Flagging, signs, and temporary traffic control devices furnished, installed, maintained, and removed when no longer required shall conform to the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions.

The cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic through the work under provisions in sections 7-1.08, "Public Convenience," and 7-1.09, "Public Safety," of the Standard Specifications and for providing stands or towers for use of flaggers shall be considered included in the prices paid for the various contract items of work and no additional compensation will be allowed therfor.

Category 1 temporary traffic control devices are defined as small and lightweight (less than 100 pounds) devices. These devices shall be certified as crashworthy by crash testing, crash

testing of similar devices, or years of demonstrable safe performance. Category 1 temporary traffic control devices include traffic cones, plastic drums, portable delineators, and channelizers.

If requested by the Engineer, the Contractor shall provide written self-certification for crashworthiness of Category 1 temporary traffic control devices at least 5 days before beginning any work using the devices or within 2 days after the request if the devices are already in use. Self-certification shall be provided by the manufacturer or Contractor and shall include the following:

- A. Date,
- B. Federal Aid number (if applicable),
- C. Contract number, district, county, route and post mile of project limits,
- D. Company name of certifying vendor, street address, city, state and zip code,
- E. Printed name, signature and title of certifying person; and
- F. Category 1 temporary traffic control devices that will be used on the project.

The Contractor may obtain a standard form for self-certification from the Engineer.

Category 2 temporary traffic control devices are defined as small and lightweight (less than 100 pounds) devices that are not expected to produce significant vehicular velocity change, but may cause potential harm to impacting vehicles. Category 2 temporary traffic control devices include barricades and portable sign supports.

Category 2 temporary traffic control devices shall be on the Federal Highway Administration's (FHWA) list of Acceptable Crashworthy Category 2 Hardware for Work Zones. This list is maintained by FHWA and can be located at:

http://safety.fhwa.dot.gov/roadway_dept/road_hardware/listing.cfm?code=workzone

The Department also maintains this list at:

http://www.dot.ca.gov/hq/traffops/signtech/signdel/pdf/Category2.pdf

Category 2 temporary traffic control devices that have not received FHWA acceptance shall not be used. Category 2 temporary traffic control devices in use that have received FHWA acceptance shall be labeled with the FHWA acceptance letter number and the name of the manufacturer. The label shall be readable and permanently affixed by the manufacturer. Category 2 temporary traffic control devices without a label shall not be used.

If requested by the Engineer, the Contractor shall provide a written list of Category 2 temporary traffic control devices to be used on the project at least 5 days before beginning any work using the devices or within 2 days after the request if the devices are already in use.

Category 3 temporary traffic control devices consist of temporary traffic-handling equipment and devices that weigh 100 pounds or more and are expected to produce significant vehicular velocity change to impacting vehicles. Temporary traffic-handling equipment and devices include crash cushions, truck-mounted attenuators, temporary railing, temporary barrier, and end treatments for temporary railing and barrier.

Type III barricades may be used as sign supports if the barricades have been successfully crash tested, meeting the NCHRP Report 350 criteria, as one unit with a construction area sign attached.

Category 3 temporary traffic control devices shall be shown on the plans or on the Department's Highway Safety Features list. This list is maintained by the Division of Engineering Services and can be found at:

http://www.dot.ca.gov/hq/esc/approved products list/HighwaySafe.htm

Category 3 temporary traffic control devices that are not shown on the plans or not listed on the Department's Highway Safety Features list shall not be used.

Full compensation for providing self-certification for crashworthiness of Category 1 temporary traffic control devices and for providing a list of Category 2 temporary traffic control devices used on the project shall be considered as included in the prices paid for the various items of work requiring the use of the Category 1 or Category 2 temporary traffic control devices and no additional compensation will be allowed therefore.

10-1.12 CONSTRUCTION AREA SIGNS:

Construction area signs for temporary traffic control shall be furnished, installed, maintained, and removed when no longer required in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions.

Attention is directed to "Furnish Sign" of these special provisions.

Attention is directed to the provisions in "Prequalified and Tested Signing and Delineation Materials" of these special provisions. Type II retroreflective sheeting shall not be used on construction area sign panels. Type III, IV, VII, VIII, or IX retroreflective sheeting shall be used for stationary mounted construction area sign panels.

Unless otherwise shown on the plans or specified in these special provisions, the color of construction area warning and guide signs shall have black legend and border on orange background, except W10-1 or W47(CA) (Highway-Rail Grade Crossing Advance Warning) sign shall have black legend and border on yellow background.

Repair to construction area sign panels will not be allowed, except when approved by the Engineer. At nighttime under vehicular headlight illumination, sign panels that exhibit irregular luminance, shadowing or dark blotches shall be immediately replaced at the Contractor's expense.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for construction area sign posts. The regional notification centers include, but are not limited to, the following:

Telephone Number						
(800) 642-2444 (800) 227-2600						
(800) 424-3447						

Excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes. The post hole diameter, if backfilled with portland cement concrete, shall be at least 4 inches greater than the longer dimension of the post cross section.

Construction area signs placed within 15 feet from the edge of the travel way shall be mounted on stationary mounted sign supports as specified in "Construction Area Traffic Control Devices" of these special provisions.

The Contractor shall maintain accurate information on construction area signs. Signs that are no longer required shall be immediately covered or removed. Signs that convey inaccurate information shall be immediately replaced or the information shall be corrected. Covers shall be replaced when they no longer cover the signs properly. The Contractor shall immediately restore to the original position and location any sign that is displaced or overturned, from any cause, during the progress of work.

10-1.13 MAINTAINING TRAFFIC:

Maintaining traffic shall conform to the provisions in Sections 7-1.08, "Public Convenience," Section 7-1.09, "Public Safety," of the Standard Specifications and Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications.

Closure is defined as the closure of a traffic lane or lanes, including shoulder, ramp or connector lanes, within a single traffic control system.

Closures shall conform to the provisions in "Traffic Control System for Lane Closure" of these special provisions.

Closures are only allowed during the hours shown in the lane requirement charts included in this section "Maintaining Traffic," except for work required under Sections 7-1.08, "Public Convenience," and Section 7-1.09, "Public Safety" of the Standard Specifications.

The full width of the traveled way shall be open for use by public traffic when construction operations are not actively in progress.

Under one-way reversing traffic control operations, public traffic may be stopped in one direction for periods not to exceed 10 minute.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders including sections closed to public traffic.

When work vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the

shoulder area shall be closed with fluorescent orange traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 traffic cones or portable delineators shall be used for the taper. A W20-1 (ROAD WORK AHEAD) or W21-5b (RIGHT/LEFT SHOULDER CLOSED AHEAD) or C24(CA) (SHOULDER WORK AHEAD) sign shall be mounted on a crashworthy portable sign support with flags. The sign shall be placed where designated by the Engineer. The sign shall be a minimum of 48" x 48" in size. The Contractor shall immediately restore to the original position and location a traffic cone or delineator that is displaced or overturned, during the progress of work.

If minor deviations from the lane requirement charts are required, a written request shall be submitted to the Engineer at least 15 days before the proposed date of the closure. The Engineer may approve the deviations if there is no significant increase in the cost to the State and if the work can be expedited and better serve the public traffic.

Designated legal holidays are: January 17, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, November 11th, Thanksgiving Day, Day after Thanksgiving, December 24th, and December 25th. When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When November 11th falls on a Saturday, the preceding Friday shall be a designated legal holiday.

Full compensation for furnishing, erecting, maintaining, and removing and disposing of the W20-1, W21-5b, and C24(CA) signs shall be considered as included in the contract lump sum price paid for construction area signs and no additional compensation will be allowed therefor.

Co	nve	nt	ion	al	_	ha				R	יוואי	ire	mei	nts										
County: Monterey	R	nventional Highway Lane Requireme Route/Direction: Davis Road/EB & WB									MP: 3.25/4.60													
Closure Limits: 3,000 ft East of Mo	ro T	Cer	rac	e to	o B	orr	om	eo i	Dri	ve														
FROM HOUR TO HOUR 2	4 1	2	2 3	3 4	4	5 (6	7	8	9 1	0 1	1 1	2 1	3 1	4 1	5 1	61	7 1	8 1	9 2	0 2	1 2	2 2	3 24
Mondays through Thursdays	R	R	R	R	R	R			R	R	R	R	R	R	R	R				R	R	R	R	R
Fridays	R	R	R	R	R	R			R	R	R	R	R	R	R	R					R	R	R	R
Saturdays	R	R	R	R	R	R														R	R	R	R	R
Sundays	R	R	R	R	R	R															R	R	R	R
Legend: R Closure with reversible contr No closure permitted. REMARKS: Use of shoulder as through traffic law width of 11 feet.						by	the	e Er	ngin		·. Ti	hro	ugh	tra	ıffic	c la	nes	sh	all I	oe a	ı m	inir	nur	n

10-1.14 CLOSURE REQUIREMENTS AND CONDITIONS:

Closures shall conform to the provisions in "Maintaining Traffic" of these special provisions.

CLOSURE SCHEDULE

By noon Monday, the Contractor shall submit a written schedule of planned closures for the following week period, defined as Sunday noon through the following Sunday noon. Closures involving work (temporary barrier placement and paving operations) that will reduce horizontal clearances, traveled way inclusive of shoulders, to 2 lanes or less shall be submitted not less than 25 days and not more than 125 days before the anticipated start of operation. Closures involving work (pavement overlay, overhead sign installation, falsework and girder erection) that will reduce the vertical clearances available to the public, shall be submitted not less than 25 days and not more than 125 days before the anticipated start of operation.

The Closure Schedule shall show the locations and times of the proposed closures. The Closure Schedule request forms furnished by the Engineer shall be used. Closure Schedules submitted to the Engineer with incomplete or inaccurate information will be rejected and returned for correction and resubmittal. The Contractor will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval.

Closure Schedule amendments, including adding additional closures, shall be submitted by noon to the Engineer, in writing, at least 3 business days in advance of a planned closure. Approval of Closure Schedule amendments will be at the discretion of the Engineer.

The Engineer shall be notified of cancelled closures 2 business days before the date of closure.

Closures that are cancelled due to unsuitable weather may be rescheduled at the discretion of the Engineer.

CONTINGENCY PLAN

A detailed contingency plan shall be prepared for reopening closures to public traffic. If required by "Beginning of Work, Time of Completion and Liquidated Damages" of these special provisions, the contingency plan shall be submitted to the Engineer before work at the job site begins. Otherwise, the contingency plan shall be submitted to the Engineer within one business day of the Engineer's request.

LATE REOPENING OF CLOSURES

If a closure is not reopened to public traffic by the specified time, work shall be suspended in conformance with the provisions in Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. No further closures are to be made until the Engineer has accepted a work plan, submitted by the Contractor, that will insure that future closures will be reopened to public traffic at the specified time. The Engineer will have 2 business days to accept or reject the Contractor's proposed work plan. The Contractor will not be entitled to compensation for the suspension of work resulting from the late reopening of closures.

COMPENSATION

The Engineer shall be notified of delays in the Contractor's operations due to the following conditions, and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of those conditions, and the Contractor's loss due to that delay could not have been avoided by rescheduling the affected closure or by judicious handling of forces, equipment and plant, the delay will be considered a right of way delay and will be compensated in conformance with the provisions in Section 8-1.09, "Delays," of the Standard Specifications:

- 1. The Contractor's proposed Closure Schedule is denied and his planned closures are within the time frame allowed for closures in "Maintaining Traffic" of these special provisions, except that the Contractor will not be entitled to compensation for amendments to the Closure Schedule that are not approved.
- 2. The Contractor is denied a confirmed closure.

Should the Engineer direct the Contractor to remove a closure before the time designated in the approved Closure Schedule, delay to the Contractor's schedule due to removal of the closure will be considered a right of way delay and compensation for the delay will be determined in conformance with the provisions in Section 8-1.09, "Delays," of the Standard Specifications.

10-1.15 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE:

A traffic control system shall consist of closing traffic lanes in conformance with the details shown on the plans, the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, the provisions under "Maintaining Traffic" and "Construction Area Signs" of these special provisions.

The provisions in this section will not relieve the Contractor of responsibility for providing additional devices or taking measures as may be necessary to comply with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications.

Fourteen (14) days prior to the start of any construction activities that will inconvenience the public; the contractor shall place portable changeable message signs at each end of the project limit notifying the public of delays due to construction as directed by the Engineer. Attention is directed to Section 7-1.08, "Public Convenience," of the Standard Specifications.

During traffic stripe operations and pavement marker placement operations using bituminous adhesive, traffic shall be controlled, at the option of the Contractor, with either stationary or moving lane closures. During other operations, traffic shall be controlled with stationary lane closures. Attention is directed to the provisions in Section 84-1.04, "Protection From Damage," and Section 85-1.06, "Placement," of the Standard Specifications.

If components in the traffic control system are displaced or cease to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the components to the original condition or replace the components and shall restore the components to the original location.

STATIONARY LANE CLOSURE

When lane closures are made for work periods only, at the end of each work period, components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way, shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations, designated by the Engineer within the limits of the highway right of way.

Each vehicle used to place, maintain and remove components of a traffic control system on multilane highways shall be equipped with a Type II flashing arrow sign which shall be in operation when the vehicle is being used for placing, maintaining or removing the components. Vehicles equipped with Type II flashing arrow sign not involved in placing, maintaining or removing the components when operated within a stationary type lane closure shall only display the caution display mode. The sign shall be controllable by the operator of the vehicle while the vehicle is in motion. The flashing arrow sign shown on the plans shall not be used on the vehicles which are doing the placing, maintaining and removing of components of a traffic control system and shall be in place before a lane closure requiring the sign's use is completed.

MOVING LANE CLOSURE

Flashing arrow signs used in moving lane closures shall be truck-mounted. Changeable message signs used in moving lane closure operations shall conform to the provisions in Section 12-3.12, "Portable Changeable Message Signs," of the Standard Specifications, except the signs shall be truck-mounted and the full operation height of the bottom of the sign may be less than 7 feet above the ground, but should be as high as practicable.

Flashing arrow signs shall be in the caution display mode when used on 2-lane, 2-way highways.

Truck-mounted attenuators (TMA) for use in moving lane closures shall be any of the following approved models, or equal:

- 1. Hexfoam TMA Series 3000, Alpha 1000 TMA Series 1000, and Alpha 2001 TMA Series 2001, manufactured by Energy Absorption Systems, Inc., 35 East Wacker Drive, Suite 1100, Chicago, IL 60601:
 - 1.1. Northern California: Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, telephone (800) 884-8274, FAX (916) 387-9734
 - 1.2. Southern California: Traffic Control Service, Inc., 1818 E. Orangethorpe, Fullerton, CA 92831-5324, telephone (800) 222-8274, FAX (714) 526-9501
- 2. Cal T-001 Model 2 or Model 3, manufacturer and distributor: Hexcel Corporation, 11711 Dublin Boulevard, P.O. Box 2312, Dublin, CA 94568, telephone (925) 551-4900
- 3. Renco Rengard Model Nos. CAM 8-815 and RAM 8-815, manufacturer and distributor: Renco Inc., 1582 Pflugerville Loop Road, P.O. Box 730, Pflugerville, TX 78660-0730, telephone (800) 654-8182

Each TMA shall be individually identified with the manufacturer's name, address, TMA model number, and a specific serial number. The names and numbers shall each be a minimum 1/2 inch high and located on the left (street) side at the lower front corner. The TMA shall have a message next to the name and model number in 1/2 inch high letters which states, "The bottom of this TMA shall be 15 inches $\pm 1/2$ inch above the ground at all points for proper impact performance." Any TMA which is damaged or appears to be in poor condition shall not be used unless recertified by the manufacturer. The Engineer shall be the sole judge as to whether used

TMAs supplied under this contract need recertification. Each unit shall be certified by the manufacturer to meet the requirements for TMA in conformance with the standards established by the Transportation Laboratory.

Approvals for new TMA designs proposed as equal to the above approved models shall be in conformance with the procedures (including crash testing) established by the Transportation Laboratory. For information regarding submittal of new designs for evaluation contact: Transportation Laboratory, 5900 Folsom Boulevard, Sacramento, California 95819.

New TMAs proposed as equal to approved TMAs or approved TMAs determined by the Engineer to need recertification shall not be used until approved or recertified by the Transportation Laboratory.

PAYMENT

The contract lump sum price paid for traffic control system shall include full compensation for furnishing all labor, materials (including signs), tools, equipment (including portable changeable message signs), and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the traffic control system shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The adjustment provisions in Section 4-1.03, "Changes," 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. The adjustment will be made on a force account basis as provided in Section 9-1.03, "Force Account Payment," of the Standard Specifications for increased work and estimated on the same basis in the case of decreased work.

Traffic control system required by work which is classed as extra work, as provided in Section 4-1.03D of the Standard Specifications, will be paid for as a part of the extra work.

10-1.16 TEMPORARY PAVEMENT DELINEATION:

Temporary pavement delineation shall be furnished, placed, maintained, and removed in conformance with the provisions in Section 12-3.01, "General," of the Standard Specifications and these special provisions. Nothing in these special provisions shall be construed as reducing the minimum standards specified in the California MUTCD or as relieving the Contractor from the responsibilities specified in Section 7-1.09, "Public Safety," of the Standard Specifications.

GENERAL

When the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place before opening the traveled way to public traffic. Laneline or centerline pavement delineation shall be provided for traveled ways open to public traffic. On multilane roadways (freeways and expressways), edgeline delineation shall be provided for traveled ways open to public traffic.

Work necessary, including required lines or markers, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. Surfaces to receive application of paint or removable traffic tape temporary pavement delineation shall be dry and free of dirt and loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation, or as determined by the Engineer.

Temporary pavement markers and removable traffic tape that conflicts with a new traffic pattern or that is applied to the final layer of surfacing or existing pavement to remain in place shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

Temporary pavement delineation shall be used on or adjacent to lanes open to public traffic for a maximum of 14 days. Before the end of the 14 days, the permanent pavement delineation shall be placed. If the permanent pavement delineation is not placed within the 14 days, additional temporary pavement delineation shall be provided by the Contractor at no additional cost to the Department. The additional temporary pavement delineation to be provided shall be equivalent to the pattern specified for the permanent pavement delineation for the area, as determined by the Engineer.

TEMPORARY LANELINE AND CENTERLINE DELINEATION

When lanelines or centerlines are obliterated, the minimum laneline and centerline delineation to be provided shall be temporary pavement markers placed at longitudinal intervals of not more than 24 feet. The temporary pavement markers shall be the same color as the laneline or centerline the markers replace. Temporary pavement markers shall be, at the option of the Contractor, one of the temporary pavement markers listed for short term day/night use (14 days or less) or long term day/night use (6 months or less) in "Prequalified and Tested Signing and Delineation Materials" of these special provisions. Temporary pavement markers shall be placed in conformance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place pavement markers in areas where removal of the markers will be required.

Temporary laneline or centerline delineation consisting entirely of temporary pavement markers shall be placed on longitudinal intervals of not more than 24 feet.

Where "no passing" centerline pavement delineation is obliterated, the following "no passing" zone signing shall be installed before opening the lanes to public traffic. W20-1 (ROAD WORK AHEAD) signs shall be installed from 1,000 feet to 2,000 feet in advance of "no passing" zones. R4-1 (DO NOT PASS) signs shall be installed at the beginning and at every 2,000-foot interval within "no passing" zones. For continuous zones longer than 2 miles, W7-3a or W71(CA) signs shall be installed beneath the W20-1 signs installed in advance of "no passing" zones. R4-2 (PASS WITH CARE) signs shall be installed at the end of "no passing" zones. The exact location of "no passing" zone signing will be as determined by the Engineer and shall be maintained in place until permanent "no passing" centerline pavement delineation has been applied. The signing for "no passing" zones shall be removed when no longer required for the direction of public traffic. The signing for "no passing" zones shall conform to the provisions in

"Construction Area Signs" of these special provisions, except for payment.

Full compensation for furnishing, placing, maintaining, and removing temporary pavement markers used for temporary laneline and centerline delineation and for providing equivalent patterns of permanent traffic lines for these areas when required shall be considered as included in the contract prices paid for the items of work that obliterated the laneline and centerline pavement delineation and no separate payment will be made therefore.

Full compensation for furnishing, placing, and maintaining temporary painted laneline and centerline pavement delineation shall be considered as included in the contract prices paid for the items of work that obliterated the laneline and centerline pavement delineation and no separate payment will be made therefore.

Full compensation for furnishing, placing, maintaining, and removing signing specified for "no passing" zones shall be considered as included in the contract prices paid for the items of work that obliterated the laneline and centerline pavement delineation and no separate payment will be made therefore.

TEMPORARY EDGELINE DELINEATION

When edgelines are obliterated on multilane roadways (freeways and expressways), the edgeline delineation to be provided for that area adjacent to lanes open to public traffic shall consist of, at the option of the Contractor, either solid 4-inch wide traffic stripe tape of the same color as the stripe it replaces, traffic cones, portable delineators or channelizers placed at longitudinal intervals not to exceed 100 feet.

Temporary removable construction grade striping and pavement marking tape shall be as listed in "Prequalified and Tested Signing and Delineation Materials" of these special provisions.

Temporary removable construction grade striping and pavement marking tape when used shall be applied in conformance with the manufacturer's recommendations.

The lateral offset for traffic cones, portable delineators or channelizers used for temporary edgeline delineation shall be determined by the Engineer. If traffic cones or portable delineators are used as temporary pavement delineation for edgelines, the Contractor shall provide personnel to remain at the project site to maintain the cones or delineators during hours of the day that the cones or delineators are in use.

Channelizers used for temporary edgeline delineation shall be the surface mounted type and shall be orange in color. Channelizer bases shall be cemented to the pavement in the same manner provided for cementing pavement markers to pavement in "Pavement Markers" of these special provisions, except epoxy adhesive shall not be used to place channelizers on the top layer of pavement. Channelizers shall be, at the Contractor's option, one of the surface mount types (36 inch) listed in "Prequalified and Tested Signing and Delineation Materials" of these special provisions.

Temporary edgeline delineation shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

Full compensation for furnishing, placing, maintaining, and removing temporary edgeline delineation shall be considered as included in the contract prices paid for the items of work that obliterated the edgeline pavement delineation and no separate payment will be made therefore.

<u>10-1.17 PORTABLE CHANGEABLE MESSAGE SIGN:</u>

Portable changeable message signs shall be furnished, placed, operated, and maintained at locations designated by the Engineer and shall conform to the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions. Messages displayed on the portable changeable message signs shall conform to Section 12-3.12 "Portable Changeable Message Signs," of the Standard Specifications and "Maintaining Traffic" of these special provisions."

A portable changeable message sign shall be placed in advance of the first warning sign for each stationary lane closure.

A portable changeable message sign shall be placed during speed zone reductions. When used in conjunction with a lane closure, use one portable changeable message sign, with both the speed zone reduction and the lane closure messages.

Seven (7) calendar days prior to the start of work, portable changeable message signs shall be placed at minimum, at both begin and end limits of construction, warning the public of expected delays due to construction activities, as directed by the Engineer.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, placing, operating, maintaining, repairing, transporting from location to location and removing the portable changeable message sign, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer shall be considered as included in the contract lump sum price paid for traffic control system.

10-1.18 TEMPORARY CRASH CUSHION MODULE:

This work shall consist of furnishing, installing, and maintaining sand filled temporary crash cushion modules in groupings or arrays at each location shown on the plans, as specified in these special provisions or where designated by the Engineer. The grouping or array of sand filled modules shall form a complete sand filled temporary crash cushion in conformance with the details shown on the plans and these special provisions.

Attention is directed to "Public Safety" of these special provisions.

Whenever the work or the Contractor's operations establishes a fixed obstacle, the exposed fixed obstacle shall be protected with a sand filled temporary crash cushion. The sand filled temporary crash cushion shall be in place prior to opening the lanes adjacent to the fixed obstacle to public traffic.

Sand filled temporary crash cushions shall be maintained in place at each location, including times when work is not actively in progress. Sand filled temporary crash cushions may be removed during a work period for access to the work provided that the exposed fixed obstacle is 15 feet or more from a lane carrying public traffic and the temporary crash cushion is reset to

protect the obstacle prior to the end of the work period in which the fixed obstacle was exposed. When no longer required, as determined by the Engineer, sand filled temporary crash cushions shall be removed from the site of the work.

At the Contractor's option, the modules for use in sand filled temporary crash cushions shall be either Energite III Inertial Modules, Fitch Inertial Modules or TrafFix Sand Barrels manufactured after March 31, 1997, or equal:

- 1. Energite III and Fitch Inertial Modules, manufactured by Energy Absorption Systems, Inc., 35 East Wacker Drive, Suite 1100, Chicago, IL 60601:
 - 1.1. Northern California: Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, telephone (800) 884-8274, FAX (916) 387-9734
 - 1.2. Southern California: Traffic Control Service, Inc., 1818 E. Orangethorpe, Fullerton, CA 92831-5324, telephone (800) 222-8274, FAX (714) 526-9501
- 2. TrafFix Sand Barrels, manufactured by TrafFix Devices, Inc., 220 Calle Pintoresco, San Clemente, CA 92672, telephone (949) 361-5663, FAX (949) 361-9205
 - 2.1. Northern California: United Rentals, Inc., 1533 Berger Drive, San Jose, CA 95112, telephone (408) 287-4303, FAX (408) 287-1929
 - 2.2. Southern California: Statewide Safety & Sign, Inc., P.O. Box 1440, Pismo Beach, CA 93448, telephone (800) 559-7080, FAX (805) 929-5786

Modules contained in each temporary crash cushion shall be of the same type at each location. The color of the modules shall be the standard yellow color, as furnished by the vendor, with black lids. The modules shall exhibit good workmanship free from structural flaws and objectionable surface defects. The modules need not be new. Good used undamaged modules conforming to color and quality of the types specified herein may be utilized. If used Fitch modules requiring a seal are furnished, the top edge of the seal shall be securely fastened to the wall of the module by a continuous strip of heavy duty tape.

Modules shall be filled with sand in conformance with the manufacturer's directions, and to the sand capacity in pounds for each module shown on the plans. Sand for filling the modules shall be clean washed concrete sand of commercial quality. At the time of placing in the modules, the sand shall contain not more than 7 percent water as determined by California Test 226.

Modules damaged due to the Contractor's operations shall be repaired immediately by the Contractor at the Contractor's expense. Modules damaged beyond repair, as determined by the Engineer, due to the Contractor's operations shall be removed and replaced by the Contractor at the Contractor's expense.

Temporary crash cushion modules shall be placed on movable pallets or frames conforming to the dimensions shown on the plans. The pallets or frames shall provide a full bearing base beneath the modules. The modules and supporting pallets or frames shall not be moved by sliding or skidding along the pavement or bridge deck.

A Type R or P marker panel shall be attached to the front of the crash cushion as shown on the plans, when the closest point of the crash cushion array is within 12 feet of the traveled way. The

marker panel, when required, shall be firmly fastened to the crash cushion with commercial quality hardware or by other methods determined by the Engineer.

At the completion of the project, temporary crash cushion modules, sand filling, pallets or frames, and marker panels shall become the property of the Contractor and shall be removed from the site of the work. Temporary crash cushion modules shall not be installed in the permanent work.

Temporary crash cushion modules placed in conformance with the provisions in "Public Safety" of these special provisions will not be measured nor paid for.

10-1.19 EXISTING HIGHWAY FACILITIES:

The work performed in connection with various existing highway facilities shall conform to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications and these special provisions.

COLD PLANE ASPHALT CONCRETE PAVEMENT

Existing asphalt concrete pavement shall be cold planed at the locations and to the dimensions shown on the plans.

Planing asphalt concrete pavement shall be performed by the cold planing method. Planing of the asphalt concrete pavement shall not be done by the heater planing method.

Cold planing machines shall be equipped with a cutter head not less than 30 inches in width and shall be operated so that no fumes or smoke will be produced. The cold planing machine shall plane the pavement without requiring the use of a heating device to soften the pavement during or prior to the planing operation.

The depth, width, and shape of the cut shall be as shown on the typical cross sections or as designated by the Engineer. The final cut shall result in a uniform surface conforming to the typical cross sections. The outside lines of the planed area shall be neat and uniform. Planing asphalt concrete pavement operations shall be performed without damage to the surfacing to remain in place.

Planed widths of pavement shall be continuous except for intersections at cross streets where the planing shall be carried around the corners and through the conform lines. Following planing operations, a drop-off of more than 0.15-foot will not be allowed between adjacent lanes open to public traffic.

Attention is directed to "Order of Work" of these special provisions regarding cold plane operations.

Where transverse joints are planed in the pavement at conform lines, no drop-off shall remain between the existing pavement and the planed area when the pavement is opened to public traffic. If Hot Mix Asphalt (HMA) has not been placed to the level of existing pavement before the pavement is to be opened to public traffic a temporary HMA taper shall be constructed. HMA for temporary tapers shall be placed to the level of the existing pavement and tapered on a

slope of 30:1 (Horizontal: Vertical) or flatter to the level of the planed area.

HMA for temporary tapers shall be the same quality as the HMA used elsewhere on the project. HMA for tapers shall be compacted by any method that will produce a smooth riding surface. Temporary HMA tapers shall be completely removed, including the removal of loose material from the underlying surface, before placing the permanent surfacing. The removed material shall be disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Operations shall be scheduled so that not more than 7 days shall elapse between the time when transverse joints are planed in the pavement at the conform lines and the permanent surfacing is placed at the conform lines.

The material planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications. Removal operations of cold planed material shall be concurrent with planing operations and follow within 50 feet of the planer, unless otherwise directed by the Engineer.

Cold plane asphalt concrete pavement will be measured by the square yard. The quantity to be paid for will be the actual area of surface cold planed irrespective of the number of passes required to obtain the depth shown on the plans.

The contract price paid per square yard for cold plane asphalt concrete pavement shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in cold planing asphalt concrete surfacing and disposing of planed material, including furnishing the HMA for and constructing, maintaining, removing, and disposing of temporary HMA tapers, as specified in the Standard Specifications and these special provisions and as directed by the Engineer.

REMOVE PIPE

This work shall consist of removing existing drainage facilities as shown in the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Removing drainage facilities shall be measured by the linear foot for the various types of pipe.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing pipe including all excavation and backfill required to remove pipe shall be considered as included in the contract unit price paid for remove pipe and no additional compensation will be allowed therefor.

10-1.20 RELOCATE MAILBOX:

Existing mailboxes shall be removed and relocated in conformance with the details shown on the plans, as specified in the Standard Specifications, these special provisions, and as directed by the

Engineer.

During construction operations, the mailboxes shall be moved as necessary to clear the way for the Contractor's operations, but shall be accessible for delivery at all times. During construction, the mailboxes shall be installed on posts set in the ground or the mailboxes may be installed on temporary supports approved by the Engineer.

When construction is complete, the mailboxes shall be installed in the final position on new wood posts.

Wood posts shall conform to the provisions for sign posts in Section 56-2.02B, "Wood Posts," of the Standard Specifications.

The space around the posts shall be backfilled with material as specified in the plans. The backfill material shall be placed in layers approximately 4 inches thick and each layer shall be thoroughly compacted.

Existing posts, mounts, and hardware shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

A multiple-box installation shall consist of 2 mailboxes installed on a single post. Each multi-box installation shall be considered as 2 units for payment purposes.

Newspaper boxes on individual posts will be considered as mailboxes for measurement and payment.

Newspaper boxes attached to existing mailbox posts shall be removed and fastened to the new mailbox posts and no separate payment will be made therefor.

Full compensation for disposing of existing posts, mounts, and hardware; moving and maintaining the mailboxes (regardless of the number of moves required); and for furnishing new posts, planks, and hardware shall be considered as included in the contract unit price paid for relocate mailbox and no additional compensation will be allowed therefor.

10-1.21 REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE:

Traffic stripe and pavement marking shall be removed at the locations shown on the plans and as directed by the Engineer.

Attention is directed to "Water Pollution Control" of these special provisions.

Waste from removal of yellow thermoplastic traffic stripe contains lead chromate in average concentrations greater than or equal to 5 mg/L Soluble Lead or 1000 mg/kg Total Lead. Residue produced from when yellow thermoplastic and yellow paint are removed may contain heavy metals in concentrations that exceed thresholds established by the California Health and Safety Code and may produce toxic fumes when heated.

The removed yellow thermoplastic and shall be disposed of at a Class 1 disposal facility or a

Class 2 disposal facility permitted by the Regional Water Quality Control Board in conformance with the requirements of the disposal facility operator within 30 days after accumulating 100 kg of residue and dust. The Contractor shall make necessary arrangements with the operator of the disposal facility to test the yellow thermoplastic and residue as required by the facility and these special provisions. Testing shall include, at a minimum, (1) Total Lead and Chromium by EPA Method 7000 series and (2) Soluble Lead and Chromium by California Waste Extraction Test. From the first 3360 L of waste or portion thereof, if less than 3360 L of waste are produced, a minimum of four randomly selected samples shall be taken and analyzed. From each additional 840 L of waste or portion thereof, if less than 840 L are produced, a minimum of one additional random sample shall be taken and analyzed. The Contractor shall submit the name and location of the disposal facility and analytical laboratory along with the testing requirements to the Engineer not less than 5 days prior to the start of removal of yellow thermoplastic traffic stripe. The analytical laboratory shall be certified by the Department of Health Services Environmental Laboratory Accreditation Program. Test results shall be provided to the Engineer for review prior to signing a waste profile as requested by the disposal facility, prior to issuing an EPA identification number, and prior to allowing removal of the waste from the site.

The Contractor shall prepare a project specific Lead Compliance Plan to prevent or minimize worker exposure to lead while handling removed yellow thermoplastic residue. Attention is directed to Title 8, California Code of Regulations, Section 1532.1, "Lead," for specific Cal-OSHA requirements when working with lead.

The Lead Compliance Plan shall contain the elements listed in Title 8, California Code of Regulations, Section 1532.1(e)(2)(B). Before submission to the Engineer, the Lead Compliance Plan shall be approved by an Industrial Hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene. The Plan shall be submitted to the Engineer at least 7 days prior to beginning removal of yellow thermoplastic.

Prior to removing yellow thermoplastic traffic stripe, personnel who have no prior training, including State personnel, shall complete a safety training program provided by the Contractor that meets the requirements of Title 8, California Code of Regulations, Section 1532.1, "Lead," and the Contractor's Lead Compliance Program.

Personal protective equipment, training, and washing facilities required by the Contractor's Lead Compliance Plan shall be supplied to State personnel by the Contractor. The number of State personnel will be 3.

Where grinding or other methods approved by the Engineer are used to remove yellow thermoplastic traffic stripe, the removed residue, including dust, shall be contained and collected immediately. Sweeping equipment shall not be used. Collection shall be by a high efficiency particulate air (HEPA) filter equipped vacuum attachment operated concurrently with the removal operations or other equally effective methods approved by the Engineer. The Contractor shall submit a written work plan for the removal, storage, and disposal of yellow thermoplastic traffic stripe to the Engineer for approval not less than 7 days prior to the start of the removal operations. Removal operations shall not be started until the Engineer has approved the work plan.

The removed yellow thermoplastic traffic stripe residue shall be stored and labeled in covered

containers. Labels shall conform to the provisions of Title 22, California Code of Regulations, Sections 66262.31 and 66262.32. Labels shall be marked with date when the waste is generated, the words "Hazardous Waste", composition and physical state of the waste (for example, asphalt grindings with thermoplastic), the word "Toxic", the name and address of the Engineer, the Engineer's telephone number, contract number, and Contractor or subcontractor. The containers shall be a type approved by the United States Department of Transportation for the transportation and temporary storage of the removed residue. The containers shall be handled so that no spillage will occur. The containers shall be stored in a secured enclosure at a location within the project limits until disposal, as approved by the Engineer.

If the yellow thermoplastic traffic stripe residue is transported to a Class 1 disposal facility, a manifest shall be used, and the transporter shall be registered with the California Department of Toxic Substance Control. The Engineer will obtain the United States Environmental Protection Agency Identification Number and sign all manifests as the generator within 2 working days of receiving sample test results and approving the test methods.

Nothing in these special provisions shall relieve the Contractor of the Contractor's responsibilities as specified in Section 7-1.09, "Public Safety," of the Standard Specifications.

Attention is directed to "Material Containing Aerially Deposited Lead" of these special provisions regarding payment for the Lead Compliance Plan.

Full compensation for providing a written work plan for the removal, storage, and disposal of yellow thermoplastic traffic stripe shall be considered as included in the contract prices paid per linear foot for remove yellow thermoplastic traffic stripe and no separate payment will be made therefor.

10-1.22 HOT MIX ASPHALT:

GENERAL

Summary

This work includes producing and placing hot mix asphalt (HMA) Type A using the Standard process.

Comply with Section 39, "Hot Mix Asphalt," of the Standard Specifications.

MATERIALS

Asphalt Binder

The grade of asphalt binder mixed with aggregate for HMA Type A must be PG 64-10.

Aggregate

The aggregate for HMA Type A must comply with the 3/4-inch grading.

CONSTRUCTION

The Contractor's attention is directed to the provision in Section 39-6, "Spreading and Compacting," of the Standard Specifications for the requirements and conditions concerning the spreading and compacting of hot mix asphalt.

Vertical Joints

If you perform half-width paving, at the end of each day's work the distance between the ends of adjacent surfaced lanes must not be greater than can be completed in the following day of normal paving.

Before opening the lane to public traffic, pave shoulders and median borders adjacent to a lane being paved.

Do not leave a vertical joint more than 0.15 foot high between adjacent lanes open to public traffic.

Conform Tapers

Place shoulder conform tapers concurrently with the adjacent lane's paving.

SMOOTHNESS

The Contractor shall determine HMA smoothness with a profilograph and a straightedge.

Straightedge

The HMA pavement top layer must not vary from the lower edge of a 12-foot long straightedge:

- 1. More than 0.02 foot when the straightedge is laid perpendicular to the centerline and extends from edge to edge of a traffic lane.
- 2. More than 0.02 foot when the straightedge is laid within 24 feet of a pavement conform.

Profilograph

Under California Test 526, determine the zero (null) blanking band Profile Index (PI₀) and must-grinds on the top layer of HMA Type A, Type B, and RHMA-G pavement. Take 2 profiles within each traffic lane, 3 feet from and parallel with the edge of each lane.

A must-grind is a deviation of 0.3 inch or more in a length of 25 feet. Contractor shall correct must-grinds.

Profile pavement in the Engineer's presence. Choose the time of profiling.

On tangents and horizontal curves with a centerline radius of curvature 2,000 feet or more, the PI₀ must be at most 3 inches per 0.1-mile section.

On horizontal curves with a centerline radius of curvature between 1,000 feet and 2,000 feet

including pavement within the superelevation transitions, the PI₀ must be at most 6 inches per 0.1-mile section.

Before the Engineer accepts HMA pavement for smoothness, submit written final profilograms.

Submit an electronic copy of the profile information in an approved format to the Engineer.

10-1.23 SLURRY SEAL:

Slurry seal shall conform to the provisions in Section 37-2, "Slurry Seal," of the Standard Specifications and these special provisions.

The aggregate for slurry seal shall be Type III

The polymer used in the manufacture of polymer modified asphaltic emulsions shall be at the option of the Contractor, either neoprene, or a copolymer of butadiene and styrene. The polymer used in the polymer modified asphaltic emulsion shall be homogenous and shall be milled into the product at the colloid mill.

The polymer modified asphaltic emulsion shall be Grade PMCQS1h and shall conform to the following requirements:

Туре	Cat	ionic
Grade	PMCQS1h	
Properties	Min.	Max
Tests on Emulsion:		
Viscosity SSF @ 25°C, sec	15	90
AASHTO Designation: T 59		
Sieve Test, %	_	0.30
AASHTO Designation T 539		
Storage Stability, 1 day, %	_	1
AASHTO Designation: T 59		
Residue by Evaporation, %	57	
California Test 331		
Particle Charge	Positive	
AASHTO Designation: T 59	rositive	
Tests on Residue from Evaporation Test		
Penetration, 25°C	40	90
AASHTO Designation: T 49		
Ductility, 25°C, mm	400	_
AASHTO Designation: T 51		
Torsional Recovery, %	18	_
California Test 332		
or		
Polymer Content, %	2.5	_
California Test 401	<u> </u>	

Note:

When the test for polymer content of polymer modified asphaltic emulsion is used, see sampling requirements in Section 94-1.03, "Sampling" of the Standard Specifications.

At least 72 hours prior to the beginning of slurry seal operations, the Contractor shall notify all residents, businesses, and agencies by an approved, written notice detailing streets and limits of work to be done and the hours of work. The Contractor shall, prior to the beginning of slurry

seal operations, post streets that are to be worked upon with approved "No Parking - Tow Away" signs at 100-foot intervals. These signs shall state the day of the week and the hours of no parking.

10-1.24 AGGREGATE BASE:

Aggregate base must comply with Section 26, "Aggregate Bases," of the Standard Specifications and these special provisions.

Aggregate base must be Class 2.

Do not store reclaimed asphalt concrete or aggregate base with reclaimed asphalt concrete within 100 feet measured horizontally of any culvert, watercourse, or bridge.

10-1.25 CLEARING AND GRUBBING:

Clearing and grubbing shall conform to the provisions in Section 16, "Clearing and Grubbing," of the Standard Specifications. Attention is directed to Section 20-4.025, "Roadside Clearing" of the Standard Specifications.

The contractor shall remove and dispose of all existing vegetation, weeds, tree branches, dirt, debris and other materials that cover the existing paved shoulder and paved ditches. The contractor shall trim existing tree branches and shrubs to have a minimum lateral clearance of 3 feet from existing edge of pavement and a vertical clearance of 16 feet. The contractor shall remove and dispose of all the trimmings and debris. The contractor shall expose all the existing edges of pavement so that the grinding and/or overlay can be accomplished to the existing edges of pavement.

The contract lump sum price paid for clearing and grubbing shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in clearing and grubbing as shown on the plans, and as specified in these specifications and these special provisions, and as directed by the Engineer, including the removal and disposal of the resulting material and no additional compensation will be allowed therefor.

10-1.26 EROSION CONTROL (HYDROSEED):

GENERAL

Summary

This work includes removing and disposing of weeds and applying erosion control materials including seed, fiber, commercial fertilizer, organic fertilizer, straw, and tackifier to erosion control (Hydroseed) areas shown on the plans.

Comply with Section 20-3, "Erosion Control," of the Standard Specifications.

If notified by the Engineer that an area is ready to receive erosion control materials, start erosion control (Hydroseed) work within 5 business days of the Engineer's notification to perform the work.

The Engineer will designate the ground location of all erosion control (Hydroseed) areas in

increments of one acre or smaller by directing the placing of stakes or other suitable markers. Furnish all tools, labor, materials, and transportation required to adequately indicate the various erosion control (Hydroseed) locations.

MATERIALS

Seed

Seed not required to be labeled under the California Food and Agricultural Code 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. Measure and mix individual seed species in the presence of the Engineer.

Seed must contain at most 1.0 percent total weed seed by weight.

Deliver seed to the job site in unopened separate containers with the seed tag attached. Containers without a seed tag attached are not accepted. The Engineer takes a sample of approximately one ounce or 0.25 cup of seed for each seed lot greater than 2 pounds.

Any substitute seed must be native to the project area and must be approved by the Engineer.

Seed must comply with the following:

Seed

Botanical Name (Common Name)	Percent Germination (Minimum)	Pounds Pure Live Seed Per Acre (Slope Measurement)
Achillea millefolium	60	0.5
Yarrow Artemisia douglasiana Mugwort	25	0.5
Elymus glaucus Blue Wildrye	60	2.0
Hetromeles arbutifolia Toyon	40	6.0
Clarkia unguiculata Elegant Clarkia	60	1.5
Claytonia perfoliata ssp. Perfoliata Miner's lettuce	40	1.0
Lotus scoparius Deerweed	50	6.0
Melica imperfect Coastal Melic	60	2.0
Mimulus aurantiacus var. aurantiacus sticky monkey flower	40	4.0
Rubus ursinus Pacific Blackberry	35	2.0
Rhamnus californica California coffeeberry	25	6.0
Salvia spathaeca Hummingbird Sage	40	3.0
Scrophularia californica Bee Plant	60	1.0
Solidago californicum California Goldenrod	50	0.10
Sisyrinchium bellem Blue Eyed Grass	60	1.0
	Total	36.6

Seed Sampling Supplies

At the time of seed sampling, provide the Engineer a glassine lined bag and custody seal tag for each seed lot sample.

Tackifier

Tackifier must be:

1. Guar (Plant Based)

Tackifier must comply with the following:

- 1. Nonflammable
- 2. Nontoxic to aquatic organisms
- 3. Free from growth or germination inhibiting factors
- 4. Either a plant-based product or a polymeric-emulsion blend

Tackifier classified as a plant based product must comply with the following:

- 1. A natural high molecular weight polysaccharide
- 2. A high viscosity hydrocolloid that is miscible in water
- 3. Functional for at least 180 days
- 4. Labeled as guar

Guar:

- 1. A guar gum based product derived from the ground endosperm of the guar plant, cyanmopsis tetragonolobus
- 2. Treated with dispersant agents for easy mixing
- 3. Able to be diluted at the rate of 1 to 5 pounds per 100 gallons of water

Fiber

Fiber must be:

1. Wood

Fiber must comply with the following:

- 1. Free from lead paint, printing ink, varnish, petroleum products, seed germination inhibitors, or chlorine bleach
- 2. Free from synthetic or plastic materials
- 3. At most 7 percent ash

Wood Fiber must comply with the following:

- 1. Long strand, whole wood fibers, thermo-mechanically processed from clean, whole wood chips
- 2. Not made from sawdust, cardboard, paper, or paper byproducts
- 3. At least 25 percent of fibers 3/8 inch long
- 4. At least 40 percent held on a No. 25 sieve

Coloring Agent

Use a biodegradable, nontoxic coloring agent free from copper, mercury, and arsenic.

CONSTRUCTION

Site Preparation

Immediately prior to applying seed to erosion control (Hydroseed) areas, trash and debris and weeds must be removed.

Removed weeds must be disposed of in conformance with the provisions in Section 7-1.13,

"Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Application

Apply erosion control (Hydroseed) materials in separate applications in the following sequence:

1. Apply the following mixture with hydroseeding equipment at the rates indicated within 60 minutes after the seed has been added to the mixture:

Material	Pounds Per Acre	
	(Slope Measurement)	
Seed	36.6	
Fiber	500	

2. Apply the following mixture with hydro-seeding equipment at the corresponding rates:

Material	Pounds Per Acre
	(Slope Measurement)
Fiber	500
Tackifier	200

The ratio of total water to total tackifier in the mixture must be as recommended by the manufacturer.

Seed may be dry applied at the total rate specified in the preceding table for small areas not accessible by the hydro-seeding equipment, when approved in writing by the Engineer. Dry applied seed must be incorporated into the soil a maximum depth of 1/4 inch by raking or dragging.

Hydraulic application of erosion control (Hydroseed) materials for rolled erosion control product (Netting) areas must be applied by hose, from the ground. Erosion control (Hydroseed) materials must be applied onto the slope face such that the materials are well integrated into the rolled erosion control product (Netting) and in contact with ground surface. Application must be perpendicular to the slope face such that rolled erosion control product (Netting) materials are not damaged or displaced.

Once straw work is started in an area, complete tackifier applications in that area on the same working day.

The Engineer may change the rates of erosion control (Hydroseed) materials to meet field conditions.

For any area where erosion control (Hydroseed) materials are to be applied, the application of all erosion control (Hydroseed) materials to be applied to that area must be completed within 72 hours from when the first materials were applied.

MEASUREMENT AND PAYMENT

Erosion control (Hydroseed) will be measured by the square foot or by the acre, whichever is

designated in the Engineer's Estimate. The area will be calculated on the basis of actual or computed slope measurements.

The contract price paid per square foot or acre for erosion control (Hydroseed) includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in erosion control (Hydroseed) complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.27 ROCK SLOPE PROTECTION:

This work includes placing geosynthetic fabric and rock material for rock slope protection.

Comply with specifications for rock slope protection under Section 72-2 "Rock Slope Protection," of the Standard Specifications.

Grading of material for rock slope protection shall conform to Class No. 2, Method B Placement.

Geosynthetic fabric for rock slope protection must be Class 8, as specified in Section 88-1.06 "Channel and Shore Protection," of the Standard Specifications.

Install geosynthetic fabric for rock slope protection under Section 72-2.025 "Rock Slope Protection Fabric," of the Standard Specifications.

Rock slope protection is measured and paid for by the cubic yard as specified in Section 72-2 "Rock Slope Protection," of the Standard Specifications.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and placing geosynthetic fabric for rock slope protection, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer, shall be included in the contract price paid per cubic yard for rock slope protection and no additional compensation will be allowed therefor.

10-1.28 PLANT ESTABLISHMENT WORK:

The plant establishment period shall be Type 1 and shall be 750 working days.

Attention is directed to "Relief From Maintenance and Responsibility" in these special provisions regarding relief from maintenance and protection.

Weeds within plant basins, including basin walls and ground cover, shall be controlled by hand pulling.

Weeds within mulched and ground cover areas and outside of plant basins shall be controlled by killing.

At the option of the Contractor, plants of a larger container size than those originally specified may be used for replacement plants during the first 125 working days of the plant establishment period.

After 125 working days of the plant establishment period have been completed, replacement of plants, except for ground cover plants, shall be one-gallon size for seedlings, pot and liner size plants; 5-gallon size for one-gallon size plants; 15-gallon size for 5-gallon size plants; and other plant replacement plants shall be the same size as originally specified.

During the plant establishment period, if plants become restricted by foliage protectors, the tops of foliage protectors shall be removed. Foliage protectors shall be completely removed, including the support stakes, within 15 working days prior to completion of the plant establishment period.

Wye strainers shall be cleaned at least 15 days prior to the completion of the plant establishment period.

The final inspection shall be performed in conformance with the provisions in Section 5-1.13, "Final Inspection," of the Standard Specifications and shall be completed a minimum of 20 working days before the estimated completion of the contract.

Full compensation for mowing and trimming turf (sod) and disposing of mowed and trimmed material during the plant establishment period shall be considered as included in the contract lump sum price paid for plant establishment work and no additional compensation will be allowed therefor.

The contract lump sum price paid for plant establishment work shall include full compensation for furnishing all labor, materials (including pesticides, commercial fertilizer and replacement plants), tools, equipment, and incidentals, and for doing all the work involved in establishing plants, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.29 ROADSIDE SIGNS:

Roadside signs shall be furnished and installed at the locations shown on the plans or where designated by the Engineer and in conformance with the provisions in Section 56-2, "Roadside Signs," of the Standard Specifications and these special provisions.

The Contractor shall furnish roadside sign panels in conformance with the provisions in "Furnish Sign" of these special provisions.

Wood posts shall be pressure treated after fabrication in conformance with the provisions in Section 58, "Preservative Treatment of Lumber, Timber and Piling," of the Standard Specifications and AWPA Use Category System: UC4A, Commodity Specification A or B.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for roadside sign posts. The regional notification centers include, but are not limited to, the following:

Notification Center	Telephone Number
Underground Service Alert-Northern California (USA)	(800) 642-2444 (800) 227-2600
Western Utilities Underground Alert (Inc.)	(800) 424-3447

The contract price paid per unit for roadside sign shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in fabricating, furnishing, and installing roadside signs, complete in place, including fastening hardware, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

<u>10-1.30 FURNISH SIGN:</u>

Construction area signs and permanent roadside signs shall be fabricated and furnished in accordance with details shown on the plans, the Traffic Sign Specifications, and these special provisions.

Traffic Sign Specifications for California sign codes are available for review at:

http://www.dot.ca.gov/hq/traffops/signtech/signdel/specs.htm

Traffic Sign Specifications for signs referenced with Federal MUTCD sign codes can be found in Standard Highway Signs Book, administered by the Federal Highway Administration, which is available for review at:

http://mutcd.fhwa.dot.gov/ser-shs millennium.htm

Information on cross-referencing California sign codes with the Federal MUTCD sign codes is available at:

http://www.dot.ca.gov/hq/traffops/signtech/signdel/specs.htm

Temporary or permanent signs shall be free from blemishes that may affect the serviceability and detract from the general sign color and appearance when viewing during daytime and nighttime from a distance of 25 feet. The face of each finished sign shall be uniform, flat, smooth, and free of defects, scratches, wrinkles, gel, hard spots, streaks, extrusion marks, and air bubbles. The front, back, and edges of the sign panels shall be free of router chatter marks, burns, sharp edges, loose rivets, delaminated skins, excessive adhesive over spray and aluminum marks.

SHEET ALUMINUM

Alloy and temper designations for sheet aluminum shall be in accordance with ASTM Designation: B 209.

The Contractor shall furnish the Engineer a Certificate of Compliance in conformance with Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for the sheet aluminum.

Sheet aluminum shall be pretreated in accordance to ASTM Designation: B 449. Surface of the sheet aluminum shall be cleaned, deoxidized, and coated with a light and tightly adherent chromate conversion coating free of powdery residue. The conversion coating shall be Class 2 with a weight between 10 milligrams per square foot and 35 milligrams per square foot, and an average weight of 25 milligrams per square foot. Following the cleaning and coating process, the sheet aluminum shall be protected from exposure to grease, oils, dust, and contaminants.

Sheet aluminum shall be free of buckles, warps, dents, cockles, burrs, and defects resulting from fabrication.

Base plate for standard route marker shall be die cut.

RETROREFLECTIVE SHEETING

The Contractor shall furnish retroreflective sheeting for sign background and legend in conformance with ASTM Designation: D 4956 and "Prequalified and Tested Signing and Delineation Materials" of these special provisions.

Retroreflective sheeting shall be applied to sign panels as recommended by the retroreflective sheeting manufacturer without stretching, tearing, and damage.

Class 1, 3, or 4 adhesive backing shall be used for Type II, III, IV, VII, VIII, and IX retroreflective sheeting. Class 2 adhesive backing may also be used for Type II retroreflective sheeting. The adhesive backing shall be pressure sensitive and fungus resistant.

When the color of the retroreflective sheeting determined from instrumental testing is in dispute, the Engineer's visual test will govern.

PROCESS COLOR AND FILM

The Contractor shall furnish and apply screened process color, non-reflective opaque black film, and protective overlay film of the type, kind, and product that are approved by the manufacturer of the retroreflective sheeting.

The Contractor shall furnish the Engineer a Certificate of Compliance in accordance to Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for the screened process color, non-reflective opaque black film, and protective overlay film.

The surface of the screened process color shall be flat and smooth. When the screened process colors determined from the instrumental testing in accordance to ASTM Designation: D 4956 are in dispute, the Engineer's visual test will govern.

The Contractor shall provide patterns, layouts, and set-ups necessary for the screened process.

The Contractor may use green, red, blue, and brown reverse-screened process colors for background and non-reflective opaque black film or black screened process color for legend. The coefficient of retroreflection for reverse-screened process colors on white retroreflective sheeting shall not be less than 70 percent of the coefficient of retroreflection specified in ASTM

Designation: D 4956.

The screened process colors and non-reflective opaque black film shall have the same outdoor weatherability as that of the retroreflective sheeting.

After curing, screened process colors shall withstand removal when tested by applying 3M Company Scotch Brand Cellophane Tape No. 600 or equivalent tape over the color and removing with one quick motion at 90° angle.

SINGLE SHEET ALUMINUM SIGN

Single sheet aluminum signs shall be fabricated and furnished with or without frame. The Contractor shall furnish the sheet aluminum in accordance to "Sheet Aluminum" of these special provisions. Single sheet aluminum signs shall be fabricated from sheet aluminum alloy 6061-T6 or 5052-H38.

Single Sheet aluminum signs shall not have a vertical splice in the sheet aluminum. For signs with depth greater than 48 inches, one horizontal splice will be allowed in the sheet aluminum.

Framing for single sheet aluminum signs shall consist of aluminum channel or rectangular aluminum tubing. The framing shall have a length tolerance of $\pm 1/8$ inch. The face sheet shall be affixed to the frame with rivets of 3/16-inch diameter. Rivets shall be placed within the web of channels and shall not be placed less than 1/2 inch from edges of the sign panels. Rivets shall be made of aluminum alloy 5052 and shall be anodized or treated with conversion coating to prevent corrosion. The exposed portion of rivets on the face of signs shall be the same color as the background or legend where the rivets are placed.

Finished signs shall be flat within a tolerance of $\pm 1/32$ inch per linear foot when measured across the plane of the sign in all directions. The finished signs shall have an overall tolerance within $\pm 1/8$ inch of the detailed dimensions.

Aluminum channels or rectangular aluminum tubings shall be welded together with the inert gas shielded-arc welding process using E4043 aluminum electrode filler wires as shown on the plans. Width of the filler shall be equal to wall thickness of smallest welded channel or tubing.

10-1.31 PLASTIC PIPE (HDPE):

Plastic pipe shall conform to the provisions in Section 64, "Plastic Pipe," of the Standard Specifications and these special provisions.

The Plastic Pipes (12", 14", and 30" diameters as shown on the plans) shall be ADS N-12® WT IB manufactured by Advanced Drainage System, Inc. or approved equal and shall be measured and paid by linear foot.

The pipe and fittings shall be of high-density polyethylene (HDPE) conforming with the minimum requirements of cell classification 424420C (ESCR Test Condition B) for 4-inch to 10-inch diameters, and 435400C (ESCR Test Condition B) for 12-inch to 60-inch diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%.

The HDPE pipe shall meet ASTM F2648 and shall have a smooth interior and annular exterior corrugations. The fittings shall conform to ASTM 2306. The bell and spigot connections shall utilize a spun-on or welded bell and valley or saddle gasket meeting the watertight joint performance requirements of ASTM F 2306. Both pipe and fittings shall have a Manning's "n" value of 0.012.

The HDPE pipe and joining system shall be inspected prior to installation. Installation shall be in accordance with ASTM D2321 and ADS's published installation guidelines. Backfill for minimum cover situations shall consist of Class 1 (compacted), or Class 2 (minimum 90% standard Proctor density) material. The pipe shall be watertight according to the requirements of ASTM D3212; and shall have a reinforced bell with a bell tolerance device. The bell tolerance device shall be installed by the manufacturer. Gaskets shall be made of polyisoprene meeting the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure it is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly.

Dragging or striking the HDPE pipe against another pipe or object shall be avoided. The pipe shall not be dropped into an open trench or onto uneven surfaces. Dragging the pipe across the ground or any surface shall be avoided. No vehicles shall be driven over the pipe prior to installation.

Where the HDPE pipe is stock piled, the total pile height shall not exceed 5 feet. The pipe shall be restrained to prevent pile collapse. Walking on the stock piled pipe shall be prohibited.

The contract unit price per linear feet for HDPE pipe shall be considered full compensation for providing all labor, materials, equipment, tools and incidentals necessary to provide the storm drain in place as shown on the plans, as indicated in the Standard Specifications and these Special Provisions. Said contract unit price shall include but not be limited to excavation and disposal of unsuitable or excess material, pipe, couplings and accessories, and the installation thereof, structural excavation and backfill, compaction, watering if required, and any other items necessary or required to provide HDPE Storm Drain. The length of pipe to be paid for will be the horizontal length actually installed as measured from end to end on the ground.

10-1.32 PLASTIC FLARED END SECTION:

Plastic flared end section shall conform to the provisions in Section 64," Plastic Pipe," Section 70, "Miscellaneous Facilities," and Section 70-1.02C "Flared End Sections" of the Standard Specifications and these Special Provisions.

Plastic flared end section shall be installed at the location as shown on the plans and shall be as shown on Standard plan D94A "Metal and Plastic Flared End Sections and Detail 6 Sheet 26 of 27 on the plans.

Measurement for "Plastic Flared End Section" shall be by each location installed and as indicated in Section 70-1.04 "Measurement" and Payment shall be as indicated in Section 70-1.05 "Payment" and per contract price each for "Concrete Flared End Section."

10-1.33 DRAINAGE INLET WITH GRATE:

Drainage Inlet Frames and Grates shall conform to the provision in Section 90-10, "Minor Concrete," of the Standard Specifications and these Special Provisions. Drainage Inlet Frames and Grates shall be manufactured by Christy Concrete Products, "U" Series Catch Basins - U52 catch basin with U52-HT Grate, or approved equal.

Measurement and payment for item of work, "Drainage Inlet Frame and Grate," shall be by each unit installed and shall include full compensation for furnishing pre-cast inlet frame with grate, all labor, materials, tools, equipment and incidentals, and for doing all of the work involved in installation as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefor.

10-1.34 THERMOPLASTIC TRAFFIC STRIPE AND PAVEMENT MARKING:

Thermoplastic traffic stripes (traffic lines) and pavement markings shall be applied in conformance with the provisions in Section 84, "Traffic Stripes and Pavement Markings," of the Standard Specifications and these special provisions.

Thermoplastic material shall be free of lead and chromium, and shall conform to the requirements in State Specification PTH-02ALKYD.

Retroreflectivity of the thermoplastic traffic stripes and pavement markings shall conform to the requirements in ASTM Designation: D 6359-99. White thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of 250 mcd m⁻² lx⁻¹. Yellow thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of 150 mcd m⁻² lx⁻¹.

Where striping joins existing striping, as shown on the plans, the Contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

Thermoplastic traffic stripes shall be applied at the minimum thickness and application rate as specified below. The minimum application rate is based on a solid stripe of 4 inches in width.

Minimum	Minimum
Stripe Thickness	Application Rate
(inch)	(lb/ft)
0.079	0.27

Thermoplastic traffic stripes and pavement markings shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

10-1.35 PAVEMENT MARKERS:

Pavement markers shall be placed in conformance with the provisions in Section 85, "Pavement Markers," of the Standard Specifications and these special provisions.

Attention is directed to "Traffic Control System For Lane Closure" of these special provisions

regarding the use of moving lane closures during placement of pavement markers with bituminous adhesive.

The Contractor shall furnish the Engineer certificates of compliance for the pavement markers in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.

Retroreflective pavement markers shall be marked as abrasion resistant on the body of the markers.

10-1.36 RUMBLE STRIP:

GENERAL

This work includes constructing rumble strips in the top layer of hot mix asphalt surfacing by ground-in method.

CONSTRUCTION

Rumble strips shall be ground-in indentations.

Select the method and equipment for constructing ground-in indentations.

Do not construct rumble strips on structures or approach slabs.

Construct rumble strips within 2 inches of the specified alignment. The grinding equipment must be equipped with a sighting device enabling the operator to maintain the rumble strip alignment.

Indentations must comply with the specified dimensions within 0.06 inch in depth and 10 percent in length and width.

The Engineer orders grinding or removal and replacement of noncompliant rumble strips to bring them within specified tolerances. Ground surface areas must be neat and uniform in appearance.

The grinding equipment must be equipped with a vacuum attachment to remove residue from the roadbed.

Dispose of removed material under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

On ground areas, apply fog seal coat under Section 37-1, "Seal Coats," of the Standard Specifications.

MEASUREMENT AND PAYMENT

The contract item for rumble strip is measured by the station along the length of the rumble strips without deductions for gaps between indentations.

The contract price paid per station for rumble strip includes full compensation for furnishing all

labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing rumble strip complete in place including furnishing and applying fog seal coat to the actual ground areas, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.37 RECONSTRUCT FENCE (TYPE BW):

This work consists of reconstructing fence Type BW. This work shall comply with Section 15, "Existing Highway Facilities," and Section 80, "Fences," of the Standard Specifications.

Reconstruct fence along right-of-way line as shown on the plans and as determined by the Engineer.

Reconstruct Fence (Type BW) is measured and paid for in the same manner specified for fence (Type BW or WM) in Section 80 of the Standard Specifications.

<u>SECTION 11 – ENVIRONMENTAL STEWARDSHIP</u>

11-1.01 GENERAL:

Attention is directed to Section 14, "Environmental Stewardship," of the Amended Standard Specifications and these Special Provisions.

11-1.02 NOISE AND VIBRATION:

Sound control shall conform to the provisions in Section 14-8, "Noise and Vibration," of the Amended Standard Specifications.

The noise level from the Contractor's operations shall not exceed 85 dBA (max) at a distance of 50 feet from the job site activities from 7 AM to 7 PM, Monday through Friday and from 9 AM to 7 PM, Saturdays and Holidays; where such noise will impact existing development. No noise-generating construction activities shall be allowed on Sundays.

The Contractor shall provide one "Type 1" sound level meter and one acoustic calibrator which will be used by the Department during the life of the contract. The Contractor shall provide training by a person trained in noise monitoring to one Department employee designated by the Engineer. The sound level meter shall be calibrated and certified by the manufacturer or other independent acoustical laboratory prior to delivery to the Department. The Contractor shall provide annual recalibration by the manufacturer or other independent acoustical laboratory. All equipment shall be capable of taking measurements using the A-weighting network and the "slow" response of the sound level meter. The measurement microphone shall be fitted with an appropriate windscreen. All equipment shall be returned to the Contractor at the acceptance of the contract. Equipment damaged by actions of the Department or the public shall be paid for as extra work as provided in Section 4-1.03D of the Amended Standard Specifications.

Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler. The contractor shall comply with the California Vehicle Code prohibitions against faulty or modified loud vehicle exhaust systems - Sections 27150 and 27151.

The noise level requirement shall apply to the equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

11-1.03 AIR QUALITY:

Air pollution control shall conform to the provisions in Section 14-9, "Air Quality," of the Amended Standard Specifications.

Material to be disposed of shall not be burned unless the Contractor has obtained a permit to burn combustible material resulting from clearing and grubbing operations from an air pollution control officer of the local or regional authority. A copy of the permit shall be filed with the Engineer before beginning any burning. All such burning shall be conducted in strict conformance with the provisions stipulated in said permit and at such times and in such manner as to prevent the fire from spreading to areas adjoining the right-of-way.

In case the burning precedes construction operations, the piles may be placed in the center of the right-of-way; otherwise, the piles shall be placed in the most convenient location at the side of the right-of-way and beyond slope lines where they may be burned without damage to the surrounding forest cover or adjacent property.

To control dust during grading, excavation and construction activities, the Contractor shall implement the following dust control measures:

- a. Water all active construction areas at least twice daily, or as required to control dust.
- b. Cover all trucks hauling dirt, sand, or loose material.
- c. Sweep streets daily if visible soil material is carried out from the construction site.
- d. Apply non-toxic chemical soil stabilizers on all unpaved access roads, parking areas and staging areas as well as on disturbed construction areas that are inactive for at least four consecutive days.
- e. Apply non-toxic binders to exposed areas after cut and fill operations and hydroseed.
- f. Cover inactive storage piles.
- g. Limit traffic speed on unpaved roads to 15 miles per hour.
- h. Plant vegetative ground cover in disturbed areas as soon as possible.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation shall be allowed therefor

11-1.04 ENVIRONMENTAL MITIGATION MEASURES:

The Contractor shall implement the following mitigation measures as specified in the Mitigated Negative Declaration, Mitigation Monitoring & Reporting Program, and as directed by the Engineer and/or a qualified biologist.

PROTECTIVE FENCING

Prior to the commencement of construction, protective fencing shall be placed along the boundary of temporary construction area to keep construction activities from impacting river habitat, riparian vegetation, and wetland adjacent to the construction site, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

CALIFORNIA RED LEGGED FROG

Prior to and during any construction activities, the following mitigation measures shall be implemented to avoid impacts to the California red-legged frog (CRLF):

- A biologist with CRLF experience will be on site during construction activities. If CRLF are observed, all construction activities will cease until the CRLF voluntarily move out of the area. All CRLF sightings will be immediately reported to the US Fish and Widlife Service (Service).
- Before ground disturbing work activities begin each day, a CRLF-experienced biologist
 will inspect under construction equipment and materials to look for CRLF. If a CRLF is
 found during these checks or during construction monitoring, construction activities will
 cease until the Service is consulted and appropriate actions are taken to allow project
 activities to continue.
- Riparian vegetation removal necessary to accommodate the project will be done by hand.
- A CRLF-experienced biologist will monitor all vegetation removal and ground disturbing
 construction activity. The CRLF experienced biologist and the construction monitor will
 have the authority to stop and/or redirect project activities to ensure avoidance of take and
 implementation of all avoidance measures.
- To prevent inadvertent entrapment of CRLF during the project, all excavated, steep-walled holes or trenches more than 2 feet deep will be covered at the close of each working day with plywood or similar materials. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If CRLF is found during these checks or during construction monitoring, construction activities will cease until the Service is consulted and appropriate actions are taken to allow project activities to continue.

Only tightly woven fiber netting or similar material may be used for erosion control at the project site. Coconut coir matting is an acceptable erosion control material. No plastic mono-filament matting will be used for erosion control, as this material may ensuare wildlife, including CRLF.

PRECONSTRUCTION SURVEYS

Prior to the commencement of construction, the contractor shall perform the following biological surveys and implement the required mitigation measures:

- To avoid impacts to nesting birds, vegetation proposed for removal will be removed during the nonbreeding season (September 15 to February 14). If this is not possible and removal of trees and shrubs must occur during the breeding season (February 15 to September 14), pre-construction surveys shall be conducted for active nesting raptor and riparian avian species in all areas that may provide suitable nesting habitat that exist in or within 300 feet of the APE by a qualified biologist no more than seven days prior to the commencement of construction activities. If nesting birds are identified during preconstruction surveys, a minimum 250-foot no-disturbance buffer will be imposed within which no construction activities or disturbance will take place. A qualified biological monitor shall be on-site during work re-initiation in the vicinity of the nest offset to ensure that the buffer is adequate and that the nest is not stressed and/or abandoned. No work may proceed in the vicinity of an active nest until a qualified biologist has determined that all young are fledged and are no longer reliant upon the nest or parental care for survival.
- A qualified biologist shall conduct pre-construction surveys for daytime or nighttime roost used by bats 30 days prior to construction activities. Surveys may be conducted through visual assessment and/or by acoustical methods. If nesting or roosting bats are found, the work schedule shall be amended to allow for the bats to vacate the roosting or nesting habitat on their own. If this is infeasible, the contractor shall obtain a Memorandum of Understanding with the California Department of Fish and Game (CDFG) in order to remove the bat species. If bats are to be excluded from maternity roosts, a roost with comparable spatial and thermal characteristics shall be provided. CDFG shall be consulted regarding specific designs.

EROSION CONTROL

The contractor shall comply with the Standard Specifications and these Special Provisions when implementing erosion control and slope stabilization measures.

Erosion control and slope stabilization measures shall be implemented to assure that disturbed slopes do not erode. Best Management Practices shall be employed to reduce the transport of sediment from the site into adjacent sensitive fisheries habitat. In addition, where feasible, alternative bank protection methods, such as restoration of native vegetation, root wads, or other bioengineering methods of stabilization, shall be used.

ARCHAEOLOGICAL DISCOVERIES

If archaeological or human remains are discovered during construction within the project limits, the Engineer and the Caltrans District 5 Environmental Planning Branch shall be notified immediately. Work shall be halted within 50 meters (165 feet) of the find until it can be evaluated by a qualified professional archaeologist (project archaeologist) in accordance with the Programmatic Agreement. If the find is determined to be significant, a mitigation program shall be prepared in conformance with the protocol set forth in the CEQA Guidelines (Section 15064.5). A final report shall be prepared by the project archaeologist when a find is determined to be a significant archaeological site, and/or when Native American remains are found on the site. The final report shall include background information on the completed work, a description

and list of identified resources, the disposition and curation of these resources, any testing, other recovered information, and conclusions.

HAZARDS AND HAZARDOUS MATERIALS

The contractor shall comply with the Standard Specifications and these Special Provisions when implementing Best Management Practices for hazards and hazardous materials.

Prior to commencement of construction activities, the contractor will prepare a Hazardous Materials Spill Response Plan, which details the protocol to follow in the event that a hazardous material is released into the environment. This plan shall be maintained on the project site, and all personnel working on the project site will be notified of its location.

PAYMENT

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in implementing environmental mitigation measures, as specified in the Standard Specifications and these special provisions, Mitigated Negative Declaration, Mitigation Monitoring & Reporting Program, and as directed by the Engineer and/or qualified biologist shall be considered as included in the contract price paid for Construction Site Management and no additional compensation will be allowed therefor.

11-1.05 TREES AND VEGETATION PROTECTION:

The contractor shall provide appropriate protection for trees and/or vegetation not required for removal, but directly adjacent to construction activities, from impacts of construction activities, as specified in the Tree Resource Assessment/Management Plan, Mitigated Negative Declaration, Mitigation Monitoring & Reporting Program, and as directed by the Engineer and/or a qualified arborist/forester.

TREE PROTECTION STANDARDS

Prior to the commencement of any construction activity the contractor shall implement the following tree protection measures as approved by a qualified arborist or forester:

- Trees located adjacent to the construction area shall be protected from damage by construction equipment by the use of temporary fencing and through wrapping of trunks with protective materials. Existing fencing may also be used.
- Fencing is not to be attached to the tree but free standing or self-supporting so as not to damage trees. Fencing shall be rigidly supported and shall stand a minimum of height of four feet above grade and should be placed to the farthest extent possible from the trees base to protect the area within the trees drip line (typically 10-12 feet away from the base of a tree).
- In cases where access or space is limited for tree protection it is permissible to protect the tree within the 10-12 foot distance after determination and approval by a qualified forester or arborist.
- Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials should not be allowed adjacent to trees on the property especially within fenced areas.

• Fenced areas and the trunk protection materials should remain in place during the entire construction period.

During grading and excavation activities:

- All trenching, grading or any other digging or soil removal that is expected to encounter tree roots should be monitored by a qualified arborist or forester to ensure against drilling or cutting into or through major roots.
- The project architect and qualified arborist should be on site during excavation activities to direct any minor field adjustments that may be needed.
- Trenching for retaining walls or footings located adjacent to any tree should be done by hand where practical and any roots greater than 3-inches diameter should be bridged or pruned appropriately.
- Any roots that must be cut should be cut by manually digging a trench and cutting
 exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or
 other approved root pruning equipment.
- Any roots damaged during grading or excavation should be exposed to sound tissue and cut cleanly with a saw.

If at any time potentially significant roots are discovered:

- The arborist/forester will be authorized to halt excavation until appropriate mitigation measures are formulated and implemented.
- If significant roots are identified that must be removed that will destabilize or negatively affects the target trees negatively, the property owner will be notified immediately and a determination for removal will be assessed and made as required by law for treatment of the area that will not risk death decline or instability of the tree consistent with the implementation of appropriate construction design approaches to minimize affects, such as hand digging, bridging or tunneling under roots, etc..

TREE PRUNING

It is understood that the pruning of retained trees will be expected for this site specifically those areas requiring access or trail clearance along the edges of the trail pathway. Tree pruning must conform to ANSI A300 pruning standards. Pruning will include the trees that have deadwood or are exhibiting some minor structural defect or minor disease that must be compensated. Those trees that may require pruning and possible monitoring are the closest and overhanging the proposed bike path. Trees should be monitored on occasion for health and vigor after pruning. Should the health and vigor of any tree decline it will be treated as appropriately recommended by a certified arborist or qualified forester.

The following are offered as guidelines when pruning:

- In general the trees will be pruned first for safety, next for health, and finally for aesthetics.
- Type of pruning is determined by the size of branches to be removed. General guidelines for branch removal are:

- 1. Fine Detail pruning- limbs under 2 inch diameter are removed
- 2. Medium Detail Pruning Limbs between 2 and 4 inch diameter
- 3. Structural Enhancement limbs greater than 4 inch diameter.
- 4. Broken and cracked limbs-removed will be removed in high traffic areas of concern.

Crown thinning is the cleaning out of or removal of dead diseased, weakly attached, or low vigor branches from a tree crown

- All trees will be assessed on how a tree will be pruned from the top down prior to pruning by qualified personnel.
- Trimmers will favor branches with strong, U- shaped angles of attachment and where possible remove branches with weak, V-shaped angles of attachment and/or included bark
- Lateral branches will be evenly spaced on the main stem of young trees and areas of fine pruning.
- Branches that rub or cross another branch will be removed where possible.
- Lateral branches will be no more than one-half to three-quarters of the diameter of the stem to discourage the development of codominant stems where feasible.
- In most cases trimmers will not remove more than one- quarter of the living crown of a tree at one time. If it is necessary to remove more, it will be done over successive years.

Crown-raising removes the lower branches of a tree to provide clearance for buildings, vehicles, pedestrians and vistas.

- Live branches on at least two-thirds of a tree's total height will be maintained wherever possible. The removal of many lower branches will hinder the development of a strong stem.
- All basal sprouts and vigorous epicormic sprouts will be removed where feasible.

Crown reduction is used to reduce the height and/or spread of trees and is used for maintaining the structural integrity and natural form of a tree.

- Crown reduction pruning will be used only when absolutely necessary. Pruning cuts will be at a lateral branch that is at least one-third the diameter of the stem to be removed wherever possible.
- When it is necessary to remove more than half of the foliage from a branch it may be necessary remove the entire branch.

Crown restoration is used to improve the structure and appearance of trees that have been topped or severely pruned by the use of heading cuts. One of three sprouts on main branch stubs should be selected to reform a natural appearing crown. Selected vigorous sprouts may need to be thinned to ensure adequate attachment for the size of the sprout. Restoration may require several years of pruning.

Remedial pruning should occur prior to construction. Following construction, any above ground tree pruning/trimming should be delayed until one year after completion of construction.

Following construction, a qualified forester/arborist should monitor trees adjacent to the improvements area and if any decline in health that is attributable to the construction is noted, additional trees shall be planted on the site.

BEST MANAGEMENT PRACTICES (BMPs)

The health of trees remaining should not be affected if the following best management practices are adhered to:

- A) Do not deposit any fill around trees, which may compact soils and alter water and air relationships. Avoid depositing fill, parking equipment, or staging construction materials near existing trees. Covering and compacting soil around trees can alter water and air relationships with the roots. As necessary, trees may be protected by boards, fencing or other materials to delineate protection zones.
- B) Pruning shall be conducted so as not to unnecessarily injure the tree. General-principals of pruning include placing cuts immediately beyond the branch collar, making clean cuts by scoring the underside of the branch first. Pruning of live crowns should occur during fall and winter months.
- C) Root cutting should occur outside of the springtime. Late June and July would likely be the best.
- D) A mulch layer up to approximately 4 inches deep should be applied to the ground under selected trees following construction. Only 1 to 2 inches of mulch should be applied within 1 to 2 feet of the trunk, and under no circumstances should any soil or mulch be placed against the root crown (base) of trees. The best source of mulch would be from chipped material generated on site.
- E) If trees along near the development are visibly declining in vigor, a Professional Forester or Certified Arborist should be contacted to inspect the site to recommend a course of action.

PAYMENT

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in protecting trees and vegetation, including pruning trees, as specified in the Standard Specifications and these special provisions, Tree Resource Assessment/Management Plan, Mitigated Negative Declaration, Mitigation Monitoring & Reporting Program, and as directed by the Engineer and/or qualified arborist/forester shall be considered as included in the contract price paid for Construction Site Management and Clearing and Grubbing and no additional compensation will be allowed therefor.

SECTION 12 (Blank)

SECTION 13 (Blank)

SECTION 14 FEDERAL REQUIREMENTS FOR FEDERAL AID CONSTRUCTION PROJECTS

minority owned.)

GENERAL.—The work herein proposed will be financed in whole or in part with Federal funds, and therefore all of the statutes, rules and regulations promulgated by the Federal Government and applicable to work financed in whole or in part with Federal funds will apply to such work. The "Required Contract Provisions, Federal-Aid Construction Contracts, "Form FHWA 1273, are included in this Section 14. Whenever in said required contract provisions references are made to "SHA contracting officer", "SHA resident engineer", or "authorized representative of the SHA", such references shall be construed to mean "Engineer" as defined in Section 1-1.18 of the Standard Specifications.

PERFORMANCE OF PREVIOUS CONTRACT.—In addition to the provisions in Section II, "Nondiscrimination," and Section VII, "Subletting or Assigning the Contract," of the required contract provisions, the Contractor shall comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of \$10,000 will be considered under the provisions of Section VII of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

NON-COLLUSION PROVISION.—The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary projects.

Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28, USC, Sec. 1746, is included in the proposal.

PARTICIPATION BY MINORITY BUSINESS ENTERPRISES IN SUBCONTRACTING.—Part 26, Title 49, Code of Federal Regulations applies to this Federal-aid project. Pertinent sections of said Code are incorporated in part or in its entirety within other sections of these special provisions.

Schedule B—Information for Determining Joint Venture Eligibility

1. Name of joint venture 2. Address of joint venture 3. Phone number of joint venture 4. Identify the firms, which comprise the joint venture. (The MBE partner must complete Schedule A.) a. Describe the role of the MBE firm in the joint venture. b. Describe very briefly the experience and business qualifications of each non-MBE joint venturer: 5. Nature of the joint venture's business 6. Provide a copy of the joint venture agreement. 7. What is the claimed percentage of MBE ownership?

8. Ownership of joint venture: (This need not be filled in if

described in the joint venture agreement, provided by question 6.).

(This form need not be filled in if all joint venture firms are

- a. Profit and loss sharing.
- b. Capital contributions, including equipment.
- c. Other applicable ownership interests.
- 9. Control of and participation in this contract. Identify by name, race, sex, and "firm" those individuals (and their titles) who are responsible for day-to-day management and policy decision-making, including, but not limited to, those with prime responsibility for:

a. Financial decisions	
b. Management decisions, such as:	
1. Estimating	
2. Marketing and sales	
3. Hiring and firing of management personnel	
4. Purchasing of major items or supplies	
c. Supervision of field operations	

Note.—If, after filing this Schedule B and before the completion of the joint venture's work on the contract covered by this regulation, there is any significant change in the information submitted, the joint venture must inform the grantee, either directly or through the prime contractor if the joint venture is a subcontractor.

Affidavit

"The undersigned swear that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operation of our joint venture and the intended participation by each joint venturer in the undertaking. Further, the undersigned covenant and agree to provide to grantee current, complete and accurate information regarding actual joint venture work and the payment therefore and any proposed changes in any of the joint venture arrangements and to permit the audit and examination of the books, records and files of the joint venture, or those of each joint venturer relevant to the joint venture, by authorized representatives of the grantee or the Federal funding agency. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal or State laws concerning false statements."

Name of Firm	Name of Firm
Signature	Signature
Name	Name
Title	Title
Date	Date
Date	
On this day of	, 19, before me
appeared (Name)	, to me personally known,
who, being duly sworn, did exec	cute the foregoing affidavit, and did
state that he or she was proper	ly authorized by (Name of firm)
• · · · · · · · · · · · · · · · · · · ·	_ to execute the affidavit and did so
as his or her free act and deed.	
Notary Public	
Commission expires	
[Seal]	
Date	
State of	
County of	
On this day of	, 19, before me
appeared (Name)	to me personally known,
who, being duly sworn, did exec	cute the foregoing affidavit, and did
state that he or she was proper	rly authorized by (Name of firm)
	to execute the affidavit and did
so as his or her free act and dee	
Notary Public	
Commission expires	
[Seal]	

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

(Exclusive of Appalachian Contracts)

		Page
I.	General	3
II.	Nondiscrimination	3
III.	Nonsegregated Facilities	5
IV.	Payment of Predetermined Minimum Wage	6
V.	Statements and Payrolls	8
VI.	Record of Materials, Supplies, and Labor	9
VII.	Subletting or Assigning the Contract	9
VIII.	Safety: Accident Prevention	10
IX.	False Statements Concerning Highway Project	10
X.	Implementation of Clean Air Act and Federal Water	
	Pollution Control Act	10
XI.	Certification Regarding Debarment, Suspension,	
	Ineligibility, and Voluntary Exclusion	11
XII.	Certification Regarding Use of Contract Funds for	
	Lobbying	12

ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

- 1. 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.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- 4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4, and 7; Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the

procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.

- 6. **Selection of Labor:** During the performance of this contract, the contractor shall not:
 - a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
 - b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 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, and 41 CFR 60) 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 Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American 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 State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
 - b. The contractor will accept as his 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, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively

administering and promoting an active contractor program of EEO 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 minority group employees.
 - 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 minority groups 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 minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group 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, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
 - c. The contractor will encourage his present employees to refer

- minority group applicants for employment. Information and procedures with regard to referring minority group 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 his 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 his avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- 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. Where feasible, 25 percent of apprentices or traines in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- 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 minority group and women employees and will encourage eligible employees to apply for such training and promotion.

- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. 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 best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - b. The contractor will use best 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 SHA 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 minority and women 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 minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) 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 SHA.
- 8. 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.
 - a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
 - b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 26, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
 - The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
- 9. **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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

- a. The records kept by the contractor shall document the following:
 - (1) The number 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;
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
 - (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
- b. The contractors will submit an annual report to the SHA 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. If onthe-job training is being required by special provision, the contractor will be required to collect and report training data.

III NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

$\begin{array}{ll} \textbf{IV.} & \textbf{PAYMENT OF PREDETERMINED-MINIMUM} \\ \textbf{WAGE} \end{array}$

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers 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 (29 CFR 3)] issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276e) the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers-or-mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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 paragraphs 4 and 5 of this Section IV.

b. 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.

e. All rulings and interpretations of the Davis Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- (2) the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage-rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards Administrator, Washington, D.C. 20210. The Wage and Hour 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.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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. Said 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

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a 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.

4. Apprentices and Trainces (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman level employees 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 employee 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 listed in 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 or subcontractor 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 level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) 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 journeyman-level 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 for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainces:

(1) 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 DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman level 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 level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. 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.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor 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, as 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, traince, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer 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.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one and one half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid-Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in-providing-benefits. Contractors or subcontractors employing apprentices or trainees under-approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

- e. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH 347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029 005 0014 1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.
- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
 - (2) that such 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 the Regulations, 29 CFR 3;
 - (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e. 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 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
 - a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
 - b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
 - c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- 2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 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 State. 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).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.
 - 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 on the contract as a whole and in general are to be limited to minor components of the overall contract.

- 2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII 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 SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

- 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 SHA 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. 333).
- 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. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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,

the following notice 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:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

"Whoever being an officer, agent, or employee of the United States, or 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 not more that \$10,000 or imprisoned not more than 5 years or both."

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

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

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

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15 20
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- 3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized

for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

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

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary 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 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 primary 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 department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary 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," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary 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 primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. 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 information of 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.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a 3-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;
 - c. 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 1b of this certification; and

- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- 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," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- 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.
- 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the

Nonprocurement List.

- 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 information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 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 Covered Transactions

- 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 participation in this transaction 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.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(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 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 recipients shall certify and disclose accordingly.

FEDERAL-AID FEMALE AND MINORITY GOALS

In accordance with Section II, "Nondiscrime "Required Contract Provisions Federal-aid	mination," of Construction	177 Sacramento, CA:	
Contracts" the following are the goals for female utilization:		SMSA Counties:	
		6920 Sacramento, CA	16.1
Goal for Women		CA Placer; CA Sacramento;	
(applies nationwide)(percent)	6.9	CA Yolo.	
The following are goals for minority utilization:		Non-SMSA Counties.	14.3
		CA Butte; CA Colusa;	
CALIFORNIA E/CONOMICAL	DEA	CA El Dorado; CA Glenn;	
CALIFORNIA ECONOMIC A	RŁA	CA Nevada; CA Sierra;	
	Cool	CA Sutter; CA Yuba.	
	Goal	100 0 1 1 1 0	
174 P-11' CA	(Percent)	178 Stockton-Modesto, CA:	
174 Redding, CA:		CMCA C	
Non CMCA Counting	6.8	SMSA Counties:	10.0
Non-SMSA Counties	0.8	5170 Modesto, CA	12.3
CA Plumas; CA Shasta;		CA Stanislaus.	040
CA Siskiyou; CA Tehama.		8120 Stockton, CA	24.3
orr story out remainer		CA San Joaquin.	10.0
175 Eureka, CA:		Non-SMSA Counties	19.8
		CA Aipine; CA Amador; CA Calaveras; CA Mariposa;	
Non-SMSA Counties	6.6	CA Merced; CA Tuolumne.	
CA Del Norte; CA Humboldt;		off Moroca, off Tuorannie.	
CA Trinity.		179 Fresno-Bakersfield, CA:	
176 San Francisco-Oakland-San Jose, CA:		SMSA Counties:	
		0680 Bakersfield, CA	19.1
SMSA Counties:		CA Kern.	17.1
7120 Salinas-Seaside-		2840 Fresno, CA	26.1
Monterey, CA	28.9	CA Fresno.	20,1
CA Monterey.		Non-SMSA Counties	23.6
7360 San Francisco-Oakland, CA	25.6	CA Kings; CA Madera;	
CA Alameda; CA Contra Costa;		CA Tulare.	
CA Marin; CA San Francisco; CA San Mateo.			
7400 San Jose, CA	19.6	180 Los Angeles, CA:	
CA Santa Clara.	19.0		
7485 Santa Cruz, CA	14.9	SMSA Counties:	
CA Santa Cruz.	14.7	0360 Anaheim-Santa Ana-Garden	
7500 Santa Rosa, CA	9.1	Grove, CA	11.9
CA Sonoma.	7.1	CA Orange.	
8720 Vallejo-Fairfield- Napa, CA	17.1	4480 Los Angeles-Long	20.2
CA Napa; CA Solano	11,1	Beach, CA	28.3
or riapa, or coluito		CA Los Angeles.	
Non-SMSA Counties	23.2	6000 Oxnard-Simi Valley- Ventura, CA	21.5
CA Lake; CA Mendocino;	45.4	CA Ventura.	21.3
CA San Benito.		Or volitara.	
· · · · · · · · · · · · · · · · · · ·			

181 San Diego, CA:

6780 Riverside-San Bernardino-	
Ontario, CA	19.0
CA Riverside;	
CA San Bernardino.	
7480 Santa Barbara-Santa Maria-	
Lompoc, CA	19.7
CA Santa Barbara.	
Non-SMSA Counties	24.6
CA Inyo; CA Mono;	
CA San Luis Obispo.	

SMSA Counties	
7320 San Diego, CA	16.9
CA San Diego.	
Non-SMSA Counties	18.2
CA Imperial.	

In addition to the reporting requirements set forth elsewhere in this contract the Contractor and subcontractors holding subcontracts, not including material suppliers, of \$10,000 or more, shall submit for every month of July during which work is performed, employment data as contained under Form FHWA PR-1391 (Appendix C to 23 CFR, Part 230), and in accordance with the instructions included thereon.

FEDERAL REQUIREMENT TRAINING SPECIAL PROVISIONS

FEDERAL REQUIREMENT TRAINING SPECIAL PROVISION. -- As part of the

Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training to develop full journeymen in the types of trades or job classification involved.

The goal for the number of trainees or apprentices to be trained under the requirements of this special provision will be $\mathbf{0}$.

In the event the Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees or apprentices are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of trainees or apprentices in each occupation shall be in their first year of apprenticeship or training.

The number of trainees or apprentices shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing work, the Contractor shall submit to the Department for approval the number of trainees or apprentices to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee or apprentice employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees or apprentices as provided hereinafter.

Training and upgrading of minorities and women toward journeymen status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority and women trainees or apprentices (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees or apprentices) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a ofa minority group member or

No employee shall be employed as a trainee or apprentice in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by both the Department and the Federal Highway Administration. The Department and the Federal Highway Administration will approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee or apprentice for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with the State of California, Department of Industrial Relations, Division of Apprenticeship Standards recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some

offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training. Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein.

This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees or apprentices are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or apprentice or pays the trainee's or apprentice's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee or apprentice as a journeyman, is caused by the

Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee or apprentice will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees or apprentices be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees or apprentices specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Only trainees or apprentices registered in a program approved by the State of California's State Administrator of Apprenticeship may be employed on the project and said trainees or apprentices shall be paid the standard wage specified under the regulations of the craft or trade at which they are employed.

The Contractor shall furnish the trainee or apprentice a copy of the program he will follow in providing the training. The Contractor shall provide each trainee or apprentice with a certification showing the type and length of training satisfactorily completed. The Contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

Form 1273 — Revised 3-95 08-07-95

SECTION 15 – SAMPLE CONTRACT

SAMPLE CONTRACT

CONTRACT FOR PUBLIC WORK

COUNTY OF MONTEREY

STATE OF CALIFORNIA

PROJECT NO. 13-140665 & 13-142265

THIS AGREEMENT, made by and between the COUNTY OF MONTEREY, a politic	cal
subdivision of the State of California, hereinafter called the "County," and	
, hereinafter called	the
"Contractor." WITNESSETH:	

(1) THE WORK

The Contractor shall do all the work and furnish all the materials, except such as are mentioned in any of the contract documents to be furnished by the County, necessary to construct and complete in a good, workmanlike and substantial manner and to the satisfaction of the County, the following public work:

BLACKIE ROAD SAFETY IMPROVEMENTS PROJECT NO. 13-140665 & 13-142265

State Project No: EA 05-930075L & EA 05-930155L Federal Aid Project No: HRRRL-5944(086) & HRRRL-5944(091)

in accordance with this agreement and with all of the following additional contract documents which are incorporated into and made a part of this agreement:

- (a) The Standard Specifications, dated May 2006, and the Standard Plans, dated May 2006, including issued amendments through November 30, 2010, of the State of California, Department of Transportation.
- (b) A set of plans and cross sections (when applicable) entitled:

BLACKIE ROAD SAFETY IMPROVEMENTS
PROJECT NO. 13-140665 & 13-142265
State Project No: EA 05-930075L & EA 05-930155L
Federal Aid Project No: HRRRL-5944(086) & HRRRL-5944(091)

- (c) The Special Provisions for the work
- (d) The Notice to Bidders calling for bids

- (e) The Payment and Performance bonds required
- (f) Local Agency Bidder DBE information, Exhibit 15-G(2)
- (g) Certificate of Insurance
- (h) The accepted bid/proposal including the following:
 - (1) List of Subcontractors
 - (2) Equal Employment Opportunity Certification
 - (3) Public Contract Code

Section 10285.1 Statement

Section 10162 Questionnaire

Section 10232 Statement

- (4) Noncollusion Declaration
- (5) Debarment and Suspension Certification
- (6) Non-Lobbying Certification for Federal Aid Contracts
- (7) Disclosure of Lobbying Activities
- (8) Statement Concerning Employment of Undocumented Aliens
- (9) Contractor's Certificate as to Worker's Compensation
- (10) List of Satisfied Public Agencies
- (11) Bidder's Bond
- (12) Bidder's List
- (13) Local Agency Bidder UDBE Commitment, Exhibit 15-G(1)
- (14) UDBE Information Good Faith Efforts, Exhibit 15-H

All contract documents are intended to cooperate, so that any work called for in one and not mentioned in another is to be executed the same as if mentioned in all. However, should there be any conflict between the terms of this instrument and the Contractor's bid or proposal, then this instrument shall control.

2. WORKERS' COMPENSATION

In accordance with the provisions of Section 3700 of the Labor Code, the Contractor and every Subcontractor will be required to secure the payment of compensation to his employees.

3. <u>CONTRACT PRICE</u>

The County shall pay the Contractor the following prices for the performance of this contract:

BLACKIE ROAD SAFETY IMPROVEMENTS

PROJECT NO. 13-140665 & 13-142265

State Project No: EA 05-930075L & EA 05-930155L

Federal Aid Project No: HRRRL-5944(086) & HRRRL-5944(091)

BASE:

BASE	•					
ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)
1	74016	Construction Site Management	LS	1		
2	74019	Prepare Storm Water Pollution Plan and Water Pollution Control	LS	1		
3	120090	Construction Area Signs	LS	1		
4	120100	Traffic Control System	LS	1		
5	150806	Remove Pipe	LF	207		
6	152370	Relocate Mail Box	EA	7		
7	152386	Relocate Roadside Sign- One Post	EA	9		
8	153103	Cold Plane Asphalt Concrete Pavement	SY	761		
9	160101	Clearing and Grubbing	LS	1		
10	160120	Remove Tree	EA	67		
11	190101	Roadway Excavation	CY	6,402		
12	204038	Plant Coast live Oak Tree (1 Gallon)	EA	80		
13	204099	Plant Establishment Work	LS	1		
14		Class 2 Aggregate Base	CY	7,030		
15	293018	Erosion Control (Hydreseeding)	SY	1,200		
16	377501	Slurry Seal	TON	26		
17	390132	Hot Mix Asphalt Concrete (Type A)	TON	4,900		
18	394054	Rumble Strip (AC, Ground-in-Indentations)	LF	4,772		
19	394073	Place Hot Mix Asphalt Dike (Type A)	LF	4,740		-
20	394090	Place Hot Mix Asphalt (Miscellaneous Area)	SY	56		
21	566011	Roadside Sign (One Post)	EA	2		
22	641101	12" Storm Drain Pipe (HDPE)	LF	59		

ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)
23	641104	15" Storm Drain Pipe(HDPE)	LF	40		
24	641107	18" Storm Drain Pipe (HDPE)	LF	146		
25	641119	30" Storm Drain Pipe (30" HDPE Pipe)	LF	2,316		
26	705319	30" Plastic Flared End Section	EA	1		
27	720002	Rock Slope Protection (Drainage outlet)	CY	6		
28	750030	Drain Inlet with Frame and Grate	EA	7		
29	750030A	Drain Inlet (type C)	EA	1		
30	800001	Reconstruct Fence (Type BW)	LF	600		
31	810110	Survey Monument	EA	6		
32	840501	4" Thermoplastic Traffic Stripe	LF.	23,900		
33	840515	Thermoplastic Pavement Marking	SF	47		
34	850102	Pavement Markers	EA	1,645		
TOTAL BASE COST						

ADDITIVE ALTERNATE:

ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)
1	153103	Cold Plane Asphalt Concrete Pavement	SY	214		
2	160101	Clearing and Grubbing	LS	1		
3	190101	Roadway Excavation	CY	1,089		
4	194001	Ditch Excavation	CY	380		
5	260201	Class 2 Aggregate Base	CY	1,506		
6	390132	Hot Mix Asphalt Concrete (Type A)	TON	998		
7	394054	Rumble Strip (AC, Ground-in-Indentations)	LF	1,300		
	TOTAL ADDITIVE ALTERNATE COST					

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the dates appearing below their respective signatures.

CONT	RACTOR:		
	(Name of Company)		
By:		By:	
•	Signature of Chair, President, or Vice-President		Signature of Secretary, Asst. Secretary, CFO, Treasurer or Asst. Treasurer*
	Printed Name and Title	<u> </u>	Printed Name and Title
Date:		Date:	
COUN	TY OF MONTEREY:		APPROVE AS TO FISCAL TERMS
By:		By:	
Name:	Paul H. Greenway, P.E.	Name:	Gary Giboney
Title:	Acting Director of Public Works	Title:	Chief Deputy Auditor-Controller
Dated:		Date:	
	APPROVE AS TO FORM		APPROVE AS TO INDEMNITY/ INSURANCE LANGUAGE
By:		By:	
Name:	Cynthia L. Hasson	Name:	Steven F. Mauck
Title:	Deputy County Counsel	Title:	Risk Manager
Date:		Date:	

^{*}INSTRUCTIONS: If CONTRACTOR is a corporation, including limited liability and non-profit corporations, the full legal name of the corporation shall be set forth above together with the signatures of two specified officers. If CONTRACTOR is a partnership, the name of the partnership shall be set forth above together with the signature of a partner who has authority to execute this AGREEMENT on behalf of the partnership. If CONTRACTOR is contracting in an individual capacity, the individual shall set forth the name of the business, if any, and shall personally sign the AGREEMENT.

COUNTY OF MONTEREY

PAYMENT BOND

(Civil Code Section 3249)

WHEREAS, the County of Monterey has awarded to Principal, as Contractor, a contract for the following project:

BLACKIE ROAD SAFETY IMPROVEMENTS PROJECT NO. 13-140665 & 13-142265

State Project No: EA 05-930075L & EA 05-930155L Federal Aid Project No: HRRRL-5944(086) & HRRRL-5944(091)

AND WHEREAS, Principal, as Contractor, is required to furnish a bond in connection with said contract, to secure the payment of claims of laborers, mechanics, materialmen, and other persons furnishing labor and materials on the project, as provided by law.

NOW, THEREFORE, we	, as Principal,
and	
as	Surety, are held and firmly
bound unto the County of Monterey, a political subdivision of the	State of California (hereinafter
called "County"), and to the persons named in California Civil Coo	de section 3181 in the penal
sum of Dollar	rs (\$, , .)
for the payment of which sum in lawful money of the United States	s, well and truly to be made,
we bind ourselves, our heirs, executors, administrators, successors	and assigns, jointly and
severally, firmly by these presents.	•

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

If the Principal, or any of Principal's heirs, executors, administrators, successors, assigns, or Subcontractors, (1) fails to pay in full all of the persons named in Civil Code Section 3181 with respect to any labor or materials furnished by said persons on the project described above, or (2) fails to pay in full all amounts due under the California Unemployment Insurance Code with respect to work or labor performed on the project described above, or (3) fails to pay for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Principal and Subcontractors pursuant to Unemployment Insurance Code section 13020 with respect to such work and labor, then the Surety shall pay for the same.

Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract on the call for bids, or to the work to be performed there under, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said contract or the call for bids, or to the work, or to the specifications.

If suit is brought upon this bond by the County and judgment is recovered, the Surety

shall pay all litigation expenses incurred by the County in such suit, including attorney's fees, court costs, expert witness fees and investigation expenses.

This bond inures to the benefit of any of the persons named in Civil Code section 3181, and such persons or their assigns shall have a right of action in any suit brought upon this bond, subject to any limitations set forth in Civil Code sections 3247 et seq. (Civil Code, Division 3, Part 4, Title 15, Chapter 7: Payment Bond for Public Works).

	, , ,
(Corporate Seal)	
	Principal
	Ву
	Name and Title
(Corporate Seal)	
	Surety
	Ву
	Name and Title

(Attach notary acknowledgment for all signatures and attorney-in-fact certificate for signature by surety's representative)

COUNTY OF MONTEREY

PERFORMANCE BOND

WHEREAS, the County of Mor	nterey has awarded to Principal,
a	s Contractor, a contract for the following project:

BLACKIE ROAD SAFETY IMPROVEMENTS PROJECT NO. 13-140665 & 13-142265

State Project No: EA 05-930075L & EA 05-930155L Federal Aid Project No: HRRRL-5944(086) & HRRRL-5944(091)

WHEREAS, Principal, as Contractor, is required to furnish a bond in connection with said contract, to secure the faithful performance of said contract.

NOW, THEREFORE, we	, as Principal,
and	
as Surety, are	held and firmly
bound unto the County of Monterey, a political subdivision of the State of Cal	ifornia (hereinafter
called "County"), in the penal sum of	
Dollars (\$, , .), for the payment of which sum in lawful m	oney of the United
States, well and truly to be made, we bind ourselves, our heirs, executors, adm	ninistrators,
successors and assigns, jointly and severally, firmly by these presents.	

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

If the Principal, as Contractor, or Principal's heirs, executors, administrators, successors, or assigns, (1) shall in all things stand to and abide by and well and truly keep and perform the covenants, conditions, and agreements in said contract and any alteration thereof made as therein provided, on Principal's part to be kept and performed, at the time and in the manner therein specified and in all respects according to their true intent and meaning, and (2) shall defend, indemnify and save harmless the County, the members of its board of supervisors, and its officers, agents and employees as therein stipulated, then this obligation shall become null and void; otherwise, it shall be and remain in full force and virtue.

Surety hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said contract or the call for bids, or to the work, or to the specifications.

Whenever the Principal, as Contractor, is in default, and is declared in default, under the contract by the County of Monterey, the County of Monterey having performed its obligation under the contract, Surety may promptly remedy the default, or shall promptly:

(1) Complete the contract in accordance with its terms or conditions, or

(2) Obtain a bid or bids for submission to County of Monterey for completing the contract in accordance with its terms or conditions, and upon determination by County of Monterey and Surety of the lowest responsible and responsive bidder, arrange for a contract between such bidder and County of Monterey, and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of contract price.

If suit is brought upon this bond by the County and judgment is recovered, the Surety shall pay all litigation expenses incurred by the County in such suit, including attorney's fees, court costs, expert witness fees and investigation expenses.

IN WITNESS WHEREOF, the ab-	ove-bounden parties have executed this instrument
under their several seals thisday of	f, 20, the name and
corporate seal of each corporate party being	ng hereto affixed and these presents duly signed by its
undersigned representative, pursuant to au	uthority of its governing body.
(Corporate Seal)	
	Principal
	Ву
	N. 170/4
	Name and Title
(Corporate Seal)	
(Corporate Sear)	
	Surety
	Saroty
	By
	Name and Title
(Attach notary acknowledgment for all signatu	ares and attorney-in-fact certificate for signature by surety's
representative)	

Exhibit 15-G2 Local Agency Bidder DBE Information (Construction Contracts) (Inclusive of all DBEs including the UDBEs listed at bid proposal)

NOTE:	PLEASE REFER TO INST	FRUCTIONS OF	N THE REVERSE SII	DE OF THIS
AGENCY:		LOCATION:		
PROJECT DESCR	IPTION:			
TOTAL CONTRA	CT AMOUNT: \$			
BID DATE:				
	:			
CONTRACT ITEM NO.	ITEM OF WORK AND DESCRIPTION OR SERVICES TO BE SUBCONTRACTED OR MATERIALS TO BE PROVIDED	DBE Cert. No. AND EXPIRATION DATE	NAME OF DBEs (Must be certified on the date bids are opened - include DBE address and phone number)	DOLLAR AMOUNT DBE
	:			
For Local Agency to Complete: Local Agency Contract Number: Federal Aid Project Number: Federal Share: Contract Award Date: Local Agency certifies that the DBE certification(s) has been verified and all information			Total Claimed Participation	\$%
is complete and acc	curate.		——————————————————————————————————————	
Print Name Local Agency Repr	Signature esentative	Date	dignature of Didde.	
(Area Code) Telepl	none Number:			
For Caltran	s Review:		Date (Ard	ea Code) Tel. No.
Print Name Caltrans District I	Signature Local Assistance Engineer	Date	Local Agency Bidder DBE Inf	Formation (Rev 3/09)

Distribution: (1) Copy – Fax or scan a copy to the Caltrans District Local Assistance Engineer (DLAE) within 15 days of contract execution. Failure to send a copy to the DLAE within 15 days of contract execution may result in de-obligation of funds for this project.

(2) Copy -- Include in award package to Caltrans District Local Assistance

⁽³⁾ Original – Local agency files

INSTRUCTIONS - LOCAL AGENCY BIDDER DBE INFORMATION (CONSTRUCTION CONTRACTS) (Revised 03/09)

SUCCESSFUL BIDDER:

The form requires specific information regarding the construction contract: Agency, Location, Project Description, Federal Aid Project Number (assigned by Caltrans-Local Assistance), Total Contract Amount, Bid Date, Bidder's Name, and Contract Goal.

The form has a column for the Contract Item Number (or Item No's) and Item of Work and Description or Services to be Subcontracted or Materials to be provided by DBEs. The DBE should provide a certification number to the Contractor and expiration date. The DBE contractors should notify the Contractor in writing with the date of the decertification if their status should change during the course of the contract. The form has a column for the Names of DBE certified contractors to perform the work (must be certified on the date bids are opened and include DBE address and phone number). Enter DBE prime and subcontractors certification number. Prime contractors shall indicate all work to be performed by DBEs including work performed by its own forces if a DBE.

IMPORTANT: Identify all DBE firms participating in the project--including all UDBEs listed on the UDBE Commitment form (Exhibit 15G(1)), regardless of tier. Names of the First Tier DBE Subcontractors and their respective item(s) of work listed should be consistent, where applicable, with the names and items of work in the "List of Subcontractors" submitted with your bid.

There is a column for the total DBE dollar amount. Enter the Total Claimed DBE Participation dollars and percentage amount of items of work submitted with your bid pursuant to the Special Provisions. (If 100% of item is not to be performed or furnished by the DBE, describe exact portion of time to be performed or furnished by the DBE.) See Section "Disadvantaged Business Enterprise (DBE)," of the Special Provisions (construction contracts); to determine how to count the participation of DBE firms.

Exhibit 15-G (2) must be signed and dated by the successful bidder. Also list a phone number in the space provided and print the name of the person to contact.

Local agencies should complete the Contract Award Date, Federal Share, Contract and Project Number fields, and verify that all information is complete and accurate before signing and sending a copy of the form to the District Local Assistance Engineer within 15 days of contract execution. Failure to submit a completed and accurate form within the 15-day time period may result in the de-obligation of funds on this project.

District DBE Coordinator should verify that all information is complete and accurate. Once the information has been verified, the **District Local Assistance Engineer** signs and dates the form.