

PLANS AND SPECIFICATIONS
FOR

**PAVEMENT RESURFACING –
SULPHUR MOUNTAIN ROAD**

SPECIFICATION NO. RD22-02

PROJECT NO. 50611



county of ventura
ROADS & TRANSPORTATION

**COUNTY OF VENTURA
PUBLIC WORKS AGENCY**

**NOTICE INVITING BIDS, PROPOSAL FORM, & SPECIFICATIONS
FOR**

PROJECT NAME: PAVEMENT RESURFACING – SULPHUR MOUNTAIN ROAD

LOCATION: UPPER OJAI AREA (UOJ)

SPEC. NO.: RD22-02 **COST ACCOUNTING PROJECT NO.** 50611

DESIGNED BY: SOHIL BHAKTA **CHECKED BY:** CHRISTOPHER SOLIS

REVIEWED BY: CHRIS HOOKE

PROJECT MANAGER: CHRISTOPHER SOLIS



RECOMMENDED BY:

 7/6/21
Deputy Director – Roads & Transportation

APPROVED BY:


Acting Director – Roads & Transportation

APPROVED BY:


Director - Public Works Agency

BIDS WILL BE RECEIVED ON:

AUGUST 24TH 2021

AND OPENED AT 2:00PM

**at County Surveyor's Public Counter
Third floor, Hall of Administration,
800 South Victoria Avenue,
Ventura, California 93009-1670**

Construction bidding documents, including plans, specifications, addenda and any supplementary documents are only available on the Ventura County Public Works Agency Web Site.

NOTICE TO BIDDERS, SUBCONTRACTORS AND SUPPLIERS **SOURCES OF INFORMATION**

DURING BIDDING PERIOD

PLAN HOLDERS LIST & OTHER INFORMATION IS AVAILABLE ON THE INTERNET AT:

<http://vcpublicworks.org/es/>

PROJECT DOCUMENTS ON EBIDBOARD AT:

<http://www.ebidboard.com/public/projects/index.asp?mbrguid=2B485702-FFAE-4327-A8B7-F1C22BE001D2>

TECHNICAL QUESTIONS on plans and specifications

Please **EMAIL questions** early in the bidding period as an addendum may be required.

FOR BID QUESTIONS, or to confirm number of Addenda issued,

EMAIL TO:

PWA.Bidquestions@ventura.org

Spec Number must be referenced on all bid questions

Please do not call other staff members or consultant.

Note that our consultants are directed to refer all calls to the Project Managers.

DIRECTIONS TO VENTURA COUNTY GOVERNMENT CENTER

Ventura County Government Center is currently closed to the public due to COVID-19

From US101 (Ventura Freeway), take Victoria Ave off ramp, north (towards mountains) about one mile to Telephone Road, then right on Telephone Road one block and turn left at Lark St. into the Government center parking lot.

From CA126 (Santa Paula Freeway), take Victoria Ave off ramp, south (away from mountains) about one mile to Telephone Road, then left on Telephone Road 1 block and turn left at Lark St. into the Government center parking lot.

ONLY AFTER BID OPENING

BID RESULTS: are available on the internet site shown above, usually within **24 hours after** bids are opened and Include abstracts of unit prices, totals of all bids & subcontractor's list for low & 2nd bidder. Click on "BIDS & SUBS".

LOW BIDDER - ONLY AFTER AWARD OF CONTRACT

ALL QUESTIONS concerning project **AFTER AWARD** should be directed to the Project Manager named in the Notice of Award

Any other information can be requested at (805) 654-2039

COUNTY OF VENTURA
PAVEMENT RESURFACING –
SULPHUR MOUNTAIN ROAD

SPECIFICATION NO.: RD22-02 PROJECT NO: 50611

TABLE OF CONTENTS

Notice of Inviting Bids.....	1	page
Proposal.....	9	pages
Prevailing Rates of Wages.....	1	page
Excerpts from the California Labor Code.....	13	pages
Excerpts from PCC 9204 January 1, 2017.....	4	pages
Ventura County Standard Specifications Table of Contents.....	8	pages
Ventura County Standard Specifications.....	77	pages
Special Provisions – Table of Contents.....	1	page
Special Provisions (1000– 1030).....	42	pages
Appendix H – Utility Company Directory – List Cities.....	3	pages
Appendix I – Notice to Resident/Business/Institution.....	1	page
Appendix J – Applicable Standard Plans.....	16	pages
Appendix K – Unlisted Subcontractor’s List.....	1	page
Appendix L – SWPCP.....	11	pages
Appendix M – Rubberized Pavement Certification.....	2	pages
Appendix N – Reliable Contractor Declaration.....	2	pages
Appendix O – Caltrans Encroachment Permit.....	4	pages
Plans.....	56	sheets

COUNTY OF VENTURA
NOTICE INVITING FORMAL BIDS

Sealed bids will be received by mail at the County Surveyor's Public Counter, 3rd Floor, Administration Building, 800 South Victoria Avenue, Ventura, California 93009-1670, on **AUGUST 24TH, 2021**, and opened at **2:00 p.m.**, for Specification No. **RD-22-02, PAVEMENT RESURFACING – SULPHUR MOUNTAIN ROAD**, which consists of pavement resurfacing including Asphalt Concrete Hot Mix (AC) with Fiber Reinforcement, Public Access & Notice, Mobilization, Traffic Control & Construction Signing, Water Pollution Control, Existing Utility & Roadway Facilities, Roadway Preparation, Clearing & Grubbing, Tree Trimming, Unclassified Excavation & Export, Sawcut, Cold Milling (5' Wide), AC Taper with Key, AC Base Repair, AC Grinding (Full Width), Concrete Headwall, Culvert Replacement, AC Shoulders (4' Wide), AC Swale Repair, Seal Coat, AC Dike, AC Berm Rehabilitation, Asphalt Rubber Aggregate Membrane (ARAM), Tack Coat, Processed Miscellaneous Base, AC Miscellaneous Paving, Pavement Delineation, Striping, & Signing, Worksite Safety, & appurtenant work.

The estimated cost of construction is \$ **1,500,000**.

The plans, specifications and proposal forms for this project are filed in the office of the Ventura County Surveyor and are, by reference, made a part of this Notice. Construction bidding documents, including plans, specifications, addenda and any supplementary documents are now available on the Ventura County Web Site at: <https://www.vcpublishworks.org/es/contracting/>.

Then click on "Contract Bidding Opportunities" and then "eBidBoard Website" where the documents may be viewed, downloaded and printed.

Printed copies of the document can be purchased at most commercial printing companies that have internet access.

A List of Plan Holders is available on the **Website** shown above.

An abstract of bids received will be available at the same web site under **Bids & Subs**.

When projects are awarded, the award notification to the State will be posted under **Awarded Contracts**.

Bids must be submitted **by mail only** on the proposal form furnished with said documents. Subcontractor list must include a valid Contractor's License Number. Contractor and any subcontractors must be registered with the Department of Industrial Relations prior to bid time and shall be verified during bid verification processes.

Each bid must be accompanied by a bid guarantee in the amount of not less than 10% of the amount bid, **PAYABLE TO THE COUNTY OF VENTURA** and guaranteeing that the bidder will enter into a contract in accordance with the terms of the bidding documents if award is made. The bid guarantee shall be in one of the following forms: a bid bond written by an admitted surety insurer on the form included with the Proposal form, a cashier's check drawn by a National bank, a check certified by a National bank or cash. An electronically transmitted copy of the bid bond form, included in the Proposal form, may be used but the form must have the original signatures of the principal and surety. Copies of the completed bond will not be accepted.

Bidders must have a Class **A** California Contractors license, and will be required to furnish a Performance Bond and a Payment Bond, each in the amount of 100% of the contract price.

In accordance with Section 22300 of the Public Contract Code, securities may be substituted for funds withheld.

Bidders, contractors, and other interested parties can obtain wage rates pertaining to Ventura County projects at the link provided below.

California general prevailing wage rates for construction can be obtained from the following Web site: <http://www.dir.ca.gov/DLSR/PWD/index.htm>.

The awarded contractor must post copies of the prevailing wage determinations at each job site.

**LOCATED IN
VENTURA COUNTY, CALIFORNIA**

PROPOSAL
Instruction to Bidders

- 1. LICENSING OF BIDDER.** Before submitting bids, bidders shall be licensed in accordance with the provisions of Sections 7000 through 7145 of the Business and Professions Code of the State of California in the classification required for the work bid on. The bidder's license number, classification, and expiration date shall be inserted on page 8 of the proposal form. The bidder's name shall correspond in all respects with the name shown on the license. License numbers and names are checked with the State.
- 2. SITE INSPECTION.** Personally visit the worksite before submitting your bid to ascertain the existence of any surface or subsurface conditions affecting the cost of the work.
- 3. INTERPRETATION AND QUESTIONS.** Carefully review the plans and specifications for any errors, omissions, or ambiguities. If you discover any or have specific questions, notify the Agency far enough in advance of the bid opening to allow time for the issuance of appropriate written addenda, if necessary. Send the notification about any errors, omissions, ambiguities or questions to PWA.Bidquestions@ventura.org. Written addenda shall be the sole means for modifying the plans and/or specifications prior to the bid opening. The Agency shall not be bound by oral communications purportedly modifying or interpreting the plans and/or specifications regardless of when or by whom such oral communications are made and you should not rely upon such oral communications in preparing your bid.
- 4. BID ITEMS.** State in figures the unit prices, lump sum prices and extensions as indicated which shall be the prices for which you propose to supply all materials and services and perform all work required by the plans and specifications. All items described are to be construed as complete and in place. Include in the bid amount for items listed on the proposal form the cost of performing all work shown on the plans or required by the specifications for which a specific bid item is not provided. Bid on all items listed under Schedule of Work and Prices unless otherwise indicated in the proposal form.
- 5. SIGNING OF BID.** Fill in all indicated blanks in this proposal using typewriter or ink and sign with ink. Proposals signed by an agent other than an owner, partner or corporate officer shall be accompanied by a power-of-attorney. Proposal form must be dated.
- 6. NON-COLLUSION AFFIDAVIT.** The non-collusion affidavit required by Public Contract Code 7106 is included on **page 5** of this Proposal.
- 7. BID FORM NOT TO BE ALTERED.** Do not change the wording of this proposal. Any additions, deletions, conditions, limitations or provisions by the bidder will render the proposal irregular and may cause its rejection.
- 8. CORRECTING BID.** Explain over your signature any erasures or deletions of information entered by the bidder in this proposal. Modifications submitted separately from this form will not be accepted

9. **BID GUARANTEE.** Each bid must be accompanied by a bid guarantee in the amount of not less than 10% of the amount bid and guaranteeing that the bidder will enter into a contract in accordance with the terms of the bidding documents if award is made to him. The bid guarantee shall be in one of the following forms: A bid bond written by an admitted surety insurer on the form included with the proposal form, a cashier's check drawn by a national bank, a check certified by a national bank or cash. An electronically transmitted copy (FAX) of the bid bond form included in the proposal form may be used, but the form must have the original signatures of the principal and surety. A FAX of the completed bond will not be accepted. Note: Performance and Payment Bonds are required from the bidder to whom a contract is awarded. See specifications Subsection 2-4 for contract bond requirements including limitations on the sureties that may issue the bonds.

10. **SUBMITTING BID.** Submit your bid **by mail** on one copy only of this proposal form, with addenda acknowledged by inserting the addenda numbers on **page 8** of this proposal and with bid guarantee attached, in a sealed envelope addressed to:

Public Works Agency, County of Ventura, County Surveyor's Public Counter,
3rd Floor - Hall of Administration, 800 South Victoria Ave., Ventura, California 93009-1670.
For proper handling, mark outside of envelope as "SEALED BID", and show the project title and the bidder's name and address. Do not enclose other documents in the bid envelope.

IMPORTANT: Proposals received that are not signed will not be considered.

Late bids will not be opened or considered.

Bids must be on this form. Electronically transmitted bids, bid modifications or bid withdrawals will not be considered.

Notwithstanding anything stated, directed or indicated in the other bidding documents, the only items to be included with this proposal are:

1. This proposal form, signed and dated with addenda acknowledged.
2. The bid bond with original signatures of surety representative and contractor, or other bid guarantee as specified in 9 above.
3. Subcontractors and off-job fabricators list completed in accordance with Public Contract Code Section 4104.

11. **TIME OF BID CLOSURE.** The bid box will be closed promptly at the time specified on the first sheet of the proposal form. Time can be obtained from <http://www.time.gov/timezone.cgi?Pacific/d/-8> (local standard time).

12. **DELIVERY OF BID.**

Due to the COVID-19 crisis, **in-person delivery** of bids has been suspended. In person delivery will **not** be accepted; only **bids received by mail** shall be accepted.

13. MAILED BIDS (Including Express Delivery). Bids received in the County's Mail Room **by 8 a.m. on, or before**, the bid opening date will be considered to have been placed in the bid box on time, whether or not actually delivered to the bid box on time. U. S. Postal Service Special delivery, Registered and Certified mail may slow actual receipt of bids. **Bidder is solely responsible for sending bid early enough to insure delivery to the County on time.**

For mailed bids, mark "**SEALED BID**" in large letters on the **outside of the delivery envelope and clearly show the Spec No.**

Electronically transmitted bids or modifications will **not** be considered.

14. WITHDRAWAL OF PROPOSAL. Proposals may be withdrawn by the bidder prior to the time stated for opening bids upon written request, signed by the bidder or his authorized agent and submitted in the same manner as a bid. To retrieve a bid from the bid box may take 10 or more minutes as it requires a written request to withdraw the bid, the positive identification of the person requesting the withdrawal, and the opening of the bid box.

15. ERRORS. Bidder will not be released on account of errors. Where a discrepancy occurs between unit prices and totals, the unit price shall govern in computing the total. If a unit price is omitted, it will be determined from the item total, if entered. If both the unit price and line total for any item are omitted, the bid will be considered non-responsive in accordance with Paragraph 4 above. If the total Bid Price is not equal to the sum of the Item Totals (as corrected) the Total Bid Price will be corrected. If no monetary symbol (\$ or ¢) is entered with a unit price, lump sum or extension, a dollar sign will be assumed to be the bidder's intent.

16. SUBCONTRACTOR LICENSE NUMBERS. License numbers for subcontractors must be provided at the time the bid is received.

17. PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM. No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)]

No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5

18. LABOR COMPLIANCE MONITORING. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The Prime Contractor shall post job site notices prescribed by regulation.

(See Chapter 8, California Code Regulation section 16451(d) for notice that previously was required for projects monitored by the Compliance Monitoring Unit.)

PROPOSAL

I, the person whose signature is affixed to **page 8** of this proposal, submit this proposal to the **Board of Supervisors of the County of Ventura** and hereby declare:

1. That the bidder has read this proposal and has abided by and agrees to the conditions herein and has carefully examined the project plans and read the specifications and does hereby propose to furnish all materials and do all the work required to complete the work in accordance with the plans and specifications for the unit prices or lump sums named in the Schedule of Work and Prices.

2. That the addenda indicated on **page 8** of this proposal are acknowledged.

3. That the bidder, as Principal, acknowledges himself as being bound by the attached bond or other acceptable bid guarantee.

4. **NONCOLLUSION DECLARATION**

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

Signature of Officer _____

Printed Name of officer: _____

PROPOSAL

Contractor's Name _____

List of Subcontractors

Listing shall comply with the provisions of California Public Contract Code, Section 4104.

Name of Subcontractor	Contractor's License Number	Business Address	Items of Work

If more space is needed, attach additional sheets.

Public Contract Code Section 4104 provides that bidders must list:

(a)(1) The name, the location of the place of business, and the California contractor license number 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, 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 1 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 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater.

(b) The portion of the work that will be done by each subcontractor under this act. The prime contractor shall list only one subcontractor for each portion as is defined by the prime contractor in his or her bid.

Note: Contractor shall perform, with its own organization, contract work amounting to at least 50 percent of the Contract Price. See Specifications Section 2-3.2 for exceptions.

PROPOSAL

Schedule of work and prices for: **PAVEMENT RESURFACING – SULPHUR MOUNTAIN ROAD**

Item No.	Units	Approx Quantity	Item Description	Payment Reference	Unit-Prices (In Figures)	Item Total (In Figures)
1	LS	1	Mobilization	9-3.4.3		
2	LS	1	Traffic Control & Construction Signing	1003-7		
3	LS	1	Water Pollution Control	1004-3		
4	LS	1	Roadway Preparation	1006-3		
5	LS	1	Clearing & Grubbing	1007-2		
6	LS	1	Tree Trimming	1008-2		
7	CY	675	Unclassified Excavation & Export	1009-3		
8	LF	1,400	Sawcut	1010-2		
9	LF	1,630	Cold Milling (5' Wide)	1011-2		
10	SF	2,015	AC Taper with Key	1012-2		
11	TN	20	AC Base Repair	1013-4		
12	SF	1,300	AC Grinding 2" (Full Width)	1014-2		
13	EA	5	Concrete Headwalls	1015-2		
14	LS	1	Culvert Replacement	1016-4		
15	LF	1,350	Seal Coat	1017-4		
16	TN	100	AC Shoulders (4' Wide)	1018-4		
17	LS	1	AC Swale Repair	1019-4		
18	LF	1,175	AC Dike (Type A)	1020-4		
19	SY	48,218	Asphalt Rubber Aggregate Membrane (ARAM)	1022-10		
20	TN	4,193	Ashphalt Concrete Hot Mix (AC) with Fiber Reinforcement	1025-8		
21	MI	8.81	PMB Processed Miscellaneous Base	1027-2		
22	TN	110	AC Miscellaneous Paving	1028-3		
23	LS	1	Pavement Delineation, Striping & Signing	1029-4		
24	LS	1	Release on Contract	9-4		\$1.00
			Total Amount Bid			

The following addenda are acknowledged:

(Bidder must fill in number and date of each addenda or may enter the word "None " if appropriate)

Call (805) 654-2068 to determine addenda that have been issued.

I make the above proposal and certify or declare under penalty of perjury under the laws of the State of California that the statements made on **page 5** of this Proposal, and below my signature, are true and correct.

Number	Dated

Dated

At

(City and State)

Signature: _____

Printed Name: _____

Position: _____

(Sole Owner, Partner, President, etc.)

License No. _____

Company Name _____

License Classification _____

Type of Organization _____

(Individual, Partnership, Corp.)

License Expiration Date _____

Enter }
Name & }
Address }
of Bonding }
Company }

BID BOND

KNOW ALL MEN BY THESE PRESENTS: That we _____

_____, Principal,

and _____

_____, Surety, are held and firmly bound
unto

COUNTY OF VENTURA Obligee,
in the sum of Ten Percent of the total amount of the Bid for the payment of which we bind ourselves,
our legal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has submitted or is about to submit a bid or proposal to Obligee on a contract for

PAVEMENT RESURFACING – SULPHUR MOUNTAIN ROAD

NOW, THEREFORE, if that contract be awarded to principal and principal shall, within such time as specified, duly execute the contract in the prescribed form and deliver the same to obligee with all required bonds/performance securities, certificates of insurance and such other items as required in the bidding or contract documents then this obligation shall be null and void; otherwise to remain in full force and effect, and if the contract is awarded to principal and principal fails, within the time specified, to duly execute the contract in the prescribed form and deliver the same to obligee with all said required items, then surety shall pay obligee the full sum of this bond.

Surety, for value received, hereby agrees that no extension of time, change, alteration, modification, or addition to the bidding or contract documents, or of the work required thereunder, shall release or exonerate surety on this bond or in any way affect the obligation of this bond; and surety does hereby waive notice of same.

Signed, sealed and dated

(Principal)

by _____(Seal)

(Surety)

by _____
Attorney-in-Fact

INDICATE COMPLETE ADDRESS OF SURETY TO WHICH
CORRESPONDENCE CONCERNING THIS BOND SHOULD BE
DIRECTED.

Telephone No. _____

Form PW-B-1

PREVAILING WAGE REQUIREMENTS

**COUNTY OF VENTURA
PUBLIC WORKS AGENCY**

PREVAILING RATES OF WAGES

As provided in Subsection 7-2.2 of these specifications, and in accordance with Section 1770 (*Amended by Stats. 2017, Ch. 28, Sec. 17. (SB 96) Effective June 27, 2017*), et. seq. of the California Labor Code, determinations of the generally prevailing wages for various classes of workers in Ventura County have been made by the California Director of Industrial Relations as required by the California Labor Code.

As required by California Labor Code Section 1777.5, properly indentured apprentices shall be employed on the work in the minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification. Travel and subsistence shall be paid in accordance with California Labor Code Section 1773.8.

The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

The determinations made by the State are available on the Internet at

<http://www.dir.ca.gov/DLSR/PWD/Index.htm>

and are on file in the office of the Public Works Agency

The rate fixed for each craft, classification, or type of work shall be not less than the prevailing rate paid in the craft, classification, or type of work.

The Contractor shall post a copy of the wage rates at each jobsite at a location readily available to the workers.

(Rev. 1/29/2020)

S:\PWA Forms\Plans&SpecsPkg\Prevailing Wage Requirement 2020

Excerpts from the California Labor Code

These excerpts from the Labor Code include the sections listed in specification Section 7.2.2.2 that are required by Labor Code 1775(b)(1) to be included in all subcontracts. These excerpts also include sections recommended by the CA Department of Industrial Relations that contain information on the contractor registration requirements. These sections are furnished for the convenience of the contractor and in no way limit the required compliance with all laws.

1725.5. A contractor shall be registered pursuant to this section to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code or engage in the performance of any public work contract that is subject to the requirements of this chapter. For the purposes of this section, "contractor" includes a subcontractor as defined by Section 1722.1.

(a) To qualify for registration under this section, a contractor shall do all of the following:

(1) (A) Register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial nonrefundable application fee of four hundred dollars (\$400) to qualify for registration under this section and an annual renewal fee on or before July 1 of each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(B) Beginning June 1, 2019, a contractor may register or renew according to this subdivision in annual increments up to three years from the date of registration. Contractors who wish to do so will be required to prepay the applicable nonrefundable application or renewal fees to qualify for the number of years for which they wish to preregister.

(2) Provide evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Workers' compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker whom the contractor employs to perform work that is subject to prevailing wage requirements other than a contractor who is separately registered under this section. Coverage may be evidenced by a current and valid certificate of workers' compensation insurance or certification of self-insurance required under Section 7125 of the Business and Professions Code.

(B) If applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for purposes of this paragraph, the contractor shall not be disqualified for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months or since the effective date of the requirements set forth in subdivision (e), whichever is earlier. If a contractor is found to be in violation of the requirements of this paragraph, the period of disqualification shall be waived if both of the following are true:

(i) The contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months.

(ii) The contractor pays an additional nonrefundable penalty registration fee of two thousand dollars (\$2,000).

(b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(c) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. If the failure to pay the renewal fee was inadvertent, the contractor may renew its registration retroactively by paying an additional nonrefundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the due date of the renewal fee.

(d) If, after a body awarding a contract accepts the contractor's bid or awards the contract, the work covered by the bid or contract is determined to be a public work to which Section 1771 applies, either as the result of a determination by the director pursuant to Section 1773.5 or a court decision, the requirements of this section shall not apply, subject to the following requirements:

(1) The body that awarded the contract failed, in the bid specification or in the contract documents, to identify as a public work that portion of the work that the determination or decision subsequently classifies as a public work.

(2) Within 20 days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.

(3) The requirements of this section shall apply prospectively only to any subsequent bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2).

(e) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, to any contract for public work, as defined in this chapter, executed on or after April 1, 2015, and to any work performed under a contract for public work on or after January 1, 2018, regardless of when the contract for public work was executed.

(f) This section does not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

(Amended by Stats. 2017, Ch. 28, Sec. 15. (SB 96) Effective June 27, 2017.)

1771. Except for public works projects of one thousand dollars (\$1,000) or less, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in this chapter, shall be paid to all workers employed on public works.

This section is applicable only to work performed under contract, and is not applicable to work carried out by a public agency with its own forces. This section is applicable to contracts let for maintenance work.

(Amended by Stats. 1981, Ch. 449, Sec. 1.)

1771.1. (a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision

(a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h) (1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100) for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j) (1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at the address on file with either of the following:

(i) The Contractors' State License Board.

(ii) The Secretary of State.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

(Amended by Stats. 2018, Ch. 455, Sec. 2. (SB 877) Effective September 17, 2018.)

1775. (a) (1) The contractor and any subcontractor under the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the director for the work or craft in which the worker is employed for any public work done under the contract by the contractor or, except as provided in subdivision (b), by any subcontractor under the contractor.

(2) (A) The amount of the penalty shall be determined by the Labor Commissioner based on consideration of both of the following:

(i) Whether the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) Whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations.

(B) (i) The penalty may not be less than forty dollars (\$40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the contractor or subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.

(iii) The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1.

(C) If the amount due under this section is collected from the contractor or subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that contractor or subcontractor shall be satisfied before applying that amount to the penalty imposed on that contractor or subcontractor pursuant to this section.

(D) The determination of the Labor Commissioner as to the amount of the penalty shall be reviewable only for abuse of discretion.

(E) The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the contractor or subcontractor, and the body awarding the contract shall cause to be inserted in the contract a stipulation that this section will be complied with.

(b) If a worker employed by a subcontractor on a public works project is not paid the general prevailing rate of per diem wages by the subcontractor, the prime contractor of the project is not liable for any penalties under subdivision (a) unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

(1) The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of this section and Sections **1771, 1776, 1777.5, 1813, and 1815**.

(2) The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.

(3) Upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for work performed on the public works project.

(4) Prior to making final payment to the subcontractor for work performed on the public works project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees on the public works project and any amounts due pursuant to Section 1813.

(c) The Division of Labor Standards Enforcement shall notify the contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works project to pay workers the general prevailing rate of per diem wages.

(Amended by Stats. 2011, Ch. 677, Sec. 1. (AB 551) Effective January 1, 2012.)

1776 (a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.

(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

(C) Unless required to be furnished directly to the Labor Commissioner in accordance with paragraph (3) of subdivision (a) of Section 1771.4, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f) (1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply, subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

(j) The director shall adopt rules consistent with the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and the Information Practices Act of 1977 (Title 1.8 (commencing with Section 1798) of Part 4 of Division 3 of the Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.
(Amended by Stats. 2014, Ch. 28, Sec. 71. (SB 854) Effective June 20, 2014.)

1777.5. (a) (1) This chapter does not prevent the employment upon public works of properly registered apprentices who are active participants in an approved apprenticeship program.

(2) For purposes of this chapter, "apprenticeship program" means a program under the jurisdiction of the California Apprenticeship Council established pursuant to Section 3070.

(b) (1) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(2) Unless otherwise provided by a collective bargaining agreement, when a contractor requests the dispatch of an apprentice pursuant to this section to perform work on a public works project and requires the apprentice to fill out an application or undergo testing, training, an examination, or other preemployment process as a condition of employment, the apprentice shall be paid for the time spent on the required preemployment activity, including travel time to and from the required activity, if any, at the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered. Unless otherwise provided by a collective bargaining agreement, a contractor is not required to compensate an apprentice for the time spent on preemployment activities if the apprentice is required to take a preemployment drug or alcohol test and he or she fails to pass that test.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

(1) The apprenticeship standards and apprentice agreements under which he or she is training.

(2) The rules and regulations of the California Apprenticeship Council.

(d) If the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (o).

(e) Before commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body, if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program supplying apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates if the contractor agrees to be bound by those standards. However, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. When an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Administrator of Apprenticeship, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section who has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or who has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Administrator of Apprenticeship may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(l) If an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m) (1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2) (A) At the conclusion of the 2002–03 fiscal year, and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Department of Industrial Relations for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The grant funds shall be distributed as follows:

(i) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(ii) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and county for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices from that county registered in each program.

(iii) All training contributions not distributed under clauses (i) and (ii) shall be used to defray the future expenses of the Department of Industrial Relations for the administration and enforcement of apprenticeship standards and requirements under this code.

(B) An apprenticeship program shall only be eligible to receive grant funds pursuant to this subdivision if the apprenticeship program agrees, prior to the receipt of any grant funds, to keep adequate records that document the expenditure of grant funds and to make all records available to the Department of Industrial Relations so that the Department of Industrial Relations is able to verify that grant funds were used solely for training apprentices. For purposes of this subparagraph, adequate records include, but are not limited to, invoices, receipts, and canceled checks that account for the expenditure of grant funds. This subparagraph shall not be deemed to require an apprenticeship program to provide the Department of Industrial Relations with more documentation than is necessary to verify the appropriate expenditure of grant funds made pursuant to this subdivision.

(C) The Department of Industrial Relations shall verify that grants made pursuant to this subdivision are used solely to fund training apprentices. If an apprenticeship program is unable to demonstrate how grant funds are expended or if an apprenticeship program is found to be using grant funds for purposes other than training apprentices, then the apprenticeship program shall not be eligible to receive any future grant pursuant to this subdivision and the Department of Industrial Relations may initiate the process to rescind the registration of the apprenticeship program.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all moneys in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Department of Industrial Relations.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) An awarding body that implements an approved labor compliance program in accordance with subdivision (b) of Section 1771.5 may, with the approval of the director, assist in the enforcement of this section under the terms and conditions prescribed by the director. *(Amended by Stats. 2018, Ch. 704, Sec. 17. (AB 235) Effective September 22, 2018.)*

1813. The contractor or subcontractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty-five dollars (\$25) for each worker employed in the execution of the contract by the respective contractor or subcontractor for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of this article. In awarding any contract for public work, the awarding body shall cause to be inserted in the contract a stipulation to this effect. The awarding body shall take cognizance of all violations of this article committed in the course of the execution of the contract, and shall report them to the Division of Labor Standards Enforcement.

(Amended (as added by Stats. 1997, Ch. 757, Sec. 6) by Stats. 2002, Ch. 28, Sec. 3. Effective January 1, 2003.)

1815. Notwithstanding the provisions of Sections 1810 to 1814, inclusive, of this code, and notwithstanding any stipulation inserted in any contract pursuant to the requirements of said sections, work performed by employees of contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of 8 hours per day at not less than 1¹/₂ times the basic rate of pay.

(Amended by Stats. 1963, Ch. 964.)

**PUBLIC CONTRACT CODE 9204
DISPUTE RESOLUTION PROCESS**

EXCERPTS FROM PUBLIC CONTRACT CODE 9204

EFFECTIVE DATE JANUARY 1, 2017

Please note section 9204 of the Public Contract Code, set forth in full below. Contractor must follow the contractual dispute resolution process specified in the Ventura County Standard Specifications, which is consistent with section 9204.

* * *

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3)(A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

- (iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.
- (iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.
- (v) The Military Department as to any project under the jurisdiction of that department.
- (vi) The Department of General Services as to all other projects.
- (vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d)(1)(A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2)(A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public

entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a

public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute that is enacted before January 1, 2027, deletes or extends that date.

**VENTURA COUNTY
STANDARD SPECIFICATIONS**

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS

PART 1 - GENERAL PROVISION

SECTION 0 - SSPWC ADOPTION AND MODIFICATION

0-1	STANDARD SPECIFICATIONS	1
0-2	DELETIONS.....	1
0-3	NUMBERING OF SECTIONS.....	1
0-4	ADDITIONS.....	1

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOL

1-1	GENERAL	2
1-2	TERMS AND DEFINITIONS	2
1-3	ABBREVIATIONS	4
1-3.1	General.	4
1-3.2	Common Usage	4
1-3.3	Institutions.	7
1-3.4	Building Codes.	7
1-3.5	Reference Documents.	7
1-4	UNITS OF MEASURE.....	8
1-4.1	General.	8
1-4.1.1	Units for Work.....	8
1-4.2	Units of Measure and Their Abbreviations	8
1-5	SYMBOLS	8

SECTION 2 - SCOPE AND CONTROL OF WORK

2-1	AWARD AND EXECUTION OF CONTRACT	9
2-1.1	Award of Contract	9
2-1.2	Notice of Award	9
2-1.3	Execution of Contract Documents.	9
2-1.4	Failure to Execute Documents.	9
2-1.5	Return of Proposal Guarantees.	9
2-2	ASSIGNMENT.....	9
2-3	SUBCONTRACTS.	10
2-3.1	General.	10
2-3.1.1	Use of Debarred Subcontractors Prohibited.....	10
2-3.2	Additional Responsibilities.....	10
2-3.3	Status of Subcontractors.....	10
2-3.3.1	Subcontracts.....	10
2-3.3.2	Contractor Responsible.....	10
2-3.3.3	Specialty Contractors.....	11
2-4	CONTRACT BONDS.	11
2-4.1	Bond Forms.....	11
2-5	PLANS AND SPECIFICATIONS	11
2-5.1	General.	11
2-5.1.1	Specifications Captions.	11
2-5.2	Precedence of Contract Documents.	12
2-5.3	Shop Drawings, Working Drawings, and Submittals.....	12
2-5.3.1	General.	12
2-5.3.2	Working Drawings.	12
2-5.3.3	Shop Drawings.	13
2-5.3.4	Supporting Information	13
2-5.4	Record Drawings.....	13
2-6	WORK TO BE DONE.....	13
2-6.1	Manufacturer's Recommendations.	13
2-6.2	Testing of Installed Components.....	13
2-6.3	Training of Agency Personnel	13
2-7	SUBSURFACE DATA.....	14
2-8	RIGHTS-OF-WAY.....	14

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS

2-9	SURVEYING	14
2-9.1	Permanent Survey Markers.	14
2-9.2	Survey Service.	14
2-9.2.1	Open Areas.	14
2-9.2.2	Utilities.	14
2-9.3	Contractor's Surveys.	14
2-9.3.1	Errors in Surveys.	14
2-9.4	Line and Grade.	14
2-9.5	Quantity Surveys.	14
2-9.6	Payment for Surveys.	15
2-10	AUTHORITY OF BOARD AND ENGINEER.....	15
2-10.1	Decisions in Writing.....	15
2-11	INSPECTION.....	15
2-11.1	Permit Inspections.....	15
2-11.2	Structural Observation.....	15
2-12	SPECIAL NOTICES.....	15
2-13	AGENCY PERSONNEL AND AUTHORITY	15
2-13.1	General.....	15
2-13.2	Engineer.....	16
2-13.3	Department Directors (Public Works Agency).	16
2-13.4	Project manager.....	17
2-13.5	Inspector.	17
2-13.6	Other Agency Personnel and Consultants.	17
2-13.6.1	Materials Engineer.	17
2-13.6.2	Surveyors & Technicians.	17
2-13.6.3	Other Persons.....	17
2-13.6.4	Consultants.....	17
<u>SECTION 3 - CHANGES IN WORK</u>		
3-1	CHANGES REQUESTED BY THE CONTRACTOR	18
3-1.1	General.....	18
3-1.2	Payment for Changes Requested by the Contractor.	18
3-2	CHANGES INITIATED BY THE AGENCY	18
3-2.1	General.....	18
3-2.2	Payment for Changes Initiated by the Agency.	18
3-2.2.1	Contract Unit Prices.....	18
3-2.2.2	Stipulated Unit Prices.	18
3-2.2.3	Pricing.....	18
3-2.2.4	Non-Agreed Prices	18
3-3	EXTRA WORK.....	18
3-3.1	General.....	18
3-3.2	Payment.....	18
3-3.2.1	General.....	18
3-3.2.2	Basis for Establishing Costs.....	19
3-3.2.3	Markup.....	20
3-3.3	Daily Extra Work Reports by Contractor.	20
3-4	CHANGED CONDITIONS.....	21
3-5	DISPUTED WORK	21

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS

SECTION 4 - CONTROL OF MATERIALS

4-1	MATERIALS AND WORKMANSHIP	22
4-1.1	General.	22
4-1.1.1	Materials Furnished by Agency.	22
4-1.2	Protection of Work and Materials.	22
4-1.3	Inspection Requirements	22
4-1.3.1	General.	22
4-1.3.2	Inspection of Materials Not Locally Produced.	22
4-1.3.3	Inspection by the Agency.	23
4-1.3.4	Certificates of Compliance.	23
4-1.4	Tests of Materials.	23
4-1.5	Certification.	23
4-1.6	Trade Names or Equals	23
4-1.6.1	Compatibility with Design.	23
4-1.6.2	Trade Names Listed.	24
4-1.7	Weighing Equipment.	24
4-1.8	Calibration of Testing Equipment.	24

SECTION 5 - UTILITIES

5-1	LOCATION.....	25
5-2	PROTECTION.....	25
5-3	REMOVAL.....	25
5-4	RELOCATION.....	26
5-5	DELAYS.....	26
5-5.1	Cooperation During Utility Relocation.	26
5-6	COOPERATION.....	26

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

6-1	CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK.	27
6-1.1	Beginning of Work.....	28
6-1.2	Starting Work.	28
6-1.3	Work Sequence.	28
6-1.4	Resources Required.	28
6-2	PROSECUTION OF WORK.....	28
6-3	SUSPENSION OF WORK	28
6-3.1	General.	28
6-3.2	Archaeological and Paleontological Discoveries.....	29
6-3.3	Temporary Suspension of Work.	29
6-4	TERMINATION OF CONTRACT FOR DEFAULT.....	29
6-4.1	General	29
6-4.2	Notice to Cure.....	29
6-4.3	Notice of Termination for Default.....	29
6-4.4	Responsibilities of the Surety	29
6-4.5	Payment.....	30
6-5	TERMINATION OF CONTRACT.	30
6-6	DELAYS AND EXTENSIONS OF TIME	30
6-6.1	General.	30
6-6.2	Extensions of Time.	30
6-6.3	Payment for Delays to Contractor.	30
6-6.4	Written Notice and Report.....	31
6-6.4.1	Documentation of Delays.	31
6-7	TIME OF COMPLETION.....	31
6-7.1	General.	31
6-7.2	Working Day.....	31
6-7.2.1	Holidays.....	31
6-7.2.2	Landscape Maintenance Period.	32
6-7.3	Contract Time Accounting.....	32
6-7.4	Starting Date for Contract Time and Notice to Proceed.....	32

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS

6-8	COMPLETION, ACCEPTANCE AND WARRANTY.....	32
6-8.1	Completion and Acceptance.....	32
6-8.2	Warranty and Correction.....	32
6-8.3	No Waiver of Legal Rights.....	33
6-8.4	Landscape Maintenance Period.....	33
6-8.5	Non-complying Work.....	33
6-8.6	Written Warranties.....	33
6-9	LIQUIDATED DAMAGES.....	33
6-10	USE OF IMPROVEMENT DURING CONSTRUCTION.....	33
6-10.1	Use of Improvements - Exceptions.....	33
6-11	NOTICE OF POTENTIAL CLAIM FOR ADDITIONAL COMPENSATION.....	34
6-12	DISPUTES AND CLAIMS; PROCEDURE.....	34
6-12.1	GENERAL.....	34
6-12.2	ADMINISTRATIVE REVIEW.....	35
6-12.3	MEDIATION.....	35
6-12.4	ARBITRATION.....	36
6-13	CONTRACTOR'S WORK HOURS.....	36
6-13.1	Working Hours Limitations.....	36
6-13.2	Regular Work Schedule.....	36
6-13.3	Exceptions.....	36

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-1	CONTRACTOR'S EQUIPMENT AND FACILITIES.....	37
7-1.1	General.....	37
7-1.2	Temporary Utility Services.....	37
7-1.3	Crushing and Screening Operations.....	37
7-2	LABOR.....	37
7-2.1	General.....	37
7-2.1.1	Special Qualifications.....	37
7-2.2	Laws.....	37
7-2.2.1	Apprentices.....	37
7-2.2.2	Contractors' Duties Concerning Labor Code Compliance.....	37
7-2.3	Payroll Records.....	38
7-2.4	Hours of Labor.....	38
7-3	INDEPENDENCE OF CONTRACTOR, INDEMNIFICATION AND POLLUTION.....	39
7-3.1	Independence of Contractor.....	39
7-3.2	Indemnification and Hold Harmless Clause.....	39
7-3.3	Contamination and Pollution.....	39
7-4	INSURANCE REQUIREMENTS.....	39
7-4.1	Workers' Compensation Insurance.....	39
7-4.1.1	Coverage.....	39
7-4.1.2	Certification.....	39
7-4.2	Commercial General Liability Insurance.....	40
7-4.2.1	Insurance Classes.....	40
7-4.2.2	Coverage Exceptions.....	40
7-4.2.3	Excess Liability Policies.....	40
7-4.3	Commercial Automobile Liability Insurance.....	40
7-4.4	Property Insurance.....	40
7-4.5	Other Insurance Provisions.....	40
7-4.5.1	Insurance Company Qualifications.....	40
7-4.5.2	Primary Coverage.....	40
7-4.5.3	Aggregate Limits Exceeded.....	40
7-4.5.4	Liability in Excess of Limits.....	40
7-4.5.5	Additional Insured Endorsements.....	40
7-4.5.6	Waiver of Subrogation Rights.....	40
7-4.5.7	Cancellation Notice Required.....	41
7-4.5.8	Documentation Required.....	41

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS

7-5 PERMITS.	41
7-5.1 Highway and Railroad Permits.	41
7-5.2 Grading Ordinance.	41
7-5.2.1 General.	41
7-5.2.2 Permits Required.	41
7-5.2.3 Imported and Exported Material.	41
7-5.2.4 Exemptions from Permit.	41
7-5.3 Building Permit.	42
7-5.3.1 Agency Furnished Permits.	42
7-5.3.2 Contractor Furnished Permits.	42
7-5.4 Coastal Zone Permits.	42
7-5.4.1 Agency Furnished Permits.	42
7-5.4.2 Contractor Furnished Permits.	42
7-6 THE CONTRACTOR'S REPRESENTATIVE.	42
7-7 COOPERATION AND COLLATERAL WORK.	42
7-8 WORK SITE MAINTENANCE.	42
7-8.1 General.	42
7-8.2 Air Pollution Control.	42
7-8.3 Noise Control.	42
7-8.4 Storage of Equipment and Materials.	42
7-8.4.1 General.	42
7-8.4.2 Storage in Public Streets.	42
7-8.5 Sanitary Sewers.	43
7-8.5.1 General.	43
7-8.5.2 Sewage Bypass and Pumping Plan.	43
7-8.5.3 Spill Prevention and Emergency Response Plan.	43
7-8.6 Water Pollution Control.	43
7-8.6.1 Compliance with NPDES General Construction Permit.	44
7-8.6.2 Compliance with NPDES MS4 Permit.	44
7-8.6.3 Plan.	45
7-8.6.4 Measures.	45
7-8.6.5 Monitoring and Reporting.	45
7-8.6.6 Dewatering Activities.	45
7-8.6.7 Payment.	46
7-8.7 Drainage Control.	46
7-8.8 Final Cleaning.	46
7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS.	47
7-10 PUBLIC CONVENIENCE AND SAFETY.	47
7-10.1 Access.	47
7-10.2 Traffic Control.	47
7-10.3 Haul Roads.	48
7-10.4 Safety.	48
7-10.4.1 Work Site Safety.	48
7-10.4.2 Safety Orders.	48
7-10.4.3 Use of Explosives.	48
7-10.4.4 Hazardous Substances.	49
7-10.4.5 Confined Spaces.	49
7-10.4.5.1 Confined Space Entry Program (CSEP).	49
7-10.4.5.2 Permit-Required Confined Spaces.	49
7-10.5 Security and Protective Devices.	49
7-10.5.1 General.	49
7-10.5.2 Security Fencing.	49
7-10.5.3 Steel Plate Covers.	50
7-11 PATENT FEES OR ROYALTIES.	50
7-12 ADVERTISING.	50
7-13 LAWS TO BE OBSERVED.	50
7-13.1 Mined Material.	50
7-14 ANTITRUST CLAIMS.	50
7-15 RECYCLABLE CONSTRUCTION & DEMOLITION WASTES.	50
7-16 EQUAL EMPLOYMENT OPPORTUNITY.	50
7-17 LOSS OR DAMAGE TO THE WORK.	50
7-18 ACTS OF GOD.	50

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS

SECTION 8 - FACILITIES FOR AGENCY PERSONNEL

8-1	GENERAL	51
8-2	EQUIPMENT FOR FIELD OFFICES.	51

SECTION 9 - MEASUREMENT AND PAYMENT

9-1	MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK.....	52
9-1.1	General.....	53
9-1.2	Methods of Measurement.	53
9-1.3	Certified Weights.....	53
9-1.4	Units of Measurement.	53
9-2	LUMP SUM BID ITEMS.....	53
9-3	PAYMENT	53
9-3.1	General.....	53
9-3.2	Partial and Final Payment.	53
9-3.2.1	Release of Withheld Contract Funds.....	53
9-3.2.2	Timely Progress Payments.....	54
9-3.3	Delivered Materials.....	55
9-3.4	Mobilization	55
9-3.4.1	Scope.....	55
9-3.4.2	Payment.....	56
9-4	TERMINATION OF AGENCY LIABILITY.....	56

SECTION 10 - DIVERSION, CONTROL AND REMOVAL OF WATER

10-1	DESCRIPTION.....	57
10-2	REQUIREMENTS.	57
10-3	DIVERSION AND CONTROL WORKS.	57
10-4	PAYMENT.....	57

PART 2 CONSTRUCTION MATERIALS

SECTION 200 - ROCK MATERIALS

200-1	ROCK PRODUCTS.....	58
200-1.6	Stone for Riprap	58
200-1.6.1A	Alternate Stone for Riprap.	58
200-1.6.2	Riprap Size	58

SECTION 206 - MISCELLANEOUS METAL ITEMS

206-3	GRAY IRON AND DUCTILE CASTINGS.....	59
206-3.3.2A	Manhole Frame and Cover Sets.....	59
206-5	METAL RAILINGS.	59
206-5.2	Flexible Metal Guard Rail Materials.	59
206-5.2A	Flexible Metal Guard Rail Materials; Modification.....	59

SECTION 210 - PAINT AND PROTECTIVE COATINGS

210-6	STORM DRAIN HARDWARE.	59
-------	----------------------------	----

SECTION 211 - SOIL AND AGGREGATE TESTS

211-6	SIEVE ANALYSIS.	60
211-7	Sand Equivalent Test.	60
211-8	R-VALUE.....	60
211-9	SPECIFIC GRAVITY AND ABSORPTION.....	60
211-10	LOS ANGELES RATTLER TEST.	60
211-11	SOUNDNESS.	60
211-12	WET AND DRY LOSS.....	60
211-13	SOLUBILITY.	60
211-14	Permeability Test.....	60

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS

PART 3 CONSTRUCTION METHODS

SECTION 301 - TREATED SOILS, SUBGRADE PREPARATION AND PLACEMENT OF BASE MATERIALS

301-1 SUBGRADE PREPARATION	61
301-1.3 Relative Compaction	61
301-1.3.1 Firm, Hard and Unyielding.....	61
301-1.4 Subgrade Tolerances	61
301-2 UNTREATED BASE.....	61
301-2.3 Compacting.....	61
301-2.3.1 Tolerances.....	61

SECTION 302 - ROADWAY SURFACING

302-5 ASPHALT CONCRETE PAVEMENT	61
302-5.1 General	61
302-5.1.1 Asphalt Concrete Berms.	61
302-5.4 Tack Coat.....	61
302-5.4.1 Fog Seal.	61
302-5.9 Measurement and Payment.....	61
302-5.9.1 Measurement and Payment for Asphalt Berm.	61
302-5.9.2 Measurement and Payment for Fog Seal, Tack Coat, and Prime Coat.....	61

SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION

303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS,	62
303-5.1 Requirements.....	62
303-5.1.4 Concrete Substitution.	62

SECTION 306 - UNDERGROUND CONDUIT CONSTRUCTION

306-1 OPEN TRENCH OPERATIONS.....	62
306-1.2 Installation of Pipe	62
306-1.2.1 Bedding	62
306-1.2.1.1 Bedding Material.	62
306-1.2.1.2 Sewer Pipe Bedding.	62
306-1.2.1.3 Flexible Pipe Bedding.....	62
306-9 DISINFECTION.	63
306-10 WATERWORKS APPURTENANCES.....	63
306-10.1 Valves.....	63
306-10.2 Valve Boxes.	63
306-10.3 Thrust Devices.	63
306-10.4 Fire Hydrants.....	63
306-10.5 Fire Hydrant Barricades.	63

SECTION 310 - PAINTING

310-5 Painting Various Surfaces	64
310-5.6 Painting Traffic Striping, Pavement Markings, and Curb Markings.....	64
310-5.6.8A Application of Paint - Two Coats.....	64

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS

PART 4

SECTION 400 - ALTERNATE ROCK PRODUCTS.

ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE AND UNTREATED BASE MATERIAL

400-1. Rock Products.....	65
400-1.1 Requirements.....	65
400-1.1.1 General.....	65
400-3 Portland Cement Concrete.....	65
400-4 Asphalt Concrete.....	65

APPENDICES

APPENDIX A	ACCORD CERTIFICATE OF LIABILITY INSURANCE	66
APPENDIX B-1	CONSTRUCTION ELEMENT VS. TIME CHART FORM	67
APPENDIX B-2	WORK COMPLETE VS. TIME CHART FORM	68
APPENDIX C-1	CONSTRUCTION ELEMENT VS. TIME CHART SAMPLE	69
APPENDIX C-2	WORK COMPLETE VS. TIME CHART SAMPLE.....	70
APPENDIX D	ESCROW AGREEMENT FORM SAMPLE	71
APPENDIX E	BLANK	75
APPENDIX F	RELEASE ON CONTRACT FORM	76
APPENDIX G	PERFORMANCE AND PAYMENT BOND - SAMPLE SHOWING WORDING ..	77

**COUNTY OF VENTURA
PUBLIC WORKS AGENCY
STANDARD SPECIFICATIONS
PART 1 - GENERAL PROVISIONS**

SECTION 0 - SSPWC ADOPTION AND MODIFICATIONS

0-1 STANDARD SPECIFICATIONS

Except as hereinafter provided or as modified by the Special Provisions, the provisions of Parts 2 through 5 of the 2015 edition of the Standard Specifications for Public Works Construction (referred to as SSPWC), published by BNi Building News, Los Angeles, are part of these Standard Specifications.

0-2 DELETIONS

The following portions of SSPWC are hereby deleted: Part 1 and Sections 200-1.6.2, and 301-1.4.

0-3 NUMBERING OF SECTIONS

The numbering in these modifications is compatible with the numbering in SSPWC. References to whole sections of SSPWC and these modifications are preceded by the word "Section", references to parts of sections show numbers only, such as "211-5", except at the beginning of a sentence, the word "Section" precedes the number. Standard Special Provisions, if included, are numbered as Sections 901 through 999. The Special Provisions are numbered starting with Section 1000 or higher.

Cross-references contained in SSPWC to sections deleted by 0-2 hereof shall be references to the sections of like number contained herein.

0-4 ADDITIONS

The sections that follow, either, replace sections of like number in SSPWC which were deleted in 0-2 above, modify sections of SSPWC, or add material not in SSPWC.

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOLS

1-1 GENERAL Unless otherwise stated, the words directed, required, permitted, ordered, instructed, designated, considered necessary, prescribed, approved, acceptable, satisfactory, or words of like meaning, refer to actions, expressions, and prerogatives of the Engineer.

1-2 TERMS AND DEFINITIONS

Acceptance--The formal written acceptance by the Agency of the Work which has been completed in all respects in accordance with the Plans and Specifications and any Modifications thereof.

Addendum--Written or graphic instrument issued prior to the opening of Bids which clarifies, corrects or changes the bidding or Contract Documents. The term "Addendum" shall include bulletins and all other types of written notices issued to potential bidders prior to opening of Bids.

Agency--The legal entity for which the Work is being performed.

Agreement--See Contract.

Base--A layer of specified material of planned thickness placed immediately below the pavement or surfacing.

Bid--The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work.

Bidder--Any individual, firm, partnership, corporation, or combination thereof, submitting a Bid for the Work, acting directly or through a duly authorized representative.

Board--The officer or body constituting the awarding authority of the Agency.

Bond--Bid, performance and payment bond or other instrument of security.

Cash Contract--A contract financed by means other than special assessments.

Certificate of Compliance--A written document signed and submitted by a supplier or manufacturer that certifies that the material or assembled material supplied to the Work site conforms to the requirements of the Contract Documents.

Change Order--A written order to the Contractor signed by the Agency directing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract time issued after the effective date of the Contract. A Change Order may or may not also be signed by the Contractor.

Code--The terms Government Code, Labor Code, etc. refer to codes of the State of California.

Consultant--A professional engineer, architect, landscape architect or other professional who designed the project or performed other services for the Agency on the project.

Contract--The written agreement between the Agency and the Contractor covering the Work.

Contract Documents--The Contract, Addenda, notice inviting bids, instruction to bidders; Bid (including documentation accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Contract, the Bonds, permits from jurisdictional regulatory agencies, Special Provisions, Plans, Standard Plans, Standard Specifications, Reference Specifications, Change Orders and Supplemental Agreements.

Contractor--The individual, partnership, corporation, joint venture, or other legal entity having a Contract with the Agency to perform the Work. In the case of work being done under permit issued by the Agency, the Permittee shall be construed to be the Contractor. The term "prime contractor" shall mean Contractor.

Contract Price--The total amount of money for which the Contract is awarded.

Contract Unit Price--The amount shown in the Bid for a single unit of an item of work.

County Sealer--The Sealer of Weights and Measures of the county in which the Contract is let.

Days--Days shall mean consecutive calendar days unless otherwise specified.

Daily Extra Work Reports--Reports on Agency furnished forms as required by 3-3.

Disputed Work--Work in which Agency and Contractor are in disagreement.

Due Notice--A written notification, given in due time, of a proposed action where such notification is required by the Contract to be given a specified interval of time (usually 48 hours or two Working Days) prior to the commencement of the contemplated action. Notification may be from Engineer to Contractor or from Contractor to Engineer.

Electrolier--Street light assembly complete, including foundation, standard, luminaire arm, luminaire, etc.

1-2 DEFINITIONS (Continued)

- Engineer--The Director of Public Works Agency acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.
- Field Directive--A written communication from the Engineer to the Contractor that does not make any Modification to the Contract Documents. It is used only to answer Contractor's questions and to provide decisions as specified in the Contract Documents.
- Geotextile--Synthetic fiber used in civil engineering applications, serving the primary function of separation and filtration.
- House Connection Sewer--A sewer, within a public street or right of way, proposed to connect any parcel, lot, or part of a lot with a main line sewer.
- House Sewer--A sewer, wholly within private property, proposed to connect any building to a house connection sewer.
- Luminaire--The lamp housing including the optical and socket assemblies (and ballast if so specified).
- Major Bid Item--A single Contract item constituting 10% or more of the original Contract Price.
- Mast Arm--The structural member or bracket, which, when mounted on a Standard, supports the luminaire.
- Modification--Includes Change Orders and Supplemental Agreements. A Modification may only be issued after the effective date of the Contract.
- Notice of Award--The written notice by the Agency to the successful Bidder stating that upon compliance by it with the required conditions, the Agency will execute the Contract.
- Notice to Proceed--A written notice given by the Agency to the Contractor fixing the date on which the Contract time will start.
- Owner--Same meaning as Agency.
- Person--Any individual, firm, association, partnership, corporation, trust, joint venture, or other legal entity.
- Plans--The drawings, profiles, cross sections, Standard Plans, working drawings, shop drawings, and supplemental drawings, or reproductions thereof, approved by the Engineer, which show the location, character, dimensions, or details of the Work.
- Private Contract--Work subject to Agency inspection, control, and approval, involving private funds, not administered by the Agency.
- Prompt--The briefest interval of time required for a considered reply, including time required for approval by a governing body.
- Proposal--See Bid.
- Reference Specifications--Those bulletins, standards, rules, methods of analysis or testing, codes, and specifications of other agencies, engineering societies, or industrial associations referred to in the Contract Documents. These refer to the latest edition, including amendments in effect and published at the time of advertising the project or issuing the permit, unless specifically referred to by edition, volume, or date.
- Roadway--The portion of a street reserved for vehicular use.
- Service Connection--All or any portion of the conduit cable or duct including meter, between a utility distribution line and an individual consumer
- Service Lateral Connection--The interface of the House Connection Sewer with the host pipe.
- Sewer--Any conduit intended for the reception and transfer of sewage and fluid industrial waste.
- Shop Drawings--Drawings showing details of manufactured or assembled products proposed to be incorporated in the Work.
- Special Provisions--Any provisions which supplement or modify the Standard Specifications.
- Specifications--Standard Specifications, Reference Specifications, Standard Special Provisions, Special Provisions, and specifications in Change Orders or Supplemental Agreements between the Contractor and the Board.
- Standard--The shaft or pole used to support street lighting luminaire, traffic signal heads, mast arms, etc.
- Standard Plans--Details of standard structures, devices, or instructions referred to on the Plans or in the Specifications by title or number.
- Standard Special Provisions-- Special Provisions prepared in standardized form numbered in the series 401 through 499.

1-2 DEFINITIONS (Continued)

Standard Specifications--Parts 1 through 6 of this document. See Section 0. References to whole sections will be preceded by the word "Section", references to parts of sections will show numbers only, such as "3-2", except at the beginning of a sentence, the word "Section" precedes the number.

State--The State of California.

State Standard Plans--Standard Plans prepared by State of California, Business and Transportation Agency, Department of Transportation.

Stipulated Unit Price--Unit prices established by Agency in the Contract Documents.

Storm Drain--Any conduit and appurtenances intended for the reception and transfer of storm water.

Street--Any road, highway, parkway, freeway, alley, walk or way.

Subbase--A layer of specified material of planned thickness between a base and the subgrade.

Subcontractor--An individual, firm or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work.

Subgrade--For roadways, that portion of the roadbed on which pavement, surfacing, base, subbase, or a layer of other material is placed. For structures, the soil prepared to support a structure.

Supervision--Supervision, where used to indicate supervision by the Engineer, shall mean the performance of obligations, and the exercise of rights, specifically imposed upon and granted to the Agency in becoming a party to the Contract. Except as specifically stated herein, supervision by the Agency shall not mean active and direct superintendence of details of the Work.

Supplemental Agreement--A written amendment of the Contract Documents signed by both parties.

Surety--See 2-4.

Utility--Tracks, overhead or underground wires, pipelines, conduits, ducts, or structures, sewers or storm drains owned, operated or maintained in or across a public right of way or private easement.

Work--That which is proposed to be constructed or done under the Contract or permit, including the furnishing of all labor, materials, equipment, and services.

Working Day--See 6-7.2 and 6.7.2.1.

Working Drawings--Drawings showing details not shown on the Plans which are required to designed by the Contractor

1-3 ABBREVIATIONS

1-3.1 General. The abbreviations herein, together with others in general use, are applicable to these Standard Specifications and to all other Contract Documents.

All abbreviations and symbols used on Plans for structural steel construction shall conform to those given by the "Manual of Steel Construction" published by the American Institute of Steel Construction, Inc.

1-3.2 Common Usage

<u>Abbreviation</u>	<u>Word or Words</u>	<u>Abbreviation</u>	<u>Word or Words</u>
Aban	Abandon	l	Liters
Aband	Abandoned	Lab	Laboratory
ABS	Acrylonitrile-butadiene-styrene	Lat	Lateral
AC	Asphalt Concrete	LD	Local depression
ACP	Asbestos cement pipe	LED	Light Emitting Diode
ADA	Americans with Disabilities Act of 1990 (Public Law 101-336, 104 Stat. 1990,42 USC 12101-12213 (as amended))	LH	Lamp hole
Alt	Alternate	LL	Live load
AmerStd	American Standard	LOL	Layout line
APC	Air Placed Concrete	Long	Longitudinal
ARAM	Asphalt Rubber Aggregate Membrane	LP	Lamp post
ARHM	Asphalt Rubber Hot Mix	LPS	Low pressure sodium (Light)
AWG	American Wire Gage (non-ferrous wire)	LS	Lump sum
B/W	Back of wall	LTS	Lime treated soil
BC	Beginning of curve	m	Meters
BCR	Beginning of curb return	Maint	Maintenance
Bdry	Boundary	Max	Maximum
BF	Bottom of footing	MC	Medium curing
BM	Bench mark	MCR	Middle of curb return
BMPs	Best Management Practices	Meas	Measure
BVC	Beginning of vertical curve	MH	Manhole, maintenance hole
C&G	Curb & Gutter	Mil Spec	Military specification
C&G	Curb and gutter	Min	Minimum
CAB	Crushed aggregate base	Misc	Miscellaneous

<u>Abbreviation</u>	<u>Word or Words</u>	<u>Abbreviation</u>	<u>Word or Words</u>
CALOSHA	California Occupational Safety and Health Administration	Mon	Monument
CALTRANS	California Department of Transportation	MSDS	Material Safety Data Sheet
CAP	Corrugated aluminum pipe	Mult	Multiple
CB	Catch Basin	MUTCD	Manual on Uniform Traffic Control Devices
Cb	Curb	MVL	Mercury vapor light
CBP	Catch Basin Connection Pipe	N/A	No applicable
CBR	California Bearing Ratio	NRCP	Nonreinforced concrete pipe
C-C	Center to center	Obs	Obsolete
CCFRPM	Centrifugally Cast Fiberglass Reinforced Plastic Mortar	oc	On center
CCR	California Code of Regulations	OD	Outside diameter
CCTV	Closed Circuit TV	OE	Outer edge
CF	Cubic foot	Opp	Opposite
CF	Curb face	Orig	Original
CFR	Code of Federal Regulations	PAV	Pressure Aging Vessel
CFS	Cubic feet per second	PB	Pull box
CHDPE	Corrugated High Density Polyethylene	PC	Point of curvature
CIP	Cast iron pipe	PCC	Point of compound curvature
CIPP	Cast-in-place pipe	PCC	Portland cement concrete
CIPPC	Cast-in-place Concrete Pipe	PCVC	Point of compound vertical curve
CL	Clearance, center line	PE	Polyethylene
CLF	Chain link fence	PG	Performance Graded
CLSM	Controlled Low Strength Material	PI	Point of intersection
CMB	Crushed miscellaneous base	PL	Property line
CMC	Cement mortar-coated	PLI	Pounds per linear inch
CML	Cement mortar-lined	PMB	Processed miscellaneous base
cms	Cubic meters per second	POC	Point on curve
CO	Cleanout (Sewer)	POT	Point on tangent
Col	Column	PP	Power pole
Conc	Concrete	PRC	Point of reverse curve
Conn	Connection	PRCB	Precast Reinforced Concrete Box
Const	Construct, Construction	PRVC	Point of reverse vertical curve
Coord	Coordinate	PSI	Pounds per square inch
CQS	Cationic Quick-Setting	PT	Point of tangency
CRM	Crumb Rubber Modifier	PVC	Polyvinyl chloride
CRS	Cationic Rapid-Setting	Pvmt	Pavement
CSEP	Confined Space Entry Plan	Pvt R/W	Private right of way
CSP	Corrugated steel pipe	Q	Rate of flow in cms (CFS)
CSPA	Corrugated steel pipe arch	Quad	Quadrangle, Quadrant
CSS	Cationic Slow-Setting	R	Radius or Resistance value
CT	California Test	R&O	Rock and Oil
CTB	Cement treated base	R/W	Right of way
CV	Check valve	RA	Reclaimed Asphalt or Recycling agent
CY	Cubic yard	RAC	Recycled asphalt concrete
D	Depth, Load of pipe	RAP	Reclaimed asphalt pavement
db	Decibels	RBAC	Rubberized asphalt concrete
Dbl	Double	RC	Reinforced concrete or Rapid Curing
DF	Douglas Fir	RCB	Reinforced concrete box
Dia	Diameter	RCE	Registered civil engineer
DIP	Ductile iron pipe	RCP	Reinforced concrete pipe
DL	Dead load	RCV	Remote control valve
DT	Drain tile	Ref	Reference
Dwg	Drawing	Reinf	Reinforced or reinforcement
Dwy Appr	Driveway approach	Res	Reservoir
Dwy	Driveway	RGE	Registered geotechnical engineer
Ea	Each	RPPCC	Reclaimed Plastic Portland Cement Concrete
EC	End of curve	RR	Railroad
ECR	End of curb return	RSE	Registered structural engineer
EF	Each face	RTE	Registered traffic engineer
EG	Edge of gutter	RTFO	Rolling Thin Film Oven
EGL	Energy grade line	RW	Reclaimed Water
EI	Elevation	S	Slope
ELC	Electrolier lighting conduit	S/W	Sidewalk
ELT	Extra long ton of slurry	SC	Slow curing
Eng	Engineer, Engineering	SCCP	Steel cylinder concrete pipe
EP	Edge of pavement	SCNs	Supplementary Cementitious Materials
Esmt	Easement	SD	Storm drain
ETB	Emulsion treated base	SDR	Standard dimension ratio

<u>Abbreviation</u>	<u>Word or Words</u>	<u>Abbreviation</u>	<u>Word or Words</u>
EVC	End of vertical curve	SE	Sand Equivalent
Exc	Excavation	Sec	Section
Exist or Ex	Existing	SF	Square foot
Exp Jt	Expansion joint	SG	Specific gravity
F & C	Frame and cover	SI	International System of Units (Metric)
F & I	Furnish and install	SLC	Service Lateral Connection
F/W	Face of wall	Spec	Specifications
Fab	Fabricate	SR	Standard ratio
FAS	Flashing arrow sign	SS	Sanitary sewer
FD	Floor drain	SSB	Select sub-base
Fdn	Foundation	SSP	Structural steel plate pipe
Fed Spec	Federal Specification	SSPA	Structural steel plate pipe arch
FG	Finished grade	St Hwy	State highway
FL	Flow line	Sta	Station
FS	Finished surface	Std	Standard
ft - lb	foot – pound	Str Gr	Straight grade
Ftg	footing	Str	Straight
FW	Face of wall	Struc	Structural/Structure
Ga	Gauge	SW	Sidewalk
Galv	Galvanized	SWD	Sidewalk drain
GG	Gap graded	SWPPP	Storm Water Pollution Prevention Plan
GIP	Galvanized iron pipe	SY	Square Yard
GL	Ground line or grade line	T/W	Top of wall
GM	Gas meter	Tan	Tangent
GP	Guy pole	TC	Top of curb
Gr	Grade	TCP	Traffic control plan
Grtg	Grating	Tel	Telephone
GSP	Galvanized steel pipe	TF	Top of footing
H	High or height	Topo	Topography
HB	Hose bib	Tr	Tract
HC	House connection	Trans	Transition
HDPE	High density Polyethylene	TRMAC	Tire rubber modified asphalt concrete
HDWL	Headwall	TS	Traffic signal or transition structure
HGL	Hydraulic grade line	TSC	Traffic signal conduit
Hor, Horiz	Horizontal	TSS	Traffic signal standard
Hp	Horsepower	TTC	Temporary traffic control
HPG	High pressure gas	TW	Top of wall
HPS	High pressure sodium (Light)	Typ	Typical
HRWRA	High Range Water Reducing Admixture	U.S.	United States
Hyd, Hydr	Hydraulic	U.S.C.	United States Code
ID	Inside diameter	USA	Underground Service Alert
Incl	Include, Including	Var	Varies, Variable
Insp	Inspection	VB	Valve box
Inv	Invert	VC	Vertical curve
IP	Iron pipe	VCP	Vitrified clay pipe
J	Joules	Vert	Vertical
JC	Junction chamber	Vol	Volume
Jct	Junction	VTCSH	Vehicle Traffic Controls Signal Heads
JS	Junction structure	W	Width or Wider
Jt	Joint	WATCH	Work Area Traffic Control Handbook
kg	Kilograms	WI	Wrought iron
kPa	KiloPascals	WM	Water meter
L	Length	WPJ	Weakened plane joint
		WTAT	Wet Track Abrasion Test
		X Conn	Cross connection
		x (as in 2x4)	by
		X-Sec	Cross section

1-3.3 Institutions.

<u>Abbreviation</u>	<u>Word or Words</u>
AAN	American Association of Nurserymen
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AGC	Associated General Contractors of America
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute
API	American Petroleum Institute
APWA	American Public Works Association
AREA	American Railway Engineering Association
ASHRAE	American Society of Heating, Refrigeration and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWPA	American Wood Preserver's Association
AWS	American Welding Society
AWWA	American Water Works Association
CBSC	California Building Standards Commission
CRSI	Concrete Reinforcing Steel Institute
EIA	Electronic Industries Association
EPA	Environmental Protection Agency
ETL	Electrical Testing Laboratories
FCC	Federal Communications Commission
IAPMO	International Association of Plumbing and Mechanical Officials
ICC	International Code Council
IEEE	Institute of Electrical and Electronics Engineers
IMSA	International Municipal Signal Association
ITE	Institute of Traffic Engineers
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NOAA	National Oceanic and Atmospheric Administration (Department of Commerce)
RUS	Rural Utility Service
UL	Underwriters' Laboratories, Inc.
USGS	United State Geological Survey
WFCB	Western Fire Chiefs Association

1-3.4 Building Codes. The Ventura County Building Code (VCBC) and Ventura County Fire Code (VCFC) are applicable to the Work. VCBC and VCFC adopt by reference a number of uniform and national codes. Where such codes are referenced directly in the Specifications, such references shall be to the VCBC or VCFC which adopt and modify certain provisions in the referenced codes.

<u>Abbreviation</u>	<u>Code</u>	<u>Publisher</u>
CBC	California Building Code	CBSC
DBC	Uniform Code for Abatement of Dangerous Building	ICC
UBC	Uniform Building Code	ICC
UFC	Uniform Fire Code	ICC and WFCB
UHC	Uniform Housing Code	ICC
UMC	Uniform Mechanical Code	IAPMO
UPC	Uniform Plumbing Code	IAPMO
NEC	National Electrical Code	NFPA

1-3.5 Reference Documents.

<u>Abbreviation</u>	<u>Document</u>
HDM	Highway Design Manual, State of California, Department of Transportation, Latest Edition
MUTCD	Manual on Uniform Traffic Control Devices
SSP	Standard Plans, State of California, Department of Transportation, latest edition
SPPWC	Standard Plans for Public Works Construction, Latest edition, published by BNi Building News, Los Angeles,
SSPWC	Standard Specifications for Public Works Construction, (See Section 0-1)
SSS	Standard Specifications, State of California, Department of Transportation, latest edition
VCSS	Ventura County Standard Specifications (Division 1, Sections 0 through 10, of which this section is a part)

1-4 UNITS OF MEASURE

1-4.1 General. The International System of Units, also referred to as SI or the metric system, is the principal measurement system in these Specifications and shall be used for construction, unless otherwise stated in the Contract Documents. U. S. Standard Measure, also called U. S. Customary System, are included in parenthesis. SI units and U. S. Standard Measure in parenthesis may or may not be exactly equivalent. If U. S. Standard Measures are specified for use in the Contract Documents, then all values used for construction shall be U. S. Standard Measures shown in parentheses. However, certain material Specifications and test requirements contained herein use SI units specifically and conversions to U. S. Measures have not been included in these circumstances. When U. S. Standard Measures are not included in parentheses, the SI units shall control.

Reference is also made to ASTM E 380 for definitions of various units of the SI system and a more extensive set of conversion factors.

1-4.1.1 Units for Work. Where U. S. Standard Measure units are shown on the Plans or are specified, U. S. Standard Measure shall be used for the Work.

1-4.2 Units of Measure, Equivalents and Abbreviations

One U.S. Customary Unit	(abbreviation)	Is Equal To	#	SI Unit
mil (=0.001 in)		25.4	micrometers	(μm)
inch	(in)	25.4	millimeter	(mm)
inch	(in)	2.54	centimeter	(cm)
foot	(ft)	0.3048	meter	(m)
yard	(yd)	0.9144	meter	(m)
mile		1.6093	kilometer	(km)
square foot	(ft ²)	0.0929	square meter	(m ²)
square yard	(yd ²)	0.8361	square meter	(m ²)
cubic foot	(ft ³)	0.0283	cubic meter	(m ³)
cubic yard	(yd ³)	0.7646	cubic meter	(m ³)
acre (=43,560 ft ²)		0.4047	hectare (1ha=10,000m ²)	(ha)
gallon	(gal)	3.7854	Liter	(L)
fluid ounce	(fl. oz.)	29.5735	milliliter	(mL)
pound mass (avoirdupois)	(lbs)	0.4536	kilogram	(kg)
ounce mass	(oz)	0.02835	kilogram	(kg)
ounce mass	(oz)	28.35	grams	(g)
Ton (=2000 lb avoirdupois)		0.9072	Tonne (1 Tonne = 1000 kg)	
Poise		0.10	Pascal-second	(Pa-s)
centistoke	(cs)	1.00	square millimeter/sec.	(mm ² /s)
pound force	(lbf)	4.4482	Newton	(N)
pound per square inch	(psi)	6.8948	Kilopascal	(kPa)
pound force per foot	(lbf/ft)	14.594	Newton per meter	(N/M)
foot-pound force	(ft-lbf)	1.3558	Joules	(J)
foot-pound force per second	([ft-lbf]/s)	1.3558	Watt	(W)
part per million	(ppm)	1.00	milligram/liter	(mg/L)
Degree Fahrenheit	(°F)	0.5555	Degree Celsius	(°C)

Temperature: Celsius to Fahrenheit	Temperature: Fahrenheit to Celsius
Temperature °F = (1.8 x °C) + 32	Temperature °C = (°F - 32) / 1.8

SI Units Used in Both Systems		
Ampere (A)	second (s)	Candela (cd)
Volt (V)	decibel (db)	Lumen (lm)

Common Metric Prefixes			
kilo (k)	10 ³	milli (m)	10 ⁻³
centi (c)	10 ⁻²	micro (μ)	10 ⁻⁶
		nano (n)	10 ⁻⁹
		pico (p)	10 ⁻¹²

1-5 SYMBOLS

° Degree	\overline{P} Property line	% Percent
' Feet or minutes	\overline{S} Survey line or station line	# Number
" Inches or seconds	\overline{C} Center line	/ per or of (between words)
Δ Delta, the central angle or angle between tangents		\angle Angle

SECTION 2 - SCOPE AND CONTROL OF WORK

2-1 AWARD AND EXECUTION OF CONTRACT

2-1.1 Award of Contract. The right is reserved to waive minor irregularities in the proposals and to reject any or all proposals. The award of the Contract, if it be awarded, will be to the lowest responsive, responsible Bidder, determined as provided on the Proposal Form, whose Proposal complies with all the requirements prescribed. Such award, if made, will be made within the number of Days stated in the Proposal form. If the lowest responsible Bidder refuses or fails to execute the Contract, the Agency may, within 45 additional Days, consider the next lowest Bidder to be the lowest responsive, responsible Bidder. The periods of time specified above within which the award of Contract may be made shall be subject to extension for such further period as may be agreed upon in writing by the Bidder concerned. If the Bidder's bid guarantee was in the form of a bid bond, the Bidder shall also submit a statement from the Surety that the bond has been extended for the same period.

Proposals not accompanied by a properly executed Noncollusion Affidavit required by Public Contract Code Section 7106 will be considered nonresponsive and will not be considered for award.

All bids will be compared on the basis of the quantities, amounts and unit prices, or lump sums, as shown on the Bid Proposal.

Before award, the Bidder may be required to furnish acceptable evidence of adequate capability, equipment and financial resources to adequately perform the Work. Bidders found not to be so qualified may have their bids rejected. If reasonable cause exists to believe collusion exists among Bidders, or that prices Bid are unbalanced between Bid items, any or all proposals may be rejected.

Award will not be made to a Bidder who is listed by the State Labor Commissioner as ineligible to bid, work on, or be awarded public works projects.

2-1.2 Notice of Award. Within one Day after award of Contract by the Board, the Bidder to whom Contract is awarded will be notified of award by email and telephone, or if no contact is made by telephone, then by mail. Within three business days after award of Contract, a Notice of Award will be sent, transmitting the Contract Documents to such Bidder for execution. If telephone contact is made, the Bidder may request that the Contract Documents be held in Agency's office to be picked up.

2-1.3 Execution of Contract Documents. On receipt of the Contract Documents, the Bidder shall promptly obtain the required insurance coverage, certificates of insurance, power-of-attorney and Contract bonds, execute the Contract, and transmit all required documents to the Agency.

2-1.4 Failure to Execute Documents. Should the Bidder fail to furnish Agency all required documents, properly executed, prior to the starting day of the Contract time computed as provided in 6-7.4 and stated in the Notice of Award, Agency may thereafter declare the Bidder to be in default and its Proposal guarantee forfeited.

2-1.5 Return of Proposal Guarantees. Within 10 Days after the award of the Contract, Agency will return the Proposal guarantees, other than Bidder's bonds, accompanying such of the proposals as are not to be further considered in making the award. The low and second Bidder's Proposal guarantee will be held until the Contract has been executed, after which all Proposal guarantees, except Bidders' bonds and any guarantees which have been forfeited, will be returned to the respective Bidders whose proposals they accompany.

2-2 ASSIGNMENT. No Contract or portion thereof may be assigned without consent of the Board except that the Contractor may assign money due or which will accrue to it under the Contract. If given written notice, such assignment will be recognized by the Board to the extent permitted by law, but any assignment of money shall be subject to all proper withholdings in favor of the Agency and to all deductions provided for in the Contract. All money withheld, whether assigned or not, shall be subject to being used by the Agency for completion of the Work, should the Contractor be in default.

2-3 SUBCONTRACTS.

2-3.1 General. Each Bidder shall comply with the Chapter of the Public Contract Code including Sections 4100 through 4113. The following excerpts or summaries of some of the requirements of that Chapter are included below for information.

The Bidder shall set forth in the Bid, as provided in 4104:

"(a) (1) The name, the location of the place of business, and the California contractor license number 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, 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 1 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 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater.

(2) An inadvertent error in listing the California contractor license number provided pursuant to paragraph (1) shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the corrected contractor's license number is submitted to the public entity by the prime contractor within 24 hours after the bid opening and provided the corrected contractor's license number corresponds to the submitted name and location for that subcontractor."

If the Contractor fails to specify a Subcontractor, or specifies more than one Subcontractor for the same portion of the Work to be performed under the Contract (in excess of one-half of 1 percent of the Contractor's total bid), the Contractor shall be qualified to perform that portion itself, and shall perform that portion itself except as otherwise provided in the Code.

Except as provided in Section 4107, no prime contractor, whose Bid is accepted, shall substitute any person or Subcontractor in place of the Subcontractor listed in the original bid other than for causes and by procedures established in Section 4107.5 which provides procedures to correct a clerical error in the listing of a Subcontractor.

Section 4110 provides that a Contractor violating any of the provisions of the Chapter violates the Contract and the Board may exercise the option either to cancel the Contract or assess the Contractor a penalty in an amount of not more than 10 percent of the subcontract involved, after a public hearing.

2-3.1.1 Use of Debarred Subcontractors Prohibited. The Contractor is prohibited from performing work using a Subcontractor who is listed by the State Labor Commissioner as ineligible to work on public works projects.

2-3.2 Additional Responsibilities. The Contractor shall give personal attention to the fulfillment of the Contract and shall keep the Work under its control.

Except where the required Contractor's License Class is "B", the Contractor shall perform, with its own organization, Contract work amounting to at least 50 percent of the Contract Price except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the Contract Price before computing the amount required to be performed by the Contractor with its own organization. "Specialty Items" will be identified by the Agency in the Bid or Proposal with an "[S]". Where an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

Before the work of any Subcontractor is started, the Contractor shall submit to the Engineer for approval a written statement showing the work to be subcontracted giving the name, contractor license number, registration with the Department of Industrial Relations, and business of each Subcontractor and description and value of each portion of work to be subcontracted.

2-3.3 Status of Subcontractors. Subcontractors shall be considered employees of the Contractor, and the Contractor shall be responsible for their work.

2-3.3.1 Subcontracts. The Contractor shall incorporate into all subcontracts, and the Subcontractor shall incorporate into all lower tier subcontracts, all of the Plans and Specifications which are part of the Contract between the Contractor and the Agency.

2-3.3.2 Contractor Responsible. The Contractor is responsible for properly performing and completing all Work required by the Contract whether or not it employs subcontractors for certain portions of the Work. It shall coordinate the sequence and timing of its efforts and that of its subcontractors to insure the proper and timely completion of the Work.

2-3.3.3 Specialty Contractors. Where a specialty Contractor's license is required by law or by the Specifications in order to perform certain portions of the Work, the Contractor may perform such portion with its own forces if it holds the proper license. Otherwise, it shall employ a properly licensed subcontractor to perform that portion of the Work. Such requirement to employ a subcontractor does not modify the other requirements of 2-3.

2-4 CONTRACT BONDS. Before execution of the Contract by the Agency, the Bidder shall file surety bonds with the Agency to be approved by the Board in the amounts and for the purposes noted below. Bonds issued by a Surety who is listed in the latest version of U.S. Department of Treasury Circular 570, who is authorized to issue bonds in California, and whose bonding limitation shown in said circular is sufficient to provide bonds in the amount required by the Contract shall be deemed to be approved unless specifically rejected by the Agency. Bonds from all other sureties shall be accompanied by all of the documents enumerated in Code of Civil Procedure 995.660(a). The Bidder shall pay all bond premiums, costs, and incidentals.

Each bond shall incorporate, by reference, the Contract and be signed by both the Bidder and Surety and the signature of the authorized agent of the Surety shall be notarized.

The Bidder shall provide two good and sufficient surety bonds. The "Payment Bond" (Material and Labor Bond) shall be for not less than 100 percent of the Contract Price, to satisfy claims of material suppliers and mechanics and laborers employed by it on the Work. The bond shall be maintained by the Contractor in full force and effect until the Work is accepted by the Agency, and until all claims for materials and labor are paid, and shall otherwise comply with the Civil Code.

The "Performance Bond" shall be for 100 percent of the Contract Price to guaranty faithful performance of all Work, within the time prescribed, in a manner satisfactory to the Agency, and that all materials and workmanship will be free from original or developed defects. The bond must remain in effect until the end of the warranty period set forth in 6.8-2.

Should any bond become insufficient, the Contractor shall renew the bond within 10 Days after receiving notice from the Agency.

Should any Surety at any time be unsatisfactory to the Board, notice will be given the Contractor to that effect. No further payments shall be deemed due or will be made under the Contract until a new Surety shall qualify and be accepted by the Board.

Changes in the Work, or extensions of time, made pursuant to the Contract, shall in no way release the Contractor or Surety from its obligations. Notice of such changes or extensions shall be waived by the Surety.

2-4.1 Bond Forms. Bonds shall be on forms furnished by Agency.

2-5 PLANS AND SPECIFICATIONS

2-5.1 General. The Contractor shall keep at the work site a copy of the Plans and Specifications, to which the Engineer shall have access at all times.

The Plans, Specifications, and other Contract Documents shall govern the Work. The Contract Documents are intended to be complementary and cooperative. Anything specified in the Specifications and not shown on the Plans, or shown on the Plans and not specified in the Specifications, shall be as though shown or specified in both.

The Plans shall be supplemented by such working drawings and shop drawings as are necessary to adequately control the Work.

The Contractor shall ascertain the existence of any conditions affecting the cost of the Work through reasonable examination of the work site prior to submitting the Bid..

Existing improvements visible at the work site, for which no specific disposition is made on the Plans, but which interfere with the completion of the Work, shall be removed and disposed of by the Contractor.

The Contractor shall, upon discovering any error or omission in the Plans or Specifications, immediately call it to the attention of the Engineer.

2-5.1.1 Specifications Captions. Captions accompanying specification parts, sections and paragraphs are for convenience of reference only and do not limit the content of such part, section or paragraph.

The division of the Plans into parts and the division of the Specifications into divisions and sections are for the ease of reference only and does not imply the division of work between trades or subcontractors.

2-5.2 Precedence of Contract Documents. If there is a conflict between any of the Contract Documents, the document highest in precedence shall control. The precedence shall be as follows:

- 1) Permits issued by jurisdictional regulatory agencies.
- 2) Change Orders and Supplemental Agreements; whichever occurs last.
- 3) Contract/Agreement.
- 4) Addenda.
- 5) Bid/Proposal.
- 6) Special Provisions.
- 7) Plans.
- 8) Standard Plans.
- 9) Standard Specifications.
- 10) Reference Specifications.

Detail drawings shall take precedence over general drawings.

2-5.3 Shop Drawings, Working Drawings, and Submittals.

2-5.3.1 General. Submittals shall be provided, at the Contractor's expense, as required in 2-5.3.2, 2-5.3.3 and 2-5.3.4, when required by the Plans or Special Provisions, or when requested by the Engineer.

Materials shall neither be furnished nor fabricated, nor shall any work for which submittals are required be performed, before the required submittals have been reviewed and accepted by the Engineer. Neither review nor acceptance of submittals by the Engineer shall relieve the Contractor from responsibility for errors, omissions, or deviations from the Contract Documents, unless such deviations were specifically called to the attention of the Engineer in the letter of transmittal. The Contractor shall be responsible for the correctness of the submittals.

The Contractor shall allow a minimum of 20 working days for review of submittals unless otherwise specified in the Special Provisions. Each submittal shall be accompanied by a letter of transmittal.

2-5.3.2 Working Drawings. Working drawings shall be of a size and scale to clearly show all necessary details.

Six copies and one reproducible shall be submitted. If no revisions are required, 3 of the copies will be returned to the Contractor. If revisions are required, the Engineer will return one copy along with the reproducible for resubmission. Upon acceptance, the Engineer will return 2 of the copies to the Contractor and retain the remaining copies and the reproducible.

Working drawings are required in the following subsections:

TABLE 2-5.3.2 (A)

Item	Section Number	Title	Subject
1	7-8.5.2	Sanitary Sewers	Sewage Bypass and Pumping
2	7.8.6.3	Water Pollution Control	Storm Water Pollution Prevention Plan
3	7-8.6.6	Water Pollution Control	Dewatering Plan
4	7-10.2.2	Work Area Traffic Control	Traffic Control Plan
5	7-10.4.2.2	Safety	Trench Shoring
6	207-8.4	Joints	Vitrified Clay Pipe
7	207-10.2.1	General	Fabricated Steel Pipe
8	300-3.2	Cofferdams	Structure Excavation & Backfill
9	303-1.6.1	General	Falsework
10	303-1.7.1	General	Placing Reinforcement
11	303-3.1	General	Prestressed Concrete Construction
12	304-1.1.1	Shop Drawings	Structural Steel
13	304-1.1.2	Falsework Plans	Structural Steel
14	304-2.1	General	Metal Hand Railings
15	306-2.1	General	Jacking Operations
16	306-3.1	General	Tunneling Operations
17	306-3.4	Tunnel Supports	Tunneling Operations
18	306-6	Remodeling Existing Sewer Facilities	Polyethylene Liner Installation
19	306-8	Microtunneling	Microtunneling Operations

Working drawings listed above as Items 4, 5, 8, 9, 11, 12, 13, 15 and 18 shall be prepared by a Civil or Structural Engineer registered by the State of California.

2-5.3.3 Shop Drawings. Shop drawings are drawings showing details of manufactured or assembled products proposed to be incorporated into the Work. Shop drawings required shall be as specified in the Special Provisions.

2-5.3.4 Supporting Information. Supporting information is information required by the Specifications for the purposes of administration of the Contract, analysis for verification of conformance with the Specifications, the operation and maintenance of a manufactured product or system to be constructed as part of the Work, and other information as may be required by the Engineer. Six copies of the supporting information shall be submitted to the Engineer prior to the start of the Work unless otherwise specified in the Special Provisions or directed by the Engineer. Supporting information for systems shall be bound together and include all manufactured items for the system. If resubmittal is not required, three copies will be returned to the Contractor. Supporting information shall consist of the following and is required unless otherwise specified in the Special Provisions:

- 1) List of Subcontractors per 2-3.2.
- 2) List of Materials per 4-1.4.
- 3) Certificates of Compliance per 4-1.5.
- 4) Construction Schedule per 6-1.
- 5) Spill Prevention and Emergency Response Plan per 7-8.5.3
- 6) Confined Space Entry Program per 7-10.4.5.1
- 7) Lean concrete base mix designs per 200-4
- 8) Concrete mix designs per 201-1.1.
- 9) Asphalt concrete mix designs per 203-6.1.
- 10) Pipeline layout diagrams per 207-2.1
- 11) Equipment and materials list per 307-1
- 12) Controller cabinet wiring diagrams per 307-17.2.2
- 13) Data, including, but not limited to, catalog sheets, manufacturer's brochures, technical bulletins, specifications, diagrams, product samples, and other information necessary to describe a system, product or item. This information is required for irrigation systems, street lighting systems, and traffic signals, and may also be required for any product, manufactured item, or system.

2-5.4 Record Drawings. The Contractor shall prepare and maintain a set of prints in the Engineer's Field Office on which the locations and description of all plumbing, mechanical, and electrical facilities, which were not detailed fully on the Plans, are marked in colored pencil. Such prints shall also indicate any authorized changes from the original Plans. Such prints shall be furnished to the Engineer before final Acceptance of the Work.

2-6 WORK TO BE DONE. The Contractor shall perform all work necessary to complete the Contract in a satisfactory manner. Unless otherwise provided, it shall furnish all materials, equipment, tools, labor and incidentals necessary to complete the Work.

All work under the Contract shall be performed in accordance with the highest standards prevailing in the trades unless otherwise specified on the Plans or in the Special Provisions. Unless otherwise specified, it is the intent that the Contractor will construct a complete facility ready for use.

2-6.1 Manufacturer's Recommendations. Where the manufacturer of any materials or equipment provides written recommendations or instructions for its use or method of installation (including labels, tags, manuals, or trade literature), such recommendations or instructions shall be complied with except where the Contract Documents specifically require deviations.

2-6.2 Testing of Installed Components. Where the specifications provide that any component of the Work is to be tested, calibrated or adjusted during or after installation, such testing shall be performed by a qualified firm, approved by the Engineer. The firm performing the testing or calibration shall be employed by and paid for by the Contractor.

2-6.3 Training of Agency Personnel. Where the specifications provide for training of Agency personnel in the use or maintenance of any component of the Work, the Contractor shall arrange for and pay for competent personnel to perform the training. Contractor shall schedule the training with the Engineer.

2-7 SUBSURFACE DATA. All soil and test hole data, groundwater elevations, and soil analyses shown on the Plans or included in the Specifications apply only at the location of the test holes and to the depths shown. Soil test reports for test holes which have been drilled are available for inspection at the office of the Engineer. Additional subsurface exploration may be performed by Bidders or the Contractor at their own expense. The indicated groundwater elevation is that existing at the date specified in the data. It is the Contractor's responsibility to determine and allow for the groundwater elevation on the date the Work is performed. A difference in groundwater elevation between what is shown in soil boring logs and what is actually encountered during construction will not be considered as a basis for Extra Work per 3-3.

Opinions, recommendations or conclusions contained in any soils report, soil boring logs, subsurface materials investigation, geological report or other similar studies, tests or reports, prepared for the Agency, are not a part of the Contract. Contractor shall be responsible for forming its own opinions and conclusions from the facts set forth in such reports.

2-8 RIGHTS-OF-WAY. Rights-of-way, easements or rights-of-entry for the Work will be provided by the Agency. Unless otherwise provided, the Contractor shall make arrangements, pay for, and assume all responsibility for acquiring, using, and disposing of additional work areas and facilities temporarily required. The Contractor shall indemnify and hold the Agency harmless from all claims for damages caused by such actions.

2-9 SURVEYING

2-9.1 Permanent Survey Markers. The Contractor shall notify the Engineer at least 7 Days before starting work to allow for the preservation of survey monuments, lot stakes (tagged), and bench marks. The Engineer, or the owner at its cost, shall file a Corner Record Form referencing survey monuments subject to disturbance in the Office of the County Surveyor prior to the start of construction and also prior to the completion of construction for the replacement of survey monuments. The Contractor shall not disturb survey monuments, lot stakes (tagged), or bench marks without the consent of the Engineer or the owner on Private Contracts. The Contractor shall bear the expense of replacing any that may be disturbed without permission. Replacement shall be done only under the direction of the Engineer by a Licensed Land Surveyor or a Registered Civil Engineer authorized to practice land surveying within the state.

When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the Contractor shall adjust the monument cover to the new grade within 7 Days of finished paving unless otherwise specified.

2-9.2 Survey Service. The Engineer will set only the horizontal and vertical control survey points shown on the Plans. These will be set prior to the commencement of construction. The Contractor shall preserve these points as well as any other surveys established by the Engineer for use by the Contractor for the duration of their usefulness. If any survey points established by Engineer are lost or disturbed and need to be replaced, such replacement shall be by the Engineer at the expense of the Contractor. The Contractor shall employ engineers or surveyors to perform adequate surveys and staking necessary to construct the Work to the lines, elevations and grades shown on the Plans and for the Engineer's use in checking such work. Copies of the field notes or diagrams used in setting stakes shall be promptly furnished to the Engineer.

2-9.2.1 Open Areas. Where dimensions are not given on the Plans for parking lots, landscaped areas or graded areas, distances shall be scaled. Unless otherwise indicated, straight grades and smooth vertical curves shall be set between indicated elevations. Finished surfaces shall be sloped to drain in order to eliminate ponding of water.

2-9.2.2 Utilities. Section 5-5.1 requires the Contractor's cooperation during the relocation of utilities, which may require the setting of lines and grades when needed by utility owners performing relocations.

2-9.3 Contractor's Surveys. Surveying by private engineers and surveyors on the Work shall conform to the quality and practice required by the Engineer.

2-9.3.1 Errors in Surveys. The Contractor is responsible for the accuracy of all surveys except those performed by the Engineer. To assure that a survey point set by the Engineer has not been disturbed since it was set and that it was accurately set, all surveys by the Contractor shall be based on at least two survey points set by the Engineer or by other governmental surveys, in accordance with good survey practice. Should discrepancies be found between such points, the Engineer shall be notified and construction shall not proceed until the discrepancy has been resolved.

2-9.4 Line and Grade. All Work upon completion shall conform to the lines, elevations, and grades shown on the Plans.

2-9.5 Quantity Surveys. The Engineer will perform all quantity surveys for payment purposes, however, in performing such quantity surveys, it may make use of surveys performed by the Contractor.

2-9.6 Payment for Surveys. Payment for performing all of the surveying and staking as required by the Specifications and such additional surveying and staking as required by the Contractor will be made at the lump sum price set forth in the Proposal and shall be full compensation for furnishing all labor, equipment, instruments and materials necessary to perform the Work. If no bid item for surveying is included in the Proposal, the cost of surveying shall be included in the prices bid for other applicable items of work.

2-10 AUTHORITY OF BOARD AND ENGINEER. The Board has the final authority in all matters affecting the Work. Within the scope of the Contract, the Engineer has the authority to enforce compliance with the Plans and Specifications. The Contractor shall promptly comply with instructions from the Engineer or its authorized representative.

On all questions relating to quantities, the acceptability of material, equipment, or work, the execution, progress or sequence of work, and the interpretation of Specifications or drawings, the decision of the Engineer is final and binding, and shall be precedent to any payment under the Contract, unless otherwise ordered by the Board.

2-10.1 Decisions in Writing. Any and all decisions of the Engineer interpreting Specifications or drawings shall be in writing. Any purported "interpretation" which is not in writing shall not be binding upon the Agency and should not be relied upon by the Contractor.

2-11 INSPECTION

The Work is subject to inspection and approval of the Engineer. The Contractor shall notify the Engineer before noon of the working day before inspection is required. Work shall be done only in the presence of the Engineer, unless otherwise authorized. Any work done without proper inspection will be subject to rejection. The Engineer and any authorized representatives shall at all times have access to the Work during its construction at shops and yards as well as the Work site. The Contractor shall provide every reasonable facility for ascertaining that the materials and workmanship are in accordance with these specifications. Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all conditions of the Contract.

2-11.1 Permit Inspections. The Contractor shall arrange for code compliance inspections by all agencies issuing permits for the Work. The Work shall not continue beyond mandatory inspection points without clearance from the controlling agency. Each agency involved shall be notified in accordance with the code they enforce or in accordance with their standard operating procedures. No extensions of time will be granted for delays occasioned by such inspections except where, through no fault of the Contractor, the inspection is delayed more than one Day beyond normal response time after proper notification has been given. It shall be the Contractor's responsibility to see that any required inspection record card is signed off before proceeding with the next phase of the Work and completely signed off on completion of the Work.

2-11.2 Structural Observation. When the plans indicate that "Structural Observation" of specific work is required prior to Permit Inspection, Contractor shall notify Engineer, in writing, at least five working days prior to the date Contractor plans to have the work ready for structural observation. If the work is not ready for structural observation on the date indicated, Contractor shall reimburse Agency the cost of structural observer's visit to the Work site. If the work to be observed is substantially complete but is found to need correction before approval by the structural observer, Contractor shall give notice of a new date, as required above.

2-12 SPECIAL NOTICES. When specified in the Specifications or as directed by the Engineer, any notice required to be given in accordance with this subsection shall be in writing, dated, and signed by the Contractor or the Engineer. Such notices shall be served by any of the following methods:

- a) Personal delivery with proof of delivery which may be made by declaration under penalty of perjury by any person over the age of 18 years. The proof of delivery shall show that delivery was performed in accordance with these provisions. Service shall be effective on the date of delivery. Notices given to the Contractor by personal delivery may be made to the Contractor's authorized representative at the Work site; or
- b) Certified mail addressed to the mailing address of the recipient postage prepaid; return receipt requested. Service shall be effective on the date of the receipt of the mailing.

Simultaneously, the Agency may send the same notice by regular mail. If a notice that is sent by certified mail is returned unsigned, then delivery shall be effective pursuant to regular mail, provided the notice that was sent by regular mail is not returned.

2-13 AGENCY PERSONNEL AND AUTHORITY

2-13.1 General. The Board has complete authority for the project within the limits prescribed by law. Pursuant to resolutions duly adopted by the Board, the authority to perform certain functions has been delegated to the Director of Public Works. Agency staff personnel and Consultants delegated thereto by the Director are authorized to perform functions limited as set forth in the following list of personnel and designated duties.

2-13.2 Engineer. The Director of the Public Works Agency of the County of Ventura is the Engineer and has general authority to administer the Contract. The Engineer has the following specific authority:

(a) To issue Contract Change Orders (CCO) and to settle claims subsequent to Acceptance as follows:

<u>Original Contract Amount</u>	<u>Maximum Amount of any Change Order or Claim Settlement</u>
\$50,000 or less	\$5,000
greater than \$50,000 and not over \$250,000	10% of the original Contract amount
greater than \$250,000 and not over \$3,950,000	\$25,000 plus 5% of the original Contract cost in excess of \$250,000.
greater than \$3,950,000	\$210,000

CCOs and claim settlements exceeding the amounts set forth above require Board approval.

- (b) To make final adjustments of quantities (FAQ) on unit price items.
- (c) To accept the Work when the Contractor has completed all obligations of the Contract, in accordance with the Plans, Specifications and other Contract Documents. The Engineer also has authority to make and record the Notice of Completion.
- (d) To approve progress and final payments under the Contract, including the provisions for withholding funds.
- (e) To determine whether performance on the Work is satisfactory. Satisfactory performance includes compliance with all contract requirements.
- (f) To approve the substitution of a Subcontractor, where allowed by law, if the listed Subcontractor does not object when notified.
- (g) To suspend the Work for the benefit of the Agency.
- (h) In the absence of the Agency Director, a Public Works Agency Department Director, as Deputy Director of Public Works, may exercise the Engineer's authority. Such action will be indicated by "Acting" with the Department Director's signature.

2-13.3 Department Director (Public Works Agency). The Department Director responsible for the project is designated in the Notice to Proceed. The Department Director has the following authority:

(a) To issue Contract Change Orders (CCO) as follows:

<u>Original Contract Amount</u>	<u>Maximum Amount of any Change Order</u>
Less than \$500,000	\$5,000
\$500,000 to \$1,000,000	1% of Bid Price
Greater than \$1,000,000	\$10,000

- (b) To issue extensions of Contract time in accordance with the Contract Documents.
- (c) To make final adjustment of quantities where the total does not exceed the amounts listed in (a) above.
- (d) To approve the substitution of subcontractors, where allowed by law, if the listed Subcontractor does not object when notified.
- (e) To determine when the Work has been completed and acknowledge in writing the completion of the Work.

2-13.4 Project manager. The Project manager responsible for the project is designated in the Notice to Proceed. This person may also be referred to as Project Engineer. The Project manager has the following authority:

- (a) To interpret the Plans and Specifications.
- (b) To make minor changes in the location or features of the Work where no change in cost is involved. Such changes in cost may not be the net of multiple changes.
- (c) To approve substitutes for material and equipment specified by proprietary names when such material and equipment meet the Contract requirements.
- (d) To approve shop drawings and submittals.
- (e) To issue stop work orders when necessary to enforce the provisions of the Contract.
- (f) To make determinations of each Working Day to be charged against the Contract time in accordance with 6-7.3.
- (g) To take over a portion of the Work for Agency's use in accordance with 6-10.
- (h) To receive all correspondence and other documents from the Contractor.
- (i) To inspect the Work and perform Final Inspection subject to review by the Department Director and the Engineer.

2-13.5 Inspector. One or more inspectors will be assigned to the project by the Project manager. Substitutes may be used during absence of the assigned inspector. The Inspector has the following authority subject to review by the Project manager, Department Director and the Engineer:

- (a) To view and inspect the Work, sample and test components (at the Work site and at offsite manufacturing locations), and to discuss the Work with the Contractor's field representative.
- (b) To determine compliance with the Plans, Specifications and other Contract Documents and to issue warnings of noncompliance.
- (c) To issue stop work notices in the following two instances only:
 - 1) Where a safety hazard exists that has an immediate potential for serious injury or death.
 - 2) Where the operation in progress, if continued for even a short period of time, could be adverse to the Agency's interests.

2-13.6 Other Agency Personnel and Consultants.

2-13.6.1 Materials Engineer. The Materials Engineer is designated in the Notice to Proceed. The Materials Engineer may assign one or more Materials Inspectors to the project.

Materials Inspectors have authority to sample and test material at the Work site and at offsite manufacturing or storage locations. They may furnish available written test results to the Contractor's field representative. At batch plants, they may issue warnings of noncompliance, but stop notices require the signature of the Materials Engineer or Project manager.

2-13.6.2 Surveyors & Technicians. Surveyors and technicians shall have free access to the site to perform their duties but have no authority related to Contract administration.

2-13.6.3 Other Persons. Other Agency personnel who are not involved in construction administration and the general public may be present at the site because it is their present place of work, as client/customers, as visitors, as future users of the facility, or as persons who will maintain the completed facility. Where the facility is to continue in use during construction, work access for Agency workers and client/customers shall be maintained as provided in the Special Provisions. Where the facility (or portion where construction is being performed) is not in use during construction, admittance to the Work site by Agency personnel not involved in construction administration and visitors may be allowed by the Contractor or by the inspector, subject to compliance with safety regulations. Such persons have no authority under the Contract and the Agency is not responsible for their comments, suggestions or directions.

2-13.6.4 Consultants. Consultants hired by the Agency shall have free access to the site to perform their duties but have no authority related to Contract administration, unless such duties are specifically identified in writing to the Contractor. When so identified, Consultant may perform the duties of certain Agency personnel described above.

SECTION 3 - CHANGES IN WORK

3-1 CHANGES REQUESTED BY THE CONTRACTOR

3-1.1 General. Changes in specified methods of construction may be made at the Contractor's request when approved in writing by the Engineer. Changes in the Plans and Specifications, requested in writing by the Contractor, which do not materially affect the Work and which are not detrimental to the Work or to the interests of the Agency, may be granted by the Board to facilitate the Work, when approved in writing by the Engineer. Nothing herein shall be construed as granting a right to the Contractor to demand acceptance of such changes.

3-1.2 Payment for Changes Requested by the Contractor. If such changes are granted, they shall be made at a reduction in cost or at no additional cost to the Agency. All costs to the Agency in reviewing the proposed change, or testing materials involved therein, shall be paid for by the Contractor, whether or not the change is approved.

3-2 CHANGES INITIATED BY THE AGENCY

3-2.1 General. The Agency may change the Plans, Specifications, character of the Work, or quantity of work, provided the total arithmetic dollar value of all such changes, both additive and deductive, does not exceed 25 percent of the Contract Price. Should it become necessary to exceed this limitation, the change shall be by written Supplemental Agreement between the Contractor and Agency, unless both parties agree to proceed with the change by Change Order.

Change orders shall be in writing and state the dollar value of the change or establish method of payment, any adjustment in Contract time, and, when negotiated prices are involved, shall provide for the Contractor's signature indicating its acceptance.

3-2.2 Payment for Changes Initiated by the Agency.

3-2.2.1 Contract Unit Prices. If a change is ordered in an item of work covered by a Contract unit price, and such change does not involve a substantial change in the character of the Work from that shown on the Plans or included in the Specifications, an adjustment in payment will be made based upon the increase or decrease in quantity and the Contract unit price. In the case of such an increase or decrease in a Major Bid Item, the use of this basis for the adjustment of payment will be limited to that portion of the change which, together with all previous changes to that item, is not in excess of 25% of the total cost of such item based on the original quantity and Contract unit price.

If a change is ordered in an item of work covered by a Contract unit price, and such change does involve a substantial change in the character of the Work from that shown on the Plans or included in the Specifications, an adjustment in payment will be made in accordance with 3-2.2.3.

Should any Contract item be deleted in its entirety, payment will be made only for actual costs incurred prior to notification of such deletion.

3-2.2.2 Stipulated Unit Prices. Stipulated unit prices are those established by the Agency in the Contract Documents, as distinguished from Contract unit prices submitted by the Contractor. Stipulated unit prices may be used for the adjustment of Contract changes.

3-2.2.3 Pricing. Adjustments in payments for changes other than those set forth in 3-2.2.1 and 3-2.2.2 will be determined by agreement between Contractor and Agency. If unable to reach agreement, the Agency may direct the Contractor to proceed on the basis of Extra Work in accordance with 3-3 or as set forth in 3-2.2.4.

3-2.2.4 Non-Agreed Prices. Agency may issue a change order directing the Contractor to proceed at a price set by the Agency or on the basis of Extra Work. If the Agency sets a price for the work covered by the change order, Contractor is entitled to payment for such work in accordance with 3-3 to the extent payment in accordance with 3-3 exceeds the price set by the Agency.

3-3 EXTRA WORK

3-3.1 General. New or unforeseen work will be classed as "Extra Work" when the Engineer determines that it is not covered by Contract Unit Prices or Stipulated Unit Prices.

3-3.2 Payment.

3-3.2.1 General. When the price for the Extra Work cannot be agreed upon, the Agency will pay for the Extra Work based on the accumulation of costs as provided herein.

3-3.2.2 Basis for Establishing Costs

(a) Labor. The cost of labor will be the current cost for wages prevailing for each craft or type of workers performing the Extra Work at the time the Extra Work is done, plus payment of health and welfare, pension, vacation, apprenticeship funds, and other direct costs included in the prevailing rates applicable to the project, as well as assessments or benefits required by lawful collective bargaining agreements. To the total of these labor costs, the labor surcharge set forth in the current CALTRANS Labor Surcharge and Equipment Rental Rates publication shall be applied.

The use of a labor classification which would increase the Extra Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs.

Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for the equipment rental. The labor cost for foremen shall be proportioned to all of their assigned work and only that applicable to Extra Work shall be paid. A foreman is defined as a lead working journeyman.

Nondirect labor costs including superintendence, payroll taxes, all types of insurance, and all other labor costs, not specifically provided for, shall be considered to be paid for as part of the markup of 3-3.2.3(a)(1).

(b) Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the Work site in the quantities involved, plus sales tax, freight and delivery.

The Agency reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the Agency.

(c) Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of \$200 or less.

Regardless of ownership, the rates to be used for determining equipment rental costs shall not exceed the following:

- (1) For equipment that is listed in the current CALTRANS Labor Surcharge and Equipment Rental Rates publication, the rates shown therein. The right of way delay and overtime/multiple shift factors contained therein shall be used as applicable.
- (2) For equipment not listed in said CALTRANS publication, the listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed.
- (3) For equipment rental that includes operators and helpers, the applicable cost from (1) or (2) above, plus the applicable labor costs as determined in accordance with (a) above.

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Necessary loading and transportation costs for equipment used on the Extra Work shall be added to the other costs.

If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the Agency than holding it at the work site, it shall be returned, unless the Contractor elects to keep it at the work site at no expense to the Agency.

All equipment shall be acceptable to the Engineer, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and manufacturer's approved modifications shall be used to classify equipment and it shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

The reported rental rates for equipment already at the work site shall be for the duration of its use on the Extra Work, commencing at the time it is first put into actual operation on the Extra Work, plus the time required to move it from its previous site, and move it back to its previous site or to a closer site of next use.

3-3.2.2 Basis for Establishing Costs (Continued)

(d) Other Items. The Agency may authorize other items which may be required on the Extra Work. Such items include labor, service, material and equipment which are different in their nature from those required for the Work specified in the Contract and which are of a type not ordinarily available from the Contractor or any of its subcontractors.

Invoices covering all such items in detail shall be submitted with the request for payment.

(e) Invoices. Vendors' invoices for material, equipment rental, and other expenditures, shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, the Agency may establish the cost of the item involved at the lowest price which was current at the time of the report.

3-3.2.3 Markup

(a) Work by Contractor. The following percentage shall be added to the Contractor's costs and shall constitute the markup for all overhead and profits, and all other cost not specifically provided for:

- (1) Labor 33%
- (2) Materials 15%
- (3) Equipment Rental 15%
- (4) Other Items and Expenditures ... 15%

To the sum of the cost and markups provided for in this section, 1 percent shall be added as compensation for bonding.

(b) Work by Subcontractor. When all or any part of the Extra Work is performed by a Subcontractor, the markup established in 3-3.2.3(a) shall be applied to the Subcontractor's actual cost of such work. A markup of 10% on the first \$5,000 of the subcontracted portion of the Extra Work and a markup of 5% on work in excess of \$5,000 of the subcontracted portion of the Extra Work may be added by the Contractor.

3-3.3 Daily Extra Work Reports by Contractor. When the price for the Extra Work cannot be agreed upon, the Contractor shall submit a Daily Extra Work Report to the Engineer on forms furnished by the Agency, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day, and for other services and expenditures when authorized. Failure to submit the Daily Extra Work Report, showing the labor and equipment hours and the quantity of materials used, by the close of the next Working Day may waive any rights for that day. Failure to submit fully completed Daily Extra Work Reports, with the required supporting documentation, within ten calendar days after the Engineer makes a written request for the such reports shall waive all rights for the work covered by the requested reports. An attempt shall be made to reconcile the Daily Extra Work Report daily, and it shall be signed by the Engineer and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the Daily Extra Work Report. Daily Extra Work Reports by Subcontractors or others shall be submitted through the Contractor.

The Daily Extra Work Report shall:

- 1) Show names of workers, classifications, and hours worked.
- 2) Describe and list quantities of materials used.
- 3) Show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable.
- 4) Describe other services and expenditures in such detail as the Agency may require.

In addition to the Daily Extra Work Reports, the Contractor shall furnish Certified Payroll Records for the labor included in the reports before payment will be made.

3-4 CHANGED CONDITIONS. The Contractor shall notify the Engineer in writing of the following work site conditions, hereinafter called changed conditions, promptly upon their discovery and before they are disturbed:

- 1) Subsurface or latent physical conditions differing materially from those represented in the Contract;
- 2) Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character being performed; and
- 3) Material differing from that represented in the Contract which the Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law.

The Engineer will promptly investigate conditions which appear to be changed conditions. If the Engineer determines that the conditions are changed conditions and that they will materially increase or decrease the costs of any portion of the Work, a Change Order will be issued adjusting the compensation for such portion of the Work in accordance with 3-2.2. If the Engineer determines that conditions are changed conditions and that they will materially affect the performance time, the Contractor, upon submitting a written request, will be granted an extension of time subject to the provisions of 6-6.

If the Engineer determines that the conditions of which it has been notified by the Contractor do not justify an adjustment in compensation, the Contractor will be so notified in writing. This notice will also advise the Contractor of its obligation to notify the Engineer, in writing, if the Contractor disagrees.

Should the Contractor disagree with such determination, it may submit a written notice of potential claim to the Engineer before commencing the disputed work. In the event of such a disagreement, the Contractor shall not be excused on account of that disagreement from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. However, the Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties. The Contractor shall proceed as provided in 3-5.

The Contractor's failure to give notice of changed conditions promptly upon their discovery and before they are disturbed shall constitute a waiver of all claims in connection therewith.

3-5 DISPUTED WORK. If the Contractor and the Agency are unable to reach agreement on disputed work, the Agency may direct the Contractor to proceed with the Work. Payment shall be as later determined by mediation or arbitration, if the Agency and the Contractor agree thereto, or as fixed in a court of law.

Although not to be construed as proceeding under Extra Work provisions, the Contractor shall keep and furnish records of disputed work in accordance with 3-3.

SECTION 4 - CONTROL OF MATERIALS

4-1 MATERIALS AND WORKMANSHIP

4-1.1 General. All materials, parts, and equipment furnished by the Contractor in the Work shall be new, high grade, and free from defects. Quality of work shall be in accordance with the generally accepted standards. Material and work quality shall be subject to the Engineer's approval.

Materials and work quality not conforming to the requirements of the Specifications shall be considered defective and will be subject to rejection. Defective work or material, whether in place or not, shall be removed immediately from the site by the Contractor, at its expense, when so directed by the Engineer.

If the Contractor fails to replace any defective or damaged work or material after reasonable notice, the Engineer may cause such work or materials to be replaced. The replacement expense will be deducted from the amount to be paid to the Contractor.

Used or secondhand materials, parts, and equipment may be used only if permitted by the Specifications.

4-1.1.1 Materials Furnished by Agency. Materials furnished by the Agency will be available at locations designated in the Special Provisions or if not designated in the Special Provisions, they will be delivered to a single location of Agency's choice within the project area. They shall be hauled to the site of installation by the Contractor at its expense, including any necessary loading and unloading that may be involved. The cost of handling and placing materials furnished by the Agency shall be considered as included in the price paid for the Contract item involving such furnished materials.

The Contractor will be held responsible for all materials furnished to it, and it shall pay all demurrage and storage charges. Furnished materials, after delivery to Contractor, lost or damaged from any cause whatsoever shall be replaced by the Contractor. The Contractor will be liable to the Agency for the cost of replacing lost or damaged furnished material and such costs may be deducted from any monies due or to become due the Contractor.

4-1.2 Protection of Work and Materials. The Contractor shall provide and maintain storage facilities and employ such measures as will preserve the specified quality and fitness of materials to be used in the Work. Stored materials shall be reasonably accessible for inspection. The Contractor shall also adequately protect new and existing work and all items of equipment for the duration of the Contract.

The Contractor shall not, without the Agency's consent, assign, sell, mortgage, hypothecate, or remove equipment or materials which have been installed or delivered and which may be necessary for the completion of the Contract.

4-1.3 Inspection Requirements

4-1.3.1 General. Unless otherwise specified, inspection is required at the source for asphalt concrete pavement mixtures, structural concrete, metal fabrication, metal casting, welding, concrete pipe manufacture, protective coating application, and similar shop or plant operations. Steel pipe in sizes less than 450 mm (18 inches), vitrified clay and cast iron pipe in all sizes are acceptable upon certification as to compliance with the Specifications, subject to sampling and testing by the Agency. Standard items of equipment such as electric motors, conveyors, elevators, plumbing fixtures, etc., are subject to inspection at the Work site only. Special items of equipment such as designed electrical panel boards, large pumps, sewage plant equipment, etc., are subject to inspection at the source, normally only for performance testing. The Specifications may require inspection at the source for other items not typical of those listed in this section.

4-1.3.2 Inspection of Materials Not Locally Produced. When the Contractor intends to purchase materials, fabricated products, or equipment from sources located more than 80 km (50 miles) outside the geographical limits of the Agency, an inspector or accredited testing laboratory (approved by the Engineer), shall be engaged by the Contractor at its expense, to inspect the materials, equipment or process. This approval shall be obtained before producing any material or equipment. The inspector or representative of the testing laboratory shall evaluate the materials for conformance with the Plans and Specifications. The Contractor shall forward reports required by the Engineer. No materials or equipment shall be shipped nor shall any processing, fabrication or treatment of such materials be done without proper inspection by the approved agent. Approval by said agent shall not relieve the Contractor of responsibility for complying with the Contract requirements.

4-1.3.3 Inspection by the Agency. The Agency will provide all inspection and testing laboratory services within 80 km (50 miles) of the geographical limits of the Agency.

4-1.3.4 Certificates of Compliance. The Engineer may require certificates of compliance with the Specifications for materials or manufactured items produced outside of the Work site. Such certificates will not relieve the Contractor from the requirements of providing material and manufactured items complying with the Specifications even though they have been incorporated into the Work.

4-1.4 Tests of Materials. Before incorporation in the Work, the Contractor shall submit samples of materials, as the Engineer may require, at no cost to the Agency. The Contractor, at its own expense, shall deliver the materials for testing to the place and at the time designated by the Engineer. Unless otherwise provided, all initial testing and a reasonable amount of retesting shall be performed under the direction of the Engineer, and at no expense to the Contractor. If the Contractor is to provide and pay for testing, the Specifications will so state.

The Contractor shall notify the Engineer in writing, at least 15 Days in advance, of its intention to use materials for which tests are specified, to allow sufficient time to perform the tests. The notice shall name the proposed supplier and source of material.

If the notice of intent to use is sent before the materials are available for testing or inspection, or is sent so far in advance that the materials on hand at the time will not last but will be replaced by a new lot prior to use on the Work, it will be the Contractor's responsibility to re-notify the Engineer when samples which are representative may be obtained.

4-1.5 Certification. The Engineer may waive materials testing requirements of the Specifications and accept the manufacturer's written certification that the materials to be supplied meet those requirements. Materials test data may be required as part of the certification.

4-1.6 Trade Names or Equals. The Contractor may supply any of the materials specified or offer an equivalent. The Engineer shall determine whether the material offered is equivalent to that specified. Adequate time shall be allowed for the Engineer to make this determination.

Whenever any particular material, process, or equipment is indicated by patent, proprietary or brand name, or by name of manufacturer, such wording is used for the purpose of facilitating its description and shall be deemed to be followed by the words **or equal**. A listing of materials is not intended to be comprehensive, or in order of preference. The Contractor may offer any material, process, or equipment considered to be equivalent to that indicated. The substantiation of offers shall be submitted as provided in the Contract Documents.

The Contractor shall, at its expense, furnish data concerning items offered by it as equivalent to those specified. The Contractor shall have the material tested as required by the Engineer to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, dimensions, service, and suitability are such that the item will fulfill its intended function.

Test methods shall be subject to the approval of the Engineer. Test results shall be reported promptly to the Engineer, who will evaluate the results and determine if the substitute item is equivalent. The Engineer's findings shall be final. Installation and use of a substitute item shall not be made until approved by the Engineer.

If a substitute offered by the Contractor is not found to be equal to the specified material, the Contractor shall furnish and install the specified material.

The specified Contract completion time shall not be affected by any circumstance developing from the provisions of this section.

4-1.6.1 Compatibility with Design. Where the size, configuration, weight, fastening locations, fastening strength, utility rough-in locations, and utility capacities of equipment or devices offered by the Contractor as equivalents do not conform to those provided for in the Contract Documents or those which are necessary for equipment or devices indicated by brand names, the Contractor shall bear all costs of redesign and changes in construction necessary to adapt the offered equipment or device to the Work.

Equipment or devices will not be considered "equal" where the life cycle cost of operation, utilities and maintenance of the offered alternate is greater than those listed by brand names. Life cycle costs shall mean utility charges (demand and usage charges), maintenance, operating personnel and replacement (equipment, installation and down time expenses) all reduced to an average annual rate using the current interest rate earned on funds invested by the County Treasurer.

4-1.6.2 Trade Names Listed. Where the Agency has listed products by brand or trade name on the Plans or in the Specifications, or both, this shall not be construed as meaning every product may be used without furnishing shop drawings, without redesign of the facility or without a change in utility rough-in requirements.

Where use of products listed on the Plans or in the Specifications, or both, or where use of a substitute proposed as an "equal" product requires shop drawings, redesign of the facility, or revisions in the size and location of rough-in utility connections, or in connecting work, the Contractor shall provide any necessary shop drawings, or shall cause the preparation of any necessary redesign or revisions to the Plans at its own expense and shall bear the full cost of any necessary additional construction or reconstruction work. No work described in shop drawings, a redesign, or a revision to the Plans shall be undertaken until such shop drawings, redesign, or revisions have been approved by the Engineer. Any proposed redesign or revision to the Plans shall be accompanied by complete computations and details prepared by an appropriate licensed design professional.

4-1.7 Weighing Equipment. All scales used for proportioning materials shall be inspected for accuracy and certified within the past 12 months by the State of California Bureau of Weights and Measures, by the County Director or Sealer of Weights and Measures, or by a scale mechanic registered with or licensed by the County.

The accuracy of the work of a scale service agency, except as stated herein, shall meet the standards of the California Business and Professions Code and the California Code of Regulations pertaining to weighing devices. A certificate of compliance shall be presented, prior to operation, to the Engineer for approval and shall be renewed whenever required by the Engineer at no cost to the Agency.

All scales shall be arranged so they may be read easily from the operator's platform or area. They shall indicate the true net weight without the application of any factor. The figures of the scales shall be clearly legible. Scales shall be accurate to within 1 percent when tested with the plant shut down. Weighing equipment shall be so insulated against vibration or moving of other operating equipment in the plant area that the error in weighing with the entire plant running will not exceed 2 percent for any setting nor 1.5 percent for any batch.

4-1.8 Calibration of Testing Equipment. Testing equipment, such as, but not limited to, pressure gages, metering devices, hydraulic systems, force (load) measuring instruments, and strain-measuring devices shall be calibrated by a testing agency acceptable to the Engineer at intervals not to exceed 12 months and following repairs, modification, or relocation of the equipment. Calibration certificates shall be provided when requested by the Engineer.

SECTION 5 - UTILITIES

5-1 LOCATION. The Permittee (in the case of Private Contracts) and the Agency (in the case of Cash or Assessment Act Contracts), will search known substructure records and furnish the Contractor with copies of documents which describe the location of utility substructures, or will indicate on the Plans for the project those substructures (except for service connections) which may affect the Work. Information regarding removal, relocation, abandonment, or installation of new utilities will be furnished to prospective bidders.

Where underground main distribution conduits such as water, gas, sewer, electric power, telephone, or cable television are shown on the Plans, the Contractor shall assume that every property parcel will be served by a service connection for each type of utility.

As provided in Section 4216 of the California Government Code, at least 2 working days prior to commencing any excavation, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California) and obtain an inquiry identification number.

The California Department of Transportation is not required by Section 4216 to become a member of the regional notification center. The Contractor shall contact it for location of its subsurface installations.

The Contractor shall determine the location and depth of all utilities, including service connections, which have been marked by the respective owners and which may affect or be affected by its operations. If no pay item is provided in the Contract for this work, full compensation for such work shall be considered as included in the prices bid for other items of work.

5-2 PROTECTION. The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the owner or order from the Agency. All valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities located as shown on the Plans or in accordance with 5-1, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at its expense.

Upon learning of the existence and location of any utility omitted from or shown incorrectly on the Plans, the Contractor shall immediately notify the Engineer in writing. When authorized by the Engineer, support or protection of the utility will be paid for as provided in 3-2.2.3 or 3-3.

The Contractor shall immediately notify the Engineer and the utility owner if any utility is disturbed or damaged. The Contractor shall bear the costs of repair or replacement of any utility damaged if located as noted in 5-1.

When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:

1. Furnish and install a 50 mm (2 inch) cushion of expansion joint material or other similar resilient material; or
2. Provide a sleeve or other opening which will result in a 50 mm (2 inch) minimum-clear annular space between the concrete and the utility; or
3. Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill or for structures which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer and arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system.

5-3 REMOVAL. Unless otherwise specified, the Contractor shall remove all interfering portions of utilities shown on the Plans or indicated in the Bid documents as "abandoned" or "to be abandoned in place". Before starting removal operations, the Contractor shall ascertain from the Agency whether the abandonment is complete, and the costs involved in the removal and disposal shall be included in the Bid for the items of work necessitating such removals.

5-4 RELOCATION. When feasible, the owners responsible for utilities within the area affected by the Work will complete their necessary installations, relocations, repairs, or replacements before commencement of work by the Contractor. When the Plans or Specifications indicate that a utility installation is to be relocated, altered, or constructed by others, the Agency will conduct all negotiations with the owners and work will be done at no cost to the Contractor, except as provided in 301-1.6. Utilities which are relocated in order to avoid interference shall be protected in their position and the cost of such protection shall be included in the Bid for the items of work necessitating such relocation.

After award of the Contract, portions of utilities which are found to interfere with the Work will be relocated, altered or reconstructed by the owners, or the Engineer may order changes in the Work to avoid interference. Such changes will be paid for in accordance with 3-2.

When the Plans or Specifications provide for the Contractor to alter, relocate, or reconstruct a utility, all costs for such work shall be included in the Bid for the items of work necessitating such work. Temporary or permanent relocation or alteration of utilities requested by the Contractor for its convenience shall be its responsibility and it shall make all arrangements and bear all costs.

The utility owner will relocate service connections as necessary within the limits of the Work or within temporary construction or slope easements. When directed by the Engineer, the Contractor shall arrange for the relocation of service connections as necessary between the meter and property line, or between a meter and the limits of temporary construction or slope easements. The relocation of such service connections will be paid for in accordance with provisions of 3-3. Payment will include the restoration of all existing improvements which may be affected thereby. The Contractor may agree with the owner of any utility to disconnect and reconnect interfering service connections. The Agency will not be involved in any such agreement.

5-5 DELAYS. The Contractor shall notify the Engineer of its construction schedule insofar as it affects the protection, removal, or relocation of utilities. Said notification shall be included as a part of the construction schedule required in 6-1. The Contractor shall notify the Engineer in writing of any subsequent changes in the construction schedule which will affect the time available for protection, removal, or relocation of utilities.

The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, noted, and completed in accordance with 5-1.

The Contractor may be given an extension of time for unforeseen delays attributable to unreasonably protracted interference by utilities in performing work correctly shown on the Plans.

The Agency will assume responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities within the area affected by the Work if such utilities are not identified in the Contract Documents. The Contractor will not be assessed liquidated damages for any delay caused by failure of Agency to provide for the timely removal, relocation, or protection of such existing facilities.

If the Contractor sustains loss due to delays attributable to interferences, relocations, or alterations not covered by 5-1, which could not have been avoided by the judicious handling of forces, equipment, or plant, there shall be paid to the Contractor such amount as the Engineer may find to be fair and reasonable compensation for such part of the Contractor's actual loss as was unavoidable and the Contractor may be granted an extension of time.

5-5.1 Cooperation During Utility Relocation. When utilities are to be relocated during construction, the Contractor shall cooperate and coordinate with the respective utility owners so they may relocate their facilities to clear the Work. Delays in relocation of utilities which result from failure to cooperate and coordinate will not be a cause for an extension of time or Non-Working Days.

5-6 COOPERATION. When necessary, the Contractor shall so conduct its operations as to permit access to the Work site and provide time for utility work to be accomplished during the progress of the Work.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK.

The requirements of this section concerning submission of construction schedules shall not apply to projects where the time allowed to complete the Work is less than 25 Working Days or the total Contract Price bid is less than \$75,000 unless required by the special provisions.

The Contractor shall submit a construction schedule concurrently with the submittal of signed Contract, Contract bonds, and certificate of insurance. The Notice to Proceed will be delayed until the schedule is received. See 6-7.4, Starting of Contract Time.

When required by the Special Provisions, a revised schedule shall be submitted monthly prior to each progress payment closure date. Processing of the progress payment will be delayed until such revised schedule complying with this section is received.

The construction schedule shall be in the form of a Construction Element vs. Time Chart as shown in Appendix B-1 and a Work Complete vs. Time Chart as shown in Appendix B-2.

The B-1 Chart shall be in sufficient detail to show the chronological relationship of all activities of the project including, but not limited to, estimated starting and completion dates of various activities, submittal of shop drawings to the Engineer for approval, procurement of materials, and scheduling of equipment. The B-1 Chart shall recognize the requirements of 5-5. The B-1 Chart shall reflect obtaining all materials and completing all Work under the Contract within the specified time and in accordance with these Specifications. If the Contractor intends to complete the Work prior to the time for completion, the intended date of completion shall be set forth in the B-1 Chart and the Contractor shall execute a Contract Change Order that changes the number of Working Days allowed for completion to conform with such intended completion date. The Change Order shall not change the Contract Price.

The Contractor may submit a computer generated schedule in lieu of the form in Appendix B-1 and B-2, provided all of the elements shown on that form or specified herein are included.

An updated construction schedule shall be submitted prior to the next progress payment closure date whenever the actual percent Work complete versus percent time elapsed curve falls below and to the right of the dotted line shown on Appendix B-2.

If the Contractor desires to make a major change in its method of operations after commencing construction, or if its schedule fails to reflect the actual progress, it shall submit to the Agency a revised construction schedule in advance of beginning revised operations.

Revised and updated schedules shall show actual completion to the date of the revision in the lower segmented bar for each item.

The construction schedule shall be prepared as follows (see examples in Appendices C-1 and C-2):

1. On the B-1 Chart:
 - a. Enter the project name and Specification No. as shown on the notice inviting bids and the Contractors name.
 - b. List the items of Work either individually or combined where items are part of the same element of the Work.
 - c. Assign a value for each horizontal space plotting interval in Working Days as follows: 1 working day for total Contract time of less than 100 working days, 2 for 100 to 200 working days and 5 for longer projects. Enter the value used in the space provided in the lower part of the form.
 - d. At the end of performance time and draw a vertical line and label it "End Performance Time". Enter numbers at 10 times the plotting interval at the top of intermediate vertical lines.
 - e. Shade in a bar in the upper segmented section for each work item to indicate the period during which Work will be performed. Move-in time and delivery time for materials shall be shown if significant to the schedule.

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK. (Continued)

2. On the B-2 Chart:

- a. Enter the project name and Specification No. as shown on the notice inviting bids.
- b. At time intervals of 10 or 20 working days:
 - (1) Compute the cumulative dollar value of Work which is expected to be completed for each item of Work, including the value of the completed portion of lump-sum items.
 - (2) Divide the values computed in "b(1)" by the Total Contract Price to determine the percentage of the entire Contract planned for completion at the end of each time interval.
 - (3) Divide the days of performance time at the end of each time interval by the total Contract performance time to obtain the percentage of elapsed performance time.
- c. Plot each percentage of completion value figure computed in "b(2)" against the corresponding percentage of completion time computed in "b(3)" using scales on the bottom and left side of chart.
- d. Connect points plotted in "c" with a line which will show the planned progress for the entire job.

If the proposed percent Work complete versus percent time elapsed line falls below and to the right of the dotted line drawn on the B-2 Chart, the Contractor shall provide sufficient information and backup to show that the Work can be completed on time.

6-1.1 Beginning of Work. The issuance of Notice to Proceed by Agency shall constitute the Contractor's authority to enter upon the site of the Work and to begin operations provided it has also notified Engineer at least 24 hours in advance. Entry upon the site without authority will be treated as trespassing.

6-1.2 Starting Work. The Contractor may start work at any time after the Notice to Proceed is issued but work shall begin within 15 Days after the starting date for the Contract, or at such other time as may be indicated in the Special Provisions. The actual date on which the Contractor starts work will not affect the required time for completion as provided for in 6-7 and 6-7.1.

6-1.3 Work Sequence. If required by the Special Provisions, the Contractor shall start construction operations on that part of the Work designated by the Engineer.

6-1.4 Resources Required. The Work shall be conducted in such a manner and with sufficient materials, equipment, and labor to insure its completion in accordance with the Plans and Specifications within the time set forth in the Contract.

6-2 PROSECUTION OF WORK. To minimize public inconvenience and possible hazard and to restore streets and other Work areas to their original condition and former state of usefulness as soon as practicable, the Contractor shall diligently prosecute the Work to completion. If, in the Engineer's opinion, the Contractor fails to prosecute the Work to the extent that the above purposes are not being accomplished, the Contractor shall, upon orders from the Engineer, immediately take the steps necessary to fully accomplish said purposes. All costs of prosecuting the Work as described herein shall be absorbed in the Contractor's bid. Should the Contractor fail to take the necessary steps to fully accomplish said purposes, after orders of the Engineer to do so, the Engineer may suspend the Work in whole or in part, until the Contractor takes said steps.

As soon as possible under the provisions of these Specifications, the Contractor shall backfill all excavations and restore to usefulness all improvements existing prior to the start of the Work.

If Work is suspended through no fault of the Agency, all expenses and losses incurred by the Contractor during such suspensions shall be borne by the Contractor. If the Contractor fails to properly provide for public safety, traffic, and protection of the Work during periods of suspension, the Agency may elect to do so, and deduct the cost thereof from monies due the Contractor. Such action will not relieve the Contractor from liability.

6-3 SUSPENSION OF WORK

6-3.1 General. The Work may be suspended in whole or in part when determined by the Engineer that the suspension is necessary in the interest of the Agency. The Contractor shall comply immediately with any written order of the Engineer. Such suspension shall be without liability to the Contractor on the part of the Agency except as otherwise specified in 6-6.3.

6-3.2 Archaeological and Paleontological Discoveries. If discovery is made of items of archaeological or paleontological interest, the Contractor shall immediately cease excavation in the area of discovery and shall not continue until ordered by the Engineer. When resumed, excavation operations within the area of discovery shall be as directed by the Engineer.

Discoveries which may be encountered may include, but not be limited to, dwelling sites, stone implements or other artifacts, animal bones, human bones and fossils.

The Contractor shall be entitled to an extension of time and compensation in accordance with the provisions of 6-6.

6-3.3 Temporary Suspension of Work. Should suspension of Work be ordered by reason of the failure of the Contractor to carry out orders or to perform any provisions of the Contract; or by reason of weather conditions being unsuitable for performing any item or items of Work; the Contractor, at its expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public traffic during the period of such suspension. In the event that the Contractor fails to perform the work above specified, the Agency may perform such work and the cost thereof will be deducted from monies due or to become due the Contractor.

If the Engineer orders a suspension of all of the Work, or a portion of the Work which is the current controlling operation or operations, due to unsuitable weather or to such other conditions as are considered unfavorable to the suitable prosecution of the Work, the days on which the suspension is in effect shall not be considered Working Days.

If a portion of Work at the time of such suspension is not a current controlling operation or operations, but subsequently does become the current controlling operation or operations, the determination of Working Days will be made on the basis of the then current controlling operation or operations.

If a suspension of Work is ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the Contract, the Days on which the suspension order is in effect shall be considered Working Days if such days are Working Days as defined.

6-4 TERMINATION OF THE CONTRACT FOR DEFAULT..

6.4.1 General. If, prior to the acceptance of the Work, the Contractor:

- a) becomes insolvent, assigns its assets for the benefit of its creditors, is unable to pay its debts as they become due, or is otherwise financially unable to complete the Work,
- b) abandons the Work by failing to report to the Work site and diligently prosecute the Work to completion,
- c) disregards written instructions from the Agency or materially violates provisions of the Contract Documents,
- d) fails to prosecute the Work according to the schedule approved by the Engineer,
- e) disregards laws or regulations of any public body having jurisdiction, or
- f) commits continuous or repeated violations of regulatory or statutory safety requirements, then the Agency will consider the Contractor in default of the Contract.

Notices, and other written communications regarding default between the Contractor, the Agency, and the Surety shall be transmitted in accordance with 2-12.

6-4.2 Notice to Cure. The Agency will issue a written notice to cure the default to the Contractor and its Surety. The Contractor shall commence satisfactory corrective actions within 5 Working Days after receipt.

6-4.3 Notice of Termination for Default. If the Contractor fails to commence satisfactory corrective action within 5 Working Days after receipt of the notice to cure, or to diligently continue satisfactory and timely correction of the default thereafter, then the Agency will consider the Contractor in default of the Contract and:

- a) will terminate the Contractor's right to perform under the Contract by issuing a written notice of termination for default to the Contractor and its Surety,
- b) may use any materials, equipment, tools or other facilities furnished by the Contractor to secure and maintain the Work site, and
- c) may furnish labor, equipment, and materials the Agency deems necessary to secure and maintain the Work site. The provisions of this subsection shall be in addition to all other legal rights and remedies available to the Agency.

6-4.4 Responsibilities of the Surety. Upon receipt of the written notice of termination for default, the Surety shall immediately assume all rights, obligations and liabilities of the Contractor under the Contract. If the Surety fails to protect and maintain the Work site, the Agency may do so, and may recover all costs incurred. The Surety shall notify the Agency that it is assuming all rights, obligations and liabilities of the Contractor under the Contract and all money that is due, or would become due, to the Contractor shall be payable to the Surety as the Work progresses, subject to the terms of the Contract.

Within 15 Working Days of receipt of the written notice of termination for default, the Surety shall submit to the Agency a written plan detailing the course of action it intends to take to remedy the default. The Agency will review the plan and notify the Surety if the plan is satisfactory. If the Surety fails to submit a satisfactory plan, or if the Surety fails to maintain progress according to the plan accepted by the Agency, the Agency may, upon 48 hours written notice, exclude the Surety from the premises, take possession of all material and equipment, and complete the Work in any way the Agency deems to be expedient. The cost of completing the Work by the Agency shall be charged against the Surety and may be deducted from any monies due, or which would become due, the Surety. If the amounts due under the Contract are insufficient for completion, the Surety shall pay to the Agency, within 30 days after the Agency submits an invoice, all costs in excess of the remaining Contract Price.

6-4.5 Payment. The Surety will be paid for completion of the Work in accordance with 9-3 less the value of damages caused to the Agency by acts of the Contractor.

6-5 TERMINATION OF CONTRACT. The Board may terminate the Contract at its own discretion or when conditions encountered during the Work make it impossible or impracticable to proceed, or when the Agency is prevented from proceeding with the Contract by act of God, by law, or by official action of a public authority.

The Agency will issue a written notice of termination for convenience in accordance with 2-12. Upon receipt, the Contractor shall immediately cease work, except work the Contractor is directed to complete by the Engineer or required to complete for public safety and convenience. The Contractor shall immediately notify Subcontractors and suppliers to immediately cease their work.

The Contractor will be paid without duplication for:

- a) work completed in accordance with the Contract Documents prior to the effective date of termination for convenience;
- b) reasonable costs incurred in settlement of terminated contracts with Subcontractors, suppliers and others; and
- c) reasonable expenses directly attributable to termination.

The Contractor shall submit a final termination settlement proposal to the Agency no later than 90 days from the effective date of termination, unless extended, in writing, by the Agency upon written request by the Contractor.

If the Contractor fails to submit a proposal, the Agency may determine the amount, if any, due the Contractor as a result of the termination. The Agency will pay the Contractor the amount it determines to be reasonable. If the Contractor disagrees with the amount determined by the Agency as being reasonable, the Contractor shall provide notice to the Agency within 30 days of receipt of payment. Any amount due shall be as later determined by arbitration, if the Agency and the Contractor agree thereto, or as fixed in a court of law.

6-6 DELAYS AND EXTENSIONS OF TIME

6-6.1 General. If delays are caused by unforeseen events beyond the control of the Contractor, such delays will entitle the Contractor to an extension of time as provided herein, but the Contractor will not be entitled to damages or additional payment due to such delays, except as provided in 6-6.3. Such unforeseen events may include war, government regulations, labor disputes, strikes, fires, floods, adverse weather necessitating cessation of work, other similar action of the elements, inability to obtain materials, equipment or labor, required Extra Work, or other specific events as may be further described in the Specifications.

No extension of time will be granted for a delay caused by the Contractor's inability to obtain materials unless the Contractor furnishes to the Engineer documentary proof of the inability to obtain such materials in a timely manner in accordance with the sequence of the Contractor's operations and the approved construction schedule.

If delays beyond the Contractor's control are caused by events other than those mentioned above, but substantially equal in gravity to those enumerated, and an extension of time is deemed by the Engineer to be in the best interests of the Agency, an extension of time may be granted, but the Contractor will not be entitled to damages or additional payment due to such delays, except as provided in 6-6.3.

If delays beyond the Contractor's control are caused solely by action or inaction by the Agency, such delays will entitle the Contractor to an extension of time as provided in 6-6.2.

6-6.2 Extensions of Time. Extensions of time, when granted, will be based upon the effect of delays to the Work as a whole and will not be granted for noncontrolling delays to minor included portions of Work unless it can be shown that such delays did, in fact, delay the progress of the Work as a whole.

6-6.3 Payment for Delays to Contractor. The Contractor will be compensated for damages incurred due to delays for which the Agency is responsible if such delays are unreasonable in the circumstances involved and were not within the contemplation of the parties when the Contract was awarded to the Contractor and delay the Work as a whole. Such actual costs will be determined by the Engineer. The Agency will not be liable for, and in making this determination the Engineer will exclude, all damages which the Engineer determines the Contractor could have avoided by any reasonable means including, without limitation, the judicious handling of forces, equipment, or plant.

6-6.4 Written Notice and Report. If the Contractor desires payment for a delay as specified in 6-6.3 or an extension of time, it shall, within 30 Days after the beginning of the delay, file with the Agency a written request and report as to the cause and extent of the delay. The request for payment or extension must be made at least 15 Days before the specified completion date. Failure by the Contractor to file these items within the time specified will be considered grounds for refusal by the Agency to consider such request.

6-6.4.1 Documentation of Delays. When the Contractor requests an extension of time for delay due to inability to obtain materials or equipment, the documentary proof required by 6-6.1 shall include the following:

1. Date Engineer was notified of delay.
2. Date the delay began.
3. Exact description of material or equipment causing delay.
4. Documentation showing when and from whom ordered.
5. Documentation of promise to deliver.
6. Documentation of actual delivery date.
7. Description of how late delivery caused delay (include construction schedule).
8. Documentation of measures taken to get prompt delivery.
9. Documentation of attempts to get delivery from other sources.
10. Description of steps taken in project scheduling to minimize effects of late delivery.
11. Description of steps taken to get project back on schedule after actual delivery.
12. Statement of actual time lost as a result of late delivery.

6-7 TIME OF COMPLETION

6-7.1 General. The Contractor shall complete the Work within the time set forth in the Contract. The Contractor shall complete each portion of the Work within such time as set forth in the Contract for such portion. Unless otherwise specified, the time of completion of the Contract shall be expressed in Working Day

6-7.2 Working Day. A Working Day is any day within the period between the start of the Contract time as defined in 6-1 and the date provided in the Contract for completion or upon field acceptance by the Engineer of all Work provided for in the Contract, whichever occurs first, other than:

- (1) Saturday,
- (2) Sunday,
- (3) any day designated as a holiday by the Agency,
- (4) any other day designated as a holiday in a Master Labor Agreement entered into by the Contractor or on behalf of the Contractor as an eligible member of a Contractor Association,
- (5) any day the Contractor is prevented from working at the beginning of the workday for cause as defined in 6-6.1,
- (6) any day the Contractor is prevented from working during the first 5 hours of the workday with at least 60 percent of the normal work force for cause as defined in 6-6.1.

6-7.2.1 Holidays. Solely for the purposes of paragraph (3) of 6-7.2, the following days are designated as holidays by the Agency.

	A	B
<u>MONTH</u>	<u>AGENCY EMPLOYEE HOLIDAYS</u>	<u>OTHER DESIGNATED HOLIDAYS</u>
January	1st day; 3rd Monday	None
February.....	3rd Monday	12th day
March.....	None.....	31st day
March-April	None.....	One Friday between March 21 and April 23 designated as Good Friday
May	Last Monday.....	None
June	None.....	None
July.....	4th day.....	None
August.....	None.....	None
September	1st Monday.....	9th day
October	None.....	2nd Monday
November	11 th day; 4th Thursday.....	the Friday following the 4th Thursday
December	25th	23rd day, only if Thursday or Friday; 24th day; 31st day

If any day listed above falls on Saturday, the preceding Friday is the holiday. If any day listed above falls on Sunday, the succeeding Monday is the holiday.

No extra holiday shall result when such Friday or Monday is already designated as a holiday.

A copy of a Working Day calendar incorporating the above-listed holidays and used by the Agency for Contract time accounting purpose will be furnished to the Contractor upon request.

The term "holiday" as used in this section shall not be construed as being the same as "holiday" within the meaning of 7-2.2.

The Contractor may perform work on the holidays designated in Column A above provided it has obtained prior written approval of the Engineer at least two Days in advance of performing the work. The Contractor may perform work on the holidays designated in Column B above provided the Contractor notifies the Engineer two Days in advance of the holiday.

6-7.2.2 Landscape Maintenance Period. Where a landscape maintenance period is specified, the portion of the time in such period that follows the completion of all other Work required by the Contract shall not be Working Days for Contract time accounting.

6-7.3 Contract Time Accounting. The Engineer will make a daily determination of each Working Day to be charged against the Contract time. These determinations will be discussed and the Contractor will be furnished a periodic statement showing the allowable number of Working Days of Contract time, as adjusted, at the beginning of the reporting period. The statement will also indicate the number of Working Days charged during the reporting period and the number of Working Days of Contract time remaining. If the Contractor does not agree with the statement, the Contractor must file a written protest within 15 Days after receipt, setting forth the facts of the protest. Otherwise, the statement will be deemed to have been accepted.

6-7.4 Starting Date for Contract Time and Notice to Proceed. The starting date for Contract time accounting will be determined by adding the number of Days indicated on the Proposal form to the date the Contract is awarded, however the Agency may, at its option, delay the starting date by not more than 60 calendar Days if necessary to obtain permits, rights-of-way, or approval of federal or State authorities, or when prevented from starting the project due to causes beyond its control. Notice to Proceed will be issued within 7 calendar Days after the Contract, bonds, certificates of insurance and other documents have been returned, properly completed by the Contractor, unless the starting date is delayed as herein provided. If the Agency delays the Contract starting date, Notice to Proceed will be issued at least 7 calendar Days prior to the new starting date. Any delay caused by failure of the Contractor to properly complete or timely return the Contract Documents shall not change the Contract starting date and shall not be a cause for extending the Contract time. The Notice of Award will indicate a probable Contract starting date. The Notice to Proceed will indicate the actual Contract starting date, computed as herein described.

6-8 COMPLETION, ACCEPTANCE AND WARRANTY.

6-8.1 Completion and Acceptance. Acknowledgment of completion of the Work will occur prior to Acceptance by the Agency. Acceptance will only occur after all Contract requirements have been fulfilled, such as training, submission of warranties, maintenance manuals, record drawings, Release on Contract and the like. Acceptance by the Agency will occur when the Engineer signs the Notice of Completion. The Work will be inspected by the Engineer promptly upon receipt of the Contractor's written assertion that the Work has been completed. If, in the Engineer's judgment, the Work has been completed in accordance with the Plans and Specifications, the Engineer will acknowledge completion of the Work. Completion of the Work, as used above, shall include the Contractor showing evidence of having received an occupancy clearance from Building and Safety, or other permit issuing agency, when a building, plumbing electrical, grading, or other permit is required for the Work. The Engineer will, in acknowledging completion of the Work, set forth in writing the date when the Work was completed. This will be the date when the Contractor is relieved from responsibility to protect the Work. This will also be the date to which liquidated damages will be computed.

6-8.2 Warranty and Correction

6-8.2.1 Warranty The Contractor warrants to the Agency that materials and equipment furnished under the Contract will be new, unless otherwise specified in the Contract Documents, and of good quality, that the Work will be free from defects in materials and workmanship and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective by the Agency. This warranty excludes damage or defect caused by abuse (other than by the Contractor or those under the control of the Contractor), modifications not executed by the Contractor, or improper or insufficient maintenance. This warranty excludes normal wear and tear. Nothing in this warranty is intended to limit any manufacturer's warranty which provides the Agency with greater warranty rights.

6-8.2.2 Correction Period For a period of one (1) year from the date of acceptance of the Work by the Agency, the Contractor shall repair or replace any defective workmanship or materials or Work not in conformance with the Contract Documents after notice to do so from the Engineer, and within the time specified in the notice. If the Contractor fails to make such repair or replacement within the time specified in the notice, the Agency may perform the repair or replacement and the Contractor and the Contractor's sureties shall be liable for the cost thereof. The one (1) year period referenced in this section 6-8.2.2 applies only to the Contractor's obligation to repair or replace defective workmanship or materials or Work not in conformance with the Contract Documents and is not intended to constitute a period of limitations for any other rights or remedies the Agency may have regarding the Contractor's other obligations under the Contract Documents.

6-8.3 No Waiver of Legal Rights. The Agency shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and Acceptance of the Work and payment therefor from showing the true amount and character of the Work performed and materials furnished by the Contractor, nor from showing that any such measurement, estimate, or certificate is untrue or is incorrectly made, nor that the Work or materials do not in fact conform to the Contract.

The Agency shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the Contractor or its sureties, or both, such damages as it may sustain by reason of the Contractor's failure to comply with the terms of the Contract.

Neither the Acceptance by the Engineer or by its representative, nor any payment for or Acceptance of the whole or any part of the Work, nor any extension of time, nor any possession taken by the Engineer shall operate as a waiver of any portion of the Contract or of any power herein reserved, or of any right to damages.

A waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.

6-8.4 Landscape Maintenance Period. Final Acceptance of the Contract shall follow the satisfactory completion of all Contract Work, including the landscape maintenance period if one is specified.

6-8.5 Non-complying Work. Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the Agency, shall constitute an Acceptance of Work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship.

6-8.6 Written Warranties. The Contractor shall obtain and deliver to the Engineer all written warranties required to be furnished by the Specifications. Each of such warranty shall be underwritten by the Contractor for the full period prescribed therein, and shall bear its endorsement to such effect.

6-9 LIQUIDATED DAMAGES. Failure of the Contractor to complete the Work within the time allowed will result in damages being sustained by the Agency. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified, as adjusted in accordance with 6-6, for completion of the Work the Contractor shall pay to the Agency, or have withheld from monies due it, the sum of \$250, unless otherwise provided in the Contract Documents.

Execution of the Contract under these Specifications shall constitute agreement by the Agency and Contractor that \$250 per day is the minimum value of the costs and actual damage caused by failure of the Contractor to complete the Work within the allotted time, that such sum is liquidated damages and shall not be construed as a penalty, and that such sum may be deducted from payments due the Contractor if such delay occurs.

6-10 USE OF IMPROVEMENT DURING CONSTRUCTION. The Agency reserves the right to take over and utilize all or part of any completed facility or appurtenance. The Contractor will be notified in writing in advance of such action. Such action by the Agency will relieve the Contractor of responsibility for injury or damage to said completed portions of the improvement resulting from use by public traffic or from the action of the elements or from any other cause, except injury or damage resulting from the Contractor's operations or negligence. The Contractor will not be required to reclean such portions of the improvement before field completion, except for cleanup made necessary by its operations. Nothing in this section shall be construed as relieving the Contractor from full responsibility for correcting defective work or materials.

In the event the Agency exercises its right to place into service and utilize all or part of any completed facility or appurtenance, the Agency shall assume the responsibility and liability for injury to persons or property arising out of or resulting from the utilization of the facility or appurtenance so placed into service, except for any willful or negligent act or omission by the Contractor, Subcontractor, their officers, employees or agents.

6-10.1 Use of Improvements - Exceptions. The provisions of 6-10 shall not apply to projects for the repair, modification, enlargement or improvement of existing facilities that are to remain in use during construction except where a portion of the project which is completely independent from the rest of the Work can be completed and put into use by the Agency.

On projects on public roads, after satisfactory completion of an isolated section of the Work involving roadway improvements or repairs, when all temporary signs and other temporary Contractor facilities have been removed, the section is not being used as a detour, the section is no longer under the Contractor's control, and the section is opened to public traffic through the end of the Contract period, that section of the Work shall be taken over by the Agency as provided in 6-10. The Contractor shall indicate to the Engineer in writing when the conditions of this paragraph have been complied with and shall specify the limits of the section involved. Any taking over of the Work by the Agency shall be effective only when formal written notification is issued by the Agency.

6-11 NOTICE OF POTENTIAL CLAIM FOR ADDITIONAL COMPENSATION. Procedures for notice of claims in specific situations and circumstances are provided in the following sections:

- 3-4 Changed Conditions
- 6-6.4 Delay and Extensions of Time
- 6-7.3 Contract Time Accounting

Compliance with this section is not prerequisite to assertion of a claim involving those sections or based on differences in measurements or errors of computation as to Contract quantities.

Compliance with the provisions of this section is required in all other situations and circumstances.

It is the intention of this section that differences arising between the parties under and by virtue of the Contract be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action taken to resolve such differences.

The Contractor shall give the Engineer written notice of a potential claim, setting forth: (1) the reasons for which the Contractor believes additional compensation will or may be due; (2) the nature of the costs involved; and (3) insofar as possible, the amount of the potential claim.

If the claim is based upon an act or failure to act by the Engineer, the said notice must be given to the Engineer prior to the date when the work giving rise to the potential claim is commenced; in all other cases the said notice must be given to the Engineer within 15 Days after the happening of the event, thing or occurrence giving rise to the potential claim.

The Contractor shall not be entitled to the payment of any additional compensation where the written notice of potential claim has not been given to the Engineer in the manner required by and within the time limitations of this section.

6-12 DISPUTES AND CLAIMS; PROCEDURE.

6-12.1 GENERAL. Any and all decisions made on appeal pursuant to this section shall be in writing. Any "decision" purportedly made pursuant to this section which is not in writing shall not be binding upon the Agency and should not be relied upon by the Contractor.

Filing or giving the notices required under 3-4, 6-6.4, 6-7.3 and 6-11 is prerequisite to recovery under a Contractor's claim for additional compensation; nothing in this section shall excuse the Contractor from its duty to file or give the required notices, or from performing other duties required by the Contract Documents.

6-12.2 ADMINISTRATIVE REVIEW. Prior to proceeding under 6-12.3 or filing a Complaint in Arbitration, the Contractor shall exhaust its administrative remedies by submitting its claim for review and decision by the following Agency staff in the following sequence:

Project Manager, responsible for the project
Department Director (Public Works Agency), responsible for the project.
Director of the Public Works Agency (the Engineer)

If the Contractor disputes the Project Manager's decision on its claim, the Contractor shall submit the claim to the Department Director. If the Contractor disputes the Department Director's decision on its claim, the Contractor shall submit the claim to the Engineer. Agency staff decisions shall state the portion of the claim that is undisputed if any.

The Project Manager may elect to forward a claim submitted by the Contractor directly to the Department Director. The Project Manager must give the Contractor notice of that election and the Contractor may supplement its claim within 7 Days of such notice (unless the parties agree in writing to a different time) and its claim will be deemed submitted on the earlier of the day it supplements its claim, the day it states in writing that it will not supplement its claim or the day time to supplement expires. The Department Director may forward a claim timely submitted by the Contractor directly to the Engineer instead of making a decision on the claim, in which case no notice or opportunity to supplement the claim is required, and the claim shall be deemed timely submitted to the Engineer.

The Engineer's decision on the claim shall be the Agency's final decision.

Claims submitted to the Department Director and the Engineer shall be submitted in writing and shall include:

- a. A copy of the disputed decision.
- b. A statement as to why the Contractor believes the decision is in error.
- c. All information, argument, documents and evidence (collectively, materials) that the Contractor wishes to have considered in the review. Where the request for review is made to the Engineer, in lieu of resubmitting materials which have already been submitted to the Department Director, the Contractor may include with the request a list of the materials the Contractor wants the Engineer to consider. Any additional materials and evidence not previously submitted to the Department Director shall be included with the request to the Engineer, if the Contractor wishes them to be considered. If relevant evidence is not available at the time the request is made to the Department Director or the Engineer, the Contractor shall identify such evidence and include a statement as to when such evidence will be submitted.

The Project Manager shall issue a decision on a claim within 10 Days of receipt; if the Project Manager does not do so, then the Project manager will be deemed to have decided to reject the claim in its entirety as of the conclusion of the 10th Day after receipt. The Contractor shall submit a claim to the Department Director for review and decision within 7 Days of receipt of the Project Manager's decision or of the time the Project Manager is deemed to have decided to reject the claim, whichever is applicable. The Department Director shall issue a decision on a claim within 10 Days of the timely submission of the claim; if the Department Director does not do so, then the Department Director will be deemed to have decided to reject the claim in its entirety as of the conclusion of the 10th Day after timely submission. The Contractor shall submit a claim to the Engineer for review and decision within 7 Days of receipt of the Department Director's decision or of the time the Department Director is deemed to have decided to reject the claim, whichever is applicable. If a claim is timely submitted to the Engineer and the Engineer fails to issue a decision on that claim within the time limits prescribed for issuing a written statement under Public Contract Code, section 9204, subdivision (d)(1), the Engineer shall be deemed to have decided to reject the claim in its entirety. At any time after the Project Manager receives a claim, the Agency and Contractor may agree in writing to different time limits than those set forth in this paragraph.

6-12.3 MEET AND CONFER; MEDIATION If the Contractor disputes the Agency's final decision, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the Agency shall schedule a meet and confer conference within 30 Days for settlement of the dispute.

Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the Agency shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 Days after the Agency issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the Agency and the Contractor sharing the associated costs equally. The Agency

and Contractor shall agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the Agency and Contractor cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

Failure by the Agency to meet the time requirements of this section shall result in the portion of the claim that remains in dispute being deemed rejected in its entirety.

The parties may agree to waive, in writing, mediation under this section.

6-12.4 ARBITRATION. Claims and disputes arising under or related to the performance of the Contract, for which mediation under 6-12.3 was waived or unsuccessful except for claims which have been released by execution of the "Release on Contract" as provided in 9-4, shall be resolved by arbitration unless the Agency and the Contractor agree in writing, after the claim or dispute has arisen, to waive arbitration and to have the claim or dispute litigated in a court of competent jurisdiction. Arbitration shall be pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2 of the Public Contract Code and the regulations promulgated thereto, Chapter 4 (commencing with Section 1300) of Division 2 of Title 1 of the California Code of Regulations. The arbitration decision shall be decided under and in accordance with California law, supported by substantial evidence and, in writing, contain the basis for the decision, findings of fact, and conclusions of law.

Arbitration shall be initiated by a Complaint in Arbitration made in compliance with the requirements of said Chapter 4. A Complaint in Arbitration by the Contractor shall be filed not later than 90 calendar Days after receipt of the final written decision of the Agency on the claim or dispute or within 300 Days after Acceptance of the Work by the Agency if no written decision has been issued. For the purposes of this section, "Acceptance of the Work by the Agency" shall be defined as the date the Notice of Completion is filed.

Where an election is made by either party to use the Simplified Claims Procedure provided under Sections 1340-1346 of said Chapter 4, the parties may mutually agree to waive representation by counsel.

All contracts valued at more than \$25,000 between the Contractor and its subcontractors and suppliers shall include a provision that the subcontractors and suppliers shall be bound to the Contractor to the same extent that the Contractor is bound to the Agency by all terms and provisions of the Contract, including this arbitration provision.

6-13 CONTRACTOR'S WORK HOURS

6-13.1 Working Hours Limitations. Except as otherwise specified, no work shall be performed by the Contractor at the Work site between the hours of 7:00 p.m. and 7:00 a.m. the following day, nor shall work be performed on Saturdays, Sundays or holidays listed in 6-7.2.1.

6-13.2 Regular Work Schedule. The Contractor shall furnish a work schedule with the Construction Schedule required by 6-1 and inform the Engineer at least two Days in advance of changing the schedule. The schedule shall include the times for starting and ending work on each day. Such starting and ending times shall not be more than 10 1/2 hours apart.

6-13.3 Exceptions. The limitations on working hours and days shall not apply to emergency work made necessary by unusual conditions where such work is necessary to protect the Work, to protect the property of others, to protect life, or to ensure the orderly flow of traffic.

The limitations of this section shall not apply where work at times other than allowed by 6-13.1 and 6-13.2 is necessary in order to make utility connections or is required by other provisions contained in these Specifications in order to perform the work in the manner specified. In these cases, the Contractor shall obtain prior written approval of the Engineer at least two Days in advance of performing the work.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

7-1.1 General. The Contractor shall furnish and maintain in good condition all equipment and facilities as required for the proper execution and inspection of the Work.

The Contractor shall provide and maintain enclosed toilets for the use of employees engaged in the Work. These accommodations shall be maintained in a neat and sanitary condition, and regularly pumped out.

7-1.2 Temporary Utility Services. The Contractor shall, at its own expense, make all arrangements necessary for the provision of temporary utility services necessary for its own use during performance of the Work.

The Contractor shall not draw water from any fire hydrant (except to extinguish a fire), without obtaining permission from the water utility owner.

7-1.3 Crushing and Screening Operations. Unless otherwise specified in the Special Provisions, the establishment and operation of portable screens and crushers will not be allowed on or adjacent to the Work site.

7-2 LABOR

7-2.1 General. The Contractor, its agents, and employees shall be bound by and comply with applicable provisions of the Labor Code and Federal, State, and local laws related to labor.

Any worker found by the Engineer to be incompetent, intemperate, troublesome, disorderly, or otherwise objectionable, or who fails to perform the Work properly and acceptably, shall be immediately removed from the Work site by the Contractor and shall not be reemployed in the performance on the Work.

7-2.1.1 Special Qualifications. Where the Engineer determines certain portions of the Work require experience, training, certification or other special qualifications that may not be possessed by the average journeyman, such portions of the Work will be specifically identified in the Special Provisions and the special qualifications identified.

When work requiring special qualifications is being performed, a person with such qualifications must be in immediate charge of the work. The person may be a lead journeyman, foreman or trade superintendent. The general superintendent or a foreman who is not specifically assigned to the area where the identified work is being performed will not be considered to be in immediate charge of the work.

Written certification of the required qualifications shall be furnished to the Engineer at least one week prior to the time work is commenced on the work requiring such qualifications. Such certification is subject to review and acceptance by the Engineer. If, during performance of work requiring special qualifications, the qualified person becomes temporarily or permanently unavailable to the Contractor, work shall not proceed until a qualified replacement has been accepted by the Engineer. The Engineer will promptly consider the certification of the replacement.

If identified work is performed without a person having the special qualifications in charge, the Engineer may, at its sole discretion, order such work removed and replaced at the Contractor's expense.

If, after certification is accepted, the Engineer finds that the certification was inaccurate, or work on the project indicates a lack of the knowledge and experience to supervise the work, the Engineer may order the work stopped until an acceptable replacement has been certified, accepted and is in charge.

7-2.2 Prevailing Wages. Pursuant to Section 1773.2 of the Labor Code, the current prevailing rate of per diem wages at the time of the Bid as determined by the Director of the Department of Industrial Relations (DIR) are on file at the office of the Engineer. The Contractor shall post a copy of these rates at the Work site. Pursuant to Section 1774 of the Labor Code, the Contractor and any Subcontractors shall pay not less than the specified prevailing rates of wages to workers employed on the Contract. If the Contract is Federally-funded, the Contractor and any Subcontractors shall not pay less than the higher of these rates or the rates determined by the United States Department of Labor. Pursuant to Section 1775 of the Labor Code, the Contractor and any Subcontractors, shall, as a penalty to the Agency, forfeit the prescribed amounts per calendar day, or portion thereof, for each worker paid less than the prevailing wage rates. The project is subject to the compliance monitoring and enforcement by the California Department of Industrial Relations (DIR). The contractor is responsible for posting job site notices as prescribed by regulation pursuant to Labor Code section 1771.4, subdivision (a)(2). The Contractor and each Subcontractor, if any, must be registered with the DIR pursuant to Labor Code section 1725.5 and section 1771.1. The Contractor and each Subcontractor, if any, must submit certified payrolls to the Labor Commissioner pursuant to Labor Code 1771.4.

7-2.2.1 Apprentices. Apprentices shall be employed on the Work in accordance with Labor Code Section 1777.5. The Contractor is responsible for compliance with Labor Code Section 1777.5 for all apprenticeable occupations whether employed directly or through subcontractors.

7-2.2.2 Contractors' Duties Concerning Labor Code Compliance. As required by Labor Code 1775(b)(1), Labor Code Sections 1771, 1775, 1776, 1777.5, 1813 and 1815 are required to be included in the contract between the Contractor and subcontractors. The Contractor agrees to comply with these sections and all remaining provisions of the Labor Code.

7-2.3 Payroll Records. Pursuant to Section 1776 of the Labor Code the Contractor and each Subcontractor, if any, shall keep, make available, and submit to the Engineer within ten (10) days of receipt of a written request,

certified payroll records. Pursuant to Labor Code section 1776, subsection (h), the Contractor and each Subcontractor, if any, shall, as a penalty to the Agency, forfeit the prescribed amount for each calendar day, or portion thereof, for each worker, the Contractor and each Subcontractor, if any, fails to comply with that subsection until strict compliance is effectuated. The Contractor and each Subcontractor, if any, waives any right to any notice or hearing on the forfeiture of such penalties pursuant to Labor Code sections 1726 or 1771.6. The contractor shall include the in its subcontracts as required to make this paragraph effective as to each Subcontractor. Upon written request, the Contractor shall withhold penalties forfeited by a Subcontractor pursuant to Labor Code section 1776, subsection (h), and this paragraph from payment due to such Subcontractor and remit such penalties withheld to the Agency.

7-2.4 Hours of Labor. Pursuant to Section 1810 of the Labor Code, 8 hours of labor shall constitute a legal day's work. Pursuant to Section 1813 of the Labor Code, the Contractor and any Subcontractors, shall, as a penalty to the Agency, forfeit the prescribed amount per calendar day for each worker required or permitted to work more than 8 hours in any 1 calendar day and 40 hours in any 1 calendar week without being compensated in accordance with Section 1815.

Pursuant to Section 1810 of the Labor Code, 8 hours of labor shall constitute a legal day's work. Pursuant to Section 1813 of the Labor Code, the Contractor and each Subcontractor, if any, shall, as a penalty to the Agency, forfeit the prescribed amount per calendar day for each worker required or permitted to work more than 8 hours in any 1 calendar day and 40 hours in any 1 calendar week without being compensated in accordance with Section 1815. Contractor and each Subcontractor, if any, waives any right to any notice or hearing on the forfeiture of such penalties pursuant to Labor Code sections 1726 and 1771.6. Contractor shall include terms in its subcontracts as required to make this paragraph effective as to each Subcontractor. Upon written request, Contractor shall withhold penalties forfeited by a Subcontractor pursuant to Labor Code section 1813 and this paragraph from payments due to such Subcontractor and remit such penalties withheld to the Agency

7-3 INDEPENDENCE OF CONTRACTOR, INDEMNIFICATION AND POLLUTION

7-3.1 Independence of Contractor. It is understood and agreed that Contractor is at all times an independent contractor and that no relationship of employer-employee exists between the parties hereto. Contractor will not be entitled to any benefits payable to employees of County, including but not limited to overtime, retirement benefits, workers' compensation benefits, injury leave or other leave benefits. County is not required to make any tax or benefit deductions from the compensation payable to Contractor under the provisions of this Agreement. As an independent contractor, Contractor hereby holds County harmless from any and all claims that may be made against County based upon any contention by any third party that an employer-employee relationship exists by reason of the Agreement.

If, in the performance of this Agreement, any third persons are employed by Contractor, such persons will be entirely and exclusively under the direction, supervision and control of Contractor. All terms of employment, including hours, wages, working conditions, discipline, hiring and discharging or any other terms of employment or requirements of law, will be determined by Contractor. County will have no right or authority over such persons or the terms of such employment, except as provided in this Agreement.

7-3.2 Indemnification and Hold Harmless Clause. All activities arising out of or relating to the performance of the Work covered by this Contract shall be at the risk of Contractor. To the fullest extent permitted by law, Contractor shall defend (at Agency's request), indemnify and hold harmless Agency, and the County of Ventura if the County of Ventura is not the entity defined as Agency under this Contract, including all of their boards, agencies, departments, officers, employees, agents and volunteers (collectively, "Indemnatee"), against any and all claims, suits, actions, legal or administrative proceedings, judgments, debts, demands, damages, including injury or death to any person or persons, and damage to any property including loss of use resulting therefrom, incidental and consequential damages, liabilities, interest, costs, attorneys' fees and expenses of whatsoever kind of nature, whether arising before, during or after commencement or completion of this Contract, whether against Contractor and Indemnatee or which are in any manner, directly, indirectly, in whole or in part, arising from any act, omission, fault or negligence, whether active or passive, of Contractor, a Subcontractor or anyone directly or indirectly employed by them or anyone for whose acts they may be liable in connection with or incident to the Contract, even though the same may have resulted from the joint, concurring or contributory negligence, or from the passive negligence, of Indemnatee or any other person or persons, unless the same be caused by the sole negligence of Indemnatee, or except to the extent caused by the active negligence or willful misconduct of Indemnatee.

The Agency will notify the Contractor of the receipt of any third party claims.

7-3.3 Contamination and Pollution. Contractor, solely at its own cost and expense, will provide clean up of any premises, property or natural resources contaminated or polluted due to Contractor activities. Any fines, penalties, punitive or exemplary damages assigned due to contaminating or polluting activities of the Contractor will be borne entirely by the Contractor.

7-4 INSURANCE REQUIREMENTS

Contractor, at its sole cost and expense, shall obtain and maintain in full force during the term of this Contract the following types of insurance:

7-4.1 Workers' Compensation Insurance.

7-4.1.1 Coverage. Workers' Compensation coverage, in full compliance with Labor Code 3700, for all employees of Contractor and Employer's Liability in the minimum amount of \$1,000,000. The Agency, the County of Ventura, its officers, employees or Consultants, will not be responsible for any claims in law or equity occasioned by failure of Contractor to comply with this paragraph.

7-4.1.2 Certification. Before execution of the Contract by Agency, Contractor shall file with the Engineer the following signed certification:

"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."

7-4.2 Commercial General Liability Insurance

7-4.2.1 Minimum Limits and Scope; Insurance Classes. "Occurrence" coverage in the minimum amount of:

<u>Coverage Class</u>	<u>Coverage</u>
L-A	\$ 1,000,000 combined single limit (CSL) bodily injury and property damage each occurrence and \$1,000,000 aggregate
L-B	\$ 1,000,000 CSL bodily injury and property damage each occurrence and \$2,000,000 aggregate
L-C	\$ 5,000,000 CSL bodily injury and property damage each occurrence and \$5,000,000 aggregate
L-D	\$ 10,000,000 CSL bodily injury and property damage each occurrence and \$10,000,000 aggregate

If no coverage class is specified in "Proposal", coverage class L-B shall apply.

If Contractor maintains higher limits than the minimums shown above, the Agency requires and shall be entitled to coverage for the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Agency.

Coverages shall include premises/operations; products/completed operations; independent contractors; underground, explosion and collapse hazards; personal and advertising injury; broad form property damage; and broad form blanket contractual.

7-4.2.2 Coverage Exceptions. On projects where no explosives will be used and no demolition is involved, the coverage for explosion may be omitted. On projects where no excavation is involved, the coverage for underground hazard may be omitted. The omission of said coverages is at Agency's option, and shall not abrogate Contractor's responsibilities for indemnification as set forth in these Specifications.

7-4.2.3 Excess Liability Policies. All Excess Liability policies, if used, shall be on an "umbrella" or following form of the primary layer of coverage.

7-4.3 Commercial Automobile Liability Insurance

Coverage in the minimum amount of \$1,000,000 CSL bodily injury and property damage, including automobile liability, any auto.

7-4.4 Property Insurance

Contractor shall arrange for its own "Course of Construction" insurance on the project to protect its interests, as Agency does not have this coverage.

Contractor is responsible for delivering to Agency Work completed in accordance with the Contract except as provided in 7-18 (Acts of God). Should the Work being constructed be damaged by fire or other causes during construction, it shall be replaced by Contractor in accordance with the requirements of the Plans and Specifications without additional expense to Agency.

7-4.5 Other Insurance Provisions.

7-4.5.1 Insurance Company Qualifications. All insurance required shall be issued by (a) an admitted company or admitted companies authorized to transact business in the State of California which have a BEST rating of B+ or higher and a Financial Size Category (FSC) of VII or larger or (b) a California approved Surplus Line carrier or carriers which have a BEST rating of A or higher and a Financial Size Category (FSC) of VII or larger.

Workers compensation insurance not meeting the above requirements but meeting all other requirements of the specifications, will be accepted.

7-4.5.2 Primary Coverage. All insurance required shall be primary coverage as respects Agency and any insurance or self-insurance maintained by Agency or the County of Ventura shall be in excess of Contractor's insurance coverage and shall not contribute to it.

7-4.5.3 Aggregate Limits Exceeded. Agency shall not be notified immediately if any aggregate insurance limit is exceeded. Contractor shall purchase additional coverage to meet requirements.

7-4.5.4 Liability in Excess of Limits. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve Contractor for liability in excess of such coverage, nor shall it preclude Agency or the County of Ventura from taking such other actions as is available to it under any other provisions of this Contract or otherwise in law.

7-4.5.5 Additional Insured Endorsements. The Agency, the County of Ventura (if not defined as Agency) and all special Districts governed by the County of Ventura Board of Supervisors, and their officials, employees, and volunteers shall be named as Additional Insured as respects Work done by or on behalf of Contractor under the Contract on all policies required (except workers' compensation). With respect to Contractor's commercial general Liability insurance, Additional Insured coverage shall include both ongoing and completed operations.

7-4.5.6 Waiver of Subrogation Rights. Contractor agrees to waive all rights of subrogation against the Agency, the County of Ventura, including its boards, and all special Districts governed by the Board of Supervisors, for losses arising directly or indirectly from the activities or Work performed by Contractor under the Contract (applies only to Workers' Compensation and Commercial General Liability).

7-4.5.7 Cancellation Notice Required. In the case of policy cancellation, Agency shall be notified by the insurance company or companies as provided for in the policy. Contractor shall notify Agency of any and all policy cancellations within three working days of the cancellation.

7-4.5.8 Documentation Required. Prior to execution of the Contract by Agency, Contractor shall provide Agency with Certificates of Insurance for all required coverages (see Appendix A for example), all required endorsement(s) and a copy of its course of insurance policy.

It is the responsibility of Contractor to confirm that all terms and conditions of Section 7-4 Insurance Requirements are complied with by any and all subcontractors that Contractor may use in the completion of the Contract.

7-5 PERMITS. The Agency will obtain, at no cost to the Contractor, all encroachment and building permits necessary to perform Contract Work in streets, highways, railways or other rights of way, unless the necessity for such permit(s) is created by a method of operation chosen by the Contractor. The Contractor shall obtain and pay for all costs incurred for permits necessitated by its operations such as, but not limited to, those permits required for night Work, overload, blasting and demolition.

The Contractor shall pay all business taxes or license fees that are required for the Work.

7-5.1 Highway and Railroad Permits. The Engineer will obtain the basic State highway and railroad encroachment permits which will include checking of plans. However, the Contractor must also obtain permits from these agencies. Inspection fees charged by these agencies must be paid by the Contractor.

7-5.2 Grading Ordinance

7-5.2.1 General. All excavation, filling and grading operations in Ventura County are governed by the Ventura County Grading Ordinance or City Ordinances, except within the project right of way shown on the Plans.

7-5.2.2 Permits Required. Work outside the project right of way which involves excavation or filling of soils is subject to all requirements of the applicable grading ordinance. The requirements may include, but are not limited to, submitting of a grading plan prepared by a Civil Engineer, obtaining a grading permit, paying the permit fee, posting a grading bond, hiring professionals for engineering and testing services, compacting fills, constructing drainage facilities and providing erosion protection.

7-5.2.3 Imported and Exported Material. To insure that neither the Agency nor the Contractor is a party to aiding or abetting any property owner (who is ultimately responsible) to violate the applicable grading ordinance, no material shall be imported from or exported or wasted outside the project right of way until the Contractor has furnished the Engineer a copy of the grading permit covering such operation on land where material is to be deposited or excavated, unless exempt.

7-5.2.4 Exemptions from Permit. No grading permit is required of the Contractor for Work performed within the project right of way shown on the Plans or on borrow or disposal areas shown on the Plans or described in the Special Provisions and which are specifically designated as being exempt from such permit requirements.

7-5.3 Building Permit.

7-5.3.1 Agency Furnished Permits. Except as provided in **7-5.3.2**, Agency will submit the plans for the Work to Department of Building and Safety, and other building related permit issuing agencies, for plan check and make the corrections necessary for the issuance of building and related permits. Agency will Pay plan check and permit fees for the Work. The Contractor may be required to furnish information to the permit issuing agencies, as required for the issuance of permits, and sign the permit.

7-5.3.2 Contractor Furnished Permits. Components or systems, required by the Contract, may require the preparation of plans and calculations to obtain approvals or permits from state or local building, fire prevention, public health, safety, environmental protection and other agencies in addition to the basic permits arranged for by the Agency as provided in **7-5.3.1**. Contractor shall take all actions in a timely manner to obtain such approvals or permits so as not to delay completion of the Work beyond the time provided in **6-7**. Contractor shall include all costs and consider the time required to obtain approvals or permits in the Contract price bid.

7-5.4 Coastal Zone Permits

7-5.4.1 Agency Furnished Permits. Permits required for Work on the project within rights of way furnished by the Agency within the Coastal Zone will be obtained by the Agency.

7-5.4.2 Contractor Furnished Permits. Permits required for the Contractor's operations outside of rights of way furnished by the Agency must be obtained by the Contractor. Such permits are required for brush removal, grading, dredging, disposal of material and many other operations within the Coastal Zone.

7-6 THE CONTRACTOR'S REPRESENTATIVE. Before starting work, the Contractor shall designate in writing a representative who shall have complete authority to act for it. An alternative representative may be designated as well. The representative or alternate shall be present at the Work site whenever work is in progress or whenever actions of the elements necessitate its presence to take measures necessary to protect the Work, persons, or property. Any order or communication given to this representative shall be deemed delivered to the Contractor. A joint venture shall designate only one representative and alternate. In the absence of the Contractor or its representative, instructions or directions may be given by the Engineer to the superintendent or person in charge of the specific work to which the order applies. Such order shall be complied with promptly and referred to the Contractor or its representative.

In order to communicate with the Agency, the Contractor's representative, superintendent, or person in charge of specific work shall be able to speak, read, and write the English language.

7-7 COOPERATION AND COLLATERAL WORK. The Contractor shall be responsible for ascertaining the nature and extent of any simultaneous, collateral, and essential work by others. The Agency, its workers and contractors and others, shall have the right to operate within or adjacent to the Work site during the performance of such work.

The Agency, the Contractor, and each of such workers, contractors and others, shall coordinate their operations and cooperate to minimize interference.

The Contractor shall include in its Bid all costs involved as a result of coordinating its work with others. The Contractor will not be entitled to additional compensation from the Agency for damages resulting from such simultaneous, collateral, and essential work. If necessary to avoid or minimize such damage or delay, the Contractor shall redeploy its work force to other parts of the Work.

Should the Contractor be delayed by the Agency, and such delay could not have been reasonably foreseen or prevented by the Contractor, the Engineer will determine the extent of the delay, the effect on the Work, and any extension of time.

7-8 WORK SITE MAINTENANCE

7-8.1 General Throughout all phases of construction, including suspension of the Work, and until acceptance per 6-8, the Contractor shall keep the Work site clean and free from rubbish and debris. Rubbish and debris collected on the Work site shall only be stored in roll-off, enclosed containers prior to disposal. Stockpiles of such will not be allowed.

When required by the Special Provisions, the Contractor shall provide a self-loading motorized street sweeper equipped with a functional water spray system. The sweeper shall clean all paved areas within the Work site and all paved haul routes at least once each working day.

The Contractor shall ensure there is no spillage along haul routes. Any such spillage shall be removed immediately and the area cleaned.

Should the Contractor fail to keep the Work site free from rubbish and debris, the Engineer may suspend the Work per 6-3 until the condition is corrected.

7-8.2 Air Pollution Control The Contractor shall not discharge smoke, dust, equipment exhaust, or any other air contaminants into the atmosphere in such quantity as will violate any Federal, State, or local regulations.

The Contractor shall also abate dust nuisance by cleaning, sweeping and spraying with water, or other means as necessary. The use of water shall conform to 7-8.6.

7-8.3 Noise Control. Noise generated from the Contractor's operations shall be controlled as specified in the Special Provisions.

7-8.4 Storage of Equipment and Materials.

7-8.4.1 General Materials and equipment shall be removed from the Work site as soon as they are no longer necessary. Before inspection by the Engineer for acceptance, the Work site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance.

Excess excavated material shall be removed from the Work site immediately unless otherwise specified in the Special Provisions.

Forms and form lumber shall be removed from the Work site as soon as practicable after stripping.

7-8.4.2 Storage in Public Streets. Construction materials and equipment shall not be stored in streets, roads, or highways for more than 5 days after unloading unless otherwise specified in the Special Provisions or approved by the Engineer. All materials or equipment not installed or used in construction within 5 days after unloading shall be stored at a location approved by the Engineer.

Excavated material, except that which is to be used as backfill in the adjacent trench, shall not be stored in public streets unless otherwise specified in the Special Provisions or approved by the Engineer. Immediately after placing backfill, all excess material shall be removed from the Work site.

7-8.5 Sanitary Sewers.

7-8.5.1 General. The flow of sewage shall not be interrupted. Should the Contractor disrupt the operation of existing sanitary sewer facilities, or should disruption be necessary for performance of the Work, the Contractor shall bypass the sewage flow around the Work. Sewage shall be conveyed in closed conduits and disposed of in a sanitary sewer system. Sewage shall not be permitted to flow in trenches nor be covered by backfill.

Whenever sewage bypass and pumping is required by the Plans or Specifications, or the Contractor so elects to perform, the Contractor shall submit per 2-5.3 a working drawing conforming to 7-8.5.2 detailing its proposed plan of sewage bypass and pumping.

7-8.5.2 Sewage Bypass and Pumping Plan. The plan shall indicate the locations and capacities of all pumps, sumps, suction and discharge lines. Equipment and piping shall be sized to handle the peak flow of the section of sewer line to be bypassed and pumped. Equipment and piping shall conform to 7-10, the Plans, and the Special Provisions. Bypass piping, when crossing areas subject to traffic loads, shall be constructed in trenches with adequate cover and otherwise protected from damage due to traffic. Lay-flat hose or aluminum piping with an adequate casing and/or traffic plates may be allowed if so approved by the Engineer. Bypass pump suction and

discharge lines that extend into manholes shall be rigid hose or hard pipe. Lay flat hose will not be allowed to extend into manholes. The Contractor shall provide a backup bypass pumping system in case of malfunction. The backup bypass system shall provide 100 percent standby capability, and be in place and ready for immediate use.

Each standby pump shall be a complete unit with its own suction and discharge piping. In addition to the backup system, the Contractor shall furnish and operate vacuum trucks when required by the Plans or Special Provisions.

7-8.5.3 Spill Prevention and Emergency Response Plan. The Contractor shall prepare and submit per 2-5.3 a spill prevention and emergency response plan. The plan shall address implementation of measures to prevent sewage spills, procedures for spill control and containment, notifications, emergency response, cleanup, and spill and damage reporting.

The plan shall account for all storm drain systems and water courses within the vicinity of the Work which could be affected by a sewage spill. Catch basins that could receive spilled sewage shall be identified. Unless otherwise specified in the Special Provisions, these catch basins shall be sealed prior to operating the bypass and pumping system. The Contractor shall remove all material used to seal the catch basins when the bypass and pumping system operations are complete.

The Contractor shall be fully responsible for containing any sewage spillage, preventing any sewage from reaching a watercourse, recovery and legal disposal of any spilled sewage, any fines or penalties associated with the sewage spill imposed upon by the Agency and/or the Contractor by jurisdictional regulatory agencies, and any other expenses or liabilities related to the sewage spill.

7-8.6 Water Pollution Control The Contractor shall prevent, control, and abate discharges of pollutants from the construction site in order to protect the storm drain system, which includes pipes, channels, streams, waterways, and other bodies of water, by the construction, installation or performance of water pollution control measures as shown on the Stormwater Pollution Control Plan (SWPCP) or Stormwater Pollution Prevention Plan (SWPPP) depending on the land area affected by the construction activity. The Contractor shall ensure compliance with the current State NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activity (General Construction Permit), NPDES No. CAS000002 and current Ventura County NPDES Municipal Separate Storm Sewer System (MS4) Permit No. CAS004002.

7-8.6.1 Compliance with NPDES General Construction Permit

7-8.6.1.1 Construction Sites

If the Work involves construction activity that results in soil disturbance of one acre or more of total land area, or results in soil disturbances of less than one acre but is a part of a work area larger than one acre, the Contractor shall comply with the requirements of the General Construction Permit NPDES No. CAS000002. Construction activity includes clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement. Construction activity does not include routine maintenance such as, maintenance of original line and grade, hydraulic capacity, or original purpose of the facility.

The Contractor shall comply with requirements of the General Construction Permit (NPDES No. CAS000002), obtained by the Agency, including a site-specific Storm Water Pollution Prevention Plan (SWPPP) for the Work to be developed by Qualified SWPPP Developer (QSD) and implemented by the Qualified SWPPP Practitioner (QSP). After July 1, 2010, the Agency will electronically file all required Permit Registration Documents (PRDs) through the State Water Board's Stormwater Multi-Application and Report Tracking System (SMARTS) website, as required prior to the commencement of construction activity. PRDs consist of the Notice of Intent (NOI), Risk Assessment, Post-Construction Calculations, a Site Map, the SWPPP, a signed certification statement by the Legally Responsible Party (LRP), and the first annual fee. For the Permit application, the Contractor shall submit to Project Manager the following:

- The completed site-specific Risk Assessment
- Post-construction calculations if applicable for the project, and
- Site-specific SWPPP developed in accordance with applicable Permits.

7-8.6.1.2 Linear Utility Projects; Contractor shall comply with the requirements of the General Construction Permit NPDES No. CAS000002 for Linear Underground/Overhead projects (LUPs) one acre or greater.

7-8.6.2 Compliance with NPDES MS4 Permit

7-8.6.2.1 Construction Sites Less Than One Acre The Contractor shall ensure implementation of an effective combination of erosion and sediment control Best Management Practices (BMPs) listed in **Table 6** of the Ventura County NPDES MS4 Permit. The Contractor shall develop and implement a Storm Water Pollution Control Plan (SWPCP).

7-8.6.2.2 Construction Sites One Acre but Less Than 5 Acres The Contractor shall ensure implementation of an effective combination of appropriate erosion and sediment control BMPs from **Table 7** (BMPs at Construction sites 1 acre or greater but less than 5 acres) of the Ventura County NPDES MS4 Permit in addition to the ones identified in **Table 6** (BMPs at Construction sites less than 1 acre) to prevent erosion and sediment loss, and the discharge of construction wastes. For all construction sites one acre or greater, the Contractor shall submit the SWPPP to the Agency for review and certification as the Local SWPPP.

7-8.6.2.3 Construction Sites 5 Acres and Greater The Contractor shall ensure implementation of an effective combination of the following BMPs in **Tables 8** (BMPs at Construction sites 5 acres or greater) in addition to the ones identified in **Table 6** (BMPs at Construction sites less than 1 acre) and **Table 7** (BMPs at Construction sites 1 acre or greater but less than 5 acres) at all construction sites 5 acres and greater to prevent erosion and sediment loss, and the discharge of construction wastes. For all construction sites one acre or greater, the Contractor shall submit the SWPPP to the Agency for review and certification as the Local SWPPP.

7-8.6.2.4 Enhanced Construction BMP Implementation

Construction sites located on hillsides, adjacent or directly discharging to CWA 303(d) listed waters for siltation or sediment, and directly adjacent to Environmentally Sensitive Areas are termed "high risk sites." Contractor shall implement enhanced practices that preclude impacts to water quality posed by the high risk sites. Contractor shall ensure that high risk sites are inspected by the Qualified SWPPP Developer, Qualified SWPPP Practitioner, or Certified Professionals in Erosion and Sediment Control (CPESC) at the time of BMP installation, at least weekly during the wet season, and at least once each 24 hour period during a storm event that generates runoff from the site, to identify BMPs that need maintenance to operate effectively, that have failed or could fail to operate as intended.

During the wet season, the area of disturbance shall be limited to the area that can be controlled with an effective combination of erosion and sediment control BMPs. Enhanced sediment controls should be used in combination with erosion controls and should target portions of the site that cannot be effectively controlled by standard erosion controls described above. Effective sediment and erosion control BMPs proposed by the Contractor shall include the BMPs listed in Table 9 (Enhanced Construction BMP Implementation) of the NPDES MS4 Permit. The Contractor shall implement the BMPs listed in Table 9 unless shown unnecessary. Also, the Contractor shall retain records of the inspection and a determination and rationale of the BMPs selected to control runoff.

7-8.6.3 Plan.

7-8.6.3.1 The SWPCP, required for construction projects less than one acre, shall be prepared in accordance with the requirements of current Ventura County NPDES MS4 Permit No. CAS004002 and County Ordinance No. 4142.

7-8.6.3.2 The SWPPP, required for construction projects one acre or greater, shall be prepared in accordance with the requirements of the state's General Construction Permit NPDES Permit CAS000002, Ventura Countywide Stormwater Quality Management Program, NPDES MS4 Permit No. CAS004002, and County Ordinance No. 4142.

7-8.6.3.3 The SWPCP/SWPPP shall identify potential pollutant sources on the construction site that may affect the quality of discharges, whether non-stormwater or stormwater, from the site and design the use and placement of water pollution control measures, BMPs, to effectively prohibit the entry of pollutants from the site into the storm drain system during construction. At a minimum, and depending on the size of the project area, the SWPCP/SWPPP will include all appropriate minimum BMPs as required by the Ventura Countywide Stormwater Quality Management Program, NPDES MS4 Permit No. CAS004002 (Tables 6 through 9). The SWPCP/SWPPP must utilize the measures recommended in the California Stormwater Quality Association (CASQA) Stormwater BMPs Handbook for Construction (January 2003 version until July 1, 2010 and 2009 version after July 1, 2010). Starting July 1, 2010 SWPPP shall be prepared by QSD as defined in the NPDES Permit CAS000002. The Contractor shall complete, sign and submit the SWPCP/SWPPP for review and final approval by the Project Engineer, prior to issuance of the Notice to Proceed as provided in 6-7.4.

7-8.6.3.4 For all construction projects one acre and greater, the Contractor shall submit the SWPPP to the Agency for review and certification as Local SWPPP in accordance with NPDES MS4 Permit No. CAS004002 prior to the Notice to Proceed as provided in 6-7.4.

7-8.6.4 Measures. All water pollution control measures shall conform to the requirements of the submitted SWPCP/SWPPP. If circumstances during the course of construction require changes to the original SWPCP/SWPPP, a revised SWPCP/SWPPP shall be promptly submitted to the Project Manager in each instance. The SWPPP shall be amended or revised by QSD. A copy of the current SWPCP/SWPPP including revisions and amendments shall be kept at the site to ensure that field personnel has access to the current document at all times. If measures being taken are inadequate to control water pollution effectively, the Project Manager may direct the Contractor to revise the operations and no further work shall be performed until adequate water pollution control measures are implemented. Effective September 2, 2011, implementation of the SWPPP shall be overseen by the Contractor's QSP as defined in the General Construction Permit NPDES No. CAS000002. All work installed by the Contractor in connection with the SWPCP/SWPPP but not specified to become a permanent part of the Work shall be removed and the site restored in so far as practical to its original condition prior to completion of the Work.

7-8.6.4.1 Post-Construction Standards; Contractor shall ensure that applicable post-construction standards are implemented to meet applicable project requirements of the Ventura County NPDES MS4 Permit and General Construction Permit NPDES No. CAS000002 (effective September 2, 2012).

7-8.6.4.2 Active Treatment Systems; Contractor shall comply with requirements of the General Construction Permit NPDES No. CAS000002 for active treatment systems as applicable.

7-8.6.5 Monitoring and Reporting

7-8.6.5.1 Monitoring; In accordance with the General Construction Permit NPDES No. CAS000002, the Contractor shall develop and implement monitoring program for Risk Level 2 and 3 sites. In addition at Risk Level 3 sites, contractor shall perform receiving water monitoring to meet Permit requirements.

7-8.6.5.2 Reporting; the Contractor shall ensure that all submittals and reports are prepared and submitted to the RWQCB in accordance with the applicable Permits. At minimum the reports will include Annual Report (for applicable projects due September 1st), Rain Event Action Plan (due 48 hrs prior to the rain event for the applicable projects), Numeric Action Levels (NAL) Exceedance Report (as required), Numeric Effluent Limitations (NELs) Violation Report (within 24 hours after NEL exceedance is identified). Contractor shall submit required reports to the Project Manager for review and approval prior to submittal to the RWQCB.

7-8.6.6 Dewatering Activities. All dewatering activities shall be performed in accordance with applicable regulatory requirements issued by the Los Angeles Regional Water Quality Control Board, including specific requirements contained in the Waste Discharge Requirements (WDR) when issued for the Work.

7-8.6.7 Payment. The Contract lump sum price for water pollution control shall include full compensation for furnishing all labor, materials, tools, equipment, services and incidentals and for doing all work involved in water pollution control as specified herein. Payment for water pollution control will be made as the Work proceeds, and is in compliance with the approved Water Pollution Control Plan, on the following basis.

Partial payment estimate (excluding mobilization & water pollution control payments) as a percentage of the original Contract price (excluding the mobilization & water pollution control Bid items).		Cumulative amount of water pollution control pay item earned is the lesser of the amounts as computed by these two columns.	
Equal to or greater than	Less than	Percentage of water pollution control pay item	Percentage of the original Contract total.
5	10	10	1
10	20	20	2
20	50	50	3
50	Completion of Work	75	5
Completion of Work		100	

Where no Bid item is provided for water pollution control, payment for water pollution control shall be considered to be included in the other Bid items.

7-8.7 Drainage Control. The Contractor shall maintain drainage within and through the Work areas. Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete or other acceptable material will be permitted when necessary to protect the Work, provided their use does not create a hazard or nuisance to the public. Such dams shall be removed from the site as soon as their use is no longer necessary.

7-8.8 Final Cleaning. At the completion of the Work, the Contractor shall remove all waste materials and rubbish from and about the project, as well as all tools, construction equipment, temporary facilities, machinery, and surplus materials.

At completion of construction and just prior to final inspection, the Contractor shall thoroughly clean the interior and exterior of the buildings, including hardware, floors, roofs, sills, ledges, glass, or other surfaces where debris, plaster, paint, spots, and dirt or dust may have collected. All glass shall be washed clean and polished. Remove all grease, stains, labels, fingerprints, and other foreign materials from interior and exterior surfaces. Repair, patch, and touch up marred surfaces to match adjacent finishes.

The Contractor shall use only experienced workmen or professional cleaners for final cleaning. It shall use only cleaning materials recommended by the manufacturer of the surface to be cleaned, and use cleaning materials only on surfaces recommended by the cleaning material manufacturer.

It shall broom-clean all paved surfaces and rake-clean other surfaces of grounds.

The Contractor shall replace air conditioning filters if units were operated during construction, and clean all ducts, blowers, and coils if air conditioning units were operated without filters during construction.

After cleaning, the Contractor shall maintain the building in a clean condition until it is accepted by the Agency.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS. The Contractor shall be responsible for the protection of public and private property adjacent to the Work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements within the right-of-way which are not designated for removal (e.g., curbs, sidewalks, driveways, fences, walls, signs, utility installations, pavement, structures, etc.) which are damaged or removed as a result of its operations. When a portion of a sprinkler system within the right-of-way must be removed, the remaining lines shall be capped. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension.

Maintenance of street and traffic signal systems that are damaged, temporarily removed or relocated shall be done in conformance with 307-1.5.

Trees, lawns, and shrubbery that are not designated to be removed shall be protected from damage or injury. If damaged or removed because of the Contractor's operations, they shall be restored or replaced in as nearly the original condition and location as is reasonably possible. Lawns shall be reseeded and covered with suitable mulch.

The Contractor shall give reasonable notice to occupants or owners of adjacent property to permit them to salvage or relocate plants, trees, fences, sprinklers and other improvements which are designated for removal and would be destroyed because of the Work.

All costs to the Contractor for protecting, removing, and restoring existing improvements shall be absorbed in its bid.

In existing buildings, all surfaces, equipment, furniture and other property shall be protected from loss or damage by or as result of the Contractor's operations. The Contractor shall replace damaged property or shall repair and restore it to its previous condition. Patching, painting, replacement of wall, ceiling and floor covering and similar Work shall be done in such a manner that the repaired Work will not be readily noticeable.

7-10 PUBLIC CONVENIENCE AND SAFETY

7-10.1 Access.

7-10.1.1 General. The Contractor's operations shall cause no unnecessary inconvenience to the public or businesses in the vicinity of the Work. The Contractor shall have no greater length or quantity of Work under construction than can be properly prosecuted with a minimum of inconvenience to the public and other contractors engaged in adjacent or related work.

The Contractor shall provide continuous and unobstructed access to the adjacent properties unless otherwise specified in the Special Provisions or approved by Engineer. Work requiring traffic lane closures shall only be performed between the hours specified in the Special Provisions or shown on the TCP. Traffic shall be permitted to pass through the Work site, unless otherwise specified in the Special Provisions or shown on the TCP.

7-10.1.1.1 Vehicular Access. Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access. If backfill has been completed to the extent that safe access may be provided and the street is opened to local traffic, the Contractor shall immediately clear the street and driveways and provide and maintain access.

7-10.1.1.2 Pedestrian Access. Safe, adequate, and ADA compliant pedestrian access shall be maintained unless otherwise approved by the Engineer. 7-10.2 Work Area Traffic Control.

7-10.2 Traffic Control

7-10.2.1 General. Work area traffic control shall conform to the California MUTCD, WATCH, or as specified in the Special Provisions. The total length of the traffic control zone shall include a buffer space, advance signing, striping transitions in advance of the Work site, existing striping, signing, and raised medians.

7-10.2.2 Traffic Control Plan.

7-10.2.2.1 General. If so specified in the Special Provisions or on the permit, the Contractor shall submit a TCP in accordance with 2-5.3. The sheets of the TCP shall display the title, phase identification, name of the firm preparing the TCP, name and stamp of the Registered Traffic or Civil Engineer, approval block for each jurisdictional agency, north arrow, sheet number, and number of sheets comprising the TCP. General notes and symbol definitions shall be included when required. Adequate dimensioning shall be provided to allow for proper field installation. The TCP shall be drawn to a 1 inch = 40 feet scale on common size sheets, either 8-1/2 inches x 11 inches, 8-1/2 inches x 14 inches, 11 inches x 17 inches, or 2-foot x 3-foot plan sheets as dictated by the length of the Work.

The requirements in the Special Provisions shall govern the design of the proposed TCP.

7-10.2.2.2 Payment. Payment for preparation of the TCP shall be included in the appropriate lump sum Bid items. If no Bid items have been provided, payment shall be included in the various Bid items unless otherwise specified in the Special Provisions.

7-10.3 Haul Routes. Unless otherwise specified in the Special Provisions, the haul route(s) shall be determined by the Contractor.

7-10.4 Safety.

7-10.4.1 Work Site Safety.

7-10.4.1.1 General. The Contractor shall provide safety measures as necessary to protect the public and workers within, or in the vicinity of, the Work site. The Contractor shall ensure that its operations will not create safety hazards. The Contractor shall provide safety equipment, material, and assistance to Agency personnel so that they may properly inspect all phases of the Work. When asbestos is being removed, the requirements of the CCR Title 8, Div. 1, Chapter 4, Subchapter 4 and Subchapter 7 shall be implemented.

7-10.4.1.2 Work Site Safety Official. The Contractor shall designate in writing a "Project Safety Official" who shall be at the Work site at all times, and who shall be thoroughly familiar with the Contractor's Injury and Illness Prevention Program (IIPP) and Code of Safe Practices (CSP). The Project Safety Official shall be available at all times to abate any potential safety hazards and shall have the authority and responsibility to shut down an unsafe operation, if necessary.

7-10.4.2 Safety Orders.

7-10.4.2.1 General. The Contractor shall have at the Work site, copies or suitable extracts of Construction Safety Orders, Tunnel Safety Orders, and General Industry Safety Orders issued by the State Division of Industrial Safety. Prior to beginning any excavation 5 feet in depth or greater, the Contractor shall submit to the Engineer, the name of the "Competent Person" as defined in CCR, Title 8, Section 1504, in accordance with 2-5.3. The "Competent Person" shall be present at the Work site as required by Cal-OSHA.

7-10.4.2.2 Shoring Plan. Before excavating any trench 5 feet (105m) or more in depth, the Contractor shall submit in accordance with 2-5.3 a detailed working drawing (shoring plan) showing the design of the shoring, bracing, sloping, or other provisions used for the workers' protection. If the shoring plan varies from the shoring system standards, the shoring plan shall be prepared by a registered Structural or Civil Engineer. The shoring plan shall accommodate existing underground utilities. No excavation shall start until the Engineer has accepted the shoring plan and the Contractor has obtained a permit from the State Division of Industrial Safety. A copy of the permit shall be submitted to the Engineer in accordance with 2-5.3. If the Contractor fails to submit a shoring plan or fails to comply with an accepted shoring plan, the Contractor shall suspend work at the affected location(s) when directed to do so by the Engineer. Such a directive shall not be the basis of a claim for Extra Work and the Contractor shall not receive additional compensation or Contract time due to the suspension.

7-10.4.2.3 Payment. Payment for shoring shall be included in the Bid item provided therefor. Payment for compliance with the provisions of the safety orders and all other laws, ordinances, and regulations shall be included in the various Bid items.

7-10.4.3 Use of Explosives. Explosives may be used only when authorized in writing by the Engineer, or as otherwise specified in the Special Provisions.

Explosives shall be handled, used, and stored in accordance with all applicable regulations.

Prior to blasting, the Contractor shall comply with the following requirements:

- a) The jurisdictional law enforcement agency shall be notified 24 hours in advance of blasting.
- b) The jurisdictional fire department shall be notified 24 hours in advance of blasting.
- c) Blasting activities and schedule milestones shall be included in the Contractor's construction schedule per 6-1.

For a Private Contract, specific permission shall be obtained from the Agency in writing, prior to any blasting operations in addition to the above requirements.

The Engineer's approval of the use of explosives shall not relieve the Contractor from liability for claims caused by blasting operations.

7-10.4.4 Hazardous Substances. An MSDS as described in CCR, Title 8, Section 5194, shall be maintained at the Work site for all hazardous material used by the Contractor. Material usage shall be accomplished with strict adherence to California Division of Industrial Safety requirements and all manufacturer warnings and application instructions listed on the MSDS and on the product container label. The Contractor shall notify the Engineer if a specified product cannot be used under safe conditions. **7-10.4.5 Confined Spaces.** **7-10.4.5.1 Confined Space Entry Program (CSEP).** The Contractor shall be responsible for implementing, administering and maintaining a CSEP in accordance with CCR, Title 8, Sections 5156, 5157 and 5158.

Prior to the start of the Work, the Contractor shall prepare and submit a CSEP in accordance with 2-5.3. The CSEP shall address all potential physical and environmental hazards and contain procedures for safe entry into confined spaces such as the following:

- a) Training of personnel
- b) Purging and cleaning the space of materials and residue
- c) Potential isolation and control of energy and material inflow
- d) Controlled access to the space
- e) Atmospheric testing of the space
- f) Ventilation of the space
- g) Special hazards consideration
- h) Personal protective equipment
- i) Rescue plan provisions

The submittal shall include the names of the Contractor's personnel, including each Subcontractor's personnel, assigned to the Work that will have CSEP responsibilities, their CSEP training, and their specific assignment and responsibility in carrying out the CSEP.

7-10.4.5 Confined Spaces.

7-10.4.5.1 Confined Space Entry Program (CSEP). The Contractor shall be responsible for implementing, administering and maintaining a CSEP in accordance with CCR, Title 8, Sections 5156, 5157 and 5158.

Prior to the start of the Work, the Contractor shall prepare and submit a CSEP in accordance with 2-5.3. The CSEP shall address all potential physical and environmental hazards and contain procedures for safe entry into confined spaces such as the following:

- a) Training of personnel.
- b) Purging and cleaning the space of materials and residue.
- c) Potential isolation and control of energy and material inflow.
- d) Controlled access to the space.
- e) Atmospheric testing of the space.
- f) Ventilation of the space.
- g) Special hazards consideration.
- h) Personal protective equipment.
- i) Rescue plan provisions.

The submittal shall include the names of the Contractor's personnel, including each Subcontractor's personnel, assigned to the Work that will have CSEP responsibilities, their CSEP training, and their specific assignment and responsibility in carrying out the CSEP.

7-10.4.5.2 Permit-Required Confined Spaces. Entry into permit-required confined spaces as defined in CCR, Title 8, Section 5157 may be required as a part of the Work. Manholes, tanks, vaults, pipelines, excavations, or other enclosed or partially enclosed spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. The Contractor shall implement a permit-required CSEP prior to performing any work in a permit-required confined space. A copy of the permit shall be available at all times for review by the Contractor and the Engineer at the Work site.

7-10.4.5.3 Payment. Payment for the CSEP shall be included in the Bid items for which the CSEP is required.

7-10.5 Security and Protective Devices.

7-10.5.1 General. Security and protective devices shall consist of fencing, steel plates, or other devices as specified in the Special Provisions to protect open excavations

7-10.5.2 Security Fencing. The Contractor shall completely fence open excavations. Security fencing shall conform to 304-3.5. Security fencing shall remain in place unless workers are present and construction operations are in progress during which time the Contractor shall provide equivalent security..

7-10.5.3 Steel Plate Covers. The Contractor shall provide steel plate covers as necessary to protect from accidental entry into openings, trenches, and excavations.

7-11 PATENT FEES OR ROYALTIES. The Contractor shall absorb in its Bid, the patent fees or royalties on any patented article or process which may be furnished or used in the Work. The Contractor shall indemnify and hold the Agency harmless from any legal action that may be brought for infringement of patents.

7-12 ADVERTISING. The names of contractors, subcontractors, architects, or engineers, with their addresses and the designation of their particular specialties, may be displayed on removable signs. The size and location of such signs shall be subject to the Engineer's approval.

Commercial advertising matter shall not be attached or painted on the surfaces of buildings, fences, canopies, or barricades.

7-13 LAWS TO BE OBSERVED. The Contractor shall keep fully informed of State and National laws and County and Municipal ordinances and regulations which in any manner affect those employed in the Work or the materials used in the Work or in any way affect the conduct of the Work. It shall at all times observe and comply with all such laws, ordinances and regulations.

7-13.1 Mined Materials. Mined material from California surface mines, used on the Work, shall be from a mine identified in the list published by the California Department of Conservation (referred to as 3098 List), as required by Public Contract Code 20676. This list is available on the Internet at www.conservation.ca.gov/OMR/ab_3098_list/index.htm.

7-14 ANTITRUST CLAIMS. Section 7103.5 of the Public Contract Code provides:

"In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 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, services, or materials pursuant to the public works contract or subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgement by the parties."

7-15 RECYCLABLE CONSTRUCTION & DEMOLITION WASTES. Ventura County Ordinance Code Section, 4421 et seq, requires that if any recyclable solid wastes or marketable reusable materials will be generated on the site of the Work within the unincorporated areas of Ventura County, the Contractor shall prepare a Construction & Demolition Debris Waste Diversion Plan and submit it to the Ventura County Public Works Agency, Water & Sanitation Department - Integrated Waste Management Division (IWMD). The Contractor shall prepare and file Construction & Demolition Debris Waste Diversion Reporting Forms as required by the IWMD.

For projects within the unincorporated areas of Ventura County, the Contractor shall submit an IWMD Form B-Recycling Plan approved by IWMD prior to issuance of the Notice to Proceed as provided in 6-7.4.

For projects within the unincorporated areas of Ventura County, the Contractor shall submit an IWMD Form C-Reporting Form approved by IWMD prior to the Engineer preparing the final estimate as provided in 9-3.2.

If the site of the Work is within an incorporated city, the Contractor shall comply with all the recycling, solid waste diversion, and hauling requirements of that incorporated city.

7-16 BLANK

7-17 LOSS OR DAMAGE TO THE WORK. The Contractor is responsible for delivering to the Agency Work completed in accordance with the Contract except as provided in 7-18. Should the Work being constructed be damaged by fire or other causes before Acceptance by the Agency, it shall be replaced in accordance with the requirements of the Plans and Specifications without additional expense to the Agency. The Agency does not carry "Course of Construction" insurance on the Work. Contractor should arrange for its own insurance to protect its interests.

7-18 ACTS OF GOD. As provided in Section 7105 of the California Public Contract Code, the Contractor shall not be responsible for the cost of repairing or restoring damaged portions of the Work determined to have been proximately caused by an act of God in excess of 5 percent of the contracted amount, provided that the Work damaged was built in accordance with accepted and applicable building standards and the Specifications and Drawings. The Contractor shall obtain insurance to indemnify the Agency for any damage to the Work caused by an act of God if the premium of said insurance coverage is called for as a separate bid item in the bidding schedule for the Work. For purposes of this section, the term "acts of God" shall include only the following occurrences or conditions and effects: earthquakes in excess of a magnitude of 3.5 on the Richter Scale, and tidal waves.

SECTION 8 - FACILITIES FOR AGENCY PERSONNEL

8-1 GENERAL. A field office shall be provided when required by the Plans or Special Provisions. The field office shall be at a suitable location approved by the Engineer.

A field office shall be a weather-tight building of suitable proportions with 16 m² (120 sq. ft.) of floor area, at least one door, and a window area of 2 m² (22 Sq. Ft.). A field office may be a building or a separate room in a building the Contractor may be required to provide or that it may desire to provide for its own use. In either case, the room shall have a separate exterior door. All doors shall be provided with hasps for padlocks.

The office shall be convenient to the Work. It shall be adequately heated, ventilated, electrically lighted, and provided with telephone service, all at the expense of the Contractor or plant owner. Offices are for the exclusive use of Agency personnel, unless otherwise provided herein.

Field offices at the worksite shall be removed upon completion of the Work.

All costs incurred in furnishing, maintaining, servicing, and removing a field office required at the Work site shall be included in the price bid for such item. If such item is required by the Plans or Specifications and no bid item is provided in the Proposal, the costs shall be absorbed in the other items for which bids are entered. Buildings and equipment furnished by the Contractor at the Work site under the provisions of this section are the property of the Contractor.

The first progress payment will not be approved until all facilities are in place and fully comply with the Specifications.

8-2 EQUIPMENT FOR FIELD OFFICES. Unless otherwise specified, a field office shall be equipped with:

- Plan table, 0.75 m x 1.5 m (2 1/2 ft. x 5 ft.) or larger
- Plan rack, capacity to hold two sets of project Plans plus all shop drawings
- Desk and chair
- Two lockers with hasps for padlocks

SECTION 9 - MEASUREMENT AND PAYMENT

9-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK

9-1.1 General. Unless otherwise specified, quantities of work shall be determined from measurements or dimensions in horizontal planes. However, linear quantities of pipe, piling, fencing, and timber shall be considered as being the true length measured along longitudinal axis.

Unless otherwise provided in Specifications, volumetric quantities shall be the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimension. The planimeter shall be considered an instrument of precision adapted to measurement of all areas.

9-1.2 Methods of Measurement. Materials and items of Work which are to be paid for on the basis of measurement shall be measured in accordance with the methods stipulated in the particular sections involved.

9-1.3 Certified Weights. When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing actual net weights. The Agency will accept the certificate as evidence of weights delivered.

9-1.4 Units of Measurement. Measurements shall be in accordance with 1-4.1 and 1-4.2. A metric ton or "tonne" is equal to 1000 kilograms and the unit of liquid measure is a Liter (in U.S. Standard Measures, a pound is an avoirdupois pound; a ton is 2000 pounds avoirdupois; and the unit of liquid measure is a gallon).

9-2 LUMP SUM BID ITEMS. Items for which quantities are indicated as "Lump Sum", "L.S." or "Job" shall be paid for at the price indicated in the Proposal. Such payment shall be full compensation for the items of Work and all Work appurtenant thereto.

When required by the Specifications or requested by the Engineer, the Contractor shall submit to the Engineer within 15 Days after award of Contract, a detailed schedule in triplicate, to be used only as a basis for determining progress payments on a lump sum contract or any designated lump sum bid item. This schedule should equal in total the lump sum bid and shall be in such form and sufficiently detailed as to satisfy the Engineer that it correctly represents a reasonable apportionment of the lump sum. If Mobilization or Water Pollution Control are included in the detailed schedule, those items will be paid for as provided in 9-3.4.2 and 7-8.6.4, receptively.

9-3 PAYMENT

9-3.1 General. The quantities listed in the Bid schedule will not govern final payment unless identified by Agency on the Proposal as [F]. The symbol "[F]" indicates that the quantities shown on the Proposal form are the final pay quantities. Payment to the Contractor (except those items identified as [F]) will be made only for the actual quantities of Contract items constructed in accordance with the Plans and Specifications. Upon completion of construction, if the actual quantities show either an increase or decrease from the quantities given in the Bid schedule, the Contract Unit Prices will prevail subject to the provisions of 3-2.2.1. Payment for those items identified as [F] will be based on the quantities shown on the Proposal unless changed as provided in 3-2.2.1.

The unit and lump sum prices to be paid shall be full compensation for the items of work and all appurtenant work, including furnishing all materials, labor, equipment, tools and incidentals.

Payment for items shown on the Plans or required by the Specifications, for which no pay item is provided, shall be considered included in the prices named for the other items shown on the Proposal.

Payment will not be made for materials wasted or disposed of in a manner not called for under the Contract. This includes rejected material not unloaded from vehicles, material rejected after it has been placed and material placed outside of the Plan lines. No compensation will be allowed for disposing of rejected or excess material.

Whenever any portion of the Work is performed by the Agency at the Contractor's request, the cost thereof shall be charged against the Contractor, and may be deducted from any amount due or becoming due from the Agency.

Whenever immediate action is required to prevent injury, death, or property damage, and precautions which are the Contractor's responsibility have not been taken and are not reasonably expected to be taken, the Agency may, after reasonable attempt to notify the Contractor, cause such precautions to be taken and shall charge the cost thereof against the Contractor, or may deduct such cost from any amount due or becoming due from the Agency. Agency action or inaction under such circumstances shall not be construed as relieving the Contractor or its Surety from liability.

9-3.1 General. (Continued)

Payment shall not relieve the Contractor from its obligations under the Contract; nor shall such payment be construed to be Acceptance of any of the Work. Payment shall not be construed as the transfer of ownership of any equipment or materials to the Agency. Responsibility of ownership shall remain with the Contractor who shall be obligated to store, protect, repair, replace, rebuild, or otherwise restore any fully or partially completed work or structure for which payment has been made; or replace any materials or equipment required to be provided under the Contract which may be damaged, lost, stolen or otherwise degraded in any way prior to completion of the Work under the Contract, except as provided in 6-10.

Warranty periods shall not be affected by any payment but shall commence on the date equipment or material is placed into service at the written direction of the Engineer. In the event such items are not placed into service prior to partial or final completion of the Work, the warranty periods will commence on the date set forth as the date of field completion in the Engineer's acknowledgement of completion.

If, within the time fixed by law, a properly executed notice to stop payment is filed with the Agency, due to the Contractor's failure to pay for labor or materials used in the Work, all money due for such labor or materials will be withheld from payment to the Contractor in accordance with applicable laws.

At the expiration of 35 Days from the date of recording of the Notice of Completion, or as prescribed by law, the amount deducted from the final estimate and retained by the Agency will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the Contract to be further retained.

9-3.2 Partial and Final Payment. The Engineer will, after award of Contract, establish a closure date for the purpose of making monthly progress payments. The Contractor may request in writing that such monthly closure date be changed. The Engineer may approve such request when it is compatible with the Agency's payment procedure.

Each month, the Engineer will make an approximate measurement of the Work performed to the closure date and, as a basis for making monthly payments, estimate its value based on the Contract Unit Prices or as provided for in 9-2. When the Work has been satisfactorily completed, the Engineer will determine the quantity of Work performed and prepare the final estimate.

Work not conforming to the Contract Documents shall not be measured for payment.

Conformance with the Contract Documents shall be, in addition to constructing the Work in accordance with the Contract Documents, the Contractor's compliance with those portions of the Contract Documents not directly related to the completed Work, including but not limited to: construction and maintenance of detours; diversion and control of water; protection and repair of existing facilities of the Agency and adjacent owners; site maintenance; coordination with utilities and other contractors on the site; proper survey procedures and records; obtaining required permits and inspections; complying with working hour limitations; providing a Contractor's representative while Work is being performed; complying with environmental requirements; maintaining access and safety for users of facilities that are to remain in service during construction; and obeying all laws affecting the Work.

Payment for Extra Work will be made only on approved Daily Extra Work Reports with supporting documentation as required in 3-3.

From each progress estimate, 5 percent will be deducted and retained by the Agency, and the remainder less the amount of all previous payment will be paid to the Contractor.

No progress payment made to the Contractor or its sureties will constitute a waiver of the liquidated damages under 6-9.

9-3.2 Partial and Final Payment. (Continued)

As provided for in Sections 22300 of the California Public Contract Code, the Contractor may substitute securities for any monies withheld by the Agency to ensure performance under the Contract. In substituting securities, the Contractor may either:

- a. Deposit qualifying securities already owned by the Contractor with the Escrow prior to the Contract payment date, or
- b. Direct the Agency to send retained funds to the Escrow to be invested by the Escrow in qualifying securities as directed by the Contractor.

9-3.2.1 Release of Withheld Contract Funds. Pursuant to Public Contract Code Section 22300, Contractor has the option to deposit securities with an Escrow Agent as a substitute for retention earnings required to be withheld by Agency pursuant to the construction Contract between the Agency and the Contractor. A form of Escrow Agreement for Security Deposits in Lieu of Retention has been adopted by the Agency as one of the Contract Documents; procedures for implementing the provisions of the Escrow Agreement are contained in Escrow Instructions which shall become effective upon exercise of the option by the Contractor.

The Contractor shall take the following steps if it desires to substitute securities:

- a. Execute the Escrow Agreement for Security Deposits in Lieu of Retention.
- b. Furnish to the Escrow Agent a power of attorney and other forms necessary to empower the Escrow Agent to convert the securities to cash.
- c. Furnish to the Escrow Agent the securities described.
- d. Pay the Escrow Agent's fees and costs.

When the Contractor deposits with the Escrow Agent securities in lieu of money required to be withheld from progress payments, a sum of money equivalent to the current cash value of the securities as determined by the Escrow Agent shall be released to the Contractor by, or upon the direction of, the Agency.

If the total of the money plus the current cash conversion value of securities on deposit should fall below the aggregate amount of the sums required to be withheld from progress payments pursuant to 9-3.1 and 9-3.2, an amount equal to the difference shall be withheld from the next regular progress payment in addition to the amount which would ordinarily be withheld pursuant to 9-3.1 and 9-3.2. If the next regular progress payment is less than the total of the amounts to be withheld therefrom, the Contractor shall immediately either deposit with the Agency cash in the amount of the difference or deposit with the Escrow Agent additional securities having a current cash conversion value equal to or greater than the difference.

The Contractor shall be the beneficial owner of any such securities on deposit with the Escrow Agency and shall be entitled to any interest earned thereon prior to conversion. The Agency may direct the Escrow Agency to convert securities with the Escrow Agency into cash, and to deliver the cash to the Agency, in any case where the Contractor is in default, including the following:

- a. where the Agency would be entitled to use funds withheld pursuant to 9-3.1 and 9-3.2 to satisfy claims of workers, materials suppliers or subcontractors, or to complete or correct work which the Contractor has failed or refused to complete or correct, or
- b. where the Contractor has failed to comply with the requirements of this section respecting the deposit of additional cash or securities to make up for a fall in the value of securities already on deposit with the Escrow Agency.

The Agency may hold and use cash resulting from such a conversion of securities in the same manner as it would be entitled to hold and use funds withheld pursuant to 9-3.1 and 9-3.2.

9-3.2.2 Timely Progress Payments. As required by Public Contract Code Section 20104.50, the Contractor is informed that should a progress payment not be made within 30 Days after receipt of an undisputed and properly submitted payment request from the Contractor, the Agency shall pay interest to the Contractor on the unpaid amount at the rate set forth in the Code of Civil Procedures, Section 685.010(a). Agency shall promptly review payment requests, and if not determined to be proper, document to the Contractor, within 7 Days, the reasons why the request is not proper.

Contractor should refer to the code sections cited for further information.

9-3.3 Delivered Materials. Payment for the cost of materials and equipment delivered to the Work site but not incorporated in the Work will be included in the progress estimate if, prior to the closure date for the monthly progress payment, the material or equipment is listed by the Contractor on the Agency's form together with date of delivery, vendor's or Subcontractor's name and cost; is accompanied by a copy of an invoice showing the cost thereof; has an aggregate cost in excess of \$5,000 for each progress payment; is currently on the Work site at an approved location and in good condition; and is one of the following:

1. Precast concrete units weighing more than 100 kilograms (200 pounds) each.
2. Structural steel members weighing more than 100 kilograms (200 pounds) each.
3. Individual pieces of electrical equipment costing over \$1,000 each.
4. Individual pieces of mechanical equipment costing over \$1,000 each.
5. Reinforced concrete pipe of any size.
6. Storm drainage pipe 900 mm (36") in diameter and larger.
7. Water and sewer pipe 300 mm (12") in diameter and larger.
8. Finish hardware for doors.
9. Other individual items of equipment costing over \$1,000 each
10. Materials where the aggregate value of a single type of material exceeds \$1,000 and is either:
 - a) Fabricated or cut to fit the Work before delivery, or
 - b) Of a size or type not available from any manufacturer without a special production run.

On unit price Bid items, the amount paid for materials or equipment delivered but not incorporated in the Work shall not exceed 75% of the amount of the Bid item which includes such material or equipment.

On lump sum Bid items, the amount paid for materials and equipment delivered and not incorporated in the Work shall not exceed 75% of the item in the approved schedule submitted in accordance with 9-2 of which such materials or equipment is a part.

Should materials or equipment previously paid for be damaged, destroyed, stolen or removed from the Work site, the payment previously made therefor will be deducted from the next progress payment, unless such materials or equipment are replaced prior thereto.

On the closure date for progress payments, as provided in 9-3.2, the Contractor shall certify that all materials and equipment not incorporated into the Work, for which payment has previously been made or is being requested, is still at the Work site and in good condition. Failure to provide such certification will be cause for deducting previous payments for materials not incorporated in the Work from the amount due the Contractor in the progress payment.

Payment for materials or equipment, as provided herein, shall not constitute approval or acceptance thereof nor shall such payment modify or abridge any of the rights the Agency has under the Specifications or at law nor relieve the Surety of any of its obligations under the bonds.

9-3.4 Mobilization

9-3.4.1 Scope. Mobilization includes preliminary services, work and operations, including but not limited to, furnishing required bonds, obtaining necessary permits and work areas, providing a specified field office, the movement of labor, supplies, equipment and incidentals to the Work site, and for all other work, services and operations which must be performed or for which costs are incurred prior to performing work of the other Contract items.

9-3.4.2 Payment. The Contract lump sum price bid for mobilization shall include full compensation for furnishing all labor, materials, tools, equipment, services and incidentals and for doing all work involved in mobilization as specified herein. Payment for mobilization will be made as the Work proceeds on the following basis except that where a field office is required by the Specifications, no payment for mobilization will be made until the specified field office has been provided:

Partial payment estimate (excluding mobilization & water pollution control payments) as a percentage of the original Contract price (excluding the mobilization & water pollution control Bid items).		Cumulative amount of mobilization pay item earned is the lesser of the amounts as computed by these two columns.	
Equal to or greater than	Less than	Percentage of mobilization pay item	Percentage of the original Contract total.
5	10	50	5
10	20	75	7.5
20	50	95	9.5
50	Completion of Work	100	10
Completion of Work		100	

Where no Bid item is provided for mobilization, payment for mobilization shall be considered to be included in the other Bid items.

9-4 TERMINATION OF AGENCY LIABILITY. After completion of all work required by the contract, Agency will furnish Contractor a Release on Contract form stating the amount of total authorized payments for the project. Contractor shall execute and return said form within 21 days of receipt. Said form shall release and discharge the Agency from all claims of and liability to the Contractor for all manner of debts, demands, accounts, claims, and causes of action under or by virtue of said Contract except:

- a. The claim against the Agency for the remainder, if any, of the amounts retained as provided in 9-3.2, and any amounts retained as required by Stop Notices or Labor Code provisions.
- b. Any unsettled claims or disputes listed on the Release on Contract form which has been processed in compliance with the requirements for making claims under the Contract, including given timely notice pursuant to the applicable provisions of the Contract and following the procedure set forth in 6-12.

Acceptance of the Release on Contract by the Agency shall not be deemed a waiver or release of the Agency's right to contest either the substantive or procedural validity of any listed unsettled claims or disputes.

When executing the Release on Contract, the Contractor shall certify that each unsettled claim or dispute listed thereon has been processed in compliance with the requirements for making claims under the Contract, including giving timely notice pursuant to the applicable provisions of the Contract and following the procedures for resolution of disputes or claims set forth in 6-12 and that acceptance of the Release on Contract by the Agency shall not be deemed a waiver or release of the Agency's right to contest either the substantive or procedural validity of any listed unsettled claims or disputes.

If Contractor fails to execute and submit a Release on Contract within the 21 day time period set forth above, the Release on Contract shall be deemed to have been submitted with no unsettled claims or disputes listed on the Release on Contract. A payment of \$1.00 will be made to the Contractor for such Release on Contract and waiver.

SECTION 10 - DIVERSION, CONTROL AND REMOVAL OF WATER

10-1 DESCRIPTION. This section covers the diversion, control and removal of all water entering into the construction area or otherwise affecting construction activities.

10-2 REQUIREMENTS. All permanent construction shall be performed in a site free from water unless otherwise provided for in the Special Provisions. The Contractor shall construct, maintain, and operate all necessary cofferdams, pumps, channels, flumes, drains, well points and/or other temporary diversion, protective, and water removal works required for diversion, control and removal of all water, whether surface or groundwater, whatever its source, during construction.

Inundation of partially completed Work due to lack of control during non-working periods will not be permitted, and may be cause for requiring removal and replacement of Work already completed.

The Contractor shall be responsible for obtaining the use of any property in addition to that provided for in the Plans and Specifications, which may be required for the diversion, protective, and water removal works so as not to create a hazard to persons or property or to interfere with the water rights of others.

It shall be understood and agreed that the Contractor shall hold the Agency and the Engineer harmless from legal action taken by any third party with respect to construction and operations of the diversion and protective works.

10-3 DIVERSION AND CONTROL WORKS.

Prior to beginning of work involving diversion, control and removal of water, the Contractor shall submit a water control plan to the Engineer. In the event circumstances during the course of construction require changes to the original water control plan, a revised water control plan shall be promptly submitted to the Engineer in each instance. No responsibility shall accrue to the Engineer or the Agency as a result of the plan or as a result of knowledge of the plan.

Construction and operation of the diversion, control and removal works shall be in accordance with the water control plan submitted, except deviations therefrom may be specifically approved by the Engineer.

All works installed by the Contractor in connection with dewatering, control, and diversion of water but not specified to become a permanent part of the Work, shall be removed and the site restored, insofar as practical, to its original condition prior to completion of construction or when directed by the Engineer.

10-4 PAYMENT. No separate Bid item is included. Payment for this item of Work will be considered to be included in the payments made for other items of Contract Work to which water control is incidental.

PART 2 CONSTRUCTION MATERIALS

SECTION 200 - ROCK MATERIALS

200-1 ROCK PRODUCTS

200-1.6 Stone for Riprap

200-1.6.1A Alternate Stone for Riprap. As an alternate to the requirements of Subsection 200-1.6, the sample may be subject to the following tests:

TESTS	TEST METHOD NO.	REQUIREMENTS
Apparent Specific Gravity	ASTM C 127	2.40 Min.
Resistance to Abrasion	ASTM C 535, Grading 1	35% Max.
Soundness	Section 211-8	10% Max.
Wet and Dry Loss	Section 211-9	5% Max.
Solubility	Section 211-10	No Loss

All rock shall be angular or subangular in shape. Angular shall be defined as having sharp corners and straight planes on all faces, with no evidence of wear caused by wind, water or abrasion. Subangular shall be defined the same as angular except that evidence of wear by wind, water or abrasion may be allowed. Determination of angularity will be made by the Engineer.

200-1.6.2 Riprap Size

The individual classes of rock used for riprap shall conform to the following:

Rock Sizes	RIPRAP CLASSES					
	1-Tonne (1-Ton)	½-Tonne (½-Ton)	¼-Tonne (¼-Ton)	Light	Facing	Cobble
	PERCENTAGE LARGER THAN					
2-Tonne (2-Ton)	0-5					
1-Tonne (1-Ton)	50-100	0-5				
½-Tonne (½-Ton)		50-100	0-5			
¼-Tonne (¼-Ton)	90-100		50-100	0-5		
100-kg (200-lb)		90-100		50-100	0-5	
35-kg (75-lb)			90-100	90-100	50-100	0-5
10-kg (25-lb)					90-100	95-100
0.5-kg (1-lb)	100	100	100	100	100	100

The amount of material smaller than the smallest size listed in the table for any class of riprap shall not exceed the percentage limit listed in the table determined on a weight basis.

Compliance with the percentage limit shown in the table for all other sizes of the individual pieces of any class of riprap shall be determined by the ratio of the number of individual pieces larger than the specified size compared to the total number of individual pieces larger than the smallest size listed in the table for that class.

Flat or needle shapes will not be accepted unless the thickness of individual pieces is greater than 1/3 the length.

Before placing in final location, depositing, or stockpiling within the project limits, each individual load of riprap must meet the size requirements of the class specified.

SECTION 206 - MISCELLANEOUS METAL ITEMS

206-3 GRAY IRON AND DUCTILE IRON CASTINGS

206-3.3.2A Manhole Frame and Cover Sets

Unless otherwise specified, manhole frames and covers shall be in accordance with the following Standard Plans contained in the SPPWC:

Clear Opening Diameter mm (Inches)	SPPWC Plan No.	Catalog Numbers	
		Alhambra Foundry	Long Beach Iron Works
600 (24)	630-1	A-1495	X-162
675 (27)	631-1	A-1496	X-164
750 (30)	632-1	A-1497	X-163
900 (36)	633-1	A-1498	X-106A

206-5 METAL RAILINGS.

206-5.2 Flexible Metal Guard Rail Materials.

206-5.2A Flexible Metal Guard Rail Materials; Modification. The "Construction" grade Douglas Fir for "posts, including blocks" does not have to be "free of heart center".

SECTION 210 - PAINT AND PROTECTIVE COATINGS

210-6 STORM DRAIN HARDWARE. All storm drain hardware, including manhole frames and covers, grates, protection bars, steps, etc., shall be protected from corrosion.

Storm drain hardware made of cast iron shall be protected by painting with, or dipping in, a commercial grade asphalt paint. Storm drain hardware made of steel shall be galvanized.

SECTION 211 - MATERIAL TESTS

211-6 SIEVE ANALYSIS. Sieve analysis shall be performed in accordance with ASTM C136.

211-7 Sand Equivalent Test. This test is intended to serve as a field test to indicate the presence or absence of plastic fine material. The test shall be run in accordance with Calif. test 217 or ASTM D2419. When testing material containing asphalt, this test method shall be modified by drying the sample at a temperature not exceeding 38°C (100°F).

211-8 R-VALUE. Resistance (R-value) shall be determined by California Test 301.

211-9 SPECIFIC GRAVITY AND ABSORPTION. Apparent specific gravity, bulk specific gravity and absorption shall be determined by California Test 206, 207, 208, 209, 224, 225, or 308, Method C where zinc stearate may be substituted for paraffin.

211-10 LOS ANGELES RATTLER TEST. Loss in Los Angeles Rattler shall be determined by California Test 211.

211-11 SOUNDNESS. For riprap, the soundness shall be determined in accordance with Calif. Test 214, excluding sections D, E, G.2.b, and H, and adding the following:

- a. The test sample shall be prepared by breaking or sawing a representative sampling of riprap into particles passing the 75 mm (three inch) and retained on the 50 mm (two inch) sieve. If there are a variety of rock types or degrees of weathering within a rock type, each unique type or condition must meet the loss requirement.
- b. The test sample size shall be 25,000 grams (55 lbs.) \pm 1 percent.
- c. All particles of test sample which break into three or more pieces during testing shall be discarded. The remaining sample shall be washed on a 4.75 mm (#4) sieve and all particles retained shall be oven dried.
- d. The loss in weight shall be determined by subtracting from the original weight of the test sample the final weight of all particles retained on the 4.75 mm (#4) sieve. Divide the loss in weight by the original weight and multiply by 100 to determine the percent loss.
- e. Report the following:
 - (1) The percent loss.
 - (2) The number of pieces affected, classified as to number disintegrating, splitting, crumbling, cracking, flaking, etc.

211-12 WET AND DRY LOSS. Wet and dry loss shall be determined as follows:

A sample of rock shall be crushed, screened, oven dried, and 1,000 g (2.2 lbs.) to 1,500 g (3.3 lbs.) of the 19 mm (3/4 inch) to 9.5 mm (3/8 inch) fraction shall be taken for the test.

The crushed and graded sample shall be submerged in tap water for 8 hours at room temperature, after which the sample shall be drained and oven dried at 78°C (140°F). When dry, the sample shall be cooled to room temperature. This completes one cycle.

After 10 cycles, the percent loss shall be computed as follows:

$$\% \text{ Loss} = \frac{100 \times \text{Weight of Material Passing 4.75 mm (No. 4) Sieve}}{\text{Total Weight of Sample}}$$

211-13 SOLUBILITY. Approximately 0.5 kg (one pound), air dried samples shall be immersed in local tap water and in Pacific Ocean water (or a 3.5% sodium chloride solution) for 8 hours each at 78°C (140°F). After immersion, the samples shall be washed with tap water, air dried and reweighed.

211-14 Permeability Test. Permeability tests for granular soils shall be performed in accordance with ASTM D2434, using samples compacted to the specified field density.

PART 3 CONSTRUCTION METHODS

SECTION 301 - TREATED SOILS, SUBGRADE PREPARATION AND PLACEMENT OF BASE MATERIALS

301-1 SUBGRADE PREPARATION

301-1.3 Relative Compaction

301-1.3.1 Firm, Hard and Unyielding. The term "firm, hard and unyielding" as used in 301-1.3 shall mean that when the heaviest construction and hauling equipment used on the Work drives over the subgrade, no permanent deformation shall occur either before or during pavement construction.

301-1.4 Subgrade Tolerances. Subgrade for pavement, sidewalk, curb and gutter, driveways, or other roadway structures shall not vary more than 15 mm (0.05 feet) from the specified grade and cross section. Subgrade for subbase or base material shall not vary more than 15 mm (0.05 feet) from the specified grade and cross section.

Variations within the above specified tolerances shall be compensating so that the average grade and cross section specified are met.

301-2 UNTREATED BASE

301-2.3 Compacting

301-2.3.1 Tolerances. The tolerance requirement in 301-2.3 is modified from 6 mm (0.02 foot) to 15 mm (0.05 foot).

SECTION 302 - ROADWAY SURFACING

302-5 ASPHALT CONCRETE PAVEMENT

302-5.1 General

302-5.1.1 Asphalt Concrete Berms. Asphalt concrete berms shall be constructed of Class III-D-PG70-10 asphalt concrete by mechanical means to conform to the details and location as shown on the Plans.

A tack coat, as provided in 302-5.4, shall be applied to the existing or new pavement preceding the placement of the asphalt concrete berms.

302-5.4 Tack Coat

302-5.4.1 Fog Seal. When specified, a fog seal consisting of material meeting the requirements of 203-3 shall be applied to the surfaces of all completed asphalt concrete at the rate of 0.36 liter per square meter (0.08 gallon per square yard) of the combined emulsion or such lesser rate ordered by the Engineer. Surface to be sealed shall be free from dust, dirt, and other foreign material. Surface shall be sealed within 7 Days after paving.

302-5.9 Measurement and Payment

302-5.9.1 Measurement and Payment for Asphalt Berm. Asphalt concrete berms will be paid for at the Contract Unit Price per linear meter (feet) of berm in place. No separate measurement or payment will be made for asphalt, aggregate, or tack coat.

302-5.9.2 Measurement and Payment for Fog Seal, Tack Coat, and Prime Coat. Measurement and payment for the specified material shall be by the tonne (ton) in place. Emulsions shall be measured after the specified dilution has been made.

SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION

303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS AND DRIVEWAYS

303-5.1 Requirements

303-5.1.4 Concrete Substitution. Class 280-C-14 (470-C-2000) may be used in lieu of Class 310-C-17 (520-C-2500) and Class 280-D-14 (470-D-2000) in lieu of Class 310-D-17 (520-D-2500) as specified in 201-1.1.2 for street surface improvements, excluding concrete pavement, when no class is specified on the Plans or in the Special Provisions.

SECTION 306 - UNDERGROUND CONDUIT CONSTRUCTION

306-1 OPEN TRENCH OPERATIONS

306-1.2 Installation of Pipe

306-1.2.1 Bedding

306-1.2.1.1 Bedding Material. When native material is allowed for backfill in the bedding zone, no rocks larger than 40 mm (1½") in maximum dimensions shall be included. Material containing ashes, cinders, and types of refuse or other deleterious material shall not be used as bedding.

306-1.2.1.2 Sewer Pipe Bedding. Bedding for sewer pipe from 100 mm (4") below the pipe to the spring line (horizontal diameter) of the pipe shall be free draining, granular material with a maximum size of 15 mm (1/2 inch), unless another bedding method is shown on the Plans.

Densification of the bedding material may be by the application of water or by mechanical means. Unless otherwise specified, all bedding material shall be densified to a relative density of 90%. Acceptability of densification in the bedding zone will be determined by visual inspection and probing to determine that no voids exist in the backfill material. In this paragraph, the word "voids" does not include intergranular voids in the soil structure.

306-1.2.1.3 Flexible Pipe Bedding. Bedding for flexible drainage and sewer pipe shall be granular material having a sand equivalent of at least 50. The bedding material shall be placed and compacted from 150 mm (six inches) below the pipe to the top of the bedding as defined in 306-1.2.1. A 1 m (three foot) long section of low permeability material (50% passing 75 µm (200) sieve) shall be installed and mechanically compacted in lieu of the above specified bedding material at intervals of 60 m (200 feet) or as otherwise indicated on the Plans.

306-9 DISINFECTION. All water mains and appurtenances shall be disinfected before being placed in service in accordance with AWWA C651 except as specified herein:

- a. The water mains shall be chlorinated so that a chlorine residual of not less than 20 ppm remains in the water after standing in the pipe for 24 hours.
- b. The Agency will perform sampling and testing of bacteriologic samples. Disinfection shall be repeated until two or more consecutive samples are negative for coliform organisms.

The pressure in the line being chlorinated shall be maintained at least 35 kPa (5 psi) lower than that existing in any Agency line to which it is connected.

306-10 WATERWORKS APPURTENANCES

306-10.1 Valves. Valves shall be located as shown on the drawings.

Each valve shall be operated prior to its installation to assure proper functioning. Valves shall be installed plumb and in alignment with the water main. Valves shall be anchored by metal ties to a concrete base. Line valves may be moved to the closest joint upon approval of the Engineer.

306-10.2 Valve Boxes. Each underground valve shall be provided with a valve box. The valve boxes shall be installed plumb and centered over the operating nut of the valve. Valve boxes shall be installed with concrete collars.

Where valve boxes are to be placed in asphaltic type pavement, they shall not be set to grade until after paving has been completed.

Where valve boxes are to be placed in concrete pavement, they shall be set to grade prior to paving operations.

306-10.3 Thrust Devices. A reaction or thrust device shall be provided on all dead ends, tees, elbows, and bends with more than 5 degrees deflection on pressure pipe lines.

Thrust devices shall be cast-in-place concrete, poured against undisturbed or compacted earth. Thrust devices shall be sized and constructed in accordance with the Plans.

Thrust devices and anchor blocks shall be constructed of Class 280-C-14 (420-C-2000) concrete. Thrust devices and anchor blocks shall be cured at least 7 Days where Type IP or II cement is used or at least 48 hours where Type III cement is used.

Metal tie-rods or clamps shall be of adequate strength to prevent movement of pipe. All metal shall be coated in accordance with AWWA C110.

306-10.4 Fire Hydrants. Fire Hydrants shall be installed as shown on the Plans.

All hydrants shall stand plumb and shall have their nozzles parallel with or at right angles to the curb, with the pumper nozzle facing the curb, except that hydrants having only two hose nozzles 90 degrees apart shall be set with each nozzle facing the curb at an angle of 45 degrees.

In uncurbed public road rights of way, fire hydrants shall be located as far as possible from the traveled way while providing a 1 m (3-foot) wide clear space between the fire hydrant and the right of way line. In curbed public road rights of way, fire hydrants shall be installed so that there is 300 mm (12 inches) clear between the face of curb and the fire hydrant.

306-10.5 Fire Hydrant Barricades. Fire hydrant barricades shall consist of 100 mm (4-inch) standard steel pipe, schedule 40, filled with concrete, and having a total length of 2 m (72 inches). They shall be embedded in concrete blocks 300 mm (12 inches) in diameter and 1000 mm (40 inches) deep below ground surface with the barricade pipe embedded to 100 mm (4 inches) above the bottom of the concrete so 1 m (36 inches) extends above ground surface. The steel pipe above ground shall be painted chrome yellow in accordance with AWWA C503.

Barricades shall be installed between the fire hydrant and vehicle traffic paths at locations indicated on the Plans or where required by the water purveyor or Fire Department. Barricades shall not be installed within public road rights of way.

Fire hydrant barricades shall not obstruct the hydrant outlets.

SECTION 310 - PAINTING

310-5 Painting Various Surfaces

310-5.6 Painting Traffic Striping, Pavement Markings, and Curb Markings.

310-5.6.8A Application of Paint - Two Coats All painted traffic striping and markings shall be applied in two coats. The price named in any Bid item for painting traffic striping and markings shall include all costs for both applications, including any delays entailed for the required drying time between applications. If bleeding, curling or discoloration occurs following application of the second coat, unsatisfactory areas shall be given an additional coat, or coats, of paint. No additional payment will be made for work necessary to correct bleeding, curling or discoloration.

PART 4

SECTION 400 - ALTERNATE ROCK PRODUCTS, ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE AND UNTREATED BASE MATERIAL

400-1 Rock Products

400-1.1 Requirements

400-1.1.1 General

Alternate rock material, Type S, as specified in Section 400 may be used on the Work.

400-3 Portland Cement Concrete

Suppliers of portland cement concrete shall file mix designs as required by 400-1.1.2

400-4 Asphalt Concrete

Suppliers of asphaltic cement concrete shall file mix designs as required by 400-1.1.2



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
INSURED	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	NAIC #	
	INSURER A:	
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
INSURER F:		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY						EACH OCCURRENCE \$ See VCSS 7-4.2
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						MED EXP (Any one person) \$
							PERSONAL & ADV INJURY \$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ See VCSS 7-4.2
	<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$
							\$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS						BODILY INJURY (Per accident) \$ 1,000,000
	<input type="checkbox"/> HIRED AUTOS						PROPERTY DAMAGE (Per accident) \$ 1,000,000
							\$
	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR						EACH OCCURRENCE \$
	EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE						AGGREGATE \$
	DED <input type="checkbox"/> RETENTION \$						\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						WC STATUTORY LIMITS OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICE/MEMBER EXCLUDED? (Mandatory in NH)						E L EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E L DISEASE - EA EMPLOYEE \$
							E L DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

(Agency) - (Project Name) (Project Specification number)

The Agency and the County of Ventura, including its boards, all special Districts governed by the Board of Supervisors, agencies, departments, officers, consultants, employees, agents and volunteers, is named as Additional Insured as respects work done by Contractor under the terms of the contract on General Liability and Auto Liability Policies. Waiver of Subrogation is applicable to the Agency and the County of Ventura, its boards, districts, agencies, departments, officers, employees, agents and volunteers for Work Comp and General Liability. Endorsements required for referenced contract will be issued by the Insurance Company.

CERTIFICATE HOLDER

CANCELLATION

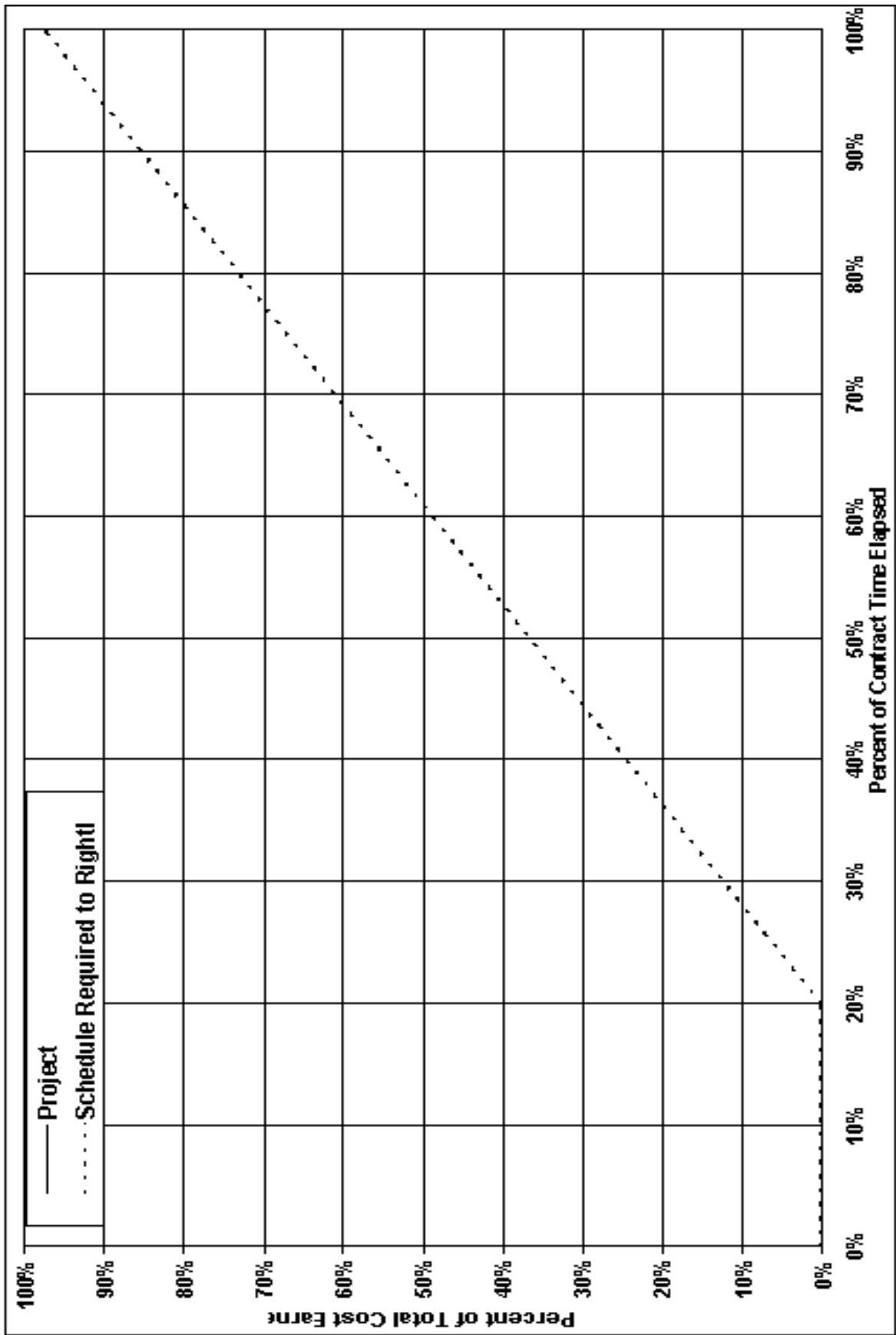
County of Ventura Public Works Agency L-1670 800 S. Victoria Avenue Ventura, CA 93009-1670	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
---	---

© 1988-2010 ACORD CORPORATION. All rights reserved.

[illegible]

Spec. No.

Project Name



[illegible]

EACH HORIZONTAL INTERVAL EQUALS 1 WORKING DAYS OF CONTRACT TIME

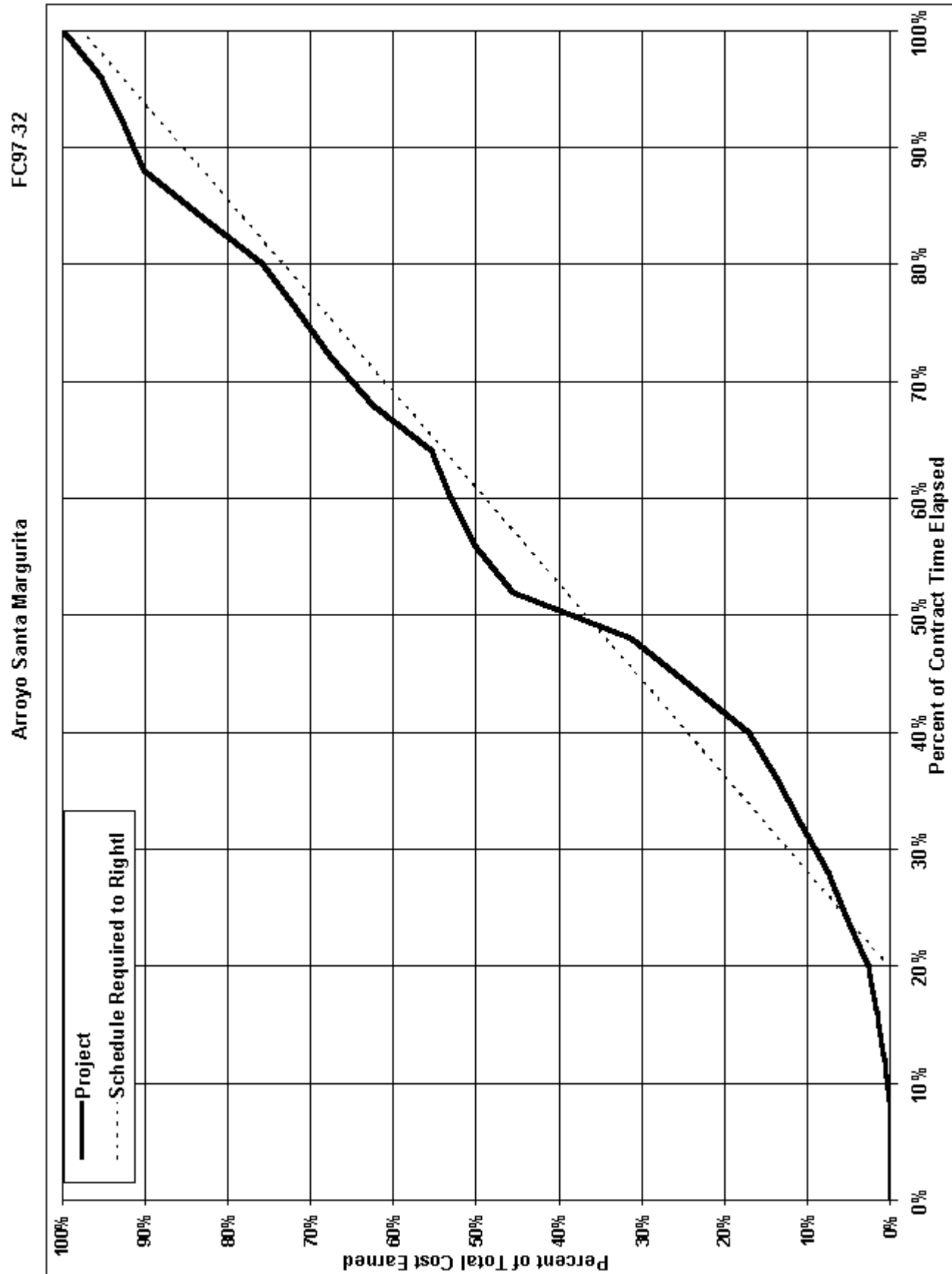
Submitted Dilbert and Company Construction

By *Tina Blair*

5/22/97

Date

Title President



ESCROW AGREEMENT FOR
SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between
("Agency") whose address is _____ and
("Contractor") whose address is _____ and
("Escrow Agent") whose address is _____.

For the consideration hereinafter set forth, the Agency, Contractor and Escrow Agent agree as follows:

- (1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Agency pursuant to the Construction Contract entered into between the Agency and Contractor for _____ in the amount of dated _____, (hereinafter referred to as the "Contract") which Contract is identified by Spec. No. _____ and Auditor Controller's Contract No. _____. Alternatively, on written request of the Contractor, the Agency shall make payments of the retention earnings directly to the Escrow Agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Agency within ten days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Agency and Contractor. Securities shall be held in the name of _____, and shall designate the Contractor as the beneficial owner.
- (2) The Agency shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.
- (3) When the Agency makes payments of retentions earned directly to Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until such time as the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Agency pays the Escrow Agent directly.
- (4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the escrow account. These expenses and payment terms shall be determined by the Agency, Contractor and Escrow Agent.
- (5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Agency.
- (6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Agency to the Escrow Agent that Agency consents to the withdrawal of the amount sought to be withdrawn by Contractor.
- (7) The Agency shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the Agency of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Agency.
- (8) Upon receipt of written notification from the Agency certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, the Escrow Agent shall release to the Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.
- (9) Escrow Agent shall rely on the written notifications from the Agency and the Contractor pursuant to Sections (1) to (8), inclusive, of this Agreement and the Agency and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Agency and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Agency:

_____, Director,
Public Works Agency

_____, Director
Central Services Department

_____, Director
Engineering Services Department

Address for all of the above:
Public Works Agency
800 South Victoria Avenue
Ventura, CA 93009

SAMPLE FORM

Form used for escrow will have names and
signatures of persons authorized in accordance
with paragraph 10.

On behalf of Contractor:

Title

Name

Signature

Street Address

City & State

Zip Code

On behalf of Escrow Agent:

Title

Name

Signature

Street Address

City & State

Zip Code

At the time the Escrow Account is opened, the Agency and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

Agency:
(Agency name)

Title

Name

Signature

Contractor:
(Contractor company name)

Title

Name

Signature

EXHIBIT "A"
ESCROW INSTRUCTIONS

The parties to this escrow are _____ ("Agency") and _____ ("Contractor") and _____ ("Escrow Agent"). Agency and Contractor have entered into a contract for the construction of _____ which contract is identified by Spec. No. _____ and Auditor-Controller's Contract No. _____ and was entered into by and between Agency and Contractor ("Construction Contract"). Pursuant to Public Contract Code Section 22300, Contractor may substitute certain securities for an equivalent amount of money required to be withheld from progress payments by Agency to Contractor pursuant to the Construction Contract.

The Escrow Agent is hereby instructed as follows:

1. Contractor may deliver to Escrow Agent:
 - (a) Securities of the types specified in Sections 22300 of the Public Contract Code and Section 16430 of the Government Code.
 - (b) Such other documents as are necessary to enable Escrow Agent to convert such securities into cash.
2. Upon receipt of such securities and other documents, Escrow Agent shall notify Agency within ten days of the deposit, and shall examine them to determine whether they are in a form sufficient to effect conversion of the securities into cash. Escrow Agent shall thereupon send written notice of its determination to Agency.
3. Escrow Agent shall hold such securities as trustee for Agency. The right of Agency to such securities is superior to any other lien or claim of lien; provided, however, that Contractor shall be entitled to any interest earned by such securities prior to their conversion to cash pursuant to section 5 hereof, and further provided that such interest may be withdrawn by Contractor at any time and from time to time without notice to Agency.

Securities may be substituted by Contractor, but any securities substituted for securities previously deposited shall not reduce the current cash value of securities held below that last reported to Agency by Escrow Agent.
4. Escrow Agent shall determine the current cash value of such securities held by it as of the close of business on the first business day following the _____ day of each month and, in addition, on any other days which the Agency may from time to time specify in a written notice to Escrow Agent. Current cash value shall be determined as follows:
 - (a) For securities traded over-the-counter or on a stock exchange:
 - (1) Determine either the current bid price for the securities as of the close of business or the face value of the securities, whichever is less.
 - (2) Subtract the cost of sale (broker commission).
 - (3) Subtract all unpaid escrow fees and costs associated therewith.
 - (b) For certificates of deposit:
 - (1) Determine the face amount.
 - (2) Subtract the potential interest penalty for immediate conversion.
 - (3) Subtract all unpaid escrow fees and costs associated therewith.
 - (c) Determine the value of other securities by procedures calculated to determine net realizable value. Promptly upon making each such determination, Escrow Agent shall notify Agency of the securities held and current cash value of such securities.

5. At any time or times that Agency believes it has a right to do so under the provisions of the Construction Contract, Agency may, without the consent of Contractor, deliver to Escrow Agent a written demand that Escrow Agent convert to cash all or any part of such securities. Upon seven days' written notice from Agency of such demand, Escrow Agent shall convert to cash all or part of such securities as demanded and shall distribute the cash as instructed by the Agency.
6. When the Construction Contract has been satisfactorily completed on the part of Contractor and any stop notices filed against the Construction Contract have been released, Agency shall give written notice to Escrow Agent that such securities may be returned to Contractor. Upon receipt of such written notice and payment of all escrow fees and costs, the Escrow Agent shall deliver to Contractor all money, interest, securities and other documents remaining in escrow and the escrow shall terminate.
7. Contractor, and not Agency, shall be liable to Escrow Agent for all of Escrow Agent's fees and costs associated with this escrow.
8. The Director of the Ventura County Public Works Agency, a Department Director of said Agency, or other person authorized in writing by such Director or Department Director is authorized to give written notice and to make written demands on behalf of Agency pursuant to sections 4, 5 and 6 hereof.
9. All written notices and demands pursuant to the escrow agreement and these Instructions shall be addressed as follows:
 - (a) To Agency:

Director, Ventura County Public Works Agency
800 South Victoria Avenue
Ventura, California 93009
 - (b) To Contractor:
 - (c) To Escrow Agent:

DATED: _____

By _____	By _____	By _____
Title _____	Title _____	Title _____

AGENCY

CONTRACTOR

ESCROW AGENT
 Bank Charter: State ☐
 Federal ☐
 Escrow Agent's Address:

RELEASE ON CONTRACT

CONTRACT NAME: _____

SPEC. NO. _____, PROJECT NO. _____

WHEREAS, by the terms of the contract dated _____, 20____ entered into by

_____ and the undersigned CONTRACTOR,_____

undersigned CONTRACTOR agreed to perform certain work for the compensation specified in said contract; and

WHEREAS, the CONTRACTOR represents that said work is fully completed and that final payment is due to the CONTRACTOR under terms of said contract,

NOW, THEREFORE, in consideration of the promises and the payment by [AGENCY NAME] to the CONTRACTOR of the amount due under the contract, to wit, the sum of \$_____ and the additional consideration of \$1.00, receipt of which is hereby acknowledged by the CONTRACTOR, the CONTRACTOR hereby releases and forever discharges _____ of and from all manner of debts, dues, demands, sum or sums of money, accounts, claims and causes of action, in law and in equity, under or by virtue of said contract except the claim against the Agency for the remainder, if any, of the amounts retained as provided in 9-3.2, any amounts retained as required by Stop Notices or Labor Code Provisions, and any unsettled claims or disputes as follows: (If none, leave blank)

Description of Claim or Dispute	Amount	Date of Claim	Date of Notice of Potential Claim
------------------------------------	--------	------------------	---

The CONTRACTOR certifies that each unsettled claim or dispute listed hereon has been processed in compliance with the requirements for making claims under the contract, including giving notice pursuant to the applicable provisions of the contract, and following the procedures for resolution of disputes or claims set forth in subsection 6-12 of the contract. Acceptance of this Release on Contract by the [Agency Name] shall not be deemed as a waiver or release of its right to contest either the substantive or procedural validity of any listed unsettled claims or disputes.

IN WITNESS WHEREOF, the hand and seal of the CONTRACTOR have been
hereunto set this ____ day of _____, 20____.

THIS FORM MUST BE ACCOMPANIED
by a proper acknowledgement form
(See Civil Code Section 1189)

Contractor

By

Title

**SURETY BONDS
PERFORMANCE BOND**

Whereas, the «Agency», hereinafter called "Agency", and «Contr», hereinafter called "principal", have entered into a contract dated «ContrDate» whereby principal agrees to complete certain designated work identified as project «ProjName» (Spec. No. «SpecNo»), and to perform other duties and obligations as described in said contract, which is incorporated herein by this reference and made a part hereof; and Whereas, principal is required under the terms of said contract to furnish a bond to guarantee principal's faithful performance of the work and all terms and conditions of the contract;

Now, therefore, we the principal and the undersigned, as corporate surety, are held and firmly bound unto Agency in the penal sum of «CostText» (\$«OrigCostFmtd») lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and provisions in the 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 shall indemnify and save harmless Agency, 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 effect.

The above obligation shall continue after Agency's acceptance of the work for the duration of the warranty period as specified in the contract during which time if principal fails to make full, complete, and satisfactory repair or replacement to the work and/or fails to protect Agency from loss or damage resulting from or caused by defective materials or faulty workmanship, the obligation of surety hereunder shall continue so long as any obligation of principal remains.

PAYMENT BOND

And, whereas, under the terms of said contract, principal is required before entering upon the performance of the work, to file a good and sufficient payment bond with the Agency to secure the claims to which reference is made in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code of the State of California.

Now, therefore, said principal and the undersigned, as corporate surety, are held firmly bound unto the Agency and all contractors, subcontractors, laborers, material suppliers and other persons employed in the performance of the aforesaid contract and referred to in the aforesaid Civil Code in the like sum of «CostText» dollars (\$«OrigCostFmtd») for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, or for any amounts required to be deducted, withheld and paid over to the Franchise Tax Board from the wages of employees of the contractor and the contractor's subcontractors, that said surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees including reasonable attorney's fees incurred in successfully enforcing such obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should this condition of this bond be fully performed, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

GENERAL TERMS

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said contract or the plans and specifications accompanying the same shall in any manner affect its obligations on these bonds, and it does hereby waive notice of any such change, extension, alteration or addition.

Nothing herein shall limit the Agency's rights or surety's obligations under the contract or applicable law, including, without limitation, California Code of Civil Procedure section 337.15.

In witness whereof, this instrument has been duly executed by the principal and surety above named

on _____, 20____.

«Contr»
Name of Principal

By _____

Title _____

Name of Surety

By _____

Attorney-in-Fact

Address _____

City _____

State _____

Zip _____

INDICATE COMPLETE ADDRESS OF SURETY TO WHICH
CORRESPONDENCE CONCERNING THIS BOND SHOULD BE
DIRECTED.

Telephone No. _____

SAMPLE BOND FORM

Agency will prepare the Bond in this format and transmit it to the Contractor along with the Contract and the Notice of Award letter.

Surety shall fill in the Bond No., date identification and signature of surety in places provided.

Contractor shall sign and indicate title in place provided.

SPECIAL PROVISIONS

COUNTY OF VENTURA

PAVEMENT RESURFACING – SULPHUR MOUNTAIN ROAD

SPECIFICATION NO.: RD22-02 PROJECT NO.: 50611

TABLE OF CONTENTS

1000	GENERAL REQUIREMENTS	1
1001	PUBLIC ACCESS & NOTICE	6
1002	MOBILIZATION	7
1003	TRAFFIC CONTROL & CONSTRUCTION SIGNING	7
1004	WATER POLLUTION CONTROL	10
1005	EXISTING UTILITY & ROADWAY FACILITIES	11
1006	ROADWAY PREPARATION	13
1007	CLEARING & GRUBBING	14
1008	TREE TRIMMING	15
1009	UNCLASSIFIED EXCAVATION & EXPORT	15
1010	SAWCUT	16
1011	COLD MILLING (5' WIDE)	16
1012	AC TAPER WITH KEY	17
1013	AC BASE REPAIR	18
1014	AC GRINDING (FULL WIDTH)	19
1015	CONCRETE HEADWALL	19
1016	CULVERT REPLACEMENT	20
1017	SEAL COAT	21
1018	AC SHOULDERS (4' WIDE)	22
1019	AC SWALE REPAIR	23
1020	AC DIKE	23
1021	AC BERM REHABILITATION	24
1022	ASPHALT RUBBER AGGREGATE MEMBRANE (ARAM)	25
1023	TACK COAT	29
1024	ASPHALT CONCRETE HOT MIX (AC) WITH FIBER REINFORCEMENT	30
1025	FIBER REINFORCEMENT FOR HOT MIX ASPHALT (FORTI-FI)	34
1026	FIBER REINFORCEMENT FOR HOT MIX ASPHALT (ACE XP)	36
1027	PROCESSED MISCELLANEOUS BASE	38
1028	AC MISCELLANEOUS PAVING	39
1029	PAVEMENT DELINEATION, STRIPING & SIGNING	40
1030	WORKSITE SAFETY	41

SPECIAL PROVISIONS

1000 GENERAL REQUIREMENTS

1000-1 DESCRIPTION OF WORK

Work under this contract consists of pavement resurfacing including Asphalt Concrete Hot Mix (AC) with Fiber Reinforcement, Public Access and Notice, Mobilization, Traffic Control and Construction Signing, Water Pollution Control, Existing Utility & Roadway Facilities, Roadway Preparation, Clearing and Grubbing, Tree Trimming, Unclassified Excavation and Export, Sawcut, Cold Milling (5' Wide), AC Taper with Key, AC Base Repair, AC Grinding (Full Width), Concrete Headwall, Culvert Replacement, AC Shoulders (4' Wide), AC Swale Repair, Seal Coat, AC Dike, AC Berm Rehabilitation, Asphalt Rubber Aggregate Membrane (ARAM), Tack Coat, Processed Miscellaneous Base, AC Miscellaneous Paving, Pavement Delineation, Striping, & Signing, Worksite Safety and appurtenant work.

All work shall be performed in accordance with the Plans, the Standard Specifications and these Special Provisions. During the duration of this contract, pavement resurfacing limits may be revised or other roads within the project areas may be added to or deleted from the contract in accordance with 3-2 of the Standard Specifications.

1000-2 REFERENCE SPECIFICATIONS & STANDARD PLANS

1000-2.1 SPECIFICATIONS

The Standard Specifications for this project are the Ventura County Standard Specifications (77 pages with VCSS typed at the bottom) supplemented by the Standard Specifications for Public Works Construction (SSPWC, commonly known as the Greenbook), 2021 Edition, published by BNI Publications, Inc.

Where used herein, SSS shall mean the State Standard Specifications, being the State of California, Department of Transportation Standard Specifications, 2018 Edition. Where required by the Special Provisions, work shall conform to the requirements of said SSS except that where reference is made in the SSS to other sections thereof which are not specifically referred to in these Special Provisions, such reference shall be deemed to be reference to the applicable sections of the VCSS (herein referred to as Standard Specifications), and all references to "State" shall mean County of Ventura.

1000-2.2 STANDARD PLANS

The contract drawings utilize and make reference to the State Standard Plans (SSP), which is that document published by the State of California, Department of Transportation, dated 2018, and the Standard Plans for Public Works Construction (SPPWC) published by BNI Publications Inc., 2021 Edition.

1000-2.3 MODIFICATIONS TO STANDARD SPECIFICATIONS

Section 6-1.2 is hereby amended to include the following:

A Preconstruction Meeting will be scheduled by the Agency prior to the beginning of contract time. The meeting will be held at the Hall of Administration Building of the County of Ventura Government Center, online, or via conference call on a date and time established by the Engineer. Attendance at the Preconstruction Meeting by the Contractor's Representative as described in 7-6 of the Standard Specifications is mandatory prior to starting work. Subcontractors' representatives as required by the Engineer shall also attend the Preconstruction Meeting.

Section 2-9.1 shall only apply to Ventura County Standard Monuments (centerline well monuments). All other survey monuments, including nails, iron pipes, and any other objects in the public right-of-way referenced on recorded maps and Ventura County Field Notes will be replaced or reestablished by the Agency following construction.

1000-3 GENERAL GUARANTEE

Section 6-8.2 of the Standard Specifications is hereby deleted, and the following is substituted:

The Contractor shall obtain and assign to the Agency, such warranties or guarantees given as customary trade practice for any material or product purchased for use in the project constructed under this contract.

The last sentence of the third paragraph of 2-4, is hereby deleted and the following is substituted:

The material and labor bond must remain in effect until the expiration of six months after the period in which verified claims may be filed as provided in the Civil Code.

1000-4 PROMPT PAYMENT TO SUBCONTRACTORS

A prime contractor or subcontractor shall pay any subcontractor no later than 7 days of receipt of each payment. Any contractor who violates prompt payment shall pay a penalty of 2% of the amount due per month for every month that payment is not made.

Prompt payment verification shall be submitted to the Agency on the 15th of each month.

The contractor shall notify the Agency in writing in the event that for some reason timely payment is not made to a subcontractor. Disputes shall be resolved in accordance with the contract and state law.

This provision applies to both DBE and non-DBE prime contractors and subcontractors.

1000-5 LABOR COMPLIANCE SOFTWARE

The County of Ventura has implemented, and maintains, a labor compliance software service program called "LCP Tracker".

Contractors and subcontractors shall keep accurate payroll records in accordance with Labor Code Section 1776 and shall furnish weekly certified payrolls for their workers and shall input their certified payroll records electronically using LCP Tracker within 7 days following the end of the preceding week.

NOTE: This requirement is in addition to the State of California requirement to upload payrolls into the State DIR electronic system. However, LCP Tracker has the functionality to upload the submitted payrolls directly to the State DIR electronic system.

In bidding on the project, it shall be bidder's responsibility to evaluate the cost of complying with the above-referenced LCP Tracker requirements.

Agency will provide materials and information to assist the Contractor with using LCP Tracker.

1000-6 PERMITS

In accordance with Section 7-5, the Contractor shall obtain and keep in force during the term of this contract all necessary permits required by the County of Ventura or any other permits necessary to perform the work.

An encroachment permit for work within the State right-of-way has been obtained by the Agency from the State of California, Department of Transportation (Caltrans). A copy of this permit is included in the Appendices of these Special Provisions. The Contractor shall obtain at his own expense the necessary separate (double) Caltrans encroachment permit prior to beginning work that may disrupt traffic or encroach onto a state highway. Contact Caltrans at (818) 370-1272, State Permit Inspector, Jasraj (Raj) Singh per the permit instructions 10 days prior to the initial start of work.

1000-7 WORK AREA

The Contractor shall confine its operations within the right-of-way and temporary easements shown on the Plans or shall make its own separate arrangements with owners of any additional property needed for this project. Prior to entering upon any such additional property, the Contractor shall submit to the Engineer proof of written permission from the appropriate property owner(s).

1000-8 REQUIRED DOCUMENTS FOR WORK AREAS

The Contractor shall submit to the Engineer, for review and approval, the following documents at least three working days prior to beginning work in any specified area indicated on the vicinity maps shown on the Plans.

- A. Order of Work and Traffic Control Plan, including map(s) and descriptions indicating the locations of work areas, construction signing, text used for changeable message signs and timing of advance notice. Traffic Control Plan shall be updated and re-submitted for approval as necessary to accurately reflect the Contractor's planned operations.
- B. As-Built Plan of existing striping and marking. The plan shall be prepared by the Contractor.
- C. Plans documenting ties to the existing location of any facility planned for relocation, adjustment, or replacement including, but not limited to, survey monuments, manholes, valves, clean-outs, signs, roadside markers, and guardrails.
- D. A map or written description of material haul routes.
- E. A copy of the Notice to Resident/Business/Institution.
- F. Copies of any required encroachment permits.
- G. Underground Service Alert confirmation number.
- H. Name and phone number of person(s) responsible for 24-hour maintenance of construction signing and traffic control.

1000-9 SURVEYING

The Contractor shall provide its own survey control for the project and shall bear all responsibility for the correctness of the work in accordance with 2-9 of the Standard Specifications. The Engineer will set only basic control bench marks for elevation and a minimum of two alignment control monuments as shown on the Plans.

1000-10 STORAGE OF CONSTRUCTION MATERIAL

The Contractor may store construction equipment and material outside the roadway and inside the Right-of-Way for the safety and security of all material and equipment. Storage of equipment or material is NOT permitted within the roadway pavement area.

Materials, which are to be disposed of, shall not be stored at the site but shall be removed immediately. No overnight storage of materials or debris will be allowed in the street.

1000-11 BIRD SURVEY

Shortly before construction begins, County will conduct a bird survey with its own forces. It is possible that the survey will find active nesting birds near proposed work areas, and this may result in some of the work being delayed or deleted. Contractor shall accept this as a contract condition and shall cooperate with County directions if bird-related impacts occur.

1000-12 CALRECYCLE REQUIREMENTS

This contract includes placement of ARAM, a rubberized chip seal. Contractor shall sign and submit to Engineer the "Reliable Contractor Declaration," Form 168 contained in Appendix M, prior to issuance of Notice to Proceed. Contractor shall sign and submit "Rubberized Pavement Certificate," Form 739-TRP contained in Appendix N, prior to Contractor's Assertion of Completion.

Binder Material must contain 300 pounds (equivalent to 15% by weight) of tire-derived crumb rubber per ton of rubberized binder.

Only California-generated waste tires, processed in California, shall be used in the crumb rubber portion of the project.

1000-13 MEASUREMENT & PAYMENT

Payment for complying with these General Requirements Special Provisions shall be considered included in the prices paid for other items of work and no additional compensation will be made

1001 PUBLIC ACCESS & NOTICE

1001-1 SCOPE

This work consists of notification to the public and maintaining access during construction

1001-2 NOTICE TO RESIDENT/BUSINESS/INSTITUTION

The Contractor shall notify all adjacent residents, businesses, and institutions within 600 feet of the project limits four days prior to starting any work, using "door-knob" type notices. These notices will notify affected people within the area of impending work. The notice shall be worded as shown on Appendices and shall be double-sided with Spanish translation.

1001-3 PARKING RESTRICTIONS

The Contractor shall furnish and place "No Parking" signs, 12" x 18" minimum size approved by the Engineer, along the street, in front of every residence affected by the work, three working days in advance of any work. In rural areas, the signs shall be placed at a spacing not exceeding 400 feet. The signs shall include the day and the time during which parking is not permitted.

Parking restrictions shall be limited to periods of up to five calendar days at a time, when work requires it. Parking restrictions shall not be posted for the entire duration of the project or for periods longer than five days between work activities. Parking restrictions shall be limited to the interval between 7:00 a.m. and 5:00 p.m. to allow for parking during the night. The Contractor shall remove these signs immediately when they are no longer needed.

If the work is delayed or rescheduled for any reason after placement of "No Parking" signs, the Contractor shall re-date the signs affected. If the work is delayed more than five days, the Contractor shall notify local authorities, remove the signs, and place re-dated signs two days in advance of the work.

1001-4 ACCESS

The Contractor shall provide property owners and residents with access to their properties at all times except when paving operations make access to properties impractical or unsafe, in accordance with the Plans, the Standard Specifications and these Special Provisions.

1001-5 MEASUREMENT & PAYMENT

Payment for Public Access and Notice shall be considered included in the prices paid for other items of work and no additional compensation will be made.

1002 MOBILIZATION

1002-1 SCOPE

In addition to the work specified in 9-3.4.1, Mobilization includes work, services and operations necessary to establish access to the project site, restoration of such areas to their original conditions or to a condition approved by the Engineer, the movement of labor, supplies, equipment and incidentals to and from the project site, applying for and obtaining all required permits, and for all other work for which costs are incurred prior to or after performing work of other Contract items.

1002-2 MEASUREMENT & PAYMENT

Measurement and Payment for Mobilization will be made in accordance with 9-3.4.2 of VCSS. The lump sum price shall be considered full compensation for all labor, materials, and equipment necessary to mobilize and completely demobilize.

1003 TRAFFIC CONTROL & CONSTRUCTION SIGNING

1003-1 SCOPE

The Contractor shall be responsible for maintaining Traffic Control in accordance with the provisions of 7-10 of the Standard Specifications, 12-3 and 56-2 of the SSS, SSP T11, T12, or T13, the current requirements set forth in the California Manual on Uniform Traffic Control Devices (California MUTCD 2014, Rev 3) adopted on March 9, 2018 by the California Department of Transportation, and these Special Provisions.

The Contractor shall notify the Engineer and County Traffic Engineer at (805) 654-2063 of its intention to begin work at least ten working days before starting any work.

The Contractor shall replace all STOP bars the same day they are removed by grinding or paving, as indicated in Pavement Delineation and Striping of these Special Provisions.

1003-2 TRAFFIC CONTROL

The Contractor shall be responsible for handling vehicular and pedestrian traffic in accordance with 7-10 of the Standard Specifications and these Special Provisions.

The Contractor shall submit in writing, for approval by the Engineer, an Order of Work and Traffic Control Plan (graphic form) at least five working days prior to beginning work on the project site. No work on site shall begin until such approval is obtained.

The Traffic Control Plan shall include map(s) and descriptions indicating the location of work areas, intersecting streets, construction signing, and text used for changeable message signs, and timing of Advance notice. The Plan shall be updated and re-submitted for approval as necessary to accurately reflect the Contractor's planned operations.

Traffic Control Plans shall include Caltrans and/or other Local Agencies Encroachment Permit work areas.

Traffic control signs shall be covered or removed when not in use.

In areas of high-volume pedestrian traffic, such as schools and shopping centers, the Contractor shall provide for controlled pedestrian crossings through the work or schedule work to avoid peak pedestrian volumes. Crossings shall provide pedestrians a means of passing over or through the work without tracking tack coat or hot asphalt concrete.

At intersections, if a cross road needs to be temporarily closed when work is in progress through the intersection and the anticipated traffic delay is more than five minutes, a detour sign shall be installed on the cross road and shall include the installation of a changeable message sign displaying the anticipated delay time. The signing shall be approved by the Engineer.

When two-way traffic is restricted to one lane, and when applying the resurfacing treatment past intersecting roads, traffic shall be controlled as shown on SSP T13. A pilot car and driver will be required at various locations if control by flaggers proves deficient in the opinion of the Engineer.

Overnight parking of construction equipment on adjacent County roads is not permitted. If construction equipment is parked on the shoulder area overnight, barricades and other suitable warning devices shall be placed around the equipment. No part of the equipment shall be less than 4 feet from the edge of pavement.

1003-3 CONSTRUCTION SIGNING

Construction Signing shall consist of furnishing, installing, maintaining and removing construction signs and barricades.

A "Road Work Ahead" sign (W20-1) mounted on either a 4" x 4" wood post or a Type III barricade shall be installed at each approach in accordance with SSP T11, T12, or T13. The signs for each road shall be installed prior to starting work on that road and shall not be removed until all work has been completed on that road.

When locations are changed, the full traffic control system shall be in place at the new location prior to starting any work and shall not be removed until all work has been completed at that location.

A changeable message sign shall be provided at the intersection of Sulphur Mountain Road and State Route 150 for the duration of the project. The PCMS shall state "ROAD WORK, 10/21-1/22" and "EXPECT DELAYS, 7AM – 3AM, MON – FRI".

1003-4 TEMPORARY GUIDE MARKERS

Temporary Guide Markers shall be portable delineators as specified in 12-3.04 of the SSS and these Special Provisions. Only one type of Temporary Guide Marker shall be used at any one time.

Temporary Guide Markers shall be placed adjacent to the edge of all overlay, at such locations as called for elsewhere in this Section, and as directed by the Engineer. Spacing of Temporary Guide Markers shall not exceed 30 feet on tangents or 15 feet on curves.

Temporary Guide Markers shall be placed at the required locations prior to sundown on the same day the overlay is placed. Temporary Guide Markers shall be left in place along the completed edges of pavement and maintained, repaired, and replaced as required until the work is completed. If the Temporary Guide Markers are damaged, displaced, or are not in an upright position, from any cause, said markers shall immediately be replaced or restored to their original locations, in an upright position by the Contractor. Upon completion of the project, all components of the temporary traffic control system shall be removed from the work site.

1003-5 GENERAL WORK SEQUENCE & RESTRICTIONS ON CLOSURE OF TRAFFIC LANES

The full width of the traveled way on all roads shall be open for use by public traffic on Saturday, Sunday and any day designated by the Agency as a holiday, after 3:00 p.m. on Friday, after 3:00 p.m. on the day preceding an Agency-designated holiday, and when construction operations are not actively in progression working days. Days designated by the Agency as holidays are listed in 6-7.2.1 of the Standard Specifications.

Contractor shall keep at least one lane of traffic open at all times during working hours and one lane in each direction open at all other times. Contractor's equipment and personal vehicles of the Contractor's employees shall not be parked on the traveled way, or on any section where traffic is restricted at any time. Overnight parking of construction equipment on adjacent county roads is not permitted.

A changeable message sign displaying the anticipated delay time shall be placed at each end of lane closure and at the approaches to any side streets within the lane closure.

1003-6 ROAD CLOSURES

Except as provided herein, road closures are generally not allowed, and the Contractor shall maintain one lane of traffic through the work area at all times. Limited road closures may be allowed under unusual circumstances, subject to advance approval by the Engineer and public notice.

If in the Engineer's opinion, the Contractor demonstrates that a 12-foot wide lane cannot be maintained through the work area or demonstrates that a partial closure would be in the best interests of the Agency and minimizes public inconvenience, a limited road closure may be approved. Prior to approval of any limited road closure, the Contractor shall prepare a site-specific traffic control (detour) plan 10 days prior to the intended date of the road closure for approval by the Engineer. The traffic control (detour) plan shall include notice to the public with placement of changeable message signs at least 72 hours prior to physically closing the road.

1003-7 MEASUREMENT & PAYMENT

Payment for Traffic Control and Construction Signing will be made at the contract lump sum price. Such payment will be considered full compensation for furnishing and installing all materials, labor, equipment and all incidentals necessary to complete the work in accordance with the Standard Specifications and these Special Provisions.

1004 WATER POLLUTION CONTROL

1004-1 SCOPE

This item shall consist of preventing, controlling, and abating discharges of pollutants from the construction site, and shall be performed in accordance with the Standard Specifications and these Special Provisions. The Contractor shall prepare and submit a Storm Water Pollution Control Plan (SWPCP) covering pollution control measures and best management practices in general for all locations.

1004-2 CONSTRUCTION METHODS

All work for Water Pollution Control proposed by the Contractor shall be approved by the Engineer. All work shall be performed in accordance with 7-8 of the Standard Specifications. See Appendix for a SWPCP template.

If the Contractor determines that discharge of ground water to surface water will be necessary to complete the work, the Contractor shall obtain a Waste Discharge Permit under General NPDES Permit No. CAG994004 from the California Regional Water Quality Board, Los Angeles Region. The Contractor will be given an extension of time to obtain the Water Discharge Permit based on a written request to the Engineer in accordance with 6-6.4 of the Standard Specifications.

1004-3 MEASUREMENT & PAYMENT

Payment for Water Pollution Control will be made in accordance with 7-8.6.7. The contract lump sum price for Water Pollution Control shall be considered full compensation for obtaining and complying with all necessary permits and installation and removal of Water Pollution Control works, including all labor, materials, tools and equipment and all other necessary incidental items required to complete the work.

1005 EXISTING UTILITY & ROADWAY FACILITIES

1005-1 SCOPE

Work shall conform to the provisions in Section 5 of the Standard Specifications and these Special Provisions.

Prior to placing pavement on streets, the Contractor shall document or mark the location of each utility valve box, lid, cover, manhole, vault, cleanout, or any other utility access at the road surface that will be covered by the new pavement with two swing ties or perpendicular offsets to a marker or fixed feature at the side of the road. These swing ties or offset measurements shall be written in an organized manner and provided to the Engineer. The Contractor shall demonstrate the utility markings to the Engineer and receive acceptance prior to paving any street.

The Contractor shall remove wasted material from the interior and exterior of manholes, valve boxes, storm drains, gutters or other facilities.

All manholes, valve covers and cleanouts shall be covered with roofing paper prior to applying the overlay in order to permit easy removal of the materials. Covers that are partially exposed shall be cleaned to the satisfaction of the Engineer.

The Contractor shall contact Underground Service Alert and the respective utility companies at least two working days prior to starting any work on each road by which those companies are affected.

The Contractor shall provide access to utility owners at all times during the construction life of the project. The Contractor shall coordinate work by others in accordance with 7-7 of the Standard Specifications.

1005-2 UTILITY CONTACTS

Utility contacts sorted by services area are included in the appendices.

The Contract shall notify the Engineer and the Utility Company and request written authorization to proceed from the Engineer prior to potholing any utility crossings. Below is the contact information for the conflicting Utility Companies:

AT&T

Joesph Forkert
22311 Brookhurst Street Suite 203
Huntington Beach, CA, 92646
(619) 200-7896
joef@forkertengineering.com

Casitas Municipal Water District

Julia Aranda
1055 Ventura Avenue
Oakview, CA 93001
jaranda@castiaswater.com

SCE

Glenn Gorss
(805) 654-7356
Glenn.Gorss@sce.com
10060 Telegraph Rd.
Ventura, CA 93004

1005-3 ROADWAY FACILITIES

The Contractor shall protect existing Roadway Facilities, including but not limited to, curbs, curb and gutters, cross gutters, spandrels, traffic striping, from being disfigured by overspray of materials or by tracking of materials by equipment used in the project. If such overspray or tracking does occur, the Contractor shall, at its own expense, clean, restore, or replace disfigured items to the satisfaction of the engineer.

Existing Signs, Clearance Markers and Delineators within the existing pavement area or which interfere with the Contractor's work on any road to be rehabilitated, shall be removed, and re-installed at their original locations after completion of work on that road. The Contractor shall exercise extreme caution when removing the markers or delineators. Damaged markers or delineators shall be replaced at the expense of the Contractor.

The Contractor may trim back trees and shrubbery encroaching on the public road right-of-way or interfering with this work. Contractor shall obtain permission from the Engineer to trim trees or shrubbery on private property.

1005-4 MEASUREMENT & PAYMENT

Payment for costs incurred in protecting and marking existing utility and roadway facilities and including all of the requirements set forth in this section, shall be considered included in the prices paid for other items of work and no additional compensation will be made.

1006 ROADWAY PREPARATION

1006-1 SCOPE

The work under this section consists of preparing the roadway and shoulders prior to the widening and the resurfacing. Such work shall include the removal and disposal off site of soil, dirt, and rock deposits on existing pavement, shoulders, and swales, trimming of interfering trees and shrubbery, scraping and removing spilled concrete on pavement, removing raised pavement markers, eradication and removal of vegetation, controlling nuisance water, sweeping, watering, and removing loose and broken asphalt concrete pavement and foreign material as specified in these Special Provisions and as required by the Engineer.

1006-2 CONSTRUCTION METHODS

Any vegetation in the area of the roadway shall be removed.

Eradication of vegetation shall include treatment with an approved herbicide, not containing the active ingredient glyphosate, with an approved dye at least five working days prior to asphalt concrete resurfacing.

All thermoplastic markings, painted markings and pavement markers shall be removed in accordance with the following requirements:

1. All existing painted or thermoplastic traffic stripes and pavement markings within areas to receive overlay shall be removed prior to sealing operations, unless indicated otherwise on the Plans.
2. Removal of existing painted or thermoplastic striping/markings shall be performed by grinding. Removal shall be to the satisfaction of the Engineer.
3. Immediately following the removal of existing pavement and sweep/markings and pavement markers, the Contractor shall clean and sweep roadways and on-site paved areas to eliminate all materials attributed to or involved with removal operations. All materials shall be removed from the roadway prior to the end of each working day or as directed by the Inspector. The Contractor shall not use water to flush down streets in place of street sweeping.

Preparation shall include removal of pavement markers, trimming of interfering shrubbery and ground growth, removing trimmed vegetation, controlling nuisance water, and sweeping. Immediately prior to overlay application, the surface shall be cleaned of dust, dirt, oil, grease, vegetation and other foreign material.

All metal covers and survey markers within the street overlay areas shall be protected by the Contractor in order that the overlay will not adhere. The methods of protection shall be approved in advance by the Engineer. These areas shall be cleaned no later than twenty-four (24) hours or the following work day after the application of the overlay.

1006-3 MEASUREMENT & PAYMENT

Payment for Roadway Preparation will be made at the contract Lump Sum price and no additional compensation will be made.

1007 CLEARING & GRUBBING

1007-1 SCOPE

The Contractor shall perform Clearing and Grubbing in accordance with 300-1, "Clearing and Grubbing," of the Standard Specifications. Clearing and Grubbing shall include removal of existing vegetation and organics from all cut and fill areas, eradication of all weeds in the roadway and shoulders within 5 feet of the limits of grading as shown on the plans, removal of vegetation, and cleaning shoulders from any sloughing dirt as identified to be removed within the limits of construction. Eradication of vegetation shall include cutting and treatment of the root with an EPA-approved herbicide with an approved color dye. Use only enough herbicide to properly treat roots. Clearing and Grubbing shall include removing and disposing of all vegetation, trash, and debris and any other objects in conflict with the proposed construction, adjacent to existing facilities or identified for removal. Depressions and disturbed areas left from removals shall be replaced and compact with fill.

1007-2 MEASUREMENT & PAYMENT

Payment for clearing and grubbing will be made at the Contract Lump Sum Price for Clearing and Grubbing shown on the Proposal form. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment and all incidentals, and for doing all the work involved in clearing and grubbing, protecting existing irrigation facilities, and removing and disposing of any materials as required, as specified in Standard Specifications, these Special Provisions, and no additional compensation will be allowed.

1008 TREE TRIMMING

1008-1 SCOPE

This work consists of trimming any trees in conflict with the work specified in these Special Provisions, as shown on the plans, or specified by the Engineer.

Existing trees not in conflict with the proposed construction or those specifically identified on the plans to be preserved and protected, shall be preserved and protected at all times. If any such trees are damaged, they shall be replaced in kind with the same type and size and maintained until established as directed by the Engineer at the Contractor's own expense.

1008-2 MEASUREMENT & PAYMENT

Payment for Tree Trimming will be made at the Contract Lump Sum price for Tree Trimming shown on the Proposal Form. Such payment be considered full compensation for furnishing all labor, materials, tools, equipment and all incidentals, and for doing all the work involved in tree trimming, protecting existing irrigation facilities or utilities, and removing and disposing of any materials as required, as specified in Standard Specifications, these Special Provisions, and no additional compensation will be allowed.

1009 UNCLASSIFIED EXCAVATION & EXPORT

1009-1 SCOPE

Construction of Unclassified Excavation & Export shall conform to SSPWC 300-2. Unclassified Excavation & Export includes all excavation, including roadway, trenching and excavation for pipe, culverts, headwalls, shoulder widening, removal of fallen rock as shown on the Plans, and export.

1009-2 CONSTRUCTION METHODS

Removal and disposal of material that is unsuitable shall be excavated and disposed of as directed by the Engineer and will be paid for as Unclassified Excavation specified in these Special Provisions.

The exposed surface shall be scarified to a depth of 6 inches, moisture conditioned to within 2 percent of optimum moisture, and recompact to a relative compaction of at least 95 percent (i.e. 95 percent of the maximum dry density determined by ASTM D1557).

1009-3 MEASUREMENT & PAYMENT

Measurement of Unclassified Excavation & Export will be by the cubic yard exported in accordance with grading limits shown on the plans and 300-2.8, "Measurement," of the Standard Specifications and these Special Provisions. Payment for unclassified excavation will be made at the Contract Unit Price per cubic yard for Unclassified Excavation & Export. Such payment shall be considered full compensation for furnishing all materials, labor, equipment, and all incidentals for excavating, loading, hauling, disposing of surplus or unsuitable material or dumping as specified by the Standard Specifications and these Special Provisions, and no additional compensation will be allowed.

1010 SAWCUT

1010-1 SCOPE

This work consists of sawcutting existing pavement to a neat line and depth as shown on the plans and as marked in the field. Sawcutting using a grinding wheel will not be permitted.

1010-2 MEASUREMENT & PAYMENT

Payment for Sawcut will be made at the contract unit price per linear foot. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the work.

1011 COLD MILLING (5' WIDE)

1011-1 SCOPE

Cold Milling shall be performed in accordance with the 404-3 and 404-5 of the Standard Specifications, as shown on the Plans, marked in the field, and as specified in these Special Provisions. The placing of AC overlay shall follow cold milling and all similar grinding-related operations within six calendar days.

Cold Milling is milling a tapered section of pavement a standard width of 5 feet along the outside edge of pavement or flowline along existing AC Dikes existing utilities and vaults that are to be protected in place, and existing concrete features that transitions from 0 inches to 2 inches in depth.

1011-2 MEASUREMENT & PAYMENT

Cold Milling will be measured by the linear foot along the edge of the adjacent traveled way. Payment will be made at the contract unit price on the basis of actual measured quantities of cold milling completed. Such payment shall be considered full compensation for providing all labor and equipment and performing all work related to cold milling, including dust control and disposal of the material removed.

1012 AC TAPER WITH KEY

1012-1 SCOPE

AC Taper shall be provided at ends of the overlay and at Concrete Driveways as shown on the Plans, marked in the field, and as specified in these Special Provisions. AC Taper is a cold milling operation and shall be performed in accordance with the 404-3 and 404-5 of the Standard Specifications, as shown on the Plans, marked in the field, and as specified in these Special Provisions. The placing of pavement resurfacing shall follow cold milling and all similar grinding-related operations within six calendar days.

AC Taper at Driveways is milling a tapered section of pavement a standard width of 10 feet along the outside edge of pavement along existing Driveways that transitions from 0 inches to 2 inches in depth in the transverse direction and transitions from 2 inches to 0 inches in the longitudinal direction over 10 feet at each end of the driveway.

AC Taper at Intersections also known as "AC Taper with Key" shall be provided at ends of the overlay and intersections and includes forming a key. It involves constructing a key formed by creating a neat straight, 2 inch high vertical edge by sawcutting at the joint line and/or removing by cold milling and disposing of a portion of the existing AC pavement as shown on the Plans. Should cold milling result in an uneven line, the Engineer or his Inspector may direct the contractor to construct the key by sawcutting.

If the placing of the AC taper cannot be completed on the same day the key is formed, a temporary AC ramp shall be installed to enhance traffic safety. The asphalt concrete temporarily placed shall be removed prior to the final placement of AC taper.

1012-2 MEASUREMENT & PAYMENT

Payment for AC Taper will be paid at the contracted price per square foot in place. Such payment shall be considered full compensation for forming a key by sawcutting and/or milling, furnishing all labor, materials, removal of any encountered fabric, equipment, tools and incidentals necessary to complete the work. No separate payment will be made for AC used in the installation of temporary ramps, or sawcutting associated with this work. Such payment shall be considered full compensation for providing all labor and equipment and performing all work related to cold milling, including dust control and disposal of the material removed.

1013 AC BASE REPAIR

1013-1 SCOPE

AC Base Repair involved repairing the structural section of the roadway shall by removing the existing AC plus 1 inch or to a depth of 6 inches, whichever is less. The structural section is replaced with asphalt concrete placed in two equal lifts and compacted, as specified in 302-5.5 and 302-5.6 of the Standard Specifications, prior to placing the overlay.

1013-2 MATERIAL

Asphalt concrete used in Base Repair shall be B-PG 64-10.

1013-3 CONSTRUCTION METHODS

In areas delineated by a double dashed white line painted on the existing road, the structural section of the roadway shall be removed to a depth of 6 inches. Any roots within the upper six inches of base and/or sub-grade shall be removed and the base and/or sub-grade material shall be compacted to 95 percent relative compaction. The structural section removed shall be replaced with asphalt concrete placed in two equal lifts and compacted, as specified in 302-5.5 and 302-5.6 of the Standard Specifications, prior to placing the overlay.

Where new asphalt concrete pavement for base repair is placed against existing pavement, the pavement shall be removed in a manner that will not result in ragged and loose edges of the existing pavement. Tack coat shall be applied to exposed edges of the existing pavement per 302-5.4 of the Standard Specifications.

1013-4 MEASUREMENT & PAYMENT

Payment for Base Repair, complete in place, will be made at the contract unit price per ton in accordance with 302-5.9 of the Standard Specifications and these Special Provisions. Such payment shall be considered full compensation

for furnishing all labor, materials, equipment, tools and incidentals necessary in the removal and disposal of existing pavement, compaction of base and/or sub-grade, applying tack coat, and AC backfill.

1014 AC GRINDING (FULL WIDTH)

1014-1 SCOPE

AC Grinding shall be performed in accordance with the 404-3 and 404-5 of the Standard Specifications, as shown on the Plans, marked in the field, and as specified in these Special Provisions. The placing of AC overlay shall follow AC Grinding and all similar grinding-related operations within six calendar days.

AC Grinding shall be performed at location shown on the plans. The limits of grinding will be as marked in the field by a single dashed line or as directed by the Engineer.

Utility covers, manholes vaults, etc. within the grinding area shall be ramped with temporary AC pavement as specified in 306-13. Ramps shall be constructed the same day as grinding and removed the same day as permanent paving. Ramp dimensions and compaction shall be approved by the Engineer. Ramps shall be constructed as soon as practicable for the maximum convenience of the Public.

1014-2 MEASUREMENT & PAYMENT

Grinding will be measured by the square foot of ground pavement to the depth specified on the Plans, in these Special Provisions and as specified by the Engineer.

Payment will be made at the contract unit price on the basis of actual measured quantities of AC Grinding completed. Such payment shall be considered full compensation for providing all labor and equipment and performing all work related to grinding, removal of encountered fabric, constructing temporary AC Ramps including dust control and disposal of the material removed.

1015 CONCRETE HEADWALL

1015-1 SCOPE

Construction of headwalls shall conform to the provisions in Section 51, "Concrete Structures," Section 52, "Reinforcement," Section 75, "Miscellaneous Metal" and other applicable subsections of the SSS, SSP, these Special Provisions, and the Plans. Installation of the headwalls include CMP bands and extensions to tie into existing culvert. Band dimensions shall match existing CMP in kind as shown on the Plans.

The existing soil material directly below the proposed headwall shall be over-excavated and recompact to provide a firm, uniform bearing layer. Removals below the proposed headwall shall extend 12 inches below structure.

The Contractor's attention is directed to the probability of encountering Rock and surface water during construction of the headwall. The Contractor shall reroute surface water as required. In no case will surface water be allowed to come into contact with wet concrete.

1015-2 MEASUREMENT & PAYMENT

Payment for construction of Concrete Headwalls will be made at the Contract Unit Price for each as shown on the Proposal form, the Plans and Special provisions. Such payment shall be considered full compensation for furnishing all labor, equipment, tools, minor concrete, minor grading and fill, sawcutting and removal of existing pavement and pipe, CMP bands and extensions, berms, rocks, boulders, and incidents necessary to complete work including subgrade preparation, water diversion, and structure excavation and backfill.

Such payment shall be considered full compensation for furnishing all labor, material equipment, tools and incidents necessary to complete work including subgrade preparation, water diversion, and structure excavation and backfill, adjacent grading and fill.

1016 CULVERT REPLACEMENT

1016-1 SCOPE

Culvert Replacement shall consist of furnishing and installing a composite steel spiral rib pipe with smooth interior as shown on the Plans and these Special Provisions.

1016-2 MATERIAL

The culvert shall have a smooth interior wall with a roughness coefficient of 0.012. The pipe shall be 16 gauge (0.064 inches). The pipe shall be in accordance with SSS 66-4, SSP D97J, these Special Provisions, and the Plans. The culvert pipe shall be Armttec UltraFlo, St Regis Culvert Inc. Max Flow, Lane Enterprises Spiral Rib Polymer Coated Steel pipe or approved equivalent. Backfill material shall be 2 – sack sand cement slurry, CLSM-2 (100-E-188 to 300).

1016-3 CONSTRUCTION METHODS

Culvert shall be installed per Ventura County Road Standards Plate E-11.

All work necessary for any given length of pipe placed, including excavation bedding, pipe placement and backfill shall be accomplished during the same workday. Culvert Pipe and Pipe Extensions shall include the connection to the existing pipe. Pipe sizes are shown on the Plans.

1016-4 MEASUREMENT & PAYMENT

Payment for Culvert Replacement will be made at the contract unit price per Lump Sum shown on the Proposal Form. Such payment shall be considered full compensation for constructing all pipe culvert in place and furnishing all labor, equipment, tools, materials including band, anchor assembly, collars, elbow ,fittings, minor concrete, minor grading and fill, subgrade preparation, sawcutting and removal of existing pavement, berms, rocks, boulders, trenching, pavement repair, 2 sack slurry mix, and incidentals necessary to complete work including subgrade preparation, water diversion, and structure excavation and backfill.

1017 SEAL COAT

1017-1 SCOPE

Work under this section consists of applying a seal coat on existing AC Dike and AC Berms as specified in the Standard Specifications and these Special Provisions. Seal coat shall be applied to all existing AC Dike and AC Berms as shown on the Plans.

1017-2 MATERIAL

The seal coat shall be SS-1h complying with the provisions of 203-3 of the Standard Specifications.

1017-3 CONSTRUCTION METHODS

Roadway resurfacing shall be performed prior to the seal coat application. The application shall extend 1 foot into the existing pavement and shall be performed after placing an asphalt concrete overlay. Rate of application shall be 0.15 to 0.20 gallons per square yard.

1017-4 MEASUREMENT & PAYMENT

Seal Coat will be measured by the linear foot and payment made at the contract unit price per linear foot. Such payment shall be considered full compensation for furnishing all labor, materials, tools and equipment's, and other incidental necessary to complete the work.

1018 AC SHOULDERS (4' WIDE)

1018-1 SCOPE

This section covers pavement widening (4 feet) along existing shoulders as shown on the Plans and as specified in these Special Provisions.

1018-2 MATERIAL

Asphalt concrete with fiber reinforcement for AC Shoulders shall be C2-PG 64-10 as specified on the Plans and in accordance with 203-6.4 of the SSPWC and these Special Provisions. In addition to the requirements of 203-6.7.3.2, a certificate of calibrated batch scales per California State Test 109 from the batch plant supplying the material is required.

1018-3 CONSTRUCTION METHODS

Where new asphalt concrete pavement is placed against existing pavement, the pavement shall be removed by sawcutting to a neat line a minimum of 6" from the edge of existing pavement that will not result in ragged and loose edges.

Tack Coat shall be applied to exposed edges of the existing pavement per 302-5.4 of the SSPWC.

The material below the proposed paving surface shall be graded and compacted to receive 3" thick asphalt concrete pavement with fiber reinforcement over 6" of scarified subgrade. Sub-grade preparation shall be per SSPWC 301-1. The structural section removed shall be replaced with asphalt concrete placed in equal lifts and compacted, as specified in 302-5.5 and 302-5.6 of the Standard Specifications, and as shown on the plans prior to placing the asphalt concrete.

1018-4 MEASUREMENT & PAYMENT

Payment for AC Shoulders will be made at the contract unit price per ton in accordance with 302-5.9 of the SSPWC and these Special Provisions. Such payment shall be considered full compensation for furnishing all labor, materials, equipment, tools and incidentals necessary including sawcutting and removals and disposals of existing pavement and other foreign materials, roadway excavation and fill, preparation and compaction of sub-grade, applying tack coat, and AC paving.

1019 AC SWALE REPAIR

1019-1 SCOPE

AC Shoulder Repair shall include filling of the incised swale flowline with 2-sack slurry cement. It shall include repairing failed portions of the paved shoulder where the AC has been undermined and material has been eroded and loss by filling with 2-sack slurry cement.

1019-2 MATERIAL

A AC Shoulder Repair use 2 – sack sand cement slurry, CLSM-2 (100-E-188 to 300) in accordance of section 201-XXX in the SSPWC and these Special Provisions. Use of slag is acceptable.

1019-3 CONSTRUCTION METHODS

- A. The flowline shall be swept and air-blasted clean by compressed air of pressure not less than 130 psi to provide an intact bonding surface, to remove all dirt, sand, gravel, weeds, or other debris that might be in the swale.
- B. Where AC has failed, the damaged pavement shall be removed in a manner that will not result in ragged and loose edges of the existing AC.
- C. After being cleaned by pressurized air blasting, the flowline shall be filled with 2-sack slurry cement.

1019-4 MEASUREMENT & PAYMENT

Measurement and Payment for AC Swale Repair will be made at the contract unit price per Lump Sum shown on the Proposal Form. Such payment shall be considered full compensation for furnishing all labor, equipment, tools, materials, and incidentals necessary to complete work.

1020 AC DIKE

1020-1 SCOPE

The work consists of construction of AC Dike including transitions, at the locations shown on the Plans and as directed by the Engineer shall be performed in accordance with SSP A87B Type A, the Plans and these Special Provisions.

1020-2 MATERIAL

Asphalt Concrete for AC Dike shall be D1-PG 70-10, in accordance with SSPWC Sub-section 203-6 and these Special Provisions.

Tack coat for AC Dike shall be in accordance with **1023 Tack Coat** as specified in these Special Provisions.

1020-3 CONSTRUCTION METHODS

AC surfaces to receive AC Dike shall be clean and free of loose materials and dirt and shall be tack-coated prior to placing the dike. A self-powered Dike extrusion machine shall be used for shaping and compacting the Dike to the required cross section.

1020-4 MEASUREMENT & PAYMENT

Measurement and Payment for AC Dike will be made at the Contract Unit Price per linear foot of AC Dike Type shown on the Proposal form. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment, and all incidentals necessary to complete the work, including clearing and grubbing, grinding, removal and disposal of asphalt concrete, tack coat and additional AC necessary to complete the work.

1021 AC BERM REHABILITATION

1021-1 SCOPE

AC Berm Rehabilitation shall consist of Capping existing AC berms with 2" Hot Mix Asphalt, new construction and/or removal and replacement of AC Berm in accordance with the Plans, the Standard Specifications and these Special Provisions.

1021-2 MATERIAL

Asphalt concrete for AC Berm Rehabilitation shall be D2-PG 64-10 in accordance with 203-6 of the Standard Specifications. The Contractor may substitute a paving asphalt mix upon approval of the Engineer.

Tack coat for AC Berm Rehabilitation shall be in accordance with **1023 Tack Coat** as specified in these Special Provisions.

1021-3 CONSTRUCTION METHODS

Pavement Resurfacing per these plans and specs shall be performed prior to rehabilitation of AC Berm. All surfaces of the AC pavement shall be cleaned and free of loose materials, dirt, vegetation, and shall be tack-coated prior to capping of the AC Berm. A 2" Layer of AC shall be placed and shaped over the existing AC berm or compacted subgrade.

1021-4 MEASUREMENT & PAYMENT

Measurement and Payment for AC Berm Rehabilitation will be made in accordance with **1028 AC Miscellaneous Paving**. Such payment shall be considered full compensation for furnishing all labor, materials equipment, tools and incidentals necessary to complete the work.

1022 ASPHALT RUBBER AGGREGATE MEMBRANE (ARAM)

1022-1 SCOPE

Rubberized Chip Seal shall conform to SSPWC 302-10 except as modified herein.

Rubberized chip seal shall consist of an application of rubberized asphalt binder and hot screenings pre-coated with paving asphalt.

Asphalt rubber shall conform to 203-11, Asphalt Rubber Hot Mix (ARHM) Wet Process, of the SSPWC.

1022-2 SUBMITTALS

Prior to construction, the Contractor shall supply the Engineer with mix proportions, a formula for the production of asphalt rubber binder, and the individual raw components of the asphalt rubber binder to verify conformance to the specifications, modifier, natural rubber and tire crumb rubber.

1022-3 ROCK PRODUCT SCREENINGS

The Screenings shall conform to 200-1.2.2.3, of the SSPWC except modified herein. The screenings shall also meet the following requirements:

Tests	
Test Method No.	Requirements
Percentage Wear (100 rev.) ASTM C 131	12 Maximum
Percentage Wear (500 rev.) ASTM C 131	35 Maximum
Film Stripping Calif. 302	25 Maximum
Cleanness Value Calif 227	80 Minimum
Aggregate for screenings shall be medium (3/8 inch)	

1022-4 SURFACE PREPARATION

Pavement must be completely dry prior to the application of Rubberized Chip Seal. Special care shall be taken to clean the pavement before the Rubberized Chip Seal application. Prior to the application of Rubberized Chip Seal, the surface to receive the treatment shall be cleaned by power brooming, or other means necessary to remove all vegetation, loose particles of paving, all dirt and extraneous material. Vegetation shall be removed from cracks in pavement and at the interface of pavement and gutter prior to sweeping. The contractor shall blow the cracks clean of loose materials with a high-pressure air nozzle (90 psi or greater and free of oil). Pavements impregnated with grease, oil, or fuel shall be thoroughly scrubbed with water and approved detergent and then flushed and swept clean. Wash water shall be vacuumed up and disposed of and shall not be permitted to enter the storm drain system. Contractor shall be responsible for sweeping the streets until sufficiently cleaned to the satisfaction of the Engineer. Streets shall be swept from face of Dike to face of Dike (full width). Pavement missed by or inaccessible to power brooms shall be swept manually or by other methods approved by the Engineer.

All existing temporary and permanent pavement markers and temporary delineation shall be removed. All surface metal utility covers (including survey monuments) shall be protected by thoroughly covering the surface with tar paper. Tar paper is to be removed from top of utility covers and cleaned of ARAM material by the end of the same work day.

1022-5 ASPHALT-RUBBER APPLICATION

The asphalt-rubber shall conform to 302-10, Application of the SSPWC except modified herein.

Asphalt-Rubber shall be applied at a temperature between 375°F to 425°F. Asphalt-Rubber binder shall be applied at a rate between 0.55 to 0.65 gallons per square yard as directed by the Engineer.

Application shall not take place when rain is predicted within the next 8 hours. Application should be stopped before the distribution tank is empty to assure designated application. Application of asphalt-rubber shall be discontinued sufficiently early in the day to permit the termination of traffic control prior to darkness.

Apply tar paper cover to the tops of manholes, survey monuments, valve covers and other miscellaneous frames and covers to prevent emulsion from adhering. After the new surface is placed, the Contractor shall uncover and expose the frames and covers. Any utility covers that need to be adjusted to grade should be adjusted promptly by the utility owners.

1022-6 SPREADING SCREENINGS

Screening shall be spread at a uniform rate over the full width of a traffic lane in one application. The spreader shall be capable of reducing the aggregate spreading width to accommodate variable width.

Screenings shall be applied at a temperature between 260°F and 325°F. Stock piling of screenings after preheating and precoating with paving asphalt will not be permitted.

Spread screenings at a rate from 30 to 40 lbs./sq. yd. The exact rate shall be determined by the Engineer. Spread to within 10% of the determined rate.

All joint edges shall be swept clean of excess screenings prior to the adjacent application of asphalt-rubber material. Precautions shall be taken to avoid "skips" and "overlaps" at joints and to protect the surfaces of adjacent structures from being spattered or marred.

All transverse cold joints shall be made by placing building paper over the ends of the previous applications of concrete joints, and the joining applications shall start and end on the building paper. The paper shall be removed and disposed of as required by 7-8.1 of the SSPWC.

Hot joints shall be made utilizing a squeegee man between the boot truck and the aggregate spreader to spread out or rake off overlaps or excess applications of the asphalt-rubber binder. The longitudinal joints between adjacent applications of screening shall coincide with the line between designated traffic lanes.

The completed surface shall present a uniform appearance and shall be thoroughly compacted, and free from ruts, humps, depressions or irregularities due to an uneven distribution of asphalt-rubber or screenings.

1022-7 ROLLING OPERATIONS

Initial rolling shall commence within 90 seconds following the placement of screenings. Rolling shall be accomplished by 3 self-propelled, pneumatic-tired rollers meeting the requirements of 302-5.6.1 SSPWC except that the tires shall be inflated to 100 psi. There shall be at least 4 complete coverages (single pass in one direction) by the pneumatic-tired rollers before the final roller coverage. As steel-drum roller weighing 8 tons minimum to 10 tons maximum shall complete the final roller coverage.

1022-8 FINAL SWEEPING

A minimum of three (3) vacuum sweepers shall be used that are capable of cleaning the existing pavement and removing loose screenings without dislodging screenings set in the asphalt-rubber mixture. Gutter brooms or steel-tined brooms shall not be used.

Sweeping shall commence on the day of Rubberized Chip Seal operations. Three (3) vacuum sweepers shall be used on those streets being resurfaced that day. Two (2) sweepers shall be used to remove excess screenings from the road surface, and one (1) sweeper shall be used to sweep and clean the surrounding streets, staging area and road surfaces outside of the project area to avoid tracking loose material. The Rubberized Chip Seal shall be maintained free of loose screenings for a minimum of 5 working days following placement. During this period the surface shall be swept as necessary to remove any loose cover material as directed by the Engineer. Final sweeping shall be done, and all loose aggregate shall be removed prior to acceptance. The aggregate shall be disposed of by the Contractor at no cost to the Agency.

1022-9 PUBLIC CONVENIENCE & TRAFFIC CONTROL

The Contractor shall prohibit traffic on the street until initial sweeping is complete. Prior to opening the streets to traffic, "Loose Gravel," W8-7 signs, and appropriate speed reduction signs conforming to local, State and Federal regulations shall be posted and maintained by the contractor. The signs shall remain in place until there is no further dislodging of the cover aggregate.

1022-10 MEASUREMENT & PAYMENT

ARAM will be paid for at the contract unit price per square yard. Such payment shall be considered full compensation for furnishing and placing all materials, labor, equipment, tools, incidentals, road dust blotter, and sweeping if necessary and for doing all the work needed to complete the Rubberized Chip Seal.

1023 TACK COAT

1023-1 SCOPE

Tack Coat shall be used to adhere new Asphalt to Existing Asphalt.

1023-2 MATERIAL

Tack Coat shall be Thermoplastic Polymer Modified High Performance Seal, also known as HPS No-Track Tack, manufactured by Paramount Petroleum, no known equal.

1023-3 CONSTRUCTION METHODS

The tack coat shall not be applied until the preparation of the existing surface has been completed, and then only so far in advance of placing the asphalt concrete overlay as permitted by the Engineer. Tack coat shall not be applied when the temperature of the surface to be tacked is below 50o F in the shade. No tack coat shall be applied when rain is imminent.

No tack coat shall be left exposed overnight. Immediately in advance of placing the asphalt concrete, additional tack coat shall be applied as directed by the Engineer to areas where the tack coat has been destroyed or otherwise rendered ineffective, and no additional compensation will be allowed for such work.

Tack coat shall be heated slowly to temperature between 325-425 degrees F. At no time shall the product be heated to above 450 degrees F. The product shall be applied through a distributor truck equipped with a heating unit. It shall be equipped with a full circulating spreader bar and pumping system capable of applying the tack coat material within 0.05 gallons per square yard tolerance of the specified application rate and give a uniform covering of the surface to be treated. The distributor shall also include tachometer, pressure gauge, and volume measuring device and thermometer.

The application rate shall be between 0.12 to 0.15 gallons per square yard and the rate to be determined by the prevailing surface conditions or as approved by the Engineer.

The Tack Coat shall not be applied until the preparation of the existing surface has been completed, and then only so far in advance of placing the asphalt concrete overlay as permitted by the Engineer. The Engineer will determine if the pavement is sufficiently clean and dry for the application of Tack Coat.

Existing concrete surfaces shall be protected against disfigurement from the asphalt. Residue of the material shall be removed by sandblasting to the extent required by the Engineer.

1023-4 MEASUREMENT & PAYMENT

Payment for Tack Coat shall be considered included in the prices paid for other items of work and no additional compensation will be made.

1024 ASPHALT CONCRETE HOT MIX (AC) WITH FIBER REINFORCEMENT

1024-1 SCOPE

Asphalt Concrete Hot Mix with fiber reinforcement shall be placed in accordance with the Plans, Section 203-6 and 302-5 of the Standard Specifications and these Special Provisions. The width of road tabulated on the Plans is the weighted average width determined by adding the areas of portions of the street of different widths and dividing by the total length of the street to be overlaid and is only approximate. The full width of existing pavement shall be overlaid and asphalt tapers at paved driveways.

1024-2 MATERIAL

Material for conventional AC Hot Mix shall be C2-PG 64-10 as specified on the Plans and in accordance with 203-6.4 of the Standard Specifications and these Special Provisions. In addition to the requirements of 203-6.7.3.2, a certificate of calibrated batch scales per California State Test 109 from the batch plant supplying the material is required. A minimum of 5.5% Asphalt Binder Content is set for this project.

Fibers shall be FORTA-FI, ACE XP Polymer Fiber by Surface-Tech, or an approved equal. Fibers shall be mixed with AC in accordance with the manufacturer's recommendation. A manufacturer's representative shall be present at the batch plant to approve the fiber addition system and ensure uniform distribution. The Contractor shall submit alternative fiber reinforcement no later than 7 days after award for evaluation by the Engineer.

1024-3 DISTRIBUTION & SPREADING

New longitudinal joints shall be located as approved by the Engineer with the following order of preference:

1. Longitudinal joints shall be located a minimum of two feet away from existing longitudinal joints.
2. Longitudinal joints shall not be placed in wheel paths.
3. Longitudinal joints shall occur within one foot of lane lines or the center line.

The full width of undivided roadway shall be paved such that no unfinished longitudinal joints of asphalt concrete exist at the end of the workday.

The fourth paragraph included in 302-5.5 is hereby deleted and replaced with the following:

“Asphalt Rubber Hot Mix shall not be placed unless the atmospheric temperature is at least 55°F and rising or during unsuitable weather.”

In addition to the requirements of 302-5 of the Standard Specifications, asphalt concrete shall be placed with spreading equipment equipped with fully automatic screed and grade sensing controls, which shall control the longitudinal grade of the screed. Automatic controls shall conform to and be operated in accordance with the following provisions.

Unless approved otherwise, ski-type devices, with a minimum length of 30 feet, shall be used to provide a reference for the grade sensor. Skis shall be constructed and installed in such a manner that a reference to the average elevation of the existing pavement, along the length of ski, is maintained at the sensor point. When placing surfacing adjacent to surfacing previously placed in conformance with these provisions, a joint matching shoe of adequate size and type to properly sense the grade of the previously placed mat, may be used in lieu of the 30-foot ski.

The ski shall be mounted at a location, which will provide an accurate reference for the surfacing being placed. This may require the ski to be mounted ahead of, and inside the outer limits of the screed. Automatic cross slope control may be accomplished by use of a ski and grade sensor on each side of the paving machine.

Automatic screed controls shall be installed in such a manner that the occasional manual adjustments, necessary to maintain the attitude of the screed parallel to the underlying pavement, are readily accomplished. Automatic screed controls shall be installed so that with little or no delay, use of the automatic controls can be discontinued and the screed controlled by manual methods.

Should the automatic screed controls fail to operate properly during any day's work, the Contractor may use manual control of the spreading equipment for the remainder of that day, provided the quality of the work conforms to the requirements of 302-5 of the Standard Specifications. Should the methods and equipment used for automatic control fail to result in the quality of work required by said 302-5, the paving operations shall be temporarily discontinued, and the Contractor shall make the necessary changes to the equipment, or furnish other equipment conforming to the requirements herein, before paving is resumed.

If it is determined by the Engineer that the existing grade and cross slope is too irregular for the automatic controls to provide the quality of work required, the use of the automatic controls shall be discontinued, and the spreading equipment adjusted by manual methods. Use of the automatic equipment shall be resumed when the Engineer has determined that it is again practical and so orders.

Base repairs, as specified in these Special Provisions, shall be accomplished in advance of the paving operation. Repair of potholes may be accomplished directly in front of the leveling course operation using material taken from the hopper of the paving machine as directed by the Engineer.

Placement of a seal coat of SS1h emulsion in accordance with 203-3 is required at areas where new pavement meets existing asphalt concrete.

1024-4 ROLLING

In addition to the requirements of 302-5.6 of the Standard Specifications, the number of rollers required for each paving operation shall be such that all rolling for density shall be completed before the temperature of the asphalt concrete mixture drops below 290°F.

Breakdown rolling shall commence when the asphalt concrete is placed. Rolling shall be accomplished with the drive wheel forward and with the advance and return passes in the same line.

Road dust blotter shall be applied in accordance with 302-9.7.

1024-5 COMPACTION TESTING

Engineer will take nuclear gage compaction tests to ensure the minimum 95% compaction requirement is being met. If 95% compaction or better is not achieved, Contractor shall receive decreased payment for AC pavement in accordance with the following:

The Contractor shall reimburse the Agency with the difference between the contract unit price and the reduced unit price for those tons that fall below 95% compaction. The reduced unit price is calculated as follows:

Contract unit price x (1- Reduced Compensation Factor) = Reduced unit price.
Pavement with 93.0% or lower compaction will be removed and replaced by the contractor at no cost to Agency.

The amount of reduced compensation will be calculated based on the following table.

Relative Compaction (Percent)	Reduced Compensation Factor	Relative Compaction (Percent)	Reduced Compensation Factor
95.0	0.000	93.8	0.300
94.8	0.050	93.6	0.350
94.6	0.100	93.4	0.400
94.4	0.150	93.2	0.450
94.2	0.200	93.0	0.500
94.0	0.250	LESS THAN 93.0 NO COMPENSATION	

1024-6 INTERSECTIONS

Where AC overlay is required on a through street at an intersection with no concrete cross gutter, the overlay on the cross-street shall extend a distance of ten feet per inch of overlay thickness (including leveling course) past the end of the pavement or Dike return unless otherwise marked in the field or as directed by the Engineer.

Existing road surface drainage pattern shall be maintained.

1024-7 SAMPLING

The Engineer will sample the asphalt concrete from the hopper of the paving machine at various intervals. The Contractor shall facilitate the sampling process.

1024-8 MEASUREMENT & PAYMENT

Payment for Asphalt Concrete Hot Mix with Fiber Reinforcement, complete in place, will be made as specified in 302-5.9 of the Standard Specifications and these Special Provisions. The unit prices per ton paid for asphalt concrete shall be considered full compensation for all labor, materials, and equipment required to construct asphalt concrete overlays as shown on the Plans and as specified in the Standard Specifications and these Special Provisions including AC overlay at AC taper with key, paving of driveway approaches, AC shoulder tapers, AC V-Ditch, and AC Shoulder Repair.

1025 FIBER REINFORCEMENT FOR HOT MIX ASPHALT (FORTI-FI)

1025-1 SCOPE

This item shall consist of High tensile strength aramid fiber blend specially formulated to reinforce hot mix asphalt.

1025-2 SUBMITTAL

Representative fiber product sample.

Fiber product data sheet and certification from the Manufacturer that the fiber product supplied meets the requirements of this specification.

1025-3 MATERIAL

Provide FORTA-FI provided by Forta-Fi corporation or equal product of reinforcing fiber blend of Virgin Polyolefins and Virgin Aramids that meets the requirements in Table 1 and Table 2.

Table 1: Reinforcing Fiber Material Properties

Property	Test Method	Aramid
Form	Manufacturer Certification	Monofilament
Nominal Specific Gravity	ASTM D276	1.44
Tensile Strength (psi)	ASTM D7269	400,000
Length (in)	Manufacturer Certification	0.75

1. Polyolefin fibers will melt or become plastically deformed during production

Table 2: Reinforcing Fiber Performance Properties

Performance Measure	Test Method	Standard	Requirement
Dispersion Efficiency	Aramid Dispersion State Ratio (ADSR)	Modified ASTM D2172	≥ 85%
Field Performance Cracking Resistance	Pavement Condition Index	ASTM D6433	≥ 10 PCI Points Increase, Minimum 4 Years
Resistance to Permanent Deformation (Rutting)	Flow Number (FN)	AASHTO TP79	≥ 75% increase

1025-4 DELIVERY, STORAGE, AND HANDLING

Deliver fiber-reinforcement in sealed, undamaged containers with labels intact and legible, indicating material name and lot number.

Deliver fiber-reinforcement to location where it will be added to each batch or loaded into the mixer.

Store materials covered and off the ground. Keep sand and dust out of boxes and do not allow boxes to become wet.

1025-5 MIXING, PRODUCTION, AND QUALITY CONTROL

1. Add Reinforcing Fibers at a dosage rate of 2.1 ounces per ton of asphalt.
2. Add alternative aramid fiber blends at a rate proposed by the manufacturer that achieves the ADSR, PCI, and FN results required by Section D.
3. Have a fiber manufacturer's representative on site during mixing and production. This requirement can be waived if fiber manufacturer and asphalt producer can supply evidence of manufacturer's brand of fiber being successfully produced a minimum of three times at the asphalt plant to be used for the project.
4. Batch Plant. When a batch plant is used, add fiber to the aggregate in the weigh hopper and increase both dry and wet mixing times. Ensure that the fiber is uniformly distributed before the injection of asphalt cement into the mixture.
5. Drum Plant:
 - a. Inject fibers through the RAP collar using an automatic, metered air blown system to promote rapid and complete fiber dispersion. System must automatically record fiber addition data so as to remove human error. Rate the feeding of fibers with the rate the plant is producing asphalt mix. If there is any evidence of fiber bundles at the discharge chute, increase the mixing time and/or temperature or change the angle of the fiber feeder line to increase dry mixing time.
 - b. Manual feeding of the fibers is not allowed.
 - c. Add fibers continuously and in a steady uniform manner. Provide automated proportioning devices and control delivery within $\pm 10\%$ of the mass of the fibers required. Perform an equipment calibration to the satisfaction of the fiber manufacturer's representative to show that the fiber is being accurately metered and uniformly distributed into the mix.

Include the following with the air blown system:

- Low level indicators
- No-flow indicators
- A printout of feed rate status in pounds/minute
- A section of transparent pipe in the fiber supply line for observing consistency of flow or feed.
- Manufacturer's representative's approval of fiber addition system

1025-6 PLACEMENT

Follow the manufacturer's and Engineer's recommendations for placement of Asphalt Concrete Hot Mix with Fiber Reinforcement.

1025-7 MEASUREMENT & PAYMENT

Measurement & Payment for Fiber Reinforcement for Hot Mix Asphalt and including all the requirements set forth in this section shall be considered included in the prices paid for other items of work and no additional compensation will be made.

1026 FIBER REINFORCEMENT FOR HOT MIX ASPHALT (ACE XP)

1026-1 SCOPE

This item shall consist of ACE XP Polymer Fiber, a high tensile strength aramid fiber blend, or equal product of reinforcing fiber specially formulated to reinforce hot mix asphalt (HMA).

1026-2 SUBMITTAL

The following shall be submitted prior to asphalt production:

1. Identification of the mixing plant and type (batch or drum).
2. Material data sheet for the treated aramid fiber and associated treatment properties.
3. Certified quality assurance and quality control (QA/QC) mixing plan which includes procedures for continuously feeding the aramid fiber into the asphalt. The fiber supplier must approve of the QA/QC plan and provide certification of the QA/QC mixing technician at the mixing plant who is responsible for the continuous feeding of the fiber into the HMA. Continuous feeding can be accomplished either by a manual machine or an automated machine for the entire fiber mixing process.

1026-3 MATERIAL

Provide ACE XP Polymer Fiber provided by Surface Tech corporation or equal product of reinforcing fiber blend that meet the following aramid and treatment material properties found in the following Table 1 and Table 2.

Table 1: Reinforcing Fiber Material Properties

Property	Measure
Material	Para-Aramid Fiber (50-52% by weight)
Form	Filament Yarn
Elongation at Break (%)	<4.4
Modulus (GPa)	>95
Decomposition Temperature (°F)	>800
Specific Gravity (g/cm ³)	1.44-1.45
Tensile Strength (GPa)	>2.758
Length (in)	1.5 +/-0.05

Table 2: Treatment Properties

Property	Measure
Treatment Type	Sasobit® Wax (48-50% by weight)
Treatment Melting Temperature(°F)	>175

1026-4 DELIVERY AND STORAGE

1. Deliver fiber-reinforcement in sealed, undamaged containers with labels intact and legible, indicating material name and lot number.
2. Deliver fiber-reinforcement to location where it will be added to each batch or loaded into the mixer.
3. Store materials covered and off the ground. Keep sand and dust out of boxes and do not allow boxes to become wet.

1026-5 MIXING, PRODUCTION, AND QUALITY CONTROL

1. Add Reinforcing Fibers at a dosage rate of 2.1 ounces per ton of HMA.
2. Add alternative aramid fiber blends at a rate proposed by the manufacturer.

3. Have a fiber manufacturer's representative on site during mixing and production. This requirement can be waived if fiber manufacturer and asphalt producer can supply evidence of manufacturer's brand of fiber being successfully produced a minimum of three times at the asphalt plant to be used for the project.
4. Batch Plant: When a batch plant is used, add fiber to the aggregate in the weigh hopper. HMA batch dry mix times will need to be 20 seconds minimum to ensure proper aramid distribution. Metering shall be based on batch size (tons) and dosage rate (oz/ton). Feeding shall occur in a constant stream-like manner as the heated aggregate is added to the weigh hopper. If necessary, increase the mixing time with heated aggregates to ensure the aramid fibers are uniformly distributed.
5. Drum Plant: When a drum plant is used, feed the treated aramid with automated dosing machine directly into the mixing drum through the Reclaimed Asphalt Pavement collar. Standard project HMA asphalt production rates apply. Metering shall be calibrated by the automated dosing machine based on the asphalt production rate (tons/hour), and the dosage rate (oz/ton). Feeding shall occur in a constant stream-like manner through the Reclaimed Asphalt collar.

1026-6 PLACEMENT

Follow the manufacturer's Engineer recommendations for placement of Asphalt Concrete Hot Mix with Fiber Reinforcement.

1026-7 MEASUREMENT & PAYMENT

Measurement & Payment for Fiber Reinforcement for Hot Mix Asphalt and including all the requirements set forth in this section shall be considered included in the prices paid for other items of work and no additional compensation will be made.

1027 PROCESSED MISCELLANEOUS BASE

1027-1 SCOPE

This work shall consist of scarifying, shaping existing shoulder, conforming to dirt driveways, and adding Processed Miscellaneous Base (PMB), as modified herein, to bring shoulders to the new pavement surface.

1027-2 MATERIAL

PMB shall conform to the provisions of 200-2.5 of the Standard Specifications and coarse graded per table 200-2.4.2; however, the percentage passing sieve No. 200 shall be 7 - 11 percent and the sand equivalent requirement does not apply.

1027-3 CONSTRUCTION METHODS

Shoulder Backing shall start no sooner than three (3) calendar days and shall be completed no later than seven (7) calendar days after placing the adjacent overlay.

PMB placed under pavement widening and shall be compacted to 95%.

The existing shoulder backing shall be scarified to a minimum distance of three feet from the edge of pavement, watered and shaped prior to adding PMB. The PMB shall be watered, shaped and compacted by rolling to a smooth, firm surface using a pneumatic tire roller or a 4 - 6 ton steel wheel roller.

Existing drainage patterns shall be maintained. Where unusual conditions are encountered, the Contractor shall notify the Engineer in advance of performing the work. The Engineer will specify the methodology to be employed to ensure road drainage patterns are not disrupted.

In the event that Shoulder Backing cannot be completed within the specified number of days, the Engineer may order asphalt concrete paving operations suspended in accordance with 6-2 to allow shoulder backing work to catch up to the schedules specified in these Special Provisions and the Plans.

1027-4 MEASUREMENT & PAYMENT

Processed Miscellaneous Base will be measured in miles of PMB placed. The contract unit price paid per mile of Processed Miscellaneous Base shall be considered full compensation for furnishing all labor, material, and equipment and for doing all the work involved in scarifying existing material, furnishing and placing PMB, compacting, reshaping shoulders, constructing base layer, and maintaining drainage patterns as specified in these Special Provisions and the Plans.

1028 AC MISCELLANEOUS PAVING

1028-1 SCOPE

AC Miscellaneous Paving shall include resurfacing existing asphalt drainage aprons and swales contiguous to the resurfacing, repairing existing roadway as directed by the Engineer, and feathering asphalt concrete to maintain surface drainage patterns at locations directed by Engineer. The work shall include Roadway Preparation and shall be in accordance with the Plans, the Standard Specifications and these Special Provisions.

1028-2 MATERIAL

Asphalt concrete for Miscellaneous Paving shall be D2-PG 64-10 in accordance with 203-6 of the Standard Specifications. The Contractor may substitute a paving asphalt mix upon approval of the Engineer. A minimum of 5.5% Asphalt Binder content is set for this project.

1028-3 MEASUREMENT & PAYMENT

Payment for AC Miscellaneous Paving, complete in place, will be made at the contract unit price per ton. Such payment shall be considered full compensation for furnishing all labor, materials equipment, tools and incidentals necessary to complete the work.

1029 PAVEMENT DELINEATION, STRIPING & SIGNING

1029-1 SCOPE

Pavement Delineation shall consist of removing and installing thermoplastic striping, marking, pavement markers, delineators, object markers and signs and posts as shown on the Plans and as directed by the Engineer.

All conflicting or damaged signs within project limits as determined by the Engineer shall be removed and replaced, and shall have a minimum vertical clearance of 7 feet. All sign posts shall be 2" x 2" Quick Punch steel posts (12-gauge galvanized square steel tubing) with knock out holes and breakaway pin in accordance with County Road Standard Plate F-4.

On roads to be delineated, prior to removing traffic control, temporary markings shall be placed. Permanent Pavement Delineation on each road to be delineated shall be completed within 14 calendar days following completion of the overlay on that road unless otherwise specified in these Special Provisions. In the event that striping cannot be completed within the specified number of days, the Engineer may order resurfacing operations suspended in accordance with 6-2 to allow striping work to meet schedules specified in these Special Provisions. Centerline striping shall be completed within 10 calendar days after placing overlay. Pavement markers, pavement legends, edge line striping and markings shall be completed within 7 calendar days after completion of work.

1029-2 TEMPORARY MARKINGS

STOP bars: On roads to be delineated and on which permanent delineation will not be applied before public traffic is allowed on the freshly ground or paved surface, Temporary Stop bars shall be placed at stop signs the same day that paving or grinding occurs. Temporary Stop Bars shall be 12 inches wide.

Temporary Markings shall be placed at the centerline of pavement and on multi-lane roads at each lane line the same day that grinding occurs or overlay is placed. Temporary centerline markings shall consist of temporary raised

pavement markers (Davidson Plastics Co., M. V. Plastics, or approved equal) at 25-foot maximum intervals. Temporary lane line markings shall be reflective tape or painted spots (cat-tracking) at 50-foot maximum intervals or a painted dribble line. Temporary Markings shall be maintained, replaced, restored or augmented as directed by the Engineer until permanent pavement delineation is completed. When the Engineer determines Temporary Markings as specified herein do not provide adequate temporary delineation, the Contractor shall install Temporary Markings as specified for permanent delineation. All Temporary Markings shall be removed prior to the installation of permanent markings and striping.

PAVEMENT MARKERS

Pavement Markers shall be placed in accordance with SSS Section 85, SSP A20A through A20D and these Special Provisions. Pavement markers shall include placement of blue fire hydrant markers. The Contractor shall replace any damaged Pavement Markers, without cost to the Agency, prior to the Agency's acceptance of the project.

1029-3 THERMOPLASTIC TRAFFIC STRIPING & PAVEMENT MARKINGS

Thermoplastic Traffic Striping and Pavement Markings shall be 90 mils in thickness and shall conform to the provisions of 84-2 of the SSS, SSP, and these Special Provisions. Striping and markings shall be reapplied as shown on the Plans and as specified herein. The size, color, and spacing of the striping shall conform to the requirements of Section 310 of the Standard Specifications and the State Standard Specifications, State of California, Department of Transportation Standard Plans as shown on SSP A20A through A20D and A24A through A24F, except that lane lines shall be 4-inches wide.

Striping Width shall comply with 2015 SSP, the Plans, and these Special Provisions.

1029-4 MEASUREMENT & PAYMENT

Payment for Pavement Delineation, Striping and Signing will be made at the contract lump sum price. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to complete the work.

1030 WORKSITE SAFETY

1030-1 SCOPE

This item shall consist of all the work required to meet the worksite safety requirements of section 7-10.4 of the Standard Specifications.

1030-2 MEASUREMENT & PAYMENT

Payment for Worksite Safety shall be considered included in the prices paid for other items of work and no additional compensation will be made.

APPENDIX H
UTILITY COMPANY DIRECTORY

Utility Company Directory

Ojai

Electric	So. Calif. Edison Company Attn: Planning	10060 Telegraph Road	Phone: (714) 796-9932
E-Mail: MapRequests@sce.com		Ventura CA 93004-	Fax: (714) 973-5735

Comments: Use to request facilities maps

Electric	So. Calif. Edison Company SCE Planning Supervisor	10060 Telegraph Road	Phone: (805) 654-7444
E-Mail: MapRequests@sce.com		Ventura CA 93004-	Fax: (805) 654-7275

Comments: For review of preliminary or final plans

Gas	The Gas Company - Distribution Peggy Li, Planning Associate	P.O. Box 2300, SC9331	Phone: (818) 701-3319
E-Mail: NorthwestDistributionUtilityRequest@semprautilities.com		Chatsworth CA 91313-	Fax: (818) 701-3380

Comments:

Gas	The Gas Company - Transmission Rosalyn Squires, Planning Associate	9400 Oakdale Avenue P.O. Box 2300, M.L. 9314	Phone: (818) 701-4546
E-Mail: SoCalGasTransmissionUtilityRequest@semprautilities.com		Chatsworth CA 91313-2300	Fax: (818) 701-3441

Comments:

Pipeline	Carbon California Attn: Luke Faith	270 Quail Court, Suite B	Phone: (805) 933-1901
E-Mail: lfaith@carbonenergycorp.com		Santa Paula CA 93033-	Fax:

Comments:

Pipeline	Vintage Production, LLC Attn: Pipeline Tech	9200 Oakdale Avenue 9th Floor	Phone: (805) 625-3413
E-Mail: Michael_Espitia @ oxy.com or Stephen_Schweitzer@oxy.com		Los Angeles CA 91311-	Fax:

Comments: Contacts: Steve Schweitzer; Michael A. Espitia; Jim Lovins; Andy Marsh

Sewer	Ojai Valley Sanitary District	1072 Tico Road	Phone: (805) 646-5548
E-Mail:		Ojai CA 93023-	Fax:

Comments:

Telecom	AT & T California Attn: Cathy Hurtado	Right of Way 600 E. Green Street #300	Phone: (626) 817-4263
E-Mail: ma2797@att.com		Pasadena CA 91101-2020	Fax:

Comments: AT & T leasehold entity

Utility Company Directory

Ojai

Telecom	AT&T Long Distance Inquiries Attn: Joe Forkert	22311 Brookhurst Street #203	Phone: (714) 963-7964
E-Mail:	joef@forkertengineering.com	Huntington Beach CA 92646-	Fax:

Comments: Steve Shermoen - AT & T (Long Distance). E-mail inquiries to AT&T-Inquiries@forkertengineering.com

Telecom	Time Warner Cable Attn: Joe Maysick	2525 Knoll Drive	Phone: (805) 477-4439
E-Mail:	Joe.Maysick@adelphia.com	Ventura CA 93003-	Fax: (805) 644-9324

Comments: Data Operations - West Region, 750 Canyon Drive, Coppell, TX 75019 - west-engineering-relo@twcable.com

Telecom	Verizon Business/MCI Attn: Chuck Czumak	1701 Ringling Blvd.	Phone:
E-Mail:	investigations@verizon.com	Sarasota, FL FL 94240-	Fax:

Comments:

Water	Casitas Municipal Water District	1055 Ventura Avenue	Phone: (805) 649-2251
E-Mail:		Oak View CA 93022-	Fax:

Comments: Andy Benetiz: underground service alert

Water	Hermitage Mutual Water	2955 Hermitage Road	Phone: (805) 646-3421 (805) 320-1406
E-Mail:		Ojai CA 93023-	Fax:

Comments:

Water	Ladera Management Group	1114 State Street #232	Phone: (805) 646-8195
E-Mail:		Santa Barbara CA 93101-	Fax: (805) 646-3830

Comments: formerly Gridley Road Water Group & Waite Mutual Water Company

Water	Old Creek Mutual Water Company	9850 Old Creek Road	Phone: (805) 649-2209
E-Mail:		Ventura CA 93001-	Fax:

Comments:

Water	Senior Canyon Mutual Water Company c/o Jacobs & Jacobs	603 W. Ojai Avenue	Phone: (805) 646-4321
E-Mail:		Ojai CA 93023-	Fax:

Comments:

Utility Company Directory

Ojai

Water **Siete Robles Mutual Water Company** 603 W. Ojai Avenue **Phone:** (805) 646-4321

E-Mail: Ojai CA 93023-3732 **Fax:**

Comments: Mark Bowman, President

Water **Sisar Mutual Water Company** P.O. Box 68 **Phone:** (805) 524-5583

E-Mail: Santa Paula CA 93060- **Fax:**

Comments:

Water **Sulfur Mountain Road Water Association** P.O. Box 1578 **Phone:**

E-Mail: Ventura CA 93002- **Fax:**

Comments:

Water **Ventura River Water District** 409 Old Baldwin Road **Phone:** (805) 707-4086
 Bert Rapp, P.E. General Manager (805) 340-7263
E-Mail: Bert@VenturaRiverWD.com Ojai Ca 93023- **Fax:** (805) 646-3860

Comments: 8/18/14: fka Ventura River County Water District

APPENDIX I
NOTICE TO RESIDENT/BUSINESS/INSTITUTION

NOTICE TO RESIDENT/ BUSINESS/ INSTITUTION

Date _____

In approximately _____, the Transportation Department of the Public Works Agency, County of Ventura, will resurface the existing pavement of your street. The work will be done by _____.

The resurfacing consists of street repairs, concrete repairs, street resurfacing, and restriping of the streets. The new surfacing will provide smoother driving and will extend the service life of the road. Generally, existing driveways and the surface drainage should not be affected; however, if there are changes, we will contact you.

It will be necessary to close, or partially close, your street on the days the work is done. We will post temporary "No Parking" signs at least 48 hours in advance of the scheduled work. This will prohibit parking on the pavement between 7:30 AM and 5:30 PM. In case of inclement weather, it may be necessary to reschedule the contractor's operations.

We ask your cooperation by not parking your automobile in the street during the short construction period. You can drive in and out of your garage or driveway anytime during construction operations as one lane will be kept open to traffic.

In order for the resurfacing to be effective, it is absolutely necessary that the pavement be kept dry prior to its application. If water is allowed to run onto the pavement the treatment will be less effective.

We ask that during the time we are working that you DO NOT:

1. Park on the street.
2. Allow water to run onto the street.
3. Allow children to play in the street.

If some asphalt accidentally gets on your skin clean the area with oil-dissolving skin cleaner. Do not use solvents or thinners to remove material from skin.

We regret any inconvenience that this work may cause you. We thank you for your cooperation in assisting us to maintain your street in the most efficient way possible.

If you have any questions regarding the project, please call:

General Contractor

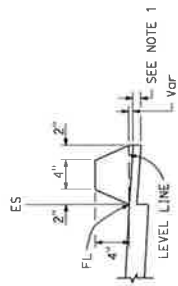
Tel. _____

Christopher Solis, Project Manager
County of Ventura, Public Works Agency

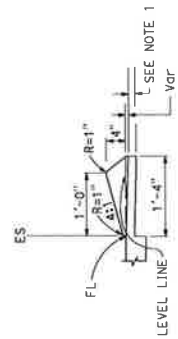
Tel. (805) 654-2065

Si necesita esta informacion traducida en español, por favor contacte al Departamento de Obras Publicas, del Condado de Ventura al 805-654-2049.

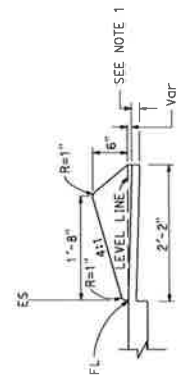
APPENDIX J
STANDARD APPLICABLE PLANS



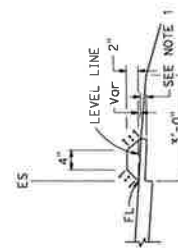
TYPE F
See Note 5



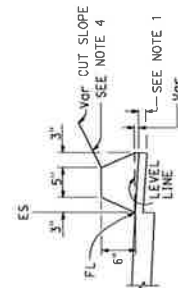
TYPE E



TYPE D



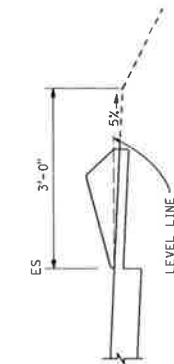
TYPE C



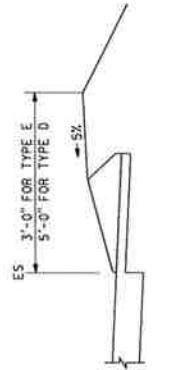
TYPE A

See Notes 3 and 5

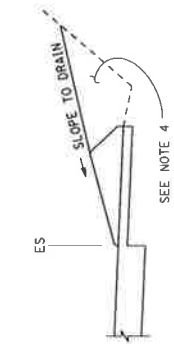
DIKES



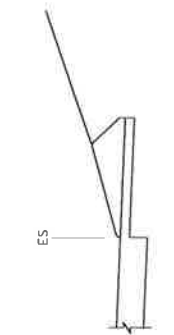
CASE R
See Note 2



CASE F



ASE C-2



ASE C-1

TYPE D AND E BACKFILL DETAILS

DIKE QUANTITIES	
TYPE	CUBIC YARDS PER LINEAR FOOT
A	0.0135
C	0.0038
D	0.0293
E	0.0130
F	0.0066

Quantities based on 5% cross slope.

NOTES:

1. For HMA shoulders only, extend top layer of HMA beyond the shoulder under the existing concrete curb. For Type E projects with OGC shoulders, do not extend OGC under dike. See project plans for modified dike detail.
2. Case R applies to retrofit only projects where restrictive conditions do not provide enough width for Case F detail.
3. Type A dike only to be used where restrictive slope conditions do not provide enough width to use Type D or Type E dike.
4. Fill and compact with excavated material to top of dike.
5. Use Type A or F dike where dike is required with guardrail installations. See Standard plan A77N for details on positive drainage details. See Standard plan A77N3 for hinge point details with guardrail.

HOT MIX ASPHALT DIKES

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

A 87 B



D97J

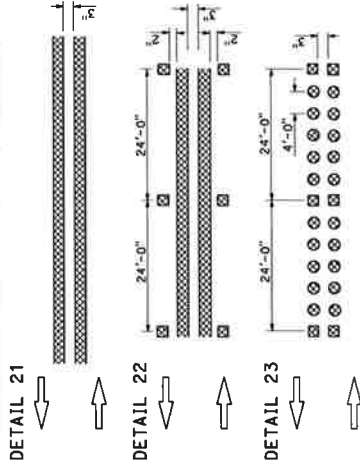
NOTES:

1. See Standard Plan A62F for backfill details.
2. See Standard Plan D97C for Universal Coupling details.
3. Strap joint connection shall consist of 2 separate bolted preformed connectors joined to form one strap when pipe inside diameter is greater than or equal to 60".

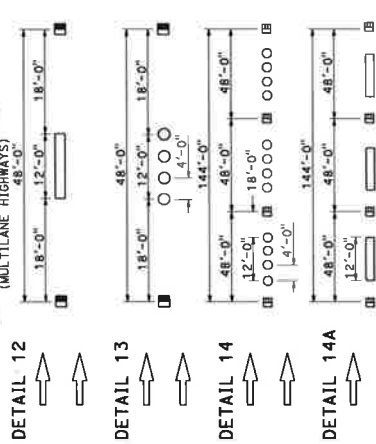


SHEET NO. 1
 TOTAL SHEETS 1
 PROJECT NO. 060402
 DATE 8-11-17
 REGISTERED CIVIL ENGINEER
 October 30, 2015
 THE STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 SAN JOSE DISTRICT OFFICE
 1000 CALIFORNIA STREET, SUITE 100
 SAN JOSE, CALIFORNIA 95128-1000
 CONTRACT NO. 060402
 SHEET NO. 1 OF 1
 PROJECT TITLE: 060402

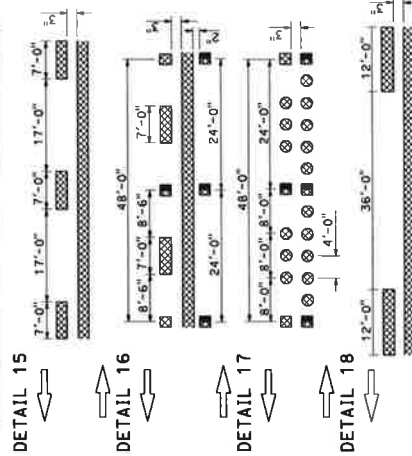
NO PASSING ZONES-TWO DIRECTION



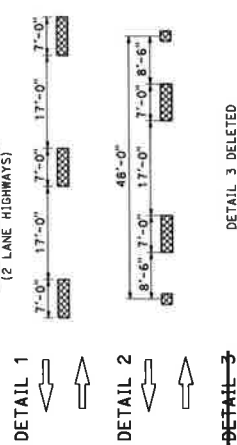
LANELINES (Cont)



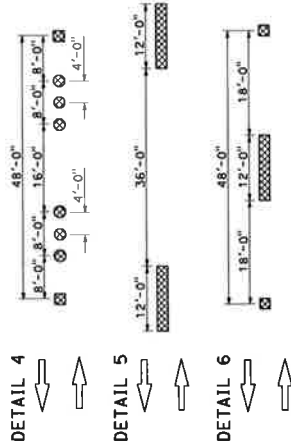
NO PASSING ZONES-ONE DIRECTION



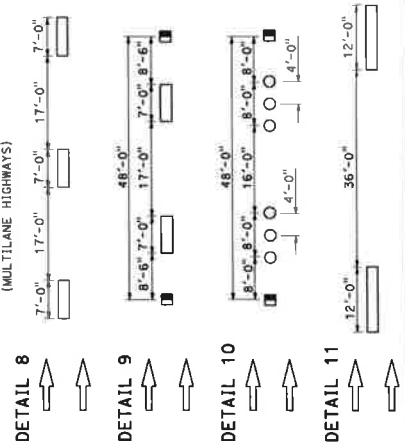
CENTERLINES (2 LANE HIGHWAYS)



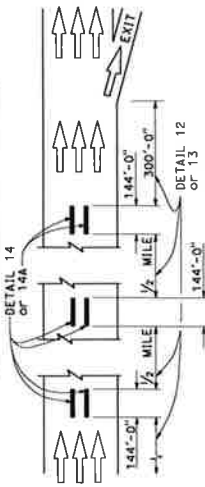
DETAIL 3 DELETED



LANELINES (MULTILANE HIGHWAYS)



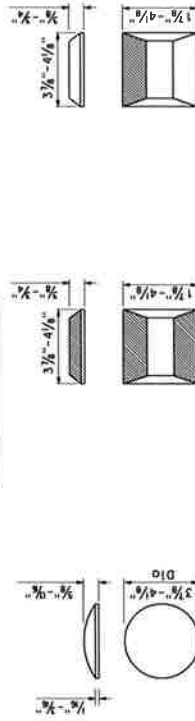
TYPICAL LANE LINE DELINEATION IN ADVANCE OF EXIT RAMP



NOTE:

Detail 14 is to be used in combination with Detail 13. Detail 14A is to be used in combination with Detail 12.

MARKER DETAILS



TYPE A AND TYPE AY

TYPE C AND TYPE D

TYPE G AND TYPE H

RETROREFLECTIVE FACE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

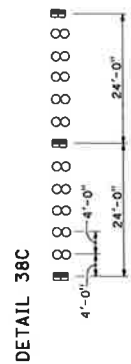
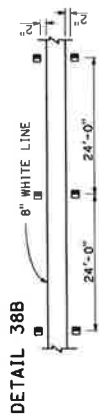
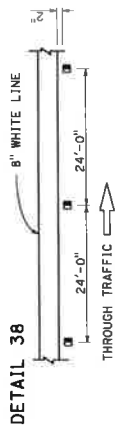
PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

NO SCALE

A20A

STATE	COUNTY	ROUTE	POST MILE	SECTION
REGISTERED CIVIL ENGINEER Alfred J. ... October 30, 2015 PLANS APPROVAL DATE THE STATE OF CALIFORNIA ON ITS OFFICIAL SEAL AND ADVISE THAT THIS IS A REPRODUCTION OF THE ORIGINAL PLANS AND NOT A COPY OF THE SAME.				

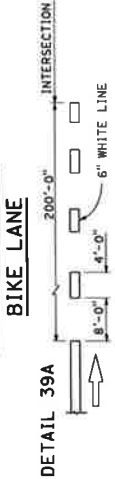
CHANNELIZING LINE



BIKE LANE LINE



INTERSECTION LINE



LANE LINE EXTENSIONS THROUGH INTERSECTIONS



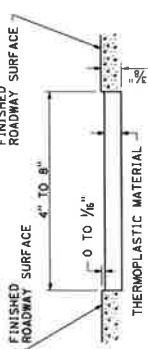
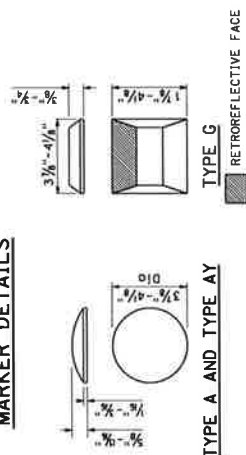
CENTER LINE EXTENSIONS THROUGH INTERSECTIONS



LEGEND

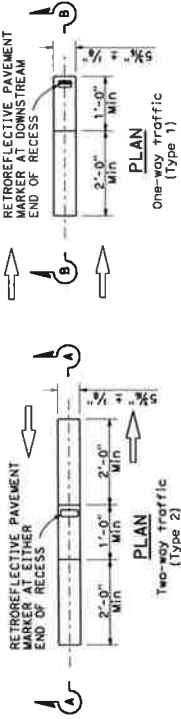
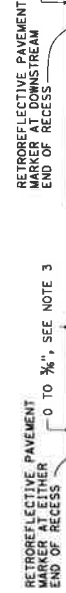
- MARKERS**
- TYPE A WHITE NON-REFLECTIVE
 - ⊗ TYPE AY YELLOW NON-REFLECTIVE
 - TYPE G ONE-WAY CLEAR RETROREFLECTIVE
 - ▨ 4" YELLOW LINE

MARKER DETAILS

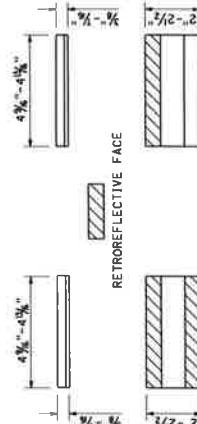


DETAIL FOR RECESSED THERMOPLASTIC TRAFFIC STRIPE

- RECESSED THERMOPLASTIC NOTES**
- See typical traffic line details for pavement marking patterns.
 - The top of the thermoplastic installed in recessed pavement shall be 0 to 1/16 inch below the pavement surface.



RECESS DETAIL FOR RETROREFLECTIVE PAVEMENT MARKER



TYPE C AND TYPE D TYPE G AND TYPE H

RECESSED PAVEMENT MARKER FOR RECESSED INSTALLATION

- RECESSED MARKER NOTES:**
- See typical traffic line details for pavement marking patterns to be used with recessed pavement markers. Detail 14A requires a Type 2 recess.
 - The retroreflective pavement markers shown for recessed installations are not to be used for non-recessed installations.
 - The top of pavement markers installed in recesses shall be 0 to 1/16 inch below the pavement surface.

PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

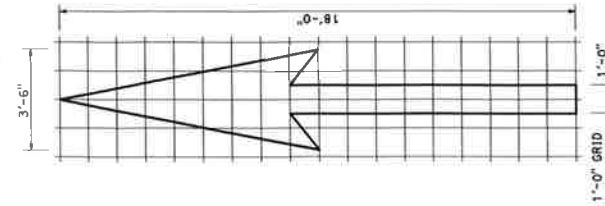
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

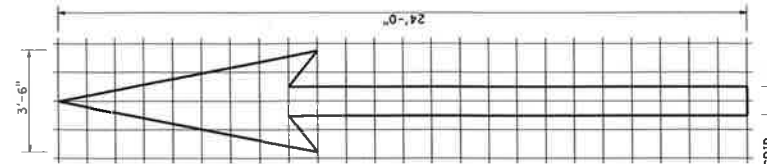
A20D

DIST.	COUNTY	ROUTE	SHEET NO.	TOTAL SHEETS

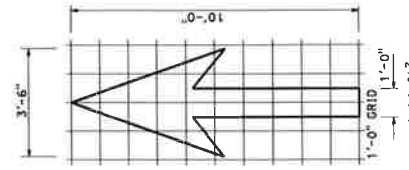
Alfred J. ...
 REGISTERED CIVIL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA
 THE BOARD OF CIVIL ENGINEERS
 THE BOARD OF ARCHITECTS
 THE BOARD OF LAND SURVEYORS
 THE BOARD OF PROFESSIONAL ENGINEERS
 THE BOARD OF PROFESSIONAL LAND SURVEYORS



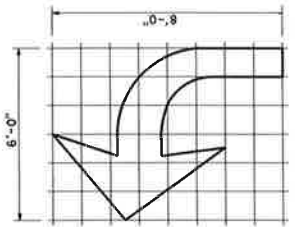
TYPE I 18'-0" ARROW
 A=25 ft±



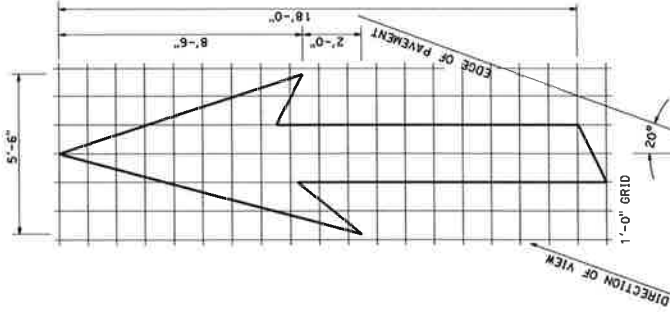
TYPE I 24'-0" ARROW
 A=31 ft±



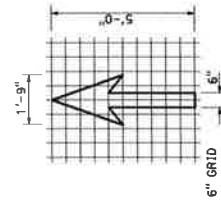
TYPE I 10'-0" ARROW
 A=14 ft±



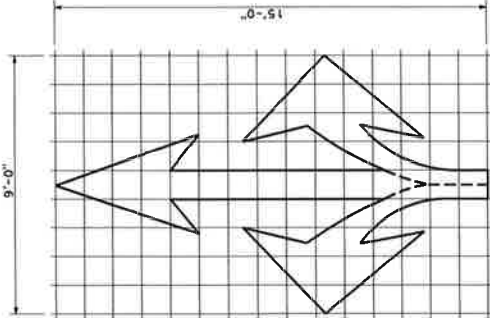
TYPE IV (L) ARROW
 (For Type IV (R) arrow, use mirror image)
 A=15 ft±



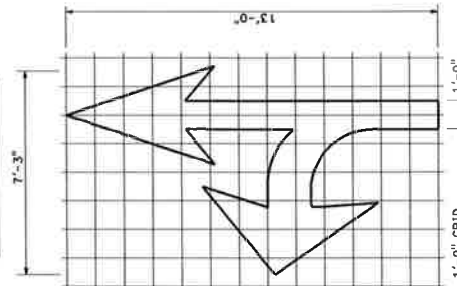
TYPE VII ARROW
 Right lane drop arrow
 (For left lane, use mirror image)
 A=42 ft±



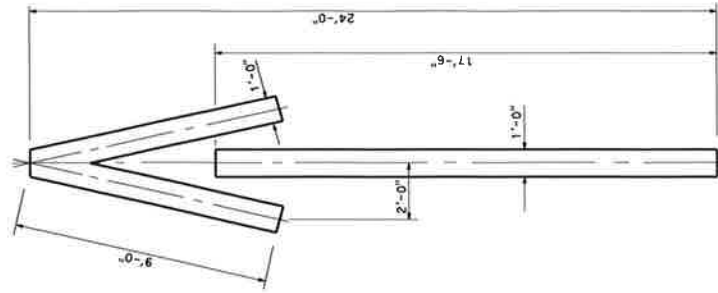
BIKE LANE ARROW
 A=3.5 ft±



TYPE VIII ARROW
 A=36 ft±



TYPE IX (L) ARROW
 (For Type IX (R) arrow, use mirror image)
 A=27 ft±



TYPE Y ARROW
 A=33 ft±

NOTE:
 Minor variations in dimensions may be accepted by the Engineer.

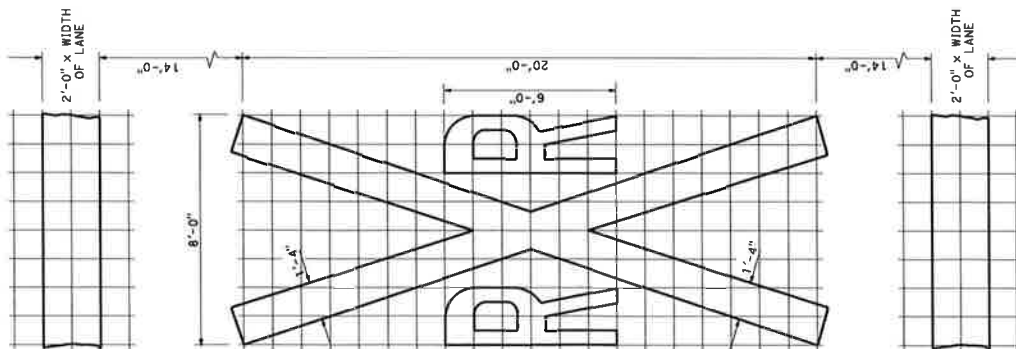
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
 ARROWS**

NO SCALE

A24A

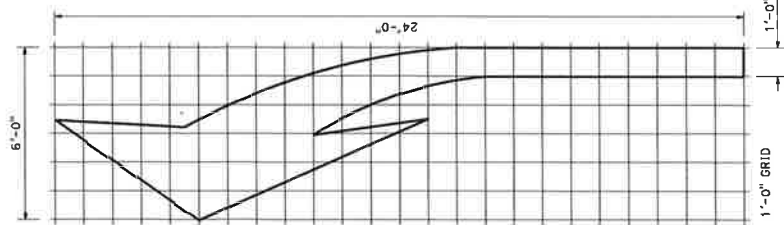
SHEET	COUNTY	ROUTE	POST MILE	SHEET TOTAL

October 30, 2015 PLANS APPROVAL DATE THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION THE ACCOUNTS OF THE ENGINEER'S WORK COMPLY WITH THIS PLAN SHEET.	

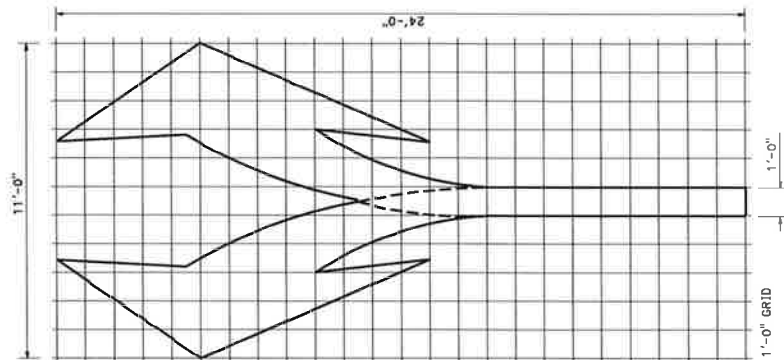


1'-0" GRID
A=70 f42 *

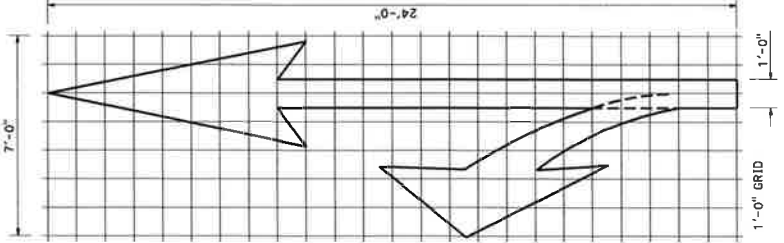
RAILROAD CROSSING SYMBOL
 * 70 f42 does not include the 2'-0" x variable width transverse lines.



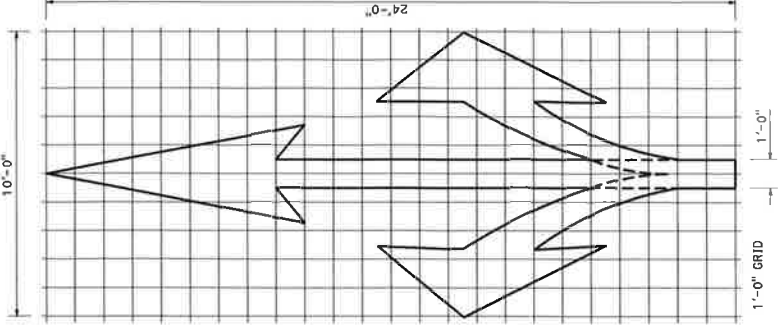
A=42 f42
TYPE III (L) ARROW
 (For Type III (R) use mirror image)



A=73 f42
TYPE III (B) ARROW



A=45 f42
TYPE II (L) ARROW
 (For Type II (R) use mirror image)



A=59 f42
TYPE II (B) ARROW

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

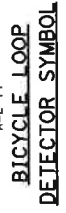
**PAVEMENT MARKINGS
 ARROWS AND SYMBOLS**

NO SCALE

A24B

Return to Table of Contents

Minor variations in dimensions may be accepted by the Engineer.



A 24C

DIST	COUNTY	ROUTE	SHEET NO.	TOTAL SHEETS

Attilio Ferro
REGISTERED CIVIL ENGINEER
October 30, 2015
PLANS APPROVAL DATE
AT 16 FERRO
08082
3-23-17
THE STATE OF CALIFORNIA ON ITS BEHALF
DOES HEREBY CERTIFY THAT THE ABOVE
IS IN ACCORDANCE WITH THE STANDARD
CONTRACTS OF THIS PUBLIC WORKS.

RUNAWAY VEHICLES SLOW DOWN
A=43 f+2 A=42 f+2 A=24 f+2 A=23 f+2 A=19 f+2

SCHOOL AHEAD TURN HERE
A=35 f+2 A=31 f+2 A=24 f+2 A=26 f+2 A=21 f+2

SIGNAL LEFT RIGHT STOP
A=32 f+2 A=19 f+2 A=26 f+2 A=22 f+2 A=18 f+2

COMPACT BIKE LANE
A=10 f+2 A=5 f+2 A=6 f+2

NOTES:

1. If a message consists of more than one word, it must read "UP", i.e., the first word must be nearest the driver.
2. The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.

WORD MARKINGS									
ITEM	f+2	ITEM	f+2	ITEM	f+2	ITEM	f+2	ITEM	f+2
XING	21	YIELD	24	BIKE	5	PEO	18		
AHEAD	31	SCHOOL	35	SLOW	23	COMPACT	10		
WAIT	19	SIGNAL	32	STOP	22	RUNAWAY	43		
LANE	6	TURN	24	LEFT	19	VEHICLES	42		
RIGHT	26	HERE	26						

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS**
NO SCALE

A24D

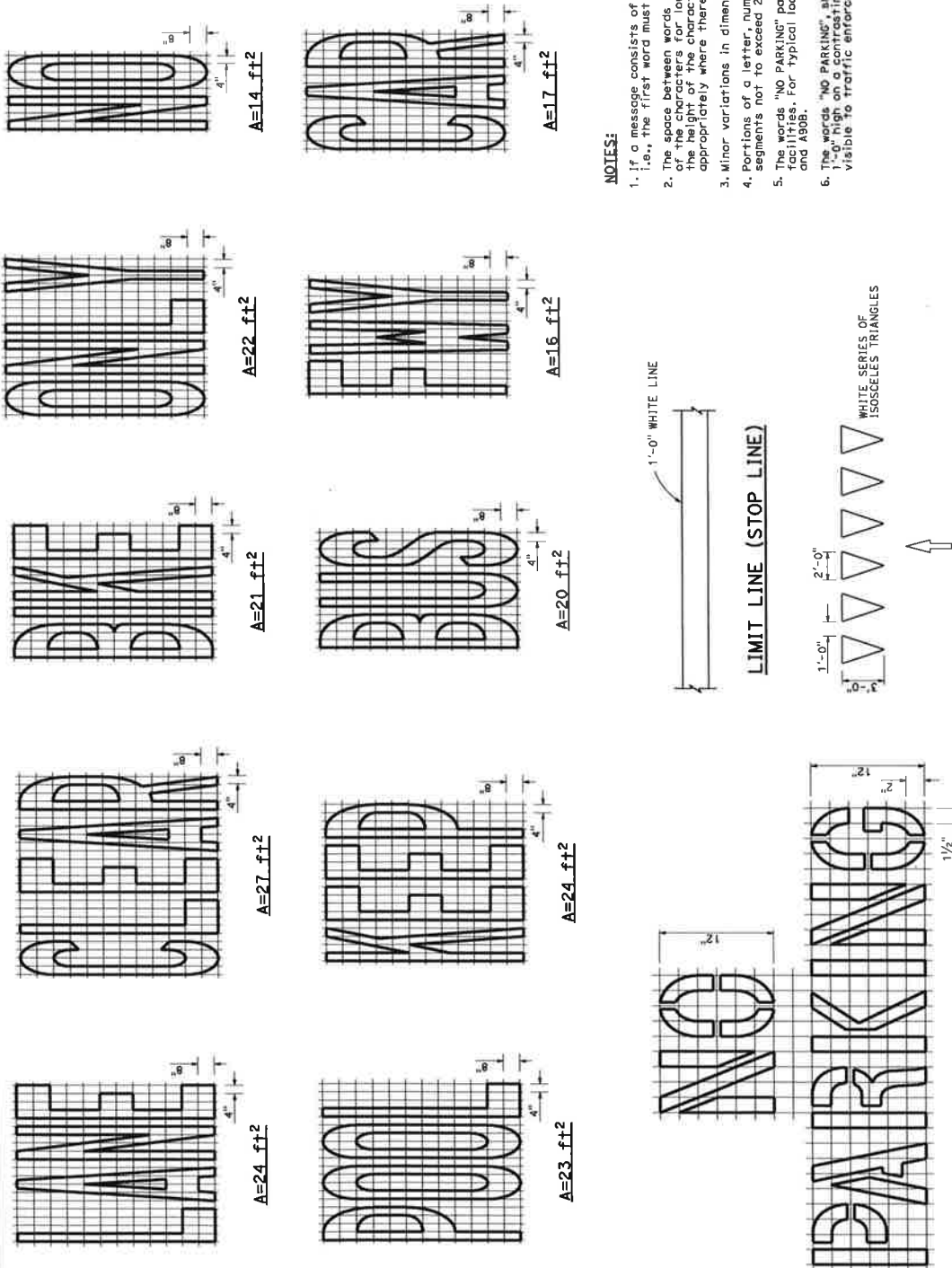
WORD MARKINGS		
ITEM	f ¹ 2	f ¹ 2
LANE	24	NO 14
POOL	23	BIKE 21
CAR	17	BUS 20
CLEAR	27	ONLY 22
KEEP	24	FWY 16

1. If a message consists of more than one word, it must read "UP", i.e., the first word must be nearest the driver.
2. The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters for high speed roads, and must be appropriate where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING" shall be painted in white letters no less than 1'-6" high on a contrasting background and located so that it is visible to traffic enforcement officials.

PAVEMENT MARKINGS WORDS, LIMIT AND YIELD LINES

NO SCALE

A 24E



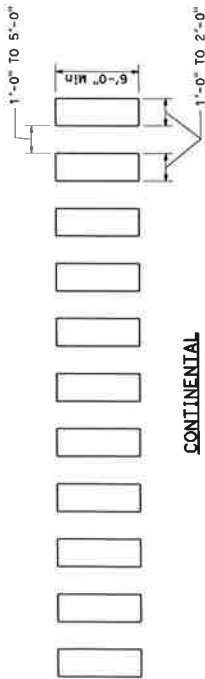
See Notes 6 and 7

DIST.	COUNTY	ROUTE	PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER <i>Alfred J. ...</i> October 30, 2015 PLANS APPROVAL DATE THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS COUNTY OF ... SHEET NO. ... OF ... PROJECT NO. ...	
--	--

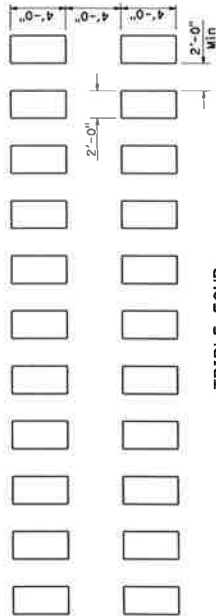
NOTES:

1. Spaces between markings must be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except those near schools must be yellow.



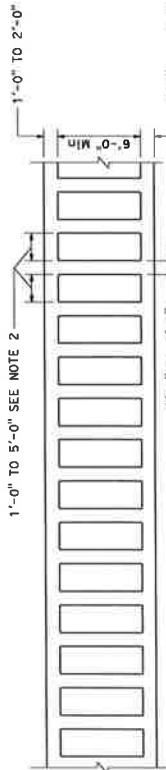
CONTINENTAL

See Note 1

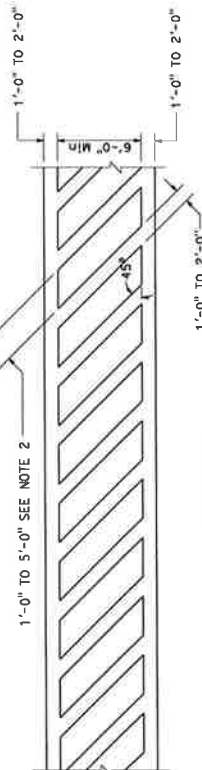


TRIPLE FOUR

See Note 1

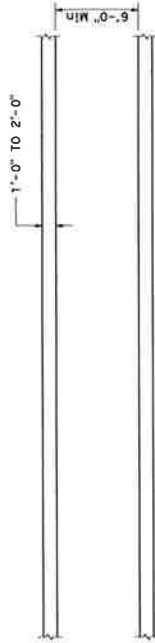


LADDER



DIAGONAL

HIGHER VISIBILITY CROSSWALKS

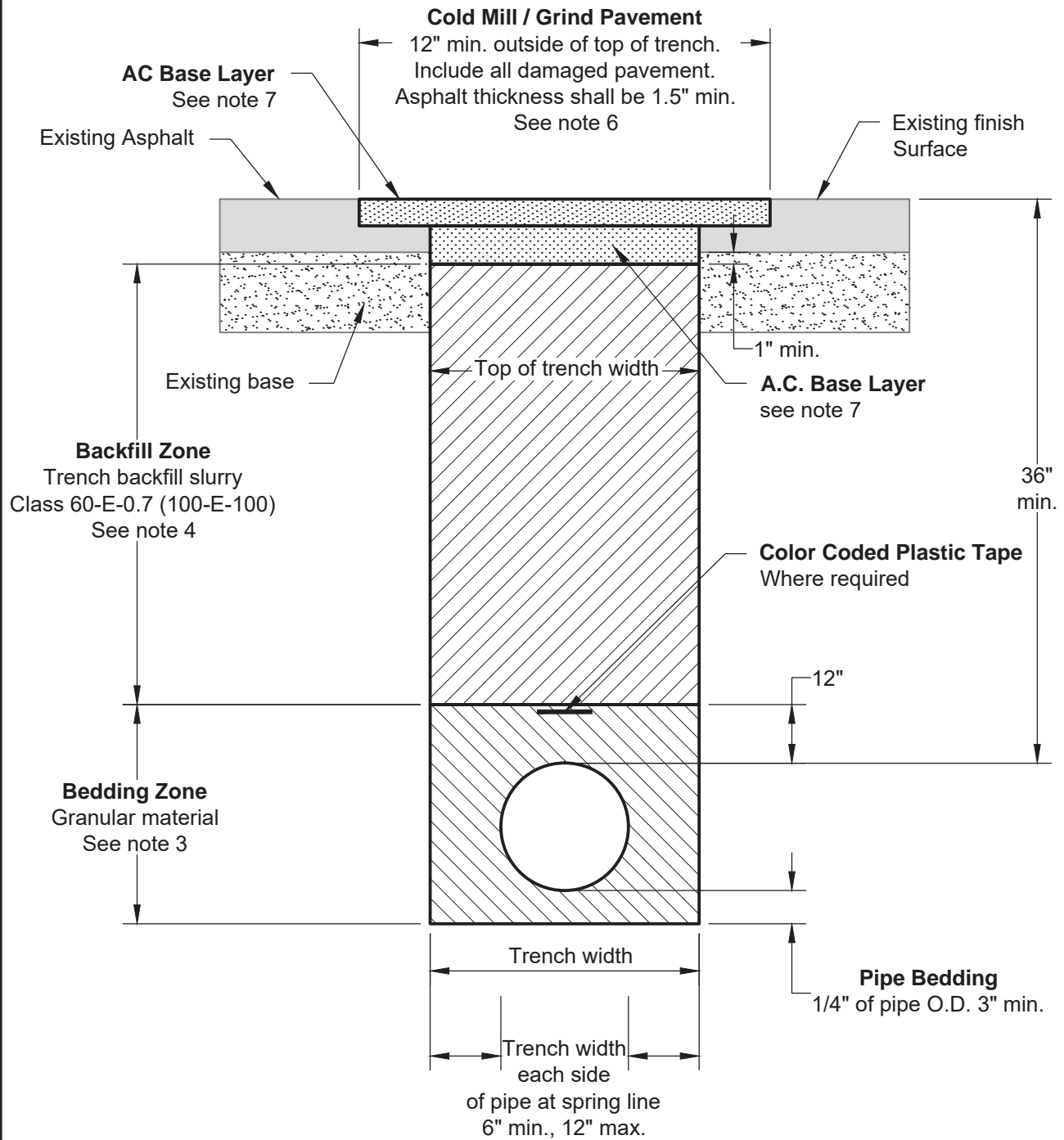


BASIC

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
CROSSWALKS**

NO SCALE

A24F



ADOPTED BY BOARD OF SUPERVISORS: 05-16-2017

REVISION DATE:	DESCRIPTION:	APPROVED BY:
		J P
		RECOMMENDED BY:
		D F

COUNTY OF VENTURA
PUBLIC WORKS AGENCY

ROAD STANDARDS

PAVEMENT REPAIRS FOR
TRENCHING

SHEET 1 OF 2

US UNITS	REVISION:	PLATE E-11
-----------------	------------------	-------------------

PLATE E-11 NOTES:

1. Construction shall conform to Standard Specifications for Public Works Construction (SSPWC) except as noted.

2. Trench width shall be as shown unless otherwise shown on the approved plans.

3. Bedding material shall be granular with 100% passing 3/4" sieve, 90 to 100% passing the 3/8" sieve and not more than 4% passing No. 200 sieve.

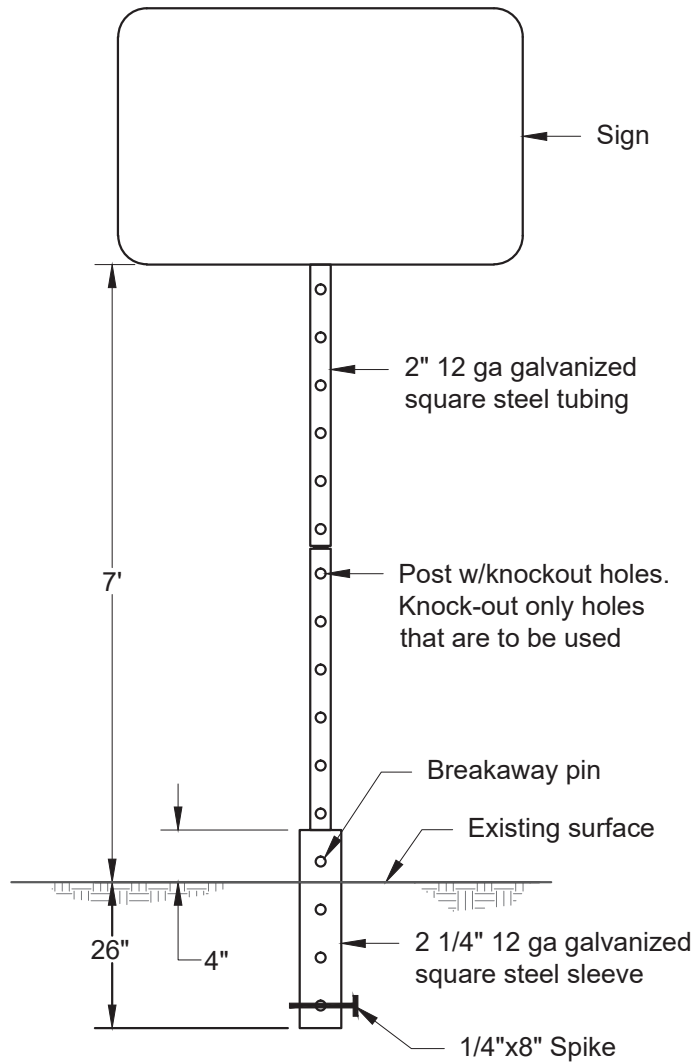
4. Backfill between the bedding zone and subgrade shall be Trench Backfill Slurry Class 60-E-0.7 (100-E-100). The Director of Public Works may approve the substitution of one of the following:
 - a. Controlled Low Strength Material (SSPWC 201-6), provided that laboratory control is provided to insure compliance with the specifications.
 - b. Non-cementitious backfill, provided that the backfill is tested and certified to meet the approved specifications for the material by an independent testing laboratory (SSPWC 217-2). A Quality Control Plan shall be submitted for approval.

5. Compaction shall not use flooding, ponding or jetting unless directed by Soils Engineer.

6. A.C. Overlay shall be C1 or C2 PG 64-10, 1.5" minimum.

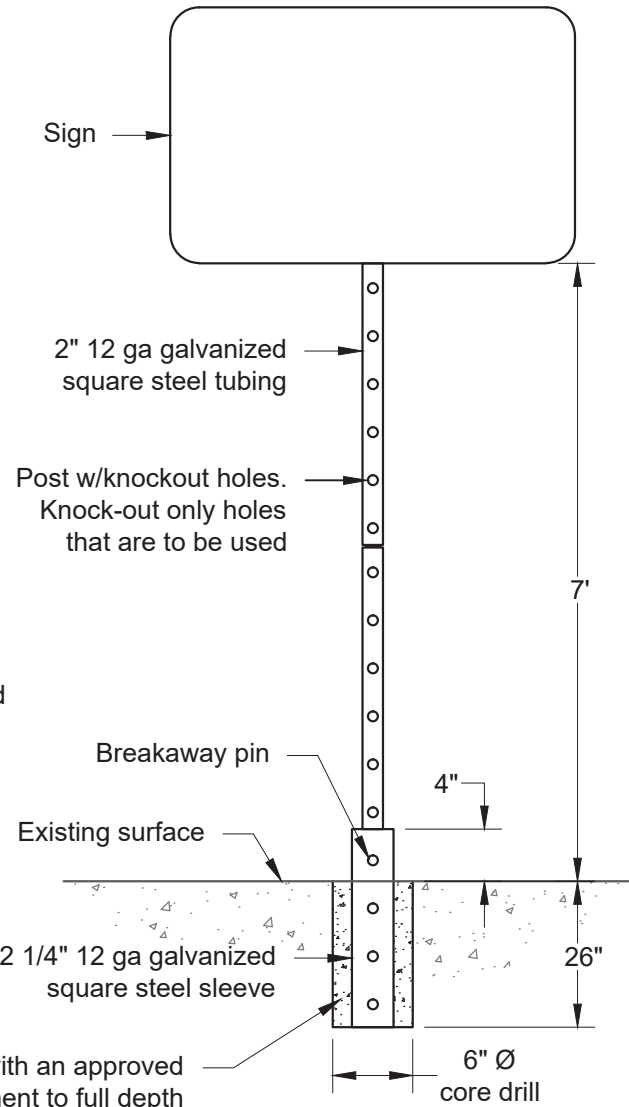
7. AC Base Layer
 - a. Where existing pavement surface is AC the AC Base Layer thickness shall be equal to or greater than the existing AC thickness plus 1" with a minimum of 3" and a maximum of 8". For roads where Traffic Index is 7.0 or greater (Plates B-2, B-3 & B-7a), the AC Base layer thickness shall be 4" min.
 - b. Where existing pavement surface is PCC pavement, saw cut 2" into the existing pavement at the outer edge of the trench and break the remaining thickness. Replace the PCC and base to the same depth as the existing pavement. The PCC shall be 560-C-3250.

ADOPTED BY BOARD OF SUPERVISORS: 05-16-2017			COUNTY OF VENTURA PUBLIC WORKS AGENCY ROAD STANDARDS PAVEMENT REPAIRS FOR TRENCHING <div style="text-align: right;">SHEET 2 OF 2</div>	
REVISION DATE:	DESCRIPTION:	APPROVED BY:		
		J P		
		RECOMMENDED BY:		
		D F		



SIGN INSTALLATION

In dirt area



SIGN INSTALLATION

In sidewalk area

NOTE:

No concrete is required for sign posts installed in dirt areas. Maintain 7' clearance to bottom of lowest sign.

ADOPTED BY BOARD OF SUPERVISORS: 05-16-2017

REVISION DATE:	DESCRIPTION:	APPROVED BY:
		J P
		RECOMMENDED BY:
		D F

COUNTY OF VENTURA
PUBLIC WORKS AGENCY

ROAD STANDARDS

SIGN POST INSTALLATION

APPENDIX K
UNLISTED SUBCONTRACTOR'S LIST

UNLISTED SUBCONTRACTOR'S LIST

Name of Contractor: _____

NAME OF SUBCONTRACTOR	CONTRACTOR'S LICENSE No.	BUSINESS ADDRESS	CATEGORY OF WORK

The California Department of Industrial Relations (DIR) requires that all construction contractors and tiered subcontractors performing prevailing wage work is to be registered with the DIR pursuant to Labor Code Section 1725.5.

Contractors and Subcontractor who are required to register but fail to do so are ineligible to bid or work on a public works contract.

Note: The Unlisted Subcontractor's List is required to be submitted to the Project Engineer for approval prior to the issuance of the Notice to Proceed.

APPENDIX L
SWPCP



COUNTY OF VENTURA STORMWATER PROGRAM

COUNTY OF VENTURA STORMWATER POLLUTION CONTROL PLAN (SWPCP)

Project Name

Project Information (if applicable)

Tract/Plan No.: _____

Grading Permit No.: _____

Building Permit No.: _____

Land Use No.: _____

Conditional Use Permit No.: _____

Subdivision No.: _____

Assessor Parcel Number: _____

Location: _____

General Description: _____

Construction Start Date: _____

Construction Completion Date: _____

Stormwater Pollution Control Plan (SWPCP) Prepared by:

Name, Title

Date

Agency or Contractor Name

Agency or Contractor Phone No.

REQUIREMENTS

FOR

STORMWATER POLLUTION CONTROL PLAN

For County owned or operated construction projects including those under a Capital Improvement Project Plan that disturb less than one acre of soil, the County of Ventura requires the development and implementation of a Storm Water Pollution Control Plan (SWPCP) to meet requirements of the County of Ventura National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit Order No. R4-2010-0108 (dated July 8, 2010).

The purpose of the SWPCP is to identify potential pollutant sources that may affect the quality of discharges and to design the use and placement of Best Management Practices (BMPs) to effectively prohibit the entry of pollutants from the construction site into the storm drain system during construction. Erosion and sediment source control BMPs should be considered for both active and inactive (previously disturbed) construction areas. BMPs for wind erosion and dust control are also included. The SWPCP may require modification as the project progresses and as conditions warrant.

The SWPCP shall be developed and implemented in accordance with the NPDES Municipal Stormwater Permit No. CAS004002 (Order No. R4-2010-0108; dated July 8, 2010), and any other requirements established by the County of Ventura.

All project contractors and subcontractors shall implement an effective combination of appropriate erosion and sediment control BMPs prescribed by the Ventura County Municipal Stormwater Permit Order No. R4-2010-0108 as applicable on the County owned or operated construction projects. The purpose of BMP implementation is to prevent erosion and sediment loss, and the discharge of construction wastes.

This SWPCP includes BMP references from the California Stormwater Best Management Practice Handbooks (Construction (11/09 ver.), Municipal, New Development & Redevelopment, and Industrial). The handbooks may be obtained from the California Stormwater Quality Association (CASQA), Post Office Box 2105, Menlo Park, CA 94026-2105; 650-366-1042; www.casqa.org or www.cabmphandbooks.com.

Acronyms and Abbreviations:

CASQA	California Stormwater Quality Association
BMP	Best Management Practice
NPDES	National Pollutant Discharge Elimination System
SWPCP	Stormwater Pollution Control Plan

COUNTY OF VENTURA

STORMWATER POLLUTION CONTROL PLAN

Project Owner/Developer/Operator Information

Project Manager: _____

Project Engineer: _____

County Agency: _____

Department/Division: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____ Phone: _____

Estimated Start Date
of Project: _____

Estimated Finish
Date of Project: _____

Site Map Requirements

In addition to proposed construction plans, provide the following information, *if applicable*.

- Parcel Size = _____ acres
- Construction work area = _____ acre/acres.
- Soil disturbance area = _____ acre/acres.
Note: This SWPCP is only required for construction projects disturbing less than 1 acre of soil. All construction projects that disturb one acre or more of soil or that disturb less than one acre of soil, but the site is a part of a larger common area of development or sale, require coverage under the State National Pollutant Discharge Elimination System (NPDES) General Construction Permit No. CAS000002. For more information refer to http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.
- Existing paved areas and buildings.
- Areas of existing vegetation to be protected/preserved.
- Areas where it is known that toxic materials have been stored, disposed, spilled, or leaked onto the construction site.
- Affected water courses, lakes, wetlands, springs, and wells.
- Watershed boundary of offsite areas that drain into construction site.
- Boundary of drainage area where stormwater leaves property.
- Areas of soil disturbance and locations of potential soil erosion areas requiring BMPs during construction.
- Areas of cut and fill.
- Drainage patterns and slopes anticipated after major grading activities.
- Locations of existing storm drain facilities.
Types and locations of stormwater structures, controls, and/or BMPs that will be built/utilized to control stormwater pollution during construction. Provide a brief description of BMPs selected and, if appropriate, attach modified fact sheets or additional information.
- Construction and erosion control material storage areas.
- Temporary stockpile and construction waste storage areas.
- Construction vehicle storage and service areas.

The above information should be updated as needed to meet evolving construction conditions.

Inventory of Contractor's Activities and Special Conditions

1. Describe construction materials, equipment, and vehicles that will be used onsite.
2. Describe the existing soil and source description of fill material (reference or attach soils report if available).
3. Provide a description of special site conditions that may contribute pollutants to all discharges and how they are to be controlled.
4. Describe stormwater structures/controls on the site prior to construction and how these structures/controls will be integrated into the SWPCP to reduce sediment and other pollutants in all discharges.
5. Provide the sequence for implementation or installation or proposed BMPs.
6. List waters, other than stormwater, which will flow from the site during dry weather, the approximate amount of flow, and methods for preventing or treating these dry weather flows.

Attach sheets if additional space is required.

Monitoring, Inspection, and Maintenance Requirements

1. Implement maintenance/repair efforts to ensure that the required BMPs are in good and effective condition. (A maintenance/repair plan is attached? ☐ Yes ☐ No)
2. Annually train all site personnel responsible for installing, inspecting, and maintaining BMPs (training program/material attached? ☐ Yes ☐ No) Document training is provided in Attachment 2.
3. At minimum conduct one site inspection during the wet season (between October 1 and April 15). Keep records and document inspection information on the Inspection form (Attachment 1)

Best Management Practices - BMPs

Complete the following charts. The BMPs listed may be used if applicable or adequate. Additional BMPs may apply. Please do not attach the BMP Fact Sheets referenced from the California Stormwater BMP Handbooks to the County's copy of the SWPCP; however, the BMP Fact Sheets must be attached to the SWPCP that is kept at the construction site. BMPs can be downloaded from the California Stormwater Handbooks at www.casqa.org or <http://www.dot.ca.gov/hq/construc/constmanual/>

Table 1. BMPs at Construction Sites Less than 1 Acre

BMPs Selected – Noted by Ref. ID from the California Stormwater BMP Handbooks		Use BMP		(If no, state reason)
		Yes	No	
Erosion Control BMPs				
EC-1 or SS-1	Scheduling			
EC-2 or SS-2	Preservation of Existing Vegetation			
Temporary Sediment Control BMPs				
SE-1 or SC-1	Silt Fence			
SE-8 or SC-8	Sandbag Barrier			
Temporary Tracking Control BMPs				
TC-1	Stabilized Construction Entrance/Exit			
Non-Stormwater Management BMPs				
NS-1	Water Conservation Practices			
NS-2	Dewatering Operations			

Table 1. BMPs at Construction Sites Less than 1 Acre (Continued)

BMPs Selected – Noted by Ref. ID from the California Stormwater BMP Handbooks		Use BMP		(If no, state reason)
		Yes	No	
Waste Management & Materials Pollution Control BMPs				
WM-1	Material Delivery & Storage			
WM-3	Stockpile Management			
WM-4	Spill Prevention & Control			
WM-5	Solid Waste Management			
WM-8	Concrete Waste Management			
WM-9	Sanitary/Septic Waste Mgmt.			
Additional BMPs Selected				

Certification

Contractor

As the Contractor of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project's construction activities on stormwater quality. The project owner is aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activity.

Name: _____

Title: _____

Signature: _____

Date: _____

Owner/Developer:

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is true, accurate, and complete. I am aware that submitting false and/or inaccurate information, failing to update the SWPCP to reflect current conditions, or failing to properly and/or adequately implement the SWPCP may result in sanctions provided by law.

Name: _____

Title: _____

County Agency: _____

Department/Division: _____

Signature: _____

Date: _____

Attachment 1 to SWPCP

Inspection Checklist for Construction Sites Less Than One Acre

County's Project Engineer or Project Inspector shall conduct site inspection at sites less than one acre for the implementation of storm water quality controls a minimum of once during the wet season (October 1 through April 15) using this checklist. Keep a copy of the completed inspection checklist with the project SWPCP on site.

DATE OF INSPECTION: _____

Project Name: _____

Inspector's Name: _____

Weather Conditions during inspection: _____

	Item	Compliance Accomplished			Date Completed
		YES	NO	N/A	
1	Are erosion control measures (BMPs) identified in SWPCP in place and effective?				
2	Are sediment control measures (BMPs) identified in SWPCP in place and effective?				
3	Is the site entrance stabilization adequate?				
4	Is equipment/vehicles parked in designated areas and free from significant leaks? Are drip pans present as needed?				
5	Are maintenance areas free from stains on the soil?				
6	Are all materials stored in bins or covered in plastic and protected from storm water?				
7	Is construction waste being disposed of in proper trash containers?				
8	Are concrete washout stations present and being utilized and maintained?				
9	Is fugitive dust being controlled and water being used as needed?				
10	Are catch basins, drainage channels, drain inlets/outlets being protected?				

Construction Site Inspection Checklist (Continued)

Comments:

I certify under penalty of law that this inspection is true, and I or a qualified assigned person has performed the required inspection as stated in the SWPCP.

Inspector Name

Inspector Signature

Date _____

Attachment 2 to SWPCP

Trained Personnel Log

Employees and contractors must be trained on the SWPCP prior to start of construction and annually thereafter. Contractor shall keep original training logs as an attachment to the project specific SWPCP.

Stormwater Management Training Log

Project Name: _____

Project Number/Location: _____

Stormwater Management Topic: (check as appropriate)

- | | |
|---|---|
| <input type="checkbox"/> Erosion Control | <input type="checkbox"/> Sediment Control |
| <input type="checkbox"/> Wind Erosion Control | <input type="checkbox"/> Tracking Control |
| <input type="checkbox"/> Non-storm water management | <input type="checkbox"/> Waste Management and Materials Pollution Control |
| <input type="checkbox"/> Storm Water Sampling | |

Specific Training Objective: _____

Location: _____ Date: _____

Instructor: _____ Telephone: _____

Course Length (hours): _____

Attendee Roster (attach additional forms if necessary)

Name	Company	Phone

COMMENTS:

APPENDIX M
RUBBERIZED PAVEMENT CERTIFICATION

Grantee Name	
Grant Number:	

Rubberized Pavement Certification

The Rubberized Pavement Certification form must be submitted with the payment request form(s). By signing this form, the signator certifies, under penalty of perjury, that the information provided below by the rubberized pavement (RP) manufacturer, binder supplier or contractor is true and accurate.

Grantee: Request completion of this form by each RP manufacturer, binder supplier or contractor. Review form for completeness and submit form to CalRecycle with payment request form(s). Retain supporting documentation that only California-generated waste tires were used for this grant project.

RP manufacturer, binder supplier or contractor: See instructions on the next page, complete and submit form to Grantee.

RP MANUFACTURER, BINDER SUPPLIER OR CONTRACTOR NAME:		EMAIL:	
CONTACT NAME:	PHONE:		FAX:
ADDRESS:	WEBSITE:		

SUPPORTING DOCUMENTATION REQUIREMENT

☐ CERTIFICATE OF ORIGIN OR ACCEPTABLE SUPPORTING DOCUMENTATION ATTACHED (SEE FOOTNOTES ON NEXT PAGE)

Product Description Choose either Crumb Rubber or Crumb Rubber Modifier	Manufacturer Name	Quantity (lbs.)	/ (divided)	Passenger Tire Equivalent (PTE)	=	Number of PTE's Diverted
Crumb Rubber	<i>E X A M P L E</i>	25,000	/	12 lbs./tire	=	2,083
			/		=	
			/		=	
TOTAL:						

The Product Provider agrees to be bound by the Audit/Records Access requirements of the above-referenced Grant. See next page for additional detail.
I certify under penalty of perjury that the material provided to the above-named grantee was manufactured from only California-generated waste tires. I understand that if it cannot be verified that the source of the material is from only California-generated waste tires, or an audit discloses the use of non-California tire rubber, that the CalRecycle may deny reimbursement or require the grantee to return all grant funds previously paid under this grant, and that the grantee may seek reimbursement from the above-named RP manufacturer, binder supplier or contractor.

Signature of Authorized Signer for RP manufacturer, binder supplier or contractor	Print Name	Title	Date

INSTRUCTIONS:

Grantee to provide:

1. Grantee Name: Complete full legal name as it appears on the Rubberized Pavement Grant Program Grant Agreement Cover Sheet.
2. Grant Number: Enter assigned grant number.

RAC manufacturer, binder supplier or contractor to provide:

1. Contact information: Provide your business' contact information in this section.
2. Supporting documentation requirement: Provide the Grantee with copies of supporting documentation that validates only California-generated waste tires were used for this grant project and that the waste tires were processed in California. Acceptable forms of supporting documentation include: Certificate of Origin (if completed by a California Processor) or a Bill of Lading and Manifest documentation for non-California processors.
3. Number of tires diverted: Provide the total number of tires diverted in Passenger Tire Equivalents for this project. Include both the number of pounds of crumb rubber and the calculated number of Passenger Tire Equivalent (PTes): Use **12** pounds of crumb rubber per PTE.
4. Signature of RAC manufacturer, binder supplier or contractor: This form must be signed by an authorized signer from the RAC manufacturer, binder supplier, or contractor. Provide the completed form, with supporting documentation, to the Grantee.

AUDIT/RECORDS ACCESS:

The Product Provider agrees that CalRecycle, the Department of Finance, the Bureau of State Audits, or their designated representative(s) shall have the right to review and to copy any records and supporting documentation pertaining to this Certification or the products certified herein. The Product Provider agrees to maintain such records for possible audit for a minimum of three (3) years after final payment date or grant term end date, whichever is later, unless a longer period of records retention is stipulated, or until completion of any action and resolution of all issues which may arise as a result of any litigation, dispute, or audit, whichever is later. The Product Provider agrees to allow the designated representative(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, the Product Provider agrees to include a similar right of the State to audit records and interview staff in any contract or subcontract related to this Certification or the products certified herein.

APPENDIX N
RELIABLE CONTRACTOR DECLARATION

RELIABLE CONTRACTOR DECLARATION

CalRecycle 168 (Revised 9/16)

This form must be completed and submitted to the Department of Resources Recycling and Recovery (CalRecycle) prior to authorizing a contractor(s) to commence work. Failure to provide this documentation in a timely manner may result in nonpayment of funds to the contractor(s).

This form is intended to help the CalRecycle's Grantees comply with the Reliable Contractor Declaration (formerly Unreliable List) requirement of their Terms and Conditions.

The Reliable Contractor Declaration (formerly Unreliable List) provision requires the following: Prior to authorizing a contractor(s) to commence work under the Grant, the Grantee shall submit to CalRecycle a declaration signed under penalty of perjury by the contractor(s) stating that within the preceding three (3) years, none of the events listed in Section 17050 of Title 14, California Code of Regulations, Natural Resources, Division 7, has occurred with respect to the contractor(s). Please see the reverse of this page, or refer to the [California Code of Regulations](http://www.calregs.com) (www.calregs.com).

If any of the events listed in Section 17050 have occurred, disclosure is required but will not necessarily result in CalRecycle refusing to approve the contractor. A signed statement explaining the facts and circumstances of the events must be attached to and submitted with this form.

Contractor: Complete the form and send original to the Grantee.

Grantee: Scan the form and upload it to the grant in CalRecycle's Grant Management System. For further instruction about logging into the Grant Management System and uploading this form, reference the Procedures and Requirements. Retain the original form in your grant file.

GRANTEE INFORMATION	
GRANTEE NAME:	GRANT NUMBER:
PRIMARY CONTACT NAME:	
CONTRACTOR INFORMATION	
CONTRACTOR NAME:	
AUTHORIZED CONTRACTOR REPRESENTATIVE NAME:	
MAILING ADDRESS:	
<p>As the authorized representative of the above identified contractor, I declare under penalty of perjury under the laws of the State of California that within the preceding three (3) years, none of the events listed in Section 17050 of Title 14, California Code of Regulations, Natural Resources, Division 7, has occurred with respect to the above identified contractor.</p> <p>Alternatively, as the authorized representative of the above identified contractor, I declare under penalty of perjury under the laws of the State of California that within the preceding three (3) years, if any of the events listed in Section 17050 of Title 14, California Code of Regulations, Natural Resources, Division 7, has occurred with respect to the above identified contractor, I have disclosed all such occurrences in an attached signed statement that explains the facts and circumstances of the listed events.</p>	
Signature	Date

RELIABLE CONTRACTOR DECLARATION

CalRecycle 168 (Revised 9/16)

Title 14 CCR, Division 7, Chapter 1**Article 5. Unreliable Contractors, Subcontractors, Borrowers and Grantees****Section 17050. Grounds for Placement on Unreliable List**

The following are grounds for a finding that a contractor, any subcontractor that provides services for a CalRecycle agreement, grantee or borrower is unreliable and should be placed on the CalRecycle Unreliable Contractor, Subcontractor, Grantee or Borrower List ("[Unreliable List](#)"). The presence of one of these grounds shall not automatically result in placement on the Unreliable List. A finding must be made by the Executive Director in accordance with section 17054, and there must be a final decision on any appeal that may be filed in accordance with section 17055 et seq.

- (a) Disallowance of any and/or all claim(s) to CalRecycle due to fraudulent claims or reporting; or
- (b) The filing of a civil action by the Attorney General for a violation of the False Claims Act, Government Code section 12650 et. seq; or
- (c) Default on a CalRecycle loan, as evidenced by written notice from CalRecycle staff provided to the borrower of the default; or
- (d) Foreclosure upon real property loan collateral or repossession of personal property loan collateral by CalRecycle; or
- (e) Filing voluntary or involuntary bankruptcy, where there is a finding based on substantial evidence, that the bankruptcy interfered with the CalRecycle contract, subcontract, grant or loan; or
- (f) Breach of the terms and conditions of a previous CalRecycle contract, any subcontract for a CalRecycle agreement, grant, or loan, resulting in termination of the CalRecycle contract, subcontract, grant or loan by the CalRecycle or prime contractor; or
- (g) Placement on the CalRecycle's chronic violator inventory established pursuant to Public Resources Code section 44104 for any owner or operator of a solid waste facility; or
- (h) The person, or any partner, member, officer, director, responsible managing officer, or responsible managing employee of an entity has been convicted by a court of competent jurisdiction of any charge of fraud, bribery, collusion, conspiracy, or any act in violation of any state or federal antitrust law in connection with the bidding upon, award of, or performance under any CalRecycle contract, subcontract, grant or loan; or
- (i) The person or entity is on the list of unreliable persons or entities, or similar list, of any other federal or California state agency; or
- (j) The person or entity has violated an Order issued in accordance with section 18304; or,
- (k) The person or entity has directed or transported to, has or accepted waste tires at, a site where the operator is required to have but does not have a waste tire facility permit; or,
- (l) The person or entity has transported waste tires without a waste tire hauler registration; or,
- (m) The person or entity has had a solid waste facility or waste tire permit or a waste tire hauler registration denied, suspended or revoked; or,
- (n) The person or entity has abandoned a site or taken a similar action which resulted in corrective action or the expenditure of funds by CalRecycle to remediate, clean, or abate a nuisance at the site; or
- (o) The following are additional grounds for a finding that, a person or entity described below should be placed on the Unreliable List:
 - (1) The person or entity owned 20% or more of an entity on the Unreliable List at the time of the activity that resulted in its placement on the Unreliable List;
 - (2) The person held the position of officer director, manager, partner, trustee, or any other management position with significant control (Principal Manager) in an entity on the Unreliable List at the time of the activity that resulted in its placement on the Unreliable List;
 - (3) The entity includes a Principal Manager who:
 - 1. Was a Principal Manager in an entity on the Unreliable List at the time of the activity that resulted in its placement on the Unreliable List; or,
 - 2. Owned 20% or more of an entity on the Unreliable List at the time of the activity that resulted in its placement on the Unreliable List;
 - (4) The entity has a person who owns 20% or more of the entity, if that person:
 - 1. Was a Principal Manager in an entity on the Unreliable List at the time of the activity that resulted in its placement on the Unreliable List; or,
 - 2. Owned 20% or more of an entity on the Unreliable List at the time of the activity that resulted in its placement on the Unreliable List.
 - (5) The entity has another entity which owns 20% or more of the entity, if that other entity:
 - 1. Is on the Unreliable List; or,
 - 2. Owned 20% or more of an entity on the Unreliable List at the time of the activity that resulted in its placement on the Unreliable List.
 - (6) Subsection (o) is not intended to apply to a person or entity that purchases or otherwise obtains an entity on the Unreliable List subsequent to its placement on the Unreliable List.

APPENDIX O
CALTRANS ENCROACHMENT PERMIT

ENCROACHMENT PERMIT

TR-0120 (REV. 6/2012)

Permit No.

07-21-N-TK-1793

Dist/Co/Rte/PM

07-VEN-150, PM 24.093/24.093

Permit Approval Date

06/29/2021

Fee Paid

\$ **EXEMPT**

Deposit

\$ **EXEMPT**

Performance Bond Amount (1)

\$ **0.00**

Payment Bond Amount (2)

\$ **0.00**

Bond Company

Bond Number (1)

Bond Number (2)

In compliance with (Check one):

☒ Your application of**June 18, 2021**☐ Utility Notice No.

of

☐ Agreement No.

of

☐ R/W Contract No.

of

TO: County of Ventura Public Works
800 S. Victoria Ave.
Ventura, CA 93009

Attn: Christopher Solis @ 805-654-2065**, PERMITTEE**

and subject to the following, PERMISSION IS HEREBY GRANTED to:

Conduct temporary traffic control on Ojai Rd. (SR-150) to resurface on Sulphur Mountain Road (outside of Caltrans R/W); within State right-of-way, in the city of Ojai; all in accordance with current State specifications and standard plans, Encroachment Permits Special Provisions, and the stamped Caltrans Permit Plans.

Double permit fees: \$820.00

A pre-job meeting with the assigned Caltrans Representative, Jasraj Singh (jasraj.singh@dot.ca.gov), (213) 760-9392, is required at least 7 days prior to start of any work under this permit. Failure to do so may result in permit revocation with no prejudice.

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit (Check applicable):

☒ Yes ☐ No General Provisions☐ Yes ☒ No Utility Maintenance Provisions☐ Yes ☒ No Storm Water Special Provisions☒ Yes ☐ No Special Provisions☐ Yes ☒ No A Cal-OSHA permit, if required: Permit No. _____☐ Yes ☒ No As-Built Plans Submittal Route Slip for Locally Advertised Projects☐ Yes ☒ No Storm Water Pollution Prevention Plan / Water Pollution Control Plan

In addition to fee, the permittee will be billed actual costs for:

☐ Yes ☒ No Review☐ Yes ☒ No Inspection☒ Yes ☐ No Field Work

(if any Caltrans effort expended)

☐ Yes ☒ No The information in the environmental documentation has been reviewed and considered prior to approval of this permit.This permit is void unless the work is completed before **December 31, 2021**

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.

No project work shall be commenced until all the other necessary permits and the environmental clearances have been obtained.

PERMIT ENGINEER: Patrick Truong

COPIES TO:

Inspector: Jasraj Singh

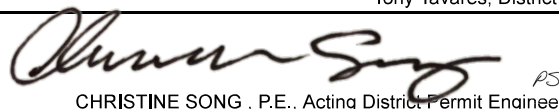
Maintenance: West Region

File

APPROVED:

Tony Tavares, District Director

BY:



CHRISTINE SONG, P.E., Acting District Permit Engineer

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DISTRICT 7 DIVISION OF OPERATIONS
OFFICE OF PERMITS

ENCROACHMENT PERMITS SPECIAL PROVISIONS FOR PERMIT PROJECTS WITHIN STATE RIGHT-OF-WAY

ATTACHED TO AND MADE PART OF ALL ENCROACHMENT PERMITS

The attached District's Special Provisions are generalizations of the Department's policies, procedures, standards, and specifications. They are included only as a convenience to the permittee. It is permittee's responsibility to verify all requirements in the appropriate publications.

EFFECTIVE February 24, 2020
(Rev. 04072021)

GODSON K. OKEREKE, CHIEF, DISTRICT PERMIT ENGINEER

TABLE OF CONTENTS

<u>District 7 Special Provisions</u>	<u>Page</u>
Common Provisions	1
Annual Maintenance Permit Requirement	1
Electrical Systems – Lighting, Signal, and Other Facilities	1-2
Electrical – Detector Loops	2
Excavation – Non-Utility	2-3
Fiber Optic Cable (FOC)	3
Full-Time Inspector	3
Monitoring Wells	3
Special Events	3
Survey Monuments	4
Traffic Controls	5
Traffic Controls (Utility Aerials)	4-5
Utility Relocation Clause	5
 <u>Headquarters Special Provisions</u>	
Access Control and Temporary Safety Barrier Retaining Walls and Soundwalls	5
Advertising Displays	5-6
Air Space Development	6
Art Program	6
Banners and Decorations	6-7
Bus Passenger Shelters, Benches, and Pullouts – Advertising and Location	7
Cables/Geophysical Testing	7
Drainage – Roof and Surface	7-8
Driveway – Commercial	8
Driveway Reconstruction	8
Driveway – Single Family	8
Mail Box	8-9
Notification of Encroachment	9
Pedestrian Safety	9
Railroad Grade Crossing – Maintenance	9-10
Sidewalks	10
Surveys	10
Special Events	10-11
Temporary Ground Anchors (Tiebacks)	11
Traffic Counters	11
Traffic Striping, Markings, and Signs	11
Utility Leasing	12
Vibrio Generating Equipment	12
 <u>State of California, Department of Transportation TR Forms</u>	
General Provisions, TR-0045	12-17
H-Support Diagram for Aerial Crossings, TR-0108	18
Permit Survey Grid, TR-0151	19
Settlement Rod Detail, TR-0152	20
Trench Detail, TR-0153	21-22
Steel Plate Bridging Utility Provision, TR-0157 – <i>Applicable to non-utilities</i>	23
Uncased High-Pressure Natural Gas Pipeline Special Provisions, TR-0158	24-25
Tree Pruning (Trimming) and Chemical Application, TR-0159	26-28
Annual Utility Provisions, TR-0160	29-30
Overhead Utility Provisions, TR-0162	31
Underground Utility Provisions, TR-0163	32-35
Tree Removal, TR-0171	36
Storm Water Special Provisions for Minimal or No Impact, TR-0400	38-38
Rolling Traffic Breaks, TR-0407	39
Hazardous Materials and Hazardous Waste Management, TR-0408	40
Unmanned Aircraft Systems (UAS) Operation, TR-0416	41-43

DISTRICT 7 SPECIAL PROVISIONS

COMMON PROVISIONS

1. If at any time, the permit is assigned by the permittee, assignee (typically, the Prime contractor) is required to obtain a valid Double Permit per procedures below.
Double Permit (DP) Procedures:
 - A. Assignee furnishes Caltrans with
 - a. a completed Standard Encroachment Permit Application,
 - b. a copy of this permit cover,
 - c. the indicated fees (inspection deposit + State furnished materials if required) as noted on this permit cover, and
 - d. a list of sub-contractors containing Company Names, Specialty, Name of Foreman or Superintendent, and Contact Phone Number.
 - B. A no-fee permit application for a Rider will be required to add additional sub-contractors not listed.
2. It is permittee's responsibility to furnish assignee(s) with a copy of the permit and all attachments; it is assignee's responsibility to have a copy of all associated permits at the jobsite and to present the permits upon requests from governing entities.
3. If a time extension is required, request is required 30-days in advance of the expiration date. Expired permits cannot be reactivated under any circumstance and the Department will not furnish advance warnings.
4. Caltrans is not a member of DigAlert and Caltrans underground facilities are not located by DigAlert. It is solely the permittee's responsibility to locate Caltrans facilities prior to commencing work. Existing underground installations (shown on contract plans or not) damaged by the permittee or assignee shall be replaced, restored in kind, or better at the permittee's expense.
5. When permittee's work falls within one of the provisions of Section 6500 of the Labor Code, the permittee must have a Cal-OSHA permit prior to starting permitted work.
6. American National Standards Institute (ANSI) compliant Class II vests and hard hats shall be worn while working within State's right of way. Workers working at night will be required to wear ANSI Class III warning garments. Class III compliance can be achieved by combining ANSI Class E pants worn with an ANSI Class II vest.
7. The State inspector has full authority to modify permit requirements as necessary to ensure public safety and to suspend permit due to poor workmanship, safeguarding the integrity of the highway facility.

ANNUAL MAINTENANCE PERMIT REQUIREMENT

1. Due to the encroachment installed within State right of way, the permittee is obligated to apply for a maintenance permit annually. The permittee can apply any time after construction is deemed complete.

ELECTRICAL SYSTEMS – LIGHTING, SIGNAL, AND OTHER FACILITIES

In addition to General Provisions, TR-0045, #7, your attention is directed towards the current Construction Manual Section 87 Electrical Systems.

1. All existing electrical systems shall always be protected.
2. All work involving installation or revision to the state's lighting, signal or electrical facilities, permittee shall notify the State Electrical Inspector, 7-day notice to schedule work.
3. Existing traffic signal systems shall be kept fully operational, minimizing inconvenience to the travelling public during construction. If traffic signal system shutdown is necessary, provide the State Electrical Inspector 10-day notice. There shall be no shutdowns or turn-ons on Fridays or any day before a holiday.
4. Permittee shall provide, any temporary wiring, signal equipment, or service connections required at their own expense, to keep the existing traffic signal system in effective operation duration modifications.
5. All equipment shall be new. Poles, signal heads, and safety lighting shall have Manufacturer's Certificate of compliance conforming to State Standard Specification.
6. A completed form DC-CEM-3101 "Notice of Materials to be Used" shall be provided to the State Electrical Inspector for all signal poles, sign poles, light poles, mast arms, BBS, LED's, overhead signs, and other items as directed.
7. Welding operations for overhead sign and pole structures requires satisfactory completion of the Department's "Manufacturing Qualification Audit for Overhead Sign and Pole Structures," and must be listed as having a current audit. Audits are available at:

<https://mets.dot.ca.gov/afl/AuditedFacilitiesList.php>

8. The face of any pole shall not be placed closer than 2-feet from any curb face. Final location of any pole shall be approved by the State Electrical Inspector in the filed prior to installation.
9. All standards (Poles, Mast Arms, Luminaries and Signal Heads) in or near the proximity of any high voltage lines shall meet current CAL/OSHA Electrical Safety Orders.
10. There shall be no official turn-on of any traffic signal until all appurtenances/equipment are properly installed, tested, and approved by the State Electrical Inspector. All associated pavement delineations/markings shall be placed, temporary traffic controls removed, mechanical fittings completed, and all holes filled prior to a signal turn-on.
11. Signal and/or street lighting facilities shall be relocated prior to starting road work in the area.
12. Accidental damages, repairs shall be made within 10-days from the date of incident. If it deemed a threat to public health and safety, repairs shall commence immediately. All repairs are the responsibility of the permittee at no cost to the State.
13. When applicable, the permittee shall furnish the power company's approved construction plan for the power source to the electrical meter cabinet. Construction cannot commence without the approved plan.

ELECTRICAL – DETECTOR LOOPS

1. Prior to commencement of work, if loop detectors are to be damaged, a 7-day notice shall be provided to the State Electrical Inspector to arrange modifications to traffic signal operations. Work shall not commence without State Electrical Inspector approval.
2. Permittee shall provide, any temporary wiring, signal equipment, or service connections required at their own expense, to keep the existing traffic signal system in effective operation duration modifications.
3. All traffic loop detector installations shall have a minimum depth of 3.5-inches for existing pavement and 5-inches for new pavement. Type II wire with hot-melt rubber sealant shall be used. Type E, 6-Inch diameter loops shall be used.
4. Accidental damages, repairs shall be made within 10-days from the date of incident. If it deemed a threat to public health and safety, repairs shall commence immediately. All repairs are the responsibility of the permittee at no cost to the State.
5. Interconnect cables cannot be spliced; new continuous cable of the same type shall be installed between controllers, when damaged.
6. There shall be no official turn-on of any traffic signal until all appurtenances/equipment are properly installed, tested, and approved by the State Electrical Inspector. All associated pavement delineations/markings shall be placed, temporary traffic controls removed, mechanical fittings completed, and all holes filled prior to a signal turn-on.

EXCAVATION – NON-UTILITY

1. If, at the end of the working day, backfilling operations have not been properly completed, steel plate bridging must be required to make the entire highway facility available to the traveling public in accordance with the "Steel Plate Bridging Special Provisions" (TR-0157).
2. PCC pavement to be removed must be saw cut at a minimum depth of 4-inches to provide a neat and straight pavement break along all sides of the excavation. AC pavement must be saw cut to the full depth.
3. Where the edge of the excavation is within 2-foot of existing curb and gutter or pavement edge, the asphalt concrete pavement between the excavation and the curb or pavement edge must be removed.
4. When the permit authorizes excavation, surfacing and base materials and thickness thereof must be as specified in the permit.
5. Sides of excavations in paved areas must be kept as nearly vertical as possible. Excavation widths shall be limited to what is required and shall be of sufficient width to accommodate shoring, if needed.
6. Where it is necessary to excavate under existing curb and gutter, or underground facilities, the void must be backfilled with 2-sack cement-sand slurry.
7. All backfilling must conform to the applicable sections of the Department's Standard Specifications. Ponding or jetting methods of backfilling are prohibited.
8. Any required compaction tests must be performed by a certified laboratory at no cost to the Department and the laboratory report furnished to the Department's representative.
9. No excavation shall be left open after daylight hours unless specifically authorized and adequate protection for traffic is provided in accordance with General Provisions, TR-0045, #14.

10. Repairs to PCC pavement must be made of Portland Cement Concrete containing a minimum of 658 lbs. or 7-sack of cement per cubic yard. Replaced PCC pavement must equal existing pavement thickness. The concrete must be satisfactorily cured and protected from disturbance for not less than 48-hours. Where necessary to open the area to traffic, no more than 2% by weight of calcium chloride may be added to the mix and the road opened to traffic after 6-hours.
11. Temporary repairs to pavements must be made and maintained upon completion of backfill until permanent repairs are made. Permanent repairs to pavements must be made within 30-days of completion of backfill unless otherwise specified by the Department. Temporary pavement patches must be placed and maintained in a smooth riding plane free of humps and/or depressions.
12. Tree roots 3-inches or larger in diameter will not be cut within the tree drip line when excavating adjacent to roadside trees. If such roots are encountered, they must be tunneled under, wrapped in burlap and kept moist until the trench is backfilled. Trenching machines may not be used under trees if the trunk or limbs will be damaged by their use.
13. No earth or construction materials are to be dragged or scraped across the highway pavement, and no excavated earth placed or allowed to remain at a location where it may be tracked onto the highway traveled way, or any public or private approach by the permittee's construction equipment, or by traffic entering or leaving the highway traveled way. Any excavated earth or mud so tracked onto the highway pavement or public or private approach must be immediately removed by the permittee.

FIBER OPTIC CABLE (FOC)

1. Pothole and positively identify the fiber optics cable (FOC) before any excavation work to ensure that the excavation area is clear of any FOC.
2. In the event the fiber optics cable (FOC) is damaged, temporary fusion splicing will be required within 24-hours to restore the damaged cable, and the permittee shall replace the FOC from vault to vault at the permittee's expense within 14-days.
3. Permittee shall pay for any temporary wiring or service connections required to keep the existing traffic signal system in effective operation during modifications.

FULL-TIME INSPECTOR

1. If a full-time Civil Inspector is required; the permittee is required to provide a full-time inspector who has a minimum of 5-years field experience to oversee the entire works under this permit. A minimum of 2-weeks prior to the start of work, permittee's Civil Inspector shall submit his/her resume for review and arrange an interview with State Inspector(s). Please note that Caltrans reserves the right to reject or disqualify the appointed inspector if he/she shows low performance on the job or fails to comply with State requirements.

MONITORING WELLS

1. Access to temporary well(s) shall be from a local road or private property. The intent of this requirement is for service vehicles to park outside the State right-of-way.
2. Permittee shall not discharge treated groundwater or effluent into the State drainage systems without prior written authorization documenting the exception.
3. Temporary conduits or pipelines through culverts is prohibited, a separate permit is required to install an independent conduit or pipeline.
4. If the governing water quality control board requires monitoring beyond the initial 5-year permit duration, the permittee shall apply for a new well permit every 5-years, as needed.
5. A performance bond shall be kept active throughout the life of the well, a new bond will be required with each 5-year re-application.
6. When the governing water quality control board allows well termination, the permittee shall apply for a well abandonment permit with abandonment plans and a copy of the well status determination from the governing water quality control board.

SPECIAL EVENTS

1. If rain, fog, or other elements significantly affect safety for event participants or vehicular traffic, Caltrans may take whatever action is necessary to protect the public. Also, if for some unforeseen reason the traffic demand for the State facility significantly exceeds the anticipated demand, it may be necessary to terminate the event.

SURVEY MONUMENTS

- 1 Your attention is directed to Standard Specification, Section 5-1.36 Property and Facility Preservation, and Business and Professions Code, Section 8771. Permittee must physically inspect the work site and locate survey monuments before work commencement. Monuments that might be disturbed must be referenced or reset in accordance with Business and Professions Code.
- 2 If feasible, monuments should not be set within the traveled way. All monuments that must be set or perpetuated in paved surfaces, must be constructed in accordance with Caltrans Standard Specification Section 78-2 'Survey Monuments' and Standard Plan A74, Type D, or equal with prior approval of the District Surveys Engineer.
- 3 Copies of Corner Records or Record of Surveys recorded in compliance with the Business and Professions Code must be forwarded to the District Surveys Engineer.

TRAFFIC CONTROLS

- 1 All traffic control devices shall be compliant with the current California Manual on Uniform Traffic Control Devices (CAMUTCD).
- 2 A Class C-31 (Construction Zone Traffic Control Contractor) license, as defined by the California Business and Professions Code and the California code of Regulations, is required to perform lane and ramp closures on State highways and freeways. Other Classes are restricted to sidewalk and shoulder closures only.
- 3 Except for installing, maintaining, and removing traffic control devices, whenever work is performed, or equipment is operated in the following work areas, the permittee shall close the adjacent traffic lane unless otherwise provided in the permit:

Approach speed (posted limit)

Over 45 mph

45 mph and Under

Work Areas

Within 6-feet of a traffic lane

Within 3-feet of a traffic lane

- 4 No traffic controls shall be allowed during rainy, foggy or inclement weather.
- 5 Unless noted in the permit or otherwise authorized by the State Inspector, the normal working hours of permitted traffic control shall be limited between 9:00 a.m. and 3:00 p.m., Monday through Friday.
- 6 No traffic controls shall be allowed on designated legal holidays. Designated legal holidays are typically as follows: January 1, the third Monday in January, the third Monday in February, the last Monday in May, July 4, the first Monday in September, November 11, the fourth Thursday in November and December 25.
- 7 Traffic controls shall be maintained in good standing continually throughout each work day.
- 8 Ramp closure requires 7-day advance public notification notice prior to actual closure date or as directed by the State Inspector. Message shall be approved by the State Inspector.
- 9 Permittee shall obtain a Closure ID and Log number from the State Inspector. Permittee shall notify the State Inspector and the Traffic Management Center (TMC) by telephone at (323) 259-2352 immediately prior to a lane/ramp closure. Inform Caltrans' dispatcher the "10-97" closure number before closure installation, and the "10- 98" closure number after closure and all signs have been removed with lane/ramp opened to traffic. Permittee should also provide the Caltrans' dispatcher with an on-site phone number where information regarding this permit may be readily obtained during the closure period.
- 10 Existing traffic signals and highway lighting shall be kept in operation during progress of the work.
- 11 If a transit stop is located within the construction work area, the permittee is responsible for contacting the Transit Agency to arrange a temporary stop elsewhere.

TRAFFIC CONTROLS (UTILITY AERIALS)

1. Wires, cables, or conductors may not be pulled over moving traffic at any time unless a suitable safety net has been installed, refer to TR-0108.
2. The permittee will pay all costs incurred by the District for scheduled work unless the State inspector receives a cancellation notice 24-hours in advance of the scheduled date.
3. ***FREEWAY***
 - a. Installation or removal shall be on Sunday mornings between day break and 8:00 a.m., unless otherwise authorized by the State inspector.
 - b. Aerial crossings made with traffic breaks, breaks shall be performed by the California Highway Patrol (CHP) with a minimum of two CHP vehicles or as otherwise directed by CHP and/or the State inspector.

- c. Traffic break durations shall not exceed 5-minutes at any one time, thereafter, a minimum period of 10-minutes shall be provided to minimize queuing.
 - d. If the permit is accompanied with an approved temporary traffic control plan, there shall be no deviations unless authorized by the State inspector in writing.
4. **CONVENTIONAL HIGHWAY**
- a. Installation or removal shall be made on weekdays between 9:00 a.m. and 11:00 a.m., unless otherwise authorized by the State inspector.
 - b. Traffic may be stopped by competent flagmen with the installation of traffic control signs and devices compliant with the current California Manual of Uniform Traffic Control Devices (CAMUTCD) and/or Standard Plan.
 - c. Traffic shall not be delayed for periods greater than 5-minutes at any one time, thereafter, a minimum period of ten-minutes shall be provided to minimize queuing.

UTILITY RELOCATION CLAUSE

1. **PERMITS FOR LOCAL AGENCY PROJECTS CONSTRUCTED BY ENCROACHMENT PERMIT WITHOUT A COOPERATIVE AGREEMENT:** If existing public or private utilities conflict with the construction project, Permittee will make necessary arrangements with the owners of such utilities for their protection, relocation, or removal. Permittee must inspect the protection, relocation, or removal of such facilities. Total costs of such protection, relocation, or removal that must be legally paid, will be borne by Permittee. If any protection, relocation, or removal of utilities is required, including determination of liability for cost, such work must be performed in accordance with State policy and procedure. Permittee must require any utility company performing relocation work within the State right-of-way to obtain a State Encroachment Permit before the performance of said relocation work. Any relocated utilities must be correctly located and identified on as-built plans.
2. **PERMITS FOR DEVELOPER PROJECTS BEING CONSTRUCTED WITHOUT A HIGHWAY IMPROVEMENT AGREEMENT:** If existing public or private utilities conflict with the construction project, Permittee will make necessary arrangements with the owners of such utilities for their protection, relocation, or removal. Permittee must inspect the protection, relocation, or removal of such facilities. Total costs of such protection, relocation, or removal must be borne by Permittee in compliance with the terms of the Highway Encroachment Permits, Case Law, Public Utility Regulations, and Property Rights. Permittee must require any utility company performing relocation work within the State right-of-way to obtain a State Encroachment Permit before the performance of said relocation work.

HEADQUARTERS SPECIAL PROVISIONS

ACCESS CONTROL AND TEMPORARY SAFETY BARRIER RETAINING WALLS AND SOUNDWALLS:

1. A temporary 6-feet high access control fence shall be provided before removing the existing fence. Existing fence fabric shall be salvaged and delivered to the nearest State facility as directed by the State's representative at no cost to the State. The remaining access control fence shall be tied to the wall.
2. Fence posts are to be removed completely and the holes backfilled with compacted earthen material.
3. Access to the worksite from the freeway is prohibited.
4. Any material stored at the worksite within 30-feet of the traveled way when work is not in progress shall be protected by Type K barrier railing placed at a 20:1 taper or as otherwise directed by the State's representative.
5. Any Type K barrier placed within 10-feet of the traveled way shall have one appropriate reflective marker affixed to the top of each section. A Type "P" object marker shall be installed in front of the approach end section. The end section shall also be protected by a temporary crash cushion array.

ADVERTISING DISPLAYS:

1. **GENERAL**
 - a. Signs, Marquees and Awnings overhanging State highway right of way (R/W) shall comply with the requirements of the applicable local agency, the latest edition of the Uniform Building Code (UBC) or these special provisions, whichever is the higher standard.
2. **SIGNS**
 - a. Vertical Clearance: The minimum clearance of signs from the sidewalk shall be 12-feet.

- b. Codes: Must be structurally adequate and conform to applicable building code and Caltrans' Outdoor Advertising Regulations.
 - c. Location: Support shall be off the right of way. The overhang shall be at least 2-feet behind the curb line. If no curbs are in place, the signs should be placed so that some physical barrier prevents them from being struck.
 - d. Advertising: The wording on the sign may only identify either the owner, the goods sold or manufactured on the premises or the services rendered.
 - e. Lights: No flashing, rotating or intermittent lights shall be allowed except approved public service information. Signs that contain red, yellow, or green lights shall not be permitted where they could interfere with the driver's perception of traffic signals.
 - f. No displays shall interfere with or hide traffic signals or traffic signs.
 - g. Any future change of copy or location must be covered by a separate permit.
3. MARQUEES
- a. The horizontal clearance between a marquee and the curb line shall not be less than 2-feet.
 - b. The minimum vertical clearance from the sidewalk shall be 12-feet.
 - c. A marquee shall be supported entirely by the building.
 - d. Any drainage from the marquee shall not fall on or drain across the sidewalk.
4. AWNINGS
- a. An awning is a temporary shelter supported entirely from the exterior wall of a building.
 - b. Awnings may identify the owner or place of business.

AIR SPACE DEVELOPMENT:

1. Column Protection: shall be lumber at least 2-inches nominal thickness and at least 4-inches nominal width with 2-inches maximum clear space between pieces. The lumber shall be strapped to columns with a minimum of 3-galvanized steel bands. The bottoms of the pieces of lumber shall be 2-feet or less above the ground and tops 8-feet minimum above the ground.
2. Fencing: a standard 6-feet high chain link fence may be installed around the perimeter of the leasing area with gate(s) as designated. Security may be enhanced by the installation of vertical brackets on the fence posts and attaching 3-strands of barbed wire to the brackets. THE USE OF RAZOR RIBBON COILS ATOP THE FENCE IS PROHIBITED.
3. The improvements shall not be occupied by the leasee until all work is completed to the satisfaction of the State and a notice of completion has been issued to the permittee.
4. Upon completion of the work, the permittee shall submit one set of film positive reproducible, either matte or clear, "As-Built" plans to the District Permit Engineer.

ART PROGRAM:

1. Artwork located within State right of way will be considered a gift to the people of California.
2. Caltrans reserves the right to reproduce the artwork for publicity type purposes.
3. No commercial advertising on State right of way is allowed. Any identification of the donor or sponsor must have prior approval by Caltrans.
4. The permittee must maintain the integrity of the artwork until further notice. The permittee agrees to remove the artwork if so ordered by Caltrans.
5. The permittee shall abide by Caltrans' safety rules and regulations, including traffic control.

BANNERS AND DECORATIONS:

1. BANNERS
 - a. The banners shall not contain private advertising nor be of a political nature.
 - b. The lower edge of the banners shall be at least 18-feet above the highway pavement at its closest point.
 - c. Suspension or installation on State owned traffic signal poles or other State-owned facilities is prohibited.
 - d. Local police shall provide traffic control while banner is being installed or removed.
 - e. The display may not be in place more than two weeks prior to the event and shall be immediately removed after the, event.

2. HOLIDAY DECORATIONS

- a. Installation of Holiday decorations shall not begin prior to the day after Thanksgiving Day.
- b. Decorations attached to vertical structures such as power, telephone, or light poles, are not to project beyond the curb line and shall not hang below a height of 14-feet. Decorations which project beyond the curb line or cross the highway shall have a minimum vertical clearance of 18-feet.
- c. Decorations shall not be attached to State owned poles.
- d. Decorative lighting displaying red, yellow, or green lights shall not be placed where they could interfere with the driver's perception of traffic signals.

BUS PASSENGER SHELTERS, BENCHES, AND PULLOUTS – ADVERTISING AND LOCATION:

1. Advertising displays on bus passenger shelters or benches may not be within 660' of and visible from any Federal Aid Interstate or Primary highway. Advertising displays shall only be placed at approved passenger loading areas. The advertising displays must not extend beyond the exterior limits of the shelter or bench. Advertising shall not exceed 2-display panels per shelter or bench.
2. Bus passenger shelters and benches shall be located a minimum of 2-feet behind the face of curb, with a minimum of 4-feet width of walkway available.
3. All pavement shall be saw cut prior to removal.
4. Pavement markings obliterated shall be replaced in kind by permittee.
5. No telephone installations are authorized by this permit.

CABLES/GEOPHYSICAL TESTING:

1. The shear wave method of geo-physical testing is prohibited.
2. Cables shall not be left on the roadbed overnight.
3. Personnel working within the right of way shall wear orange colored outer garments and hard-hats.
4. No equipment shall be parked on or operated on the traveled way except for normal legal travel.
5. No holes shall be drilled, and no blasting shall be conducted on State right of way.
6. On overcrossing structures, cables shall be placed within 6-inches of curb face.
7. No equipment, work, or personnel shall be allowed within access-controlled rights of way except for personnel and cable necessary to place cable crossings required for continuity. Cable shall cross access-controlled rights of way in culverts or at crossing structures if available within 500-feet of proposed crossing. Any drainage channel shall not be disturbed.
8. Cables shall be placed as close to the right of way line as practical.
9. Cable shall be securely attached to the traveled way by taping. No nails, spikes or other material shall be driven into the pavement.
10. No paint shall be placed upon highway pavements, signs or markers. If pavement markings are necessary, traffic tape, chalk or crayon shall be used. All tape, stakes and other obvious markers shall be removed upon completion of permitted work.
11. All mud, dirt or gravel tracked onto the highway pavement shall be immediately and completely removed.
12. Any ruts or other damage to unpaved shoulder areas caused by driving or operating equipment on soft shoulders shall be repaired immediately.
13. Should any deviation from these procedures be observed, all work shall be suspended until satisfactory steps have been taken to insure compliance.
14. Except as specifically provided herein, all requirements of the vehicle code and other applicable laws must be complied with in all particulars.
15. Work shall be limited to normal working hours unless otherwise specifically authorized on the permit. Permittee will be required to deposit an amount equal to four-hours minimum of overtime per day for inspection charges, if work is permitted beyond normal working hours, weekends or holidays.

DRAINAGE – ROOF AND SURFACE:

1. Drains must be restricted to the exclusive purpose of draining rain water from the roof of permittee's building and/or paved parking lot. Drains if used for any other purpose, such as draining waste water or domestic supply water into the highway, will not be authorized. Drains shall be installed at right angles to the curb line unless otherwise authorized.

2. Removal of PCC Sidewalks or Curbs: Concrete sidewalks or curbs shall be saw cut to the nearest score marks and replaced equal in dimension to that removed with score marks matching existing adjacent sidewalk or curb.
3. After pipe drains are installed, curb and sidewalk shall be replaced with Portland Cement Concrete in accordance with State Standard Specifications.

DRIVEWAY – COMMERCIAL:

1. Asphalt Concrete or PCC pavement shall be saw-cut at conform location.
2. Excavations made within the limits of the right of way shall be backfilled before leaving the work for the night unless otherwise authorized by State's representative. After backfilling, temporary surfacing shall be placed if required by State's representative.
3. The permittee shall contact State's representative before placing structural section materials for the roadway pavement.
4. The approach fill area shall slope away from the highway pavement or improved shoulder and shall be so constructed as to avoid any flowing water reaching the traveled way and to avoid pocketing or ponding of water.
5. If not shown on project plans, the road approach or driveway shall conform to the "Design Guidelines for Typical Rural Driveways in State Right of Way".

DRIVEWAY RECONSTRUCTION:

1. Where reconstruction requires removal of existing asphalt concrete pavement, it shall be either saw-cut before removal or removed by grinding.
2. Existing drainage shall not be impaired.

DRIVEWAYS – SINGLE FAMILY:

1. RURAL LOCATIONS
 - a. The driveway shall be surfaced with a minimum of 3-inches of asphalt concrete placed on 6" of well graded and compacted aggregate base and shall conform to the existing pavement.
 - b. Existing drainage shall not be impaired. Either a valley gutter or a culvert shall be provided.
 - c. Where a culvert is installed, it shall be installed in the flowline of the existing drainage ditch at a slope to provide maximum drainage.
 - d. A standard tapered end section shall be installed at the inlet and outlet of the culvert.
 - e. Any change in the existing drainage pattern, whether occasioned by increase or diversion, and the cost of any damage, repair or restoration of the State highway right of way shall be the responsibility of the permittee.
 - f. Driveway installation shall conform to the attached plan, "Design Guidelines for Typical Rural Driveways in State Right of Way".
2. URBAN LOCATIONS
 - a. Where curbs exist, the driveway structural section shall be a minimum of 4-inches of Portland Cement Concrete (PCC) over 6-inches of aggregate base.
 - b. Driveway details shall comply with State standards unless local standards exceed the State's.
 - c. Any existing utility boxes must be either relocated or adjusted to grade at the permittee's expense.
 - d. Removal of PCC Sidewalks or Curbs: sidewalks or curbs shall be saw cut to the nearest score marks and replaced equal in dimension to that removed with score marks matching existing adjacent sidewalk or curb.

MAIL BOX:

1. LOCATION
 - a. Whenever possible, mailboxes shall be located outside State highway right of way (R/W).
 - b. Mailboxes may be located inside State Highway right of way in compliance with AASHTO's "Roadside Design Guide", 3rd Edition, Chapter 11 "Erecting Mailboxes on Streets and Highways". (A copy can be found in Appendix H of the Encroachment Permits Manual)
 - c. Coordination with the local postmaster is required to determine the exact site.

- d. In areas where curbs or dikes exist, mailboxes shall be located no closer than 1' behind the face of curb or dike to face of box.

2. INSTALLATION

- a. Installation shall be as shown in the "Roadside Design Guide".
- b. Mailboxes supported by structures such as masonry columns, railroad rails and ties, tractor wheels, plow blades, concrete filled barrels are strictly prohibited.
- c. Postmaster approved, neighborhood delivery and collection box units (NDCBU) shall be installed in a location where they will not pose a hazard to errant vehicles.
- d. Request for exceptions must follow the exception process described in Chapter 300 of the Encroachment Permits Manual.

NOTIFICATION OF ENCROACHMENT:

When highway or ramp closures, detours, and work with significant traffic impacts occur, use paragraphs 1, 2, and 3.

Media Notification for Special Events (SE):

1. Permittee shall verify to State's representative that local or regional media, including radio, television or newspapers serving the area affected by the special event, have been notified by letter or press release format. Media contact must allow sufficient time for print or broadcast two days prior to the permitted activity. Letter or press release shall include date, time, location, duration, permitted activity, and identify detours for impacted State highways and local roads.

Highway Signing for Special Events (SE):

Public Notification Signs

2. Permittee shall place public notification signs at locations designated on the approved signing plan a minimum of 7-calendar days before the activity begins. Signs shall be constructed and installed to Caltrans specifications and standards.

Detour Signs

3. Permittee shall place detour signs prior to the permitted activity in accordance with State Standard Specifications.

**When encroachment activities create significant traffic impacts use paragraph 4 for local agency notification.*

Local Agency Notification

4. Permittee shall make written notice to, and coordinate with, local emergency services, law enforcement agencies and public road departments 7-calendar days prior to the scheduled permitted activity. Letter copies shall be provided to the State's representative to evidence contacts.

**When special event (SE) encroachments create significant traffic impacts use paragraph 5 for CHP notification.*

CHP Notification

5. Permittee shall make written notice to, and coordinate with, CHP 7-calendar days before encroachment activities are scheduled. Letter copies shall be provided to the State's representative to evidence contacts.

PEDESTRIAN SAFETY:

1. When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped, is safe and well defined and shown on the approved permit plan.
2. Pedestrian walkways and canopies within State Right of Way shall comply with the requirements of the applicable local agency or of the latest edition of the Uniform Building Code whichever contains the higher standards

RAILROAD GRADE CROSSING – MAINTENANCE:

1. This permit does not authorize work on freeways, expressways or other activities not specifically provided for in this permit.

2. Work that reduces the vertical clearance over highways or changes the load carrying capacity of structures is not authorized by this permit.
3. Railroad work shall conform to Railroad, and applicable California Public Utilities Commission standards. Work affecting State highway facilities shall conform to current Caltrans standards.
4. Permittee may control or alter the flow of highway traffic only if absolutely necessary for public safety or to prevent a serious interruption of railroad service. Traffic control shall conform to Caltrans Traffic Control Systems published in the current State Standard Plans.
5. No excavation within 30-feet of the traveled way shall be left open after daylight hours, unless specifically authorized and adequate protection of traffic is provided in accordance with the General Provisions "Protection of Traffic." Backfill and highway paving shall conform to Standard Specifications and the General Provisions.
6. Routine maintenance taking place from the State highway shall be conducted between 9 a.m. and 3 p.m. or as directed by the State representative.
7. Methods of installation and time of work for replacing aerial lines for railroad communication shall be approved by the State representative.

SIDEWALKS:

1. A State issued permit is required for any landscaping or tree installation, including installation of tree wells.
2. A separate permit must be obtained from Caltrans for any driveway, handicap-ramp installations or any sidewalks that are other than Portland Cement Concrete constructed in compliance with Caltrans Standard Specifications.
3. Traffic control is authorized only between 9 a.m. and 3 p.m., Monday through Friday, holidays excluded. Any traffic control that requires lane closure shall be in compliance with the appropriate traffic control plan. Where required by the plan, the use of a flashing arrow board is MANDATORY.
4. New curb and gutter installations shall be State Standard Type A2-6, unless necessary to conform to existing adjacent curb and gutter installations.
5. The minimum width of a sidewalk should be 8-feet between a curb and a building when in urban and rural main street place types. For all other locations the minimum width of sidewalk should be 6-feet when contiguous to a curb or 5-feet when separated by a planting strip.
6. Alignment and grade of gutter and sidewalk shall match the existing.
7. Existing concrete curb and paved shoulder shall be saw cut to a neat line prior to excavating and forming. Existing concrete sidewalk shall be saw cut at the score line. Paved shoulder shall be replaced with asphalt concrete paving material equal "in kind" and thickness to existing shoulder and shall conform to lip of new curb and gutter.
8. Permittee shall be responsible for the relocation or adjustment of any utility required as the result of work authorized by this permit, and utility relocation shall be completed prior to the installation of any new curb, gutter or sidewalk.
9. A monolithic pour of sidewalk and curb and gutter shall not be permitted.

SURVEYS:

1. All survey operations shall be conducted off the traveled way except where necessary to cross pavements and medians.
2. When survey operations are being conducted, the permittee shall furnish, place and maintain signs and safety equipment in accordance with the latest edition of the "California Manual on Uniform Traffic Control Devices" (Part 6, Temporary Traffic Control).
3. All personnel shall wear hard hats and orange vests, shirts or jackets as appropriate. Any painted markings shall be made with water soluble paint.
4. Permission is also granted to park survey vehicles temporarily within the right of way, outside the shoulders, while survey work is in progress.
5. SURVEY WORK IS PROHIBITED ON FREEWAYS.

TEMPORARY GROUND ANCHORS (TIEBACKS):

1. The tiebacks must be de-tensioned and physically detached from the shoring wall once the permittee's foundation construction is complete. No future access to the tiebacks will be allowed once they have been detached.

2. Tieback installations shall not be placed in such a manner to impact traffic operations, maintenance, or obstruct any future transportation improvements in the state right-of-way.
3. Permanent tiebacks are prohibited. Tiebacks shall not be used to support the completed structure.
4. The shoring wall shall not be located within the state highway right-of-way.
5. The shoring wall shall be monitored during construction to determine any lateral movement.
6. The temporary wall must not create perched ground water that affects the foundation strength of state structures and facilities.
7. Should any underground facilities or utilities be encountered during the installation of the tiebacks, work must stop and the Caltrans representative shall be immediately notified. Work will not continue until Caltrans agrees to an alternate strategy (including the possible need to redesign) or other mitigation.
8. Deformation impacting state structures, roadways, utilities, drainage, or other features as a result of installation of the temporary excavation support and grouting, is not permitted. Should unanticipated deformation or other impacts occur, the Caltrans representative shall be immediately notified, and work will cease until Caltrans agrees to an alternate strategy (including the possible need to redesign) or other mitigation.
9. Upon completion of the installation and subsequent de-tensioning of the tiebacks, the permittee must submit as-built plans, prepared in accordance with Caltrans' CADD Users Manual, of all objects installed and to be abandoned in state highway right-of-way and submit as-built plans to the assigned inspector/representative for their authorization.

SPECIAL EVENTS:

1. In accordance with subdivision (a) of Streets and Highways Code section 682.5, the Department is not responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the State, the Department, and the Directors, officers, employees, agents, and contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of any activity for which this encroachment permit is issued.
2. The permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the event, and further agrees to defend, indemnify, and save harmless the State and the Department, and the Directors, officers, and employees of the State and/or Department, including but not limited to the Director of the Department and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of or by virtue of the Americans with Disabilities Act.

TEMPORARY STRUCTURAL SUPPORTS – TIEBACKS:

1. Permanent tiebacks are prohibited. Tiebacks shall not be used to support the completed structure.
2. The tieback wall shall be monitored during construction to determine any lateral movement.
3. Soldier beams may remain in place providing they are cut off 3' below ground surface and the holes backfilled as directed.

TRAFFIC COUNTERS:

1. Personnel installing or removing traffic counters shall wear an orange colored outer garment and a hard hat.
2. Traffic counters installed on freeway ramps shall be located at the curb return as near as possible to the local street intersection.
3. Counter tubes shall be securely attached to the pavement by taping. No nails, spikes or other material shall be driven into the pavement except to secure the tube at the outside edge of shoulder, at the lip of a gutter, or in the center line stripe.
4. A copy of the collected data shall be sent to the Caltrans District Permit Engineer via the State Inspector.

TRAFFIC STRIPING, MARKINGS, AND SIGNS:

1. Traffic striping, pavement markings and signs shall be furnished and placed by the permittee and the cost shall be borne by the permittee. Where new asphalt concrete has been placed, painted striping and pavement markings shall be installed within 24-hours. Where shown on the plans, after 30-days curing time, thermoplastic materials shall be applied in compliance with Section 84 of the Standard Specifications.

2. Roadside signs shall be placed at locations shown on the permit plans and shall be installed in compliance with the latest edition of Caltrans Standard Plans.
3. Permittee shall furnish to State's representative a completed Form CEM-3101 "Notice of Materials to be Used," and approval of the material used shall be obtained prior to its installation.

UTILITY LEASING:

1. Leasing all or part of the longitudinal utility encroachment is prohibited. Encroachment includes but is not limited to: utilities, carrier pipes, casings, conduits, poles, etc.

VIBRIO GENERATING EQUIPMENT:

1. Equipment shall not be operated on any pavement or other paved surface.
2. Equipment shall not be operated within access-controlled rights of way.
3. Equipment shall be placed and operated as close to the right of way line as possible.
4. Equipment shall be operated so that no damage will occur to trees, plants, wells, culverts, headwalls, structures or other improvements.
5. This permit does not authorize the shear wave method.
6. Equipment shall not be parked on or operated on the traveled way except for normal legal travel.
7. Personnel working within the State right of way shall wear hard hats and orange jackets, shirts or vests.
8. All mud, dirt or gravel tracked onto the highway pavement shall be immediately and completely removed.
9. Dirt areas within the State right of way disturbed by Geophysical testing operations shall be graded back to its original shape and grade

ENCROACHMENT PERMIT GENERAL PROVISIONS

TR – 0045 (REV. 04/2021)

1. **AUTHORITY:** The California Department of Transportation ("Department") has authority to issue encroachment permits under Division 1, Chapter 3, Article 1, Sections 660 through 734 of the Streets and Highways Code.
2. **REVOCAION:** Encroachment permits are revocable on five (5) business days' notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. Notwithstanding the foregoing, in an emergency situation as determined by the Department, an encroachment permit may be revoked immediately. These General Provisions and any applicable Special Provisions are subject to modification or abrogation by the Department at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State of California ("State") highway right-of-way may be exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay encroachment permit fees when due may result in rejection of future applications and denial of encroachment permits.
4. **ASSIGNMENT:** This encroachment permit allows only the Permittee or Permittee's authorized agent to work within or encroach upon the State highway right-of-way, and the Permittee may not assign or transfer this encroachment permit. Any attempt to assign or transfer this encroachment permit shall be null and void.
5. **ACCEPTANCE OF PROVISIONS:** Permittee understands and agrees to accept and comply with these General Provisions, the Special Provisions, any and all terms and/or conditions contained in or incorporated into the encroachment permit, and all attachments to the encroachment permit (collectively "the Permit Conditions"), for any encroachment, work, and/or activity to be performed under this encroachment permit and/or under color of authority of this encroachment permit. Permittee understands and agrees the Permit Conditions are applicable to and enforceable against Permittee as long as the encroachment remains in, under, or over any part of the State highway right-of-way.
6. **BEGINNING OF WORK:** When traffic is not impacted (see General Provision Number 35), the Permittee must notify the Department's representative two (2) business days before starting permitted work. Permittee must notify the Department's representative if the work is to be interrupted for a period of five (5) business days or more, unless otherwise agreed upon. All work must be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this encroachment permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within State highway right-of-way must conform to all applicable Departmental construction standards including but not limited to: Standard Specifications, Standard Plans, Project Development Procedures Manual, Highway Design Manual and Special Provisions.
Other than as expressly provided by these General Provisions, the Special Provisions, the Standard Specifications, Standard Plans, and other applicable Departmental standards, nothing in these General Provisions is intended to give any third party any legal or equitable right, remedy, or claim with respect to the encroachment permit and/or to these General Provisions or any provision herein. These General Provisions are for the sole and exclusive benefit of the Permittee and the Department.
Where reference is made in such standards to "Contractor" and "Engineer," these are amended to be read as "Permittee" and "Department's representative," respectively, for purposes of this encroachment permit.
8. **PLAN CHANGES:** Deviations from plans, specifications, and/or the Permit Conditions as defined in General Provision Number 5 are not allowed without prior approval from the Department's representative and the Federal Highway Administration ("FHWA") representative if applicable.
9. **RIGHT OF ENTRY, INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. The United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, and other state, and federal agencies, and the FHWA, through their agents or representatives, must have full access to highway facilities/encroachment area, at any and all times for the purpose of inspection, maintenance, activities needed for construction/reconstruction, and operation of the State highway right-of-way.
Upon completion of work, Permittee must request a final inspection for acceptance and approval by the Department. The local public agency Permittee must not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.
10. **PERMIT AT WORKSITE:** Permittee must keep the permit package or a copy thereof at the work site at all times and must show it upon request to any Department representative or law enforcement officer. If the permit package, or a copy thereof, is not kept and made available at the work site at all times, the work must be suspended.
11. **CONFLICTING ENCROACHMENTS:** Permittee must yield start of work to ongoing, prior authorized work adjacent to or within the limits of the Permittee's project site. When existing encroachments conflict with Permittee's work, the Permittee must bear all cost for rearrangements (e.g., relocation, alteration, removal, etc.).

- 12. PERMITS AND APPROVALS FROM OTHER PUBLIC AGENCIES AND/OR ENTITIES:** This encroachment permit is invalidated if the Permittee has not obtained all permits and approvals necessary and required by law, including but not limited to permits from the California Public Utilities Commission ("CPUC"), California Occupational Safety and Health Administration ("Cal-OSHA"), and any other public agency and/or entity having jurisdiction. Permittee warrants all such permits and approvals have been obtained before beginning work under this encroachment permit. The Department may, at the Department's discretion, require the Permittee to demonstrate that Permittee has obtained all such permits/approvals, and Permittee shall demonstrate this at the time and in the manner specified by the Department.
- 13. PEDESTRIAN AND BICYCLIST SAFETY:** A safe continuous passageway must be maintained through the work area at existing pedestrian or bicycle facilities. At no time must pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades must be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street. Attention is directed to Section 7-1.04 "Public Safety," and to Section 12-4.04 "Temporary Pedestrian Access Routes," and to Section 16-2.02 "Temporary Pedestrian Facility," of the Department's Standard Specifications, and to California Vehicle Code section 21760, subdivision (c).
- 14. PUBLIC TRAFFIC CONTROL:** The Permittee must provide traffic control protection, warning signs, lights, safety devices, etc., and take all other measures necessary for the traveling public's safety as required by law and/or the Department. While providing traffic control, the needs of all road users, including but not limited to motorists, bicyclists and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act, must be an essential part of the work activity.
Lane, Bike Lane, Sidewalk, Crosswalk, and/or shoulder closures must comply with the Department's Standard Specifications and Standard Plans for Temporary Traffic Control Systems & Temporary Pedestrian Access Routes, and with the applicable Special Provisions. Where issues are not addressed in the Standard Specifications, Standard Plans, and/or Special Provisions, the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control) must be followed.
- 15. MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee must plan and conduct work so as to create the least possible inconvenience to the traveling public (motorized vehicles, unmotorized vehicles such as bicycles, pedestrians, person(s) with disabilities, etc.), such that traffic is not unreasonably delayed.
- 16. STORAGE OF EQUIPMENT AND MATERIALS:** The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this encroachment permit. If encroachment permit Special Provisions allow for the storage of equipment or materials within the State highway right-of-way, the equipment and material storage must also comply with Section 7-1.04, Public Safety, of the Department's Standard Specifications.
- 17. CARE OF DRAINAGE:** Permittee must provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Department's Standard Specifications, Standard Plans, and/or as directed by the Department's representative.
- 18. RESTORATION AND REPAIRS IN STATE HIGHWAY RIGHT-OF-WAY:** Permittee is responsible for restoration and repair of State highway right-of-way resulting from permitted work (Streets and Highways Code, section 670 et seq.).
- 19. STATE HIGHWAY RIGHT-OF-WAY CLEAN UP:** Upon completion of work, Permittee must remove and dispose of all scraps, refuse, brush, timber, materials, etc. off the State highway right-of-way. The aesthetics of the highway must be as it was before work started or better.
- 20. COST OF WORK:** Unless stated otherwise in the encroachment permit or a separate written agreement with the Department, the Permittee must bear all costs incurred for work within the State highway right-of-way and waives all claims for indemnification or contribution from the United States, the State, the Department, and from the Directors, officers, and employees of the State and/or the Department. Removal of Permittee's personal property and improvements shall be at no cost to the United States, the State, and the Department.
- 21. ACTUAL COST BILLING:** When specified in the permit, the Department will bill the Permittee actual costs at the currently set Standard Hourly Rate for encroachment permits.
- 22. AS-BUILT PLANS:** When required, Permittee must submit one (1) set of folded as-built plans within thirty (30) calendar days after completion and acceptance of work in compliance with requirements listed as follows:
- Upon completion of the work provided herein, the Permittee must submit a paper set of As-Built plans to the Department's representative.
 - All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
 - The plans are to be prominently stamped or otherwise noted "AS-BUILT" by the Permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a Department stamp, or by signature of the Department's representative, must be used for producing the As-Built plans.
 - If construction plans include signing or striping, the dates of signing or striping removal, relocation, or installation must be shown on the As-Built plans when required as a condition of the encroachment permit. When the construction plans show signing and striping for staged construction on separate sheets,

ENCROACHMENT PERMIT GENERAL PROVISIONS

- the sheet for each stage must show the removal, relocation, and installation dates of the appropriate staged striping and signing.
- e) As-Built plans must contain the Encroachment Permit Number, County, Route, and Post Mile on each sheet.
 - f) The As-Built Plans must not include a disclaimer statement of any kind that differs from the obligations and protections provided by sections 6735 through 6735.6 of the California Business and Professions Code. Such statements constitute non-compliance with Encroachment Permit requirements and may result in the Department retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future encroachment permits or a provision requiring a public agency to supply additional bonding.
- 23. PERMITS FOR RECORD PURPOSES ONLY:** When work in the State highway right-of-way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt encroachment permit is issued to the Permittee for the purpose of providing a notice and record of work. The Permittee's prior rights must be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" must be stamped across the face of the encroachment permit.
- 24. BONDING:** The Permittee must file bond(s), in advance, in the amount(s) set by the Department and using forms acceptable to the Department. The bonds must name the Department as obligee. Failure to maintain bond(s) in full force and effect will result in the Department stopping all work under this encroachment permit and possibly revoking other encroachment permit(s). Bonds are not required of public corporations or privately-owned utilities unless Permittee failed to comply with the provisions and/or conditions of a prior encroachment permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedure section 337.15. A local public agency Permittee also must comply with the following requirements:
- a) In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local public agency Permittee agrees to require the construction contractor to furnish both a payment and performance bond in the local public agency's name with both bonds complying with the requirements set forth in Section 3-1.05 Contract Bonds of the Department's Standard Specifications before performing any project construction work.
 - b) The local public agency Permittee must defend, indemnify, and hold harmless the United States, the State and the Department, and the Directors, officers, and employees of the State and/or Department, from all project construction related claims by contractors, subcontractors, and suppliers, and from all stop notice and/or mechanic's lien claimants. The local public agency also agrees to remedy, in a timely manner and to the Department's satisfaction, any latent defects occurring as a result of the project construction work.
- 25. FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to relocate a permitted installation upon notice by the Department. Unless under prior property right or agreement, the Permittee must comply with said notice at the Permittee's sole expense.
- 26. ENVIRONMENTAL:**
- a) **ARCHAEOLOGICAL/HISTORICAL:** If any archaeological or historical resources are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified archaeologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.
 - b) **HAZARDOUS MATERIALS:** If any hazardous waste or materials (such as underground storage tanks, asbestos pipes, contaminated soil, etc.) are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified hazardous waste/material specialist who must evaluate the site at the Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work. Attention is directed to potential aerially deposited lead (ADL) presence in unpaved areas along highways. It is the Permittee's responsibility to take all appropriate measures to protect workers in conformance with California Code of Regulations Title 8, Section 1532.1, "Lead," and with Cal-OSHA Construction Safety Orders, and to ensure roadway soil management is in compliance with Department of Toxic Substances Control (DTSC) requirements.
 - c) **Biological:** If any regional, state, or federally listed biological resource is identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified biologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.
- 27. PREVAILING WAGES:** Work performed by or under an encroachment permit may require Permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the California Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements must be directed to the California Department of Industrial Relations.
- 28. LIABILITY, DEFENSE, AND INDEMNITY:** The Permittee agrees to indemnify and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director

of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind, and description, including but not limited to those brought for or on account of property damage, invasion of privacy, violation or deprivation of a right under a state or federal law, environmental damage or penalty, or injury to or death of any person including but not limited to members of the public, the Permittee, persons employed by the Permittee, and/or persons acting on behalf of the Permittee, arising out of or in connection with: (a) the issuance and/or use of this encroachment permit; and/or (b) the encroachment, work, and/or activity conducted pursuant to this encroachment permit but not in full compliance with the Permit Conditions as defined in General Provision Number 5 ("Unauthorized Work or Activity"); and/or (c) the installation, placement, design, existence, operation, and/or maintenance of the encroachment, work, and/or activity; and/or (d) the failure by the Permittee or anyone acting on behalf of the Permittee to perform the Permittee's obligations under any part of the Permit Conditions as defined in General Provision Number 5, in respect to maintenance or any other obligation; and/or (e) any change to the Department's property or adjacent property, including but not limited to the features or conditions of either of them, made by the Permittee or anyone acting on behalf of the Permittee; and/or (f) a defect or obstruction related to or caused by the encroachment, work, and/or activity whether conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constituting Unauthorized Work or Activity, or from any cause whatsoever. The duty of the Permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

It is the intent of the parties that except as prohibited by law, the Permittee will defend, indemnify, and hold harmless as set forth in this General Provision Number 28 regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of: the United States, the State; the Department; the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors; the Permittee; persons employed by the Permittee; and/or persons acting on behalf of the Permittee.

The Permittee waives any and all rights to any type of expressed or implied indemnity from or against the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors.

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the encroachment, work, and/or activity whether conducted pursuant to this encroachment permit or constituting Unauthorized Work

or Activity, and further agrees to defend, indemnify, and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, penalties, liability, suits, or actions of every name, kind, and description arising out of or by virtue of the Americans with Disabilities Act.

The Permittee understands and agrees the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, are not personally responsible for any liability arising from or by virtue of this encroachment permit.

For the purpose of this General Provision Number 28 and all paragraphs herein, "contractors of the State and/or of the Department" includes contractors, and their subcontractors, under contract to the State and/or the Department.

This General Provision Number 28 and all paragraphs herein take effect immediately upon issuance of this encroachment permit, and apply before, during, and after the encroachment, work, and/or activity contemplated under this encroachment permit, whether such work is in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, except as otherwise provided by California law. The Permittee's obligations to defend, indemnify, and save harmless under this General Provision Number 28 take effect immediately upon issuance of this encroachment permit and have no expiration date, including but not limited to situations in which this encroachment permit expires or is revoked, the work or activity performed under this encroachment permit is accepted or not accepted by the Department, the encroachment, work, and/or activity is conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, and/or no work or activity is undertaken by the Permittee or by others on the Permittee's behalf.

If the United States or an agency, department, or board of the United States is the Permittee, the first two paragraphs of this General Provision Number 28 (beginning "The Permittee agrees to indemnify..." and "It is the intent of the parties...") are replaced by the following paragraph:

Claims for personal injury, death, or property damage allegedly caused by the negligent or wrongful act or omission of any employee of the United States acting within the scope of their official duties are subject to the Federal Tort Claims Act, as amended, 28 U.S.C. § 1346 and § 2671 et seq. (Chapter 171).

29. **NO PRECEDENT ESTABLISHED:** This encroachment permit is issued with the understanding that it does not establish a precedent.

30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**

ENCROACHMENT PERMIT GENERAL PROVISIONS

- a) As part of the consideration for being issued this encroachment permit, the Permittee, on behalf of Permittee and on behalf of Permittee's personal representatives, successors in interest, and assigns, does hereby covenant and agree that:
 - i) No person on the grounds of race, color, or national origin may be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
 - ii) That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination must be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
 - iii) That such discrimination must not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the State highway right-of-way.
 - iv) That the Permittee must use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.
 - b) That in the event of breach of any of the above nondiscrimination covenants, the State and the Department have the right to terminate this encroachment permit and to re-enter and repossess said land and the facilities thereon and hold the same as if said permit had never been made or issued.
31. **MAINTENANCE:** The Permittee is responsible at Permittee's sole expense for the encroachment, and the inspection, maintenance, repair, and condition thereof, so that it does not negatively impact State highway safety, maintenance, operations, construction, activities needed for construction/reconstruction, State facilities, or other encroachments. Additional permits or approval documents may be required authorizing additional work related to inspection, repair, and/or maintenance activities.
32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code section 682.5 and 682.7, the Department is not responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of any activity for which this encroachment permit is issued.

The Permittee is required, as a condition of this encroachment permit, for any event that awards prize compensation to competitors in gendered categories, for any participant level that receives prize compensation, to ensure the prize compensation for each gendered category is identical at each participant level. (Streets and Highways Code, section 682.7.)

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the event, and further agrees to defend, indemnify, and save harmless the United State, the State and the Department, and the Directors, officers, and employees of the State and/or Department, including but not limited to the Director of the Department and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of or by virtue of the Americans with Disabilities Act.

- 33. **PRIVATE USE OF STATE HIGHWAY RIGHT-OF-WAY:** State highway right-of-way must not be used for private purposes without compensation to the State. The gifting of public property uses and therefore public funds is prohibited under the California Constitution, Article XVI, Section 6.
- 34. **FIELD WORK REIMBURSEMENT:** Permittee must reimburse the Department for field work performed on Permittee's behalf to correct or remedy hazards or damaged facilities, or to clear refuse, debris, etc. not attended to by the Permittee.
- 35. **LANE CLOSURE REQUEST SUBMITTALS AND NOTIFICATION OF CLOSURES TO THE DEPARTMENT:** Lane closure request submittals and notifications must be in accordance with Section 12-4.02, and Section 12.4-04, of the Department's Standard Specifications or as directed by the Department's representative. The Permittee must notify the Department's representative and the Traffic Management Center ("TMC") before initiating a lane closure or conducting an activity that may cause a traffic impact. In emergency situations when the corrective work or the emergency itself may affect traffic, the Department's representative and the TMC must be notified as soon as possible.
- 36. **SUSPENSION OF TRAFFIC CONTROL OPERATION:** The Permittee, upon notification by the Department's representative, must immediately suspend all traffic lane, bike lane, sidewalk, crosswalk, and/or shoulder closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension must be borne by the Permittee.
- 37. **UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code section 4216 et seq., including but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The Permittee must provide notification to the Department representative at least five (5) business days before, and the regional notification center at least forty-

ENCROACHMENT PERMIT GENERAL PROVISIONS

eight (48) hours before, performing any excavation work within the State highway right-of-way.

- 38. COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA):** All work within the State highway right-of-way to construct and/or maintain any public facility must be designed, maintained, and constructed strictly in accordance with all applicable Federal Access laws and regulations (including but not limited to Section 504 of the Rehabilitation Act of 1973, codified at 29 U.S.C. § 794), California Access laws and regulations relating to ADA, along with its implementing regulations, Title 28 of the Code of Federal Regulations Parts 35 and 36 (28 C.F.R., Ch. I, Part 35, § 35.101 et seq., and Part 36, § 36.101 et seq.), Title 36 of the Code of Federal Regulations Part 1191 (36 C.F.R., Ch. XI, Part 1191, § 1119.1 et seq.), Title 49 of the Code of Federal Regulations Part 37 (49 C.F.R., Ch. A, Part 37, § 37.1 et seq.), the United States Department of Justice Title II and Title III for the ADA, and California Government Code section 4450 et seq., which require public facilities be made accessible to persons with disabilities.

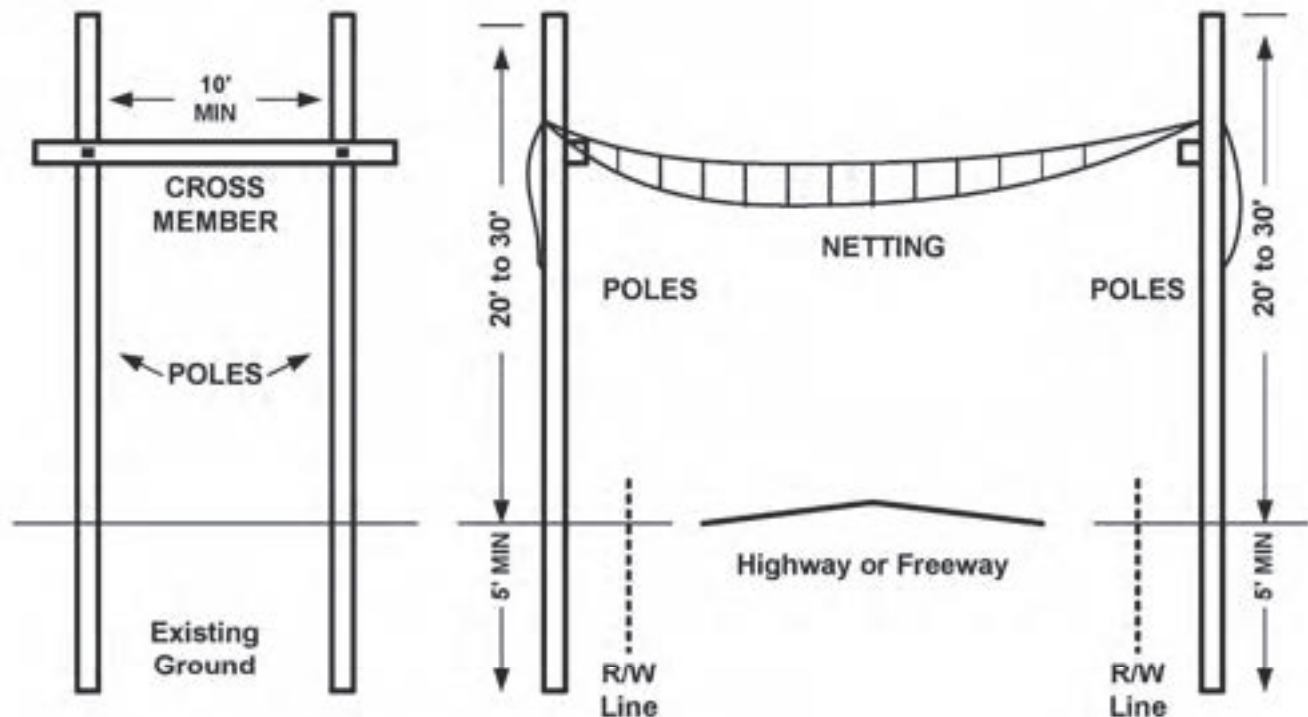
Notwithstanding the requirements of the previous paragraph, all construction, design, and maintenance of public facilities must also comply with the Department's

Design Information Bulletin 82, "Pedestrian Accessibility Guidelines for Highway Projects" and Standard Plans & Specifications on "Temporary Pedestrian Access Routes."

- 39. STORMWATER:** The Permittee is responsible for full compliance with the following:
- a) For all projects, the Department's Storm Water Program and the Department's National Pollutant Discharge Elimination System (NPDES) Permit requirements under Order No. 2012-0011-DWQ, NPDES No CAS000003; and
 - b) In addition, for projects disturbing one acre or more of soil, with the California Construction General Permit Order No. 2009-0009-DWQ, NPDES No CAS000002; and
 - c) In addition, for projects disturbing one acre or more of soil in the Lahontan Region with Order No. R6T-2016-0010, NPDES No CAG616002.
 - d) For all projects, it is the Permittee's responsibility to install, inspect, repair, and maintain all facilities and devices used for water pollution control practices (Best Management Practices/BMPs) before performing daily work activities.

ENCROACHMENT PERMIT H - SUPPORT DIAGRAM FOR AERIAL CROSSINGS

TR-0108 (REV. 03/2007)



CONSTRUCTION NOTES:

A MINIMUM OF 18' SHALL BE MAINTAINED OVER AND ACROSS HIGHWAY OR FREEWAY LANES.

NETTING SHALL BE MAINTAINED OVER AND ACROSS LANES UNTIL AERIAL FACILITIES ARE PROPERLY SECURED IN PLACE.

H - SUPPORTS SHALL BE INSTALLED OUTSIDE OF STATE R/W, UNLESS PERMITTED BY THE STATE'S REPRESENTATIVE.

CHP BREAKS SHALL NOT EXCEED 5 MINUTES FOR THE PLACEMENT OF NETTING.

PLACEMENT OF AERIAL LINES: Installation or removal of overhead conductors crossing a freeway require traffic control by the California Highway Patrol (CHP) and usually occur on weekend mornings. The CHP can perform a rolling break in traffic on most highways to allow up to a five-minute clearing. These breaks are adequate for simple cable installation. Utility personnel carry the conductors across the freeway lanes and hoist them into place on the opposite side of the freeway.

On larger conductor crossings such as transmission lines, 1" or greater in diameter, districts may determine that safety nets are needed to prevent transmission lines from falling on traffic during cabling installations. Temporary safety-net support poles are placed at protected locations outside shoulders and in medians. If locations for temporary supports are not available, the utility company may use K-rail and sand barrel crash cushions. After rope nets are strung during CHP traffic breaks other work is then allowed to proceed. Placement of the aerial line may be by helicopter.

LEGEND:

- Octagon Data Points required when the diameter is < 8'.
- △ Octagon & Triangle Data Points required when the diameter is > 8'.
- ☆ Settlement Rod may be required when the diameter is > 5'. (Settlement Rod Detail is located in Appendix E of the Encroachment Permits Manual)

EP Edge of Pavement

ETW Edge of Travel Way
(Fog line, Yellow Stripe, etc.)

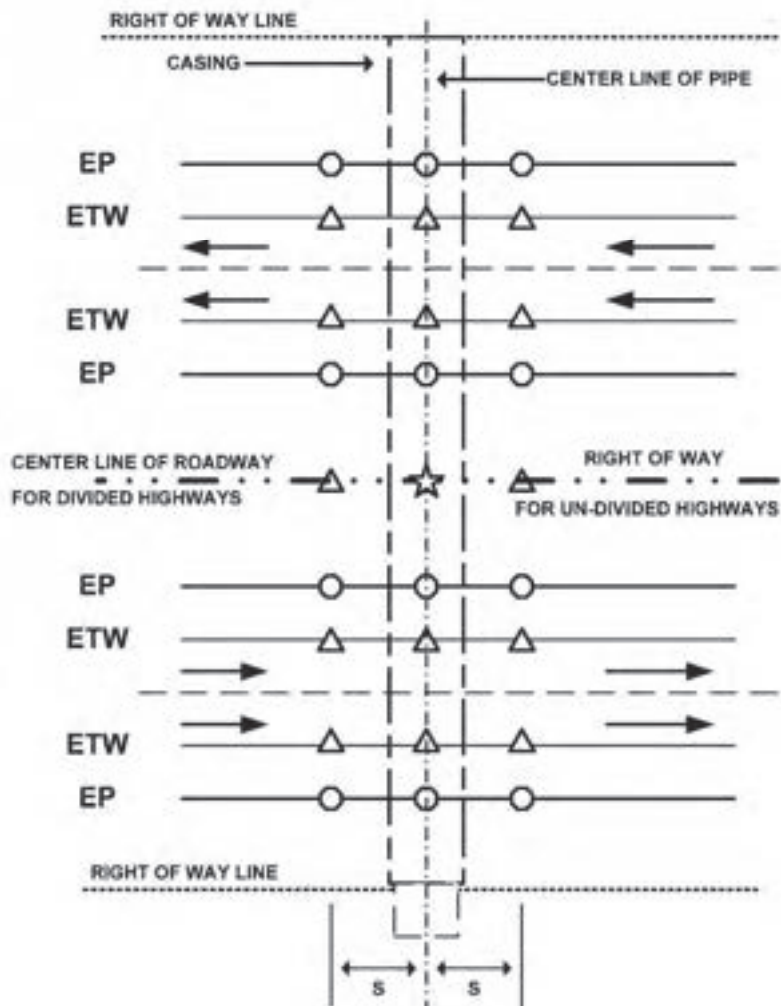
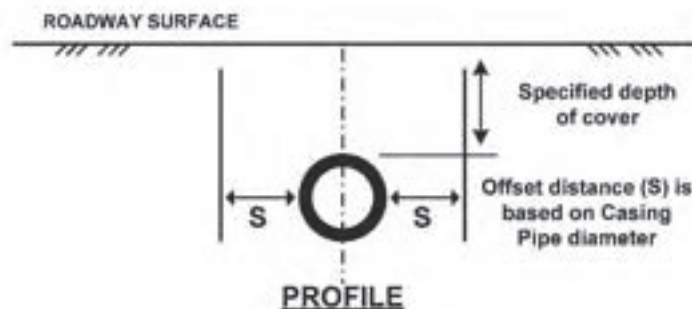
S Offset Distance away from the pipe alignment, as follows:

- 3' for casing pipe diameters < 30"
- 5' for casing pipe diameters 30" - 72"
- 10' for casing pipe diameters 72" - 108"
- 15' for casing pipe diameters > 108"

NOTES:

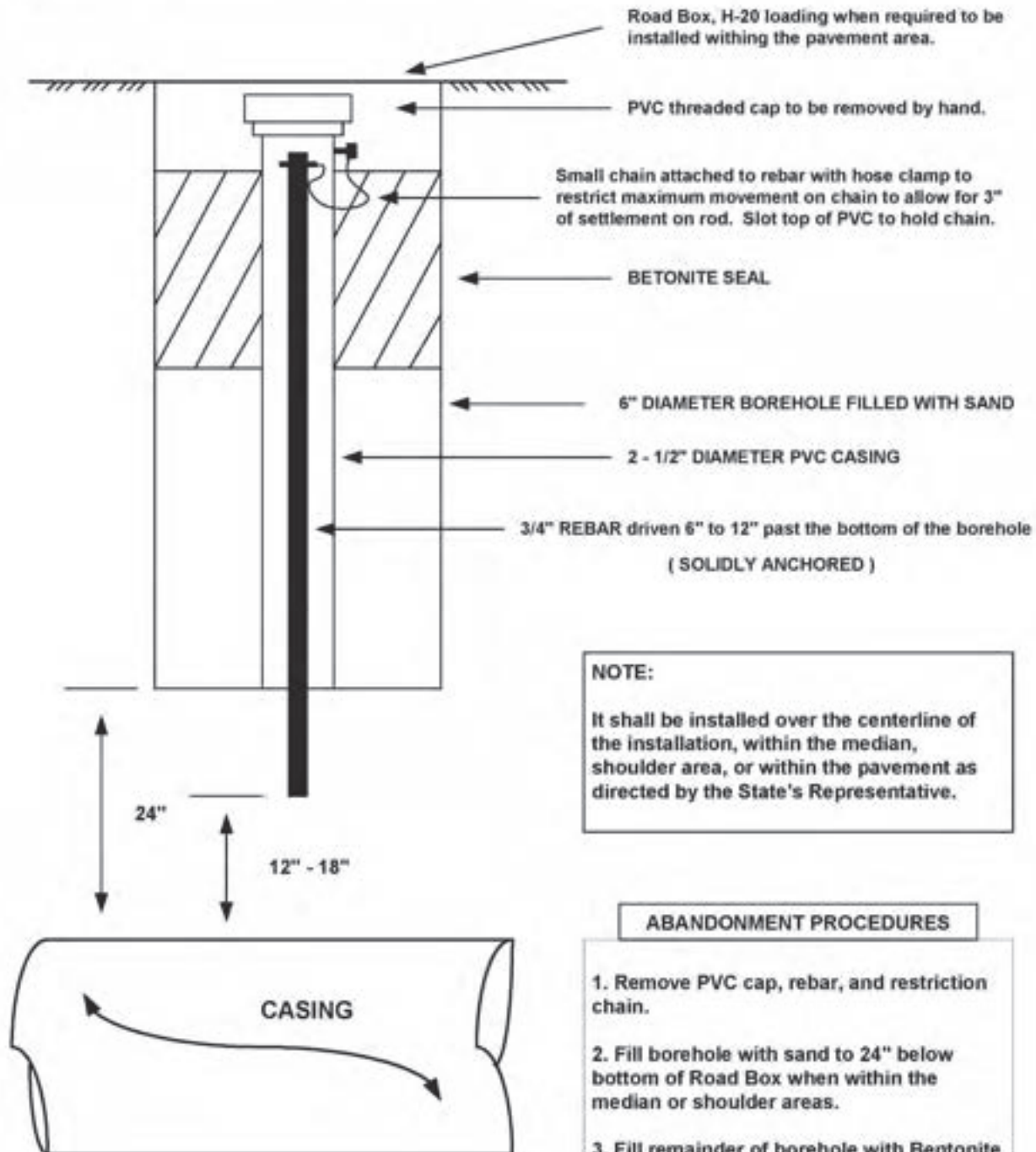
Survey data is to be collected at the specific points along the casing alignment at the following times:

1. Prior to Start of Work.
2. Every two (2) hours continuously throughout the project.
3. Upon completion of the project.
4. Every two (2) months, during a six month period after the date of completion, and or As Required by the Department.

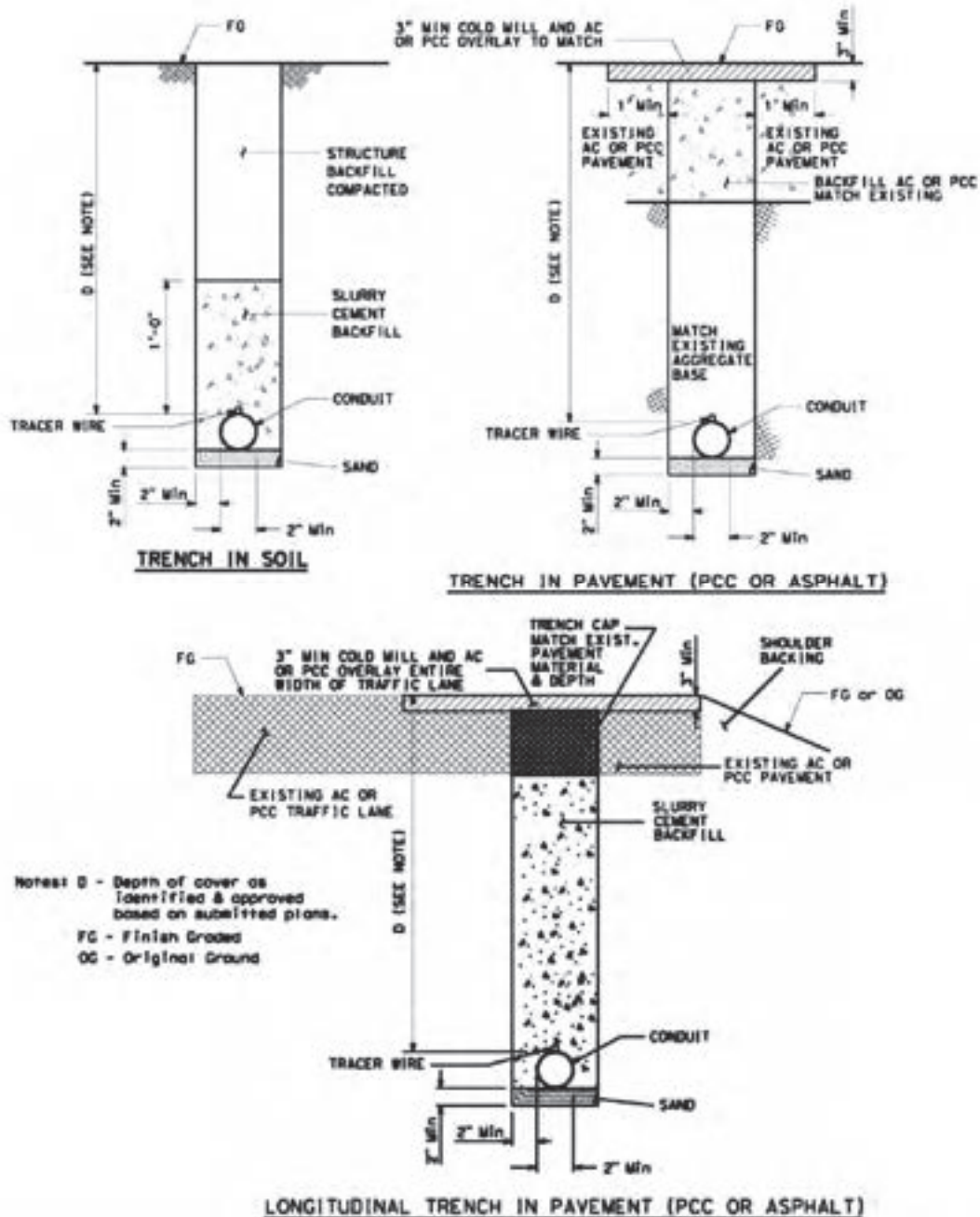


ENCROACHMENT PERMIT SETTLEMENT ROD DETAIL

TR-0152 (REV. 05/2006)



TYPICAL TRENCH DETAIL (NOT TO SCALE)



See page 2 for additional notes.

- All work must be authorized by the encroachment permit, and/or as directed by the State's representative.
- A tracer wire must be placed on top of the conduit unless specified not to.
- Clearance between the trench wall and encroachment work less than 6 inches in width shall be a minimum of 2 inches. Clearance between the trench wall and encroachment work greater than 6 inches width shall be a minimum of 6 inches.
- When the trench width is less than 2' the backfill for subgrade must consist of either slurry cement or Controlled Low-Strength Material (CLSM).
- When trench width is greater than 2' compacted aggregate base may be used for backfill.
- Structure backfill must conform to Section 19-3.02C of the Standard Specifications.
- For trench located under unimproved surface, structure backfill can use the original soil. Soil must be compacted by mechanical means. Ponding, jetting or flooding are not allowed. Slurry cement backfill is optional at the discretion of the Caltrans District.
- Slurry cement backfill must conform to Section 19-3.02E of the Standard Specifications.
- Aggregate base shall conform to Section 26 of the Standard Specifications.
- CLSM must conform to Section 19-3.02G of the Standard Specifications. When CLSM is utilized the mix design and test results must be submitted to the State's representative. See Appendix H of the Encroachment Permits Manual for additional information.
- Cold planed surface and overlay shall be to the nearest lane line for the entire length of the trench/disturbed areas, and/or as directed by the State's representative.
- A paving notch ("T" Cut) shall be cold planed in exist asphalt concrete to a minimum width of 1.0' beyond each side of the trench and to a depth of 3" for the final layer of HMA.
- HMA or PCC to replace pavement section shall match existing pavement depth, unless directed otherwise by the State's representative.
- Hot mix asphalt must conform to Section 39 of the Standard Specifications.
- A tack coat of asphaltic emulsion conforming to Section 39-2.01C (3) (f) shall be applied.
- When the trench is within 4' of curb and gutter, additional cold planing may be required at the discretion of the State's representative.
- Pavement markings and/or striping removed or damaged during construction must be replaced as directed by the State's representative.
- Other trench related details are shown in Chapter 6 of the Encroachment Permits Manual as well as the Trenching and Shoring Manual. Both publications can be found on the State of California, Department of Transportation's website.

ENCROACHMENT PERMIT STEEL PLATE BRIDGING UTILITY

TR -0157 (Rev. 04/2018)

To accommodate excavation work, steel plate bridging may be necessary. All conditions for use of steel plate bridging should be set forth in the special provisions.

Consideration of steel plate bridging should take into account the following factors:

1. Traffic speed.
2. Traffic Volume and Composition.
3. Duration and dimensions (width & daily estimated lengths) of the proposed excavation.
4. Weather conditions.

When backfilling operations of an excavation in the traveled way, whether transverse or longitudinal, cannot be properly completed within a work day, steel plate bridging with a non-skid surface and shoring (see Trenching & Shoring) may be required to preserve unobstructed traffic flow. In such cases, the following conditions shall apply:

1. Steel plate bridging on freeways is not allowed.
2. Steel plates used for bridging must extend a minimum of 12" beyond the edges of the trench.
3. Steel plate bridging shall be installed to operate with minimum noise.
4. The trench shall be adequately shored, (as mentioned in Section 603.6B-2 of the Encroachment Permits Manual) to support the bridging and traffic loads.
5. Temporary paving with cold asphalt concrete shall be used to feather the edges of the plates, if plate installation by Method (2) described below, is used.
6. Bridging shall be secured against displacement by using adjustable cleats, shims, or other devices.

As required by the district, steel plate bridging and shoring shall be installed using either Method (1) or (2):

Method 1 For speeds of 45 MPH or greater:

The pavement shall be cold planed to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate.

Approach plate(s) and ending plate (if longitudinal placement) shall be attached to the roadway by a minimum of 2 dowels pre-drilled into the corners of the plate and drilled 2" into the pavement. Subsequent plates are to be butted and tack welded to each other.

Method 2 For Speeds less than 45 mph:

Approach plate(s) and ending plate (if longitudinal placement) shall be attached to the roadway by a minimum of 2 dowels pre-drilled into the corners of the plate and drilled 2" into the pavement. Subsequent plates are to be butted and tack welded to each other. Fine graded asphalt concrete shall be compacted to form ramps, maximum slope 8.5 % with a minimum 12" taper to cover all edges of the steel plates. When steel plates are removed, the dowel holes in the pavement shall be backfilled with either graded fines of

asphalt concrete mix, concrete slurry, epoxy or an equivalent that is satisfactory to the Caltrans' representative.

The permittee is responsible for maintenance of the steel plates, shoring, asphalt concrete ramps, and ensuring that they meet minimum specifications. Unless specifically noted or granted in the special provisions, or approved by the State representative, steel plate bridging shall not exceed 4 consecutive working days in any given week. Backfilling of excavations shall be covered with a minimum 3" temporary layer of cold asphalt concrete.

The following table shows the advisory minimal thickness of steel plate bridging required for a given trench width (A-36 grade steel, designed for HS20-44 truck loading per Caltrans Bridge Design Specifications Manual).

Trench Width	Minimum Plate Thickness
10"	1/2"
1'-11"	3/4"
2'-7"	7/8"
3'-5"	1"
5'-3"	1 1/4"

NOTE: For spans greater than 5'-3", a structural design shall be prepared by a California registered civil engineer.

All steel plates within the right of way whether used in or out of the traveled way shall be without deformation. Inspectors can determine the trueness of steel plates by using a straight edge and should reject any plate that is permanently deformed.

Steel plates used in the traveled portion of the highway shall have a surface that was manufactured with a nominal Coefficient Of Friction (COF) of 0.35 as determined by California Test Method 342 (See Appendix H, Encroachment Permits Manual). If a different test method is used, the permittee may utilize standard test plates with known coefficients of friction available from each Caltrans District Materials Engineer to correlate skid resistance results to California Test Method 342. Based on the test data, the permittee shall determine what amount of surface wear is acceptable, and independently ascertain when to remove, test, or resurface an individual plate.

Caltrans Inspectors should not enforce plate removal unless it is permanently deformed or delivered without the required surfacing. However, an inspector should document in a diary all contacts with the contractor.

A "Rough Road" (W8-8) sign and a "Steel Plate Ahead" (W8-24) sign with black lettering on an orange background must be used in advance of steel plate bridging along with the required construction area signs. These signs must be used along with any other construction area signs.

Surfacing requirements are not necessary for steel plates used in parking strips, on shoulders not used for turning movements, or on connecting driveways, etc., not open to the public.

UNCASED HIGH PRESSURE NATURAL GAS PIPELINE

TR-0158 (Rev 04/2018)

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

In accordance with the Department's Project Development Procedures Manual, all new high priority utilities and pressurized facilities are required to be encased on both conventional and access controlled highway rights-of-way.

Based on the Memorandum dated November 9, 1994, "Exception to Policy - Uncased High-pressure Natural Gas Pipelines," the Department may allow the installation of uncased natural gas pipelines crossings in specific circumstances. The Department's primary concerns are for public safety, the integrity of the highway facility and the mechanical protection of the pipeline itself, it is necessary to limit the number of requests for transverse natural gas transmission pipeline crossings without casings to locations where all of the following conditions are met:

UNG 1. The pipeline owner agrees that the crossing will be designed for construction in accordance with the Code of Federal Regulations, Title 49, Part 192, and/or the California Public Utilities Commission General Orders No. 112-D with respect to natural gas pipelines. The crossing design shall be comprehensive in all respects including but not limited to" material specification, pipe wall thickness determination, coating selection, and cathodic protection. Soil conditions at each site shall be analyzed for characteristics that may prove harmful to the protective pipe coating. This analysis shall be used by the pipeline owner in selecting a protective pipe coating sufficient to withstand the potential for gouging or peeling during the boring and jacking operation, or other methods approved by Caltrans. The final condition of the coating will be determined by the pipeline owner through monitoring of the boring and jacking operation, visually inspecting the exiting initial pipe segment, and electrical testing by an engineer or technician with expertise in cathodic protection. The test data shall be noted on the as-built drawings. Remedial action will be taken if the condition of the coating is such that cathodic protection is not practical.

UNG 2. The minimum depth of cover within State highway right of way, from the final ground line (finished grade or original ground) to the top of the proposed gas carrier pipeline, is 7.5 feet. If the location is such that it is not practical to achieve the above depth of cover, then an engineered protective cover (such as a reinforced concrete structure) may be provided outside of pavement areas in lieu of casing.

At no time shall the minimum depth of cover be less than 42 inches.

UNG 3. The permit specifies that the uncased gas carrier pipeline shall, as a minimum, be designed for a Class 3 Location (Code of Federal Regulations referenced above) for hard surfaced roads, highways, public streets, and railroads. (See attached Excerpts from the Code of Federal Regulations, Design Factor to be used for Natural Gas Pipelines.).

UNG 4. The existence of the crossing is adequately identified by signing at the right-of-way line, with at least one identifying sign, which is visible from the roadway in each direction of travel.

UNG 5. The pipeline owner agrees to provide as-built drawings at completion of the pipeline crossing, with a letter certifying that the pipeline was installed properly and in accordance with the permit plans (including approved changes to the permit plans), and meets industry and regulatory standards for such installation.

UNG 6. All other applicable requirements in Chapter 600 of the Encroachment Permits Manual are satisfied.

UNG 7. All submittals requesting installations of such uncased natural gas pipeline crossings greater than 6 inches in diameter or with normal operating pressures greater than 60 psig and meeting all of the above requirements may be approved by the district. Any deviations from the above requirements require an encroachment policy exception.

EXCERPTS FROM CODE OF FEDERAL REGULATIONS

DESIGN FACTORS TO BE UTILIZED FOR NATURAL GAS PIPELINES

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

In the design of steel natural gas pipelines the Minimum Yield Strength for the grade of steel used is reduced by a Design Factor (F). This Design Factor is determined by the type of road being crossed by the pipeline and a Class Location established by Code of Federal Regulations, Title 49, Part 192 (Office of the Federal Register, 1990).

The Class Location depends on the occupancy of buildings or activities within an area that extends 660 feet from either side of the pipeline centerline for a continuous 1 mile segment of the pipeline. There are four Class Locations as follows:

- Class 1. A location that has 10 or less buildings intended for human occupancy.
- Class 2. A location that has more than 10 but less than 46 buildings intended for human occupancy.
- Class 3. a) Any location that has 46 or more buildings intended for human occupancy; or
b) Area where pipeline lies less than 300 feet of either a building or a small well defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days or weeks need not to be consecutive).
- Class 4. A location where buildings of four or more stories are prevalent.

The design factor used for a specific Class Location also depends on the kind of road involved as indicated on the following Table.

DESIGN FACTOR (F)

TYPE OF THOROUGHFARE	CLASS LOCATION			
	1	2	3	4
Privately owned roads	0.72	0.60	0.50	0.40
Unimproved public roads	0.60	0.60	0.50	0.40
Hard surfaced roads, highways public streets, and railroads	0.60	0.50	0.50	0.40

Example: A pipe made of X42 grade of steel which has a Minimum Yield Strength (MYS) of 42,000 psi used in a Class 4 location at a hard surface road crossing would be designed using a reduced Minimum Yield Strength, by applying a Design Factor of 0.4, of 16,800 psi.

TREE PRUNING (TRIMMING) AND CHEMICAL APPLICATION

TR – 0159 (Rev. 01/2018)

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

I. GENERAL (Applies to BOTH Non-Utility and Utility Projects):

1. Scheduled pruning work may be restricted by Caltrans to maintain mobility during special events, commuter traffic, or other periods of projected high traffic volumes.
 - i. Traffic control is generally authorized from 9 a.m. to 3 p.m., Monday through Friday, excluding holidays. Extended traffic control hours may be required by Caltrans.
 - ii. Traffic control must conform to requirements shown in the State Standard Plans. When required, the use of a flashing arrow board is MANDATORY.
 - iii. Suspend work during inclement weather, such as heavy fog, if lane or shoulder closures will be required. Do not perform pruning work during periods of high wind to minimize the spread of debris into the traveled way.
2. Prune trees in compliance with the most recent version of ANSI A300-Pruning Part 1, the American National Standard for Tree Care Operations, Tree, Shrub and Other Woody Plant Maintenance-Standard Practices (Pruning), and the International Society of Arboriculture (ISA) Tree Pruning Best Management Practices.
3. Prune trees in compliance with the seasonal tree pruning restrictions specified in the Migratory Bird Act and meet the seasonal requirements of specific tree species. Perform pruning based upon the age of the tree (newly planted or established), type of tree (evergreen or deciduous), purpose for pruning (maintenance of form, structure, maintaining sight lines, utility clearance), and to minimize the spread of disease (pine pitch canker, eucalyptus psyllid, eucalyptus borer beetles, Dutch elm disease, or mistletoe).
4. Tree trimmers must be licensed by the California State Contractors State License Board and hold a current C61/D49 license.
5. Do not use climbing spurs to prune trees, except when working in the tops of Eucalyptus, Palms, and Conifers.
6. Prune trees to maintain their natural structure and shape. If unbalanced growth already exists, first thin and head prune the tree. Where prior topping or side pruning has resulted in excessive growth over the State right-of-way, prune to restore a balanced, symmetrical shape. Avoid creating large holes in the canopy. Upon completion of work, trees should present a balanced, symmetrical shape that is characteristic of their species.
7. Prune trees to maintain their natural open crown structure. Do not cut young growth year after year at the same fixed distance from the trunk. This technique creates very dense growth at the tree canopy margin, growth called "crow's nests" or "brooms". Maintain the natural open crown structure by thinning out dense growth.
8. Prune trees to restore an open crown structure. Remove limbs larger than 2-inches in diameter as necessary to open up dense growth, called "crow's nests" or "brooms." Make these cuts at laterals or parent branches in older wood so that the following season's growth will result in a crown structure free of dense, disfiguring growth.

ENCROACHMENT PERMIT SPECIAL PROVISIONS

9. Prune trees to avoid redirecting growth over the highway. Maintain the terminal bud of the leader. Perform top or center pruning only after these trees have recovered their natural balance and form.
10. Final cuts must not leave stubs. Prune in ways that maximize wound recovery from callus growth. Keep wounds as small as practicable, reasonably flush, within the shoulder ring area, keeping cambial tissues at the cut edge alive and healthy. Do not make extreme flush cuts that produce large wounds and weaken the tree.
11. Remove debris, cuttings, and tree limbs from the State right-of-way at the end of each workday, leaving the work area in a safe and presentable condition. In regions where pruned limbs and bark might harbor pests or disease (such as pine pitch canker, eucalyptus psyllid, eucalyptus borer beetles, Dutch elm disease, or sudden oak death) dispose pruned materials in accordance with Federal, State, and local agency requirements.
12. Topping of trees is not allowed.
13. Prune trees to allow 8' over sidewalks and 17' over vehicular pavement.
14. Pruning must not change the character of the tree.

VIII. ADDITIONAL TREE PRUNING REQUIREMENTS FOR UTILITIES ONLY:

Comply with the requirements under "I. General" above, and the following:

15. Severity of utility tree pruning work may be restricted by the District Landscape Specialist to preserve the appearance of trees that possess high value due to local community significance, historic landscape potential, or documented horticultural value.
16. Limit pruning severity such that required minimum clearances are maintained for no more than two years.
17. Comply with minimum utility clearances as established by the CPUC General Orders, California Public Resources Code and Federal and State laws. Clearances that exceed the established minimum must be agreed upon by Caltrans and the Utility Company. For most locations, pruning should not take place more frequently than once per year. Pruning clearances and pruning frequencies must reflect the species, growth habit, condition, and health of each tree.
18. Prune trees receiving their first pruning, or recently pruned trees with "directional pruning" as defined in the ISA Tree-Pruning Guidelines. Trees that cannot be directionally pruned, such as older trees that have been topped many times may be submitted for consideration of removal.
19. Do not perform initial, severe "V" shaped pruning on trees along any highway, expressway or freeway without approval from the District Landscape Specialist or District Landscape Architect. Do not perform severe "V" pruning on any tree along a state or federally designated scenic highway without approval from the District Landscape Architect.
20. Maintain previously "rounded over" trees consistent with past practices, unless Caltrans and the Electric Utility owner agree that the tree can be directionally pruned or have its crown restored without creating structural defects or growth that presents a liability.

IX. CHEMICAL CONTROL:

21. Do not apply chemicals to trees located on scenic highways.
22. Upon approval by Caltrans to use chemicals, also obtain approval by the County Agricultural Commissioner.

ENCROACHMENT PERMIT SPECIAL PROVISIONS

23. Control resprouting tree species using integrated vegetation management program techniques, including chemical and non-chemical methods.
24. Prior to chemical application, obtain a pest control recommendation from a licensed Pest Control Advisor. Submit a copy of the recommendation to the Caltrans District Landscape Specialist or their designee.
25. Utility Companies must maintain a list of locations, chemical types, and quantities used for treatment in pruning operations. Provide this information upon expiration of your annual permit or upon request of the Department during the annual/biennial permit period.
26. Utility Companies must submit copies of MSDS sheets for all chemical compounds used in tree pruning operations along with their permit application.
27. Utility Companies must notify the District Encroachment Permits Office when they change or modify the chemicals used in their pruning operations. Do not apply chemicals to trees located on scenic highways.

ENCROACHMENT PERMIT ANNUAL UTILITY

TR – 0160 (Rev. 10/2019)

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

Annual utility permits UE are issued to utilities who maintain their facilities within State highway right-of-way. Any utility or public corporation, who lawfully maintains a utility encroachment, or their agent, may perform routine or emergency maintenance on such facility in accordance with the following provisions:

UE1. EXCLUSIONS: These provisions do not authorize any work on freeways and expressways, tree trimming, aerial capacity increases on designated "Scenic Highways", pole replacement / relocation work, or other activities not specifically provided for in this permit.

UE2. EMERGENCY REPAIRS: The permittee may make emergency repairs, alter traffic flow, and excavate through improved surfaces only when breaks in the conduit, cable, or pipeline over or under the pavement presents a definite public hazard or serious interruption of essential services. In such cases, the Department's representative shall be notified immediately.

Replace poles knocked down by vehicles, accidental causes or natural disasters. The entire length of poles and stubs must be removed from the ground and replacement pole must be placed at the exact location. Planned pole replacements/installations are not allowed under this permit.

UE3. OPEN EXCAVATIONS: Excavation must not be left open after daylight hours unless specifically authorized and adequate protection for traffic is provided in accordance with the General Provisions, "Public Traffic Control" And "Minimum Interference with Traffic". Backfill and pavement replacement must be performed in accordance with General Provisions, "Restoration and Repairs in State Highway right-of-way."

UE4. TRAFFIC CONTROL: Work requiring traffic control shall be conducted between Monday-Friday 9:00 a.m. and 3:00 p.m. or as otherwise authorized by the Permit Engineer. Adequate traffic control must be provided in accordance with the General Provisions, "Public Traffic Control", "Minimum Interference with Traffic" and "Suspension of Traffic Control Operation."

Only those maintenance activities that can be performed using a Caltrans Standard Plans for Temporary Traffic Control Systems and Temporary Pedestrian Access Routes are authorized under the annual maintenance permit. Otherwise a separate permit application for the work, along with a traffic control plan designed and signed by a California Registered Civil or Traffic Engineer must be submitted for review and approval.

Advanced notification must be provided to Caltrans Traffic Management Center for any activities that may cause a traffic impact including all lane closures. Adequate notice must be provided in accordance with the General Provisions, "Notification of Closure to Department and Traffic Management Center (TMC)."

UE5. WORK PERMITTED - AERIAL: All permitted activity must not be over the traveled way or within the limits of officially designated scenic highways and/or on Caltrans structures.

1. Maintain, inspect, remove, repair or replace (in the same location) all aerial facilities. Work over the traveled way requires a separate permit and the placement of "H" poles and netting as per form TR-0108, located in Appendix "E" of the Encroachment Permits Manual.

Replace broken pins and/or insulators, repair broken wires, pull slack wires, and replace or pull broken or slack guys.

Replace aerial wires and cross arms on existing poles except where wires cross the highway. Unless otherwise specifically required by the Department, protected cable, tree wire or plastic tree wire guard used for communication lines may be used through trees where necessary, provided the appearance of the tree or the tree itself will not be damaged.

ENCROACHMENT PERMIT SPECIAL PROVISIONS

Perform insulator washing and interconnect splicing of cables.

Install additional capacity (in the same location), install, maintain, remove, repair or replace aerial service connections with potential to ground of 300 volts or less.

2. Installations and clearances must be equal to those required by either the California Public Utilities Commission orders or the Division of Occupational Safety and Health (Cal/OSHA) regulations promulgated in the California Code of Regulations, Title 8, Chapter 4, whichever is more restrictive.

UE6. WORK PERMITTED - UNDERGROUND:

1. Maintain, inspect, remove, repair or replace (in the same location) all underground facilities except those requiring trenching in the traveled way or require uncovering more than 50 feet of line at any one time. The permittee may open existing manholes to repair underground cables. Where the manhole lies within the improved surface of the highway, the permittee will provide adequate protection for traffic in accordance with the General Provisions "Public Traffic Control" and "Minimum Interference with Traffic".
2. Install additional capacity in existing ducts except for facilities not in compliance with the Department's High priority utility policies or on Structures.
3. Install air flow monitoring transducers and piping in existing ducts.
4. Barholing, potholing, cleaning, rodding and placing float ropes.
5. Adjust access cover to grade and replace in kind or with larger size pull boxes.
6. Interconnect splicing of cables.
7. Install service connections (laterals) perpendicular to the highway for the following:

- i. Natural gas service lines less than 2 inches in pipe diameter that have normal operating pressures of 60 psig or less
 - ii. Subsurface electrical service connections with a potential to ground of 50 volts or less
 - iii. Service connections for water, sewer, telephone, telecommunication, and cable service
8. Permanent pavement patching for work authorized by this permit. The patching must be made within thirty (30) days of completion of backfill unless otherwise specified by the Permit Engineer. See Underground Utility Provision UG 9 (form TR-0163).

UE7. POLE MAINTENANCE & CHEMICAL TREATMENT:

1. Utility Companies are to provide a list of the pole identification, locations, type of chemicals and quantities used for their pole treatment maintenance operations. This information must be provided upon expiration of their annual permit or upon request of the Department as needed.
2. Utility Companies must submit copies of the Safety Data Sheets (SDS) for all chemical compounds to be used in their pole treatment maintenance operations, in conjunction with the permit application submittal.
3. Utility Companies are to notify the District Landscape Specialist or their designee and the District Encroachment Permits Office when there is any change or modification in the type(s) of chemical used in their pole treatment maintenance operations.
4. Prior to any application of Tree Growth Regulators (TGR) approval shall be obtained from the District Landscape Specialist or their designee.

UE8. MISCELLANEOUS:

1. Install new and replace existing transformers on existing poles.
2. Clear grass from around base of poles and excavate around poles for inspection, including tamping and straightening. The use of herbicides or other chemicals is not authorized by this permit. A separate encroachment permit is required for that purpose.

UTILITY OVERHEAD PROVISIONS (OH)

TR – 0162 (Rev. 10/2019)

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

OH1. LOCATION POLE LINES, ETC.: Pole lines shall be located as specifically directed in the provisions of the permit.

OH2. INSTALLATIONS AND CLEARANCES: Horizontal clearances, as measured from the edge of traveled way to the installation must be in accordance with the minimum clearance required for Discretionary Fixed Objects. According to Caltrans' Highway Design Manual (309.1) The installation should be located beyond the clear recovery zone at a minimum of 52 feet horizontally or 8 feet vertically up-slope from the edge of traveled way, unless they are made breakaway or shielded behind existing guardrail, barrier or other safety device. In no case is a pole allowed closer than 1.5' behind a curb face or less than 2' from the edge of a slope catch point or 3' from the curb returns of intersections and near the edges of driveways, or within a drainage ditch. New installations should adhere to setback limits or should be protected. Consideration should be given to placing such encroachments underground in shoulder or parking areas. Also, installations and clearances must comply with applicable orders of the California Public Utilities Commission (CPUC), or the Division of Occupational Safety and Health (Cal/OSHA) Safety Orders, whichever is more restrictive.

OH3. PERMISSION FROM PROPERTY OWNERS: When necessary, permission must be secured from the abutting property owner(s) in written form by the permittee before starting work.

OH4. CLEARANCE OF TREES: Unless otherwise specifically required by the Department, protected cables, tree wires or plastic tree wire guards used for communication lines may be used through trees where necessary, provided the installation and any necessary pruning does not damage or affect the appearance of the tree or the tree itself will not be damaged. This allowance does not apply to scenic highways.

OH5. GUY WIRES: No guy wires are to be attached to trees except as may be specified in the permit and in no event must they be so attached as to girdle the tree or interfere with its growth. Guy wires must be kept to a minimum elevation above ground as directed.

OH6. ANCHOR: Anchors must not be placed closer to the traveled way than the pole itself.

OH7. REMOVE OLD POLES, GUY, and STUBS: The entire length of poles and stubs must be removed from the ground and the holes backfilled. Guy rods must be removed to a minimum depth of 3' below original ground.

OH8. AERIAL CROSSING: Works involving new or additions to existing aerial crossings must not be performed in rainy, foggy or inclement weather which creates hazardous conditions for highway users.

OH9. CLEARANCE FROM CURBS: The face of poles must not be placed closer than 1.5' from any curb face.

OH10. POLE INSTALLATION OR REMOVAL: Where poles are to be installed or removed behind the curb in a parkway that is paved with Portland Cement Concrete, the concrete must be saw cut, removed and replaced to the nearest score lines or expansion joints. The hole in the PCC sidewalk created by pole removal must be temporarily backfilled with 2" minimum temporary AC at the time the pole is removed. Poles are not to be installed without prior approval of the final location by the Department's field representative.

OH11. CONTROLLED ACCESS RW: Poles, anchors, etc., must not be installed inside of any controlled access right of way. All such requests are "exceptions" to policy.

UNDERGROUND UTILITY

TR - 0163 (Rev. 04/2018)

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

High priority utilities, pressurized facilities, pipes or ducts 6" or larger in diameter, or placement of multiple pipes or ducts, regardless of diameters are required to be encased on both conventional and access-controlled highway rights-of-way.

A "High Priority Utility" is defined as: 1) a natural gas pipeline greater than 6" in diameter, or with normal operating pressures greater than 60 psig, 2) petroleum pipelines, 3) pressurized sanitary sewer pipelines, 4) high-voltage electric supply lines, conductors, or cables that have a potential to ground of greater than or equal to 60 kV, or 5) hazardous materials pipelines that are potentially harmful to workers or the public if damaged.

An exception to this policy may be allowed on a case by case basis for the installation of Uncased High-Pressure Natural Gas Pipelines when in compliance with the TR-0158 Special Provisions.

The pavement or roadway must not be open-cut unless specifically allowed under a separate "UT" permit. Utility installations must not be installed inside of culverts or drainage structures.

For additional details regarding longitudinal utility encroachments on both conventional and access-controlled highway rights-of-way, see Chapter 600.

UG 1. CASINGS: Casings must be steel conduit with a minimum inside diameter sufficiently larger than the outside diameter of the pipe or ducts to accommodate placement and removal. The casing can be either new or used steel pipe, or an approved connector system. Used pipe must be pre-approved by the Department's engineer or representative before installation.

When the method of Horizontal Directional Drilling (HDD) is used to place casing, the use of High Density Polyethylene Pipe (HDPE) as casing is acceptable.

Reinforced Concrete Pipe (RCP) in compliance of State Standard Specifications is an acceptable carrier for storm drain gravity flow or non-pressure flow. RCP when installed by Bore & Jack must have rubber gaskets at the joints, and holes for grouting of voids left by jacking operations, see "E" below.

- A. Minimum wall thickness for steel pipe casing for different lengths and diameters of pipes are as follows:

Minimum Wall Thickness

Casing Pipe (Diameter)	Up to 150 ft (Length)	Over 150 ft (Length)
6" to 28"	1/4"	1/4"
30" to 38"	3/8"	1/2"
40" to 60"	1/2"	3/4"
62" to 72"	3/4"	3/4"

- B. Spiral welded casing is authorized provided the casing is new and the weld is smooth.

- C. The ends of the casing must be plugged with ungrouted bricks or other suitable material approved by the Department's representative.
- D. When required by the Department's representative, the permittee must at his expense, pressure grout the area between the pavement and the casing from within the casing in order to fill any voids caused by the work covered under this permit. The increments for grout holes inside the pipe must be 8' staggered and located 22-1/2 degrees from vertical axis of the casing. Pressure must not exceed 5 psig for a duration sufficient to fill all voids.
- E. There is a spacing requirement when placement of multiple encasements is requested. The distance between multiple encasements must be the greater of either 24" or twice that of the diameter of the larger pipe being installed.
- F. Casings placed within access controlled highway rights-of-way must extend to the right-of-way lines.
- G. Wing cutters, if used, must be a maximum of 1" larger than the casing. Voids caused by the use of wing cutters must be grouted in accordance with "E" above.
- H. A band welded to the leading edge of the casing must be placed square to the alignment. The band must not be placed on the bottom edge. Flaring the lead section on bores over 100' must not be permitted.

ENCROACHMENT PERMIT SPECIAL PROVISIONS

- I. All casing lengths must equal to the auger length.
- J. The casings within conventional highways must extend 5' beyond the back of curb or edge of pavement, or to the right of way line if less. Where PCC cross-gutter exists, the casing must extend at least 5' beyond the back of the cross-gutter, or to the right of way line if less.

Bore and receiving pits must:

- A. be located at least 10' or more from the edge of pavement on conventional highways in rural areas.
- B. be located 5' behind the concrete curb or AC dike on conventional highways in urban areas.
- C. be located 5' outside the toe of slope of embankment areas.
- D. be located outside access controlled highway rights-of-way.
- E. be adequately fenced and/or have a Type-K barrier placed around them.
- F. be adequately shored in accordance with Cal-OSHA requirements. Shoring for jacking and receiving pits located within 15' of traffic lanes on a State highway must not extend more than 36" above the pavement grade unless otherwise authorized by Department's representative. Reflectors must be affixed to the shoring on the sides facing traffic. A 6' chain link fence must be installed around the perimeter of the pits during non-working hours.
- G. have crushed-rock and sump areas to clear groundwater and water used to clean the casing. Where ground water is found and pumping is required, the pits must be lined with filter fabric.

UG 2. HORIZONTAL DIRECTIONAL DRILLING: Bore and receiving pits

When HDD is the approved method for pipe installation, drilling plans must contain information listed as follows:

1. Location of: entry and exit point, access pit, equipment, and pipe staging area.
2. Proposed drill path alignment (horizontal and vertical).
3. Location and clearances of all other facilities.
4. Depth of cover.
5. Soil analysis.*
6. Carrier pipe length, diameter, thickness, and material (HDPE/steel) and ream pipe diameter.
7. Detailed carrier pipe calculations confirming ability to withstand installation loads and long-term operational loads including H2O.
8. Proposed drilling fluid composition, viscosity, and density (based on soils analysis).
9. Drilling fluid pumping capacity, pressures, and flow rates.
10. State right-of-way lines, property, and utility right of way or easement lines.
11. Elevations.
12. Type of tracking method/system and accuracy used.
13. A detailed plan for monitoring ground surface movement (settlement or heave) resulting from the drilling operation.
- * May be waived by the District Permit Engineer for HDD jobs less than 6" in diameter and a traverse crossing less than 150'.

UG 3. LIMIT OF EXCAVATION: No excavation is allowed within 10' from the edge of pavement except in curbed urban areas or as specified in the permit. Where no curb exists and excavations within 10' of the traveled way are to remain open, a temporary Type-K railing must be placed at a 10:1 taper or as otherwise directed by the Department.

UG 4. TUNNELING: Review requirements of Section 603.6A-6 of the Encroachment Permits Manual, if applicable. In addition to the requirements of "UG1" the following requirements apply:

- A. For the purpose of this provision, a tunnel is defined as any pipe, 30" or larger in diameter placed.
- B. When tunneling is authorized, the permittee must provide full-time inspection of tunneling operations. The Department's representative must monitor projects.
- C. A survey grid must be set and appropriately checked over the centerline of the pipe jacking or tunneling operation. Copies of the survey notes must be submitted to the Department's representative.
- D. Sand shields may be required as ground conditions change.
- E. The method used to check the grade and alignment must be approved by the Department's representative.
- F. Pressure grouting for liner plates, rib and spiling, or rib and lagging tunnels must be at every 8' section or at the end of work shift before the next section is excavated. All grouting must be completed at the end of each workday.
- G. A method for securing the headway at the end of each workday is required. Breastplates must be

ENCROACHMENT PERMIT SPECIAL PROVISIONS

installed during working hours for running sand or super-saturated soil.

UG 5. CLEARANCE AND OFFSET

REQUIREMENTS: All installations must comply with Chapter 17, Article 4 of the Project Delivery Procedures Manual (PDPM) for utility clearance and offset requirements.

UG 6. FACILITIES EXEMPT FROM THE HIGH PRIORITY UTILITY REQUIREMENTS:

The following utilities (not including State owned utilities) are exempt from these policies and do not need to be plotted on the plans unless the depiction of the utility is needed for interconnectivity with the proposed work:

- Natural gas service lines less than 2 inches in pipe diameter that have normal operating pressures of 60 psig or less
- Subsurface electrical service connections with a potential to ground of 50 volts or less
- Service connections (laterals) for water, sewer, telephone, telecommunication, and cable service

All State owned utilities must be plotted on the plans.

UG 7. DETECTOR STRIP: A continuous metallic detector strip must be provided with non-metallic main installations. Service connections must be installed at right angles to the centerline of the State highway where possible.

UG 8. BACKFILLING: All backfilling must conform to the applicable sections of the Department's Standard Specifications. Ponding or jetting methods of backfilling are prohibited.

Any required compaction tests must be performed by a certified laboratory at no cost to the Department and the laboratory report furnished to the Department's representative.

UG 9. ROADWAY SURFACING AND BASE MATERIALS: When the permit authorizes installation by the open cut method, surfacing and base materials and thickness thereof must be as specified in the permit.

Temporary repairs to pavements must be made and maintained upon completion of backfill until permanent repairs are made. Permanent repairs to pavements must be made within thirty (30) days of completion of backfill unless otherwise specified by the Department. Temporary pavement patches must be placed and maintained in a smooth riding plane free of humps and/or depressions.

UG 10. DAMAGE TO TREE ROOTS: Tree roots 3" or larger in diameter will not be cut within the tree drip

line when trenching or other underground work is necessary adjacent to roadside trees. If such roots are encountered, they must be tunneled under, wrapped in burlap and kept moist until the trench is backfilled. Trenching machines may not be used under trees if the trunk or limbs will be damaged by their use.

If the trees involved are close together and of such size that it is impractical to protect all roots over 3" in diameter, or when roots are less than 4" in diameter, outside tree drip line, special arrangements may be made whereby pruning of the tree tops to balance the root loss can be done by the permittee under the close supervision of the District Landscape Specialist or District Tree Maintenance Supervisor. Manholes must not be installed within 20' of any trunk.

UG 11. PIPES ALONG ROADWAY: Pipes and conduits paralleling the pavement must be located as shown on the plans or located outside of pavement as close as possible to the right-of-way line.

UG 12. BORROW AND WASTE: Borrow and waste will be allowed within the work limits only as specified in the permit.

UG 13. MARKERS: The permittee must not place any markers that create a safety hazard for the traveling public or departmental employees.

UG 14. CATHODIC PROTECTION: The permittee must perform stray current interference tests on underground utilities under cathodic protection. The permittee must notify the Department prior to the tests. The permittee must perform any necessary corrective measures and advise the Department.

UG 15. DELETED. Provision left blank intentionally

UG 16. INSTALLATION BY OPEN CUT METHOD: When the permit authorizes installation by the open cut method no more than one lane of the highway pavement must be open-cut at any one time. Any exceptions must be in writing by the Department's representative. After the pipe is placed in the open section, the trench is to be backfilled in accordance with specifications, temporary repairs made to the surfacing and that portion opened to traffic before the pavement is cut for the next section.

If, at the end of the working day, backfilling operations have not been properly completed, steel plate bridging must be required to make the entire highway facility available to the traveling public in accordance with the "Steel Plate Bridging Special Provisions" (TR-0157)

ENCROACHMENT PERMIT SPECIAL PROVISIONS

UG 17. PAVEMENT REMOVAL: PCC pavement to be removed must be saw cut at a minimum depth of 4" to provide a neat and straight pavement break along both sides of the trench. AC pavement must be saw cut to the full depth.

Where the edge of the trench is within 2' of existing curb and gutter or pavement edge, the asphalt concrete pavement between the trench and the curb or pavement edge must be removed.

UG 18. DELETED. Provision left blank intentionally.*

UG 19. SIDES OF OPEN-CUT TRENCHES: Sides of open cut trenches in paved areas must be kept as nearly vertical as possible. Trenches must not be more the 2' wider than the outside diameter of the pipe to be laid therein, plus the necessary width to accommodate shoring.

UG 20. EXCAVATION UNDER FACILITIES:

Where it is necessary to excavate under existing curb and gutter, or underground facilities, the void must be backfilled with two (2) sack cement-sand slurry.

UG 21. PERMANENT REPAIRS TO PCC

PAVEMENT: Repairs to PCC pavement must be made of Portland Cement Concrete containing a minimum of 658 lbs. or 7 sack of cement per cubic yard. Replaced PCC

pavement must equal existing pavement thickness. The concrete must be satisfactorily cured and protected from disturbance for not less than forty-eight (48) hours. Where necessary to open the area to traffic, no more than two (2%) percent by weight of calcium chloride may be added to the mix and the road opened to traffic after six (6) hours.

UG 22. REMOVAL OF PCC SIDEWALKS OR

CURBS: Concrete sidewalks or curbs must be saw cut to the nearest score marks and replaced equal in dimension to that removed with score marks matching existing sidewalk or curb.

UG 23. SPOILS: No earth or construction materials are to be dragged or scraped across the highway pavement, and no excavated earth placed or allowed to remain at a location where it may be tracked onto the highway traveled way, or any public or private approach by the permittee's construction equipment, or by traffic entering or leaving the highway traveled way. Any excavated earth or mud so tracked onto the highway pavement or public or private approach must be immediately removed by the permittee.

*NOTE: Special Provision was deleted since it is already part of the EP General Provisions (TR-0045)

TREE REMOVAL

TR – 0171 (New 01/2018)

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

I. GENERAL (Applies to BOTH Non-Utility and Utility Projects):

1. Scheduled removal work may be restricted by Caltrans to maintain mobility during special events, commuter traffic, or other periods of projected high traffic volumes.
 - i. Traffic control is generally authorized from 9 a.m. to 3 p.m., Monday through Friday, excluding holidays. Extended traffic control hours may be required by Caltrans.
 - ii. Traffic control must conform to requirements shown in the State Standard Plans. When required, the use of a flashing arrow board is MANDATORY.
 - iii. Suspend removal work during inclement weather, such as heavy fog, if lane or shoulder closures will be required. Do not perform removal work during periods of high wind to minimize the spread of debris into the traveled way.
2. Remove trees in compliance with the seasonal restrictions specified in the Migratory Bird Act.
3. Contractors must be licensed by the California State Contractors State License Board and hold a current C61/D49 license.
4. Remove debris, cuttings, and limbs from the State right-of-way at the end of each workday, leaving the work area in a safe and presentable condition. In regions where debris, cuttings, limbs and bark may harbor pests or disease (such as pine pitch canker, eucalyptus psyllid, eucalyptus borer beetles, Dutch elm disease, or sudden oak death) dispose the vegetative materials in accordance with Federal, State, and local agency requirements.
5. Permittee or their contractors may collect woodchips produced by removing trees located both inside and outside Caltrans right-of-way, and dispose of these woodchips by placing them in locations within Caltrans right-of-way, when approved in advance by Caltrans Maintenance. Woodchips must not create a fire hazard, encourage illegal dumping, block traveler sightlines, or obstruct drainage ditches or drain inlets.

X. NON-UTILITY TREE REMOVAL PROJECTS:

When a permit is issued for removal of a tree as an independent operation or as a part of other work, the entire stump must be taken out to a depth of at least 12-inches below the ground surface. All debris must be removed from the right of way. The hole left by the stump must be backfilled and thoroughly tamped and the site left in a safe presentable condition.

XI. UTILITY TREE REMOVAL PROJECTS ONLY:

Removal of trees over sub-surface Gas lines:

After trees are removed, cut trunks flush with the ground, leaving no more than 2-inches exposed above the finished grade. If required by Caltrans, remove the stump to a depth of at least 12-inches, remove all debris from the hole, backfill with clean fill, and thoroughly compact the soil, leaving the area in a safe presentable condition.

1. GENERAL: The purpose of these Special Provisions is to provide the Permittee with specifications for water pollution control to minimize, prevent, or control the discharge of material into the air, surface waters, groundwater, and storm sewers owned by the State or local agencies. These provisions are not intended to take the place of the Caltrans Water Pollution Control Program (WPCP) for projects where soil disturbance from work activities less than one acre, or work activities of one acre or more subject to the preparation of the Caltrans Storm Water Pollution Prevention Plan (SWPPP). The Permittee must comply with the following Special Provisions and the direction of the State Representative. All Stormwater Best Management Practices (BMPs) must conform to Section 13 Water Pollution Control of Caltrans' Standard Specifications.

2. NPDES REQUIREMENTS: The Permittee must be responsible for full compliance with the Caltrans Storm Water Program and the Caltrans National Pollutant Discharge Elimination System (NPDES) Permit requirements (*Order No. 2012-0011-DWQ, NPDES No. CAS000003*) and for and projects disturbing one acre or more of soil, full compliance with the California Construction General Permit (*Order No. 2009-0009-DWQ, NPDES No. CAS000002*) or for projects for projects that have one acre or more of soil disturbance in the Lahontan Region (*Order No. R6T-2016-0010, NPDES No. CAG616002*). It is the Permittee's responsibility to install, inspect, and repair or maintain facilities and devices used for water pollution control practices (BMPs) before performing daily work activities. Installation, inspection and maintenance responsibilities on the job site include: 1) soil stabilization materials in work areas that are inactive or prior to storm events, 2) water pollution control devices to control sediment and erosion, 3) implementation of spill and leak prevention procedures for chemical and hazardous substances stored on the job site, 4) material storage, 5) stockpile management, 6) waste management, 7) non-stormwater management, 8) water conservation, 9) tracking controls and 10) illicit connection, illegal discharge detection and reporting. The Permittee must report to the State representative when discharges enter into receiving waters, adjacent property, drainage systems or when discharges could be a cause or a threat for water pollution. The Permittee must also control illicit discharges or illegal dumping prior to start of daily work schedule. Copies of written notices or orders from the Regional Water Quality Control Board or other regulatory agency must be provided to the State representative within 48 hours of reported activity. For additional information on stormwater compliance, visit the State Water Resources Control Boards storm water Website at:

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

3. RESPONSIBILITY FOR DEBRIS REMOVAL: The Permittee must be responsible for preventing sediment, trash, debris, and other construction waste from entering the street, the storm drains, local creeks, or any other bodies of water.

4. SPOILS AND RESIDUE: The Permittee must vacuum any saw-cut concrete waste material, debris, residue, etc. No spoils, debris, residue, etc. must be washed into a drainage system.

5. SWEEPING: Sweep paved roads at construction entrance and exit locations and surrounding paved areas daily within the job site during: 1) clearing and grubbing, 2) earthwork, 3) trenching, 4) soil disturbance, 5) pavement grinding and/or cutting, and 6) after observing tracking of material onto or off the State property. Keep dust to a minimum during sweeping activities. Use vacuum whenever dust generation is excessive or sediment pickup is ineffective.

Roadways or work areas must not be washed down with water. Street sweeping operations must conform to Section 13 Water Pollution Control of Caltrans' Standard Specifications.

6. VEHICLES AND EQUIPMENT: Permittee must prevent all vehicles, equipment, etc. from leakage or mud tracking onto roadways. If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site.

7. MAINTENANCE AND FUELING OF VEHICLES AND EQUIPMENT: Maintenance and fueling of equipment must not result in any pollution at the job site. The Permittee must immediately clean up spills/leaks, and properly dispose of contaminated soil and materials.

8. CLEANING VEHICLES AND EQUIPMENT: Limit vehicle and equipment cleaning or washing at the job site except what is necessary to control vehicle tracking or hazardous waste. The Permittee must clean all equipment within a bermed area or over a drip pan large enough to prevent run-off. No soaps, solvents, degreasers, etc. must be used in State right-of-way. Any water from this operation must be collected and disposed of at an appropriate site. Containment berms or dikes must be used for fueling, washing, maintaining and washing vehicles or equipment in outside areas. Containment must be performed at least 100 feet from concentrated flows of storm water, drainage courses, and storm drain inlets if within a flood plain, otherwise at least 50 feet if outside the floodplain. Keep adequate quantities of absorbent spill- cleanup material and spill kits in the fueling or maintenance area and on fueling trucks.

9. DIESEL FUELS: The use of diesel fuel from petroleum or other fossil fuel as a form-oil or solvent is not allowed.

10. WEATHER CONDITIONS AT WORKSITE: Any activity that would generate fine particles or dust that could be transported off site by stormwater must be performed during dry weather.

11. WIND EROSION PROTECTION: The use of Wind Erosion BMPs must be deployed year-round in instances where dust or fine particles could be transported off site.

11. HOT MIX ASPHALT: Runoff from washing hot mix asphalt must not enter into any drainage conveyances.

12. PROTECTION OF DRAINAGE FACILITIES: The Permittee must protect/cover gutters, ditches, drainage courses, and inlets with gravel bags, fiber rolls, State approved fabric filters, etc., to the satisfaction of the State representative during grading, paving, saw-cutting, etc. and materials must conform to Section 13-6.02 Materials for Water Pollution Control of Caltrans' Standard Specifications. No such protection measures must cause an obstruction to the traveling public. The Permittee must implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site (including secondary containment requirements) in accordance to section 13-4.03B Spill Prevention and Control, and 14-11 Hazardous Waste and Contamination. Water Pollution Control of Caltrans' Standard Specifications.

13. PAINT: Rinsing of painting equipment and materials is not permitted in State right-of-way. When thoroughly dry, dispose of the following as solid waste: dry latex paint, paint cans, used brushes, rags, gloves, absorbent materials, and drop cloths. Oil based paint sludge and unusable thinner must be disposed of at an approved hazardous waste site.

14. CONSTRUCTION MATERIALS: Stockpile of all construction materials, including, but not limited to: pressure treated wood, asphalt concrete, cold mix asphalt concrete, concrete, grout, cement containing premixes, and mortar, must conform to section 13-4.03C (2) Material Storage & 13-4.03C (3) Stockpile Management of Caltrans' Standard Specifications.

15. CONCRETE EQUIPMENT: Concrete equipment must be washed in a designated washing area in a way that does not contaminate soil, receiving waters, or storm drain systems.

16. EXISTING VEGETATION: Established existing vegetation is the best form of erosion control. Minimize disturbance to existing vegetation. Damaged or removed vegetation must be replaced as directed by the State Representative.

17. SOIL DISTURBANCE: Soil disturbing activities must be avoided during the wet weather season. If construction activities during wet weather are allowed in your permit, all necessary erosion control and soil stabilization measures must be implemented in advance of soil disturbing activity.

18. SLOPE STABILIZATION AND SEDIMENT CONTROL: Consider a certified expert in Erosion and Sediment control in cases where slopes are disturbed during construction. The Permittee is directed to comply with Section 13.5 Temporary Soil Stabilization and Section 21 Erosion Control of Caltrans' Standard Specifications during application of temporary soil stabilization measures to the soil surface. Fiber rolls or silt fences may be required down slope until permanent soil stabilization is established. Remove the accumulated sediment whenever the sediment accumulates to 1/3 of the linear sediment barrier height. The Permittee must limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist or when environmental regulations prohibit their use within the project.

19. STOCKPILES: Stockpiles containing aggregate and/or soil must be stored at least 100 feet from concentrated flows of storm water, drainage courses, and storm drain inlets if within a flood plain, otherwise at least 50 feet if outside the floodplain, and must be covered and protected with a temporary perimeter sediment barrier. Cold mix stockpiles must be stored on an impermeable surface and covered with 9 mil plastic to prevent contact with water. Minimize stockpiling of materials on the job site. Manage stockpiles by implementing the water pollution control practices in Section 13-4.03C (3) Stockpile Management of the State of California standard specifications for construction.

20. DISCOVERY OF CONTAMINATION: The State Representative must be notified in case any unusual discoloration, odor, or texture of ground water, is found in excavated material or if abandoned, underground tanks, pipes, or buried debris are encountered.

21. SANITARY AND SEPTIC WASTE: Do not bury or discharge wastewater from a sanitary or septic system within the highway. Properly connected sewer facilities are free from leaks. With State Representative approval place portable sanitary facility at least 50 feet away from storm drains, receiving waters, and flow lines. Permittee must comply with local health agency provisions when using an on-site disposal system.

22. LIQUID WASTE: Prevent job site liquid waste from entering storm drain systems and receiving waters. Drilling slurries, grease or oil-free waste water or rinse water, dredging, wash water or rinse water running off a surface or other non-storm water liquids not covered under separate waste water permits must be held in structurally sound, leak-proof containers, such as portable bins or portable tanks. Store containers at least 50 feet away from moving vehicles and equipment. Liquid waste may require testing to determine hazardous material content prior to disposal. All measures must conform to section 13-4.03D (5) Liquid Waste, Water Pollution Control of Caltrans' Standard Specifications.

23. WATER CONTROL AND CONSERVATION: Manage water use in a way that will prevent erosion and the discharge of

pollutants into storm drain systems and receiving waters. Direct runoff, including water from water line repair from the job site to areas where it can infiltrate into the ground. Direct water from off-site sources around the job site or from contact with jobsite runoff.

24. PILE DRIVING: Keep spill kits and cleanup materials at pile driving locations. Park pile driving equipment over drip pans, absorbent pads, or plastic sheeting with absorbent material, and away from stormwater run-on when not in use.

25. DEWATERING: Dewatering consists of discharging accumulated storm water, groundwater, or surface water from excavations or temporary containment facilities. All dewatering operations must comply with the latest Caltrans guidelines including the *Field Guide for Construction Site Dewatering*. Contact State representative for approval of dewatering discharge by infiltration or evaporation, otherwise, any effluent discharged into a permitted storm water system requires approval from the Regional Water Quality Control Board. Prior to the start of dewatering, the Permittee must provide the State Representative with a dewatering and discharge work plan that complies with section 13-4.03G Dewatering, Water Pollution Control of Caltrans' Standard Specifications. A copy of the Waste Discharge Permit and a copy of a valid WQID number issued by the Regional Board must be provided to the State representative.

ROLLING TRAFFIC BREAKS

TR-0407 (Rev 10/2017)

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

1. Permittee must arrange a meeting with the California Highway Patrol (CHP) and the Caltrans permit inspector, at least two (2) weeks prior to the start of work in order to determine the appropriate number of CHP vehicles required for planned traffic breaks. A minimum of two (2) CHP vehicles in each direction are required. One CHP vehicle will be conducting the planned traffic break and the second CHP vehicle will be stationed on the shoulder with its rear emergency lights on to caution motorists at the end of the queue. Additional CHP vehicles may be required if determined to be necessary by the CHP. It is the responsibility of the permittee to make arrangements with CHP for providing planned traffic breaks to facilitate the approved work.
2. The duration of a planned traffic break **MUST NOT** exceed five (5) minutes. If additional traffic breaks are required, traffic backup must be cleared before performing another break.
3. The permittee must provide a minimum of one (1) Portable Changeable Message Sign (PCMS). Additional PCMSs must be provided if required by Caltrans permit inspector or CHP. PCMS(s) must be placed at the locations directed by the CHP and be moved or relocated as needed. Each PCMS must comply with section 12-3.32 of the Caltrans Standard Specifications. PCMS(s) must be removed promptly after the planned traffic break is completed.
4. Message to be displayed on the PCMSs must be coordinated with Caltrans permit inspector/representative and CHP.
5. All aerial crossings should be scheduled on Sunday mornings (excluding holidays), from daylight to 10:00 AM, unless otherwise authorized by the District Permit Engineer or authorized Caltrans' representative.
6. No aerial crossings must be performed in rainy, foggy or other inclement weather.

HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT

TR-0408 (New 09/2017)

By acceptance of this encroachment permit, Permittee hereby agrees that:

1. All construction debris/materials/water/excess soil must become the property of the Permittee, and must be transported and disposed of, outside of Caltrans' right-of-way, in accordance with all applicable environmental laws and regulations. The Permittee must be identified as the generator for all construction debris/materials/water/excess soil and must be responsible for proper identification (including sampling and analysis) and management of all construction and contaminated debris/materials/water/excess soil that are removed, and/or excavated, from the work site. If hazardous waste is generated, the Permittee must obtain an Environmental Protection Agency (EPA) Identification Number issued in their name. State Permit Inspector does not sign any manifests or shipping papers. The Permittee must be named as the generator on all Uniform Hazardous Waste Manifests and shipping papers. Caltrans must not be identified or written anywhere on the manifests or shipping papers. Prior to waste disposal, the Permittee should submit the waste generator form(s) to State Permit Inspector for verification. The Permittee must submit to the State Permit Inspector, a copy of all manifests and/or shipping papers generated for materials removed, transported and/or excavated from the state right-of-way.
2. If contaminated material is encountered, Permittee is to stop work and contact the State Permit Inspector immediately. The Permittee must submit a Sampling and Analysis Plan (SAP), and a Health and Safety Plan (HaSP) prepared by a Certified Industrial Hygienist (CIH) and in conformance with California Code of Regulations title 8, section 5192, "Hazardous Waste Operations and Emergency Response" for sampling activity through a separate permit application. Upon the permit review, additional environmental documents may be required prior to resumption of construction activity.
3. Permittee is responsible for any violation, penalty, enforcement action, corrective action, remedial action, and any other type of consequences resulting from cross contamination of groundwater (including perched groundwater), improper handling/managing of hazardous materials and/or placement of contaminated materials inside Caltrans right-of-way.
4. It is the Permittee's responsibility to comply with the Department of Toxic Substances Control (DTSC) ADL requirements for roadway soil management. Reuse of soils containing greater than 80 mg/kg total lead is not allowed without written approval of the DTSC and Caltrans. The Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils between Caltrans and the DTSC does not constitute written approval for the Permittee to reuse soils containing greater than 80 mg/kg total lead.
5. The Permittee must implement the emergency notification requirements established in the California Office of Emergency Management Hazardous Materials, Spill / Release Notification Guidance (<http://www.caloes.ca.gov/>).
6. Any imported material used for backfill must be free of contamination, and a certificate of the material as "clean" with the source area of the material must be provided to Permit Inspector upon request. Importing soils containing greater than 80 mg/kg total lead for use in state right-of-way is not allowed.

Stockpiles of material containing aerially deposited lead shall not be placed where affected by surface run-on or run-off. Stockpiles shall be covered with plastic sheeting 13 mils minimum thickness or with one foot of nonhazardous material. Stockpiles shall not be placed in environmentally sensitive areas. Stockpiled material shall not enter storm drains, inlets, or waters of the State.

UNMANNED AIRCRAFT SYSTEMS (UAS) OPERATION

TR-0416 (New 10/2019)

In addition to the attached General Provisions (TR-0045), the following special provisions are also applicable:

The following are Federal Aviation Administration (FAA) Regulations for small UAS:

1. UAS operations are considered public or commercial operations. UAS operations will occur under Title 14, Code of Federal Regulations, section 107 (also known as Federal Aviation Regulation [FAR] Part 107).
2. Prior to each flight operation, the remote pilot must check the UAS to determine whether it is in a condition for safe operation (section 107.15).
3. A small UAS cannot be operated in a careless or reckless manner that endangers the life or property of another. Do not allow an object to be dropped from UAS in a manner that creates an undue hazard to persons or property (section 107.23).
4. Unless granted a waiver from the FAA from a FAR Part 107, section 107.205 restriction, a remote pilot operating UAS shall NOT:
 - a. Operate UAS from a moving aircraft or from a moving land or water-borne vehicle (section 107.25)
 - b. Operate UAS at night or during civil twilight hours (section 107.29)
 - c. Operate UAS beyond the pilot's ability to clearly determine its orientation with unaided vision (section 107.31)
 - d. Act as a remote pilot or visual observer in the operation of more than one UAS at the same time (section 107.35)
 - e. Operate UAS over a human being unless that human being is directly participating in the operation of the UAS or is located under a covered structure or inside a stationary vehicle that can provide reasonable protection from a falling small unmanned aircraft (section 107.39)
 - f. Operate UAS without yielding the right-of-way to all aircraft, airborne vehicles, and launch and re-entry vehicles. Yielding the right-of-way means that the UAS must give way to aircraft or airborne vehicles and may not pass over, under, or ahead of them unless well clear of the aircraft or vehicle. [section 107.37(a)].
 - g. Operate UAS
 - i. with a groundspeed exceeding 87 knots (100 miles per hour)
 - ii. with an altitude higher than 400 feet above ground level, unless flown within 400-foot radius of a structure and is not higher than 400 feet above the structure's immediate uppermost limit
 - iii. with less than 3 statute miles flight visibility
 - iv. within 500 feet below clouds nor within 2,000 feet horizontally from clouds (section 107.51)
5. No person shall operate UAS so close to another aircraft as to create a collision hazard [section 107.37(b)].

ENCROACHMENT PERMIT SPECIAL PROVISIONS - UAS

6. No person shall operate UAS in Class B, Class C, or Class D Airspace as defined by the FAA, or within the lateral boundaries of the surface area of Class E Airspace designated for an airport, unless that person has prior authorization from Air Traffic Control or has a Certificate of Authorization Waiver to do so (section 107.41).
7. No person shall operate UAS in a manner that interferes with operations and traffic patterns at any airport, heliport, or seaplane base (section 107.43).
8. No person shall operate UAS where Temporary Flight Restrictions (TFR) are in place as designated by a Notice-To-Airmen (NOTAM), unless cleared to do so by the controlling agency under 14 CFR 91.137 (section 107.47).
9. A small UAS cannot carry hazardous materials (section 107.36).
10. The maximum total weight of a small unmanned aircraft (UA) (including payload/cameras) operating under FAR Part 107 authority shall be less than 55 pounds. The 55-pound weight limit for small UAS includes everything that is on board or otherwise attached to the aircraft at the time of takeoff (section 107.3).

The following are Caltrans Special Provisions related to small UAS:

1. UAS operations within the SHS shall comply with federal and State laws, local ordinances, and the Caltrans UAS Operations Handbook (Handbook).
2. The remote pilot shall consult current aeronautical charts, Notice to Airmen (NOTAMs), Temporary Flight Restrictions (TFRs), and the "B4UFly" mobile device application prior to each UAS operation.
3. The remote pilot cannot relinquish control of UAS to a non-remote pilot during UAS operation.
4. UAS shall be operated according to manufacturer recommendations, user guide, and maintenance requirements. Prior to each flight operation, the remote pilot must check the UAS to determine whether it is in a condition for safe operation. Equipment will be visually inspected to include the following:
 - a. Condition of aircraft including motors, propellers, and electrical connections
 - b. Display of the UAS Certificate of Registration number on the UAS
 - c. Aircraft radio control transmitter
 - d. Camera and gimbal and any other sensor/payload
 - e. Battery condition
 - f. Video transmitter, receiver, and antennae
5. A permanent marker, label, or engraving of the FAA UAS registration number that is accessible and legible upon close visual inspection, must be affixed to the UAS aircraft.
6. UAS flight crew is the team responsible to perform a UAS operation. The UAS flight crew must include, at a minimum, a remote pilot and a visual observer. Support personnel may be assigned, as needed, to ensure the safe and effective operation of the UAS. UAS flight crew should maintain a position as far from the edge of traveled way as possible (close to the right-of-way line).
7. Do not launch or land UAS closer than 50 feet horizontally from the edge of traveled way unless Intermittent Traffic Control (ITC), or rolling break closure is in effect.

ENCROACHMENT PERMIT SPECIAL PROVISIONS - UAS

8. Do not operate UAS when manned aircraft (fixed-wing or rotor-wing) or other UAS are observed nearby.
9. Do not operate UAS at an altitude less than 100 feet.
10. UAS cannot operate over event participants, spectators, or bystanders. UAS cannot operate over traveled lanes, bicycle lanes, shoulders, or sidewalks within the SHS unless a closure is in effect.
11. UAS operation shall not be planned to fly over private property without first obtaining permission from the property owner. The remote pilot shall be aware of the right-of-way limits. Remote pilots shall take precautions to avoid accidental or incidental overflight of private property, unless first obtaining permission from the property owner.
12. Traffic impacts must be mitigated. Traffic mitigation measures must be shown on traffic control plans (signed and stamped).
13. A safety meeting shall be conducted prior to UAS operation and will include at least the following items: roles and responsibilities, the planned operation, traffic control, potential safety concerns, and emergency response. Any modifications on the UAS Data form must be notified to the Department's Representative at least 24 hours prior to UAS operation.
14. A remote pilot operating UAS shall not operate UAS:
 - a. Above any cloud or smoke that presents obstructions to visibility between the UAS and the remote pilot
 - b. In any situation where local conditions have changed considerably prior to or during flight
 - c. In a manner to invade individuals' privacy
 - d. In restricted types of airspace (see the Handbook)
15. Authorization to operate UAS under an encroachment permit, may be suspended immediately for reasons including, but not limited to the following:
 - a. Lack of compliance with the FAA requirements, the Handbook, and/or Caltrans policies and procedures
 - b. Lack of required knowledge and/or skills, or lapsed and/or incomplete records, certifications, or certification renewal
 - c. The traffic demand for the State facility significantly exceeds the anticipated demand

STANDARD ENCOACHMENT PERMIT APPLICATION

TR-0100 (REV 12/2018)

Complete ALL fields, write "N/A" if not applicable. Type or print clearly.

This application is not complete until all requirements have been approved.

Permission is requested to encroach on the State Highway right-of-way as follows:

1. COUNTY COUNTY OF VENTURA		2. ROUTE SR-150	3. POST MILE VEN 24.093	FOR CALTRANS USE TRACKING NO. 07-21-N-TK-1793 DIST/CO/RTE/PM 07/VEN/150/24.093 SIMPLEX STAMP 1793 DATE OF SIMPLEX STAMP 06/18/2021
4. ADDRESS OR STREET NAME SULPHUR MOUNTAIN ROAD		5. CITY Ojai		
6. CROSS STREET (Distance and direction from project site) SULPHUR MOUNTAIN ROAD/SR-150				
7. WORK TO BE PERFORMED BY <input type="checkbox"/> APPLICANT <input checked="" type="checkbox"/> CONTRACTOR		8. IS THIS APPLICATION FOR THE CONTRACTOR'S (DOUBLE) PERMIT? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES. If "YES", provide the Parent Permit Number		
9. ESTIMATE START DATE 09/20/2021		10. ESTIMATED COMPLETION DATE 09/24/2021		
11. ESTIMATED NUMBER OF WORKING DAYS WITHIN STATE HIGHWAY RIGHT-OF-WAY 5				
12. ESTIMATED CONSTRUCTION COSTS WITHIN STATE HIGHWAY RIGHT-OF-WAY \$1000				
13. HAS THE PROJECT BEEN REVIEWED BY ANOTHER CALTRANS BRANCH? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES. If "YES", which branch?				
14. FUNDING SOURCE(S) <input type="checkbox"/> FEDERAL <input type="checkbox"/> STATE <input type="checkbox"/> LOCAL <input type="checkbox"/> PRIVATE <input checked="" type="checkbox"/> SB 1 (ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017)				
15. CALTRANS PROJECT CODE (ID) N/A		16. APPLICANT'S REFERENCE / UTILITY WORK ORDER NUMBER N/A		

17. DESCRIBE WORK TO BE DONE WITHIN STATE HIGHWAY RIGHT-OF-WAY (in 20 lines or less)

Attach 6 complete sets of plans (folded to 8.5" x 11") and any applicable specifications, calculations, maps, traffic control plans, etc.

Temporary lane closure on Sulphur Mountain Road (County ROW) per attached Traffic Control Plans. W20-2 placed ahead of intersection and R3-2 on WB direction preventing Left Turn. Closure to occur during non peak hours as directed by CDOT 9:00am-3:00pm. All resurfacing work within the Ventura County Right-of-Way: AC Taper, AC Overlay, and re-striping of Stop Bar and Legend. No construction work in Caltrans ROW

RECEIVED
June 18, 2021
OFFICE OF PERMITS

18 (a). PORTION OF STATE HIGHWAY RIGHT-OF-WAY WHERE WORK IS BEING PROPOSED (check all that apply)

☐ Traffic lane ☐ Shoulder ☐ Sidewalk ☐ Median ☒ At or near an intersection ☐ Mobile work
☐ Outside of the shoulder, _____ feet from edge of pavement ☐ Other _____

18 (b). PROPOSED TRAFFIC CONTROL PLANS AND METHOD

☐ No traffic control needed ☐ State Standard Plans (T-Sheets) # _____☒ Project specific Traffic Control Plans included ☐ To be submitted by contractor**ADA Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

STANDARD ENCROACHMENT PERMIT APPLICATION

TR-0100 (REV 12/2018)

TRACKING NO.

07-21-N-TK-1793

19. EXCAVATION	MAX. DEPTH (in) N/A	MIN. DEPTH (in) N/A	AVG. WIDTH (in) N/A	LENGTH (ft) N/A	SURFACE TYPE (e.g. Asphalt, concrete, soil, etc.) N/A
20. PIPES	PRODUCT BEING TRANSPORTED N/A	CARRIER PIPE DIAMETER <u>N/A</u> (in.) MATERIAL <u>N/A</u>			CASING PIPE DIAMETER <u>N/A</u> (in.) MATERIAL <u>N/A</u>
PROPOSED INSTALLATION METHOD (e.g. HDD, Bore & Jack, Open Cut, etc.) N/A					VOLTAGE / PSIG N/A

DOES THE PROPOSED PROJECT INVOLVE THE REPLACEMENT AND/OR ABANDONMENT OF AN EXISTING FACILITY?

☒ NO ☐ YES. If "YES", provide a description

21. IS A CITY, COUNTY OR OTHER PUBLIC AGENCY INVOLVED IN THE APPROVAL OF THIS PROJECT?

☒ YES (if "YES", check the type of project AND attach the environmental documentation and conditions of approval)☐ COMMERCIAL DEVELOPMENT ☐ BUILDING ☐ GRADING ☐ OTHER PAVEMENT RESURFACING☒ CATEGORICALLY EXEMPT ☐ NEGATIVE DECLARATION ☐ ENVIRONMENTAL IMPACT REPORT ☐ OTHER _____☐ NO (if "NO", check the category below which best describes the project AND answer questions A-K)☒ DRIVEWAY OR ROAD APPROACH, RECONSTRUCTION,
MAINTENANCE OR RESURFACING☐ FENCE ☐ EROSION CONTROL☐ PUBLIC UTILITY MODIFICATION, EXTENSIONS, HOOKUPS☐ MAILBOX ☐ LANDSCAPING☐ FLAGS, SIGNS, BANNERS, DECORATIONS, PARADES AND CELEBRATIONS ☐ OTHER _____**The following questions must be answered when a City, County or other public agency IS NOT involved in the approval of this project.**

Your answers to these questions will assist Caltrans staff in identifying any physical, biological, social or economic resources that may be affected by your proposed project within State Highway right-of-way and to determine which type of environmental studies may be required to approve your application for an encroachment permit. It is the applicant's responsibility for the production of all required environmental documentation and supporting studies and in some cases this may be costly and time consuming. If possible, attach photographs of the location of the proposed project. Answer these questions to the best of your ability. Provide a description of any "YES" answers (type, name, number, etc.).

A. Will any existing vegetation and/or landscaping within State Highway right-of-way be disturbed?

B. Are there waterways (e.g. river, creek, pond, natural pool or dry streambed) adjacent to or within the limits of the proposed project?

C. Is the proposed project located within five miles of the coast line?

D. Will the proposed project generate construction noise levels greater than 86 decibels (dBA) (e.g. Jack-hammering, pile driving)?

E. Will the proposed project incorporate land from a public park, recreation area or wildlife refuge open to the public?

F. Are there any recreational trails or paths within the limits of the proposed project?

G. Will the proposed project impact any structures, buildings, rail lines or bridges within State Highway right-of-way?

H. Will the proposed project impact access to any businesses or residences?

I. Will the proposed project impact any existing public utilities or public services?

J. Will the proposed project impact any existing pedestrian facilities, such as sidewalks, crosswalks or overcrossings?

K. Will new lighting be constructed within or adjacent to State Highway right-of-way?

RECEIVED
June 18, 2021
OFFICE OF PERMITS

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

STANDARD ENCROACHMENT PERMIT APPLICATION

TR-0100 (REV 12/2018)

TRACKING NO.

07-21-N-TK-1793

22. Will the proposed project cause a substantial change in the significance of a historical resource (45 years or older), or cultural resource? ☐ YES ☒ NO (if "YES", provide a description)

23. Will the proposed project be on an existing State Highway or street where the activity involves removal of a scenic resource? (e.g. A significant tree or stand of trees, a rock outcropping or a historic building) ☐ YES ☒ NO (if "YES", provide a description)

24. Is work being done on the applicant's property in addition to State Highway right-of-way? ☐ YES ☒ NO
(If "YES", attach 6 complete sets of site and grading plans)

25. Will the proposed project require the disturbance of soil? ☐ YES ☒ NO
If "YES", estimate the area of disturbed soil within State Highway right-of-way in acres: _____
and estimate the area of disturbed soil outside State Highway right-of-way in acres: _____

26. Will the proposed project require dewatering? ☐ YES ☒ NO
If "YES", estimate Total gallons AND gallons/month. _____ (Total gallons) AND _____ (gallons/month)
SOURCE*: ☐ STORMWATER ☐ NON-STORMWATER
(*See Caltrans SWMP for definition of non-storm water discharge: <http://www.dot.ca.gov/env/stormwater/>)

27. How will any storm water or ground water be disposed?
☒ Storm Drain System ☐ Combined Sewer / Stormwater System ☐ Stormwater Retention Basin ☐ N/A
☒ Other (explain) EXISTING CULVERTS AND SURFACE DRAINAGE

RECEIVED
June 18, 2021
OFFICE OF PERMITS

STANDARD ENCROACHMENT PERMIT APPLICATION

TR-0100 (REV 12/2018)

TRACKING NO.

07-21-N-TK-1793

READ THE FOLLOWING CLAUSES PRIOR TO SIGNING THIS ENCROACHMENT PERMIT APPLICATION.

The applicant's submission of this application to the California Department of Transportation constitutes the applicant's agreement and representation that the work or other activity contemplated by the encroachment permit application shall comply with all applicable standards, specifications, policies, requirements, conditions, and regulations of the California Department of Transportation, and the applicant understands the application may be denied if there is non-compliance with any of the above. An exception process exists and may result in approval of a non-compliant encroachment, in the discretion of the California Department of Transportation, but the exception process may require additional time to complete. The applicant understands and agrees all work or other activity contemplated by the encroachment permit application is subject to inspection and oversight by the California Department of Transportation. The applicant understands and agrees encroachment permit fees must still be paid if an application is withdrawn or denied. The applicant understands a denial may be appealed, in accordance with California Streets and Highways Code, Section 671.5, and the related regulations found in California Code of Regulations, Title 21, Division 2, Chapter 8, Article 2.

The applicant understands and agrees that immediately upon issuance of the encroachment permit the applicant is bound by, subject to, and must comply with the "Encroachment Permit General Provisions" (TR-0045), "Stormwater Special Provisions" (TR-0400) and any other applicable Special Provisions and Conditions of the encroachment permit. The "Encroachment Permit General Provisions" (TR-0045), and the Stormwater Special Provisions (TR-0400) are available at: [http://www.dot.ca.gov/trafficops/ep/docs/Appendix_K_\(WEB\).pdf](http://www.dot.ca.gov/trafficops/ep/docs/Appendix_K_(WEB).pdf). If a paper copy is needed of the "Encroachment Permit General Provisions" (TR-0045) and/or "Stormwater Special Provisions" (TR-0400), please contact the District Office of Encroachment Permits. Their contact information is available at: [http://www.dot.ca.gov/trafficops/ep/docs/Appendix_G_\(WEB\).pdf](http://www.dot.ca.gov/trafficops/ep/docs/Appendix_G_(WEB).pdf). The "Encroachment Permit General Provisions" (TR-0045) and any other applicable Special Provisions and Conditions will be provided as part of the encroachment permit. Information about Stormwater requirements is available at the Internet address: <http://www.dot.ca.gov/hq/construc/stormwater/>.

The applicant understands an encroachment permit may be denied, revoked, and/or a bond may be required, for non-payment of prior or present encroachment permit fees. An encroachment permit is not a property right and does not transfer with the property to a new owner. Each of the persons purporting to execute this application on behalf of the applicant and/or on behalf of the applicant's authorized agent or engineer represents and warrants such person has full and complete legal authority to do so and to thereby bind applicant to the terms and conditions herein and to the terms and/or conditions of the encroachment permit. Applicant understands and agrees this application may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Executed copies of this application and/or its counterparts may be reproduced and/or exchanged by copy machine, mailing, facsimile, or electronic means (such as e-mail), and such copies shall be deemed to be effective as originals.

28. NAME OF APPLICANT (Project or Property Owner or Organization)

COUNTY OF VENTURA PUBLIC WORKS AGENCY

ADDRESS OF APPLICANT (Include City, State and Zip Code)

800 SOUTH VICTORIA AVE, VENTURA, CALIFORNIA 93009

E-MAIL ADDRESS

CHRISTOPHER.SOLIS@VENTURA.ORG

PHONE NUMBER

(805) 654-2065

FAX NUMBER

N/A

29. NAME OF AUTHORIZED AGENT / ENGINEER

(A "Letter of Authorization" is required if different from #28)

CHRISTOPHER SOLIS

IS A LETTER OF
AUTHORIZATION ATTACHED?☐ YES ☒ NO

ADDRESS OF AUTHORIZED AGENT / ENGINEER (Include City, State and Zip Code)

800 SOUTH VICTORIA AVE, VENTURA, CALIFORNIA 93009

E-MAIL ADDRESS

CHRISTOPHER.SOLIS@VENTURA.ORG

PHONE NUMBER

(805) 654-2065

FAX NUMBER

N/A

30. NAME OF BILLING CONTACT (Same as #28 ☐ Same as #29 ☒)

CHRISTOPHER SOLIS

BILLING ADDRESS WHERE INVOICE(S) IS / ARE TO BE MAILED (Include City, State and Zip Code)

800 SOUTH VICTORIA AVE, VENTURA, CALIFORNIA 93009

E-MAIL ADDRESS

CHRISTOPHER.SOLIS@VENTURA.ORG

PHONE NUMBER

(805) 654-2065

FAX NUMBER

N/A

* I hereby certify under penalty of perjury under the laws of the State of California that the information in this application and any document submitted with or in support of this application are true and correct to the best of my knowledge and belief, and that copies of any documents submitted with or in support of this application are true and correct copies of unaltered original documents. I further understand that if I have provided information that is false, intentionally incomplete, or misleading I may be charged with a crime and subjected to fine or imprisonment, or both fine and imprisonment. (Penal Code Section 72)

31. SIGNATURE OF APPLICANT OR AUTHORIZED AGENT***32. PRINT OR TYPE NAME**

CHRISTOPHER SOLIS

33. TITLE

ENGINEERING MANAGER I

34. DATE

6/15/2021

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

RECEIVED
June 18, 2021
OFFICE OF PERMITS

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT FEE CALCULATION SHEET
 TR-0406 (NEW 06/2015)

PERMIT NO:
 07-21-N-TK-1793

THIS PAGE IS FOR CALTRANS USE ONLY

WORK ORDER/REFERENCE NUMBER:

☐ DEFERRED BILLING (Utility) ☒ EXEMPT ☐ PROJECT CODE (ID):

FEES

1. REVIEW..... 8 hours @ \$ 82.00 / hour = \$ 656
 INSPECTION..... 8 hours @ \$ 82.00 / hour = \$ 656
 FIELD WORK..... hours @ \$ 82.00 / hour = \$
 EQUIPMENT AND MATERIALS..... \$
 CALCULATED BY: Patrick Truong DATE: 06/29/2021 AMOUNT: \$ 1,312

2. REVIEW..... hours @ \$ 82.00 / hour = \$
 INSPECTION..... hours @ \$ 82.00 / hour = \$
 FIELD WORK..... hours @ \$ 82.00 / hour = \$
 EQUIPMENT AND MATERIALS..... \$
 CALCULATED BY: DATE: AMOUNT: \$

3. REVIEW..... hours @ \$ 82.00 / hour = \$
 INSPECTION..... hours @ \$ 82.00 / hour = \$
 FIELD WORK..... hours @ \$ 82.00 / hour = \$
 EQUIPMENT AND MATERIALS..... \$
 CALCULATED BY: DATE: AMOUNT: \$

4. REVIEW..... hours @ \$ 82.00 / hour = \$
 INSPECTION..... hours @ \$ 82.00 / hour = \$
 FIELD WORK..... hours @ \$ 82.00 / hour = \$
 EQUIPMENT AND MATERIALS..... \$
 CALCULATED BY: DATE: AMOUNT: \$

DEPOSITS

1. ☐ CHECK NUMBER: NAME ON CARD/CHECK: AMOUNT: \$
☐ CREDIT CARD PHONE NUMBER:
☐ CASH CASHIER'S INITIALS: DATE: AMOUNT: \$
 2. ☐ CHECK NUMBER: NAME ON CARD/CHECK: AMOUNT: \$
☐ CREDIT CARD PHONE NUMBER:
☐ CASH CASHIER'S INITIALS: DATE: AMOUNT: \$
 3. ☐ CHECK NUMBER: NAME ON CARD/CHECK: AMOUNT: \$
☐ CREDIT CARD PHONE NUMBER:
☐ CASH CASHIER'S INITIALS: DATE: AMOUNT: \$
 4. ☐ CHECK NUMBER: NAME ON CARD/CHECK: AMOUNT: \$
☐ CREDIT CARD PHONE NUMBER:
☐ CASH CASHIER'S INITIALS: DATE: AMOUNT: \$

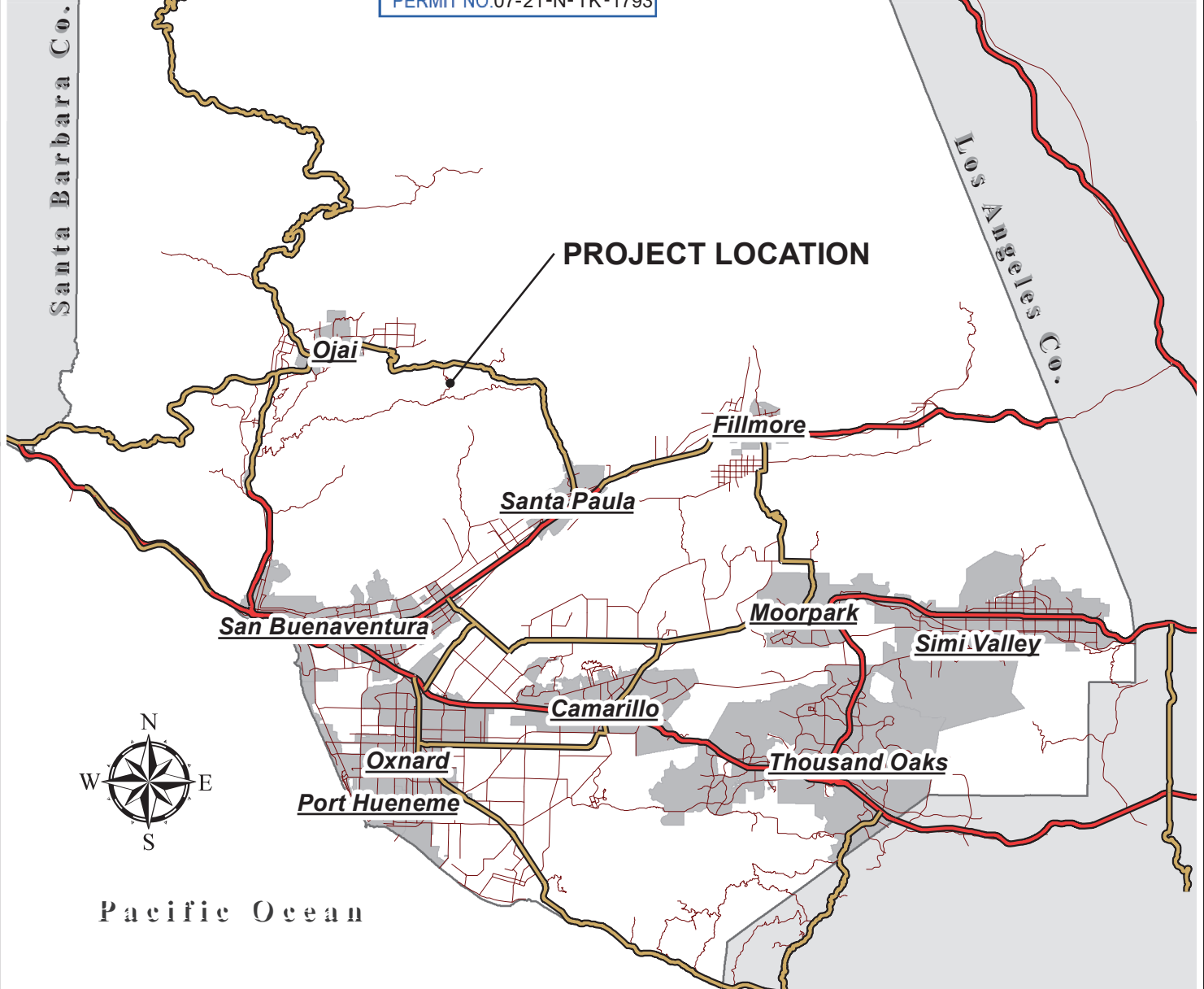
TOTAL DEPOSITS: \$

CASH DEPOSIT IN LIEU OF BOND	<input type="checkbox"/>	DATE:	AMOUNT:	\$
PERFORMANCE BOND	<input type="checkbox"/>	DATE:	AMOUNT:	\$
PAYMENT BOND	<input type="checkbox"/>	DATE:	AMOUNT:	\$
IS LIABILITY INSURANCE REQUIRED?	<input type="checkbox"/> YES <input type="checkbox"/> NO		AMOUNT:	\$

**CALTRANS
PERMIT PLANS**

Jun 29, 2021
ATTACHED TO
PERMIT NO.07-21-N-TK-1793

PROJECT LOCATION



Pacific Ocean

Vicinity Map

DRAWN IR

CHECKED HDL

**VENTURA COUNTY
PUBLIC WORKS AGENCY
ROADS & TRANSPORTATION**

**PAVEMENT RESURFACING
SULPHUR MOUNTAIN ROAD**

1
SHEET
2
OF

RECEIVED
June 18, 2021
OFFICE OF PERMITS

CALTRANS
PERMIT PLANS
Jun 29, 2021
ATTACHED TO
PERMIT NO 07-21-N-TK-1793



 Project Limits

Location Map

DRAWN IR

CHECKED HDL

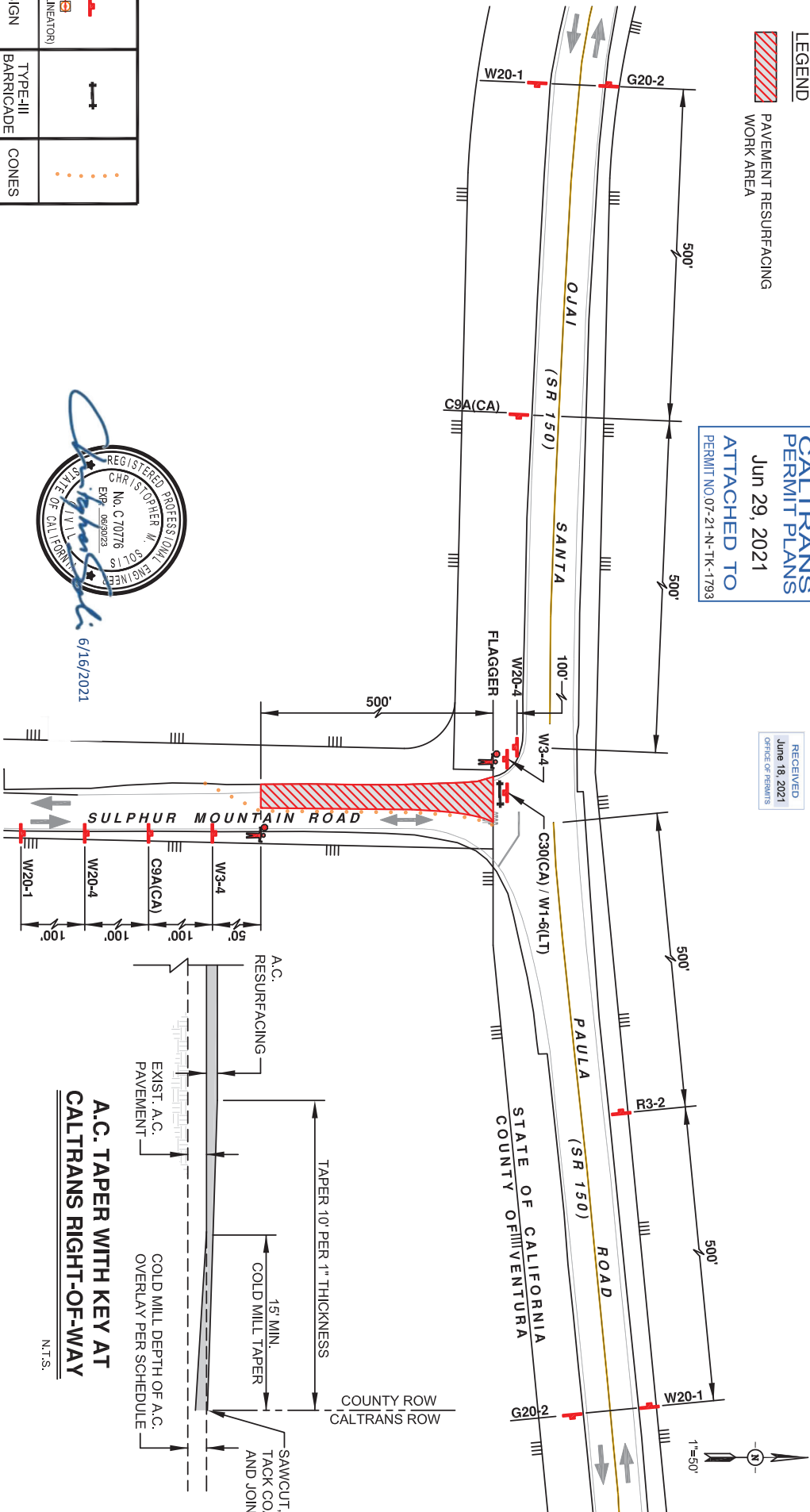
**VENTURA COUNTY
PUBLIC WORKS AGENCY
ROADS & TRANSPORTATION
PAVEMENT RESURFACING
SULPHUR MOUNTAIN ROAD**

2
SHEET
2
OF












LEGEND
 PAVEMENT RESURFACING
 WORK AREA

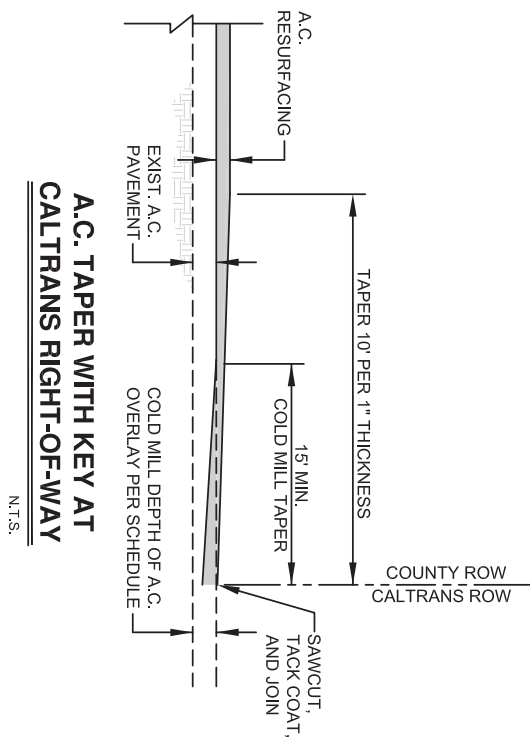
CALTRANS
 PERMIT PLANS
 Jun 29, 2021
 ATTACHED TO
 PERMIT NO.07-21-N-TK-1793

RECEIVED
 June 18, 2021
 OFFICE OF PERMITS



REGISTERED PROFESSIONAL ENGINEER
 No. C 70776
 EXP. 06/30/23
 STATE OF CALIFORNIA
 6/16/2021

(ON DELINEATOR)			
SIGN	TYPE-III BARRICADE	CONES	
			
C9A(CA)	C30(CA)	G20-2	R3-2
			
W1-6 (LT)	W3-4	W20-1	W20-4
			FLAGGER

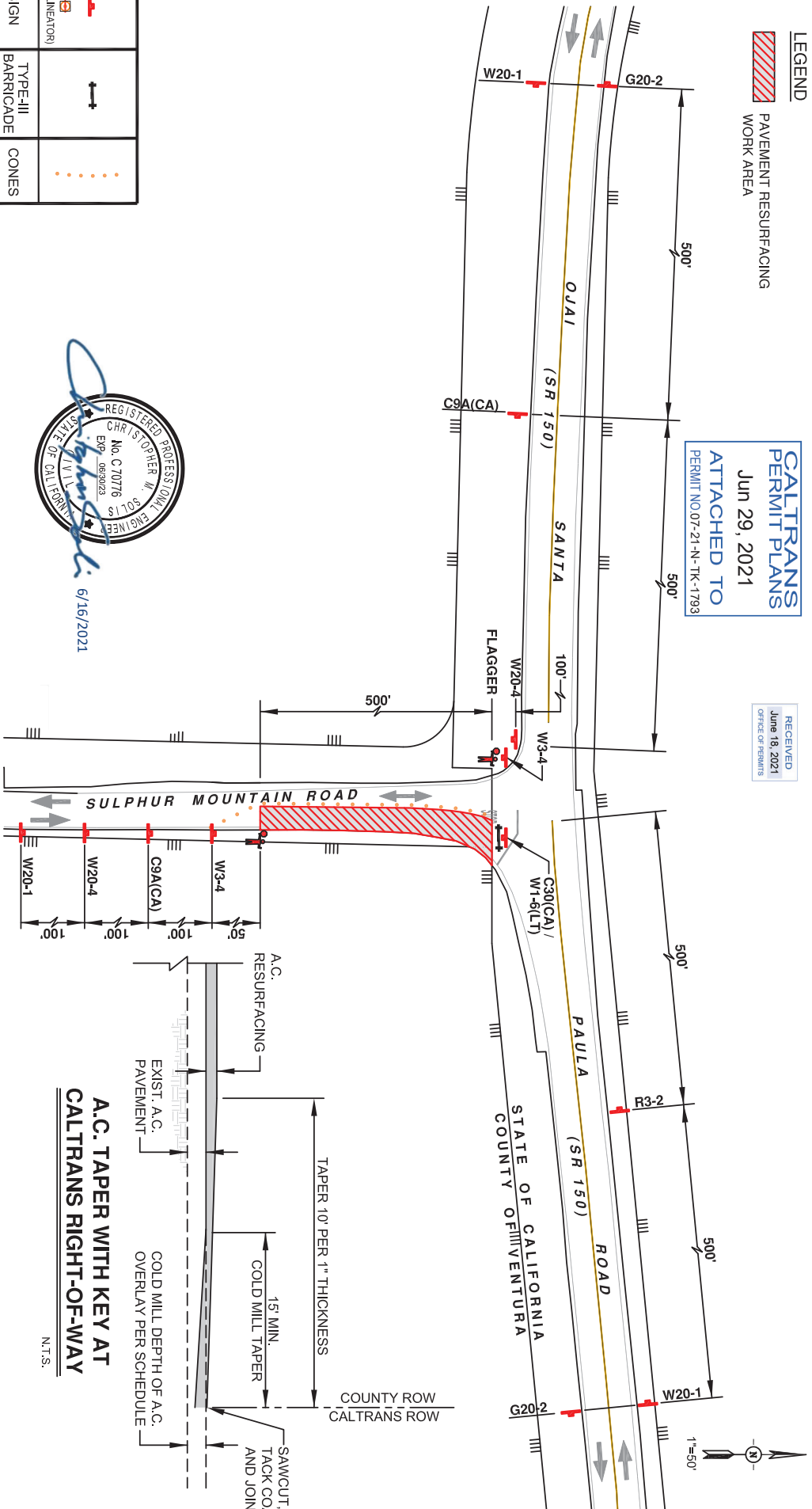


PUBLIC
 VENTURA COUNTY
 TRAFFIC CONTROL PLAN - PH. I
 ROUTE: SR-150 PM: VEN 24.093
 PR50611

LEGEND
PAVEMENT RESURFACING
WORK AREA

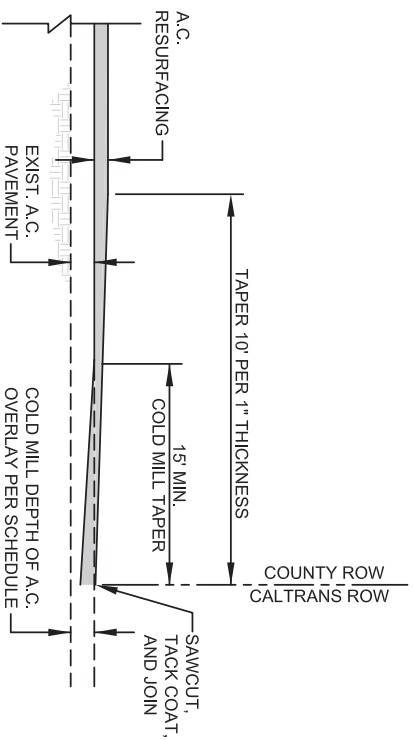
CALTRANS
PERMIT PLANS
Jun 29, 2021
ATTACHED TO
PERMIT NO.07-21-N-TK-1793

RECEIVED
June 18, 2021
OFFICE OF PERMITS



REGISTERED PROFESSIONAL ENGINEER
No. C 70776
CHRISTOPHER M. SOLIS
EXP. 06/30/23
STATE OF CALIFORNIA
6/16/2021

SIGN	TYPE-III BARRICADE	CONES
(ON DELINEATOR)		
		
C9A(CA)	C30(CA)	G20-2
		
R3-2	W1-6 (LT)	W3-4
		
W20-1	W20-4	FLAGGER



PUBLIC
VENTURA COUNTY
WORKS
TRAFFIC CONTROL PLAN - PH. II
ROUTE: SR-150 PM: VEN 24.093
PR50611

**PLANS
(7 SHEETS)**

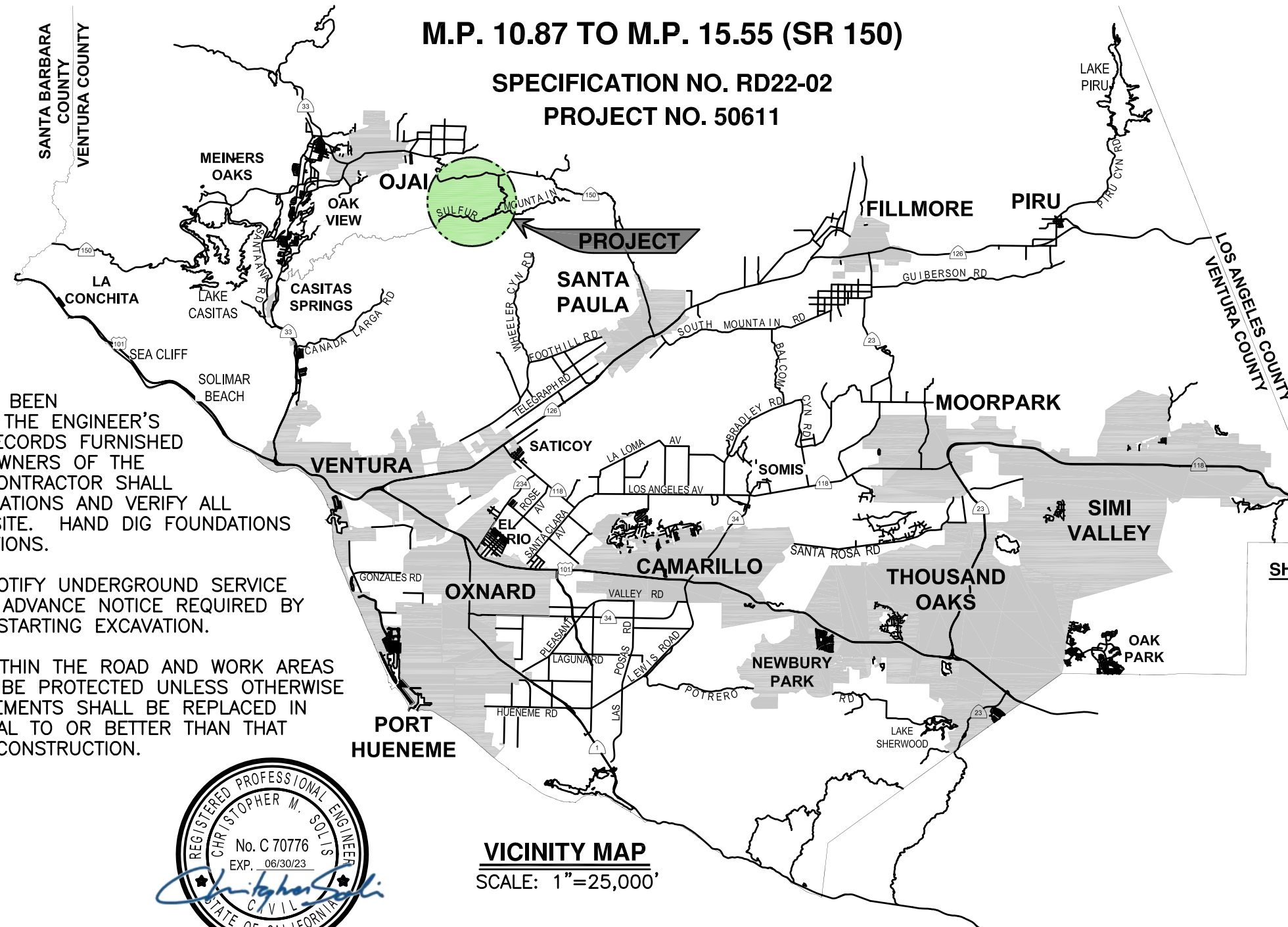
COUNTY OF VENTURA
PUBLIC WORKS AGENCY

PAVEMENT RESURFACING - SULPHUR MOUNTAIN ROAD

M.P. 10.87 TO M.P. 15.55 (SR 150)

SPECIFICATION NO. RD22-02

PROJECT NO. 50611



GENERAL NOTES:

1. ALL KNOWN UTILITIES HAVE BEEN LOCATED TO THE BEST OF THE ENGINEER'S ABILITY FROM DATA AND RECORDS FURNISHED BY THE REPRESENTATIVE OWNERS OF THE VARIOUS UTILITIES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS AND VERIFY ALL CONDITIONS ON THE JOB SITE. HAND DIG FOUNDATIONS UNTIL CLEAR OF OBSTRUCTIONS.
2. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 811 WITH ADVANCE NOTICE REQUIRED BY USA PROTOCOL PRIOR TO STARTING EXCAVATION.
3. EXISTING IMPROVEMENTS WITHIN THE ROAD AND WORK AREAS SHALL REMAIN AND SHALL BE PROTECTED UNLESS OTHERWISE NOTED. DAMAGED IMPROVEMENTS SHALL BE REPLACED IN KIND TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION.



VICINITY MAP
SCALE: 1"=25,000'

INDEX

SHT. NO.	DESCRIPTION
1	TITLE SHEET
2	LOCATION MAP
3	QUANTITY SCHEDULE AND DETAILS
4	PLAN SHEET M.P. 10.87 TO M.P. 12.37
5	PLAN SHEET M.P. 12.37 TO M.P. 13.87
6	PLAN SHEET M.P. 13.87 TO M.P. 15.55
7	DETAILS

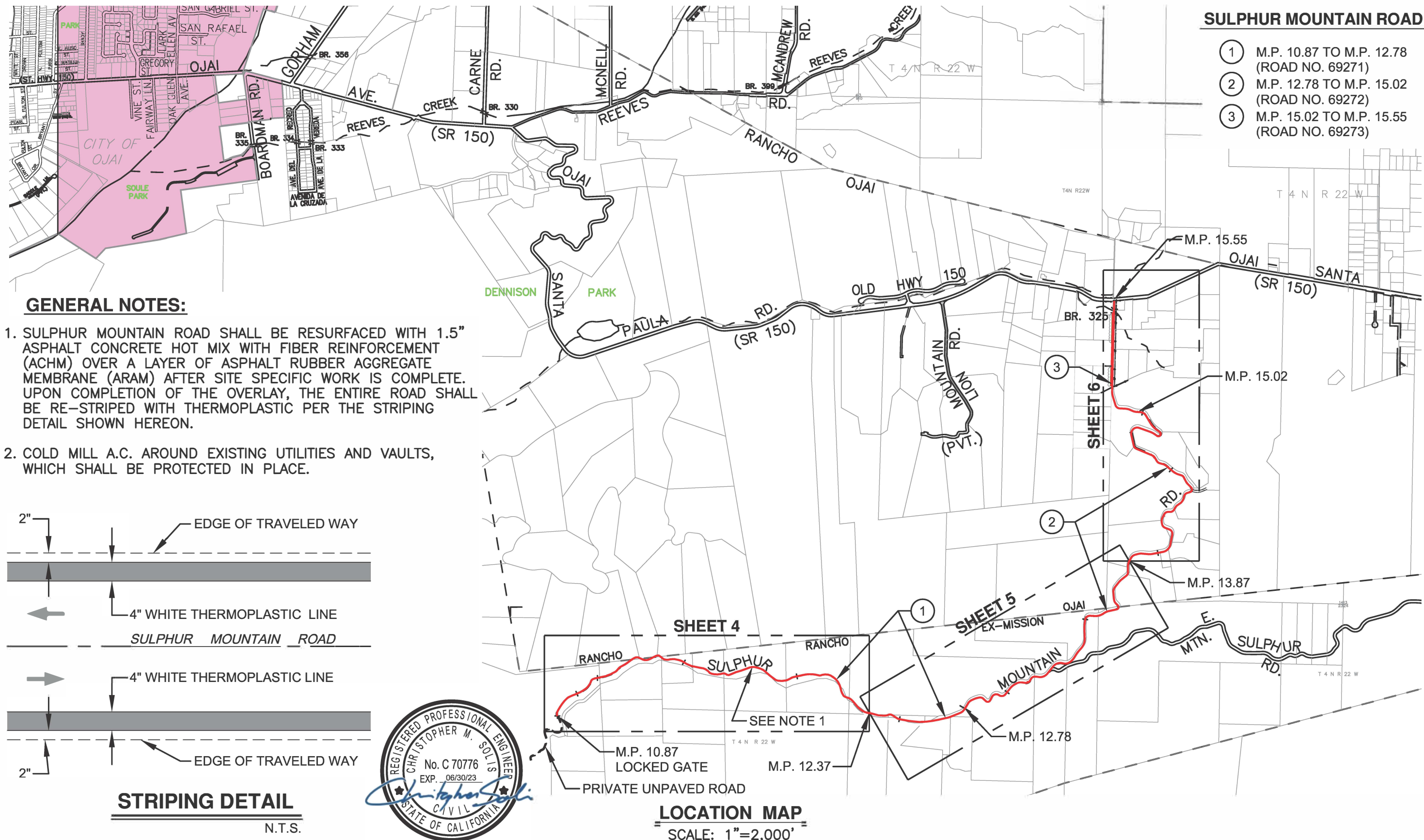
Chris Hooke
DEPUTY DIRECTOR, DESIGN DIVISION
Chris Hooke Acting
DIRECTOR OF ROADS & TRANSPORTATION
7/8/21
DIRECTOR OF PUBLIC WORKS

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
ROADS & TRANSPORTATION

SPEC. NO.
RD22-02
PROJ. NO.
50611

PAVEMENT RESURFACING - SULPHUR MTN. RD.
M.P. 10.87 TO M.P. 15.55 (SR 150)
TITLE SHEET

SHEET 1
OF 7
DRAWING NO.
116387

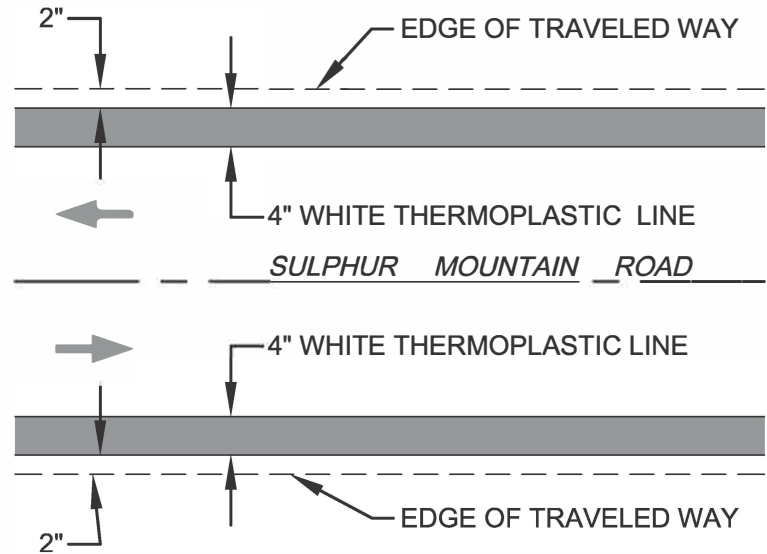


SULPHUR MOUNTAIN ROAD

- ① M.P. 10.87 TO M.P. 12.78
(ROAD NO. 69271)
- ② M.P. 12.78 TO M.P. 15.02
(ROAD NO. 69272)
- ③ M.P. 15.02 TO M.P. 15.55
(ROAD NO. 69273)

GENERAL NOTES:

- 1. SULPHUR MOUNTAIN ROAD SHALL BE RESURFACED WITH 1.5" ASPHALT CONCRETE HOT MIX WITH FIBER REINFORCEMENT (ACHM) OVER A LAYER OF ASPHALT RUBBER AGGREGATE MEMBRANE (ARAM) AFTER SITE SPECIFIC WORK IS COMPLETE. UPON COMPLETION OF THE OVERLAY, THE ENTIRE ROAD SHALL BE RE-STRIPED WITH THERMOPLASTIC PER THE STRIPING DETAIL SHOWN HEREON.
- 2. COLD MILL A.C. AROUND EXISTING UTILITIES AND VAULTS, WHICH SHALL BE PROTECTED IN PLACE.



STRIPING DETAIL
N.T.S.



LOCATION MAP
SCALE: 1"=2,000'

DESIGNED SOHIL BHAKTA
DRAWN JULIE STUART
CHECKED CHRIS SOLIS
APPROVED CH

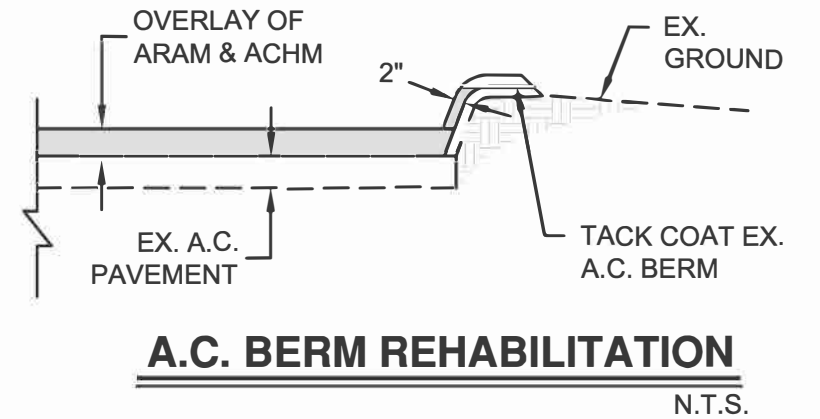
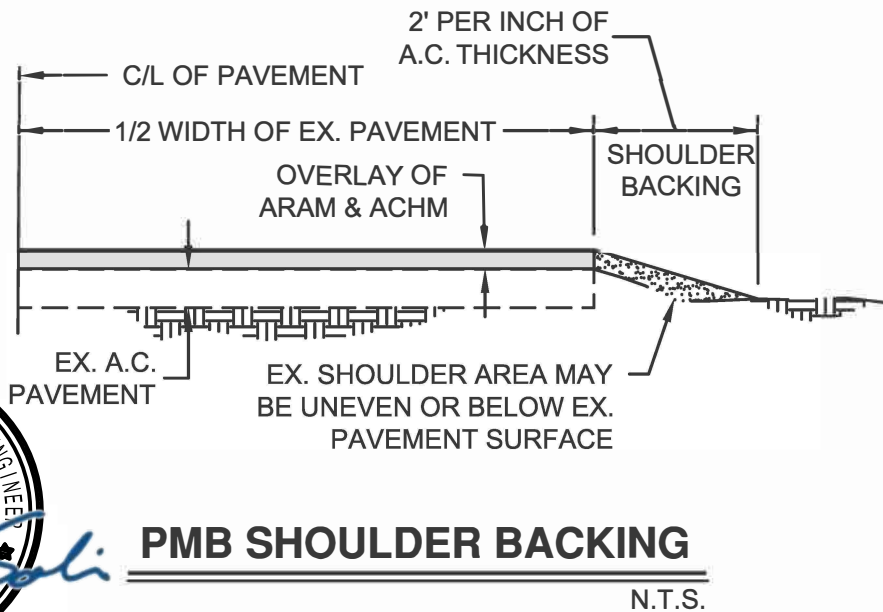
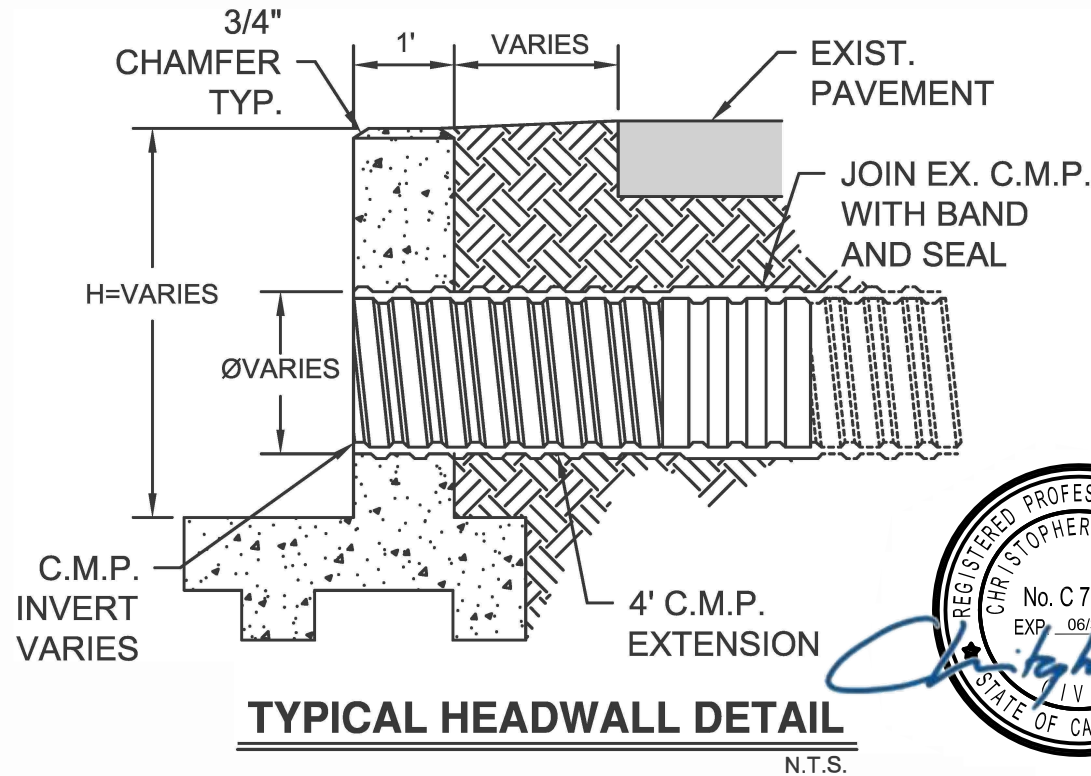
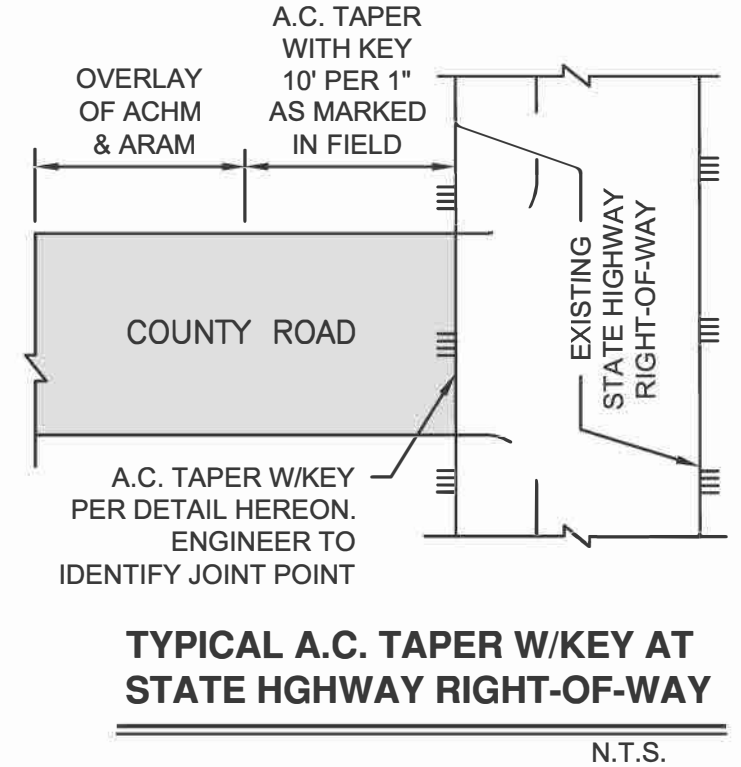
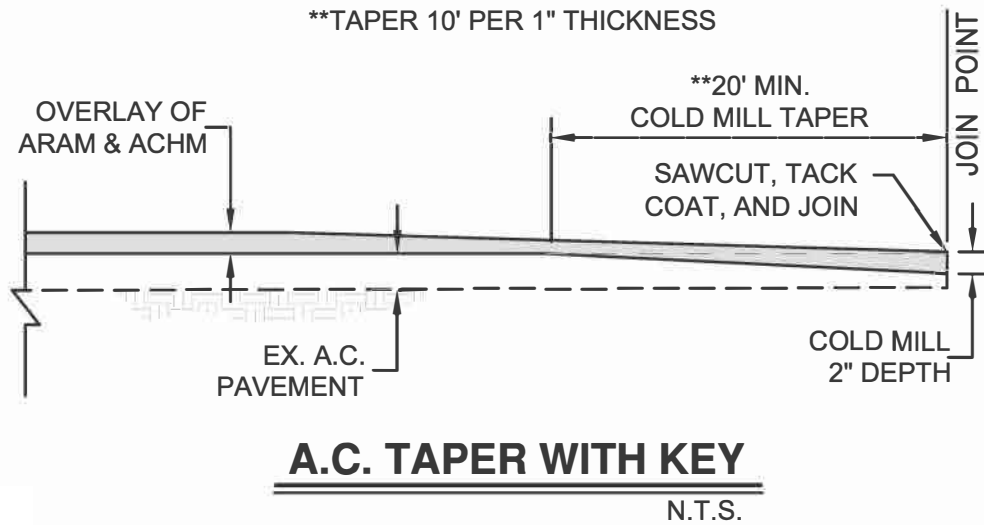
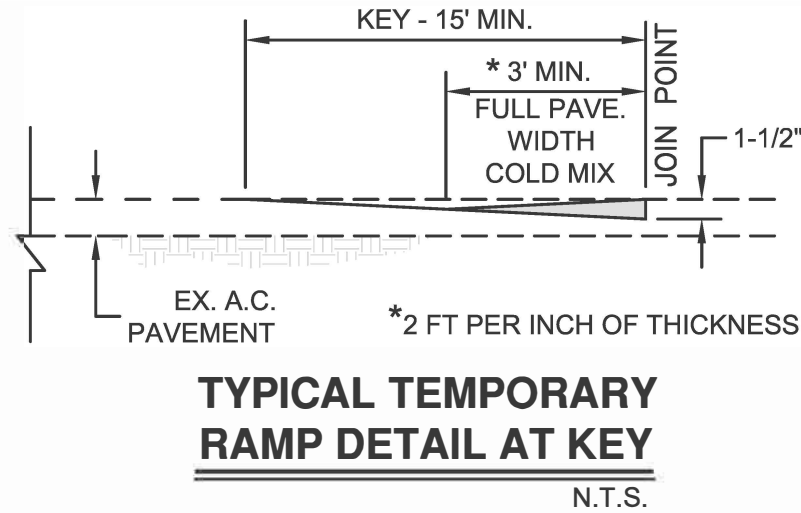
**COUNTY OF VENTURA
PUBLIC WORKS AGENCY
ROADS & TRANSPORTATION**

SPEC. NO.
RD22-02
PROJ. NO.
50611

PAVEMENT RESURFACING - SULPHUR MTN. RD.
M.P. 10.87 TO M.P. 15.55 (SR 150)
LOCATION MAP

SHEET 2
OF 7
DRAWING NO.
116388

ITEM NO.	ROAD NO.	ROAD NAME	ROAD LIMITS FROM - TO	LENGTH (MI)	WEIGHTED AVG. WIDTH (FT)	ARAM (SY)	ACHM W/FIBER (TONS)	A.C. SHOULDER (TONS)	BASE REPAIR (TONS)	MISC. PAVING (TONS)	HEAD-WALL (EA)	COLD MILLING (5' WIDE) (LF)	2" GRIND (SF)	A.C. TAPER W/KEY (SF)	A.C. DIKE (LF)	A.C. DIKE SEAL (LF)	FALLEN ROCK TO CLEAR (CY)	SHLDR BACKING (MI)
1	69271	SULPHUR MTN. RD.	GATE AT MP 10.87 - CULVERT AT MP 12.78	1.91	14	15,687	1,323			41		870				750	220	3.67
1	69272	SULPHUR MTN. RD.	GATE AT MP 12.78 - CULVERT AT MP 15.02	2.24	16	21,026	1,822	35		23	2	630			455	600		4.08
1	69273	SULPHUR MTN. RD.	GATE AT MP 15.02 - SR 150	0.53	37	11,505	1,038	65	20	46	3	130	1,300	2,015	720		155	1.06
TOTAL				4.68		48,218	4,183	100	20	110	5	1,630	1,300	2,015	1,175	1,350	375	8.81



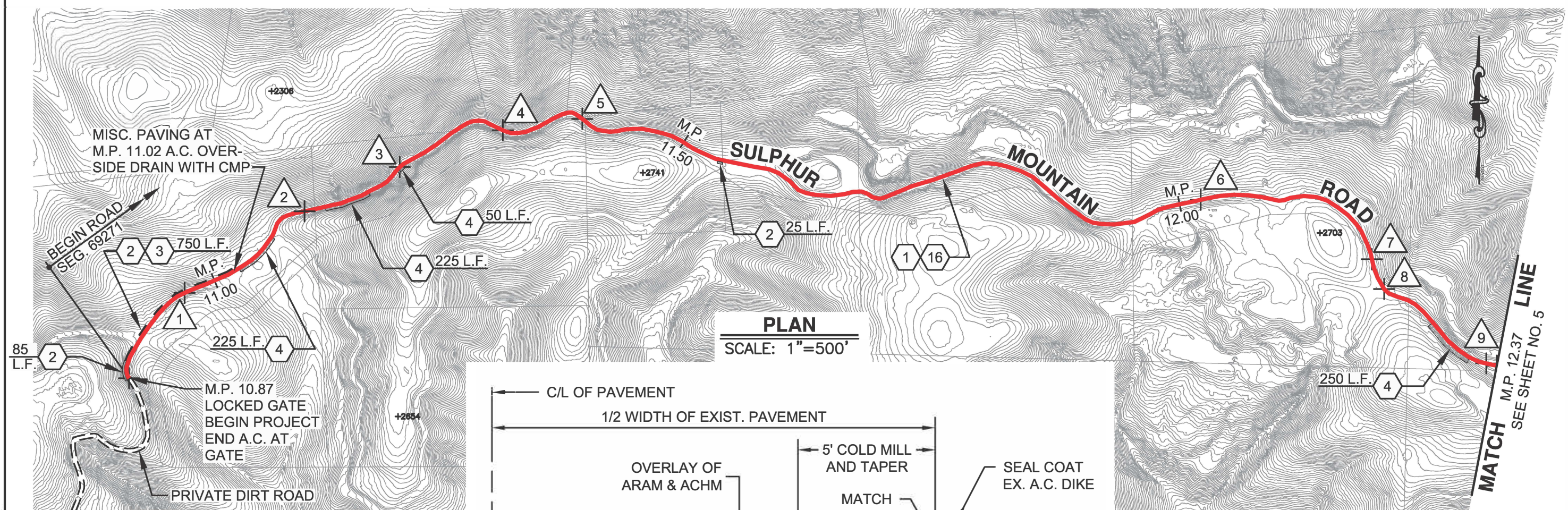
DESIGNED SOHIL BHAKTA
DRAWN JULIE STUART
CHECKED CHRIS SOLIS
APPROVED Chris Solis

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
ROADS & TRANSPORTATION

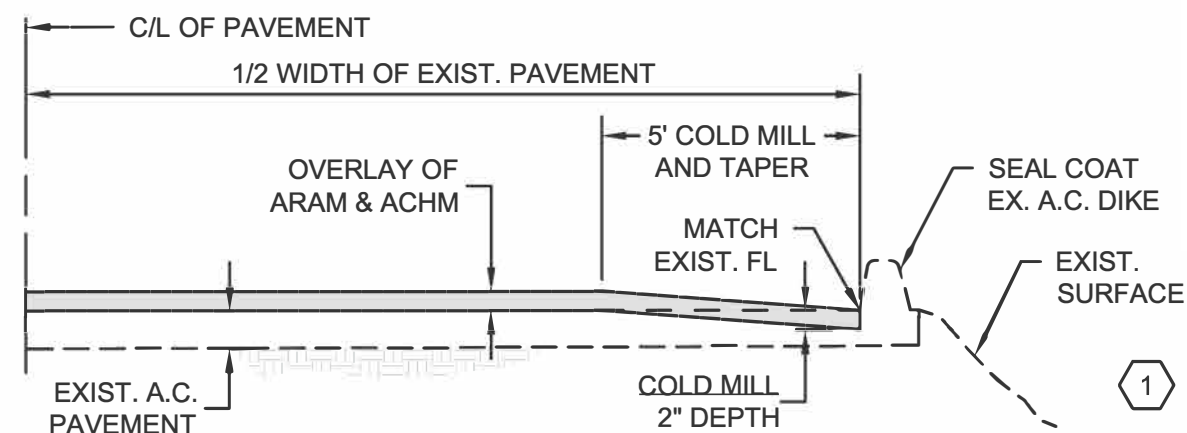
SPEC. NO.
RD22-02
PROJ. NO.
50611

PAVEMENT RESURFACING - SULPHUR MTN. RD.
M.P. 10.87 TO M.P. 15.55 (SR 150)
QUANTITY SCHEDULE AND TYPICAL DETAILS

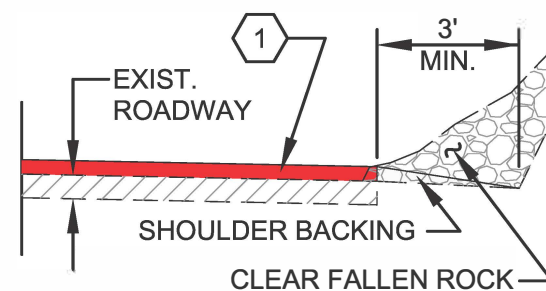
SHEET 3
OF 7
DRAWING NO.
116389



PLAN
SCALE: 1"=500'



DETAIL B
N.T.S.



DETAIL A
N.T.S.

CONSTRUCTION NOTES:

- 1 CONSTRUCT PAVEMENT RESURFACING 1.5" ASPHALT CONCRETE HOT MIX WITH FIBER REINFORCEMENT (ACHM) OVER ASPHALT RUBBER AGGREGATE MEMBRANE (ARAM) PER SPECIFICATIONS.
- 2 COLD MILL 860 L.F. AT DRIVEWAYS, VAULTS AND ALONG EXISTING DIKE AS SHOWN AND PER DETAIL "B" SHOWN HEREON.
- 3 CONSTRUCT 750 L.F. OF A.C. DIKE SEAL AS SHOWN AND PER DETAIL "B" SHOWN HEREON.
- 4 CLEAR 750 L.F. OF FALLEN ROCK AS MARKED IN THE FIELD AND PER DETAIL "A" SHOWN HEREON.
- 16 PAVEMENT MARKINGS SHALL BE REPLACED IN KIND WITH THERMOPLASTIC, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.



CULVERT TABLE			
CULVERT NUMBER	COUNTY NUMBER	DESCRIPTION	MILEPOST
1	69271-1	16" CMP	10.97
2	69271-2	36" CMP	11.11
3	69271-3	24" IP	11.21
4	69271-4	18"x24" CMPA	11.32
5	69271-5	18"x24" CMPA	11.40
6	69271-6	16" CMP	12.02
7	69271-7	18" CMP	12.21
8	69271-8	12" CMP	12.24
9	69271-9	24" CMP	12.36

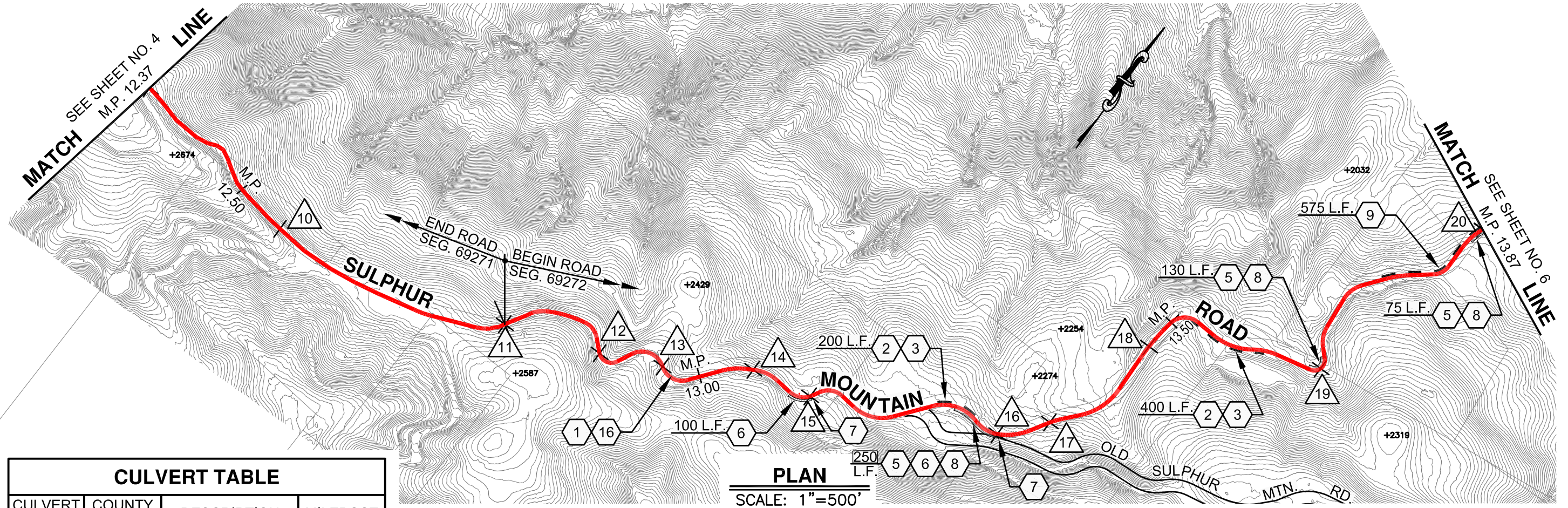
DESIGNED SOHIL BHAKTA
 DRAWN JULIE STUART
 CHECKED CHRIS SOLIS
 APPROVED CH

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
ROADS & TRANSPORTATION

SPEC. NO.
RD22-02
 PROJ. NO.
50611

PAVEMENT RESURFACING - SULPHUR MTN. RD.
M.P. 10.87 TO M.P. 15.55 (SR 150)
PLAN SHEET MILE POST 10.87 TO MILE POST 12.37

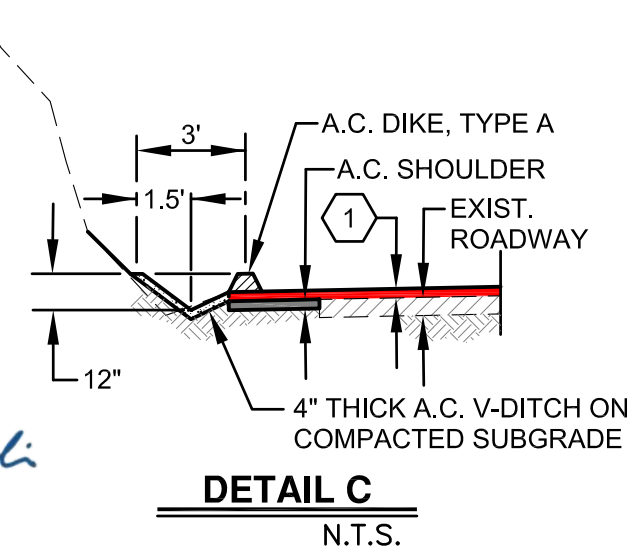
SHEET 4
 OF 7
 DRAWING NO.
116390



CULVERT TABLE			
CULVERT NUMBER	COUNTY NUMBER	DESCRIPTION	MILEPOST
10	69271-10	18" CMP	12.55
11	69271-11	24" CMP	12.78
12	69272-1	72" CMP	12.89
13	69272-2	18" CMP	12.96
14	69272-3	24" CMP	13.05
15	69272-4	18" CMP	13.11
16	69272-5	24" CMP	13.30
17	69272-6	72" CMP	13.35
18	69272-7	18" CMP	13.47
19	69272-8	18" CMP	13.65
20	69272-9	18" CMP	13.87

CONSTRUCTION NOTES:

- 1 CONSTRUCT PAVEMENT RESURFACING 1.5" ASPHALT CONCRETE HOT MIX WITH FIBER REINFORCEMENT (ACHM) OVER ASPHALT RUBBER AGGREGATE MEMBRANE (ARAM) PER SPECIFICATIONS.
- 2 COLD MILL 600 L.F. AT DRIVEWAYS, VAULTS, AND ALONG EXISTING A.C. DIKE. SEE DETAIL "B", SHEET 4.
- 3 CONSTRUCT 600 L.F. OF A.C. DIKE SEAL, SEE DETAIL "B", SHEET 4.
- 5 CONSTRUCT 455 L.F. OF A.C. DIKE, TYPE A PER SSP A87B AS SHOWN IN DETAIL "C" HEREON.
- 6 CONSTRUCT 4" THICK A.C. V-DITCH ON COMPACTED SUBGRADE PER SPECIFICATIONS AND AS SHOWN ON DETAIL "C" HEREON.
- 7 CONSTRUCT TYPE L HEADWALL PER SSP D89 MODIFIED, $L_1=5'$ AND $L_2=4'$, AT EXISTING CULVERT. TOP OF HEADWALL SHALL BE FLUSH WITH FINISHED GROUND, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
- 8 CONSTRUCT 4 FOOT WIDE A.C. SHOULDER 3" THICK PRIOR TO THE OVERLAY, THEN PLACE ARAM AND ACHM OVERLAY PER SPECIFICATIONS. SEE DETAIL "C" HEREON.
- 9 CONSTRUCT A.C. BERM REHABILITATION PER DETAIL ON SHEET 3.
- 16 PAVEMENT MARKINGS SHALL BE REPLACED IN KIND WITH THERMOPLASTIC, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.



DESIGNED SOHIL BHAKTA
DRAWN JULIE STUART
CHECKED CHRIS SOLIS
APPROVED CH

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
ROADS & TRANSPORTATION

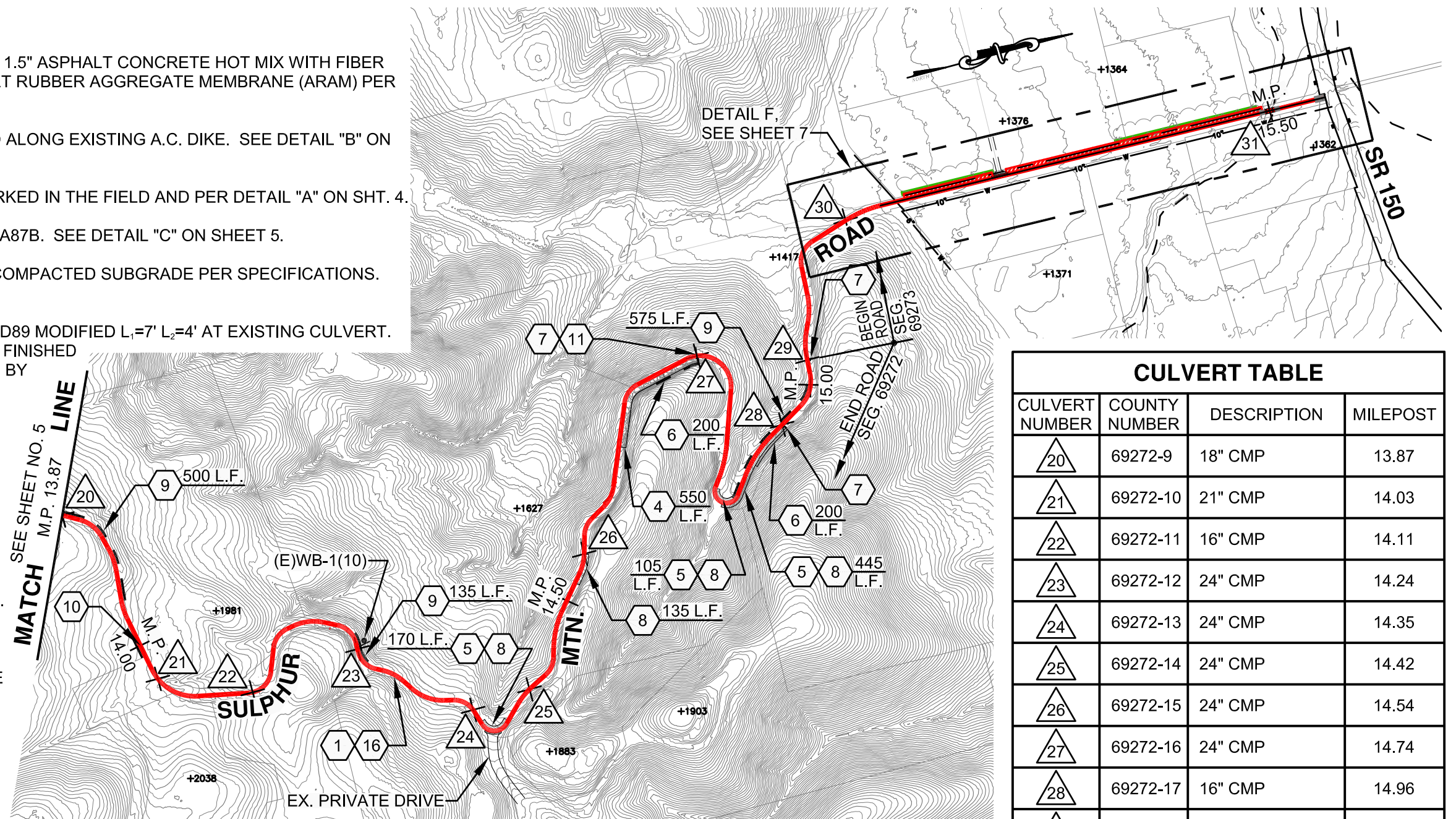
SPEC. NO.
RD22-02
PROJ. NO.
50611

PAVEMENT RESURFACING - SULPHUR MTN. RD.
M.P. 10.87 TO M.P. 15.55 (SR 150)
PLAN SHEET MILE POST 12.37 TO MILE POST 13.87

SHEET 5
OF 7
DRAWING NO.
116391

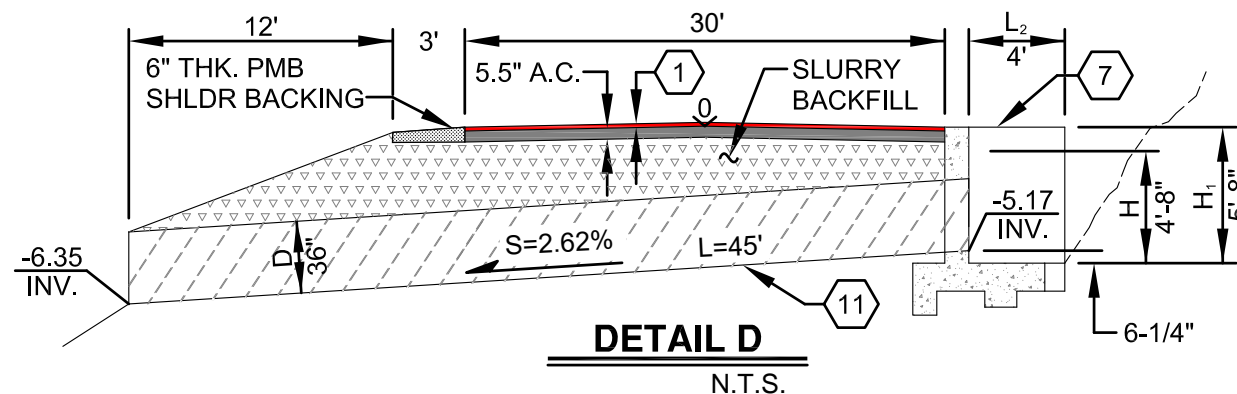
CONSTRUCTION NOTES:

- 1 CONSTRUCT PAVEMENT RESURFACING 1.5" ASPHALT CONCRETE HOT MIX WITH FIBER REINFORCEMENT (ACHM) OVER ASPHALT RUBBER AGGREGATE MEMBRANE (ARAM) PER SPECIFICATIONS.
- 2 COLD MILL AT DRIVEWAYS, VAULTS AND ALONG EXISTING A.C. DIKE. SEE DETAIL "B" ON SHEET 4.
- 4 CLEAR 550 L.F. OF FALLEN ROCK AS MARKED IN THE FIELD AND PER DETAIL "A" ON SHT. 4.
- 5 CONSTRUCT A.C. DIKE TYPE A PER SSP A87B. SEE DETAIL "C" ON SHEET 5.
- 6 CONSTRUCT 4" THICK A.C. V-DITCH ON COMPACTED SUBGRADE PER SPECIFICATIONS. SEE DETAIL "C" ON SHEET 5.
- 7 CONSTRUCT TYPE L HEADWALL PE SSP D89 MODIFIED L₁=7' L₂=4' AT EXISTING CULVERT. TOP OF HEADWALL SHALL BE FLUSH WITH FINISHED GRADE, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
- 8 CONSTRUCT 4' WIDE A.C. SHOULDER 3" THICK PRIOR TO THE OVERLAY, THEN PLACE ARAM AND ACHM OVERLAY PER SPECIFICATIONS. SEE DETAIL "C" ON SHEET 5.
- 9 CONSTRUCT A.C. BERM REHABILITATION.
- 10 GRIND OFF BUMP IN ROAD AT M.P. 14.00 AND REMOVE AND DISPOSE OF (2) SIGNS.
- 11 REPLACE CULVERT WITH 36" SPIRAL RIBBED SMOOTH INTERIOR STEEL PIPE PER SPECIFICATIONS, STANDARD PLATE E-11 AND DETAIL "D" HEREON.
- 16 PAVEMENT MARKINGS SHALL BE REPLACED IN KIND WITH THERMOPLASTIC, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.



CULVERT TABLE

CULVERT NUMBER	COUNTY NUMBER	DESCRIPTION	MILEPOST
20	69272-9	18" CMP	13.87
21	69272-10	21" CMP	14.03
22	69272-11	16" CMP	14.11
23	69272-12	24" CMP	14.24
24	69272-13	24" CMP	14.35
25	69272-14	24" CMP	14.42
26	69272-15	24" CMP	14.54
27	69272-16	24" CMP	14.74
28	69272-17	16" CMP	14.96
29	69272-18	16" CMP	15.02
30	69273-1	18" CMP	15.15
31	BR. 325	6'x16'x34' RCB	15.50



PLAN SCALE: 1"=500'



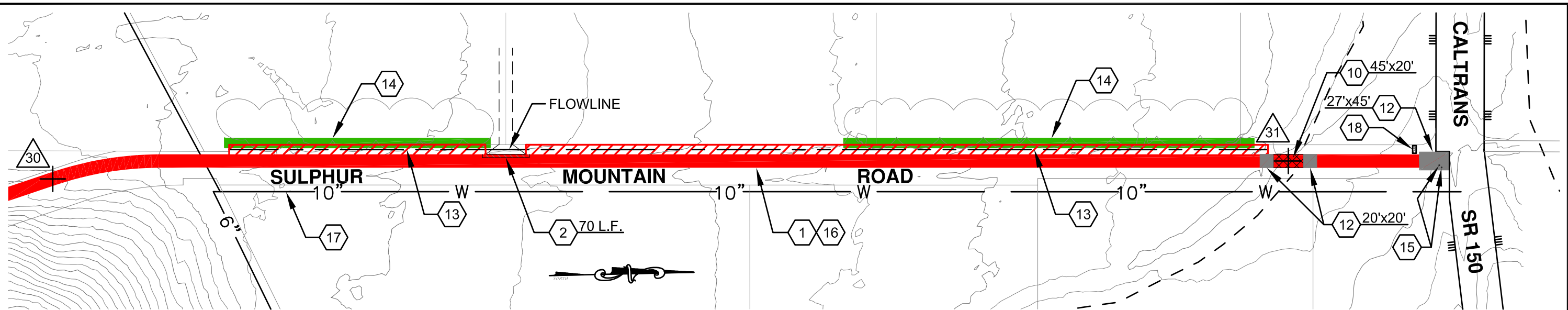
DESIGNED SOHIL BHAKTA
 DRAWN JULIE STUART
 CHECKED CHRIS SOLIS
 APPROVED CS

**COUNTY OF VENTURA
 PUBLIC WORKS AGENCY
 ROADS & TRANSPORTATION**

SPEC. NO.
RD22-02
 PROJ. NO.
50611

**PAVEMENT RESURFACING - SULPHUR MTN. RD.
 M.P. 10.87 TO M.P. 15.55 (SR 150)
 PLAN SHEET MILE POST 13.87 TO MILE POST 15.55 (SR 150)**

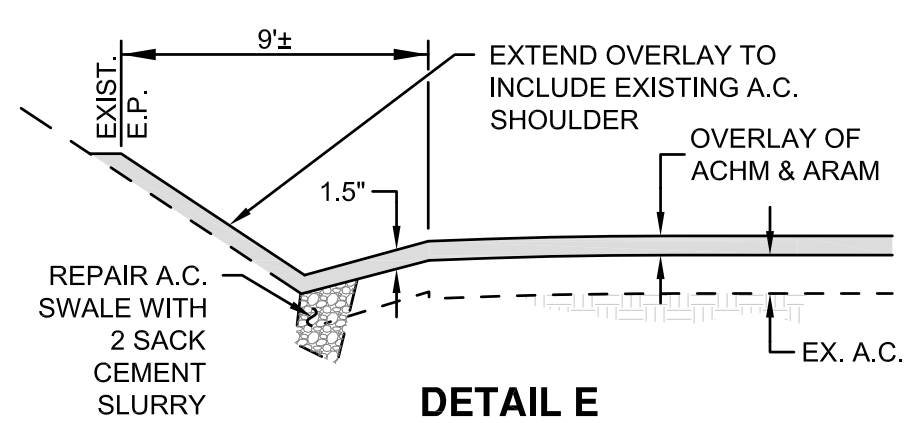
SHEET 6
 OF 7
 DRAWING NO.
116392



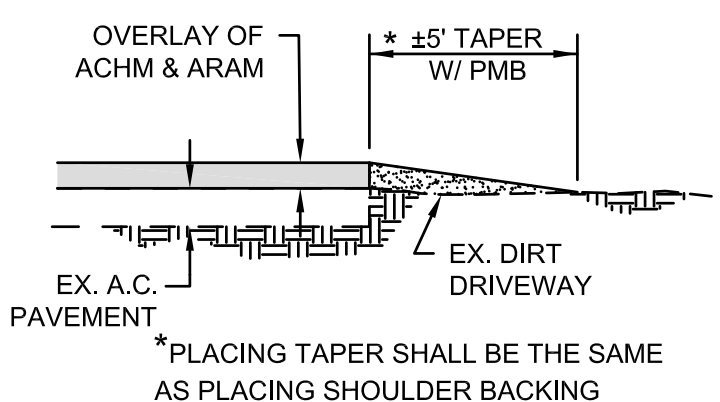
CULVERT TABLE			
CULVERT NUMBER	COUNTY NUMBER	DESCRIPTION	MILEPOST
30	69273-1	18" CMP	15.15
31	BR. 325	6'x16'x34' RCB	15.50

- CONSTRUCTION NOTES:**
- CONSTRUCT PAVEMENT RESURFACING 1.5" ASPHALT CONCRETE HOT MIX WITH FIBER REINFORCEMENT (ACHM) OVER ASPHALT RUBBER AGGREGATE MEMBRANE (ARAM) PER SPECIFICATIONS.
 - COLD MILL AT DRIVEWAYS, VAULTS AND ALONG EXIST. A.C. DIKE PER DETAIL "B" ON SHEET 4.
 - 2" FULL WIDTH GRIND.
 - CONSTRUCT A.C. TAPER WITH KEY AT INTERSECTION OF SR 150 AND AT CONCRETE DRIVEWAYS.
 - CONSTRUCT A.C. SHOULDER REPAIR AS SHOWN, PER THE SPECIFICATIONS AND PER DETAIL "E" HEREON.
 - TRIM TREES.
 - EXISTING VALVES NEAR INTERSECTION, PROTECT IN PLACE.
 - PAVEMENT MARKINGS SHALL BE REPLACED IN KIND WITH THERMOPLASTIC, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
 - EXISTING 10" CMWD WATER LINE IN SHOULDER, PROTECT IN PLACE.
 - PLACE PORTABLE CHANGEABLE MESSAGE SIGN FOR THE DURATION OF THE PROJECT.

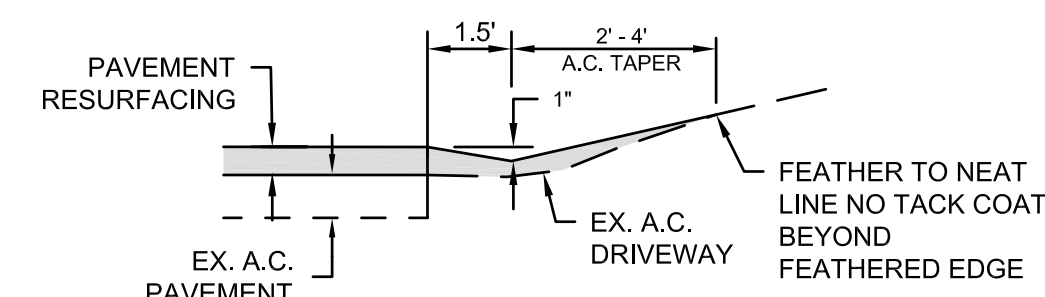
DETAIL F
SCALE: 1"=150'



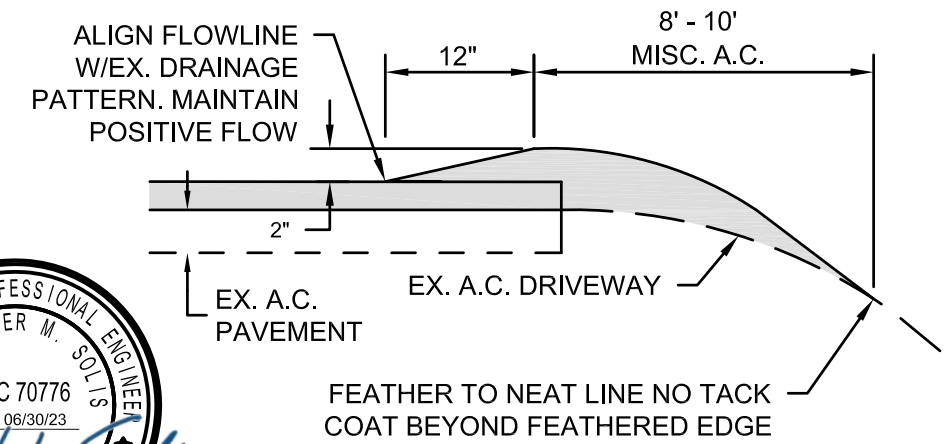
DETAIL E
N.T.S.



TYPICAL DIRT DRIVEWAY TAPER
N.T.S.



UPHILL A.C. DRIVEWAY DETAIL
MISCELLANEOUS PAVING N.T.S.



DOWNHILL A.C. DRIVEWAY DETAIL
MISCELLANEOUS PAVING N.T.S.



DESIGNED SOHIL BHAKTA
DRAWN JULIE STUART
CHECKED CHRIS SOLIS
APPROVED [Signature]

**COUNTY OF VENTURA
PUBLIC WORKS AGENCY
ROADS & TRANSPORTATION**

SPEC. NO.
RD22-02
PROJ. NO.
50611

PAVEMENT RESURFACING - SULPHUR MTN. RD.
M.P. 10.87 TO M.P. 15.55 (SR 150)
DETAILS

SHEET 7
OF 7
DRAWING NO.
116393