Before the Board of Supervisors in and for the County of Monterey, State of California

Construction No. 2011-009

- a. Approve Plans and Special Provisions for the)
 Carmel Valley Road Overlay Project, Contract)
 No. 11-141165; and)
- b. Authorize the Clerk of the Board to advertise the "Notice to Bidders" in *The Californian* for ten consecutive times commencing May 30, 2011....

Upon motion of Supervisor Potter, seconded by Supervisor Armenta, and carried by those members present, the Board hereby;

- a. Approved Plans and Special Provisions for the Carmel Valley Road Overlay Project, Contract No. 11-141165; and
- b. Authorized the Clerk of the Board to advertise the "Notice to Bidders" in *The Californian* for ten consecutive times commencing May 30, 2011.

PASSED AND ADOPTED on this 24th day of May, 2011, by the following vote, to wit:

AYES: Supervisors Armenta, Calcagno, Salinas, Parker, and Potter

NOES: None

ABSENT: None

I, Gail T. Borkowski, Clerk of the Board of Supervisors of the County of Monterey, State of California, hereby certify that the foregoing is a true copy of an original order of said Board of Supervisors duly made and entered in the minutes thereof of Minute Book 75 for the meeting on May 24, 2011.

Dated: May 25, 2011

Gail T. Borkowski, Clerk of the Board of Supervisors County of Monterey, State of California

Denut

MONTEREY COUNTY RESOURCE MANAGEMENT AGENCY

DEPARTMENT OF PUBLIC WORKS

BOOK ONE

NOTICE TO BIDDERS AND SPECIAL PROVISIONS

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165



COVER SHEET

BOOK ONE

NOTICE TO BIDDERS AND SPECIAL PROVISIONS

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

APPROVED AS TO FORM:

CYNTHIA L. HASSON Deputy County Counsel

APPROVED AS TO INDEMNITY/ INSUBANCE LANGUAGE:

STEVEN F. MAUCK Risk Manager

TITLE SHEET

BOARD OF SUPERVISORS COUNTY OF MONTEREY STATE OF CALIFORNIA

> Jane Parker, Chair Fernando Armenta Louis Calcagno Simon Salinas Dave Potter

Lew C. Bauman, P.E., Ph.D., County Administrative Officer

Yazdan T. Emrani, M.S., P.E., Director of Public Works
 Paul H. Greenway, P.E., Assistant Director of Public Works
 Arturo A. Adlawan, P.E., Senior Civil Engineer
 Jonathan L. Pascua, P.E., Project Engineer

NOTICE TO BIDDERS
AND
SPECIAL PROVISIONS

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

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

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SIGNATURE SHEET

BOOK ONE

NOTICE TO BIDDERS AND SPECIAL PROVISIONS

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

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

In other I Passage

PROFESSIONAL CREEN TO NO. C 64360 A EXP. 06-30-11 CIVIL OF CALIFORNIA

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

MISCELLANEOUS

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
A88A	Curb Ramp Details

TEMPORARY FACILITIES

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

ROADSIDE SIGNS

RS1 Roadside Signs - Typical Installation Details No	o. 1
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RS2 Roadside Signs - Wood Post, Typical Installation Details No. 2

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

NOTICE TO BIDDERS

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

Sealed bids will be received at the OFFICE OF THE CLERK OF THE BOARD OF SUPERVISORS, COUNTY OF MONTEREY, 168 W. ALISAL STREET 1ST FLOOR, SALINAS, CALIFORNIA 93901 (MAILING ADDRESS: PO BOX 1728, SALINAS CA 93902-1728), until **2:00 p.m., on June 23, 2011**, for construction on CARMEL VALLEY ROAD NEAR CARMEL FROM DORRIS DRIVE TO RANCHO FIESTA, Contract No. 11-141165, as shown on the plans and in accordance with the specifications and other requirements therefore, at which time they will be publicly opened and read by the Purchasing Agent in the County of Monterey Government Center, Board of Supervisors' Conference Room 1032, 168 West Alisal Street 1st Floor, Salinas, California 93901.

Special attention of prospective bidders is called to the "Proposal Requirements and Conditions" of the Special Provisions. 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. A blank Bidder's Bond form is attached to the Bid Form (Book Two).

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.

The project consists of hot mix asphalt overlay including but not limited to pavement delineation, adjustment of frame and cover to grade, adjustment of frame and grate to grade, replace asphalt concrete dike, clearing and grubbing, reconstruction of failed pavement areas and traffic control. The Engineer's Estimate for the Base construction cost is \$1,408,144.

The Additive Alternate for the project consists of, but not limited to hot mix asphalt overlay, pavement delineation, replace asphalt concrete dike, clearing and grubbing and reconstruction of failed pavement areas. The limit of the Additive Alternate is from Sta 429+62 (Rancho Fiesta Rd) to 447+40 (Miramonte Rd). See the Title Sheet of the Project Plans. The Engineer's Estimate for the Additive Alternate is \$221,974

A payment bond and a performance bond each in the amount of 100 percent of the Contract are required as specified by Section 3-1.02, "Contract Bonds," of the Special Provisions.

Bids are required for the entire work described herein. Prices on alternate construction methods or materials will be considered only when specifically called for.

The CONTRACT DOCUMENTS--plans, specifications, and any addenda-- may be examined at the following locations:

Monterey County
Department of Public Works
168 W. Alisal Street, 2nd Floor
Salinas, CA 93901

Salinas Valley Builders Exchange 20 Quail Run Circle Salinas, CA 93907

San Francisco Builders Exchange 850 S. Van Ness Avenue San Francisco, CA 94110

Sacramento Builders Exchange 1331 T Street Sacramento, CA 95811

Builders Exchange of the Central Coast 100 12th Street, Bldg. 2861 Marina, CA 93933 Santa Cruz Builders Exchange 1248 Thompson Avenue Santa Cruz, CA 95062

Central California Builders Exchange 1244 North Mariposa Avenue Fresno, CA 93703

McGraw Hill 11875 Dublin Blvd. Suite A-118 Dublin, CA 94568

The Contract Documents will be made 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 Director of the California Department of Industrial Relations has ascertained the general prevailing rate or per diem wages and the general prevailing rate for holiday and overtime work in this locality for each craft, classification, or type of worker needed to execute the Contract and are available on the internet at http://www.dir.ca.gov/dlsr/pwd/. Copies thereof are on file in the office of Department of Public Works, Salinas, California, and may be examined by any interested party on request. These wage determinations for this project as predetermined by the Director of the California Department of Industrial Relations are set forth in these Special Provisions. Addenda to modify wage rates, if necessary, will be issued to the holders of these Special Provisions. Future effective General Prevailing Wage Determinations, which have been predetermined and are on file with the California Department of Industrial Relations (http://www.dir.ca.gov/dlsr/pwd/), are referenced but not printed in these Special Provisions.

Pursuant to Section 5.08.120 of the Monterey County Code, all contractors and subcontractors providing work, laborers, or materials on the project shall make a good-faith effort to hire Monterey Bay Area residents such that no less than fifty percent (50%) of the contractor's total construction work force including any subcontractor work force, measured in labor work hours, is comprised of Monterey Bay Area residents.

Upon the Contractor's request, the County of Monterey will make payment of funds withheld from progress payments pursuant to the requirements of Public Contract Code Section 22300 if the

Contractor deposits in escrow with the County Treasurer or with a bank acceptable to the County of Monterey, securities eligible for the investment of State funds under Government Code Section 16430 or bank or savings and loan certificates of deposit, upon conditions specified in Contract documents.

The Resource Management Agency, Department of Public Works reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding.

The quantities in the Bid Form (Book Two) are approximate only, being given as a basis for the comparison of bids; and the Department of Public Works does not, expressly or by implication, agree that the actual amounts of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work as may be deemed necessary or expedient by the Engineer. All bids are to be compared on the Bid Form (Book Two) of the quantities to be done.

YAZDAN T. EMRANI, M.S., P.E. DIRECTOR OF PUBLIC WORKS RMA - DEPARTMENT OF PUBLIC WORKS COUNTY OF MONTEREY STATE OF CALIFORNIA

DATED: May 24, 2011

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

SPECIAL PROVISIONS

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

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.

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, licenses.

2-1.02 SUBCONTRACTORS LIST:

Each bid shall have listed 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 his 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 directed to other provisions of said Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized Subcontractors or by making unauthorized substitutions.

A sheet for listing the Subcontractors, as required herein by law, is included in the Bid.

2-1.03 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.

2-1.04 GOOD-FAITH EFFORT TO HIRE RESIDENTS OF MONTEREY BAY AREA:

In accordance with Section 5.08.120 of the Monterey County Code, unless such requirement would conflict with a state or federal law or regulation applicable to a particular contract for a public work of improvement, all contractors and subcontractors providing work, laborers, or materialmen on the project must promise to make a good-faith effort to hire qualified individuals who are, and have been for one (1) year prior to the opening of bids residents of the Monterey Bay Area in sufficient numbers so that no less than fifty percent (50%) of the contractor's total construction work force on the project including any subcontractor work force, measured in labor work hours is comprised of Monterey Bay Area residents. A certification form relating to compliance with Section 5.08.120 is furnished with the bid documents. Each contractor must complete the certification form and submit the certification form with the sealed bid. The Monterey County Board of Supervisors may deem a bid non-responsive for failure to abide by the good-faith local hiring provisions of Section 5.08.120.

The Monterey County Purchasing Agent has prescribed rules, regulations, and procedures relating to the application, administration, and interpretation of the provisions of Section 5.08.120, which include the following:

"Monterey Bay Area resident" means a person who resides within the boundaries of Monterey County, Santa Cruz County, or San Benito County.

A "good-faith effort to hire qualified individuals" means that the contractor will take the following or similar steps.

- Contact local recruitment sources to identify qualified individuals who are Monterey Bay Area residents.
- Advertise for qualified Monterey Bay Area residents in trade papers and a newspaper of general circulation in at least Monterey County, unless time limits imposed by the County do not permit that advertising.
- If portions of the work are to be performed by subcontractors, identify subcontractors whose work force includes Monterey Bay Area residents.
- Take residency into account as a factor when determining composition of construction work force and potential subcontractors for the project.
- Require the same good-faith efforts by its subcontractors.

The County department administering the contract, in conjunction with the County's Equal Opportunity Officer, may periodically request evidence from each contractor that the contractor is complying with the requirements of Section 5.08.120. To this end, the contractor shall maintain accurate records documenting the following: contractor's good-faith efforts to hire Monterey Bay Area residents; the total number of labor hours contractor's construction work force has expended to date on the project; the number of such labor hours performed by Monterey Bay Area residents; and evidence of residency of contractor construction workforce. The contractor shall require any and all subcontractors on the project to maintain records of the same information for subcontractor's work force on the project and shall require subcontractor to provide a copy of those records to contractor upon contractor's request. The contractor shall make contractor's and subcontractors' records available to County for review and inspection within five business days of the County's request.

Contractors and subcontractors are referred to the provisions of Section 5.08.120 of the Monterey County Code and the rules, regulations, and procedures adopted to implement Section 5.08.120, a copy of which are on file with the County department administering the contract, with the County's Purchasing Agent, and with the County's Equal Opportunity Officer.

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, 2^{ND} FL, Salinas, Ca, 93901-2438.

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 45 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, 16

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 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.

5-1.07 CONTRACTOR'S LICENSING LAWS:

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

5-1.08 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.

5-1.09 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS:

Attention is directed to the provisions in Sections 10262 and 10262.5 of the Public Contract Code and Section 7108.5 of the Business and Professions Code concerning prompt payment to subcontractors.

A prime contractor or subcontractor shall pay any subcontractor not later than 10 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 10 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.

5-1.10 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 9-1.07F, "Retentions," of the Standard Specifications, the following shall be inserted:

Progress payments shall not be made in excess of 90 percent of the actual work completed. County shall withhold ten (10) percent from progress payments until final completion and acceptance of the project by the Board of Supervisors.

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.

5-1.11 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.

5-1.12 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.

5-1.13 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.

5-1.14 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.

5-1.15 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.

5-1.16 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.

5-1.17 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:

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

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:

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

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 x [(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:

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

For metric projects, use:

- $A = 1.1023 \times [(Iu / Ib) 1.05] \times Ib \times [1 + (T / 100)]$ 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.

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 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)
- 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
- 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

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

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

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")
- 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

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 hot mix asphalt overlay including but not limited to pavement delineation, adjustment of frame and cover to grade, clearing and grubbing, reconstruction of failed pavement areas 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
150704	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE

150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE
150771	REMOVE ASPHALT CONCRETE DIKE
152438	ADJUST FRAME AND COVER TO GRADE
152439	ADJUST FRAME AND GRATE TO GRADE
374206	SEAL RANDOM CRACKS
394074	PLACE HOT MIX ASPHALT DIKE (TYPE A)

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 Water Pollution Control Program 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.

10-1.02 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.

10-1.03 WATER POLLUTION CONTROL:

GENERAL

Summary

Work activities must not disturb 1 or more acres of soil. Manage work activities to reduce the discharge of pollutants to surface waters, groundwater, or municipal separate storm sewer systems including the work item shown in the verified Bid Item List for Prepare Water Pollution Control Program. WPCP preparation includes obtaining WPCP approval, amending the WPCP, and monitoring and inspecting WPC practices at the job site.

Do not start work until:

- 1. WPCP is approved
- 2. WPCP review requirements have been fulfilled. If the RWQCB requires time for WPCP review, allow 30 days for the RWQCB to review the WPCP as specified under "Submittals" of these special provisions.

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

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.

BMPs: Best Management Practices are water pollution control practices.

construction phase: Construction phases are (1) Highway Construction including work activities for building roads and structures, (2) Plant Establishment including maintenance on vegetation installed for final stabilization, and (3) Suspension where work activities are suspended and areas are inactive.

Preparation Manual: The Department's "Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual."

NPDES: National Pollutant Discharge Elimination System.

NOI: Notice of Intent.

QSD: Qualified SWPPP Developer. **OSP:** Qualified SWPPP Practitioner.

RWQCB: Regional Water Quality Control Board. SWPPP: Storm Water Pollution Prevention Plan. SWRCB: State Water Resources Control Board.

WPC: Water Pollution Control.

WPC Manager: Water Pollution Control Manager. The WPC Manager implements water pollution control work described in the WPCP and oversees revisions and amendments to the WPCP.

WPCP: Water Pollution Control Program.

Submittals

Within 7 days after contract approval, start the following process for WPCP approval:

- 1. Submit 2 copies of the WPCP and allow 15 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 WPCP within 7 days of receipt of the Engineer's comments. The Engineer's review resumes when the complete WPCP is resubmitted.
- 3. When the Engineer approves the WPCP, submit an electronic and 3 printed copies of the approved WPCP.
- 4. If the RWQCB reviews the approved WPCP, the Engineer submits one copy of the approved WPCP to the RWQCB for their review and comment. RWQCBs requiring time to review WPCPs include:
- 5. If the Engineer requests changes to the WPCP based on RWQCB comments, amend the WPCP within 3 days.

Submit:

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

Submit as required:

- 1. BMP Status Report
- 2. Inspection Reports

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

- 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 WPCP 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 project.

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

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 the Department's "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

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 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/

Water Pollution Control Manager

Assign one WPC Manager to implement the WPCP. You may assign a different QSP to prepare the WPCP.

The WPC Manager must comply with the Permit (Order No. 2009-0009-DWQ, NPDES No. CAS000002) for a QSP by having at least one of the following qualifications:

- 1. Certified Erosion, Sediment and Storm Water Inspector (CESSWI)™ registered through Enviro Cert International, Inc.
- 2. Certified Inspector of Sediment and Erosion Control (CISEC) registered through CISEC, Inc.
- 3. Qualifications described in the Permit for a QSD
- 4. Department approved storm water management training described in the Department's "Construction Storm Water and Water Pollution Control" Web site

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 WPCP and amend the WPCP when required

WPC Manager must oversee:

- 1. Inspections of WPC practices identified in the WPCP
- 2. Inspections for visual monitoring

WATER POLLUTION CONTROL PROGRAM

WPCP work includes preparing a WPCP, obtaining WPCP approval, amending the WPCP, and reporting on WPC practices at the job site. The WPCP must comply with the Preparation Manual. The WPCP is required by the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications.

You may request, or the Engineer may order, changes to the WPC work. Changes may include the addition of new WPC practices. Additional WPC work will be paid for as extra work under Section 4-1.03D, "Extra Work," of the Standard Specifications.

The WPCP must include WPC practices:

- 1. For 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. For activities or mobile operations related to contractor obtained NPDES permits
- 3. Construction support facilities

The WPCP 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.

WPCP Amendments

You must amend the WPCP when:

- 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

If you amend the WPCP, follow the same process specified for WPCP approval.

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

WPCP Schedule

The WPCP schedule must:

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

IMPLEMENTATION REQUIREMENTS

WPCP Implementation

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 WPCP:

- 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 Department may correct the deficiency and deduct the cost of correcting the deficiency from payment.

Continue WPCP implementation during any temporary suspension of work activities.

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

If actions for your convenience disturb 1 or more acres of soil, you must pay all costs and be responsible for all delays associated with submitting a SWPPP.

Inspection

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

- 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

If the following occur, notify the Engineer within 6 hours:

- 1. You identify discharges into receiving waters or drainage systems causing or potentially causing pollution
- 2. The project receives a written notice or order from a regulatory agency

No later than 48 hours after the conclusion of a storm event resulting in a discharge, a non-stormwater discharge, or receiving the notice or order, submit:

- 1. Date, time, location, and nature of the activity, type of discharge and quantity, and the cause of the notice or order
- 2. WPC practices used before the discharge, or before receiving the notice or order
- 3. Description of WPC practices and corrective actions taken to manage the discharge or cause of the notice

PAYMENT

The contract lump sum price paid for prepare water pollution control program 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 WPCP and inspecting water pollution control practices as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payments for WPCP are made as follows:

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

The Department does not pay for implementation of WPC practices in areas outside the highway right-of-way not specifically provided for in the drawings or in the special provisions.

The Department does not pay for WPC practices installed at your construction support facilities.

WPC practices for which there are separate bid items of work are measured and paid for as those bid items of work.

10-1.04 CONSTRUCTION SITE MANAGEMENT:

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.

Material and Equipment Used Over Water

Place drip pans and absorbent pads under vehicles or equipment used over water. Keep an adequate supply of spill cleanup material with the vehicle or equipment. If the vehicle or equipment will be idle for more than one hour, place drip pans or plastic sheeting under the vehicle or equipment on docks, barges, or other surfaces over water.

Furnish watertight curbs or toe boards on barges, platforms, docks, or other surfaces over water

to contain material, debris, and tools. Secure material to prevent spills or discharge into water due to wind.

Structure Removal Over or Adjacent to Water

Do not allow demolished material to enter storm water systems or watercourses. Use approved covers and platforms to collect debris. Use attachments on equipment to catch debris on small demolition activities. Empty debris catching devices daily and handle debris under "Waste Management" of these special provisions.

The WPC Manager must inspect demolition sites within 50 feet of storm water systems or watercourses daily.

Paving, Sealing, Sawcutting, Grooving, and Grinding Activities

Prevent the following materials from entering storm drain systems or water courses:

- 1. Cementitious material
- 2. Asphaltic material
- 3. Aggregate or screenings
- 4. Grinding grooving, or sawcutting residue
- 5. Pavement chunks
- 6. Shoulder backing
- 7. Methacrylate

Cover drainage inlets and use linear sediment barriers to protect downhill watercourses until paving, sealing, sawcutting, grooving, or grinding activities are completed and excess material has been removed. Cover drainage inlets and manholes during the application of seal coat, tack coat, slurry seal, or fog seal.

If precipitation is predicted, limit paving, sawcutting, and grinding to places where runoff can be captured.

Do not start seal coat, tack coat, slurry seal, or fog seal activities if precipitation is predicted during the application or curing period. Do not excavate material from existing roadways during precipitation.

Use a vacuum to remove slurry immediately after slurry is produced. Do not allow slurry to run onto lanes open to traffic or off the pavement.

Collect residue from portland cement concrete grinding and grooving activities with a vacuum attachment on the grinding machine. Do not leave any residue on the pavement or allow the residue to flow across the pavement.

If approved, material excavated from existing roadways may be stockpiled under "Stockpile Management" of these special provisions.

Do not coat asphalt trucks and equipment with substances that contain soap, foaming agents, or toxic chemicals.

When paving equipment is not in use, park over drip pans or plastic sheeting with absorbent material to catch drips.

Thermoplastic Striping and Pavement Markers

Thermoplastic striping and preheating equipment shutoff valves must work properly at all times. Do not preheat, transfer, or load thermoplastic within 50 feet of drainage inlets or watercourses. Do not fill a preheating container above a level that is 6 inches below the top. Truck beds must be cleaned daily of scraps or melted thermoplastic.

Do not unload, transfer, or load bituminous material for pavement markers within 50 feet of drainage inlets or watercourses. Release all pressure from a melting tank before removing the lid to fill or service. Do not fill a melting tank above a level that is 6 inches below the top.

Collect bituminous material from the roadway after marker removal.

Pile Driving

Keep spill kits and cleanup material at pile driving locations. Pile driving equipment must be parked over drip pans, absorbent pads, or plastic sheeting with absorbent material. If precipitation is predicted, protect pile driving equipment by parking on plywood and covering with plastic.

Store pile driving equipment when not in use. Stored pile driving equipment must be:

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

If practicable, use vegetable oil instead of hydraulic fluid.

The WPC Manager must inspect the pile driving area for leaks and spills:

- 1. Daily when pile driving occurs daily
- 2. Weekly when pile driving does not occur daily

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 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 10 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 the Departments' s "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.

10-1.05 STREET SWEEPING:

Street sweeping shall be conducted where sediment is tracked from the job site onto paved roads, as described in the approved Water Pollution Control Program ((WPCP) in accordance with

"Water Pollution Control" of these special provisions, and as directed by the Engineer.

Street sweeping shall be one of the water pollution control practices for sediment control. The WPCP shall include the use of street sweeping. Street sweeping shall be performed in accordance with Section 4, SC-7 in the Construction Site Best Management Practices Manual of the Caltrans Storm Water Quality Handbooks.

The number of street sweepers shall be as designated in the approved WPCP. The Contractor shall maintain at least one sweeper on the job site at all times during the period that sweeping work is required. Sweepers shall be self-loading, motorized, and shall have spray nozzles. Sweepers may include a vacuum apparatus.

Street sweeping shall start at the beginning of clearing and grubbing and shall continue until completion of the project, or as directed by the Engineer. Street sweeping shall be performed immediately after soil disturbing activities occur or offsite tracking of material is observed. Street sweeping shall be performed so that dust is minimized. If dust generation is excessive or sediment pickup is ineffective as determined by the Engineer, the use of water or a vacuum will be required.

At the option of the Contractor, collected material may be temporarily stockpiled in accordance with the approved WPCP. Collected material shall be disposed of at least once per week.

Material collected during street sweeping operations shall be disposed of in conformance with Section 7-1.13, "Disposal of Material Outside The Highway Right Of Way," of the Standard Specifications.

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.

10-1.06 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 WPCP 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 yard in weight

- 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:
 - From 8 to 10 inches in diameter, from 10 to 20 feet long, and at least 1.1 pounds per 4.1. linear foot
 - From 10 to 12 inches in diameter, at least 10 feet long, and at least 3 pounds per 4.2. 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.

10-1.07 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.

10-1.08 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:

Cal-Am Water Company Contact: Lesley Silva Tel: (831)646-3224 P.O. Box 951 511 Forest Lodge Rd. Ste.,100 Pacific Grove, Ca 93950

AT & T Company Contact: Kurt Bush Tel: (831) 754-8501 340 Pajaro Street Salinas, Ca 93901 Contact: Michi Wright Tel: (831)648-3231 2311 Garden Rd Monterey Ca 93940

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.

10-1.09 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.

10-1.10 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:

Notification Center	Telephone Number
Underground Service Alert-Northern California (USA)	(800) 642-2444 (800) 227-2600
Western Utilities Underground Alert (Inc.)	(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.

10-1.11 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 minutes.

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 therefore.

Chart No. 1 Conventional Highway Lane Requirements																									
County: Monterey Route/Direction: Carmel Valley Road/EB and WB MP: 5.87/8.13 MP: 8.13/8.47 (Additive Alternate)								ate)																	
Closure Limits: Dorris Drive to Rand	ch	o F	ies	ta	Ro	ad																			
FROM HOUR TO HOUR 24	4	1	2	3	4	5	6		7	_	_	_		_	_			_	71	81	9 2	0 2	1 2	2 2	3 24
Mondays through Thursdays										l		L		<u></u>	L-	_	R	L	_						
Fridays					Ţ					R	R	R	R	R	R	R	R								
Saturdays																						_			
Sundays				Γ		\top									_										
Legend: R Closure with reversible control permitted No closure permitted.																									
REMARKS: Use of shoulder as through traffic lane as approved by the Engineer. Through traffic lanes shall be a minimum width of 11 feet. From Sta 316+65 to Sta 325+00, maintain at least one lane of traffic on each side of raised island at Robinson Cyn Rd interchanged. No lane closure or provide detailed traffic control staging plan to be approved by the Engineer.																									

10-1.12 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.

10-1.13 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:

- 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
 - Southern California: Traffic Control Service, Inc., 1818 E. Orangethorpe, Fullerton,
 CA 92831-5324, telephone (800) 222-8274, FAX (714) 526-9501
- 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.

10-1.14 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.

10-1.15 PORTABLE CHANGEABLE MESSAGE SIGN:

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.

10-1.16 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
 - 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.

10-1.17 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.

10-1.18 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.

10-1.19 ADJUST FRAME AND COVER TO GRADE:

Frames and covers of existing manholes, monuments, pull boxes, junction structures or other facilities shall be adjusted to grade in conformance with the provisions in Section 15-2.05, "Reconstruction," of the Standard Specifications.

Quantities of adjusting frame and covers of existing manholes, monuments, junction structures or other facilities to grade, reconstructing, remodeling, or abandoning will be determined as units from actual count.

The contract unit price paid for adjust frame and cover to grade shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved and no additional compensation shall be allowed therefor.

10-1.20 SEAL RANDOM CRACKS IN EXISTING SURFACING:

Cracks in existing asphalt concrete surfacing of traffic lanes and shoulders shall be prepared and filled with crack sealant and covered with sand and aggregate as in conformance with these special provisions.

Cracks 1/4 inch wide and wider in existing asphalt concrete surfacing and shoulders shall be prepared and sealed. Limits of lanes and shoulders to be prepared and sealed shall be as designated on the plans or directed by the Engineer.

The Contractor shall provide the Engineer with a Certificate of Compliance conforming to the provisions in Section 6-1.07, "Certificate of Compliance," of the Standard Specifications for each shipment of crack sealant. The certificate shall certify that the sealant conforms to the specifications, and shall be accompanied with storage and heating instructions and cautions for the material.

MATERIALS

Emulsified crack sealant shall conform to the provisions for asphaltic emulsion in Section 94, "Asphaltic Emulsions," of the Standard Specifications. The crack sealant shall be readily handled at ambient temperature, shall be capable of being stored for periods of up to 6 months, shall withstand freeze-thaw cycles and shall contain no volatile organic compounds which may contribute to air pollution. The base material shall remain ductile with aging and provide resiliency under extreme climatic conditions.

Emulsified crack sealant shall conform to the following requirements:

Property	Test Method	Requirements				
Viscosity @ 25°C, SFS	ASTM Designation: D 244	25 - 150				
Pumping stability	GB method, Note a	Pass				
5-day settlement test, %	ASTM Designation: D 244	5.0 max.				
Cement mixing test, %	ASTM Designation: D 244	2.0 max.				
Sieve test, %	ASTM Designation: D 244	0.1 max.				
Particle charge test	ASTM Designation: D 244,	Positive				
	Note b					
Residue, %	ASTM Designation: D 244,	64 min.				
	Notes b and c					
Test of Residue from ASTM Designation: D 244						
Viscosity @ 60°C cSt	ASTM Designation: D 2170	4500-9500				
Notes:						

Notes:

- Pumping stability is determined by charging 450 milliliters of emulsion into a one-L beaker and circulating emulsion through a gear pump (Roper 29 B22621) having a 6-mm inlet and outlet. The emulsion passes if there is not significant oil separation after circulating ten minutes.
- Use test procedure ASTM Designation: D 244 except that distilled water shall be used in place of two percent sodium oleate solution.
- ASTM Designation: D 244 Evaporation Test for percent of residue is modified by heating a 50-g sample to 149°C until foaming ceases, then cooling immediately and calculating results.

Unless otherwise directed by the Engineer, a 2-quart sample of emulsified sealant to be used in the work shall be submitted to the Engineer at least 10 days prior to beginning of the crack seal work.

Immediately following the application of crack sealant material, sand shall be applied on the crack sealant material. Sand shall be free from clay or organic material, and 90 percent to 100 percent shall pass a No 4 sieve and not more than 5 percent shall pass a No. 200 sieve. Sand shall be spread uniformly with the exact spread rate to be determined by the Engineer.

Cracks that are one inch wide or wider shall be filled with sealant flush with the existing asphalt concrete surfacing and shoulders. While the sealant is still hot, these cracks shall be covered with crushed aggregate conforming to the provisions for Type II slurry seal in Section 37-2.02C, "Aggregate," of the Standard Specifications and compacted with a wetted steel wheel roller or vibrating plate compactor large enough to compact the sealant to the cross section shown on the plans.

PREPARATION

Cracks to be filled and adjacent asphalt concrete surfacing shall be cleaned and shall be free of dirt, vegetation, debris and loose sealant. Cleaning shall be done by air blasting. Old sealant which protrudes above the asphalt concrete surfacing shall be completely removed. Routing will not be required.

When moisture is present, hot compressed air or other means, approved by the Engineer, shall be used to clean and dry the crack immediately prior to application of crack sealant.

APPLICATION

Crack sealant shall be applied only after the cracks and adjacent asphalt concrete surfacing have been cleaned and dried.

Crack sealant material shall be spread with a nozzle or device approved for use by the Engineer and be placed within the specified temperature range and to the dimensions shown on the plans.

Cracks shall be squeegeed as necessary after application of the crack sealant material.

Within 2 days after application of sealant, sealed cracks that reopen or in which the sealant material sags below the surrounding asphalt concrete surfacing and shoulders shall be resealed.

Light brooming shall be performed to remove loose excessive sand prior to opening a lane to public traffic that is not controlled by a pilot car.

MEASUREMENT AND PAYMENT

Seal random cracks will be measured by lane mile, from actual measurement along the edge of each paved lane, parallel with the gradient of the pavement, or by lane length calculated using post mile designations, as determined by the Engineer.

The contract price paid per lane mile for seal random cracks shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in sealing random cracks, complete in place, including furnishing and applying sand and aggregate and for brooming excessive sand and aggregate as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Full compensation for cleaning and sealing random cracks in adjacent paved shoulders shall be considered as included in the contract price paid per lane mile for seal random cracks and no additional compensation will be allowed therefore.

10-1.21 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. You may pave HMA in one (1) layer for specified paved thicknesses of 0.25 foot or less.

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. If you leave a vertical joint greater than 0.15 foot, provide a 6-inch to 12-inch HMA wedge.

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 (PI_0) 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.

For OGFC, only determine must-grinds when placed over HMA constructed under the same project. The top layer of the underlying HMA must comply with the smoothness specifications before placing OGFC.

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 PI_0 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.

10-1.22 REPLACE ASPHALT CONCRETE SURFACING:

GENERAL

Summary

This work includes removing existing asphalt concrete surfacing and underlying base and replacing with hot mix asphalt (HMA). The Engineer determines the exact limits of replaced asphalt concrete surfacing.

MATERIALS

HMA Type A and tack coat must comply with the specifications in Section 39-1.02, "Materials" of the Standard Specifications.

The grade of asphalt binder mixed with aggregate for HMA must be PG 64-10.

The aggregate for HMA must comply with the 3/4-inch grading.

CONSTRUCTION

Pave replacement HMA under Section 39-3, "Method," of the Standard Specifications.

Replace asphalt concrete in a lane before the lane is specified to be opened to public traffic under "Maintaining Traffic" of these special provisions.

Before removing asphalt concrete, outline the replacement area and cut neat lines with a saw or grind to full depth of the existing asphalt concrete. Do not damage asphalt concrete and base remaining in place.

Dispose of removed material under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

If base is excavated beyond the specified plane, replace it with HMA at your expense.

MEASUREMENT AND PAYMENT

The Engineer measures replace asphalt concrete surfacing based on the specified dimensions and any adjustments ordered.

The contract price paid per cubic yard for replace asphalt concrete surfacing includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in replacing asphalt concrete surfacing including tack coat, complete in place as shown on the plans, as specified in the Standard Specifications and the special provisions, and as directed by the Engineer.

You may request the Engineer's approval to leave rejected replacement HMA in place. If the Engineer approves, you must accept a reduction in the payment for the rejected replacement HMA.

10-1.23 PAVEMENT REINFORCING FABRIC:

The paving mat shall be constructed of a non-woven material consisting of at least 50% fiberglass (by weight), and the remainder comprised of polyester and binder. The material shall be resistant to chemicals, mildew and rot, and shall have no tears or holes that will adversely affect the in-situ performance and physical properties of the installed material. The paving mat shall meet the following physical requirements as follows:

Property	Test Method	Units	Value
Mass per unit area	ASTM D5261	oz/sqyd	4.0
Tensile Strength, MD	ASTM D5035	lb/2 in	> 45
Tensile Strength, CD	ASTM D5035	lb/2 in	> 45
Elongation at maximum load, MD	ASTM D5035	Percent	< 5
Elongation at maximum load, CD	ASTM D5035	Percent	< 5
Melting point	ASTM D276	°F	> 400

The pavement reinforcing fabric shall be placed in accordance to the provision in Section 39-1.09D, "Geosynthetic Pavement Interlayer," of the Standard Specifications.

The surface to receive the reinforcing fabric shall be dry and clean to provide significant adhesion to the fabric to the satisfaction of the Engineer. The surface shall be swept or vacuum cleaned by a mechanical device and be free of dirt, oil, vegetation, sand, gravel, water and other debris. All surface cracks over ¼ inch shall be crack sealed and brought to the level of the existing pavement in conformance with these special provisions.

An asphalt tack coat shall be applied to the surface prior to placing the reinforcing fabric. The asphalt tack coat shall be hot applied asphalt cement meeting grade requirements of AC or PG specifications. For normal installations temperatures, the tack coat shall be an AC-20, PG 64-22, or a 60-80 penetration grade or as directed by the Engineer. The use of emulsions, cutbacks, or materials containing solvents shall not be permitted for use as tack coat.

The tack coat shall be applied at a rate of 0.15 to 0.25 gallon per square yard of surface covered, the optimum rate as determined by the Engineer. At the discretion and direction of the engineer, the application rate shall be increased for heavily aged and/or deteriorated pavements. In the event that the contractor has applied less or more tack coat than is required, the engineer shall direct the contractor to make the necessary adjustments to the equipment to achieve the desired results.

The tack coat shall be applied uniformly using a mechanically operated distributor truck such that the surface to receive the reinforcing fabric is sufficiently covered. The application width of the tack coat shall cover the entire width of the reinforcing fabric, plus any additional width required for overlapping joints. The tack coat shall be applied only as far in advance of the fabric installation to ensure a tacky surface at the time when the fabric is laid down. The use of hand sprayers, squeegee and/or brush-applied tack coat may be used at locations where the distributor truck cannot reach. Every effort shall be made to minimize the application of tack coat by handapplied means. Traffic shall not be permitted to drive on the tack coat at any time.

The tack coat application temperatures shall be sufficiently hot so as to ensure proper coverage and proper adhesion of the reinforcing fabric to the pavement surface. The temperature of the tack coat should not be allowed to drop below $280^{\circ}F$. A maximum temperature of $400^{\circ}F$ for the tack coat is recommended to prevent premature aging of the liquid asphalt. The optimum tack coat temperature is $310^{\circ}F - 335^{\circ}F$.

The reinforcing fabric shall be laid out either by hand or by mechanical means. Mechanical equipment shall be capable of installing full width rolls of up to 12.5 feet in width. Should wrinkles occur, any wrinkle 1 inch or larger shall be cut and lapped in the direction of paving and seated into the tack coat to insure adhesion. To avoid wrinkles on curves, the reinforcing fabric shall be cut into sections and lapped. Transverse joints must be lapped in the direction of the paver by 3 - 6 inches and longitudinal joints lapped 2 - 4 inches. The reinforcing fabric shall be broomed or rolled in order to maximize pavement contact and to remove air bubbles.

Construction traffic on the reinforcing fabric after being rolled shall be kept to a minimum to avoid damage to the reinforcing fabric. Turning of paving machine and other such vehicles shall be gradual. The reinforcing fabric shall be kept clean of mud, dust, and other materials. Damaged and displaced sections shall be broomed and/or removed and patched, completely covering the damaged area. Additional application of tack coat may be required to ensure adhesion between the fabric and the surface.

All reinforcing fabric placed in a day shall be covered with HMA the same day, within permissible laying temperatures to a minimum compacted thickness of 2 inches.

The reinforcing fabric shall be stored in a dry covered condition free from dust, dirt and moisture.

The reinforcing fabric shall be laid and rolled over existing frames, covers, manholes or other such obstructions before cutting around the perimeter of the obstructions.

Overlaps in the reinforcing fabric shall not be measured and included in the payment quantities.

The contract price paid per square yard for the reinforcing fabric shall include full compensation for furnishing all labor, materials (including tack coat), tools, equipment and incidentals involved

in furnishing and placing the fabric completely in place, 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.

10-1.24 CLEARING AND GRUBBING:

Clearing and grubbing shall conform to the provisions in Section 16, "Clearing and Grubbing," 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.

10-1.25 FURNISH SIGN:

Construction area 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.

10-1.26 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 98

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.

10-1.27 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.

10-1.28 MISCELLANEOUS IRON AND STEEL:

Miscellaneous iron and steel shall conform to the provisions in Section 75, "Miscellaneous Metal," of the Standard Specifications and these special provisions.

SECTION 10-2 (Blank)

SECTION 11 – ENVIRONMENTAL STEWARDSHIP

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 Standard Specifications and these Special Provisions.

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.

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.

SECTION 12 (Blank)

SECTION 13 (Blank)

SECTION 14 (Blank)

SECTION 15 – SAMPLE CONTRACT

SAMPLE CONTRACT

CONTRACT FOR PUBLIC WORK

COUNTY OF MONTEREY

STATE OF CALIFORNIA

CONTRACT NO. 11-141165

THIS AGREEMENT, made in triplicate b	by and between the COUNTY OF
MONTEREY, a political subdivision of the State	of California, hereinafter called the "County"
and	, hereinafter called the
"Contractor," WITNESSETH:	, noromation carrou life

(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:

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

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:

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

- (c) The Special Provisions for the work
- (d) The Notice to Bidders calling for bids
- (e) The Payment and Performance bonds required
- (f) Certificate of Insurance

- (g) 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) Non-Collusion Affidavit
- (5) Debarment and Suspension Certification
- (6) Statement Concerning Employment of Undocumented Aliens
- (7) Contractor's Certificate as to Worker's Compensation
- (8) Contractor's Certification of Good-Faith Effort to Hire Monterey Bay Area Residents
- (9) List of Satisfied Public Agencies
- (10) Bidder's Bond

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. CONTRACT PRICE

The County shall pay the Contractor the following prices for the performance of this contract:

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

BASE:

DAGE	•					ITELA TOTAL
ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)
1	13254	Reset Concrete Barrier (Type K)	LF	401		
2		Construction Site Management	LS	1		
3	74017	Prepare Water Pollution Control Program	LS	1		

ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)
4	120090	Construction Area Signs	LS	1		, ,
5	120100	Traffic Control System	LS	1		
6	150704	Remove Yellow Thermoplastic Traffic Stripe	LF	21,014		
7	150714	Remove Thermoplastic Traffic Stripe	LF	25,988		
8	150715	Remove Thermoplastic Pavement Marking	SQFT	373		
9	150722	Remove Pavement Marker	EA	1,514		
10	150771	Remove Asphalt Concrete Dike	LF	4,968		
11	150801	Remove Overside Drain	EA	18		
12	152438	Adjust Frame and Cover to Grade	EA	9		
13	152438	Adjust Frame and Grate to Grade	EA	2		
14	153103	Cold Plane Asphalt Concrete Pavement	SQYD	2,857		
15	160101	Clearing and Grubbing	LS	1		
16	374206	Seal Random Cracks	LNMI	5		
17	390095	Replace Asphalt Concrete Surfacing	CY	24		
18	390132	Hot Mix Asphalt (Type A)	TON	13,738		
19	393001	Pavement Reinforcing Fabric	SQYD	39,383		
20	394074	Place Hot Mix Asphalt Dike (Type A)	LF	4,968		
21	394090	Place Hot Mix Asphalt (Miscellaneous Areas)	SQ YD	72		
22	397005	Tack Coat	TON	12		
23	597401	Paint Curb (2-Coat)	LF	42		
24	750008	Frame and Cover	EA	11		
25	840504	4" Thermoplastic Stripe	LF	46,919		

ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)			
26	840506	8" Thermoplastic Traffic Stripe	LF	1,167					
27	840515	Thermoplastic Pavement Marking	SQFT	460					
28	850111	Pavement Marker (Retrorefelctive)	EA	1,042					
29	4" Thermonlastic Traffic								
	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	150704	Remove Yellow Thermoplastic Traffic Stripe	LF	1,735		
2	150714	Remove Thermoplastic Traffic Stripe	LF	3,461		
3	150715	Remove Thermoplastic Pavement Marking	SQFT	80		
4	150722	Remove Pavement Marker	EA	97		
5	150771	Remove Asphalt Concrete Dike	LF	3,306		
6	150801	Remove Overside Drain	EA	9		
7	153103	Cold Plane Asphalt Concrete Pavement	SQYD	585		
8	160101	Clearing and Grubbing	LS	1		
9	374206	Seal Random Cracks	LNMI	2		
10	390095	Replace Asphalt Concrete Surfacing	CY	12		
11	390132	Hot Mix Asphalt (Type A)	TON	2,027		
12	393001	Pavement Reinforcing Fabric	SQYD	5,313		
13	394074	Place Hot Mix Asphalt Dike (Type A)	LF	3,306		

ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)			
14	394090	Place Hot Mix Asphalt (Miscellaneous Areas)	SQ YD	45					
15	397005	Tack Coat	TON	2					
16	840504	4" Thermoplastic Stripe	LF	4,774					
17	840515	Thermoplastic Pavement Marking	SQFT	80					
18	850111	Pavement Marker (Retrorefelctive)	EA	97					
19	840525	4" Thermoplastic Traffic Stripe (Broken 36-12)	LF	1,691					
	TOTAL ADDITIVE ALTERNATE COST								

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the dates appearing below their respective signatures.

CONTR	RACTOR:		
	(Name of Company)		
By:		By:	GEO.
-	Signature of Chair, President, or Vice-President		Signature of Secretary, Asst. Secretary, CFO, Treasurer or Asst. Treasurer*
	Printed Name and Title		Printed Name and Title
Date:		Date:	
COUN	ΓΥ OF MONTEREY:		
By:			
Name:	Yazdan T. Emrani, M.S., P.E.		
Title:	Director of Public Works		
Dated:			
	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:

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

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	,,
	s Surety, are held and firmly
bound unto the County of Monterey, a political subdivision of the called "County"), and to the persons named in California Civil Cosum of	ode section 3181 in the penal
payment of which sum in lawful money of the United States, well ourselves, our heirs, executors, administrators, successors and ass firmly by these presents.	for the and truly to be made, we bind igns, jointly and severally,

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).

their several seals this day	The above-bounden parties have executed this instrument under y of, 20, the name and corporate seal of affixed and these presents duly signed by its undersigned ority of its governing body.
(Corporate Seal)	Principal
	Ву
	Name and Title
(Corporate Seal)	
	Surety
	By
	Name and Title
(Attach notary acknowledgment for representative)	r all signatures and attorney-in-fact certificate for signature by surety's

COUNTY OF MONTEREY

PERFORMANCE BOND

WHEREAS, the County of Monterey has awarded to Principal, as Contractor, a contract for the following project:	
--	--

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

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, weand	, as Principal,
bound unto the County of Monterey, a political subdivision of t called "County"), in the penal sum of payment of which sum in lawful money of the United States, w ourselves, our heirs, executors, administrators, successors and a firmly by these presents.	, for the

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 above-betheir several seals this day ofseal of each corporate party being hereto affi undersigned representative, pursuant to authorize the seal of the	nounden parties have executed this instrument under, 20, the name and corporate xed and these presents duly signed by its ority of its governing body.
(Corporate Seal)	
(Principal
	Ву
	Name and Title
(Corporate Seal)	
	Surety
	Ву
	Name and Title
(Attach notary acknowledgment for all signature representative)	es and attorney-in-fact certificate for signature by surety's

MONTEREY COUNTY BOARD OF SUPERVISORS GOVERNMENT CENTER, 168 W. ALISAL STREET, 1ST FLR, CONFERENCE ROOM 1032 SALINAS, CALIFORNIA 93901-2437

BOOK TWO

BID FORM

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

NAME OF BIDDER		
BUSINESS P.O. BOX _		
CITY, STATE, ZIP		
BUSINESS STREET AD		
CITY, STATE, ZIP		(Please include even if P.O. Box used)
TELEPHONE NO:	AREA CODE ()
FAX NO:	AREA CODE ()
CONTRACTOR LICENS	SE NO	

APPROVED AS TO FORM:

CYNTHIA L. HASSON Deputy County Counsel

jung, and Madelman	and the second s	

BOOK TWO BID/PROPOSAL

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

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BID FORM

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

TO: MONTEREY COUNTY BOARD OF SUPERVISORS
Government Center
168 W. Alisal Street, 1st Floor, Room 1032
Salinas, California 93901-2683

1. Pursuant to and in compliance with the Notice to Bidders Inviting Formal Bids and with the other documents relating thereto, the undersigned bidder, having become familiar with the terms of the contract, the local conditions affecting the performance of the contract, the cost of the work at the place where the work is to be done, the project plans and specifications, and the other contract documents, hereby proposes and agrees to perform within the time hereinafter set forth the said Specifications and shown on the plans accompanying them, and to provide and furnish any and all labor, materials, equipment, transportation, utilities, and services necessary to perform the contract and complete in a workmanlike manner all of the work required in connection with the following project: CARMEL VALLEY ROAD OVERLAY, located near Carmel, from Dorris Drive to Rancho Fiesta Road, all in strict conformity with the drawings and specifications and other contract documents, including all addenda for the sum hereinafter stated:

CARMEL VALLEY ROAD OVERLAY

CONTRACT NO. 11-141165

BASE BID:

RASE	DID.					ITEM TOTAL
ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATE QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)
1		Reset Concrete Barrier (Type K)	LF	401		
2	74016	Construction Site Management	LS	1		
3	74017	Prepare Water Pollution Control Program	LS	1		
4	120090	Construction Area Signs	LS	1		
5	120100	Traffic Control System	LS	1		
6	150704	Remove Yellow Thermoplastic Traffic Stripe	LF	21,014		
7	150714	Remove Thermoplastic Traffic Stripe	LF	25,988		
8	150715	Remove Thermoplastic Pavement Marking	SQFT	373		

NO NO	CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATE QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)
9	150722	Remove Pavement Marker	EA	1,514	(i.gu/00)	(iii rigures)
10	150771	Remove Asphalt Concrete Dike	LF	4,968		
11	150801	Remove Overside Drain	EA	18		
12	152438	Adjust Frame and Cover to Grade	EA	9		
13	152439	Adjust Frame and Grate to Grade	EA	2		
14	153103	Cold Plane Asphalt Concrete Pavement	SQYD	2,857		
15	160101	Clearing and Grubbing	LS	1		
16	374206	Seal Random Cracks	LNMI	5		
17	390095	Replace Asphalt Concrete Surfacing	CY	24		
18	390132	Hot Mix Asphalt (Type A)	TON	13,738		
19		Pavement Reinforcing Fabric	SQYD	39,383		
20	394074	Place Hot Mix Asphalt Dike (Type A)	LF	4,968		
21	394090	Place Hot Mix Asphalt (Miscellaneous Areas)	SQYD	72		
22	397005	Tack Coat	TON	12		
23	597401	Paint Curb (2-Coat)	LF	42		
24	750008	Frame and Cover	EA	8		
25	840504	1" Thermoplastic Stripe	LF	46,919		
26	840506	3" Thermoplastic Traffic Stripe	LF	1,167		
27	840515 N	Thermoplastic Pavement Marking	SQFT	460		
28 8	350111 F	Pavement Marker Retrorefelctive)	EA	1,042		
29 8	340525 4 S	" Thermoplastic Traffic Stripe (Broken 36-12)	LF	70		
		TOTAL B	ASE BID			

ADDIT	TIVE AI	TERNATE BID:		T		ITEM TOTAL
ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATE QUANTITY	UNIT PRICE (In Figures)	ITEM TOTAL (In Figures)
1		Remove Yellow Fhermoplastic Traffic Stripe	LF	1,735		
2		Remove Thermoplastic Traffic Stripe	LF	3,461		
3		Remove Thermoplastic Pavement Marking	SQFT	80		
4	150722	Remove Pavement Marker	EA	97		
5		Remove Asphalt Concrete Dike	LF	3,306		
6	150801	Remove Overside Drain	EA	9		
7	153103	Cold Plane Asphalt Concrete Pavement	SQYD	585		
8	160101	Clearing and Grubbing	LS	1		
9	374206	Seal Random Cracks	LNMI	2		
10	390095	Replace Asphalt Concrete Surfacing	CY	12		
11	390132	Hot Mix Asphalt (Type A)	TON	2,027		
12	393001	Pavement Reinforcing Fabric	SQYD	5,313		
13	394074	Place Hot Mix Asphalt Dike (Type A)	LF	3,306		
14	394090	Place Hot Mix Asphalt (Miscellaneous Areas)	SQYD	45		
15	397005	Tack Coat	TON	2		
16	840504	4" Thermoplastic Stripe	LF	4,774		
17	840515	Thermoplastic Pavement Marking	SQFT	80		
18	850111	Payement Marker	EA	97		
19	840525	4" Thermoplastic Traffic Stripe (Broken 36-12)	LF	1,691		
		TOTAL ADDIT	IVE ALTERN	ATE BID		

2. Bids are required for the entire work. The undersigned understands that the quantities given are approximate only, being given as a basis for the comparison of Bids, and the County of Monterey does not, expressly or by implication, agree that the actual amount of work shall correspond therewith, but reserves the right to increase or decrease the amount of any portion of the work, or to omit portions of the work, as may be deemed necessary without claim for damage or loss of anticipated profit and that payment shall be made only on the basis of the actual quantities of work performed.

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

The Unit Price for Item No 11 "Hot Mix Asphalt Concrete (Type A)" set forth by the bidder in the ADDITIVE ALTERNATE BID shall be the same price as Item No 18 "Hot Mix Asphalt Concrete (Type A)" in the BASE BID. The County Department will deem the bid non-responsive for failing to meet said requirement.

The basis of award to the lowest responsive, responsible bidder will be the lowest TOTAL BID.

The bid submitted must not contain erasures, interlineations, or other corrections unless each such correction is suitably authenticated by affixing in the margin immediately opposite the correction the surname or surnames of the person or persons signing the bid, in the named person's own handwriting.

In case of discrepancy between the unit price and the item total price set forth for the item, the unit price shall prevail; provided, however, if the amount set forth as the unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, the amount set forth in the "Item Total" column for the item shall prevail in accordance with the following:

- (1) As to lump sum items, the amount set forth in the "Item Total" column shall be the unit price.
- (2) As to unit basis items, the amount set forth in the "Item Total" column shall be divided by the estimated quantity for the item, and the price thus obtained shall be the unit price.
- 3. The undersigned has checked all of the above figures carefully and understands that the County of Monterey (also referred to herein as "Owner") will not be responsible for any errors and omissions on the part of the undersigned in making this bid.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and/or decimal fractions of a dollar.

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

- 4. It is understood that the Owner reserves the right to reject any and all bids or waive any irregularities or informalities in the bidding.
- 5. This bid shall remain valid and will not be withdrawn by the undersigned bidder for a period of sixty (60) days from the date prescribed for opening of this bid.
- 6. Attached hereto are 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) Non-Collusion Affidavit
- (5) Debarment and Suspension Certification
- (6) Statement Concerning Employment of Undocumented Aliens
- (7) Contractor's Certificate as to Worker's Compensation
- (8) Contractor's Certification of Good-Faith Effort to Hire Monterey Bay Area Residents
- (9) List of Satisfied Public Agencies
- (10) Bidder's Bond
- 7. If this bid is accepted by the Owner, then the undersigned shall, within ten (10) business days after receipt of the Letter of Intent to Award, execute and deliver to the Owner (a) a contract in the form set forth in the contract documents on which this bid is based, (b) a payment bond for public works, as required by the contract documents, (c) a performance bond, as similarly required, and (d) insurance certificates showing all required insurance coverage. The undersigned will thereafter commence and complete the work within the time required by the contract documents.

In the event the bidder to whom the Letter of Intent to Award Contract is given fails or refuses to contract as required, including to post the required bonds, provide the insurance certificates, and return the executed copies of the agreement form within ten (10) business days from the date of receiving the Letter of Intent to Award Contract, the County may, at its option, determine that the bidder has abandoned the contract, reject the bid, and declare the bidder's security forfeited as damages and same shall become the property of the County of Monterey.

Notice of acceptance and any requests for additional information should be addressed to the undersigned at the following address:
The names of all persons interested in the foregoing proposal as principals are as follows
(IMPORTANT NOTICE: If the bidder or other interested person is a corporation, state the lega name of the corporation, and the names of the president, secretary, treasurer, and manager thereof; if a partnership, state the name of the firm and the names of all the individual partners composing the firm; if the bidder or other interested person is an individual, state the first and last names in full and give all fictitious names under which the individual does business.)
By execution of this bid, the undersigned bidder declares that he or she is a contractor licensed in accordance with the Contractors' State License Law, as follows:
Classification: License number: Expiration date:
ADDENDA - This Bid is submitted with respect to the changes to the contract included in addenda number(s),,,,,, and If the Bidder submits this bid without all issued addenda, the agency finds your bid nonresponsive.
(Fill in addenda numbers if addenda have been received and insert, in this Bid, any Engineer's Estimate sheets that were received as part of the addenda. By signing this Bid on the signature portion thereof, the Bidder acknowledges receipt of all addenda.)
Pursuant to Section 7103.5(b) of the Public Contract Code, in submitting a bid to the County, the bidder offers and agrees that if the bid is accepted, it will assign to the County all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 USC. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

By my signature on this bid I certify, under penalty of perjury under the laws of the State of California, the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this Bid I further certify, under penalty of perjury under the laws of the State of California and the United States of America, the Equal Employment Opportunity Certification; the Title 49 Code of Federal Regulations, Part 29 Debarment and Suspension Certification; the Statement Concerning Employment of Undocumented Aliens; and the Contractor's Certification as to Worker's Compensation are true and correct.

Dated:	Bidder's Business Name
	By:
	Print Name:
	Title:
	By:
	Print Name:
	Title:

(NOTE: If bidder is a corporation, the full legal name of the corporation shall be set forth above together with the signatures of authorized officers or agents and the document shall bear the corporate seal; if bidder is a partnership, the full name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.)

LIST OF SUBCONTRACTORS

CARMEL VALLEY ROAD OVERLAY CONTRACT NO. 11-141165

In compliance with the Subletting and Subcontracting Fair Practices Act (Chapter 4 [commencing with Section 4100], Part 1, Division 2 of the Public Contract Code) and any amendments thereto, each bidder shall set forth below: (a) the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement to be performed under this contract or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent of the prime contractor's total bid or \$10,000, whichever is greater, and (b) the portion of the work which will be done by each subcontractor under this Act. The prime contractor shall list only one subcontractor for each such portion as is defined by the prime contractor in this bid.

If a prime contractor fails to specify a subcontractor or if a prime contractor specifies more than one subcontractor for the same portion of the work to be performed under the contract in excess of one-half of one percent of the prime contractor's total bid, he shall be deemed to have agreed that he is fully qualified to perform that portion himself, and that he shall perform that portion himself.

No prime contractor whose bid is accepted shall: (a) substitute any subcontractor, (b) permit any subcontract to be voluntarily assigned or transferred or allow it to be performed by any one other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the prime contractor's total bid as to which his original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act. Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the prime contractor's total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the authority awarding this contract setting forth the facts constituting the emergency or necessity.

Subcontractor Name & Contractor License No.	Address and Telephone	Description of Portion of Work Subcontracted

LIST OF SUBCONTRACTORS continue...

Subcontractor Name & Contractor License No.	Address and Telephone	Description of Portion of Work Subcontracted		
Contractor Dicense 140.	receptions			
Check this box if	no subcontractors	are required to be listed for work or labor to be		
performed or serv	vices to be rendered	1.		
	Bidder's business name			
		By:		
		Print Name:		
		Title:		

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

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

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

PUBLIC CONTRACT CODE

PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT

In accordance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has, has not been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.					
Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided.					
Public Contract Code Section 10162 Questionnaire					
In accordance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:					
Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?					
Yes No					
If the answer is yes, explain the circumstances in the following space.					
CARMEL VALLEY ROAD OVERLAY 13 CONTRACT NO. 11-141165					

PUBLIC CONTRACT CODE SECTION 10232 STATEMENT

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

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

NON-COLLUSION AFFIDAVIT
(Title 23 United State Code Section 112 and Public Contract Code Section 7106)

State of California)	
) ss.	
County of	_)	
In conformance with Title 23 United	States Code Section 112 and	d Public Contract Code 7106 being first duly sworn, deposes
and says (1) that he or she is	of	, the party
and says (1) that he or she is making the foregoing bid; (2) that the	e bid is not made in the inter	rest of or on behalf of any
undisclosed person, partnership, corbid is genuine and not collusive or sor solicited any other bidder to put it colluded, conspired, connived, or age that anyone shall refrain from biddin indirectly, sought by agreement, corof the bidder or any other bidder, or or that of any other bidder, or to see contract to anyone interested in the are true; and further, (7) that the bid price or any breakdown thereof, or thereto, or paid, and will not pay, ar organization, bid depository, or to a bid.	ham; (4) that the bidder has read a false or sham bid, and has reed with any bidder or anyong; (5) that the bidder has not numerication, or conference with any overhead, profit, oure any advantage against the proposed contract; (6) that all der has not, directly or indirectly or indirectly fee to any corporation, parties	not directly or indirectly induced is not directly or indirectly one else to put in a sham bid, or it in any manner, directly or with anyone to fix the bid price or cost element of the bid price, it public body awarding the all statements contained in the bid pectly, submitted his or her bid ged information or data relative thership, company association,
Dated:	Bidder's Business Na	
	•	
	Print Name:	
	Title:	
State of California County of		
Subscribed and sworn to before	me on this day of	, 20,
by		
proved to me on the basis of sati	sfactory evidence to be the pers	son(s) who appeared before me.
(Notary Public Seal)	Signature	

DEBARMENT AND SUSPENSION CERTIFICATION

Title 49, Code of Federal Regulations, Part 29

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

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;
- does not have a proposed debarment pending; and,
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

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

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

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

STATEMENT CONCERNING EMPLOYMENT OF UNDOCUMENTED ALIENS

(Public Contract Code Section 6101)

In conformance with Public Contract Code Section 6101, the bidder certifies compliance with state and federal law with respect to the employment of undocumented aliens by signing this proposal on the signature portion thereof. Public Contract Code section 6101 provides that no state agency or department, as defined in Section 10335.7, that is subject to this code, shall award a public works or purchase contract to a bidder or contractor, nor shall a bidder or contractor be eligible to bid for or receive a public works or purchase contract, who has, in the preceding five years, been convicted of violating a state or federal law respecting the employment of undocumented aliens..

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

CONTRACTOR'S CERTIFICATE AS TO WORKER'S COMPENSATION

(Labor Code Section 1861)

Labor Code Section 3700 provides, in relevant part:

"Every employer except the State shall secure the payment of compensation in one or more of the following ways:

- "(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.
- "(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or as one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees."

I certify that I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract.

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

CONTRACTOR'S CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS

(Monterey County Code Section 5.08.120)

I CERTIFY THAT I am aware of the provision of Monterey County Code Section 5.08.120. Monterey County Code Section 5.08.120 provides, in relevant part:

- A. <u>General Provisions</u>. Unless such a provision would conflict with a state or federal law or regulation applicable to a particular contract for public works of improvement, all County contracts for public works of improvement shall contain provisions pursuant to which the contractor promises to make a good-faith effort to hire qualified individuals who are, and have been for at least one (1) year prior to the opening of bids, residents of the Monterey Bay Area in sufficient numbers so that no less than fifty percent (50%) of the contractors total construction work force, including any subcontractor work force, measured in labor work hours, is comprised of Monterey Bay Area residents.
- B. Non-responsive Bidder Declaration: Enforcement. If any contractor submitting a bid for a contract for public works of improvement fails to abide by the good-faith local hiring provisions of this Section, the contractor may be declared by the Board to be a non-responsive bidder for purposes of this Chapter. If a contractor lists in his or her bid a subcontractor who is currently disqualified under the terms of this Section, the Board may declare said contractor to be a non-responsive bidder for purposes of this Chapter. If the Board finds that a contractor to whom a contract for public works of improvement has been awarded has failed to comply with the good-faith hiring provisions of this Section during the performance of the contract, the Board may disqualify the contractor from bidding on any County contract for public works of improvement for a period of one (1) year from the date of the Board's disqualification. A subsequent violation of this Section by a contractor may result in disqualification by the Board for a period of three (3) years from the date of the subsequent disqualification.
- C. <u>Binding on Subcontractors</u>. Every contractor entering into a contract for public works of improvement subject to the provisions of this Section shall include in each and every subcontract for work, laborers, or materialmen relating to the project the requirement that the subcontractor promises to make a good-faith effort to hire qualified individuals who are, and have been for at least one (1) year prior to the opening of bids, residents of the Monterey Bay Area. If the Board finds that any subcontractor has failed during the performance of the subcontract to comply with its promise to contractor, the Board may disqualify said subcontractor from submitting or being listed in any bid for any County contract for public works of improvement for a period of one (1) year from the date of the Board's disqualification. A subsequent violation by a subcontractor may result in disqualification by the Board for a period of three (3) years from the date of the subsequent disqualification."

I FU	RTHER CERTIFY AS FOLLOW	VS (check the box that applies):
	any subcontractor work force qualified individuals who to the effective (1) year prior to the effective Evidence that I will comply	of the total construction work force on the project, including e, measured in labor work hours, will be comprised of the best of my knowledge are, and have been for at least one date of the opening of bids, Monterey Bay Area residents. with this requirement is as follows (please use additional ing evidence and/or documentation, as necessary):
	to the best of my knowledge, a effective date of the opening of numbers such that no less than the project, including any subcomprised of Monterey Bay	nake a good-faith effort to hire qualified individuals who, re, and have been for at least one (1) year prior to the f bids, residents of the Monterey Bay Area in sufficient fifty percent (50%) of the total construction work force on ontractor work force, measured in labor work hours, will Area residents. Evidence of my promise to make a good-please use additional pages to provide supporting evidence essary):
	I CERTIFY that I do not comeffort to comply with the good Code Section 5.08.120.	aply with and am unable to promise to make a good-faith faith local hiring provisions set forth in Monterey County
forego (city/s	I declare under penalty of peoing certification is true and correstate)	rjury under the laws of the State of California that the ect. Executed on (date) at
		Bidder's Business Name
		Signature:
		Print Name:
		Title:

LIST OF SATISFIED PUBLIC AGENCIES

(Two minimum)

Agency Name	Project Name	Contact Person	Award Date	Phone No.
				.,
		<u></u>		
				,

in the control of the

BIDDER'S BOND

Mon	EREAS, the terey, a polit wing project	tical subdiv	amed beloision of the	ow has s he State	submitted the of Californi	e accom a (herei	panying nafter ca	bid to the	County nty"), for	of r the
(exac	et description	n as on bid)	; and							
conn	ection with	said bid, to	secure tir	nely exc	to furnish a ecution of the ntract is awa	e contra	et and d	elivery of	itted sure the bond	ety in ls and
are to	be opened V, THEREFO	at(date	bid open	ing).	above- ment (city	where	bid open	ing), Cali	or which fornia, or	ı bids ı,
	- Trans		_, PRINC	CIPAL,	and					
and	firmly			I	County Dollars (\$	in	the	_ as SUR penal	sum which su	of
subm paym Coun	ent of which	l above-nar h sum in la l ourselves	ned Princ wful mo: , our hei	total and ipal to ney of to	nount of the the County, he United S cutors, admi	base bid for the tates, w	l amoun project ovell and	t including lescribed l truly to be	g all alter below, for made to	nates or the

THE CONDITION OF THIS OBLIGATION IS SUCH, That

If the aforesaid Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files two bonds with the County of Monterey, one to guarantee faithful performance and the other to guarantee payment for labor and materials, as required by law and said contract documents, then this obligation shall be 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 on 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.

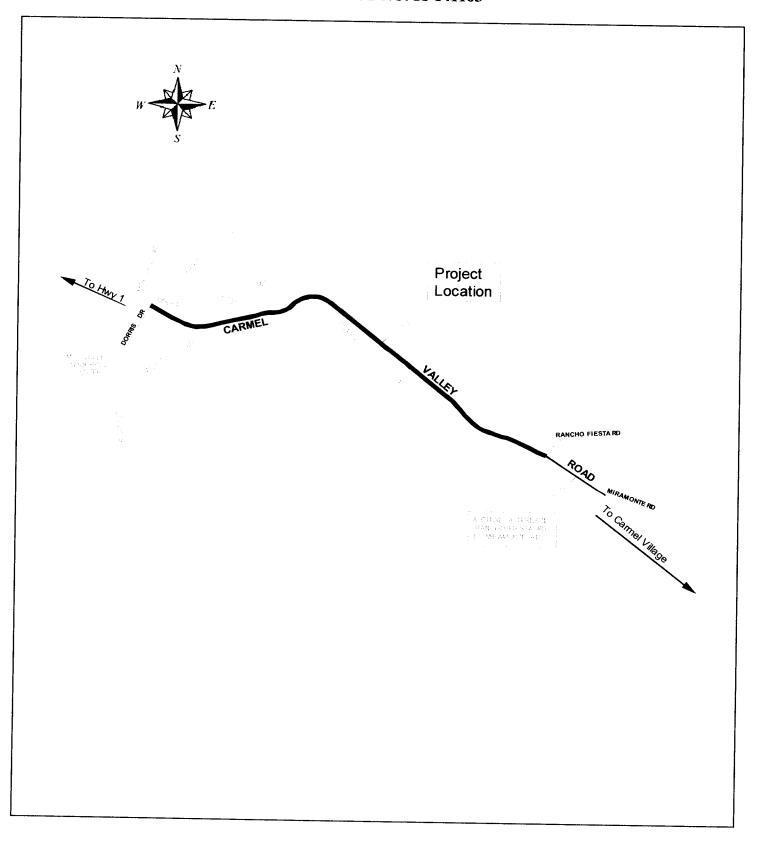
If the County brings suit upon this bond and judgment is recovered, the Surety shall pay all litigation expenses incurred by the County in such suit, including attorney's fees, court costs, expert witness fees and investigation expenses.

IN WITNESS WHEREOF the above several seals this day of corporate party being hereto affix representative, pursuant to authority of the above several seals this day of and are the above several seals this day of and are the above several seals this day of are the above several seals the above sev	e-bounden parties have executed this instrument under their, 20, the name and corporate seal of each and these presents duly signed by its undersigned of its governing body.
(Corporate Seal)	
	Principal
	By
	Name and Title
(Corporate Seal)	
	Surety
	By
	Name and Title

(Attach: 1) Copy of authorization for signatory for Principal, and 2) original or certified copy of unresolved appointment, power of attorney, by laws, or other instrument entitling or authorizing person executing bond on behalf of Surety to do so).

LOCATION MAP

CARMEL VALLEY ROAD OVERLAY PROJECT CONTRACT NO. 11-141165



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