# COUNTY OF VENTURA PUBLIC WORKS AGENCY

# BRIDGE ROAD BRIDGE DECK REPAIR COUNTY BRIDGE # 442

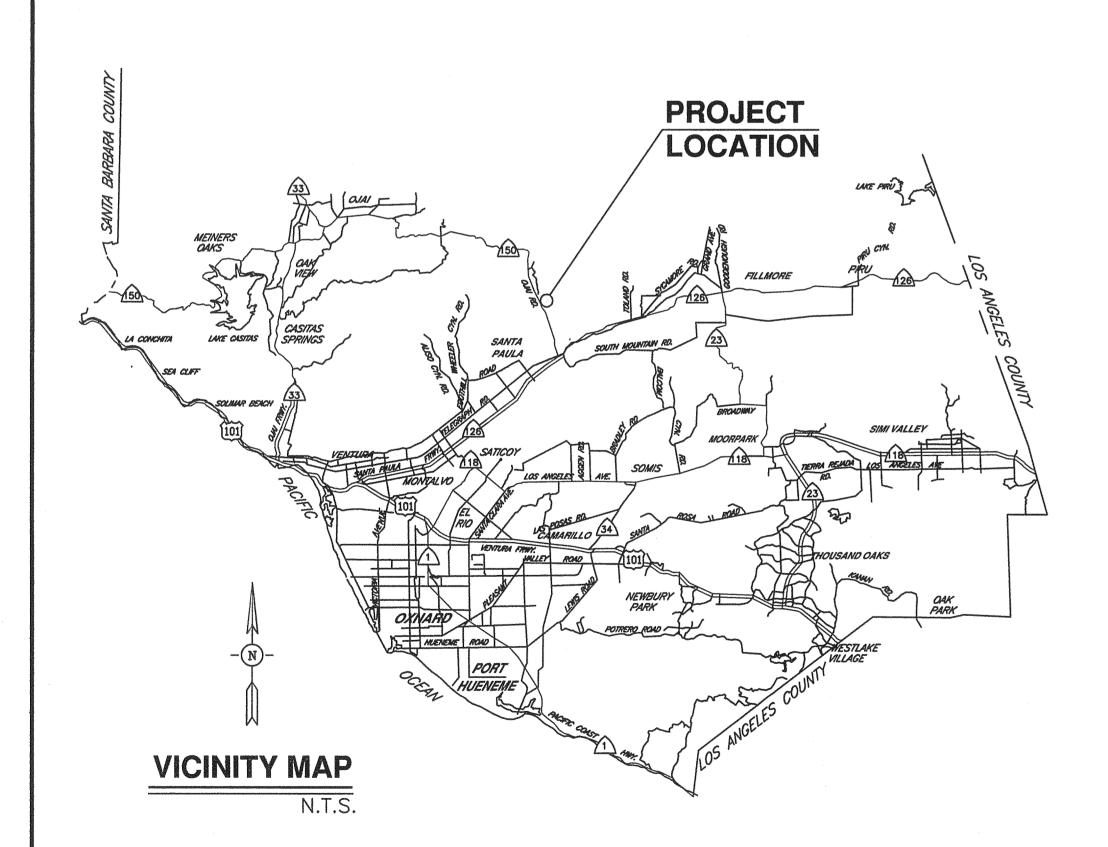
PROLECT LENGTH= 0.031 MILE

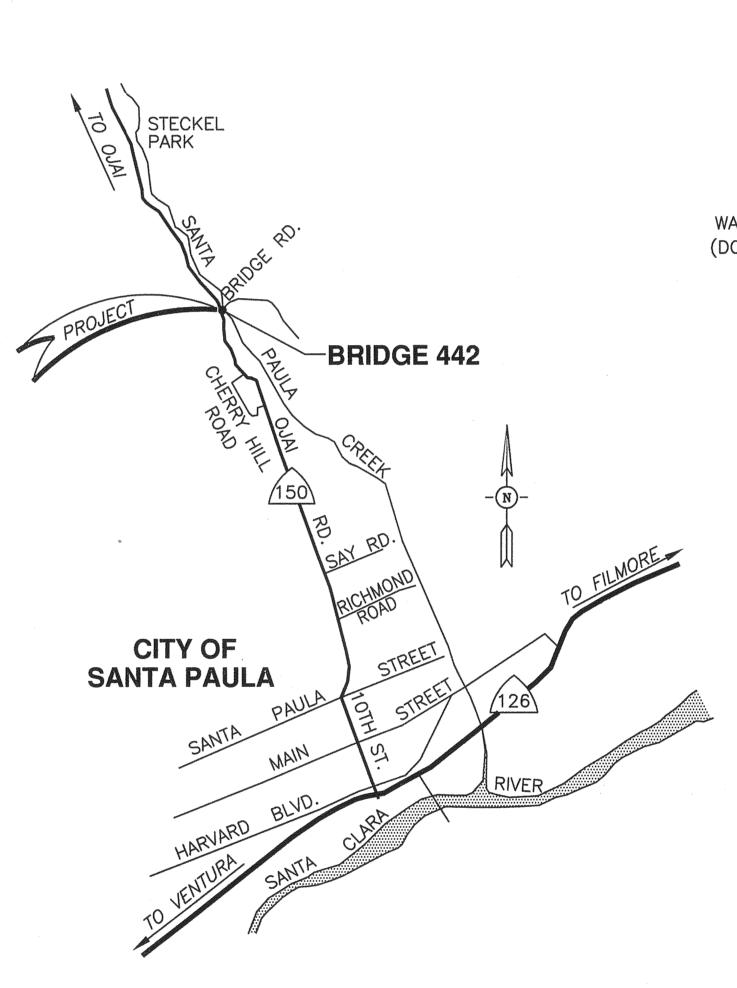
**SPECIFICATION NO. RD09-13** 

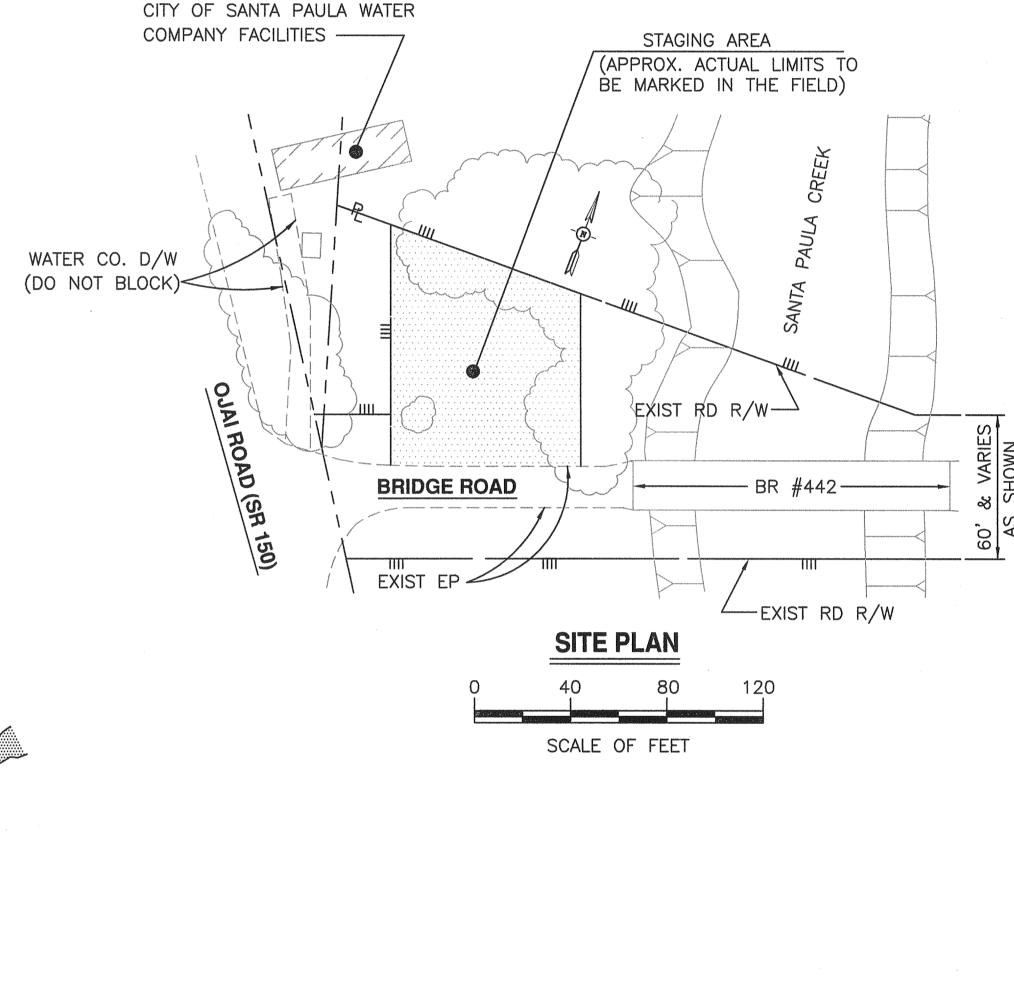
PROJECT NO. 50422

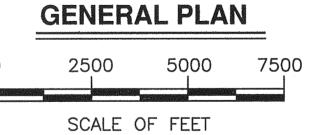
# **GENERAL NOTES:**

- 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.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 1(800) 227-2600 AT LEAST TWO WORKING DAYS PRIOR TO STARTING EXCAVATION.









# SHEET NO.

# DESCRIPTION

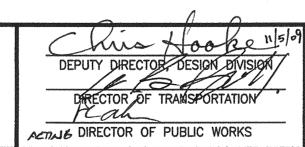
1 TITLE SHEET

2 PLAN ELEVATION AND DETAILS

INDEX

3 BEAM NO. 5 REPAIR PLAN, SECTION AND DETAIL NO. 1

4 BEAM NO. 5 REPAIR, DETAILS NO. 2 AND NO. 3



COUNTY OF VENTURA
PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT

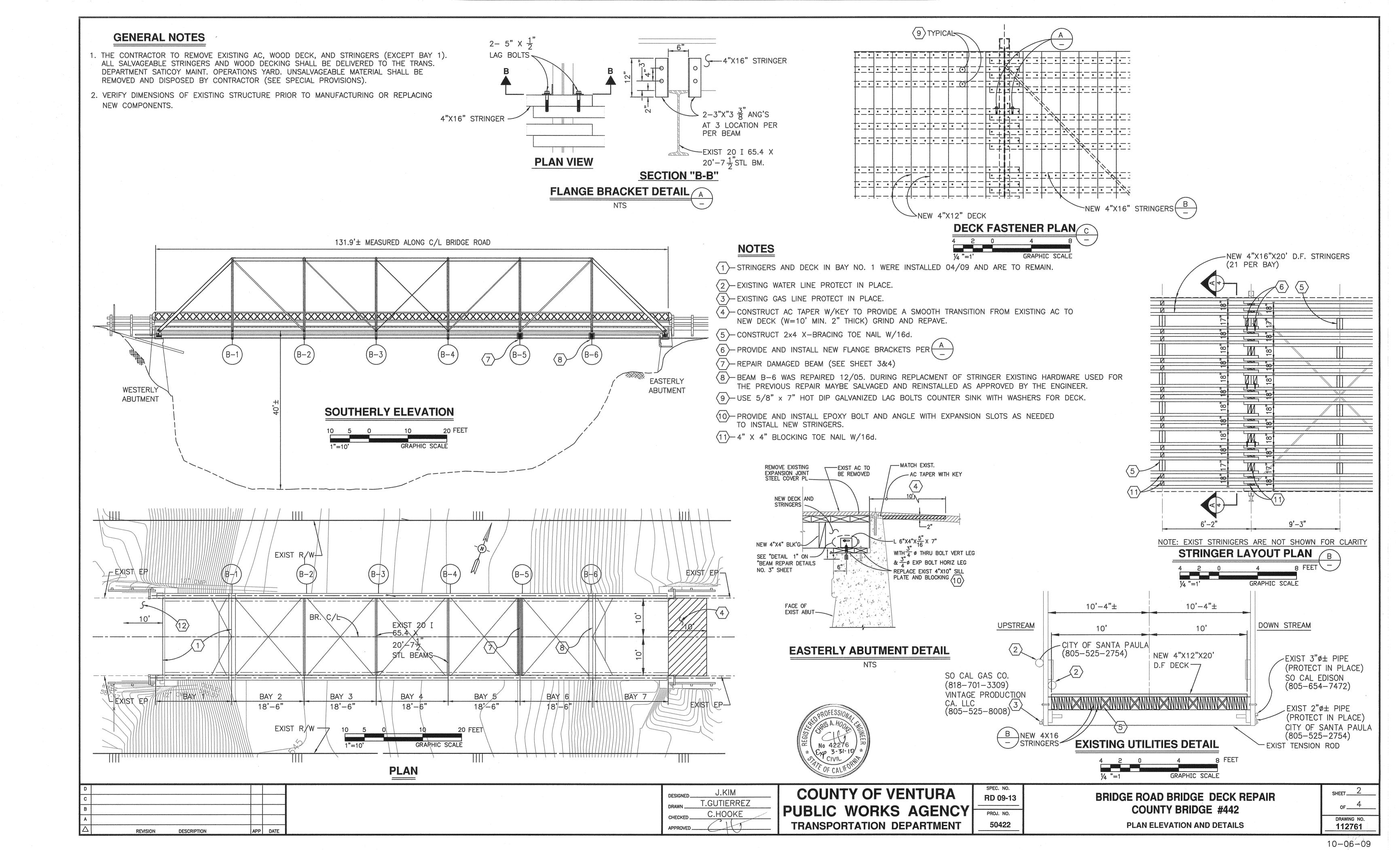
SPEC. NO.

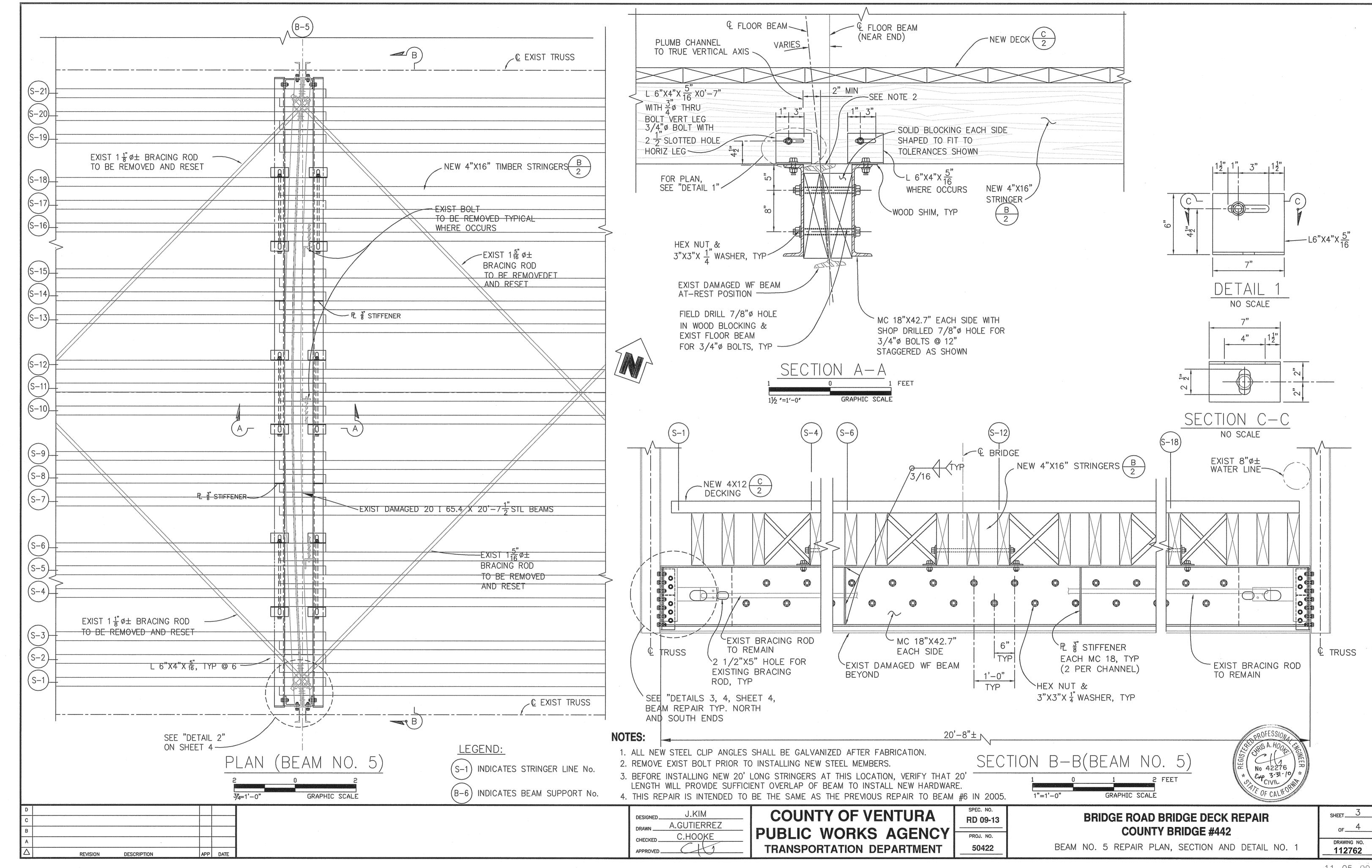
RD09-13

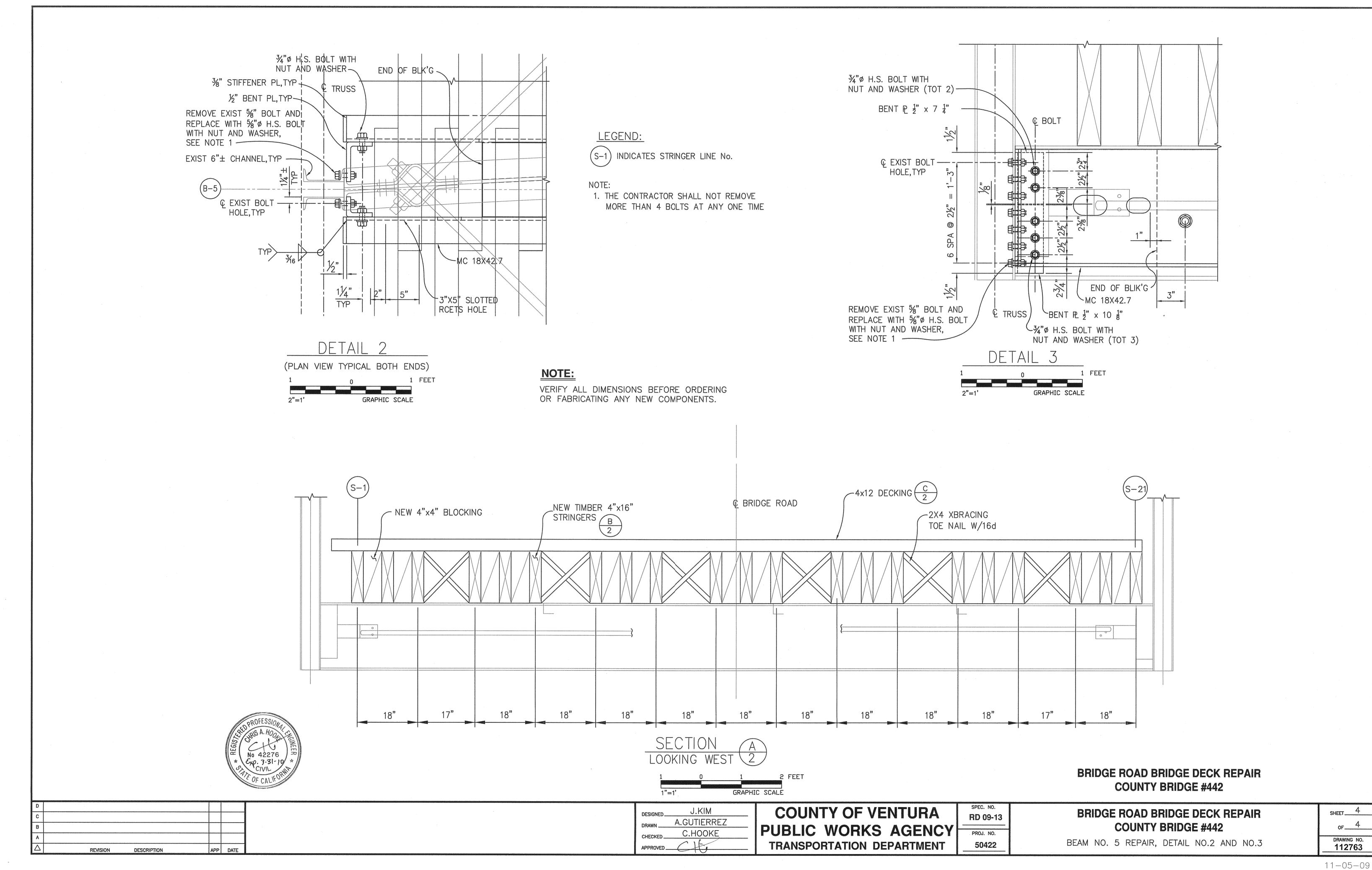
PROJ. NO.

50422

BRIDGE ROAD BRIDGE DECK REPAIR
COUNTY BRIDGE # 442
TITLE SHEET







# COUNTY OF VENTURA PUBLIC WORKS AGENCY

# NOTICE INVITING BIDS, PROPOSAL FORM, & SPECIFICATIONS

FOR

**PROJECT** 

**BRIDGE ROAD BRIDGE DECK REPAIR** 

NAME

**COUNTY BRIDGE #442** 

**LOCATION** 

**BRIDGE ROAD BRIDGE .02 MILES EAST OF SR 150** 

SPECIFICATION NO.

RD09-13

COST ACCOUNTING PROJECT NO.

50422

DESIGNED BY CHRIS HOOKE

**CHECKED BY** 

**GLENN DEROSSETT** 

**REVIEWED BY** 

**CHRIS HOOKE** 

PROJECT MANAGER: JEEWOONG KIM



RECOMMENDED BY:

**Deputy Director of Transportation** 

APPROVED BY:

**Director of Transportation** 

APPROVED BY:

**Director of Public Works Agency** 

BIDS WILL BE RECEIVED UNTIL 2:00 P.M. December 3, 2009

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 now available on the Ventura County Web Site.

Printed copies may also be purchased at the Ventura County Hall of Administration, 800 South Victoria Ave, Ventura, CA 93009-1670 (Surveyor's Public Counter on 3<sup>rd</sup> floor).

# NOTICE TO BIDDERS, SUBCONTRACTORS AND SUPPLIERS SOURCES OF INFORMATION

# **DURING BIDDING PERIOD**

# PLAN HOLDERS LIST IS AVAILABLE ON THE INTERNET AT:

http://publicworks.countyofventura.org/eng\_services/eng\_serv.htm

Click on "Construction Projects"

NUMBER OF ADDENDA ISSUED: Phone: (805) 654-2068

**TECHNICAL QUESTIONS** on plans and specifications: FAX: (805) 677-8762

Please call early in the bidding period to discuss Phone: (805) 654-3805

problems that may require an addendum. and indicate bid question.

# Please do not call other staff members or consultant.

Note that our consultants are directed to refer all calls to the numbers listed.

# **DIRECTIONS TO VENTURA COUNTY GOVERNMENT CENTER**

**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 Cal126 (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.

**Go to the Hall of Administration** (building nearest the corner of Victoria & Telephone) and to the Surveyors counter on the third floor (at the top of the escalator) where plans can be purchased and bids placed in the **bid box**.

# ONLY AFTER BID OPENING

# BID RESULTS ARE AVAILABLE ON THE INTERNET AT:

http://publicworks.countyofventura.org/eng\_services/eng\_serv.htm

Click on "Construction Projects"

Usually posted within 24 hours after bid are opened.

Includes abstracts of unit prices, totals of all bids & subcontractor's list for low & 2<sup>nd</sup> bidder.

# LOW BIDDER - ONLY AFTER AWARD OF CONTRACT

CONTRACT PREPARATION (Low Bidder only)
Phone: (805) 654-3984
FAX: (805) 677-8762

.....

ALL QUESTIONS concerning project Project Manager

NOTICE TO BIDDERSourceR.doc

# **COUNTY OF VENTURA**

# SPECIFICATION NO. RD09-13 PROJECT NO. 50422

# TABLE OF CONTENTS

Notice of Inviting Bids	1	page
Proposal	8	pages
Prevailing Rates of Wages	1	page
Excerpts from the California Labor Code	6	pages
Ventura County Standard Specification Table of Contents	8	pages
Standard Specifications	74	pages
Table of Contents-Special Provisions	1	page
Special Provisions (1000-1009)	11	pages
Plans	4	pages

# **COUNTY OF VENTURA**

# **NOTICE INVITING BIDS**

Sealed bids will be received in the bid box at the County Surveyor's Public Counter, 3rd Floor, Administration Building, 800 South Victoria Avenue, Ventura, California 93009-1670, until 2:00 p.m. on the 3<sup>rd</sup> of December, 2009 and afterwards publicly opened, for BRIDGE ROAD BRIDGE DECK REPAIR, COUNTY BRIDGE #442, for Specification No. RD09-13, which consists of removal of AC on deck, removal and replacement of existing deck planks and stringers on six bays of the bridge not including the first westerly bay, and repairing one steel floor beam.

The estimated cost of construction is \$ 270,000.00.

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:

http://countyofventura.org then click Construction Bids.

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.

Printed copies may also be purchased for **\$14.91** including tax and shipping, non-refundable (**\$5.41** if picked up) Make checks payable to the County of Ventura and send to the attention of, or bring to, the County Surveyor's Office at the Ventura County Hall of Administration, 800 South Victoria Ave, Ventura, CA 93009-1670 (Surveyor's Public Counter on 3<sup>rd</sup> floor).

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 Recent Bid Results.

For **Technical Questions** concerning bidding documents, **Fax 805-677-8762**.

Bids must be submitted on the proposal form furnished with said documents. 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 (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.

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 also obtain printed copies of the wage rates pertaining to specific current projects at the Ventura County Surveyor's public counter.

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

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

# PROPOSAL FOR

# BRIDGE ROAD BRIDGE DECK REPAIR COUNTY BRIDGE #442

**COUNTY PROJECT NO.: 50422** 

LOCATED IN VENTURA COUNTY, CALIFORNIA

MAKE BID GUARANTEE TO COUNTY OF VENTURA
USE FORM PROVIDED (SEE PARAGRAPH 9, INSTRUCTION TO BIDDERS).

SPECIFICATION NO. RD09-13 INCLUDING 4 SHEETS OF PLANS

BIDS WILL BE RECEIVED ON DECEMBER 3RD, 2009 AT 2:00 P.M.

AGENCY IS ALLOWED 60 DAYS TO AWARD A CONTRACT (SEE SECTION 2-1.1).

THE STARTING DATE OF CONTRACT WILL BE **14** CALENDAR DAYS AFTER AWARD OF CONTRACT (SEE SECTION 6-7.4).

COMPLETION TIME IS 42 WORKING DAYS (SEE SECTION 6-7).

LIQUIDATED DAMAGES ARE \$800 PER CALENDAR DAY (SEE SECTION 6-9).

CONTRACTOR'S LICENSE CLASSIFICATION REQUIRED IS CLASS A.

LIABILITY INSURANCE CLASS REQUIRED PER SECTION 7-4 IS L-B.

FEDERAL-AID CONTRACT PROVISIONS ARE NOT INCLUDED IN THESE SPECIFICATIONS.

THE NUMBER OF PAGES IN THIS PROPOSAL IS 8.

BIDDE	R SHALL COMI	PLETE	
NAME:			
MAILING ADDRESS:			
CITY:	STATE:	ZIP COD	E:
TELEPHONE NUMBER: ()	•	FAX No. ()_	
eMAIL ADDRESS:	Later to the second sec		

# 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 7 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. **MODIFICATION AND INTERPRETATION**. Carefully review the plans and specifications for any errors, omissions, or ambiguities. If you discover any, notify the Engineering Services Department of the Agency far enough in advance of the bid opening to allow time for the issuance of appropriate written addenda. 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 on one copy only of this proposal form, with addenda acknowledged by inserting the addenda numbers on page 7 of this proposal and with bid quarantee 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 Avenue, Ventura, California 93009-1670.

For proper handling, mark 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 withdrawls 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. The person opening bids will not accept bids that are not in the bid box at closing time. Time can be obtained from <a href="http://www.time.gov/timezone.cgi?Pacific/d/-8">http://www.time.gov/timezone.cgi?Pacific/d/-8</a> (local standard time). Note that clocks in the building may not be set to the correct time and should not be relied upon.
- 12. **DELIVERY OF BID**. Bids delivered in person must be placed in the bid box near the Surveyor's Public Counter located at the head of the escalator on the third floor of the Ventura County Hall of Administration Building, 800 South Victoria Avenue, Ventura, California. The Hall of Administration is on the corner of Victoria Avenue and Telephone Road and is accessible from the Ventura Freeway (U.S. 101) by taking the Victoria Avenue off ramp and proceeding north on Victoria Avenue about one mile to Telephone Road. Access from the Santa Paula Freeway (Cal. 126) is by the Victoria Avenue off ramp, then south about 1/4 mile to Telephone Road. Access to the Hall of Administration parking lot is from Telephone Road at Lark St one block east of Victoria Ave. Bids must be placed in the bid box prior to the hour and date designated on Page 1 of this proposal.

13. **MAILED BIDS (Including Express Delivery)**. Bids received in the County's Mail Room by 8 a.m. on 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 responsible for sending bid early enough to insure delivery to the County on time.

Mark bids, not placed directly in the bid box, in large letters on the outside of the delivery envelope "SEALED BID" and 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 form 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  $$\phi$ ) is entered with a unit price, lump sum or extension, a dollar sign will be assumed to be the bidder's intent.

### **PROPOSAL**

- I, the person whose signature is affixed to page 7 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 7 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. That the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof; or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Contractor's Name	

### **PROPOSAL**

Contractor's Name _	
---------------------	--

# **List of Subcontractors and Off-Job Fabricators**

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

Name of Subcontractor or Off-Job Fabricator	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 and location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of one percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half percent of one percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater.
  - (2) [Section not implemented by Agency]
- (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:

# Bridge Road Bridge Deck Repair County Bridge #442

Item		Approx	H. as D. savistica	Payment	Unit-	Item Total
No.	Units	Quantity	Item Description	Reference	Prices	(In Figures)
					(In	
					Figures)	
1	Lump Sum	1	Mobilization	9-3.4.2		
2	Lump Sum	1	Traffic Control & Construction Signing	1002-4		
3	Lump Sum	1	Water Pollution Control	7-8.6.4	-	
4	Lump Sum	1	Remove, Dispose of AC on Deck	1004-2		
5	Lump Sum	1	Remove Existing Planks and	1005-2		
			Stringers			
6	Each	120	Install 4" x 12" Deck Planks, 20' long	1006-3		
7	Each	126	Install 4" x 16" Stringers, 20' long	1006-3		
8	Each	1	Install 4" x 10" Sill Plane, 20' long	1006-3		
9	Lump Sum	1	Salvage Undamaged Lumber	1007-2		
10	Lump Sum	1	Repair Steel Floor Beam #5	1008-6		
11	Lump Sum	1	Grind for Key, Pave AC Approach	1009-2		
12	Lump Sum	1	Release on Contract	9-4		\$1.00
	2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		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.

Number	Dated
	٠

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.

Dated	Signature		
At	Position		
(City and State)	(Sole Owner, Partner, President, etc.)		
License No	Company Name		
License Classification	Type of Organization(Individual, Partnership, Corp.		
License Expiration Date	_		

nter } Name & }
Address } of Bonding } Company }
BID BOND
KNOW ALL MEN BY THESE PRESENTS: That we
, Principal,
and
, Surety, are held and firmly bound unto the <b>County of Ventura</b> 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 proposal to Obligee on a contract for
BRIDGE ROAD BRIDGE DECK REPAIR COUNTY BRIDGE #442
NOW, THEREFORE, if that contract be awarded to Principal and Principal shall, within such time as may be specified, enter into the contract in the prescribed form in writing and give such bond or bonds as may be specified in the bidding or contract documents with surety acceptable to Obligee then this obligation shall be null and void; otherwise to remain in full force and effect.
In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in the suit, including reasonable attorney's fee to be fixed by the court.
Signed, sealed and dated
(Principal)
by(Seal)
(Surety)
by Attorney-in-Fact

# 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 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. Travel and subsistence shall be paid in accordance with California Labor Code Section 1773.8.

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. A copy will be furnished without cost to the successful bidder.

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

### **EXCERPTS FROM THE**

# CALIFORNIA LABOR CODE

AS OF JANUARY 1, 2009

The Labor Code sections furnished are those mentioned in the specifications section 7.2.2.2. They are furnished for the convenience of the contractor and in no way limit the required compliance with all laws.

**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.

- 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 fifty dollars (\$50) 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 ten dollars (\$10) 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 twenty dollars (\$20) 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 thirty dollars (\$30) 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)** When 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 Sections 1771, 1775, 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.
- **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, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards 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, the Division of Apprenticeship Standards, 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) 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) 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, the Division of Apprenticeship Standards, 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 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 name and social security number. A joint labor management committee may maintain an action in a court of competent jurisdiction against an employer who fails to comply with Section 1774. The court may award restitution to an employee for unpaid wages and may award the joint labor management committee reasonable attorney's fees and costs incurred in maintaining the action. An action under this subdivision may not be based on the employer's misclassification of the craft of a worker on its certified payroll records. Nothing in this subdivision limits any other available remedies for a violation of this chapter.
- (f) 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.
- (g) 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 twenty-five dollars (\$25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or 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.
- (h) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.
- (i) 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.

- **1777.5.** (a) Nothing in this chapter shall prevent the employment of properly registered apprentices upon public works.
- (b) 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.
- (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) When 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)** Prior to 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 that can supply 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 where the contractor agrees to be bound by those standards, but, 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. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Chief of the Division of Apprenticeship Standards, 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 that has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or that 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 Chief of the Division of Apprenticeship Standards 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.
- (I) When 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) 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 Division of Apprenticeship Standards for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The funds shall be distributed as follows:
- (A) 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.
- **(B)** If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and geographic area for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices registered in each program.
- **(C)** All training contributions not distributed under subparagraphs (A) and (B) shall be used to defray the future expenses of the Division of Apprenticeship Standards.
- (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. Notwithstanding Section 13340 of the Government Code, all money in the Apprenticeship Training Contribution Fund is hereby continuously appropriated for the purpose of carrying out this subdivision and to pay the expenses of the Division of Apprenticeship Standards.
- (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) All decisions of an apprenticeship program under this section are subject to Section 3081.
- **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.
- **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.

# 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	_
1-2 TERMS AND DEFINITIONS	2
1-3 ABBREVIATIONS	Z
1-3.1 General	
1-3.2 Common Usage	
1-3.3 Institutions.	
1-3.4 Building Codes.	
1-3.5 Reference Documents.	7
1-4 UNITS OF MEASURE	γ
1-4.1 General	ይ
1-4.1.1 Units for Work	ຍ ຂ
1-4.2 Units of Measure and Their Abbreviations	 ጸ
1-5 SYMBOLS	8
SECTION 2 - SCOPE AND CONTROL OF WORK	
	_
2-1 AWARD AND EXECUTION OF CONTRACT	
	9
2-1.3 Execution of Contract Documents. 2-1.4 Failure to Execute Documents.	9
2-1.4 Pallure to Execute Documents	9
2-1.3 Return of Proposal Guarantees.	9
2-3 SUBCONTRACTS	
2-3.1 General	
2-3.1.1 Use of Debarred Subcontractors Prohibited.	۱۱۰
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 Submittals	12
2-5.3.1 General	
2-5.3.2 Working Drawings	12
2-5.3.3 Shop Drawings	12
2-5.3.4 Supporting Information	
2-5.4 Record Drawings.	
2-6 WORK TO BE DONE.	13
2-6.1 Manufacturer's Recommendations.	13
2-7 SUBSURFACE DATA	
2-8 RIGHTS-OF-WAY	12

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS	
2-9 SURVEYING	. 13
2-9.1 Permanent Survey Markers	. 13
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	
2-9.4 Line and Grade	.14
2-9.5 Quantity Surveys	
2-9.6 Payment for Surveys	.14
2-10 AUTHORITY OF BOARD AND ENGINEER.	14
2-10.1 Decisions in Writing.	.14
2-11 INSPECTION	.15
2-11.1 Permit Inspections.	
2-11.2 Structural Observation	15
2-12 AGENCY PERSONNEL AND AUTHORITY	15
2-12.1 General	.15
2-12.2 Engineer	.15
2-12.3 Department Directors (Public Works Agency).	16
2-12.4 Project manager	16
2-12.5 Inspector	
2-12.6 Other Agency Personnel and Consultants	16
2-12.6.1 Materials Engineer	16
2-12.6.2 Surveyors & Technicians	
2-12.6.3 Other Persons	
2-12.6.4 Consultants	17
SECTION 3 - CHANGES IN WORK	
3-1 CHANGES REQUESTED BY THE CONTRACTOR	18
3-1.1 General	
3-1.2 Payment for Changes Requested by the Contractor.	
3-2 CHANGES INITIATED BY THE AGENCY	
3-2.1 General	
3-2.2 Payment for Changes Initiated by the Agency	
3-2.2.1 Contract Unit Prices.	
3-2.2.2 Stipulated Unit Prices	
3-2.2.3 Pricing	18
3-2.2.4 Non-Agreed Prices	
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	
3-4 CHANGED CONDITIONS	
3-5 DISPUTED WORK	21

3-5

# VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS <u>SECTION 4 - CONTROL OF MATERIALS</u>

4-1 MA	ATERIALS AND WORKMANSHIP	22
4-1.1	General.	
	.1 Materials Furnished by Agency	
4-1.2	Protection of Work and Materials	22
4-1.3	Inspection Requirements	
	1 General	
	.2 Inspection of Materials Not Locally Produced	
	3 Inspection by the Agency	
	.4_ Certificates of Compliance	
4-1.4	Tests of Materials	
4-1.5	Certification.	23
4-1.6	Trade Names or Equals	23
4-1.6	1 Compatibility with Design.	23
	2 Trade Names Listed	
4-1.7	Weighing Equipment.	
4-1.8	Calibration of Testing Equipment	24
	SECTION 5 - UTILITIES	
5-1 LO	CATION	25
	OTECTION	
	MOVAL	25
5-4 RE	LOCATION	26
	LAYS	26
5-5.1	Cooperation During Utility Relocation	26
5-6 CO	OPERATION	26
	SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK	
6-1 CO	NSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK	27
6-1.1	Beginning of Work	
6-1.2	Starting Work.	
6-1.3	Work Sequence.	
6-1.4	Resource's Required	
6-2 PR	OSECUTION OF WORK	28
6-3 SU	SPENSION OF WORK	28
6-3.1		
6-3.2	General	28
6-3.3	General	29
0-5.5	Archaeological and Paleontological Discoveries.	29
	Archaeological and Paleontological Discoveries.  Temporary Suspension of Work.	29 29
6-4 DE 6-5 TE	Archaeological and Paleontological Discoveries.  Temporary Suspension of Work.  FAULT BY CONTRACTOR	29 29 <b>29</b>
6-4 DE 6-5 TE	Archaeological and Paleontological Discoveries.  Temporary Suspension of Work.  FAULT BY CONTRACTOR	29 29 <b>29</b>
6-4 DE 6-5 TE 6-6 DE 6-6.1	Archaeological and Paleontological Discoveries.  Temporary Suspension of Work.  FAULT BY CONTRACTOR	29 29 30 30
6-4 DE 6-5 TE 6-6 DE	Archaeological and Paleontological Discoveries. Temporary Suspension of Work. FAULT BY CONTRACTOR. RMINATION OF CONTRACT. LAYS AND EXTENSIONS OF TIME.	29 29 30 30
6-4 DE 6-5 TE 6-6 DE 6-6.1	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR  RMINATION OF CONTRACT  LAYS AND EXTENSIONS OF TIME  General	2929303030
6-4 DE 6-5 TEI 6-6 DE 6-6.1 6-6.2	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR	29 30 30 30
6-4 DE 6-5 TEI 6-6 DE 6-6.1 6-6.2 6-6.3 6-6.4 6-6.4.	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR  RMINATION OF CONTRACT  LAYS AND EXTENSIONS OF TIME  General  Extensions of Time  Payment for Delays to Contractor  Written Notice and Report  1 Documentation of Delays	293030303030
6-4 DE 6-5 TEI 6-6 DE 6-6.1 6-6.2 6-6.3 6-6.4 6-6.4.	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR  RMINATION OF CONTRACT  LAYS AND EXTENSIONS OF TIME  General  Extensions of Time.  Payment for Delays to Contractor.  Written Notice and Report.	293030303030
6-4 DE 6-5 TEI 6-6 DE 6-6.1 6-6.2 6-6.3 6-6.4 6-6.4. 6-7 TIM 6-7.1	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR.  RMINATION OF CONTRACT.  LAYS AND EXTENSIONS OF TIME.  General.  Extensions of Time.  Payment for Delays to Contractor.  Written Notice and Report.  1 Documentation of Delays.  IE OF COMPLETION.  General.	2930303030303031
6-4 DE 6-5 TEI 6-6 DE 6-6.1 6-6.2 6-6.3 6-6.4 6-6.4. 6-7 TIN 6-7.1 6-7.2	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR.  RMINATION OF CONTRACT.  LAYS AND EXTENSIONS OF TIME.  General.  Extensions of Time.  Payment for Delays to Contractor.  Written Notice and Report.  1 Documentation of Delays.  IE OF COMPLETION.  General.  Working Day.	293030303030303131
6-4 DE 6-5 TEI 6-6 DE 6-6.1 6-6.2 6-6.3 6-6.4 6-6.4. 6-7 TIN 6-7.1 6-7.2 6-7.2	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR.  RMINATION OF CONTRACT.  LAYS AND EXTENSIONS OF TIME.  General.  Extensions of Time.  Payment for Delays to Contractor.  Written Notice and Report.  1 Documentation of Delays.  IE OF COMPLETION.  General.  Working Day.  1 Holidays.	293030303030313131
6-4 DE 6-5 TEI 6-6 DE 6-6.1 6-6.2 6-6.3 6-6.4 6-6.4 6-7.1 6-7.1 6-7.2 6-7.2	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR  RMINATION OF CONTRACT  LAYS AND EXTENSIONS OF TIME  General  Extensions of Time  Payment for Delays to Contractor  Written Notice and Report  1 Documentation of Delays  IE OF COMPLETION  General  Working Day  1 Holidays  2 Landscape Maintenance Period	293030303031313131
6-4 DE 6-5 TEI 6-6 DE 6-6.1 6-6.2 6-6.3 6-6.4 6-6.4. 6-7 TIN 6-7.1 6-7.2 6-7.2	Archaeological and Paleontological Discoveries. Temporary Suspension of Work.  FAULT BY CONTRACTOR.  RMINATION OF CONTRACT.  LAYS AND EXTENSIONS OF TIME.  General.  Extensions of Time.  Payment for Delays to Contractor.  Written Notice and Report.  1 Documentation of Delays.  IE OF COMPLETION.  General.  Working Day.  1 Holidays.	293030303031313131

VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENT	S
6-8 COMPLETION, ACCEPTANCE AND WARRANTY	32
6-8.1 Completion and Acceptance	
6-8.2 Warranty	32
6-8.3 No Waiver of Legal Rights	32
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	
6-12 DISPUTES AND CLAIMS; PROCEDURE	34
6-12.1 GENERAL	
6-12.2 ADMINISTRATIVE REVIEW	
6-12.3 ARBITRATION	35
6-13 CONTRACTOR'S WORK HOURS	
6-13.1 Working Hours Limitations	
6-13.2 Regular Work Schedule	
6-13.3 Exceptions	36
SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR	
7-1 CONTRACTOR'S EQUIPMENT AND FACILITIES.	37
7-1.1 General	
7-1.2 Temporary Utility Services	
7-1.3 Crushing and Screening Operations	
7-2 LABOR	37
7-2.1 General	
7-2.1.1 Special Qualifications	
7-2.2 Laws	
7-2.2.1 Apprentices	37
7-2.2.2 Contractors' Duties Concerning Labor Code Compliance	37
7-3 INDEPENDENCE OF CONTRACTOR, INDEMNIFICATION AND POLLUTION	
7-3.1 Independence of Contractor.	38
7-3.2 Indemnification and Hold Harmless Clause	38
7-3.3 Contamination and Pollution	38
7-4 INSURANCE REQUIREMENTS	38
7-4.1 Workers' Compensation Insurance	38
7-4.1.1 Coverage	38
7-4.1.2 Certification	
7-4.2 Commercial General Liability Insurance	
7-4.2.1 Insurance Classes	
7-4.2.2 Coverage Exceptions.	39
7-4.2.3 Excess Liability Policies.	
7-4.3 Commercial Automobile Liability Insurance	
7-4.4 Property Insurance	
7-4.5 Other Insurance Provisions	39
7-4.5.1 Insurance Company Qualifications.	
7-4.5.4 Liability in Excess of Limits	39
7-4.5.5 Additional Insured Endorsements.	
7-4.5.6 Waiver of Subrogation Rights	
7-4.5.7 10 Day Notice Required.	
7-4.5.8 Documentation Required	40

# **VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS**

7-5	PERMITS	40
7-5.		
7-5.		
7	7-5.2.1 General	
	-5.2.2 Permits Required	. 40
7	-5.2.3 Imported and Exported Material	40
7	-5.2.4 Exemptions from Permit	40
7-5.		
7	7-5.3.1 Agency Furnished Permits	40
	7-5.3.2 Contractor Furnished Permits	
7-5.		
7.	-5.4.1 Agency Furnished Permits	40
7.	-5.4.2 Contractor Furnished Permits	40
7-6	THE CONTRACTOR'S REPRESENTATIVE.	41
7-7	COOPERATION AND COLLATERAL WORK.	41
7-8	WORK SITE MAINTENANCE	41
7-8.		
7-8.	.2 Air Pollution Control.	41
7-8.		
7-8.		41
7-	-8.4.1 General	41
7-	-8.4.2 Storage in Public Streets	41
7-8.	.5 Sanitary Sewers	42
7-	-8.5.1 General	42
7-	-8.5.2 Sewage Bypass and Pumping Plan	42
	-8.5.3 Spill Prevention and Emergency Response Plan	
7-8.		42
7-	-8.6.1 Size of Work or affected area	42
	-8.6.2 Plan	
	-8.6.3 Measures	
	-8.6.4 Dewatering Activities	
	-8.6.5 Payment	
7-8.		
7-8.		43
7-9	PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS.	44
7-10	PUBLIC CONVENIENCE AND SAFETY	44
	0.1 Traffic and Access	44
7-10		
7-10		
7-10		
	-10.4.1 Safety Orders.	
/-	-10.4.2 Use of Explosives.	. 45
	-10.4.3 Special Hazardous Substances and Processes.	
7.40	-10.4.4 Confined Spaces.	46
	0.4.5 Asbestos Safety & Prohibited Use	
	-10.4.5.1 Asbestos Warning Signs.	
	-10.4.5.2 Products Containing Asbestos.	
	PATENT FEES OR ROYALTIES.	
	ADVERTISING	
7 <b>-13</b> 7-13	LAWS TO BE OBSERVED.	
7-14 7-15	ANTITRUST CLAIMS	. 47
	RECYCLABLE CONSTRUCTION & DEMOLITION WASTES	
7-16	AFFIRMATIVE ACTION.	. 47
	LOSS OR DAMAGE TO THE WORK.	
7-18	ACTS OF GOD.	. 47
	SECTION 8 - FACILITIES FOR AGENCY PERSONNEL	
8-1	GENERAL	. 48
8-2	FOLIPMENT FOR FIELD OFFICES	Ω

# VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS SECTION 9 - MEASUREMENT AND PAYMENT

9-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK	49
9-1.1 General	
9-1.2 Methods of Measurement	
9-1.3 Certified Weights	
9-1.4 Units of Measurement	
9-2 LUMP SUM BID ITEMS	
9-3 PAYMENT	
9-3.1 General.	
9-3.2 Partial and Final Payment.	
9-3.2.1 Release of Withheld Contract Funds.	
9-3.2.2 Timely Progress Payments. 9-3.3 Delivered Materials.	
9-3.4 Mobilization	
9-3.4.1 Scope.	
9-3.4.2 Payment.	53
9-4 TERMINATION OF AGENCY LIABILITY.	53
SECTION 10 - DIVERSION, CONTROL AND REM	
10-1 DESCRIPTION	
10-2 REQUIREMENTS.	54
10-3 DIVERSION AND CONTROL WORKS	
PART 2 CONSTRUCTION MATER	I <u>ALS</u>
SECTION 200 - ROCK MATERIA	<u>LS</u>
200-1 ROCK PRODUCTS	55
200-1.6 Stone for Riprap	
200-1.6.1A Alternate Stone for Riprap	
200-1.6.2 Riprap Size	
SECTION 206 - MISCELLANEOUS MET	<u>AL ITEMS</u>
206-3 GRAY IRON CASTINGS	56
206-3.3 Manhole Frame and Cover Sets	56
206-3.3.1 Selection	
206-5 METAL RAILINGS	
206-5.2 Flexible Metal Guard Rail Materials	56
206-5.2A Flexible Metal Guard Rail Materials; Modification	
SECTION 210 - PAINT AND PROTECTIVE	COATINGS
210-6 STORM DRAIN HARDWARE	56
SECTION 211 - SOIL AND AGGREGAT	<u>E TESTS</u>
211-3 SIEVE ANALYSIS	57
211-4 SAND EQUIVALENT TEST	57
211-5 R-VALUE	57
211-6 SPECIFIC GRAVITY AND ABSORPTION	57
211-7 LOS ANGELES RATTLER TEST	57
211-8 SOUNDNESS	57
211-9 WET AND DRY LOSS	
211-10 SOLUBILITY.	
211-11 PERMEABILITY TEST	57

# VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS PART 3 CONSTRUCTION METHODS

SECTION 301 - TREATED SOILS, SUBGRADE PREPARATION AND PLACEMENT OF BASE N	<u>IATERIALS</u>
301-1 SUBGRADE PREPARATION	58
301-1.3 Relative Compaction	
301-1.3.1 Firm, Hard and Unyielding	
301-1.4 Subgrade Tolerances	
301-2 UNTREATED BASE	
301-2.3 Compacting	
301-2.3.1 Tolerances	58
SECTION 302 - ROADWAY SURFACING	
302-5 ASPHALT CONCRETE PAVEMENT	58
302-5.1 General	
302-5.1.1 Asphalt Concrete Berms.	58
302-5.4 Tack Coat	58
302-5.4.1 Fog Seal	58
302-5.9 Measurement and Payment	
302-5.9.1 Measurement and Payment for Asphalt Berm	
302-5.9.2 Measurement and Payment for Fog Seal, Tack Coat, and Prime Coat	58
SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION	
303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS	50
303-5.1 Requirements	
303-5.1.4 Concrete Substitution.	59
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.	
306-1.2.1.2 Sewer Pipe Bedding	59
306-9 DISINFECTION.	
306-10 WATERWORKS APPURTENANCES	
306-10.1Valves.	
306-10.2 Valves.	
306-10.3Thrust Devices.	
306-10.4Fire Hydrants	
306-10.5Fire Hydrant Barricades.	
SECTION 310 - PAINTING	00
310-5 Painting Various Surfaces	
310-5.6.8A Application of Paint - Two Coats	
510-0.0.0A Application of Faint - Two Coats	67

# VENTURA COUNTY STANDARD SPECIFICATIONS - TABLE OF CONTENTS PART 4

# SECTION 400 - ALTERNATE ROCK PRODUCTS, ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE AND UNTREATED BASE MATERIAL

400-4 ASPHALT C	ONCRETE	62
400-4.1 General		62
400-4.1.1A Asp	ohalt Concrete - Alternate Grade	62
APPENDIX A	ACCORD CERTIFICATE OF LIABILITY INSURANCE	63
APPENDIX B-1	CONSTRUCTION ELEMENT VS. TIME CHART FORM	64
APPENDIX B-2	WORK COMPLETE VS. TIME CHART FORM	65
APPENDIX C-1	CONSTRUCTION ELEMENT VS. TIME CHART SAMPLE	66
APPENDIX C-2	WORK COMPLETE VS. TIME CHART SAMPLE	67
APPENDIX D	ESCROW AGREEMENT FORM SAMPLE	68
APPENDIX E	AFFIRMATIVE ACTION POLICY FORM	72
APPENDIX F	RELEASE ON CONTRACT FORM	73
APPENDIX G	PERFORMANCE AND PAYMENT BOND - SAMPLE SHOWING W	ORDING . 74

# 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 6 of the 2009 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 401 through 499. 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.

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--Including but not limited to; the Contract, any Addendum (which pertain to the Contract Documents), 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, the general conditions, permits from other agencies, the Special Provisions, the Plans, Standard Plans, Standard Specifications, Reference Specifications, and all Modifications issued after the execution of the Contract.

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, duct, or meter, between a utility distribution line and an individual consumer.
- Sewer--Any conduit intended for the reception and transfer of sewage and fluid industrial waste.
- 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.

### 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>	Word or Words	<b>Abbreviation</b>	Word or Words
Aban	Abandon		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
Alt	Alternate	LH	Lamp hole
AmerStd	American Standard	LL	Live load
APC	Air Placed Concrete	LOL	Layout line
ARAM	Asphalt Rubber Aggregate Membrane	Long	Longitudinal
ARHM	Asphalt Rubber Hot Mix	LP	Lamp post
AWG	American Wire Gage (non-ferrous wire)	LPS	Low pressure sodium (Light)
B/W	Back of wall	LS	Lump sum
BC	Beginning of curve	LTS	Lime treated soil
BCR	Beginning of curb return	m	Meters
Bdry	Boundary	Maint	Maintenance
BF	Bottom of footing	Max	Maximum
ВМ	Bench mark	MC	Medium curing
BMPs	Best Management Practices	MCR	Middle of curb return
BVC	Beginning of vertical curve	Meas	Measure
C&G	Curb & Gutter	MH	Manhole, maintenance hole
C&G	Curb and gutter	Mil Spec	Military specification
CAB	Crushed aggregate base	Min	Minimum
CALOSHA	California Occupational Safety and	Misc	Miscellaneous
CALTDANC	Health Administration	Man	Management
CALTRANS	California Department of Transportation	Mon	Monument
CAP	Corrugated aluminum pipe	Mult	Multiple

<u>Abbreviation</u>	Word or Words	Abbreviation	Word or Words
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	oc	On center
CCR	Plastic Mortar	OD	Outside dispersion
CCTV	California Code of Regulations Closed Circuit TV	OD OE	Outside diameter 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 CMB	Controlled Low Strength Material Crushed miscellaneous base	PI PL	Point of intersection
CMC	Cement mortar-coated	PLI	Property line Pounds per linear inch
CML	Cement mortar-coated  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	PRVC	Point of reverse vertical curve
Const	Construct, Construction	PSI	Pounds per square inch
Coord	Coordinate	PT	Point of tangency
CQS	Cationic Quick-Setting	PVC	Polyvinyl chloride
CRM CRS	Crumb Rubber Modifier	Pvmt	Pavement
CSEP	Cationic Rapid-Setting Confined Space Entry Plan	Pvt R/W Q	Private right of way Rate of flow in cms (CFS)
CSP	Corrugated steel pipe	Quad	Quadrangle, Quadrant
CSPA	Corrugated steel pipe arch	R	Radius or Resistance value
CSS	Cationic Slow-Setting	R&O	Rock and Oil
CT	California Test	R/W	Right of way
CTB	Cement treated base	RA	Reclaimed Asphalt or Recycling agent
CV	Check valve	RAC	Recycled asphalt concrete
CY	Cubic yard	RAP	Reclaimed asphalt pavement
D	Depth, Load of pipe	RBAC	Rubberized asphalt concrete
db Dbl	Decibels	RC BCB	Reinforced concrete or Rapid Curing
Dbl DF	Double Douglas Fir	RCB RCE	Reinforced concrete box
Dia	Diameter	RCP	Registered civil engineer Reinforced concrete pipe
DIP	Ductile iron pipe	RCV	Remote control valve
DL	Dead load	Ref	Reference
DT	Drain tile	Reinf	Reinforced or reinforcement
Dwg	Drawing	Res	Reservoir
Dwy Appr	Driveway approach	RGE	Registered geotechnical engineer
Dwy	Driveway	RPPCC	Reclaimed Plastic Portland Cement Concrete
Ea	Each	RR	Railroad
EC	End of curve	RSE	Registered structural engineer
ECR EF	End of curb return Each face	RTE	Registered traffic engineer
EG	Edge of gutter	RTFO RW	Rolling Thin Film Oven Reclaimed Water
EGL	Energy grade line	S	Slope
El	Elevation	S/W	Sidewalk
ELC	Electrolier lighting conduit	SC	Slow curing
ELT	Extra long ton of slurry	SCCP	Steel cylinder concrete pipe
Eng	Engineer, Engineering	SCNs	Supplementary Cementitious Materials
EP	Edge of pavement	SD	Storm drain
Esmt	Easement	SDR	Standard dimension ratio
ETB	Emulsion treated base	SE	Sand Equivalent
EVC	End of vertical curve	Sec	Section
Exc Exist or Ex	Excavation	SF SG	Square foot
	Existing		Specific gravity
VCSS		5	08/25/08

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

# 1-3.3 Institutions.

<u>Abbreviation</u>	Word or Words
AAN	American Association of Nurserymen
	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
	American Society for Testing and Materials
	American Wood Preserver's Association
	American Welding Society
	American Water Works Association
CBSC	California Building Standards Commission
CRSI	Concrete Reinforcing Steel Institute
EIA	Electronic Industries Association
	Environmental Protection Agency
	Electrical Testing Laboratories
	Federal Communications Commission
IAPMO	International Association of Plumbing and Mechanical Officials
ICC	International Code Council
	Institute of Electrical and Electronics Engineers
	International Municipal Signal Association
	Institute of Traffic Engineers
	National Electrical Manufacturers Association
	National Fire Protection Association
	National Oceanic and Atmospheric Administration (Department of Commerce)
	Rural Utility Service
	Underwriters' Laboratories, Inc.
	United State Geological Survey
WFCA	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>	Code	Publisher
CBC	California Building Code	CBSC
	. Uniform Code for Abatement of Dangerous Building	
	. Uniform Building Code	
UFC	. Uniform Fire Code	ICC and WFCA
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>	Document	
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 ed	ition
SPPWC	Standard Plans for Public Works Construction, Latest edition, published Angeles,	by BNi Building News, Los
SSPWC	Standard Specifications for Public Works Construction, (See Section 0-1)	
000	Other test to the officer of the effect of the product of the test of the control	lataat aditiaa
SSS	Standard Specifications, State of California, Department of Transportation, Ventura County Standard Specifications (Division 1, Sections 0 through 1	

## 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 <sup>2</sup> )	0.0929	square meter	(m <sup>2</sup> )
square yard	(yd²)	0.8361	square meter	(m²)
cubic foot	(ft <sup>3</sup> )	0.0283	cubic meter	(m <sup>3</sup> )
cubic yard	(yd³)	0.7646	cubic meter	(m <sup>3</sup> )
acre (=43,560 ft <sup>2</sup> )		0.4047	hectare (1ha=10,000m²)	(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.	(mm²/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 <sup>3</sup>	milli (m)	10 <sup>-3</sup>	nano (n)	10 <sup>-9</sup>
centi (c)	10 <sup>-2</sup>	micro (μ)	10 <sup>-6</sup>	pico (p)	10 <sup>-12</sup>

## 1-5 SYMBOLS

0	Degree	凡 Property line	%	Percent
	Feet or minutes	§ Survey line or station line	#	Number
	Inches or seconds	Ը_ Center line	7	per or of (between words)
Δ	Delta, the central angle or angle between tangents			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 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 and location of the place of business of each Subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, 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 one 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."

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.

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 percent 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 and business of each Subcontractor and description and value of each portion of the work to be so 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/or 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 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 are drawings showing details not shown on the Plans which are required to be designed by the Contractor. 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, three 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 two 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	7-10.4.1	Safety Orders	Trench Shoring
2	207-2.5	Joints	Reinforced Concrete Pipe
3	207-8.4	Joints	Vitrified Clay Pipe
4	207-10.2.1	General	Fabricated Steel Pipe
5	300-3.2	Cofferdams	Structure Excavation & Backfill
6	303-1.6.1	General	Falsework
7	303-1.7.1	General	Placing Reinforcement
8	303-3.1	General	Prestressed Concrete Construction
9	304-1.1.1	Shop Drawings	Structural Steel
10	304-1.1.2	Falsework Plans	Structural Steel
11	304-2.1	General	Metal Hand Railings
12	306-2.1	General	Jacking Operations
13	306-3.1	General	Tunneling Operations
14	306-3.4	Tunnel Supports	Tunneling Operations
15	306-6	Remodeling Existing Sewer Facilities	Polyethylene Liner Installation
16	306-8	Microtunneling	Microtunneling Operations
17	307-4.3	Controller Cabinet Wiring Diagrams	Traffic Signal Construction

Working drawings listed above as Items 5, 6, 8, 9, 10, 12, 13, 14 and 16 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) Certifications per 4-1.5.
- 4) Construction Schedule per 6-1.
- 5) Confined Space Entry Program per 7-10.4.4.
- 6) Concrete mix designs per 201-1.1.
- 7) Asphalt concrete mix designs per 203-6.1.
- 8) 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.
- 2-7 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 AGENCY PERSONNEL AND AUTHORITY

- **2-12.1 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.
- **2-12.2** 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:

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 progress shall be determined as provided in § 9-3.2.
- (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.

- **2-12.3 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:

 Original Contract Amount
 Maximum Amount of any Change Order

 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.
- **2-12.4 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.
- **2-12.5 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:
    - Where a safety hazard exists that has an immediate potential for serious injury or death.
    - Where the operation in progress, if continued for even a short period of time, could be adverse to the Agency's interests.

# 2-12.6 Other Agency Personnel and Consultants.

**2-12.6.1 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.

- **2-12.6.2 Surveyors & Technicians.** Surveyors and technicians shall have free access to the site to perform their duties but have no authority related to Contract administration.
- 2-12.6.3 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.
- **2-12.6.4 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 actual 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)	Labor33%
(2)	Materials15%
(3)	Equipment Rental15%
(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:
  - 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.
  - 4-1.9 (No Text)

## **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-1and 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 theB-1 Chart:
  - a Enter the project name and Specification No. as shown on the notice inviting bids and the Contractors name.
  - 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)

- 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.
- **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 **DEFAULT BY CONTRACTOR.** If the Contractor fails to begin delivery of material and equipment, to commence the Work within the time specified, to maintain the rate of delivery of material, to execute the Work in the manner and at such locations as specified, or fails to maintain a Work schedule which will insure the Agency's interest, or, if the Contractor is not carrying out the intent of the Contract, the Engineer may serve written notice upon the Contractor and the Surety on its Faithful Performance Bond demanding satisfactory compliance with the Contract.

The Contract may be canceled by the Board without liability for damage, when in the Board's opinion the Contractor is not complying in good faith, has become insolvent, or has assigned or subcontracted any part of the Work without the Board's consent. In the event of such cancellation, the Contractor will be paid the actual amount due based on Contract Unit Prices or lump sums bid and the quantity of the Work completed at the time of cancellation, less damages caused to the Agency by acts of the Contractor. The Contractor, in having tendered a bid, shall be deemed to have waived any and all claims for damages because of cancellation of Contract for any such reason. If the Agency declares the Contract canceled for any of the above reasons, written notice to that effect shall be served upon the Surety. The Surety shall, within 5 Days, assume control and perform the Work as successor to the Contractor.

If the Surety assumes any part of the Work, it shall take the Contractor's place in all respects for that part, and shall be paid by the Agency for all work performed by it in accordance with the Contract. If the Surety assumes the entire Contract, all money due the Contractor at the time of its default shall be payable to the Surety as the Work progresses, subject to the terms of the Contract.

If the Surety does not assume control and perform the Work within 5 Days after receiving notice of cancellation, or fails to continue to comply, the Agency may exclude the Surety from the premises. The Agency may then take possession of all material and equipment and complete the Work by Agency forces, by letting the unfinished Work to another Contractor, or by a combination of such methods. In any event, the cost of completing the Work shall be charged against the Contractor and its Surety, and may be deducted from any money due or becoming due from the Agency. If the sums due under the Contract are insufficient for completion, the Contractor or Surety shall pay to the Agency within 5 Days after the completion, all costs in excess of the sums due.

The provisions of this subsection shall be in addition to all other rights and remedies available to the Agency under law.

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.

## 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:
  - Date Engineer was notified of delay.
  - 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.
  - 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.
  - 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.

	•	
	Α	В
<u>MONTH</u>	AGENCY EMPLOYEE HOLIDAYS	OTHER DESIGNATED HOLIDAYS
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
	None	
July	4th day	None
	None	
September	1st Monday	9th day
	None	
November	4th Thursday	11th day; the Friday following the 4th Thursday
	25th	
		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** The Work shall be warranted by the Contractor against defective workmanship and materials for a period of 1 year from the date the Work was completed. The Contractor shall replace or repair any such defective workmanship and materials in a manner satisfactory to the Engineer, after notice to do so from the Engineer, and within the time specified in the notice. If the Contractor fails to make such replacement or repair within the time specified in the notice, the Agency may perform the replacement or repair and the Contractor and its sureties shall be liable for the cost thereof.
- **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 filing a Complaint in Arbitration, the Contractor shall exhaust its administrative remedies by attempting to resolve its dispute or claim with Agency's staff in the following sequence:

Project manager
Department Director (Public Works Agency)
Director of the Public Works Agency (the Engineer)

Should the Project manager or the Department Director (Public Works Agency) fail to address a request by the Contractor for review of a disputed decision within 14 calendar Days after receiving such request, the Contractor may proceed directly to the next person on the list.

At the option of the Agency, the person to whom the request for review is directed may elect to take such request to a higher level and the Contractor's request shall be deemed to be properly submitted to such higher level.

The Engineer shall address disputes or claims within 28 calendar Days after receiving such request and all necessary supporting data. The Engineer's decision on the dispute or claim shall be the Agency's final decision.

Requests for review made to the Project manager may be either oral or written. Requests for review made to the Department Director (Public Works Agency) and The Engineer shall be made 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 correspondence and evidence that the Contractor wishes to have considered in the review. Where the request for review is made to the Engineer, in lieu of resubmitting correspondence and evidence which has already been submitted to the Department Director (Public Works Agency), the request may include a list of the correspondence and evidence which should be considered by the Engineer. Any additional correspondence and evidence not previously submitted to the Department Director (Public Works Agency) shall be included with the request to the Engineer, if the Contractor wishes it to be considered. If relevant evidence is not available at the time the request is made to the Department Director (Public Works Agency) or the Engineer, such evidence shall be identified and a statement included as to when such evidence will be submitted.

Each request for review shall be submitted by the Contractor within 21 calendar Days of receipt of the decision which it wishes reviewed.

**6-12.3 ARBITRATION.** Claims and disputes arising under or related to the performance of the Contract, 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 fur 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.** Only competent workers shall be employed on the Work. Any person employed, who is found to be incompetent, intemperate, troublesome, disorderly or otherwise objectionable, or who fails or refuses to perform its work properly and acceptably, shall be immediately removed from the Work by the Contractor and not be reemployed 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 journeyperson, 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 journeyperson, foreperson or trade superintendent. The general superintendent or a foreperson 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 Laws.** The Contractor, its agents, and employees shall be bound by and comply with all applicable provisions of the Labor Code and with Federal, State, and local laws related to labor.

The Contractor shall strictly adhere to the provisions of the Labor Code regarding minimum wages, the 8 hour day and the 40 hour week, overtime, Saturday, Sunday, and holiday work, and non-discrimination because of race, color, national origin, sex or religion. The Contractor shall forfeit to the Agency the penalties prescribed in the Labor Code for violations.

In accordance with the Labor Code, the Board has on file and will publish a schedule of prevailing wage rates for the types of work to be done under the Contract. The Contractor shall not pay less than these rates.

Each worker shall be paid subsistence and travel as required by the collective bargaining agreements on file with the State of California, Department of Industrial Relations.

The Contractor's attention is directed to Section 1776 of the Labor Code which imposes responsibility upon the Contractor for the maintenance, certification, and availability for inspection of such records for all persons employed by the Contractor or Subcontractor in connection with the Work. The Contractor shall agree through the Contract to comply with this Section and the remaining provisions of the Labor Code.

- **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**. 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.

## 7-3 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 County'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, 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, Agency or the County of Ventura 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, whether active or passive, of Agency, the County of Ventura or any other person or persons, unless the same be caused by the sole negligence or willful misconduct of Agency or County of Ventura.

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 Insurance Classes. "Occurrence" coverage in the minimum amount of:

Coverage Class

Coverage

- 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

including but not limited to coverages for premises/operations; products/completed operations; independent contractors; underground, explosion and collapse hazards; personal injury; broad form property damage; broad form blanket contractual.

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

- **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 or 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 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 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, shall be named as Additional Insured as respects Work done by Contractor under the terms of the Contract on all policies required (except Workers' Compensation).
- **7-4.5.6 Waiver of Subrogation Rights.** Contractor agrees to waive all rights of subrogation against the Agency, the County of Ventura, its boards, districts, agencies, departments, officers, employees, agents and volunteers 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 10 Day Notice Required.** Policies shall not be canceled, non-renewed or reduced in scope of coverage until after 10 Days written notice by mail has been given to Agency. Policies shall not be cancelled for non-payment of premium until after 10 Days written notice by mail has been given to Agency.
- **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) and indicating that the endorsement(s) required have been issued.

It is the responsibility of the 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 this Agreement.

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 or certificate of exemption covering such operation on land where material is to be deposited or excavated.
- **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.
- 7-8.6.1 Size of Work or affected area. If the Work involves construction activity including clearing, grading or excavation that results in soil disturbance of 1 or more acres of total land area, or results in soil disturbances of less than 1 acre but is part of a work area larger than 1 acres, the Contractor shall, in addition to the other requirements, comply with the requirements of the State General Permit for Stormwater Discharges Associated with Construction Activity, NPDES General Permit No. CAS000002. Agency will submit, if it has not previously done so, a Notice of Intent to the State Water Resources Control Board, Division of Water Quality. The Contractor shall prepare and implement a Storm Water Pollution Prevention Plan for the Work.
- 7-8.6.2 Plan. The Engineer will furnish a SWPCP/SWPPP template, with any Agency supplied data entered, together with the other Contract document forms, as provided in 2-1.3. The SWPCP/SWPPP shall be prepared in accordance with the requirements of the Ventura Countywide Stormwater Quality Management Program, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS004002 and County Ordinance No. 4142. 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, Best Management Practices, to effectively prohibit the entry of pollutants from the site into the storm drain system during construction. The SWPCP/SWPPP shall utilize the measures recommended in the California Stormwater Quality Association Stormwater Best Management Practices Handbook for Construction dated January 2003. The Contractor shall complete, sign and submit the SWPCP/SWPPP for review and approval prior to issuance of the Notice to Proceed as provided in 6-7.4.

- **7-8.6.3 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. 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. No responsibility shall accrue to the Agency as a result of the plan or as a result of knowledge of the plan. 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 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.

**7-8.6.5 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.

water pollution control pa	(excluding mobilization & yments) as a percentage of price (excluding the tion control Bid items).	Cumulative amount of wat item earned is the lesse computed by these two colu	er of the amounts as
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 Traffic and Access.** The Contractor's operations shall cause no unnecessary inconvenience. The access rights of the public shall be considered at all times. Unless otherwise authorized, traffic shall be permitted to pass through the Work, or an approved detour shall be provided.

Safe and adequate pedestrian and vehicular access shall be provided and maintained to: fire hydrants; commercial and industrial establishments; churches, schools and parking lots; service stations and motels; hospitals; police and fire stations; and establishments of similar nature. Access to these facilities shall be continuous and unobstructed unless otherwise approved by the Engineer.

Safe and adequate pedestrian zones and public transportation stops, as well as pedestrian crossings of the Work at intervals not exceeding 90m (300 feet), shall be maintained unless otherwise approved by the Engineer .

Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access for reasonable periods of time. 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.

The Contractor shall cooperate with the various parties involved in the delivery of mail and the collection and removal of trash and garbage to maintain existing schedules for these services.

Grading operations, roadway excavation and fill construction shall be conducted by the Contractor in a manner to provide a reasonably satisfactory surface for traffic. When rough grading is completed, the roadbed surface shall be brought to a smooth, even condition satisfactory for traffic.

Unless otherwise authorized, work shall be performed in only one-half the roadway at one time.

One half shall be kept open and unobstructed until the opposite side is ready for use. If one-half a street only is being improved, the other half shall be conditioned and maintained as a detour.

The Contractor shall include in its Bid all costs for the above requirements.

**7-10.2 Storage of Equipment and Materials in Public Streets.** Construction materials may not be stored in streets, roads, or highways for more than 5 Days after unloading. All materials or equipment not installed or used in the construction within 5 Days after unloading shall be stored elsewhere by the Contractor at its expense unless it is authorized additional storage time.

Construction equipment shall not be stored at the Work site before its actual use on the Work nor for more than 5 Days after it is no longer needed on the Work. Time necessary for repair or assembly of equipment may be authorized by the Engineer.

Excavated material, except that which is to be used as backfill in the adjacent trench, may not be stored in public streets, roads or highways unless otherwise permitted. After placing backfill, all excess material shall be removed immediately from the site.

7-10.3 Street Closures, Detours, Barricades. The Contractor shall comply with all applicable State, County and City requirements for closure of streets. The Contractor shall provide barriers, guards, lights, signs, temporary bridges, flagpersons and watchpersons, advising the public of detours and construction hazards. The Contractor shall also be responsible for compliance with additional public safety requirements which may arise during construction. The Contractor shall furnish and install, and upon completion of the Work, promptly remove all signs and warning devices.

At least 48 hours in advance of closing, or partially closing, or of reopening, any street, alley, or other public thoroughfare, the Contractor shall notify the Police, Fire, Traffic and Engineering Departments of jurisdictional agencies involved, and comply with their requirements. Deviations must first be approved in writing by the Engineer.

The Contractor shall secure approval, in advance, from authorities concerned for the use of any bridges proposed by it for public use. Temporary bridges shall be clearly posted as to load limit, with signs and posting conforming to current requirements set forth in the "CALTRANS Manual on Uniform Traffic Control Devices" published by the California Department of Transportation, covering "signs." This manual shall also apply to the street closures, barricades, detours, lights, and other safety devices required.

All costs involved shall be included in the bid.

## 7-10.4 Public Safety

**7-10.4.1 Safety Orders.** The Contractor shall have at the Work site, copies or suitable extracts of: Construction Safety Orders, Electrical Safety Orders, and General Industrial Safety Orders issued by the State Division of Industrial Safety. It shall comply with provisions of these and all other applicable laws, ordinances, and regulations.

Before excavating any trench 1.5 meters (5 feet) or more in depth, the Contractor shall submit to the Agency a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for the workers' protection from the hazard of caving ground during the excavation of such trench. If the plan varies from the shoring system standards, the plan shall be prepared by a Registered Civil Engineer. No excavation shall be commenced until the Engineer has accepted the 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.

Payment for performing all Work necessary to provide safety measures shall be included in the prices bid for other items of Work except where separate bid items for excavation safety are provided, or required by law.

**7-10.4.2 Use of Explosives.** Explosives may be used only when authorized in writing by the Engineer, or as otherwise stated in the Specifications. Explosives shall be handled, used, and stored in accordance with all applicable regulations.

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

**7-10.4.3** Special Hazardous Substances and Processes. Materials that contain hazardous substances or mixtures may be required on the Work. A Material Safety Data Sheet as described in Section 5194 of the California Code of Regulations shall be requested by the Contractor from the manufacturer of any hazardous product used.

Material usage shall be accomplished with strict adherence to California Division of Industrial Safety requirements and all manufacturers' warnings and application instructions listed on the Material Safety Data Sheet and on the product container label.

The Contractor shall notify the Engineer if a specified product cannot be used under safe conditions.

#### 7-10.4.4 Confined Spaces.

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

Prior to starting the Work, the Contractor shall prepare and submit its comprehensive CSEP to the Engineer. The CSEP shall address all potential physical and environmental hazards and contain procedures for safe entry into confined spaces, including, but not limited to the following:

- 1) Training of personnel
- 2) Purging and cleaning the space of materials and residue
- 3 Potential isolation and control of energy and material inflow
- 4) Controlled access to the space
- 5) Atmospheric testing of the space
- 6) Ventilation of the space
- 7) Special hazards consideration
- 8) Personal protective equipment
- 9 Rescue plan provisions

The Contractor's submittal shall include the names of its personnel, including subcontractor personnel, assigned to the project who will have CSEP responsibilities, their CSEP training, and their specific assignment and responsibility in carrying out the CSEP.

- (b) Permit-Required Confined Spaces. Entry into permit-required confined spaces as defined in Section 5157, Title 8, CCR may be required as a part of the Work. All 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 space program 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 Contractor and Agency personnel at the work site.
- (c) Payment. Payment for implementing, administering, and providing all equipment and personnel to perform the CSEP shall be included in the bid items for which the CSEP is required.

#### 7-10.4.5 Asbestos Safety & Prohibited Use

7-10.4.5.1 Asbestos Warning Signs. If any work is to be performed in an area of an existing building where there is the potential for employees working in the building to come into contact with, or release or disturb, asbestos or asbestos-containing construction materials, the Contractor shall post that area with a clear and conspicuous warning notice. The posted warning notice shall read, in print which is readily visible because of its large size and bright color, as follows:

"CAUTION. ASBESTOS. CANCER AND LUNG DISEASE HAZARD. DO NOT DISTURB WITHOUT PROPER TRAINING AND EQUIPMENT."

- **7-10.4.5.2 Products Containing Asbestos.** No product containing any asbestos fibers shall be used on the Work or by the Contractor on the Work site unless specifically identified on the Plans or in the Special Provisions as containing asbestos and not being subject to this section. Asbestos Cement (AC) pipe may be used, when specified, providing all worker safety regulations and manufacturer's recommendations are complied with.
- **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, 4770 et seq. requires that If any recyclable solid wastes or marketable reusable materials will be generated on the site of the Work, 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.

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.

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.

- **7-16 AFFIRMATIVE ACTION.** The Ventura County Affirmative Action Policy for Contractors and Vendors (Appendix E) shall be complied with. The Contractor shall sign and return a copy of Appendix E as part of the Contract Documents.
- 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  $\text{m}^2$  (120 sq. ft.) of floor area, at least one door, and a window area of 2  $\text{m}^2$  (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

VCSS 48 08/25/08

#### **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.

Satisfactory progress is determined to occur if, on the closure date, the percentage of the Work yet to be performed is not more than twice the percentage of Contract time remaining.

Satisfactory performance 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, 10 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. After 50 percent of the Work has been completed, if progress on the Work is, and remains satisfactory, the deduction to be made from the remaining progress estimates may be limited to 10 percent of the first half of the total Contract amount. During any period that performance or progress is unsatisfactory, the deduction for retention from payments shall be 10 percent of the total value of all Work completed.

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:

water pollution control pa	(excluding mobilization & hyments) as a percentage ct price (excluding the tion 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 Percentage of the mobilization pay item 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.** Within 45 calendar days of "completion" as that word is defined in subdivision (c) of section 7107 of the Public Contract Code, Contractor shall execute and submit to Agency a Release on Contract Form. 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 have 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 45 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.

VCSS 54 08/25/08

## 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:

	The marked access of took access for higher chair committee the following.							
			RIPRAP CLAS	SES				
Rock	1-Tonne	½-Tonne	1/4-Tonne	Light	Facing	Cobble		
Sizes	(1 Ton)	(½ Ton)	(¼ Ton)		_			
,		PER	CENTAGE LARG	ER THAN				
2-Tonne (2-Ton)	0-5							
1-Tonne (1-Ton)	50-100	0-5						
½-Tonne (½-Ton)		50-100	0-5	]				
1/4-Tonne (1/4-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 CASTINGS

#### 206-3.3 Manhole Frame and Cover Sets

**206-3.3.1 Selection.** 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.	Catalo	og 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**

- 211-3 SIEVE ANALYSIS. Sieve analysis shall be performed in accordance with ASTM C136.
- **211-4 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).
  - 211-5 R-VALUE. Resistance (R-value) shall be determined by California Test 301.
- **211-6 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.
- **211-7 LOS ANGELES RATTLER TEST.** Loss in Los Angeles Rattler shall be determined by California Test 211.
- **211-8 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:
  - The percent loss.
  - (2) The number of pieces affected, classified as to number disintegrating, splitting, crumbling, cracking, flaking, etc.
  - 211-9 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:

% Loss = 100 x Weight of Material Passing 4.75 mm (No. 4) Sieve

#### Total Weight of Sample

- 211-10 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.
- **211-11 PERMEABILITY TES**T. 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 MATERIALS

#### AND PLACEMENT OF BASE

#### 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  $\mu$ m (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

Alternate rock material, Type S, as specified in Section 400 may be used on the Work.

Suppliers of portland cement concrete and asphalt concrete shall file mix designs as required by 400-1.1.2

#### 400-4 ASPHALT CONCRETE

#### 400-4.1 General

**400-4.1.1A Asphalt Concrete - Alternate Grade.** Unless otherwise specified, III-B3-PG64-10asphalt concrete shall be used. On roads with PCC curbs, where the width between curbs is 12 m (40 feet) or less, III-C3-PG64-10 shall be used.

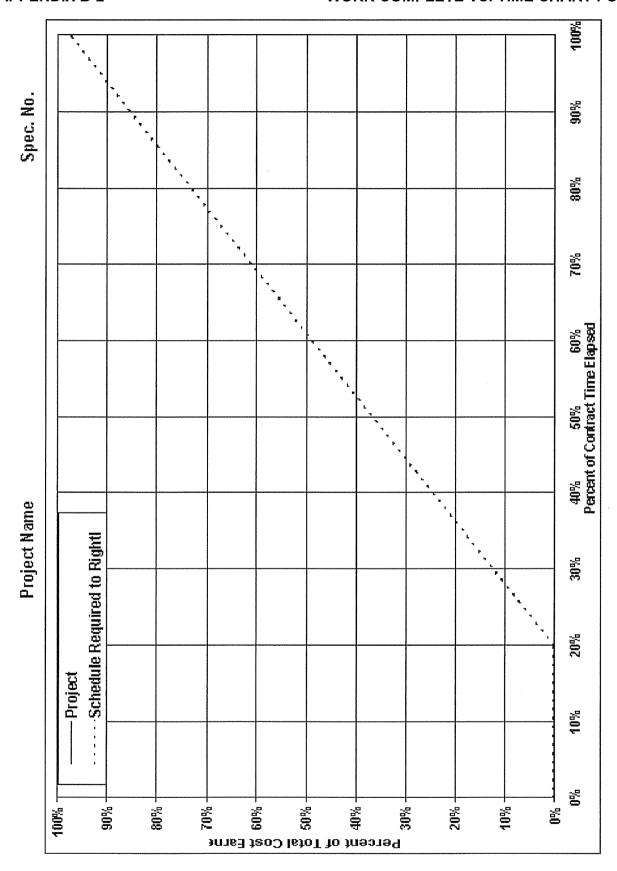
ACORD <sub>™</sub> CERTI	FICATE OF LIABI	LITY INS	URANC	E	DATE (MWDD/YY)			
PRODUCER		ONLY AN HOLDER.	ID CONFERS N THIS CERTIFICA	UED AS A MATTER O RIGHTS UPON TATE DOES NOT AME AFFORDED BY THE F	HE CERTIFICATE END, EXTEND OR			
			INSURERS AFFORDING COVERAGE					
INSURED		INSURER A:						
		INSURER 8:						
		INSURER C:						
		INSURER D:						
		INSURER E:						
COVERAGES								
ANY REQUIREMENT, TERM OR CON MAY PERTAIN, THE INSURANCE AFF POLICIES. AGGREGATE LIMITS SHOW	D BELOW HAVE BEEN ISSUED TO THE I DITION OF ANY CONTRACT OR OTHEI ORDED BY THE POLICIES DESCRIBED I WN MAY HAVE BEEN REDUCED BY PAID	R DOCUMENT WITH HEREIN IS SUBJEC OCLAIMS.	H RESPECT TO WI T TO ALL THE TERI	HICH THIS CERTIFICATE	MAY BE ISSUED OR			
INSR LTR TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MWDD/YY)	LIM	ITS			
GENERAL LIABILITY	1			EACH OCCURRENCE	\$			
X COMMERCIAL GENERAL LIABILITY				FIRE DAMAGE (Any one fire)	\$			
CLAIMS MADE X OCCUR				MED EXP (Any one person)	\$			
DEDUCTIBLE \$				PERSONAL & ADV INJURY	\$			
				GENERAL AGGREGATE	\$			
GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	\$			
X POLICY PRO- LOC								
AUTOMOBILE LIABILITY  ANY AUTO				COMBINED SINGLE LIMIT (Ea accident)	\$			
ALL OWNED AUTOS SCHEDULED AUTOS			-	BODILY INJURY (Per person)	\$			
HIRED AUTOS NON-OWNED AUTOS				BODILY INJURY (Per accident)	\$			
				PROPERTY DAMAGE (Per accident)	\$			
GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	s			
ANY AUTO				OTHER THAN EA ACC	\$			
				AUTO ONLY: AGG	3			
EXCESS LIABILITY				EACH OCCURRENCE	\$			
X OCCUR CLAIMS MADE				AGGREGATE	\$			
<u> </u>				***************************************	\$			
DEDUCTIBLE					\$			
RETENTION \$				V MC STATILL LOTIO	\$			
WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				X WC STATU- OTH ER				
				E.L. EACH ACCIDENT	\$1,000,000			
				E.L. DISEASE - EA EMPLOYE	**************************************			
OTHER				E.L. DISEASE - POLICY LIMIT	\$1,000,000			
O'NEK					:			
DESCRIPTION OF OPERATIONS/I OCATIONS/VE	HICLES/EXCLUSIONS ADDED BY ENDORSEMEN	TISPECIAL PROVISION	vs.					
The Agency and the County of Ventura consultants, employees, agents and vo General Liability and Auto Liability Poli	t Name>> Spec No. < <specno. additional="" all="" as="" boards,="" distributions="" including="" insur-<br="" is="" its="" named="" special="">cles. Waiver of Subrogation is applications and volunteers for Work Comp and</specno.>	ets governed by the ed as respects wor ple to the Agency a	rk done by Contrac and the County of \	lor under the terms of the /entura, its boards, distri	e contract on cts, agencies,			
CERTIFICATE HOLDER ADI	NITIONAL INCHDED. INCHDED + ETTED.	CANCELLAT	TON					
	OTTIONAL INSURED; INSURER LETTER:		<del></del>	ED DOLLOICO DE CANCELLES	DEPOSE THE EVENT TRANS			
County of Ventura		1		ED POLICIES BE CANCELLED				
Public Works Agency L-16	670	i	DATE THEREOF, THE ISSUING INSURER WILL XXXXXXXXXXX MAIL _10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX					
800 South Victoria Avenue								
Ventura, CA 93009-1670	~	ļ.		*******************	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
v Gritura, OA 93009-1070		AUTHORIZED REI			****			
		, , KEED KEE						
ACORD 25-S (7/97)				@ ACORD C	ORPORATION 1988			

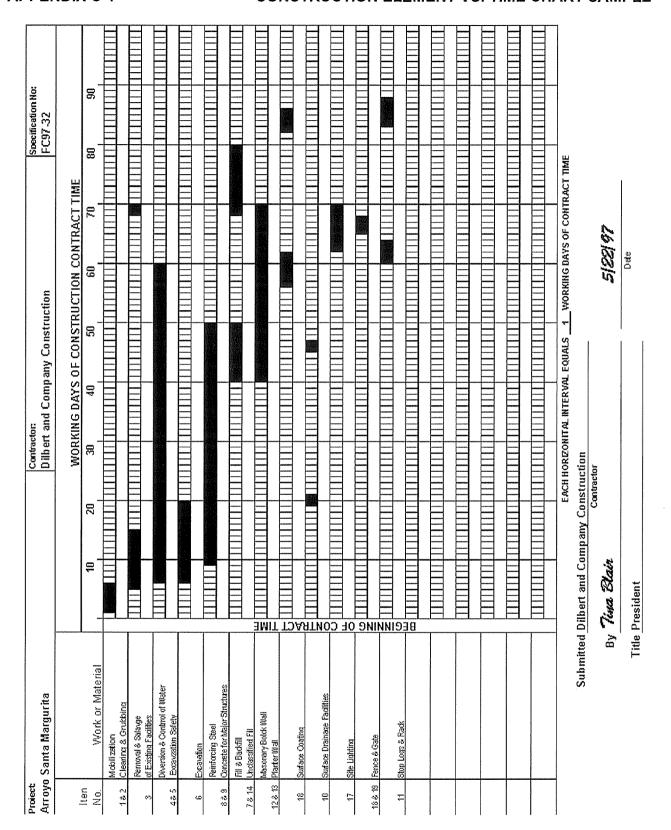
**APPENDIX B-1** 

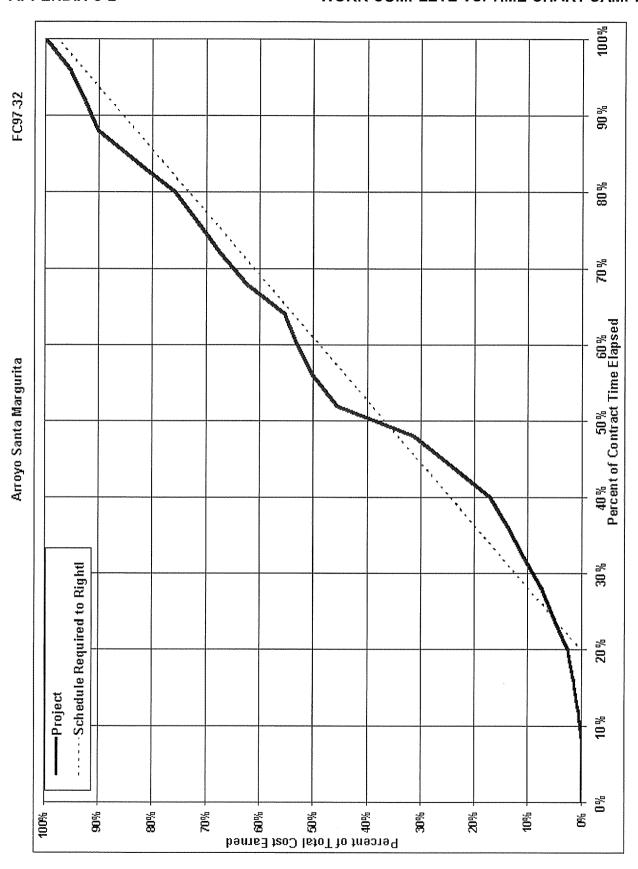
CONSTRUCTION ELEMENT VS. TIME CHART FORM

VCSS 63 08/25/08

Project			Confractor:	Specification No:	:0
lten	J		WORKING DAYS OF	WORKING DAYS OF CONSTRUCTION CONTRACT TIME	
S.	Work or Material	-		-	_
	TOA				
	JINU				
	UEU				
	IINC				
	(NIO				
	ad .				
	THE PARTY OF THE P				
	1.0	teristics.	EACH HORIZOHITAL INTERVAL EQUALS	UALSWORKING DAYS OF CONTRACT TIME	
	Submined		Contractor	1	
	Ву				
	Title			Date —	







		ive written notice or to receive written notice on behalf of ith the foregoing, and exemplars of their respective
On behalf of Agency:	and	On behalf of Contractor:
, Director, Public Works Agency	names and accordance	Title
, Director Central Services Department	ORM I have rized in	Name
, Director	wil wil	Signature
Engineering Services Departme	ent <b>and t</b>	Street Address
	SAM for esc persol	City & State Zip Code
Address for all of the above: Public Works Agency 800 South Victoria Avenue	SAMP d for escre of persons raph 10.	On behalf of Escrow Agent:
Ventura, CA 93009	SA Form used for e signatures of per with paragraph 10	Title
	Form signa with p	Name
		Signature
		Street Address
		City & State Zip Code
At the time the Escrow Account executed counterpart of this Ag		and Contractor shall deliver to the Escrow Agent a fully
IN WITNESS WHEREOF, the p forth above.	arties have executed this	s Agreement by their proper officers on the date first set
Agency: (Agency name)		Contractor: (Contractor company name)
Title		Title
Name		Name
Signature		 Signature

# EXHIBIT "A" ESCROW INSTRUCTIONS

The parties to this escrow are	("Agency") and	("Contractor")
and	("Escrow Agent"). A	gency 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, Contract	tor may substitute certain securities for an
equivalent amount of money required to be	e withheld from progress payments b	y Agency to Contractor pursuant to the
Construction Contract.		

The Escrow Agent is hereby instructed as follows:

- 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.
- 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.
- 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.
- All written notices and demands pursuant to the escrow agreement and these Instructions shall be addressed as follows:
  - (a) To Agency:

To Contractor:

To Escrow Agent:

(b)

(c)

Director, Ventura County Public Works Agency 800 South Victoria Avenue Ventura, California 93009

DATED:		
By	By	
Title	Title	Title
AGENCY	CONTRACTOR	ESCROW AGENT Bank Charter: State [ ] Federal [ ] Escrow Agent's Address:

#### AFFIRMATIVE ACTION POLICY FORM

# COUNTY OF VENTURA AFFIRMATIVE ACTION POLICY FOR CONTRACTORS AND VENDORS

Name of Contractor

Spec. No.

During the performance of this contract, the undersigned Contractor agrees to adopt this policy to affirm its support of a program of equal employment opportunity and to assure compliance with Title VII of the Civil Rights Act of 1964, Executive Order 11246 and Section 503 of the Rehabilitation Act of 1973, if applicable, the California Fair Employment and Housing Act, and the Ventura County Affirmative Action Compliance policy for contractors and vendors.

This Contractor agrees to assert leadership within the community and to put forth good faith efforts to achieve full employment and utilization of the capabilities and productivity of all our citizens without regard to race, age, color, sex, religion, ancestry, national origin, marital status or handicap.

This Contractor further recognizes that the effective application of a policy of equal employment opportunity involves more than just a policy statement and will, therefore, undertake affirmative action to make known that equal opportunities are available on the basis of individual merit, and to encourage advancement on this basis.

The following Affirmative Action compliance policy for contractors and vendors is hereby established as the policy and practice of our company:

- 1. Our company will recruit, employ and treat applicants and employees without regard to race, age, color, sex, religion, ancestry, national origin, marital status or handicap, including, but not limited to, the areas of compensation and opportunities for advancement, including upgrading and promotion.
- 2. Our company will actively use recruitment sources such as employment agencies, unions and schools which have a policy of referring applicants on a nondiscriminatory basis.
- 3. Our company will disseminate its affirmative action policy externally by informing and discussing it with all recruitment sources, by advertising in news media, specifically including minority news media, and by notifying and discussing the policy with minority groups, handicapped and women's organizations and subcontractors, as appropriate. In addition, we shall maintain records of each organization's response. The policy will also be posted in all places available and accessible to employees and applicants for employment.
- 4. Our company will maintain a file of the names and addresses of each minority, handicapped and female applicant referred to the company for hiring and if the applicant is not considered for employment or was not employed, the company's file shall fully document the reasons.
- 5. Our company will insure that all employee specifications, selection requirements, tests, and other employee recruitment or evaluation procedures do not discriminate against any applicant or employee on the basis of race, age, color, sex, religion, ancestry, national origin, marital status or handicap.
- 6. Our company will make sure that seniority practices, job classifications, rates of pay, and other forms of compensation, and other employee practices and classifications do not have an unlawfully discriminatory effect on any applicant or employee on the basis of race, age, color, sex, religion, ancestry, national origin, marital status or handicap.
- 7. Our company will make certain that all subcontractors are in compliance with the Ventura County Affirmative Action Compliance Policy for Contractors and vendors, and that all project subcontractors have an approved plan or policy statement.
- 8. Our company will solicit bids for subcontracts from qualified minority, handicapped and female subcontractors subject to availability.
- 9. Our company will continually monitor all personnel activities to insure that the Ventura County Affirmative Action Policy for Contractors and Vendors is carried out.
- 10. Our company will make good faith efforts to meet this policy and acknowledges that violators will be reported to the Board of Supervisors for appropriate action.

Our company hereby agrees to provide to the Ventura County Affirmative Action Office any access and information that they may request to assist in determining compliance with this policy.

Date	Executed at (city/state)

I declare under penalty of perjury, pursuant to the laws of the State of California, that the foregoing is true and correct to the best of my knowledge.

Signature/Title (Company Representative)

## **RELEASE ON CONTRACT**

CONTRACT	NAME	:											
SPE	EC. NC	),		PRC	JECT	NO							
WHEREAS,	by	the	terms	of	the	contract	dated	***************************************	?	20	entered	into	by
					_and th	ne undersigi	ned CON	TRACTO	R,				
whereas, to Contractor	the CC	NTRA	CTOR r	epres	ents th			-	•				the
NOW, THERI of the amoun receipt of whi discharges claims and ca Agency for th Stop Notices of Description of	t due uich is hauses auses e rema	under to hereby of acting ainder, or Cod	the contra acknow  on, in law if any, o	act, to ledge of and w and f the	wit, the wit, the with the wit	ne sum of \$_ne CONTRA all manner ouity, under ts retained	ACTOR, of debts, o or by vir as provic	the CONdues, dem dues, dem tue of sai led in 9-3	nd the a TRACTO nands, si id contra .2, any a	dditional DR hereb um or sur act excep amounts i vs: (If noi	consideration of releases the soft mone of the claim retained as	on of \$1 and for y, accou against require ank) Notice	1.00, rever unts, t the
or Disput							<u>Amour</u>		<u>Cla</u>			<u>Claim</u>	
The CONTRA with the requ provisions of the contract release of its r	uiremen the cor ct. Acc	nts for itract, a ceptand	making and follov ce of this	clain wing t Rele	ns und he prod ase or	ler the con cedures for Contract b	ntract, inc resolution by the [Ac	cluding gi n of dispu gency Nar	ving not tes or cla me] shal	tice pursi aims set f I not be d	uant to the forth in subs deemed as	applic section ( a waive	able 6-12
IN WITNESS hereunto set t							RACTOR	have bee	n				
THIS FORM No by a proper ac	cknowle	edgem	ent form				_	Contr	actor				
							Ву						
							Title						

#### APPENDIX G

## PERFORMANCE AND PAYMENT BOND FORM

SURETY BONDS
PERFORMANCE AND PAYMENT

Bond No.

Whereas, the Board of Supervisors of the «Agency», State of California, hereinafter called "Agency", and «Contr». hereinafter called "Principal", have entered into a contract whereby principal agrees to install and complete certain designated work, which said contract dated «ContrDate», and identified as project «ProjName» (Spec. No. «SpecNo») is hereby referred to and made a part hereof; and

Whereas, said principal is required under the terms of said contract to furnish a bond for the faithful performance of said 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» (\$«OrigCost») 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 above bounded principal, the principal's 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.

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 15 (commencing with Section 3082) of Part 4 of Division 3 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, materialmen 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» (\$«OrigCost») 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 pursuant to Section 18806 of the Revenue and Taxation Code, 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, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment herein 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 15 (commencing with Section 3082) of Part 4 of Division 3 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.

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 this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

In witness whereof, this instrument has been duly executed by the principal and surety above named on \_\_\_\_\_\_, 20\_\_. SAMPLE BOND FORM Agency will prepare the Bond in this «Contr» Name of Principal) format and transmit it to the Contractor along with the Contract By\_ and the Notice of Award letter. Title Surety shall fill in the Bond No., date and identification of surety in place (Name of Surety) provided. Contractor shall sign and indicate Attorney-in-Fact title in place provided. Address State \_\_\_\_\_ Zip\_\_\_\_ Telephone No.\_\_\_\_ INDICATE COMPLETE ADDRESS OF SURETY TO WHICH A-467/9 CORRESPONDENCE CONCERNING THIS BOND SHOULD BE DIRECTED.

		1
		And and the Control of the Control o
		And Andreas Angeles and Angeles Angele
		уклуждения под
		онсоро е изухналого поставления поставлени
		ekitan kenanda
		manne macha-resoulte Zimel Zimel Zimel zimel più de la commenza del co
		nellara platea por avec ana representa della escolla e
		nudeliilikelii veelikaanaa oli vootaa akk
		udichioanna di vidi li marrillassondh
		million de soute en paper de la conserve una servicio de l
		нобизанального об домощениями!

# TABLE OF CONTENTS SPECIAL PROVISIONS

# SPECIFICATION NO. RD09-13 PROJECT NO. 50422

1000	GENERAL	76
1001	MOBILIZATION	79
1002	TRAFFIC CONTROL AND CONSTRUCTION SIGNING	79
1003	WATER POLLUTION CONTROL	80
1004	REMOVAL AND DISPOSAL OF AC ON DECK	81
1005	REMOVAL OF EXISTING PLANKS AND STRINGERS	81
1006	INSTALLATION OF DECK PLANKS, STRINGERS, AND SILL PLATE	82
1007	SALVAGING UNDAMAGED LUMBER	83
1008	REPAIRING STEEL FLOOR BEAM #5	83
1009	GRINDING FOR KEY AND PAVING AC APPROACH	85

# **SPECIAL PROVISIONS**

# 1000 GENERAL REQUIREMENTS

# 1000-1 DESCRIPTION OF WORK

The work under this contract consists of removal of AC on deck, removal and replacement of existing deck planks and stringers on six bays of the bridge not including the first westerly bay, and repairing one steel floor beam. All work shall be performed in accordance with the Standard Specifications, the Plans and these Special Provisions.

# 1000-2 REFERENCE SPECIFICATIONS AND STANDARD PLANS

# 1000-2.1 SPECIFICATIONS

The Standard Specifications for Public Works Construction (SSPWC) shall mean the "Greenbook" published by BNI Publications Inc. When reference is made to the SSPWC or "Greenbook" Specifications, it shall mean the Standard Specifications for Public Works Construction 2006 Edition.

The State Standard Specifications (SSS) shall mean the State of California, Department of Transportation Standard Specifications. When reference is made to the SSS, State Specifications, or Caltrans Specifications, it shall mean State Standard Specifications May 2006 Edition.

The requirements presented in Sections 1-9 of the State Standard Specifications shall not apply to work on this project. Any and all reference to Sections 1-9 of the State Standard Specifications shall be considered references to the equivalent Sections 1-9 of the Standard Specifications, and these Special Provisions. Where no equivalent section exists, Contractor shall bring the issue to the attention of the Engineer and request guidance.

Unless the context otherwise requires, wherever the following terms, or pronouns in place of them, are used in the SSS, the intent and meaning shall be interpreted as provided in 1-2, "Definitions," of the Standard Specifications with the following modifications:

- 1. "State" shall mean "County of Ventura."
- 2. "Department" shall mean "County of Ventura."
- 3. "Director" shall mean "Engineer."
- 4. "State project" shall mean "Bridge Road Bridge Deck Repair Project, Project No. 50422."
- 5. "Laboratory" shall mean "County."

The Ventura County Standard Specifications (VCSS) shall mean the County of Ventura Standard Specifications. When reference is made to the VCSS, the Standard Specifications or County Specifications, it shall mean the Ventura County Standard Specifications.

#### 1000-2.2 STANDARD PLANS

The Standard Plans for Public Works Construction (SPPWC) shall mean the Standard Plan promulgated by the "Greenbook" Committee of Public Works Standards published by BNI Publications Inc. When reference is made to the SPPWC, "Greenbook" Standards, or Standard Plans, it shall mean the Standard Plans for Public Works Construction 2006 Edition.

The State Standard Plans (SSP) shall mean the State of California, Department of Transportation Standard Plan. When reference is made to the SSP, the State Standards, or Caltrans Standards, it shall mean the State Standard Plans May 2006 Edition.

# 1000-2.3 MODIFICATIONS TO STANDARD SPECIFICATIONS

Subsection 6-1.1 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 Administration Building of the County of Ventura Government Center on a date and time established by the Engineer. Attendance at the Preconstruction Meeting by the Contractor's Representative(s) as described in 7-6 of the Standard Specifications is mandatory prior to the Agency's issuance of a Notice To Proceed. Attendance by subcontractor representatives and payroll staff is encouraged.

# 1000-3 FIELD VERIFICATION

The Contractor shall verify dimensions of existing timber and steel members prior to ordering, manufacturing or replacing new components.

#### 1000-4 CONSTRUCTION AREA

The Contractor shall confine its operations within the right-of-way 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).

# 1000-5 REQUIRED DOCUMENTS FOR WORK AREAS

The Contractor shall submit to the Engineer for review and approval the following documents at least ten days prior to beginning work:

- A. A map or written description of material haul routes.
- B. The name and phone number of the person(s) responsible for 24-hour maintenance of construction signing and traffic control.

# 1000-6 CONTRACTOR'S WORKING HOURS

Subsection 6-13.1 and 6-13.2 are modified as follows: Work shall generally be performed between 10:30 pm and 6:00 am., Monday through Friday. Daytime work or Saturday work may be allowed if advance approval is obtained from the Engineer.

# 1000-7 COMPLETION OF WORK

The work shall be completed in 42 working days.

# 1000-8 PROJECT SPECIFIC REQUIREMENTS

Debris and construction material shall not be allowed to fall from the bridge. It is the Contractor's responsibility to take whatever actions are necessary to prevent debris, shavings, or any other materials from falling to the creekbed below. Construction equipment shall not exceed posted weight limits. At the end of each job shift, the bridge shall be re-opened by providing one ten-foot lane across the bridge. If deck planks have been removed, Contractor shall place one-inch-thick steel plates across the old or new stringers in order to provide for safe passage of vehicles. See Section 1002, Traffic Control and Construction Signing.

The existing deck timbers and stringers of this bridge have experienced varying degrees of deterioration. Contractor shall use light-weight equipment to remove the AC layer on the deck. Upon removal of deck planks, Contractor shall examine existing stringers for soundness if he intends to place steel plates until the next work shift, to allow the bridge to be re-opened. If existing stringers do not appear sound to bear traffic, Contractor shall be entitled to continue working to replace stringers as necessary to allow the bridge to be safely re-opened. Bridge deck conditions must be left in a safe condition for passage of vehicles at the end of each work shift.

Removing portions of the bridge shall conform to the provisions in 15-4, "Bridge Removal" of the State Standard Specifications and these Special Provisions.

# 1000-9 STORAGE OF MATERIALS

Contractor may park equipment and store materials within the road rightof-way of Bridge Road (not on the bridge), but such equipment and materials must be at least five feet off the pavement and must be lined with reflectorized delineators for safety.

The paved road is 20 feet wide but road right-of-way is 60 feet. The Contractor may use the full road right-of-way to store materials and equipment as shown on the Plans.

# 1001 MOBILIZATION

#### 1001-1 GENERAL

In addition to work specified in 9-3.4.1 of the Standard Specifications, Mobilization includes work, services and operations necessary to establish access to the project site, restoration of such areas to their original condition or a condition approved by the Engineer, the movement of labor, supplies, equipment and incidentals from the project site, and for all other work, services and operations which must be performed or for which costs are incurred after performing work of the other contract items.

# 1001-2 MEASUREMENT AND PAYMENT

Payment for Mobilization will be made as specified in 9-3.4.2 of the Standard Specifications.

# 1002 TRAFFIC CONTROL AND CONSTRUCTION SIGNING

#### 1002-1 TRAFFIC CONTROL

The Contractor may close the bridge on Bridge Road during work, from 10:30 pm to 6 am. The Contractor shall set signs in advance of his work notifying the public of closure of the road. Two special signs informing the public of the upcoming road closure will be provided by County. All other signs needed for traffic control shall be the responsibility of Contractor.

If emergency vehicles must urgently cross the bridge, Contractor shall immediately allow passage to these vehicles without delay, as there is no other vehicular access to the east side of the creek. The Contractor shall prepare a plan to allow vehicle passage if required, for advance approval by Engineer. This plan may include features such as steel plates to be temporarily set in place. Pedestrians shall be allowed to cross the bridge at any time during work hours and non work hours.

The Contractor shall cooperate with the Inspector relative to handling vehicular, bicycle and pedestrian traffic through the work area and shall make its own arrangements relative to keeping the work area clear of parked vehicles. During non-work hours the bridge shall be open to use. A lane at least ten feet wide must be provided across the bridge during non-work hours. Barricades or delineators shall be included in a traffic control plan which must be approved in advance by Engineer.

#### 1002-2 COORDINATION WITH RESIDENTS

Because this bridge is the only access to the east side of the creek, the Contractor shall provide a 24-hour live telephone number and shall allow vehicular access in case of extreme hardship, similar to emergency vehicles. In such cases, vehicles shall not be delayed by the Contractor more than 20 minutes. Residents who live on the east side of the bridge, who must return home after 10:30 pm, must park on the west side of the bridge and shall be allowed to walk across.

# 1002-3 CONSTRUCTION SIGNING

Construction Signing shall consist of furnishing, installing, maintaining and removing construction signs, delineators, 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 to the work area and shall not be removed until all work has been completed.

# 1002-4 MEASUREMENT AND 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.

# 1003 WATER POLLUTION CONTROL

#### 1003-1 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.

#### 1003-2 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. The Contractor shall prevent any material from falling into the streambed below the bridge.

The affected area is less than one acre; therefore the Contractor shall prepare a Stormwater Pollution Control Plan.

# 1003-3 MEASUREMENT AND PAYMENT

Payment for Water Pollution Control will be made in accordance with 7-8.6.4.

# 1004 REMOVAL AND DISPOSAL OF AC ON DECK

# 1004-1 GENERAL

This work consists of removal, hauling, and disposal of AC on the deck of the bridge in accordance with 300-1 of the SSPWC. This work shall include all labor and equipment necessary to perform the work and lawful disposal in accordance with these Special Provisions.

# 1004-2 MEASUREMENT AND PAYMENT

Payment for Remove and Dispose of AC on Deck will be made at the contract lump sum price. Such payment shall be considered full compensation for providing all materials, labor, equipment and all incidentals necessary to complete the work in accordance with the Standard Specifications and these Special Provisions.

# 1005 REMOVAL OF EXISTING PLANKS AND STRINGERS

# 1005-1 GENERAL

This work consists of removal, hauling, and disposal of deck planks and stringers from six bays of the bridge, not including the first westerly bay of the bridge.

# 1005-2 MEASUREMENT AND PAYMENT

Payment for Remove Existing Planks and Stringers will be made at the contract lump sum price. Such payment shall be considered full compensation for providing all materials, labor, equipment and all

incidentals necessary to complete the night-time work in accordance with the Standard Specifications and these Special Provisions.

# 1006 INSTALLATION OF DECK PLANKS, STRINGERS, AND SILL PLATE

# 1006-1 GENERAL

This work consists of installation of the new stringers and new deck, with new lumber on six bays of the bridge, not including the first westerly bay of the bridge. This work also includes placing steel plates at the end of each job shift as shown on the Plans, cleaning, maintenance and related work.

Twenty-one stringers shall be placed in each bay where there are now 16 stringers. The Contractor shall provide and install 4 inches X 16 inches (nominal) Pressure-Treated (0.4) Douglas Fir Grade 1 for stringers, 4 inches X 12 inches (nominal) Pressure-Treated (0.4) Douglas Fir Grade 1 for deck planks, and 4 inches X 10 inches (nominal) Pressure-Treated (0.4) Douglas Fir Grade 1 for Sill Plate. Contractor shall provide certificates of compliance with the specifications for materials and design value information for lumber. Contractor shall provide all hardware and blocks necessary to perform the job. At the end of each job shift, the Contractor shall place steel plates to cover the demolished deck and restore traveled way for traffic.

#### 1006-2 TREATED LUMBER AND TIMBER

Timber shall conform to the provisions in Section 204, "Lumber and Treatment with Preservatives", and 305-2, "Timber Structures and Timber Construction" of the Standard Specifications and these Special Provisions.

The preservative treatment shall be 0.4 pcf retention with pentachlorophenol (Type C), ammoniacal copper arsenate, ammoniacal copper zinc arsenate, or chromated copper arsenate conforming to the requirements for use in bridges and important structural members in the American Wood Preservers Association Standard C-14, "Wood for Highway Construction - Preservative Treatment".

Boltholes in lumber that is treated with ammoniacal copper arsenate, ammoniacal copper zinc arsenate, or chromated copper arsenate shall be filled with grease before the bolts are inserted. The grease shall be recommended by the manufacturer for corrosion protection and shall not melt or run at a temperature of 150°F (66°C).

Timber elements that are split, broken, or otherwise damaged by the Contractor's operations or misfitting timber elements in the new installation shall be replaced at the Contractor's expense.

#### 1006-3 MEASUREMENT AND PAYMENT

Payment for Install Deck Planks, Stringers, and Sill Plate will be made at the contract unit price. Such payment shall be considered full compensation for providing all materials, hardware, blocking, bracings, steel plating to allow traffic, labor, equipment and all incidentals necessary to complete the night-time work in accordance with the Standard Specifications and these Special Provisions.

# 1007 SALVAGING UNDAMAGED LUMBER

#### 1007-1 GENERAL

This work includes salvaging existing undamaged planks and stringers in accordance with the 15-2.04 of the SSS and these Special Provisions. Salvaging shall include the removal, disassembly, bundling, tagging, hauling and stockpiling of salvaged materials to the County of Ventura Road Maintenance yard in Saticoy. The Contractor shall contact John Ryan, (805) 340-1966 at least 72 hours prior to delivery. Any salvaged materials not wanted by the Engineer shall be disposed of at Contractor's expense.

# 1007-2 MEASUREMENT AND PAYMENT

Payment for Salvage Undamaged Lumber will be made at the contract lump sum price. Such payment shall be considered full compensation for providing all materials, labor, equipment and all incidentals necessary to complete the work in accordance with the Standard Specifications and these Special Provisions.

#### 1008 REPAIRING STEEL FLOOR BEAM #5

#### 1008-1 GENERAL

This work involves strengthening floor beam #5 in accordance with the Plans, the Standard Specifications and these Special Provisions. Bracing rods connecting to floor beams #4, #5 and #6 and bolts connecting floor beam #5 to truss shall be removed and reinstalled. The bracing rods may be salvaged and reused in the same location. Removed materials that are not to be salvaged or used in the reconstruction shall become the property of the Contractor and shall be properly disposed.

# 1008-2 REPAIRING PLAN

The Contractor shall submit a complete repairing plan to the Engineer, detailing procedures, sequences, and all features required to perform the repairing of the floor beam in a safe and controlled manner.

The repairing plan shall include, but not be limited to the following:

- A. The repairing sequence, including staging of repairing operation.
- B. Indicate how beam #5 will be repaired while re-opening the bridge during non-work hours.
- C. Measures to assure that people, property, utilities, and improvements will not be endangered.
- D. Details and measures for preventing material, equipment, and debris from falling into Santa Paula Creek.
- E. Measures to ensure the lateral stability of the truss while the bracing rods are removed.

The Contractor shall submit the Repairing Plan to the Engineer and receive approval prior to beginning any work on the bridge. The Contractor shall allow at least seven work days for the review of this plan by Engineer.

# 1008-3 SCAFFOLDING

If the Contractor elects to use scaffolding, it shall be in accordance with the Construction Safety Orders of the Division of Occupational Safety and Health and these Special Provisions.

If scaffolding is suspended from the traveled way, the Contractor shall submit to the Engineer working drawings for scaffolding systems in conformance with Section 2-5.3, "Submittals", of the Standard Specifications, and these Special Provisions. Scaffolding drawings shall be prepared by a Civil or Structural Engineer licensed by the State of California.

Scaffolding working drawings shall include the following items:

- A. Descriptions, calculations, and values for all loads anticipated during the erection, use, and removal of scaffolding.
- B. Methods and equipment for erecting, moving, and removing scaffolding.
- C. Design details including bolt layouts welding details, and any connections to existing structures.

D. Stress sheets including a summary of computed stresses in the (1) scaffolding, (2) connections between scaffolding and any existing structures and (3) existing load-supporting members. The computed stresses shall include the effects of erection, movement, and removal of the scaffolding.

Welding for the manufacturing and erection of scaffolding shall conform to the requirements in AWS D1.1 or D1.2 for steel or aluminum construction, respectively.

# 1008-4 STRUCTURAL STEEL

Structural Steel conform to the provisions in 206-1, "Structural Steel, Rivets, Bolts, Pins, and Anchor Bolts", and 304-1, "Structural Steel" of the Standard Specifications and these Special Provisions. The work included in structural steel consists of all metal parts including the new steel floor beams, new steel connections, high strength bolts, bearing plate extensions, and the expansion joint cover plate. The steel plates shall conform to ASTM A 36. All bolted connections shall use high strength steel bolts conforming to ASTM A 325 N.

# 1008-5 TREATED LUMBER AND TIMBER

The Contractor shall refer to 1006-2 of these special provisions for this section.

#### 1008-6 MEASUREMENT AND PAYMENT

Payment for Repair Steel Floor Beam #5 will be made at the contract lump sum price. Such payment shall include full compensation for furnishing all labor, materials, tools, equipments, incidentals, and for doing all the work involved in repairing floor beam, including scaffolding, structural steel, treated Douglas Fir solid blocking, hardware, and disposal of items not salvaged, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

# 1009 GRINDING FOR KEY AND PAVING AC APPROACH

#### 1009-1 GENERAL

This work involves grinding for key, placing AC, cleaning, maintenance and related work. AC Taper with Key shall be provided as shown on the Plans, marked in the field, and as specified in these Special Provisions. The Key shall be formed by saw cutting at the joint line, and removing

and disposing of a portion of the existing AC pavement as shown on the Plans.

The Contractor shall not pave the new deck but shall place AC at the easterly end of the bridge to make a smooth transition between the deck and the existing roadway approach as shown on the Plans in accordance with the Plans, the Standard Specifications and these Special Provisions. Material for placing AC shall be PG64-10 Asphalt Concrete as specified on the Plans and in accordance with SSPWC 203-6 and these Special Provisions.

# 1009-2 MEASUREMENT AND PAYMENT

Payment for Grind for Key and Pave AC Approach will be made at the contract lump sum price. Such payment shall be considered full compensation for providing all materials, labor, equipment and all incidentals necessary to complete the work in accordance with the Standard Specifications and these Special Provisions.

		·

# **PLANS**

			*.