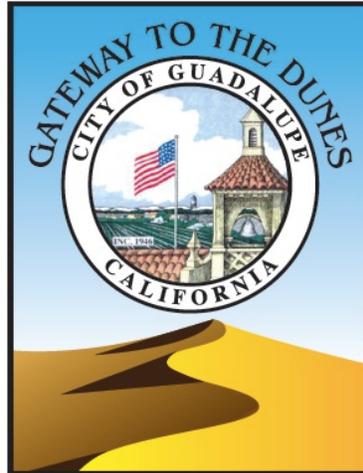


**CITY OF GUADALUPE
CALIFORNIA**



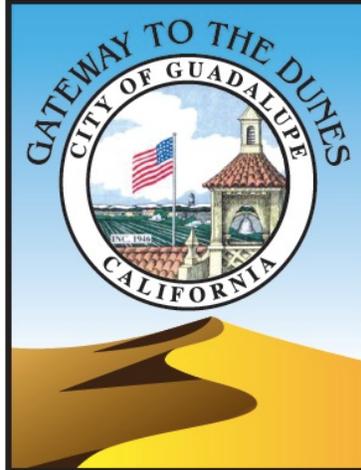
**ADA RAMP AND VALVE
REPLACEMENT PROJECT**

NOTICE TO CONTRACTORS

AND

SPECIAL PROVISIONS

CITY PROJECT NO. 2016-004



ADA Ramp and Valve Replacement Project

DEADLINE FOR SUBMITTAL OF QUESTIONS: October 27, 2016 5:00 p.m.
BID OPENING DATE: November 3, 2016 2:00 p.m.



Jeff van den Eikhof
City Engineer

October 12, 2016
Date

LICENSE REQUIREMENT: **Class A** License at the time of award.
TIME OF CONTRACT: **40** working days after date of notice to proceed
LIQUIDATED DAMAGES: **\$500/day**

For use in connection with the Standard Specifications Dated 2015 and Standard Plans Dated 2015 of the California Department of Transportation, and the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished.

ADA Ramp and Valve Replacement Project

**CONTRACT DOCUMENTS,
SPECIAL PROVISIONS and
TECHNICAL SPECIFICATIONS**

Approved By





Jeffrey A. van den Eikhof, City Engineer
Registered Civil Engineer, C59920 Date 10/12/2016

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CITY OF GUADALUPE, CA
NOTICE TO CONTRACTORS

CITY PROJECT NO. 2016-004

SEALED PROPOSALS FOR THE WORK DESCRIBED AND SHOWN ON THE PLANS ENTITLED:

ADA RAMP AND VALVE REPLACEMENT PROJECT

Will be received at the offices of the Building Department, City of Guadalupe, 918 Obispo Street, Guadalupe, California 93434, until **2:00 p.m. local time, November 3, 2016**, at which time they will be publicly opened and read at the same address.

GENERAL WORK DESCRIPTION: The work involves removing and replacing curb ramps, and water valve replacements. The work includes traffic control and storm water pollution control programs, and other various items as specified in the Contract Documents.

WORK SCHEDULE: Work must be completed within 40 working days from the Notice to Proceed.

CONTRACT DOCUMENTS: Contract documents (Plans, Notice to Contractors, Special Provisions, Proposal and Sample Contract) or other related information are available for review online at www.ci.guadalupe.ca.us or www.ebidboard.com, and at City Hall, 918 Obispo Street, Guadalupe, California, 93434.

QUESTIONS: Questions must be submitted no later than 5:00 p.m. October 27, 2016 to allow sufficient time for response. All questions shall be submitted by email to jeff@eikhofdesigngroup.com

PROPOSALS: Proposals are required for the entire work described in the Contract Documents. Proposals will not be considered unless they are made on the proposal forms furnished in the Contract Documents. Attention to prospective bidders is called to Section 2, "Proposal Requirements and Conditions," within the Contract Documents, for full direction as to bidding, etc. The City of Guadalupe reserves the right to reject any or all proposals or make the award to the lowest responsible bidder.

Notice is given to all bidders that no more than 50% of the work, as defined by the contract price, may be done by subcontractors.

Notice is also hereby given that all Bidders may be required to furnish a sworn statement of their financial responsibility, technical ability and experience before award is made to any particular Bidder.

The successful Contractor will be required to obtain a business license from the City and pay related fees.

The right is reserved by the City of Guadalupe to reject any or all Bids, to evaluate the Bids submitted, and award the contract to the lowest responsible Bidder. The City further reserves the right to waive any informalities or minor irregularities in the Bid.

BONDS: Each proposal must be accompanied by cash, a certified or cashier's check, or bidder's bond of the prescribed form and made payable to the City of Guadalupe for an amount equal to at least ten percent (10%) of the amount bid, such guaranty to be forfeited, should the bidder to whom the contract is awarded fail to furnish the required bonds and to enter into a contract with the City within ten (10) days after awarding of the contract. Each proposal shall include a Payment Bond per Civil Code Section 3248. The bond shall be in a sum not less than one hundred percent of the total amount payable by the terms of the contract.

LICENSE REQUIREMENTS: In accordance with provisions of California Public Contract Code Section 3300, the City has determined that the **Contractor shall possess a valid Class A license at the time of award**. The Contractor shall be properly licensed at the time the contract is awarded. No contract will be

awarded from a Contractor who has not been licensed in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code.

STANDARD SPECIFICATIONS: The Standard Specifications for this project are contained in the 2015 edition, including all supplementary documents, of the Caltrans Standard Specifications.

PREVAILING WAGE RATES: Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the County of San Luis Obispo, in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available from the California Department of Industrial Relations' Internet web site at <http://www.dir.ca.gov>.

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

The Contractor will be required to maintain and distribute certified payroll records in compliance with Section 1776 of the California Labor Code.

RETENTION: The Contractor may elect to receive 100 percent of payments due under the Contract Documents from time to time, without retention from any portion of the payment by the City, by depositing securities of equivalent value with the City in accordance with the provisions of Section 22300 of the California Public Contract Code. Such securities, if deposited by the Contractor, shall be valued by the City, whose decision on evaluation of the securities shall be final. Securities eligible for investment under this provision shall be limited to those listed in Section 22300 and Section 16430 of the California Government Code.

Dated at City of Guadalupe, County of Santa Barbara, California this _____ day of _____, 2016.

By

City Clerk
City of Guadalupe CA

PROPOSAL
TO
THE CITY OF GUADALUPE
FOR
ADA RAMP AND VALVE REPLACEMENT PROJECT
CITY PROJECT NO. 2016-004

NAME OF BIDDER _____

BUSINESS P.O. BOX _____

CITY, STATE, ZIP _____

BUSINESS STREET ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE NO.: _____

FAX NO.: _____

The work for which this Proposal is submitted is for construction in accordance with the Special Provisions (including the payment of not less than the State General Prevailing Wage Rates or the Federal minimum wage rates when set forth herein), the Plans described below, including any addenda thereto, the contract annexed hereto, and also in accordance with the Caltrans Standard Specifications dated 2015, and the City of Santa Maria Standard Specifications insofar as the same may apply, specifications which may be referred to in the Special Provisions or project plans, and the Labor Surcharge And Equipment Rental Rates in effect on the date the work is accomplished.

The Technical Specifications for the work to be done are entitled:

CITY OF GUADALUPE; CALIFORNIA;
ADA RAMP AND VALVE REPLACEMENT PROJECT

The Bidder's attention is directed to Section 2, "Proposal Requirements and Conditions," of the Contract Documents.

The undersigned as Bidder declares that he/she has carefully examined the location of the proposed work above described, read and examined the Contract Documents, and Addendum/Addenda (List Addenda Received: ____, ____, ____, ____) therefore, read the Notice to Contractors, the Proposal Requirements, including the Caltrans Standard Specifications, and hereby proposes and agrees, if this Proposal is accepted by the City, to furnish all materials and services required to do all the work required to complete the said construction in accordance with the Contract Documents in the time stated herein, for the unit prices given below:

BID SCHEDULE

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT OF MEASURE	PAYMENT REFERENCE	UNIT PRICE (IN FIGURES)	ITEM PRICE (IN FIGURES)
BASE BID						
1	Traffic Control	1	LS	TS-2.04		
2	Water Pollution Control Program	1	LS	TS-3.03		
3	Concrete Sidewalk and Curb Ramp	3,240	SF	TS-5.03		
4	Concrete Spandrel and Cross Gutter	710	SF	TS-5.03		
5	Concrete Curb and Gutter	745	LF	TS-5.03		
6	Truncated Domes	471	SF	TS-5.03		
7	8" Water Valve Assembly	10	EA	TS-6.02		
8	6" Water Valve Assembly	1	EA	TS-6.02		
9	Remove & Replace Asphalt Concrete Surfacing	1,000	SF	TS-7.04		
TOTAL BASE BID (Items 1 through 35):						

TOTAL BASE BID IN WORDS:

Total Bid Amount shall be shown in both words and figures.

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed. Bids will be compared by the Total Mathematical Bid as determined by the Engineer. The Total Mathematical Bid is the summation of all required bid items, excluding bid alternates. Bid items are calculated by multiplying the Engineers Estimate quantities by the unit bid prices. In the case of a discrepancy between the Total Mathematical Bid and the total bid written above, the Total Mathematical Bid shall govern.

The bidder to whom the contract is awarded agrees to enter into a contract with the City of Guadalupe, within **fifteen (15) days** after the date of Notice of Award, and to commence work within **ten (10) working days**, after the date of the Notice To Proceed, and to diligently prosecute the work to completion within the Time of Contract shown on the cover of the Project Manual.

The undersigned understands and agrees that the City of Guadalupe will not be responsible for any errors or omissions on the part of the undersigned in preparing and submitting this Proposal.

Signature

Date

DESIGNATED SUBCONTRACTOR INFORMATION SHEET

ADA RAMP AND VALVE REPLACEMENT PROJECT

The Contractor shall set forth the following information on the "Designated Subcontractor Information Sheet," the name and location of the place of business, telephone and FAX numbers, license number and classification of each subcontractor who will perform work or labor or render service to the undersigned in or about the construction of the work to be performed. That portion of the work which will be done by such subcontractor for each subcontract shall be listed by individual item number, percent of item, dollar amount of item and brief description. The contractor's attention is directed to Section 6-11, "Listing Of Subcontractors," of these Special Provisions.

(1) _____
Name

Address

City, State, Zip

Phone Number

FAX Number

License Number and Classifications

(_____) (_____) (_____)
Item No Percent of Item Dollar Amount

Description of Above Item

(_____) (_____) (_____)
Item No Percent of Item Dollar Amount

Description of Above Item

(3) _____
Name

Address

City, State, Zip

Phone Number

FAX Number

License Number and Classifications

(_____) (_____) (_____)
Item No Percent of Item Dollar Amount

Description of Above Item

(_____) (_____) (_____)
Item No Percent of Item Dollar Amount

Description of Above Item

(2) _____
Name

Address

City, State, Zip

Phone Number

FAX Number

License Number and Classifications

(_____) (_____) (_____)
Item No Percent of Item Dollar Amount

Description of Above Item

(_____) (_____) (_____)
Item No Percent of Item Dollar Amount

Description of Above Item

(4) _____
Name

Address

City, State, Zip

Phone Number

FAX Number

License Number and Classifications

(_____) (_____) (_____)
Item No Percent of Item Dollar Amount

Description of Above Item

(_____) (_____) (_____)
Item No Percent of Item Dollar Amount

Description of Above Item

By _____
Bidder's Signature

NOTE: This form may be reproduced and attached behind this page to list more subcontractors.

PUBLIC CONTRACT CODE

Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares

under penalty of perjury under the laws of the State of California that the bidder has ____ , has not ____ been convicted

within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

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

Public Contract Code Section 10162 Questionnaire

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

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

Yes _____ No _____

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

PUBLIC CONTRACT CODE 10232 STATEMENT

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

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

FAITHFUL PERFORMANCE BOND

WHEREAS, the City Council of the City of Guadalupe, State of California, and _____ (hereinafter designated as the "principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, 2016, and identified as 2016 ADA RAMP AND VALVE PROJECT, is hereby referred to and made a part hereof; and

WHEREAS, said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement.

NOW, therefore, we, the principal and _____, as surety, are held and firmly bound unto the City of Guadalupe hereinafter called "City," in the penal sum of _____ Dollars (\$_____) 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, administrators, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above bounded principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and provisions in the said agreement and any alteration thereof made as therein provided, on his or their 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 City, 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.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed there under or the 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 of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by principal and surety above named, on _____, 2016.

APPROVED AS TO FORM:

By: _____
City Attorney

ADDRESS OF CONTRACTOR FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDER-TAKING LAW:

Principal (SEAL)

(SEAL)

Signature of Principal Title

ADDRESS OF SURETY FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW

(SEAL)

Surety (SEAL)

Signature for Surety Title

LABOR AND MATERIAL BOND

WHEREAS, the City Council of the City of Guadalupe, State of California and _____ (hereinafter designated as "principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, 2016, and identified as 2016 ADA RAMP AND VALVE PROJECT, is hereby referred to and made a part hereof; and

WHEREAS, under the terms of said agreement, principal is required before entering upon the performance of the work, to file a good and sufficient payment bond with the City of Guadalupe 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 City of Guadalupe and all contractors, subcontractors, laborers, material, men and other persons employed in the performance of the aforesaid agreement and referred to in the aforesaid Code of Civil Procedure in the sum of _____ Dollars (\$_____), 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, that said surety will pay the same in amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Title 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 the 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 agreement or the 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 _____, 2016.

APPROVED AS TO FORM:

By: _____
City Attorney

ADDRESS OF CONTRACTOR FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDER-TAKING LAW:

Principal (SEAL)

(SEAL)

Signature of Principal Title

ADDRESS OF SURETY FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW

(SEAL)

Surety (SEAL)

Signature for Surety Title

GUARANTEE AND DEFECTIVE MATERIAL BOND

WHEREAS, the City Council of the City of Guadalupe, State of California and _____ (hereinafter designated as "principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, 2016, and identified as 2016 ADA RAMP AND VALVEPROJECT, is hereby referred to and made a part hereof; and

WHEREAS, said principal is required under the terms of said agreement to furnish a bond for the one year maintenance of public improvements of said agreement.

NOW, therefore, we, the principal and _____, as surety, are held and firmly bound unto the City of Guadalupe hereinafter called "City," in the penal sum of _____ dollars (\$ _____) 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, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and provisions in the said agreement and any alteration thereof made as therein provided, on his or their 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 City, 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.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed there under or the 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 of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by the principal and surety above named, on _____, 2016.

ADDRESS OF CONTRACTOR FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDER-TAKING LAW:

Principal (SEAL)

(SEAL)

Signature of Principal Title

ADDRESS OF SURETY FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW

(SEAL)

Surety (SEAL)

Signature for Surety Title

CONTRACTOR'S LICENSING STATEMENT

I declare under penalty of perjury under the laws of the State of California that the following is true and correct. Executed in the City of Guadalupe this _____ day of _____, 2016.

The undersigned is licensed in accordance with the laws of the State of California providing for the registration of the Contractors.

Contractor's License Number and expiration date: _____

Name of Individual Contractor (print or type): _____

Signature of City: _____

Business Address: _____

Or

Name of Firm: _____

Business Address: _____

Business Telephone: _____

Signature, title, and address of members signing on behalf of the partnership:

Name: _____ Title: _____

Address: _____

Name: _____ Title: _____

Address: _____

Or

Name of Corporation: _____

Business Address: _____

Corporation organized under the laws of the State of _____

Signature of President of Corporation

Signature of Secretary of Corporation

WORKERS' COMPENSATION INSURANCE CERTIFICATE

The Contractor shall execute the following form as required by the California Labor Code, Section 1861:

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.

(Date)

(Contractor)

By: _____
(Signature)

By: _____
(Title)

Attest:

By: _____
(Signature)

By: _____
(Title)

6. Name, Address, and Telephone No. of Bank:

Total Line Of Credit	How Secured	Interest Rate
\$ _____		_____

7. How much of your line of credit is currently available? \$ _____

8. Name of Loan Officer: _____

(List additional bank(s) on next page, if applicable)

9. Are you licensed as a Contractor to do business in California?

Yes ___ No ___ License No. _____ Type

Classification (Type) of Specialty Contractor

10. How many years has your organization been in business as a contractor under your present business name and license number? _____ years.

11. How many years experience in _____ construction work has your organization had?

12. Has your firm or any of its principals ever petitioned for bankruptcy? _____ If answer is "Yes," enter the date(s)

13. Has your firm or any of its principals defaulted so as to cause a loss to surety? If the answer is "Yes," enter the date(s), name and address of surety and details.

14. Show the projects (10 maximum) your organization has completed during the last three years in the following tabulation; be specific as to the nature of the work your firm actually performed.

(Use as many spaces as required to complete your answer)

YEAR COMPLETED	TYPE OF WORK (be specific)	VALUE OF WORK PERFORMED	CITY AND STATE CONTACT PERSON/PHONE

15. Have you been assessed liquidated damages for any project in the past three years?

If yes, explain.

16. Have you been in litigation on a question relating to your performance on a contract during the past three years? ____ If yes, explain.

17. Have you failed to complete a contract? _____. If so, give details:

18. In what other lines of business pertaining to this Statement do you have a financial interest?

19. Name the persons with whom you have been associated in business as partners or joint venture in each of the last five years.

20. What is the construction experience of the principal individuals of your present organization?

Individual's Name	Present Position or Office In Your Organization	Years of Construction Experience	Magnitude and Type of Work

21. List 10 subcontractors with whom you have worked in the last two years:

NAME	ADDRESS	TELEPHONE

22. List the names of three Architects or Engineers whose jobs you have worked on in the past two years:

Name of Architect Or Engineer	Telephone

23. Please attach a balance sheet and profit and loss statement prepared by a Certified Public Accountant or a Public Accountant.

24. List and explain all contingent liabilities. _____

25. Explain any Stop Notice(s) filed against you in the past three years.

Date	By Whom	How Resolved	Why Filed

List your five major suppliers of equipment, supplies and materials:

NAME	ADDRESS

BIDDER'S BOND

We, _____
_____ as Principal, and

as Surety are bound unto the City of Guadalupe, State of California, hereafter referred to as "Obligee", in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves, jointly and severally,

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal is submitted to the Obligee, for the 2016 ADA RAMP AND VALVE REPLACEMENT PROJECT

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

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 such suit, including a reasonable attorney's fee to be fixed by the court.

Dated: _____, 20____.

Principal

Surety
By _____
Attorney-in-fact

CERTIFICATE OF ACKNOWLEDGEMENT

State of California
City/County of _____ SS

On this _____ day of _____ in the year 20 __ before me
_____, personally appeared _____,
Attorney-in-fact

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

(SEAL) _____
Notary Public

SAMPLE AGREEMENT

**AGREEMENT FOR CONTRACTOR SERVICES
BETWEEN THE CITY OF GUADALUPE
AND _____ FOR THE**

ADA RAMP AND VALVE REPLACEMENT PROJECT

This agreement is made and entered into this _____ day of _____ 20____, at Guadalupe, California, by and between the City of Guadalupe, hereinafter referred to as "City", and

(name of individual or firm)

Hereinafter referred to as "Contractor."

Whereas, the Contractor, as will appear by reference to the records of the Proceedings of the City, was duly awarded the contract for the Work hereinafter mentioned.

Now, Therefore, it is hereby agreed that:

Article 1 - Witnesseth, that for and in consideration of the payment and agreements hereinafter mentioned, to be made and performed by said City, and under the conditions expressed in the two bonds, bearing even date with these present, and hereunto annexed, said Contractor agrees with said City, at its own cost and expense, to do all the work and furnish all materials, except such as are mentioned in the Contract Documents to be furnished by the City, necessary to construct and complete in good, workmanlike and substantial manner the above-described work in accordance with the Contract Documents as listed herein and are by such reference made a part hereof.

Article 2 - The said City hereby promises and agrees with the said Contractor to employ, and does hereby employ, the said Contractor to provide the materials and to do the Work according to the terms and conditions herein contained and referred to, for the price of \$_____ (_____dollars and _____cents), and hereby contracts to pay the same at the time, in the manner, and upon the conditions above set forth; and the said parties for themselves, their heirs, executors, and administrators.

Article 3 - The said Contractor agrees to receive and accept the price stated in the Bid Schedule as full compensation for furnishing all materials and for doing all the work contemplated and embraced in this Agreement; also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the Work until its acceptance by the said City and for all expenses incurred by or in consequence of the suspension or discontinuance of the Work; and for well and faithfully completing the Work, and the whole thereof in the manner and according to the requirements of the Contract Documents therefore, and the requirements of the Engineer under their terms, to wit:

Article 4 - It is expressly agreed by and between the parties hereto that the Contract Documents shall consist of the Notice to Bidders, Proposal, Bid Sheet(s), Certification of Affirmative Action Program, Contractor's Licensing Statement, List of Subcontractors, Bid Security, Non-Collusion Affidavit, Agreement, Faithful Performance Bond, Labor and Materials Bond, Maintenance Bond, Worker's Compensation Certificate, Notice of Award, Notice to Proceed, Special Provisions, Technical Provisions and the project Plans. In addition, all Change Orders and Work Directive Changes authorizing additions, deletions, or modifications, and all appendices, bulletins and addenda as prepared prior to the date of opening Bids

setting forth any modifications or corrections or interpretations of any of said documents. In the event of any conflict between the provisions thereof, the terms of said documents shall control over each other in the following order:

1. Agreement
2. Change Orders and Work Directive Changes
3. Addenda
4. Notice To Bidders
5. Contract Proposal
6. Special Provisions
7. Technical Provisions
8. Contract Plans
9. City of Guadalupe Standard Specifications and Drawings
10. California State Department of Transportation Standard Specifications, latest edition
11. Standard Specifications for Public Works Construction, "Greenbook", 2003 edition, or the latest edition thereof, when specifically referenced in the plans.
12. Standard Plans for Public Works Construction, "Greenbook", 2003 edition, or the latest edition thereof, when specifically referenced in the plans.

Article 5 - The Contractor agrees to commence work pursuant to this Contract within ten (10) working days from the date specified in the Notice to Proceed, and to diligently prosecute the same to completion within FORTY (40) WORKING DAYS from the date of commencement as specified in the Notice To Proceed.

Article 6 - For any withhold of amounts earned by the Contractor (under Paragraph 2), the Contractor may substitute securities as provided in Section 22300 of the Public Contract Code, as amended, which states in part as follows:

Provisions shall be included in any invitation for bid and in any contract documents to permit the substitution of securities for any moneys withheld by a public agency to ensure performance under a contract, provided that substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmers Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 U.S.C. Sec. 1921 et seq.), and where federal regulations or policies, or both, do not allow the substitution of securities. At the request and expense of the contractor, securities equivalent to the amount withheld shall be deposited with the public agency, or with a state or federally chartered bank in California as the escrow agent, who shall then pay such moneys to the contractor. Upon satisfactory completion of the contract, the securities shall be returned to the contractor.

Alternatively, the contractor may request and the owner shall make payment of retention earned directly to the escrow agent at the expense of the contractor. At the expense of the contractor, the contractor may direct the investment of the payments into securities and the contractor shall receive the interest earned on the investments upon the same terms provided for in this section for securities deposited by the contractor. Upon satisfactory completion of the contract, the contractor shall receive from the escrow agent all securities, interest, and payments received by the escrow agent from the owner, pursuant to the terms of this section. The contractor shall pay to each subcontractor, not later than 20 days of receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each subcontractor, on the amount of retention withheld to ensure the performance of the contractor.

Securities eligible for investment under this section shall include those listed in Section 16430 or bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the contractor and the public agency.

The contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

The escrow agreement entered into must be substantially similar to the form included in Public Contract Code Section 22300(e). The contractor shall obtain the written consent of the surety to such agreement.

If any provision of this Section shall be declared by a court of law to be illegal or unenforceable, then, notwithstanding, this Section shall remain in full force and effect (exclusive of the illegal or unenforceable provision).

In Witness whereof, the parties to these present hereunto set their hands on the date first above written.

CITY OF GUADALUPE

By:

Lupe Alvarez, Mayor

Attest:

City Clerk

Approved as to form:

David Fleishman, City Attorney

CONTRACTOR

By:

(name of firm or individual)

(signature)

(printed name)

(title)

SPECIAL PROVISIONS

SECTION 1

SPECIFICATIONS AND PLANS

1-1 SPECIFICATIONS AND PLANS.

The work embraced herein shall be done in accordance with the Standard Specifications dated 2015, the Standard Plans dated 2015, of the State of California, Department of Transportation (Caltrans), and the City of Santa Maria Standard Specifications and Standard Plans, insofar as the same may apply and in accordance with the Plans and Special Provisions.

In case of conflict between the Standard Specifications and these special provisions, these special provisions shall take precedence over and be used in lieu of such conflicting portions.

Any discrepancies found between the Plans and specifications and site conditions or any inconsistencies or ambiguities in the Plans or specifications shall be immediately reported to the Engineer in writing, who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after his discovery of such discrepancies, inconsistencies, or ambiguities shall be done at the Contractor's risk.

1-2 DEFINITIONS AND TERMS.

Whenever, in the Plans and Special Provisions, or in any documents or instruments where the Plans and Special Provisions govern, the following terms are used or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

- A. **Bid**. An offer to furnish the necessary services and materials to perform the work called for by the Contract Documents.
- B. **Bidder**. Any individual, firm or corporation submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.
- C. **Proposal**. The offer of the Bidder for the Work when made out and submitted on the prescribed Proposal Form, properly signed and guaranteed.
- D. **Proposal Guaranty**. The cash, check or Bidder's Bond accompanying the Proposal submitted by the Bidder as a guarantee that the Bidder will enter into a Contract with the City for the construction of the Work if awarded to him.
- E. **Work**. All work specified, indicated, shown or contemplated in the Contract to construct the improvements, including all alterations, amendments or extensions thereto made by Change Orders or other written orders by the City Engineer.
- F. **City**. The City of Guadalupe, California, as created by law, and including any official of the City authorized to act for the City.
- G. **Contract**. The written agreement covering the performance of the Work, and the furnishing of labor, material, tools and equipment in the construction of the Work. The Contract includes all of the Contract Documents.
- H. **Contract Documents**. The Notice to Bidders, Proposal, Bid Sheet(s), Certification of Affirmative Action Program, Contractor's Licensing Statement, List of Subcontractors, Bid Security, Non-Collusion Affidavit, Agreement, Faithful Performance Bond, Labor and Materials Bond, Maintenance Bond, Worker's Compensation Certificate, Notice of Award, Notice to Proceed, Plans and Special Provisions, any addenda and bulletins issued during the bidding period, and

all Change Orders amending or extending the work contemplated and which may be required to complete the work in a substantial and acceptable manner.

- I. **Plans.** The official plans, typical cross-sections, general cross-sections, working drawings and supplemental drawings, or reproductions thereof, approved by the City Engineer, which show the location, character, dimensions and details of the work to be done, and which are to be considered as a part of the Contract supplementary to the Special Provisions.
- J. **Special Provisions.** The Special Provisions are specific clauses setting forth conditions or requirements peculiar to the particular work called for by the Plans.
- K. **City Standard Specifications and Drawings.** Where reference is made to the City Standard Specifications and Drawings, the reference shall be to the City of Santa Maria Public Works Department Standard Specifications and Drawings.
- L. **Standard Specifications.** Where reference is made to the Standard Specifications, the reference shall be to the State of California Department of Transportation Standard Specifications, 2015, or the latest edition thereof.
- M. **Standard Plans.** Where reference is made to the Standard Plans, the reference shall be to the State of California Department of Transportation Standard Plans, 2015, or the latest edition thereof.
- N. **Days.** Unless otherwise designated, days as used in the Contract Documents will be understood to mean working days.
- O. **Liquidated Damages.** The amount prescribed in the Specifications to be paid to the City, or to be deducted from any payments due or to become due Contractor, for each day's delay in completing the Work beyond the time allowed in the Specifications.
- P. **City Engineer.** The City Engineer of the City of Guadalupe, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.
- Q. **Inspector.** An authorized representative of the City of Guadalupe assigned by the City to make inspection of work performed or material supplied by Contractor.
- R. **Superintendent.** The executive representative of Contractor present on the work at all times during progress, authorized to receive and fulfill instructions from the City Engineer.
- S. **Design Engineer.** That individual or firm responsible for the design of the project, when the design is not by the City Engineer.

T. **Legal Holidays.**

January 1
Third Monday in January (Martin Luther King Day)
Third Monday in February
Last Monday in May
July 4
First Monday in September - Labor Day
November 11
Thanksgiving Day
Friday following Thanksgiving Day
December 24
December 25

Any public holiday(s) which the President or Governor and City Council of the City of Guadalupe may proclaim. When a holiday falls on a Saturday, the preceding Friday shall be observed. When a holiday falls on a Sunday, the following Monday shall be observed.

Where State Agencies, State Departments or State Officers are referred to in the above-mentioned Standard Specifications and Standard Plans, the comparable City Agency, City Department or City Officer shall be meant thereby for the purposes of these Contract Documents. In particular, intent and meaning shall be interpreted as follows:

STATE, OR COUNTY OR STATE OF CALIFORNIA	CITY OF GUADALUPE
DEPARTMENT OR DEPARTMENT OF TRANSPORTATION	CITY COUNCIL CITY OF GUADALUPE
DIRECTOR OR DIRECTOR OF TRANSPORTATION	DIRECTOR OF PUBLIC WORKS EITHER DIRECTLY OR THROUGH PROPERLY AUTHORIZED AGENT AND CONSULTANTS
ATTORNEY GENERAL	CITY COUNCIL, CITY OF GUADALUPE

SECTION 2 PROPOSAL REQUIREMENTS AND CONDITIONS

2-1 CONTENTS OF PROPOSAL FORMS.

Prospective bidders will be furnished with proposal forms, bound together with this Project Manual, which will refer to The Specifications and Plans for the work to be done.

2-2 EXAMINATION OF PLANS, SPECIFICATIONS, CONTRACT, AND SITE OF WORK.

The bidder shall examine carefully the site of the work contemplated, The Plans and Specifications, and the proposal and Contract forms therefore. The submission of a bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work to be performed, and as to the requirements of the Contract Documents.

- (a) Where the City has made investigations of site conditions including subsurface conditions in areas where work is to be performed under the Contract, or in other areas, some of which may constitute possible local material sources, bidders or contractors may, upon written request, inspect the records of the City as to those investigations subject to and upon the conditions hereinafter set forth. The investigations are made only for the purpose of study and design.
- (b) Where there has been prior construction by the City or other public agencies within the project limits, records of the prior construction that are currently in the possession of the City and which have been used by, or are known to, the designers and administrators of the Project will be made available for inspection by bidders or contractors, upon written request, subject to the conditions hereinafter set forth. The records may include, but are not limited to, as-built drawings, design calculations, foundation and site studies, Project reports and other data assembled in connection with the investigation, design, construction and maintenance of the prior projects.
- (c) Inspection of the records of investigations and Project records may be made at the office of the City Engineer. The records of investigations and Project records are not a part of the Contract and are available solely for the convenience of the bidder or contractor. It is expressly understood and agreed that the City assumes no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations thus made, the records thereof, or of Project records, or of the interpretations set forth therein or made by the City in its use thereof and there is no warranty or guaranty, either express or implied, that the conditions indicated by the investigations or records are representative of those existing in or throughout those areas, or any part thereof, or that unlooked-for developments may not occur, or that materials other than, or in proportions different from those indicated, may not be encountered.
- (d) In some instances, information considered by the City to be of possible interest to bidders or contractors has been compiled as "Materials Information." The "Materials Information" is not a part of the Contract and is furnished solely for the convenience of bidders or contractors. It is understood and agreed that the fact that the City has compiled information as "Materials Information" and has exhibited or furnished to the bidders or contractors the "Materials Information" shall not be construed as a warranty or guaranty, express or implied, as to the completeness or accuracy of the compilations and the use of the "Materials Information" shall be subject to all of the conditions and limitations set forth herein.
- (e) When contour maps were used in the design of the Project, the bidders may inspect those maps, and if available, they may obtain copies for their use.
- (f) The availability or use of information described herein is not to be construed in any way as a waiver of the provisions of the first paragraph in this Section 2. and a bidder or contractor is cautioned to make any independent investigation and examination as they deem necessary to be satisfied as to

conditions to be encountered in the performance of the work and, with respect to possible local material sources, the quality and quantity of material available from the property and the type and extent of processing that may be required in order to produce material conforming to the requirements of the Specifications.

- (g) No information derived from the inspection of investigations or compilation thereof made by the City or from the Architect, or the Architect's assistants, will in any way relieve the bidder or contractor from any risk or from properly fulfilling the terms of the Contract.

2-3 APPROXIMATE ESTIMATE.

The quantities given in the proposal and contract are approximate only, being given as a basis for the comparison of bids. The City does not, expressly or by implication, agree that the actual amount of work will correspond therewith, and reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Engineer.

2-4 PROPOSAL FORMS.

The City will furnish to each bidder a standard proposal form, which, when filled out and executed may be submitted as that bidder's bid. Bids not presented on forms so furnished, and copies or facsimiles of the bidder's completed and executed proposal forms submitted, as a bid will be rejected.

All proposal forms shall be obtained from the office of the Building Department, City of Guadalupe, 918 Obispo Street, Guadalupe, California 93434 as designated in the Notice to Contractors.

2-5 PREPARATION AND SUBMISSION OF BIDS.

- (h) All Bids shall be submitted on the City furnished proposal forms. The proposal shall be submitted as directed in the Notice to Contractors under sealed cover plainly marked as a proposal, and identifying the project to which the proposal relates and the date of the bid opening therefor. Proposals that are not properly marked may be disregarded.
- (i) All bid items and statements shall be properly filled out. The proposal shall set forth the item prices and totals, in clearly legible figures, in the respective spaces provided, and shall be signed by the bidder in longhand, who shall fill out all blanks in the proposal form as therein required.
- (j) Bids shall not contain any recapitulations of the Work. Alternative Bids will not be received or considered unless required by the Contract Documents. No oral, telegraphic, or telephonic Proposals or modifications will be considered.
- (k) Each Bid shall be accompanied by the prescribed bid and other required documents.
- (l) Delivery of Bids shall comply with the Notice to Contractors as to place, date, and time. Bids and bid security shall be enclosed in a sealed opaque envelope bearing the title of the Work and the name of the bidder.
- (m) Prices, wording, and notations must be in ink or typewritten. No erasures will be permitted. Mistakes may be crossed out and corrections typed or written in ink adjacent thereto, and must be initialed in ink by the person or persons signing the Bid.

2-6 INTERPRETATIONS.

Should any bidder find discrepancies or omissions in the Contract Documents, or if there should be doubt as to the true meaning of any part thereof, the bidder shall at once submit a written request for correction,

clarification, or interpretation to the City Engineer. Such requests shall be submitted at least six days prior to the date fixed for the opening of Bids.

- (n) If the City determines the Contract Documents require changes, correction, clarification, or interpretation prior to the receipt of Bids, an appropriate bulletin or Addendum will be issued. All addenda so issued shall become part of the Contract Documents.
- (o) The City, its officers, employees, and agents shall not be responsible for any changes, instructions, clarifications, interpretations, or other information pertaining to the Contract Documents given to bidders during the bidding period in any manner other than written addenda.

2-7 REQUIRED LISTING OF PROPOSED SUBCONTRACTORS.

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

- (p) A sheet for listing the subcontractors, as required herein, is included in the "Proposal" book.

2-8 DESIGN ENGINEERS MAY NOT BID ON CONSTRUCTION CONTRACT.

No engineering or architectural firm that has provided design services for a project shall be eligible to submit a Proposal for the Contract to construct the Project nor to subcontract for any portion of the work. The ineligible firms include the prime contractor for design, subcontractors of portions of the design, and affiliates of either. An affiliate is a firm that is subject to the control of the same persons, through joint ownership or otherwise.

2-9 REJECTION OF PROPOSALS.

Proposals may be rejected if they have been transferred to another bidder, or if they show any alteration of form, additions not called for, conditional bids, incomplete bids, erasures, or irregularities of any kind.

- (q) When Proposals are signed by an agent, other than the officer or officers of a corporation authorized to sign contracts on its behalf or a member of a partnership, a "Power of Attorney" must be on file with the City prior to opening bids or shall be submitted with the Proposal; otherwise, the Proposal may be rejected as irregular and unauthorized.

2-10 PROPOSAL GUARANTY.

All bids shall be presented under sealed cover and accompanied by one of the following forms of bidder's security:

- (r) Cash, a cashier's check, a certified check, or a bidder's bond executed by an admitted surety insurer, made payable to the City of Guadalupe.
- (s) The security shall be in an amount equal to at least 10 percent of the amount bid. A bid will not be considered unless one of the forms of bidder's security is enclosed with it.
- (t) The contractor shall use the bidder's bond form found in this Project Manual when bidding on the project. The bidder's bond form shall be properly filled out and executed. (Note: this form may be

reproduced for transmittal to the surety for execution and attached to the front of the original bid bond form.)

- (u) Surety shall be listed in the Current Insurance Organizations Authorized By The Insurance Commissioner To Transact Business Of Insurance In The State Of California published by the Department of Insurance, State of California, or successor publication.

2-11 WITHDRAWAL OF PROPOSALS.

Any bid may be withdrawn at any time prior to the date and time fixed for the opening of bids only by written request for the withdrawal of the bid filed at the location at which the City received the bid. The request shall be executed by the bidder or the bidder's duly authorized representative. The withdrawal of a bid does not prejudice the right of the bidder to file a new bid. Whether or not bids are opened exactly at the time fixed for opening bids, a bid will not be received after that time, nor may any bid be withdrawn after the time fixed for the opening of bids.

2-12 PUBLIC OPENING OF PROPOSALS.

Proposals will be opened and read publicly at the time and place indicated in the Notice to Contractors. Bidders or their authorized agents are invited to be present.

2-13 RELIEF OF BIDDERS.

Attention is directed to the provisions of Public Contract Code Sections 5100 to 5107, inclusive, concerning relief of bidders and in particular to the requirement therein, that if the bidder claims a mistake was made in the bid presented, the bidder shall give the City written notice within 5 days after the opening of the bids of the alleged mistake, specifying in the notice in detail how the mistake occurred.

2-14 DISQUALIFICATION OF BIDDERS.

More than one Proposal from an individual, firm, partnership, corporation, or combination thereof under the same or different names will not be considered. Reasonable grounds for believing that any individual, firm, partnership, corporation or combination thereof is interested in more than one Proposal for the work contemplated may cause the rejection of all Proposals in which that individual, firm, partnership, corporation or combination thereof is interested. If there is reason for believing that collusion exists among the bidders any or all Proposals may be rejected. Proposals in which the prices obviously are unbalanced may be rejected.

2-15 MATERIAL GUARANTY.

The successful bidder may be required to furnish a written guaranty covering certain items of work for varying periods of time from the date of acceptance of the Contract. The work to be guaranteed, the form, and the time limit of the guaranty will be specified in The Specifications. The guaranty shall be signed and delivered to the City of Guadalupe before acceptance of the Contract. Upon completion of the Contract the amounts of the 2 Contract bonds required in Article B, Paragraph 2, "Contract Bonds," may be reduced to conform to the total amount of the Contract bid prices for the work to be guaranteed, and this amount shall continue in full force and effect for the duration of the guaranty period. The payment bond shall not be reduced until the expiration of the time required by Section 3249 of the Civil Code.

2-16 ADDENDA AND BULLETINS.

Full consideration shall be given to all addenda in the preparation of Bids, as addenda form a part of the Contract Documents. Bidders shall verify the number of addenda issued, if any, and acknowledge the

receipt of all addenda by filling in the Addendum number in the space provided on the signature page of the Proposal. Failure to so acknowledge may cause the Bid to be rejected as not responsive.

- (v) The City may issue bulletins to advise bidders of changed requirements. All bulletins shall be incorporated into or confirmed by subsequent addenda. Such addenda may modify previously issued bulletins.

2-17 QUALIFICATIONS OF BIDDERS.

- (w) All bidders must be currently licensed as contractors according to the laws of the State and legal jurisdiction of the place where the Work is located before contract award. All bidders are required to complete the Contractor's Licensing Statement included with the proposal forms.
- (x) No person, organization, or corporation is allowed to make, submit, or be interested in more than one Bid for the Work unless in a sub contractual relationship with respect to the Bids or unless Alternative Bids are required. A person, organization, or corporation submitting sub-Proposals or quoting prices or materials to bidders is not prevented from submitting a Bid for the entire Work.

2-18 TRADE NAMES AND ALTERNATIVES.

Requests for any "or equal" substitutions regarding a material, product, thing, or service shall be made in writing before contract award. After submitting a substitution request, the contractor shall have ten (10) days for the submission of data substantiating the request for substitution per section 4-1.6 of the Standard Specifications. All "or equal" substitutions shall be approved in writing.

SECTION 3 AWARD & EXECUTION OF CONTRACT

3-1 AWARD OF CONTRACT.

The right is reserved to reject any and all proposals. The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed. Bids will be compared by the Total Mathematical Bid as determined by the Engineer. The Total Mathematical Bid is the summation of all required bid items, excluding bid alternates. Bid items are calculated by multiplying the Engineers Estimate quantities by the unit bid prices. In the case of a discrepancy between the Total Mathematical Bid and the total bid written, the Total Mathematical Bid shall govern.

The award of the bid, if made, will be made within 35 days after the opening of the Proposal and reviewing all "or equal" requests for substitutions. This period will be subject to extension for such further period as may be agreed upon in writing between the City and the bidder concerned.

3-2 EXECUTION OF CONTRACT.

The contract shall be signed by the successful bidder and returned, together with the contract bonds, public liability and property damage insurance, and all other documentation required by the Contract Documents, within 15 days after the bidder has received the contract for execution.

3-3 CONTRACT BONDS.

The successful bidder shall furnish, at the time of execution of the contract for work, and at his/her own expense, the 2 bonds required by the State Contract Act. One bond shall secure the payment of the claims of laborers, mechanics or material men employed on the work under the contract. The other bond shall guarantee the faithful performance of the contract. Sureties on each of said bonds shall be satisfactory to the City Attorney.

- (a) Each of the 2 bonds shall be in a sum equal to at least one hundred percent (100%) of the contract price.
- (b) All alterations, extensions of time, extra and additional work, and other changes authorized by the Contract Documents may be made without securing the consent of the surety or sureties on the contract bonds.

3-4 PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.

Contractor shall procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, and subcontractors.

- (c) Coverage shall be at least as broad as:
 - Insurance Services Office Commercial General Liability coverage (occurrence from CG 0001).
 - Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto).
 - Workers Compensation insurance as required by the State of California and Employer's Liability Insurance.
- (d) Contractor shall maintain limits not less than:
 - General Liability: \$3,000,000 per occurrence for bodily injury, personal injury and property damage.
 - If Commercial Liability Insurance or other form with a general aggregate limit is used, either the

general aggregate shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.

Employer's Liability: \$1,000,000 per accident for bodily injury or disease.

- (e) Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its trustees, officers, employees and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- (f) The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

The City, its officials, officers, employees, and volunteers are to be covered as insured's with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance, or as a separate owner's policy.

- (g) For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officials, officers, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officials, officers, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- (h) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the City.
- (i) Insurance shall be placed with insurers with a current A.M. Bests rating of no less than A: VII.
- (j) Contractor shall furnish the City with original certificates and amendatory endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these special provisions at any time.
- (k) Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage and limits for subcontractors shall be subject to all to all the requirements stated herein.

3-5 FAILURE TO EXECUTE CONTRACT.

Failure of the lowest responsible bidder, the second lowest responsible bidder, or the third lowest responsible bidder to execute the contract and file acceptable bonds as provided herein within 10 days, not including Saturdays, Sundays and legal holidays, after that bidder has received the contract for execution shall be just cause for the forfeiture of the Proposal guaranty. The successful bidder may file with the City Clerk a written notice, signed by the bidder or the bidder's authorized representative, specifying that the bidder will refuse to execute the contract if it is presented. The filing of this notice shall have the same force and effect as the failure of the bidder to execute the contract and furnish acceptable bonds within the time

hereinbefore prescribed.

3-6 RETURN OF PROPOSAL GUARANTEES.

The Proposal guaranties accompanying the Proposals of the first, second and third lowest responsible bidders will be retained until the contract has been finally executed, after which those Proposal guaranties, except bidders' bonds and any guaranties which have been forfeited, will be returned to the respective bidders whose Proposals they accompany. The Proposal guaranties, other than bidder's bonds, submitted by all other unsuccessful bidders will be returned upon determination, by the City, of the first, second and third lowest responsible bidders.

SECTION 4 PROSECUTION, PROGRESS, AND ACCEPTANCE OF THE WORK

4-1 GENERAL.

Attention is directed to the provisions in Section 6, "Prosecution, Progress, and Acceptance of The Work," of the Standard Specifications and these special provisions.

4-2 COMMENCEMENT OF WORK.

The Contractor shall begin work within ten (10) working days after the date of the Notice to Proceed. This work shall be diligently prosecuted to completion before the expiration of the Time of Contract shown on the cover of the Project Manual.

The Contractor shall notify the Engineer, in writing, of the Contractor's intent to begin work at least 72 hours before work is begun. The notice shall be delivered to the Engineer and shall specify the date the Contractor intends to start.

4-3 LIQUIDATED DAMAGES.

It is agreed by the parties to the contract that in case all the work called for under the contract in all parts and requirements is not finished or completed within the number of working days expressed in the contract, damage will be sustained by the City, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the City will sustain in the event of and by reason of the delay; and it is therefor agreed that the Contractor will pay to the City, the sum of **\$500.00 per day**, for each and every calendar day's delay in finishing the work in excess of the number of working days prescribed above; and the Contractor agrees to pay the liquidated damages herein provided for, and further agrees that the City may deduct the amount thereof from any moneys due or that may become due the Contractor under the contract.

It is further agreed that in case the work called for under the contract is not finished and completed in all parts and requirements within the number of working days specified, the Engineer shall have the right to increase the number of working days or not, as the Engineer may deem best to serve the interest of the City, and if the Engineer decides to increase the number of working days, the Engineer shall further have the right to charge to the Contractor, or the Contractor's heirs, assigns or sureties and to deduct from the final payment for the work all or any part, as the Engineer may deem proper, of the actual cost of engineering, inspection, superintendence, and other overhead expenses which are directly chargeable to the contract, and which accrue during the period of the extension, except that cost of final surveys and preparation of final estimate shall not be included in the charges.

No extension of time will be granted for a delay caused by a shortage of materials unless the Contractor furnishes to the Engineer documentary proof that the Contractor has made every effort to obtain the materials from all known sources within reasonable reach of the work in a diligent and timely manner, and further proof in the form of supplementary progress schedules, that the inability to obtain the materials when originally planned, did in fact cause a delay in final completion of the entire work which could not be compensated for by revising the sequence of the Contractor's operations. The term "shortage of materials," as used in this section, shall apply only to materials, articles, parts or equipment that are standard items and are to be incorporated in the work. The term "shortage of materials," shall not apply to materials, parts, articles or equipment that are processed, made, constructed, fabricated or manufactured to meet the specific requirements of the contract. Only the physical shortage of material will be considered under these provisions as a cause for extension of time. Delays in obtaining materials due to priority in filling orders will not constitute a shortage of materials.

If the Contractor is delayed in completion of the work by reason of changes made under Section 3,

"Changes In Work," of the Standard Specifications, or by any act of the Engineer or of the City, not contemplated by the contract, an extension of time commensurate with the delay in completion of the work thus caused will be granted and the Contractor shall be relieved from any claim for liquidated damages, or engineering and inspection charges or other penalties for the period covered by that extension of time; provided that the Contractor shall notify the Engineer in writing of the causes of delay within 15 days from the beginning of the delay. The Engineer shall ascertain the facts and the extent of the delay, and the Engineer's findings thereon shall be final and conclusive.

It is the intention of the above provisions that the Contractor shall not be relieved of liability for liquidated damages or engineering and inspection charges for any period of delay in completion of the work in excess of that expressly provided for in this Section 4-3.

4-4 PRE-CONSTRUCTION CONFERENCE.

Prior to the issuance of the Notice to Proceed, a pre-construction conference may be held at the discretion of the City Engineer at Guadalupe City Hall for the purpose of discussing with the Contractor the scope of work, Plans, Specifications, existing conditions, materials to be ordered, equipment to be used, and all essential matters pertaining to the prosecution of and the satisfactory completion of the project as required. The Contractor's representative at this conference shall include all major superintendents for the work and may include major sub-contractors.

4-5 PROGRESS SCHEDULE

The Contractor shall submit a detailed CPM schedule to the Engineer one week before the Pre-Construction Meeting. The Contractor shall make revisions as required by the Engineer. Upon acceptance by the Engineer the schedule will become the accepted Construction Schedule. An accepted schedule is required before work may proceed. The schedule shall show the Work spread over the entire contract time available for construction.

The Contractor shall revise and update the Construction Schedule on or before the twentieth of each month showing the status of work actually completed during the preceding estimate period. The Contractor shall submit to the Engineer one (1) printed copy of the revised Construction Schedule with his/her monthly progress payment request for that period. The schedule shall indicate the controlling items of work for each phase of the project. Preparation and updating of Construction Schedule shall be performed at Contractor's sole expense.

Failure by the Contractor to submit updated or revised Construction Schedules when required may prevent acceptance of progress payment requests by the Engineer until such updated or revised Construction Schedules have been submitted for review and have been accepted by the Engineer.

If the Contractor has fallen behind the accepted Construction Schedule by more than fifteen (15) percentage points based on earned progress payments, the Contractor shall take steps, including, but not limited to, increasing the number of personnel, shifts, and/or overtime operations, days of work, and/or amount of construction equipment until such time as the Work is back on schedule. He/she shall also submit for review no later than the next request for partial payment, such supplementary schedule or schedules as may be deemed necessary to demonstrate the manner in which the rate of progress will be regained. All cost required to bring the Project back on schedule shall be borne by the Contractor without additional cost to the Agency.

If the Contractor falls behind the accepted construction schedule, as modified by such time extensions as may have been granted by the City for unavoidable delays, by more than thirty-five (35) percentage points based on earned progress payments, he/she shall be deemed in material breach of Contract and the Work may be turned over to the surety for completion within the scheduled time.

4-6 DISPUTES AND CLAIMS

GENERAL

Any and all decisions made on appeal pursuant to this Subsection 4-6 shall be in writing. Any “decision” purportedly made pursuant to this Subsection 4-6 which is not in writing shall not be binding upon the Agency and should not be relief upon the Contractor.

Nothing in this subsection shall be considered as relieving the Contractor from his duty to file the notice required under this Subsection or other duties required by the contract documents.

NOTICE OF POTENTIAL CLAIM

The Contractor shall not be entitled to the payment of any additional compensation for any cause, including any act, or failure to act, by the Engineer, or the happening of any event, thing or occurrence, unless he shall have given the Engineer due written notice of potential claim as hereinafter specified, provided, however, that compliance with this Subsection shall not be a prerequisite as to any claim which is based on differences in measurements or errors of computation as to contract quantities.

Additionally, this Subsection shall not supersede the specific notice and protest requirements of Section 3-4 “Changed Conditions” and Section 6-7.3 “Contract Time Accounting” of the Standard Specifications.

The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved, and, insofar as possible, the amount of the potential claim. The said notice as above required must have been given to the Engineer prior to the time that the Contractor shall have performed the work giving rise to the potential claim for additional compensation, if based on an act or for additional compensation, if based on an act or failure to act by the Engineer, or in all other cases within 15 days after the happening of the event, thing or occurrence giving rise to the potential claim.

It is the intention of this Subsection that differences between the parties arising under and by the 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 promptly taken. The Contractor hereby agrees that he shall have no right to additional compensation for any claim that may be based on any such act, failure to act, event, thing or occurrence for which no written notice of potential claim as herein required was filed.

SECTION 5 (Not Used)

SECTION 6 ADDITIONAL PROVISIONS AND NOTICES REQUIRED BY STATE LAW

6-1 GENERAL.

This section contains additional provisions and notices required to be included in contracts for public works projects entered into by the City that are not covered in other sections of these special provisions.

6-2 WORKING HOURS.

The Contractor shall comply with all applicable provisions of Section 1810 to 1815, inclusive, of the California Labor Code relating to working hours. The Contractor shall as a penalty to the City, forfeit \$50.00 for each worker employed in the execution of the Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week, unless such worker receives compensation for all hours worked in excess of 8 hours at not less than 1-1/2 times the basic rate of pay.

6-3 TRAVEL AND SUBSISTENCE PAY.

- (a) As required by Section 1773.8 of the California Labor Code the Contractor shall pay travel and subsistence payments to each workman needed to execute the Work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with this Section.
- (b) To establish such travel and subsistence payments, the representative of any craft, classification, or type of workman needed to execute the contracts shall file with the Department of Industrial Relations fully executed copies of collective bargaining agreements for the particular craft, classification or type of work involved. Such agreements shall be filed within 10 days after their execution and thereafter shall establish such travel and subsistence payments whenever filed 30 days prior to the call for bids.

6-4 PROTECTION OF WORKERS IN TRENCH EXCAVATIONS.

As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches 5 feet or more in depth, the Contractor shall submit for acceptance by the City or by a registered Civil or Structural Engineer, employed by the City, to whom authority to accept has been delegated, in advance of excavation, a detailed plan showing protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered Civil or Structural Engineer employed by the Contractor, and all costs shall be considered as included in the Contract items of work designated in the Engineer's Estimate and no other additional compensation shall be allowed therefor. Nothing in this Section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this Section shall be construed to impose tort liability on the City, the Architect, nor any of their officers, agents, representatives, or employees.

6-5 DAMAGE RESULTING FROM CERTAIN 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 damage to the Work which damage is 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 Plans and specifications of the City. The Contractor shall obtain insurance to indemnify the City for any damage to

the Work caused by an act of God if the insurance premium is 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.

6-6 CONCRETE FORMS, FALSE WORK, AND SHORING.

The Contractor shall comply fully with the requirements of Section 1717 of the Construction Safety Orders, State of California, Department of Industrial Relations, regarding the design of concrete forms, FALSE WORK, and shoring and the inspection of same prior to placement of concrete. Where the said Section 1717 requires the services of a civil engineer registered in the State of California to approve design calculations and working drawings of the FALSE WORK or shoring system, or to inspect such system prior to placement of concrete, the Contractor shall employ a registered civil engineer for these purposes, and all costs therefor shall be included in the price named in the Contract for completion of the Work as set forth in the Contract Documents.

6-7 SUBMISSION OF BIDS; AGREEMENT TO ASSIGN.

In accordance with Section 4552 of the Government Code, the bidder shall conform to the following requirements. In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing 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, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

6-8 PUBLIC WORKS CONTRACTS; ASSIGNMENT TO AWARDING BODY.

In accordance with Section 4551 of the Government Code, the Contractor and subcontractor shall conform to the following requirements. In entering into a public works contract or a subcontract to supply goods, services, or material 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 of the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

6-9 REMOVAL, RELOCATION OR PROTECTION OF EXISTING UTILITIES.

In accordance with the provisions of Section 4215 of the Government Code, the Contractor shall not be assessed liquidated damages for delay in completion of the project, when such delay was caused by failure of the public agency or owner of the utility to provide for the removal or relocation of such utility facilities.

6-10 SUBSTITUTION OF SECURITIES.

Retainage From Monthly Payments: Pursuant to Section 22300 of the Public Code, the Contractor may substitute securities for any money withheld by the Owner to insure performance under the contract. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the City or with a state or federally chartered bank as the escrow agent, who shall return such securities to the Contractor upon satisfactory completion of the contract. Deposit of securities with an escrow agent shall be subject to a written agreement between the escrow agent and the City in accordance with the provisions of Section 4590. The City will not certify that the contract has been satisfactorily completed until

at least 50 calendar days after filing by the City of a Notice of Completion. Securities eligible for investment under Section 22300 of the Public Contract Code shall be limited to those listed in Section 16430 of the Government Code and to bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the City.

6-11 LISTING OF SUBCONTRACTORS.

As required under the provisions of Section 4104 et seq of the California Public Contract Code, any person making a bid or offer to perform the work, shall in his or her bid or offer, set forth: (a) 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 in an amount in excess of one-half of 1 percent of the prime contractor's total bid; (b) the name and location of the place of business of each subcontractor licensed by the State of California who, under subcontract to the primary contractor specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in , in an amount in excess of one-half of 1 percent of the prime contractor's total bid; (c) The portion of the work which will be done by each such subcontractor under this act. The prime contractor shall list only one subcontractor for each such portion of the work as itemized on the "List of Subcontractors," included in the Proposal.

6-12 BIDS FOR TRENCHING AND EXCAVATION WORK.

In accordance with the provisions of Section 6707 of the California Labor Code, whenever the state, a county, city and county, or city issues a call for bids for the construction of a pipeline, sewer, sewage disposal system, boring or jacking pits, or similar trenches or open excavation, which are five feet deep or deeper, such call shall specify that each bid submitted in response thereto shall contain, as a bid item, adequate sheeting, shoring, and bracing or equipment method, for the protection of life or limb, which shall conform to applicable safety orders.

6-13 STATE WAGE DETERMINATION.

- (c) As required by Sections 1770 and following, of the California Labor Code, the Contractor shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Copies of such prevailing rate of per diem wages are on file at the office of the City Engineer, which copies shall be made available to any interested party on request. The Contractor shall post a copy of such determination at each job site.
- (d) As provided in Section 1775 of the California Labor Code, the Contractor shall, as a penalty to the City, forfeit \$50.00 for each calendar day, or portion thereof, for each worker paid less than the State General Prevailing Wage Rates as determined by the Director of the Department Of Industrial Relations or such work or craft in which such worker is employed for any public work done under the contract by it or by any subcontractor under it.

6-14 PAYROLL RECORDS; RETENTION; INSPECTION; NONCOMPLIANCE PENALTIES; RULES AND REGULATIONS.

- (e) As required under the provisions of Section 1776 of the California Labor Code, each Contractor and subcontractor shall keep an accurate payroll record, 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.
- (f) The payroll records enumerated herein, shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

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.

A certified copy of all payroll records enumerated herein, 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.

A certified copy of all payroll records enumerated herein, shall be made available upon request by the public for inspection or copies thereof made; provided, however, that 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 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 shall not be given access to the records at the principal offices of the Contractor.

- (g) Each Contractor shall file a certified copy of the records, enumerated herein, with the entity that requested the records within 10 days after receipt of a written request.

Any copy of records made available for inspection and copies furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standard, or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor awarded the contract or performing the contract shall not be marked or obliterated.

- (h) The Contractor shall inform the body awarding the Contract of the location of the records enumerated herein, including the street address, city and county, and shall, within 5 working days, provide a notice of change of location and address.
- (i) In the event of noncompliance with the requirements of this Article, the Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this Article. Should noncompliance still be evident after the 10-day period, the Contractor shall, as a penalty to the state or political subdivision on whose behalf the Contract is made or awarded, forfeit \$50.00 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. Responsibility for compliance with these Paragraphs lies with the Contractor.

6-15 APPRENTICES.

Attention is directed to Sections 1777.5 and 1777.6 and 1777.7 of the California Labor Code and Title 8, California Administrative Code Section 200 et seq. To insure compliance and complete understanding of the law regarding apprentices, and specifically the required ratio thereunder, the Contractor (and subcontractor) should, where some question exists, contact the Division of Apprenticeship Standards prior to commencement of the work. Responsibility for compliance with this Paragraph lies with the Contractor. The Owner policy is to encourage the employment and training of apprentices on its construction contacts as may be permitted under local apprenticeship standards.

6-16 WORKERS COMPENSATION.

- (j) In accordance with the provisions of Section 1860 of the California Labor Code, the Contractor's attention is directed to the requirement that in accordance with the provisions of Section 3700 of the California Labor Code, every Contractor will be required to secure the payment of compensation of his or her employees.

- (k) In accordance with the provisions of Section 1861 of the California Labor Code, each contractor to whom a public works contract is awarded shall sign and file with the awarding body the following certification prior to performing the work of the contract: "I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for worker's 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."

Full compensation for conforming to the provisions in Section 6, not other wise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

SECTION 7 MISCELLANEOUS

7-1 LABOR NON-DISCRIMINATION.

Attention is directed to Section 1735 of the Labor Code, which reads as follows:

"No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter."

7-2 NIGHT, SATURDAY, SUNDAY, AND HOLIDAY WORK.

No work shall be performed at night, on Saturdays, Sundays, or on legal holidays, except with the permission of the City Engineer and in accordance with such regulations, as he shall furnish in writing. Before performing any work at said times, the Contractor shall give written notice to the City Engineer so that proper inspection may be provided. "Night," as used in this paragraph, shall be deemed to include the hours from 5:00 p.m. to 7:00 a.m., of the next succeeding day.

7-3 (Not Used)

7-4 PARTIAL AND FINAL PAYMENT.

Section 9-3.2, "Partial and Final Payment," of the Standard Specifications is amended to include:

The retained percentage or security will be held by the City and will be due and payable to the Contractor fifty (50) days after final acceptance of the work by the City Council and/or City Administrator.

7-5 (Not Used)

7-6 HAZARDOUS WASTE IN EXCAVATION.

In accordance with Section 7104 of the Public Contract Code, the Contractor shall comply fully with the following requirements:

- (a) The Contractor shall promptly, and before the following conditions are disturbed, notify the City, in writing, of any:

Material encountered in excavation which the Contractor has reason to believe may be hazardous waste, as defined in Section 25117 of the Health And Safety Code, that is required to be moved to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

Subsurface of any latent physical conditions at the site differing from those indicated.

Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

- (b) That the City shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work shall issue a change order under the procedures described in the Contract
- (c) That in the event that a dispute arises between the City and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law that pertain to the resolution of disputes between the contracting parties.

7-7 PROJECT APPEARANCE.

The Contractor shall maintain a neat appearance to the work.

- (d) During construction, the Contractor shall keep the work site, areas adjacent to the work site, and streets and alleys in an orderly condition, free and clear from debris and discarded materials.
- (e) Broken concrete, trench spoil, or other debris developed during construction shall be disposed of concurrently with its removal. If stock piling is necessary it shall be done only at the approval of the City Engineer, but in no case shall the debris remain for more than one week.

7-8 DISPOSAL OF EXCESS MATERIAL.

All material determined to be excess by the Engineer becomes property of the Contractor, unless otherwise indicated in these special provisions. All material approved for disposal at the City's Sanitary Landfill is subject to payment of current fees.

The Contractor shall obtain all applicable permits from the County of Santa Barbara for the dumping of materials outside the City Limits of Guadalupe.

7-9 CLEANUP AND DUST CONTROL.

Cleanup and dust control shall conform to the Section 7-8.1, "Cleanup And Dust Control," of the Standard Specifications and these special provisions.

- (f) The Contractor shall apply water in amounts and at intervals as directed by the Engineer. The water supply vehicle and an operator shall be available within one hour's notice on Saturdays, Sundays, and holidays to perform dust control work. If the Contractor is not available for dust control measures, the City of Guadalupe will arrange for the work to be performed by others and will deduct all equipment, labor, and material costs thereof from the Contract amount.

7-10 GUARANTEE.

The Contractor shall be responsible for the repair or replacement of latent defects in workmanship or materials for a period of one year from the date of filing of the Notice of Completion.

7-11 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS.

- (g) The Contractor shall be responsible for the protection and the restoration or replacement of any improvements existing on public or private property at the start of work or placed there during the progress of work and not specified or shown on the Plans to be permanently removed. Existing improvements shall include, but are not limited to, curbs, gutters, cross-gutters, sidewalks, driveways, lawns, sprinkler systems, shrubs, trees, fences, and walls. All existing improvements shall be reconstructed to equal or better than the existing improvements removed.

In submitting a bid, the Contractor will be deemed to have carefully examined the site of the work and to have acquainted himself with all conditions relating to the protection and restoration of existing improvements. The City of Guadalupe does not guarantee that all improvements are shown on the Plans, and it shall be the Contractor's responsibility to provide in his bid for the protection and restoration of all existing improvements except those otherwise specified herein.

- (h) All curbs, gutters, sidewalks, and driveways shall be removed and replaced to the next joint or score line beyond the actually damaged or broken sections; or in the event that joints or score lines do not exist or are three or more feet from the removed or damaged section, the damaged portions shall be removed and reconstructed to neat, plane faces. All new concrete shall match, as nearly as possible, the appearance of adjacent concrete improvements.

7-12 UTILITIES.

Utilities shall conform to the provisions in Section 5, "Utilities," in the Standard Specifications and these special provisions.

- (i) Utilities for the purpose of these special provisions shall be considered as including, but not limited to: pipelines, conduits, transmission lines, and appurtenances of "Public Utilities" (as defined in the Public Utilities Act of the State of California) and those of private industry, businesses, or individuals solely for their own use or for use of their tenants; and storm drains, sanitary sewers, street lighting, and traffic signal systems. The City of Guadalupe has, by a search of known records, endeavored to locate and indicate on the Plans all utilities that exist within the limits of the work. However, the accuracy or completeness of the utilities indicated on the Plans is not guaranteed. Service connections to adjacent property may or may not be shown on the Plans. It shall be the responsibility of the Contractor to determine the exact location of all utilities and their service connections. The Contractor shall make his own investigation as to the location, type, kind of material, age, and condition of existing utilities and their appurtenances and service connections which may be affected by the contract work; and, in addition, he shall notify the City as to any utilities, appurtenances, and service connections located by him which have been incorrectly shown on or omitted from the Plans.
- (j) The Contractor shall notify the owners of all utilities at least two working days in advance of excavation around any of their structures. At the completion of the contract work, the Contractor shall leave all utilities and appurtenances in a condition satisfactory to the owners and the City of Guadalupe.

7-13 NOT USED.

7-14 SUBMITTALS.

7-1.14.A GENERAL- Submittals covered by these requirements include manufacturers information, shop drawings, test procedures, test results, samples, requests for substitutions, and miscellaneous work-related submittals. Submittals shall also include, but not be limited to, all mechanical, electrical and electronic equipment and systems, materials, reinforcing steel, fabricated items, and piping and conduit details. The Contractor shall furnish all drawings, specifications, descriptive data, certificates, samples, tests, methods, schedules, and manufacturer's installation and other instructions as specifically required in the Contract Documents to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the Contract Documents.

7-1.14.B CONTRACTOR'S RESPONSIBILITIES-The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the specified requirements. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and notify the Engineer in each case where his submittal may affect the work of another contractor or the City. The Contractor shall coordinate submittals among his subcontractors and suppliers

7-1.14.C The Contractor shall coordinate submittals with the work so that work will not be delayed. He shall coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. **No extension of time will be allowed because of failure to properly schedule submittals.** The Contractor shall not proceed with work related to a submittal until the submittal process is complete. This requires that submittals for review and comment shall be returned to the Contractor stamped "No Exceptions Taken" or "Make Corrections Noted."

7-1.14.D The Contractor shall certify on each submittal document that he has reviewed the submittal, verified field conditions, and complied with the Contract Documents

7-1.14.E The Contractor may authorize in writing a material or equipment supplier to deal directly with the Engineer or with the City with regard to a submittal. These dealings shall be limited to contract interpretations to clarify and expedite the work.

7-1.14.F CATEGORIES OF SUBMITTALS

7-1.14.F(1) GENERAL- Submittals fall into two general categories; submittals for review and comment, and submittals which are primarily for information only. Submittals that are for information only are generally specified as PRODUCT DATA in applicable specification sections.

7-1.14.F(2) SUBMITTALS FOR REVIEW AND COMMENT- All submittals except where specified to be submitted as product data for information only shall be submitted by the Contractor to the Engineer for review and comment

7-1.14.F(3) SUBMITTALS (PRODUCT DATA) FOR INFORMATION ONLY- Where specified, the Contractor shall furnish submittals (product data) to the Engineer for Information only.

7-1.14.G TRANSMITTAL

7-1.14.G(1) GENERAL- Unless otherwise specified, submittals regarding material and equipment shall be accompanied by a transmittal form approved by the Engineer. A separate transmittal form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required. Submittal documents common to more than one piece of equipment shall be identified with all the appropriate equipment numbers. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.

A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted. Original submittal numbers shall have the following format: "XXX"; where "XXX" is the sequential number assigned by the Contractor. Re-submittals shall have the following format: "XXX-Y"; where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for re-submittals, i.e., A, B, or C being the 1st, 2nd, and 3rd re-submittals, respectively. Submittal 25B, for example, is the second re-submittal of submittal 25.

7-1.14.G(2) DEVIATION FROM CONTRACT- If the Contractor proposes to provide material, equipment, or method of work which deviates from these Special Provisions, he shall indicate so under "deviations" on the transmittal form accompanying the submittal copies.

7-1.14.G(3) SUBMITTAL COMPLETENESS- Submittals which do not have all the information required to be submitted, including deviations, are not acceptable and will be returned without review.

7-1.14.H REVIEW PROCEDURE

7-1.14.H(1) GENERAL- Submittals are specified for those features and characteristics of materials, equipment, and methods of operation which can be selected based on the Contractor's judgment of their conformance to the specified requirements. Other features and characteristics are specified in a manner which enables the Contractor to determine acceptable options without submittals. The review procedure is based on the Contractor's guarantee that all features and characteristics not requiring submittals conform as specified. Review shall not extend to means, methods, techniques, sequences or procedures of construction, or to verifying quantities, dimensions, weights or gages, or fabrication processes (except where specifically indicated or required by these Special Provisions) or to safety precautions or programs incident thereto. Review of a separate item, as such, will not indicate approval of the assembly in which the item functions.

7-1.14.H(2) When the Contract Documents require a submittal, the Contractor shall submit 5 copies of all submitted information plus one reproducible original of all information shall be transmitted with submittals for review and comment.

7-1.14.H(3) SUBMITTALS FOR REVIEW AND COMMENT- Unless otherwise specified, within 10 calendar days after receipt of a submittal for review and comment, the Engineer shall review the submittal and return **3 copies** of the marked-up reproducible original noted in 1 above. The Engineer will retain the reproducible original. The returned submittal shall indicate one of the following actions:

7-1.14.H(3)a) If the review indicates that the material, equipment or work method complies with these Special Provisions, submittal copies will be marked "NO EXCEPTIONS TAKEN." In this event, the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.

7-1.14.H(3)b) If the review indicates limited corrections are required, copies will be marked "MAKE CORRECTIONS NOTED." The Contractor may begin implementing the work method or incorporating the material and equipment covered by the submittal in accordance with the noted corrections. Where submittal information will be incorporated in O&M data, a corrected copy shall be provided.

7-1.14.H(3)c) If the review reveals that the submittal is insufficient or contains incorrect data, copies will be marked "AMEND AND RESUBMIT." Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."

7-1.14.H(3)d) If the review indicates that the material, equipment, or work method does not comply with these Special Provisions, copies of the submittal will be marked "Rejected - See Remarks." Submittals with deviations that have not been identified clearly may be rejected. Except at his own risk, the Contractor shall not undertake the work covered by such submittals until a new submittal is made and returned marked either "No Exceptions Taken" or "Make Corrections Noted."

7-1.14.H(4) SUBMITTALS (PRODUCT DATA) FOR INFORMATION ONLY- Such information is not subject to submittal review procedures and shall be provided as part of the work under this contract and its acceptability determined under normal inspection procedures.

7-1.14.I EFFECT OF REVIEW OF CONTRACTOR'S SUBMITTALS- review of contract drawings, methods of work, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of his responsibility for errors therein and shall not be regarded as an assumption of risks or liability by the Engineer or the City, or by any officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" shall mean that the City has no objection to the Contractor, upon his own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

SECTION 8 (Not Used)

SECTION 9 EXTRA WORK

9-1.01 EXTRA WORK.

Delete Section 3-3, "Extra Work" of the Standard Specifications. Extra Work shall be paid in accordance with Section 9 of these Special Provisions.

9-1.02 GENERAL.

New or unforeseen work will be classified as "extra work" when the Engineer determines that it is not covered by Contract Unit Prices or Stipulated unit prices.

9-1.03 EXTRA WORK PAYMENT.

When extra work is to be paid for on a force account basis the labor, materials and equipment used in the performance of such work shall be subject to the approval of the Engineer and compensation will be determined as follows:

9-1.03A WORK PERFORMED BY CONTRACTOR. The Contractor will be paid the direct costs for labor, materials and equipment used in performing the work determined as hereinafter provided in Sections 9-1.03A(1), "Labor," 9-1.03A(2), "Materials," and 9-1.03A(3), "Equipment Rental," except where agreement has been reached to pay in accordance with Section 9-1.03B, "Work Performed by Special Forces or Other Special Services."

To the total of the direct costs computed as provided in Sections 9-1.03A(1), "Labor," 9-1.03A(2), "Materials," and 9-1.03A(3), "Equipment Rental," there will be added a markup of 33 percent to the cost of labor, 15 percent to the cost of materials, and 15 percent to the equipment rental. A markup for "Home Office Overhead" will not be allowed.

The above markups shall constitute full compensation for all overhead costs which shall be deemed to include all items of expense not specifically designated as cost or equipment rental in Sections 9-1.03A(1), "Labor," 9-1.03A(2), "Materials," and 9-1.03A(3), "Equipment Rental." The total payment made as provided above shall be deemed to be the actual cost of such work and shall constitute full compensation therefor.

When extra work is performed by a subcontractor, approved in accordance with the provisions in Section 2-3, "Subcontracts," of the Standard Specifications, an additional markup of 5 percent will be added to the total cost of said extra work including all markups specified in this Section 9-1.03A. Said additional 5 percent markup shall reimburse the Contractor for additional administrative costs, and no other additional payment will be made by reason of performance of the extra work by a subcontractor.

9-1.03A(1) LABOR. The Contractor will be paid the cost of labor for the workmen (including foremen when authorized by the Engineer), used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor, subcontractor, or other forces, will be the sum of the following:

9-1.03A(1a) ACTUAL WAGES. The actual wages paid shall include any employer payments to or on behalf of the workmen for health and welfare, pension, vacation, and similar purposes.

9-1.03A(1b) LABOR SURCHARGE. To the actual wages, as defined in Section 9-1.03A(1a), will be added a labor surcharge set forth in the Department of Transportation publication entitled Labor Surcharge And Equipment Rental Rates, which is in effect on the date upon which the work is accomplished and which is a part of the contract. Said labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workmen, other than actual wages as defined in Section 9-1.03A(1a) and subsistence and travel allowance as specified in Section 9-1.03A(1c). Nondirect labor costs, including superintendence, shall be considered part of the markup in 9-1.03A.

9-1.03A(1c) SUBSISTENCE AND TRAVEL ALLOWANCE. The actual subsistence and travel allowance paid to such workmen.

9-1.03A(2) MATERIALS. The City reserves the right to furnish such materials as it deems advisable, and the Contractor shall have no claims for costs and markup on such materials.

Only materials furnished by the Contractor and necessarily used in the performance of the work will be paid for. The cost of such materials will be the cost to the purchaser, whether Contractor, subcontractor or other forces, from the supplier thereof, except as the following are applicable:

9-1.03A(2a) If a cash or trade discount by the actual supplier is offered or available to the purchaser, it shall be credited to the City notwithstanding the fact that such discount may not have been taken.

9-1.03A(2b) If materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by the Engineer plus the actual costs, if any, incurred in the handling of such materials.

9-1.03A(2c) If the materials are obtained from a supply or source owned wholly or in part by the purchaser, the cost of such materials shall not exceed the price paid by the purchaser for similar materials furnished from said source on contract items or the current wholesale price for such materials delivered to the job site, whichever price is lower.

9-1.03A(2d) If the cost of such materials is, in the opinion of the Engineer, excessive, then the cost of such material shall be deemed to be the lowest current wholesale price at which such materials were available in the quantities concerned delivered to the job site, less any discounts as provided in Section 9-1.03A(2a).

9-1.03A(2e) If the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof within 60 days after the date of delivery of the material or within 15 days after acceptance of the contract, whichever occurs first, the City reserves the right to establish the cost of such materials at the lowest current wholesale prices at which such materials were available in the quantities concerned delivered to the location of the work, less any discounts as provided in Section 9-1.03A(2a).

9-1.03A(3) EQUIPMENT RENTAL. The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Department of Transportation publication entitled Labor Surcharge And Equipment Rental Rates, which is in effect on the date upon which the work is accomplished and which is a part of the contract, regardless of ownership and any rental or other agreement, if such may exist, for the use of such equipment entered into by the Contractor, except that for those pieces of equipment with a rental rate of \$10.00 per hour or less as listed in the Labor Surcharge And Equipment Rental Rates publication and which are rented from a local equipment agency, other than Contractor owned, the Contractor will be paid at the hourly rate shown on the rental agency invoice or agreement for the time used on force account work as provided in Section 9-1.03A(3a), "Equipment on the Work." If a minimum equipment rental amount is required by the local equipment rental agency, the actual amount charged will be paid to the Contractor.

If it is deemed necessary by the Engineer to use equipment not listed in the said publication, a suitable rental rate for such equipment will be established by the Engineer. The Contractor may furnish any cost data, which might assist the Engineer in the establishment of such rental rate. If the rental rate established by the Engineer is \$10.00 per hour or less, the provisions above concerning rental of equipment from a local equipment agency shall apply.

The rental rates paid as above provided 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.

Operators of rented equipment will be paid for as provided in Section 9-1.03A(1), "Labor."

All equipment shall, in the opinion of the Engineer, be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no

direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

Individual pieces of equipment or tools not listed in said publication and having a replacement value of \$500 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor.

Rental time will not be allowed while equipment is inoperative due to breakdowns.

9-1.03A(3a) EQUIPMENT ON THE WORK. The rental time to be paid for equipment on the work shall be the time the equipment is in operation on the extra work being performed, and in addition, shall include the time required to move the equipment to the location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used at the site of the extra work on other than such extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the extra work on other than such extra work.

The following shall be used in computing the rental time of equipment on the work:

- (1) When hourly rates are listed, less than 30 minutes of operation shall be considered to be 1/2 hour of operation.
- (2) When daily rates are listed, less than 4 hours of operation shall be considered to be 1/2 day of operation.

9-1.03A(3b) EQUIPMENT NOT ON THE WORK. For the use of equipment moved in on the work and used exclusively for extra work paid for on a force account basis, the Contractor will be paid the rental rates listed in the Department of Transportation publication entitled Labor Surcharge And Equipment Rental Rates, which is in effect on the date upon which the work is accomplished and which is a part of the contract, or determined as provided in Section 9-1.03A(3) and for the cost of transporting the equipment to the location of the work and its return to its original location, all in accordance with the following provisions:

- (1) The original location of the equipment to be hauled to the location of the work shall be agreed to by the Engineer in advance.
- (2) The State will pay the costs of loading and unloading such equipment.
- (3) The cost of transporting equipment in low bed trailers shall not exceed the hourly rates charged by established haulers.
- (4) The cost of transporting equipment shall not exceed the applicable minimum established rates of the Public Utilities Commission.
- (5) The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of the extra work, excluding Saturdays, Sundays, and legal holidays unless the equipment is used to perform the extra work on such days, and shall terminate at the end of the day on which the Engineer directs the Contractor to discontinue the use of such equipment. The rental time to be paid per day will be in accordance with the following:

<i>Hours Equipment is in Operation</i>	<i>Hours to be paid</i>
0	4
0.5	4.25
1	4.5
1.5	4.75
2	5
2.5	5.25
3	5.5
3.5	5.75
4	6
4.5	6.25
5	6.5
5.5	6.75
6	7
6.5	7.25
7	7.5
7.5	7.75
8	8
Over 8	hours in operation

The hours to be paid for equipment, which is operated less than 8 hours due to breakdowns, shall not exceed 8 less the number of hours the equipment is inoperative due to breakdowns. When hourly rates are listed, less than 30 minutes of operation shall be considered to be 1/2 hour of operation. When daily rates are listed, payment for 1/2 day will be made if the equipment is not used. If the equipment is used, payment will be made for one day. The minimum rental time to be paid for the entire rental period on an hourly basis shall not be less than 8 hours or if on a daily basis shall not be less than one day.

(6) Should the Contractor desire the return of the equipment to a location other than its original location, the City will pay the cost of transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the work.

(7) Payment for transporting, and loading and unloading equipment, as above provided, will not be made if the equipment is used on the work in any other way than upon extra work paid for on a force account basis.

When extra work, other than work specifically designated as extra work in the plans and specifications, is to be paid for on a force account basis and the Engineer determines that such

extra work requires the Contractor to move on to the work equipment which could not reasonably have been expected to be needed in the performance of the contract, the Engineer may authorize payment for the use of such equipment at equipment rental rates in excess of those listed as applicable for the use of such equipment subject to the following additional conditions:

- (1) The Engineer shall specifically approve the necessity for the use of particular equipment on such work,
- (2) The Contractor shall establish to the satisfaction of the Engineer that such equipment cannot be obtained from his normal equipment source or sources and those of his subcontractors,
- (3) The Contractor shall establish to the satisfaction of the Engineer that the proposed equipment rental rate for such equipment from his proposed source is reasonable and appropriate for the expected period of use.
- (4) The Engineer shall approve the equipment source and the equipment rental rate to be paid by the City before the Contractor begins work involving the use of said equipment.

9-1.03A(3c) OWNER-OPERATED EQUIPMENT. When owner-operated equipment is used to perform extra work to be paid for on a force account basis, the Contractor will be paid for the equipment and operator, as follows:

Payment for the equipment will be made in accordance with the provisions in Section 9-1.03A(3), "Equipment Rental."

Payment for the cost of labor and subsistence or travel allowance will be made at the rates paid by the Contractor to other workmen operating similar equipment already on the project or, in the absence of such other workmen, at the rates for such labor established by collective bargaining agreements for the type of workman and location of the work, whether or not the owner-operator is actually covered by such an agreement. A labor surcharge will be added to the cost of labor described herein, in accordance with the provisions in Section 9-1.03A(1b), "Labor Surcharge."

To the direct cost of equipment rental and labor, computed as provided herein, will be added the markups for equipment rental and labor as provided in Section 9-1.03A, "Work Performed by Contractor."

9-1.03A(3d) DUMP TRUCK RENTAL. Dump truck rental shall conform to the provisions of Sections 9-1.03A(3), "Equipment Rental," 9-1.03A(3a), "Equipment on the Work," and 9-1.03A(3b), "Equipment not on the Work," except as follows:

Fully maintained and operated rental dump trucks used in the performance of extra work paid for on a force account basis will be paid for at the same hourly rate paid by the Contractor for use of fully maintained and operated rental dump trucks in performing contract item work.

In the absence of contract item work requiring dump truck rental, the Engineer will establish an hourly rental rate to be paid. The Contractor shall provide the Engineer with complete information on the hourly rental rates available for rental of fully maintained and operated dump trucks.

The provisions in Section 9-1.03A(1), "Labor," shall not apply to operators of rented dump trucks.

The rental rates listed for dump trucks in the Department of Transportation publication entitled Labor Surcharge And Equipment Rental Rates shall not apply.

To the total of the rental costs for fully maintained and operated dump trucks, including labor, there will be added a markup of 15 percent. An additional markup of 5 percent will be added by reason of performance of the work by a subcontractor. No separate markup will be made for labor.

The provisions of Section 9-1.03A(3c), "Owner-Operated Equipment," shall not apply to dump truck rentals.

9-1.03B WORK PERFORMED BY SPECIAL FORCES OR OTHER SPECIAL SERVICES. When the Engineer and the Contractor, by agreement, determine that a special service or an item of extra work cannot be performed by the forces of the Contractor or those of any of his subcontractors, such service or extra work item may be performed by a specialist. Invoices for such service or item of extra work on the basis of the current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the special service industry to provide such complete itemization.

In those instances wherein a Contractor is required to perform extra work necessitating a fabrication or machining process in a fabrication or machine shop facility away from the jobsite, the charges for that portion of the extra work performed in such facility may, by agreement, be accepted as a specialist billing.

To the specialist invoice price, less a credit to the State for any cash or trade discount offered or available, whether or not such discount may have been taken, will be added 15 percent in lieu of the percentages provided in Section 9-1.03A, "Work Performed by Contractor."

9-1.03C RECORDS. The Contractor shall maintain his records in such a manner as to provide a clear distinction between the direct costs of extra work paid for on a force account basis and the costs of other operations.

From the above records, the Contractor shall furnish the Engineer completed daily extra work reports, either on forms furnished by the City or on computerized facsimiles of the City's forms acceptable to the Engineer, for each day's extra work to be paid for on a force account basis. The daily extra work reports shall itemize the materials used, and shall cover the direct cost of labor and the charges for equipment rental, whether furnished by the Contractor, subcontractor, or other forces, except for charges described in Section 9-1.03B, "Work Performed by Special Forces or Other Special Services." The daily extra work reports shall provide names or identifications and classifications of workmen, the hourly rate of pay and hours worked, and also the size, type and identification number of equipment, and hours operated.

Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily extra work reports, or if not available, they shall be submitted with subsequent daily extra work reports. Should said vendor's invoices not be submitted within 60 days after the date of delivery of the material or within 15 days after the acceptance of the contract, whichever occurs first, the City reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials were available in the quantities concerned delivered to the location of work less any discounts as provided in Section 9-1.03A(2a).

Said daily extra work reports shall be signed by the Contractor or his authorized representative.

The Engineer will compare his records with the completed daily extra work reports furnished by the Contractor and make any necessary adjustments. When these daily extra work reports are agreed upon and signed by both parties, said reports shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit by the City.

The Contractor's cost records pertaining to work paid for on a force account basis shall be open to inspection or audit by representatives of the City, during the life of the contract and for a period of not less than 3 years after the date of acceptance thereof, and the Contractor shall retain such records for

that period. Where payment for materials or labor is based on the cost thereof to forces other than the Contractor, the Contractor shall make every reasonable effort to insure that the cost records of such other forces will be open to inspection and audit by representatives of the City on the same terms and conditions as the cost records of the Contractor. If an audit is to be commenced more than 60 days after the acceptance date of the contract, the Contractor will be given a reasonable notice of the time when such audit is to begin.

9-1.04 PAYMENT

Payment as provided in Sections 9-1.03A, "Work Performed by Contractor," and 9-1.03B, "Work Performed by Special Forces or Other Special Services," shall constitute full compensation to the Contractor for performance of work paid for on a force account basis and no additional compensation will be allowed therefor.

**SECTION 10
TECHNICAL SPECIFICATIONS**

TECHNICAL SPECIFICATIONS

Prepared by:



5130 San Jacinto Avenue
Atascadero, CA 93422
805-464-6126



Jeff A. van den Eikhof, P.E.

10/12/2016
Date

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TS-1 GENERAL REQUIREMENTS

TS-1.01 General

All work shall conform to the applicable provisions of the State of California, Department of Transportation, Standard Specifications (Caltrans); these Special Provisions; and the plans and typical sections.

TS-1.02 Project Site Maintenance

Throughout all phases of construction until final acceptance, including any periods of work suspension, the site shall be kept clean and free from rubbish and debris.

The Contractor shall abate dust by sprinkling water or other means as necessary, but the use of water resulting in mud on public streets will not be permitted.

Excess excavated materials from any source shall be removed from the site immediately. Forms, nails and lumber shall be removed the day of form removal. Materials and equipment shall be removed from the site as soon as they are no longer necessary.

Before the final inspection, the site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All pavement areas shall be swept with a street sweeper immediately prior to the final inspection. All concrete areas shall be broom cleaned.

All topsoil areas shall be raked. All cleanup costs shall be included in the Contractor's bid. In the event that the Contractor fails to perform this final cleanup, the Agency may remove and/or dispose of the articles or materials at the Contractor's expense.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

TS-1.03 Sanitary Facilities

The Contractor shall provide and maintain enclosed, portable restrooms for the use of personnel engaged in the work. These accommodations shall be maintained in a neat and sanitary condition, and shall comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation.

TS-1.04 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, but that are damaged or removed as a result of its operations. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension.

TS-1.05 Notification of Residents, Businesses, and Agencies

The Contractor shall notify the affected residents and businesses four calendar days in advance of the start of work. Notification shall be done by using “door knob” type notices which shall include a description of the impending work, the date and time when traffic will be restricted, a date and time when parking will not be allowed along the street scheduled for renovation and 48 hour window of “no landscape irrigation” prior to work. Contractor shall submit a sample notice for review and approval by the City five calendar days prior to distribution.

Ten calendar days prior to beginning construction, the Contractor shall assist in notifying local schools, hospitals, ambulance services, police and fire departments, transit agencies, refuse collectors and Underground Service Alert (USA) of its schedule of work.

The Contractor shall furnish and place “No Parking” signs, 12 inches by 18 inches minimum size and approved by the Engineer, throughout the area of work at fifty foot intervals two working days (four calendar days prior to work beginning on a Monday or Tuesday) prior to the start of construction. In rural areas, the signs shall be placed at intervals not to exceed 400 feet. The signs shall include the date and time during which parking is prohibited. The Contractor shall remove these signs immediately when they are no longer needed.

If for any reason the work is delayed or rescheduled after the required notifications have been issued, the Contractor shall re-date the signs affected, notify residents and businesses of the change via a new “door knob” notice, and re-contact the local services and agencies. If the work is delayed more than five calendar days, the Contractor shall remove the signs and place re-dated signs two working days (four calendar days prior to work beginning on a Monday or Tuesday) in advance of the work.

TS-1.06 Payment

Payment for work required under the General Requirements shall be included in the prices bid for the individual items of work and no additional compensation will be allowed therefore unless specifically noted otherwise.

TS-2 TRAFFIC CONTROL

TS-2.01 General

The work shall consist of maintaining and controlling all vehicular and pedestrian traffic through the construction zone and/or detour routes and shall conform to the “Manual of Traffic Control for Construction and Maintenance Work Zone” (Traffic Manual) published by the State of California, Department of Transportation. The manual prescribes minimum standards for the application of uniform traffic control devices such as traffic cones, barricades, regulatory signs, warning signs, and guide signs. The Contractor shall have a copy of the manual at the work site and shall adhere to its provisions.

TS-2.02 Material and Equipment

All traffic control supplies and materials including signs, posts, temporary mounting stands, cones, delineators, and barricades shall adhere to NCHRP No. 350. Each traffic control plan shall include a compliance letter indicating each type of material or equipment to be used on the project, date of purchase, manufacturer contact information, and a compliance letter or reference.

The Contractor shall place adequate signage to alert pedestrians that the sidewalk is closed during construction.

TS-2.03 Construction

Traffic control shall include the installation, maintenance, and removal of all necessary traffic control equipment. Damaged or missing equipment shall be replaced upon discovery. Equipment left in place over weekends or during other periods of non-work shall be checked and maintained on a daily basis until the work is complete and all traffic control devices are removed from the project.

TS-2.03A Traffic Control Plan

Provide traffic control plan at or before the preconstruction meeting. Traffic control plan must be drawn to scale. Upon approval of the traffic control plan, the City will issue a no-fee Encroachment Permit. Permittee (Contractor) is responsible to comply with all conditions of the traffic control plan. Complete work using due diligence in order to restore free flowing of traffic in a safe manner.

TS-2.03B Construction Signing

Construction signing shall consist of furnishing, installing, maintaining, and removing construction signs, cones, delineators, and barricades.

TS-2.03C Flagmen

If required in the traffic control plan, and always during one-way traffic control, flagmen will be required to direct traffic during construction. The number and location of flagmen shall be sufficient to allow safe control and passage of traffic through the work zone. During the paving of intersections, two flagmen shall be posted at each intersection for the entire time between tack coat and finish rolling.

During placement of chip seals, and at other times if necessary for public or worker safety, pilot cars shall be required to control traffic speed to a maximum speed of twenty miles-per-hour to ensure traffic safety. Pilot cars shall be maintained on the chip sealed streets at least until after the primary sweeping, or longer if necessary for safety.

TS-2.03D Portable Delineators

Portable delineators shall be either cones or tubular markers. Delineators to be used at night or in low light conditions shall be reflectorized. The minimum height of either style of delineator shall be thirty-seven inches above the road surface.

All portable delineators shall follow the current version of the Traffic Manual.

The portable delineators shall be spaced as necessary for proper traffic control. However, in no case shall the spacing between the portable delineators exceed fifty feet on tangents or twenty-five feet on curves.

TS-2.03E Restrictions on Closure of Traffic Lanes

The Contractor shall submit to the City a traffic plan showing the detouring of traffic during construction. The traffic plan must be approved by the Engineer prior to any road closures.

TS-2.04 Payment

Payment for all work required under Traffic Control, including flagmen, shall be paid on a lump sum basis as indicated in the Bid Schedule, and no additional compensation will be allowed therefore.

TS-3 WATER POLLUTION CONTROL PROGRAM

TS-3.01 General

The Contractor shall prepare and implement a Water Pollution Control Program (WPCP) which describes in specific detail the Contractor's program to prevent contamination of the storm water collection system. The program shall address both common construction activities and extraordinary events.

The WPCP shall adhere to the requirements of the storm water quality management plans of the local governing jurisdictions. The plan shall address the prevention of particulates or pollutants from entering the storm water system from the job site, whether due to routine operations or spills.

TS-3.02 Construction

The Contractor shall continuously provide at the job site all of the tools, equipment, and materials necessary to implement the WPCP. This requirement shall be enforced at all times from project initiation through completion, including any punch list or warranty work on the project.

TS-3.02A Submittal

The Contractor shall submit 3 copies of the WPCP a minimum of 10 working days prior to beginning construction. Construction shall not begin until the WPCP is approved.

TS-3.02B Protection of Existing Storm Water System

As the first order of work, the Contractor shall protect the existing storm water system from entrance of particulates and pollutants. Such protection shall include implementing the Best Management Practices (BMP) as outlined in the WPCP.

In addition to the Best Management Practices outlined in the local governing jurisdiction's plans the protection system shall have a minimum of 3 features:

1. A particulate filter of geosynthetic material securely fastened in place such that it cannot be bypassed without significant physical damage,
2. A pre-filter for the particulate filter, and
3. On-hand materials to close off an inlet or opening in the case of a significant pollution spill.

TS-3.02C Materials Storage Areas

All material and/or equipment storage areas where liquid construction materials are kept, including but not limited to asphalt emulsions, paving oils, and seal coat materials, shall be protected by a physical barrier capable of containing the entire volume of stored liquid materials. During active construction activities, portions of the barrier may be removed for access. However, the barrier materials must be readily accessible for replacement by on-site construction personnel. The barrier must be in place at all times when construction personnel are absent from the storage site.

TS-3.02D System Inspection and Maintenance

The Contractor shall inspect and repair or replace any damaged or clogged element on a daily basis. During periods of precipitation where runoff occurs, the system shall be checked twice daily, seven days a week, whether or not any work has been performed. The daily checks shall be between 6 a.m. and 9 a.m., and 4 p.m. and 8 p.m.

The Contractor shall provide a monitoring log of each inspection.

TS-3.02E Non-Storm Spills or Pollution

The WPCP shall address practices for the clean-up of spilled or leaked pollutants such as hydraulic oil from damaged or leaking equipment. The plan shall include readily available equipment and materials to contain and absorb the pollutants, collection of these materials, and disposal of the materials to an approved disposal facility. The plan shall include ultimate disposal from the Contractor's yard.

The Contractor shall keep a record of any spills on the daily inspection logs. In addition, at the end of the project, the Contractor must certify that all contaminated materials have been properly disposed of in accordance with the WPCP.

TS-3.03 Payment

The Contractor shall be paid for the work of preparing, implementing, inspecting, maintaining, and removing the WPCP on a lump sum basis as indicated in the Bid Schedule.

In addition, failure to perform and document the required daily inspections shall result in a daily penalty of \$250.00 per calendar day. The imposition of the penalty shall not relieve the Contractor of any obligations of these project requirements.

Payment for the work involved under the bid item for the WPCP may be made on a partial payment system based on the completion of the following stages of the work:

Work Description	Payment Percentage
Develop plan	10% of bid price
Initial plan implementation	10% of bid price
Removal of BMP's at completion	10% of bid price
Inspection and Maintenance of WPCP	70% of bid price/contract time in calendar days

TS-4 AGGREGATE BASE

TS-4.01 General

Furnish, grade and compact aggregate base under concrete repair areas and new structures, and where called for in the plans and these Special Provisions.

TS-4.02 Materials

Comply with Section 26 of the Standard Specifications.

Use Class 2 Aggregate Base

TS-4.03 Construction

Rip, scarify, and moisture condition existing subgrade to optimum moisture content prior to compacting to a minimum of 95 percent relative compaction.

The constructed thickness of the aggregate base layer shall be not less than the design thickness minus 1/2 inch.

TS-4.04 Payment

Payment for aggregate base shall be included in the items of work for which it is necessary.

TS-5 CONCRETE CURBS AND SIDEWALKS

TS-5.01 General

Comply with Section 73 Concrete Curbs and Sidewalks of the Standard Specifications.

Furnish concrete mix design to the Engineer at least ten working days prior to start of work.

TS-5.02 Materials

Modify Section 73-1.02A as follows:

General Concrete Facilities including curb, gutter, sidewalk, access ramps, residential driveways, etc. shall meet the following requirements:

Compressive Strength:	2500 psi @ 28 days
Polypropylene Fiber Reinforcement:	1.5 lb/cy (0.01% by volume) 3/4 inch minimum length
Maximum Slump:	5 inches

Heavy Vehicular Facilities including cross gutters, spandrels, swales, commercial driveways, and alley entrances shall meet the following requirements:

Compressive Strength:	2000 psi @ 3 days, 4000 psi @ 28 days
Polypropylene Fiber Reinforcement:	3.0 lb/cy (0.02% by volume) 1-1/2 inch minimum length
Maximum Slump:	4 inches

The Contractor shall be responsible for all costs associated with the required mix design.

TS-5.03 Payment

Payment for Concrete Sidewalk and Curb Ramp is on a square foot basis.

Payment for Concrete Spandrel and Cross Gutter is on a square foot basis.

Payment for Concrete Curb and Gutter is on a linear foot basis.

Payment for Truncated Domes is on a square foot basis.

TS-6 VALVE REPLACEMENT

TS-6.01 General

Comply with Valve Replacement Technical Specifications prepared by Michael K. Nunley and Associates and attached below.

Work includes sawcutting, trenching, shoring, valve replacement, backfilling, compaction, pavement, replacement of valve wells and concrete ring, and all other work necessary to complete installation of new water valve assemblies as shown on the plans and indicated in the technical specifications.

TS-6.02 Payment

Payment for 8" Water Valve Assembly is on a unit cost basis.

Payment for 6" Water Valve Assembly is on a unit cost basis.

TS-7 REPLACE ASPHALT CONCRETE SURFACING

TS-7.01 General

Comply with Section 39-3 Existing Asphalt Concrete of the Standard Specifications

TS-7.02 Materials

Use 1/2" HMA Type A (PG 64-10)

TS-7.03 Construction

Comply with Section 39-3.02C of the Standard Specifications.

TS-7.04 Payment

Payment for replace asphalt concrete surfacing is on a square foot basis.

**CITY OF GUADALUPE VALVE REPLACEMENTS
TECHNICAL SPECIFICATIONS**

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SECTION 020120 PROTECTING EXISTING UNDERGROUND UTILITIES

PART 1 - GENERAL

1.01 DESCRIPTION

This section includes materials and procedures for protecting existing underground utilities.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Trenching, Backfilling, and Compacting: 312316.

PART 2 - MATERIALS

2.01 REPLACEMENT IN KIND

- A. Except as indicated below or as specifically authorized by the Owner's Representative, reconstruct utilities with new material of the same size, type, and quality as that removed.
- B. For sewer pipe 8 inches and less in diameter, replacement shall consist of SDR 35 PVC sewer pipe conforming to ASTM D3034. Compression couplings shall be 5000 Series Strong Back RC Couplings by Fernco or equal. Use only one section of pipe in crossing the trench section.

PART 3 - EXECUTION

3.01 GENERAL

- A. Replace in kind street improvements, such as curbs and gutters, barricades, traffic islands, signalization, fences, signs, etc., that are cut, removed, damaged, or otherwise disturbed by the construction.
- B. Where utilities are parallel to or cross the construction but do not conflict with the permanent work to be constructed, follow the procedures given below. Notify the utility owner 48 hours in advance of the crossing construction and coordinate the construction schedule with the utility owner's requirements. For utility crossings not shown in the drawings, refer to the Special Provisions and the instructions of the Owner's Representative for guidance.
- C. Determine the true location and depth of utilities and service connections which may be affected by or affect the work. Determine the type, material, and condition of these utilities. In order to provide sufficient lead-time to resolve unforeseen conflicts, order materials and take appropriate measures to ensure that there is no delay in work.

3.02 PROCEDURES

- A. Protect in Place: Protect utilities in place, unless abandoned, and maintain the utility in service, unless otherwise specified in the drawings or in the specifications.
- B. Cut and Plug Ends: Cut abandoned utility lines and plug the ends. Plug storm drains and sewers with an 8-inch wall of brick and mortar. Cap waterlines with a cast-iron cap or install a 3-foot-long concrete plug. Dispose of the cut pipe as unsuitable material.

- C. Remove and Reconstruct: Where so indicated in the drawings or as required by the Owner's Representative, remove the utility and, after passage, reconstruct it with new materials. Provide temporary service for the disconnected utility.

3.03 COMPACTION

- A. Utilities Protected in Place: Backfill and compact under and around the utility so that no voids are left.
- B. Utilities Reconstructed: Prior to replacement of the utility, backfill the trench and compact to an elevation 1 foot above the top of the ends of the utility. Excavate a cross trench of the proper width for the utility and lay, backfill, and compact.
- C. Alternative Construction--Sand-Cement Slurry: Sand-cement slurry consisting of one sack (94 pounds) of portland cement per cubic yard of sand and sufficient moisture for workability may be substituted for other backfill materials to aid in reducing compaction difficulties. Submit specific methods and procedures for the review of the Owner's Representative prior to construction.

3.04 SPECIAL CONSTRUCTION

- A. Reinforced Concrete Beam: Where indicated in the drawings or as determined by the Owner's Representative, support utilities by a reinforced concrete beam as shown on the utility support details in the drawings. The primary purpose of the beam is to prevent settlement of the utility line after construction. The Contractor is responsible for the protection of the utility during construction and shall incorporate the beam as part of the protection.
- B. Concrete Support Wall: Where indicated in the drawings or as determined by the Owner's Representative, support the utilities by a concrete support wall as shown on the utility support details in the drawings. The purpose of the concrete support wall is to prevent settlement of the utility line after construction. The Contractor is responsible for the protection of the utility during construction.

3.05 THRUST BLOCKS ON WATERLINES

- A. The Contractor's attention is called to thrust blocks for waterlines throughout the project whose thrust is in the direction of the new excavation and, therefore, may be affected by the construction. These waterlines are owned and operated by the Owner. Protect thrust blocks in place or shore to resist the thrust by a means approved by the Owner's Representative and reconstruct. If the thrust blocks are exposed or rendered to be ineffective in the opinion of the Owner's Representative, reconstruct them to bear against firm unexcavated or backfill material.
- B. Provide firm support by backfilling that portion of the trench for a distance of 2 feet on each side of the thrust block to be reconstructed from the pipe bedding to the pavement subgrade, with either:
 - 1. Sand-cement slurry (188 pounds of cement per cubic yard).
 - 2. The native material compacted to a relative compaction of 95%.
- C. Then excavate the backfill material for construction of the thrust block.
- D. Use a 5 sack per cubic yard concrete mix with a design strength of 2000 psi at 28 days for all thrust blocks.

END OF SECTION

SECTION 099752 COLD-APPLIED WAX TAPE COATING

PART 1 - GENERAL

1.01 DESCRIPTION

This section includes materials and application of a three-part, cold-applied wax tape coating system for buried piping per NACE RP0375-2006, Section 4 except as modified herein.

1.02 RELATED WORK SPECIFIED ELSEWHERE

Polyethylene Sheet Encasement (AWWA C105): 099754.

1.03 SUBMITTALS

- A. Submit shop drawings in accordance with General Provisions.
- B. Submit manufacturer's catalog data sheets and application instructions.

PART 2 - MATERIALS

2.01 PRIMER

- A. Primer shall be a blend of petrolatums, plasticizers, and corrosion inhibitors having a paste-like consistency. The primer shall comply with NACE RP0375-2006 and shall have the following properties:
 - 1. Pour Point: 100°F to 110°F.
 - 2. Flash Point: 350°F.
 - 3. Coverage: 1 gallon per 100 square feet.
- B. Primer shall be Trenton Wax Tape Primer, Denso Paste Primer, or equal.

2.02 WAX TAPE

- A. Wax tape shall consist of a synthetic-fiber felt, saturated with a blend of microcrystalline wax, petrolatums, plasticizers, and corrosion inhibitors, forming a tape coating that is easily formable over irregular surfaces. The tape shall comply with NACE RP0375-2006 and shall have the following properties:
 - 1. Saturant Pour Point: 115°F to 120°F.
 - 2. Thickness: 50 to 70 mils.
 - 3. Tape Width: 6 inches.
- B. Wax tapes used for pipe soil-to-air transitions shall be UV light stable so as not to degrade in the presence of sunlight.
- C. Wax tape shall be Trenton No. 1 Wax Tape, Denso "Densyl Tape," or equal.

2.03 PLASTIC WRAPPER

- A. Wrapper shall be a polyvinylidene chloride plastic with three 50-gauge plies wound together as a single sheet. The wrapper shall have the following properties:
 - 1. Color: Clear.
 - 2. Thickness: 1.5 mils.
 - 3. Tape Width: 6 inches.
- B. Plastic wrapper shall be Trenton Poly-Ply, Denso Tape PVC Self-Adhesive, or equal.

2.04 POLYETHYLENE SHEET COATING

See Section 099754.

PART 3 - EXECUTION

3.01 WAX TAPE COATING APPLICATION

- A. Surfaces shall be clean and free of dirt, grease, water, and other foreign material prior to the application of the primer and wax tape.
- B. Apply primer by hand or brush to fitting surfaces. Work the primer into crevices and completely cover exposed metal surfaces.
- C. Apply the wax tape immediately after the primer application. Work the tape into the crevices around fittings. Apply the wax tape by pressing and molding the tape into conformity with the surface so that it does not bridge over irregular surfaces configurations. Begin wrapping approximately 3 inches behind the area to be wrapped. If starting at a straight edge, wrap the tape spirally around the pipe while touching the end edge before starting the angle to begin the spiral. If the previous roll is headed in a downward direction, tuck the next roll under the previous roll. Stretch each roll tight as wrapping continues to avoid air bubbles.
- D. Wrap the wax tape spirally around the pipe and across the fitting. Use a minimum overlap of 50% of the tape width. Apply tape to flanges, mechanical and restrained joint bolts, nuts and glands, and grooved-end couplings to 6 inches beyond each side of the item.
- E. Work the tape into the crevices and contours of irregularly shaped surfaces and smooth out so that there is a continuous protective layer with no voids or spaces under the tape.
- F. After application, seal the overlap seams of the tape by hand by tapering and pressing the seam, attempting to create a continuous surface. There shall be no air pockets underneath the tape. The tape shall have direct intimate contact with the pipe surface.
- G. On vertical sections of the piping, such as at pipe-to-soil transitions, wrap the pipe starting from the bottom and proceeding upward so that downward flowing water and backfill do not catch in a seam.
- H. Overwrap the completed wax tape installation with the plastic wrapping material. Wrap spirally around the pipe and across the fitting. Use a minimum overlap of 55% of the tape width and apply two layers or applications of overwrap. Secure plastic wrapper to pipe with adhesive tape.

3.02 APPLICATION OF POLYETHYLENE SHEET COATING TO BURIED PIPING

Wrap completed wax tape coating system with polyethylene film per Section 099754 and secure around the adjacent pipe circumference with adhesive tape.

3.03 HANDLING AND INSTALLING WAX-TAPE COATED PIPE

- A. Handle pipe in a manner to minimize damage to the coating. Equipment used for the handling of coated pipe shall be designed and constructed to avoid damaging the protective coating system. Inspect supported areas of the pipe prior to installation. Repair damaged areas before installation.
- B. The pipeline trench shall be free of rocks, foreign matter, and projections that could damage the coating system.

END OF SECTION

SECTION 099754 POLYETHYLENE SHEET ENCASEMENT (AWWA C105)

PART 1 - GENERAL

1.01 DESCRIPTION

This section includes materials and installation of a polyethylene sheet encasement for buried ductile iron pipe, fittings, and valves.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Cold-Applied Wax Tape Coating: 099752.
- B. Trenching, Backfilling, and Compacting: 312316.
- C. General Piping Requirements: 400500.
- D. Flexible Pipe Couplings and Expansion Joints: 400722.

1.03 SUBMITTALS

- A. Submit shop drawings in accordance with General Provisions.
- B. Submit manufacturer's catalog literature and product data sheets describing the physical, chemical, and electrical properties of the encasement material.

PART 2 - MATERIALS

2.01 POLYETHYLENE WRAP

- A. The encasement shall consist of low-density polyethylene wrap of at least 8-mil thickness conforming to AWWA C105. Color: Black.
- B. Polyethylene encasement for ductile-iron pipe shall be supplied as a flat tube meeting the dimensions of Table 1 in AWWA C105 and shall be supplied by the ductile-iron pipe manufacturer.

2.02 PLASTIC ADHESIVE TAPE

- A. Tape shall consist of polyolefin backing and adhesive which bonds to common pipeline coatings including polyethylene.
- B. Minimum Width: 2 inches.
- C. Products: Canusa Wrapid Tape; Tapecoat 35; Polyken 934; AA Thread Seal Tape, Inc.; or equal.

PART 3 - EXECUTION

3.01 APPLICATION OF MOLDABLE MASTIC FILLER TO IRREGULAR ADJACENT SURFACES

When the adjacent joints are bell-and-spigot or mechanical joints and any associated welding specifications do not require an external full fillet weld, apply a moldable mastic filler (per Section 400500) at the step-down area prior to the application of the sheet encasement and tape.

3.02 APPLYING SHEET COATING TO BURIED FITTINGS

- A. Apply wrapping per AWWA C105 as modified herein.
- B. Apply a single wrapping.
- C. Install the polyethylene to completely encase fittings to provide a watertight corrosion barrier. Continuously secure overlaps and ends of sheet and tube with polyethylene tape. Make circumferential seams with two complete wraps, with no exposed edges. Tape longitudinal seams and longitudinal overlaps, extending tape beyond and beneath circumferential seams.
- D. Wrap bell-spigot interfaces, restrained joint components, and other irregular surfaces with wax tape or moldable sealant prior to placing polyethylene encasement.
- E. Minimize voids beneath polyethylene. Place circumferential or spiral wraps of polyethylene tape at 2-foot intervals along the barrel of the pipe to minimize the space between the pipe and the polyethylene.
- F. Overlap adjoining polyethylene tube coatings a minimum of 1 foot and wrap prior to placing concrete anchors, collars, supports, or thrust blocks. Hand wrap the polyethylene sheet, apply two complete wraps with no exposed edges to provide a watertight corrosion barrier, and secure in place with 2-inch-wide plastic adhesive tape.

3.03 APPLYING SHEET COATING TO BURIED VALVES

- A. Wrap flanges and other irregular surfaces with wax tape or moldable sealant. Press tightly into place leaving no voids underneath and a smooth surface under coating for polyethylene sheet.
- B. Wrap with a flat sheet of polyethylene. Place the sheet under the valve and the flanges or joints with the connecting pipe and fold in half. Extend the sheet to the valve stem and secure the sheet in place with 2-inch-wide plastic adhesive tape. Apply a second layer and secure with tape. Make two complete wraps, with no exposed edges, to provide a watertight corrosion barrier. Secure the sheets with tape around the valve stem below the operating nut and around the barrel of the connecting pipe to prevent the entrance of water and soil. Place concrete anchor and support blocks after the wrap has been installed.

3.04 APPLYING SHEET COATING TO BURIED FLEXIBLE PIPE COUPLINGS

- A. Wrap irregular surfaces with wax tape or moldable sealant. Press tightly into place leaving no voids underneath and a smooth surface under coating for polyethylene sheet.
- B. Apply two layers or wraps around the coupling. Overlap the adjoining pipe or fitting a minimum of 1 foot and secure in place with tape. Provide sufficient slack in polyethylene to allow backfill to be placed around fitting without tearing polyethylene. Apply tape around the entire circumference of the overlapped section on the adjoining pipe or fitting in two complete wraps, with no exposed edges, to provide a watertight corrosion barrier.

3.05 REPAIR OF POLYETHYLENE MATERIAL

Repair polyethylene material that is damaged during installation. Use polyethylene sheet, place over damaged or torn area, and secure in place with 2-inch-wide plastic adhesive tape.

3.06 APPLYING SHEET COATING TO EXISTING BURIED PIPING

When connecting polyethylene-encased pipe or fittings to existing pipe, expose existing pipe, thoroughly clean the surface, and securely tape the end of the polyethylene to the existing as specified above. When the existing pipe is polyethylene encased, wrap new polyethylene encasement over the existing, with overlap of at least 2 feet. Tape securely as specified above.

3.07 BACKFILL FOR POLYETHYLENE-WRAPPED PIPE, VALVES, AND FITTINGS

Place sand backfill within 1 foot of the pipe, valves, and fittings wrapped with polyethylene encasement per Section 312316.

3.08 INSTALLATION AND REPAIR OF POLYETHYLENE AT SERVICE TAPS

- A. Wrap two or three layers of polyethylene adhesive tape completely around the pipe to cover the area where the tapping machine and chain will be mounted.
- B. Mount the tapping machine on the pipe area covered by the polyethylene tape. Then make the tap and install the corporation stop directly through the tape and polyethylene.
- C. After making the direct service connection, inspect the entire circumferential area for damage and make repairs.
- D. To minimize the possibility of dissimilar metal corrosion at service connections, wrap the corporation stop a minimum clear distance of 3 feet of copper service pipes with polyethylene or dielectric tape.

END OF SECTION

SECTION 312316 TRENCHING, BACKFILLING, AND COMPACTING

PART 1 - GENERAL

1.01 DESCRIPTION

This section includes materials, testing, and installation for pipeline trench excavation, backfilling, and compacting.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Existing Conditions: General Provisions.
- B. Protecting Existing Underground Utilities: 020120.

1.03 SUBMITTALS

- A. Submit one copy of a report from a testing laboratory verifying that material contains less than 0.25% asbestos by weight or volume and conforms to the specified gradations or characteristics for pea gravel, granular material, imported sand, rock refill for foundation stabilization, and water. Submit asbestos test results with the submittals for materials gradation. Material gradation reports without the accompanying asbestos test results will be rejected as incomplete.
- B. Submit method(s) of compaction including removal sequence of shoring where used.

1.04 TESTING FOR COMPACTION

- A. The Owner will test for compaction as described below.
- B. Determine the density of soil in place by the sand cone method, ASTM D1556 or by nuclear methods, ASTM D6938. Compaction tests will be performed for each lift or layer. The minimum depth for the sand cone test hole shall be 12 inches. The minimum size shall be 8 inches, and size 16/30 or 10/20 silica sand shall be used.
- C. Determine laboratory moisture-density relations of soils by ASTM D1557. If nuclear methods are used for in-place density determination, the compaction test results for maximum dry density and optimum water content shall be adjusted in accordance with ASTM D4718. This will be required for determination of percent relative compaction and moisture variation from optimum.
- D. Determine the relative density of cohesionless soils by ASTM D4253 and D4254.
- E. Sample backfill materials per ASTM D75.
- F. "Relative compaction" is the ratio, expressed as a percentage, of the in-place dry density to the laboratory maximum dry density.
- G. Compaction shall be deemed to comply with the specifications when no test falls below the specified relative compaction. The Contractor shall pay the costs for any retesting or additional testing of work not conforming to the specifications.

- H. Where compaction tests indicate a failure to meet the specified compaction, the Owner will take additional tests every 25 feet in each direction until the extent of the failing area is identified. Rework the entire failed area until the specified compaction has been achieved.

1.05 TRENCH ZONE

The trench zone is the top of the trench immediately below the pavement zone in paved areas extending down to the pipe zone.

1.06 PIPE ZONE

The pipe zone shall include the full width of trench from the bottom of the pipe or conduit to a horizontal level above the top of the pipe, as specified below. Where multiple pipes or conduits are placed in the same trench, the pipe zone shall extend from the bottom of the lowest pipe to a horizontal level above the top of the highest or topmost pipe. Thickness of pipe zone above the highest top of pipe shall be 12 inches unless otherwise shown in the drawings or otherwise described in the specifications for the particular type of pipe installed.

1.07 PIPE BASE OR BEDDING

The pipe base or bedding shall be defined as a layer of material immediately below the bottom of the pipe or conduit and extending over the full trench width in which the pipe is bedded. Thickness of pipe base shall be 4 inches unless otherwise shown in the drawings or otherwise described in the specifications for the particular type of pipe installed.

PART 2 - MATERIALS

2.01 GRANULAR MATERIAL FOR BACKFILL-- TRENCH ZONE

Granular material or granular soil for backfill used above the pipe zone shall in accordance with State Standard Specifications, latest revision, for structural backfill, Section 19-3 with a minimum sand equivalent of 20 and a maximum particle size of 3 inches.

2.02 IMPORTED SAND--PIPE ZONE AND PIPE BASE

- A. Imported sand used in the pipe zone or for the pipe base shall have the following gradation:

Sieve Size	Percent Passing By Weight
2 inch	100
No. 4	32 to 100

- B. Imported sand shall have a minimum sand equivalent of 20 per ASTM D2419.

2.03 SAND-CEMENT SLURRY BACKFILL--PIPE ZONE

Sand-cement slurry backfill shall consist of two sacks (188 pounds of Type I or II portland cement added per cubic yard of imported sand and sufficient water for workability.

2.04 ROCK REFILL FOR FOUNDATION STABILIZATION

Rock refill shall be crushed or natural rock containing less than 0.25% asbestos by weight or volume, having the following gradation:

Sieve Size	Percent Passing By Weight
3 inches	100
1 1/2 inches	70 to 100
3/4 inch	60 to 100
No. 4	25 to 55
No. 30	10 to 30
No. 200	0 to 10

2.05 CONCRETE FOR PIPE ENCASUREMENT AND THRUST BLOCKS

- A. Concrete for unreinforced pipe encasement and thrust blocks shall be Class C per Section 030500, unless otherwise shown in the drawings.
- B. Provide thrust blocks at fittings in pipe having rubber gasket bell-and-spigot or unrestrained mechanical joints. Do not provide thrust blocks for steel pipe having welded, flanged, or butt-strap joints unless detailed in the drawings or required in the detailed piping specification.
- C. See the details in the drawings for thrust block sizes. Install thrust blocks based on the test pressures given in Section 400515. Size thrust blocks in accordance with the following table:

Pipe Test Pressure (psi)	Use Thrust Block Sizing for
0 to 25	25 psi
26 to 50	50 psi
51 to 100	100 psi
101 to 150	150 psi
151 to 200	200 psi

- D. Dimensions of thrust blocks for pipes smaller than 6 inches shall be the same as the dimensions shown for 6-inch pipe, unless specific dimensions are shown in the drawings.

2.06 WATER FOR COMPACTION

Water shall be free of organic materials injurious to the pipe coatings.

2.07 UNDERGROUND DETECTABLE METALLIC PIPE WARNING TAPE

Provide permanent, bright-colored, continuous-printed polyethylene tape, not less than 3 inches wide by 3 mils thick. Provide tape with printing which most accurately indicates type of buried service. Provide the following colored tape for the various piping services:

Service	Color
Cable TV	Orange
Gas	Yellow
Electric	Red
Telephone	Orange
Water	Blue
Sewer	Green
Chemical	Yellow
Reclaimed Water	Violet

2.08 FILTER FABRIC

Filter fabric for separation shall consist of material that conforms to State Specifications for filter fabric Section 88-1.03.

PART 3 - EXECUTION

3.01 SLOPING, SHEETING, SHORING, AND BRACING OF TRENCHES

Trenches shall have sloping, sheeting, shoring, and bracing conforming with 29CFR1926, Subpart P--Excavations, CAL/OSHA requirements, and the Special Provisions.

3.02 SIDEWALK, PAVEMENT, AND CURB REMOVAL

Cut bituminous and concrete pavements regardless of the thickness and curbs and sidewalks prior to excavation of the trenches with a pavement saw or pavement cutter. Width of the pavement cut shall be at least equal to the required width of the trench at ground surface. Haul pavement and concrete materials from the site. Do not use for trench backfill.

3.03 TRENCH EXCAVATION

- A. Excavate the trench to the lines and grades shown in the drawings with allowance for pipe thickness, sheeting and shoring if used, and for pipe base or special bedding. If the trench is excavated below the required grade, refill any part of the trench excavated below the grade at no additional cost to the Owner with granular material. Place the refilling material over the full width of trench in compacted layers not exceeding 8 inches deep to the established grade with allowance for the pipe base or special bedding.
- B. Trench widths in the pipe zone shall be as shown in the drawings. If no details are shown, maximum width shall be 18 inches greater than the pipe outside diameter. Comply with 29CFR Part 1926 Subpart P--Excavations. Trench width at the top of the trench will not be limited except where width of excavation would undercut adjacent structures and footings. In such case, width of trench shall be such that there is at least 2 feet between the top edge of the trench and the structure or footing.

3.04 TRENCH EXCAVATION IN BACKFILL AND EMBANKMENT AREAS

- A. Construct and compact the embankment to an elevation of 1-foot minimum over the top of the largest pipe or conduit to be installed.
- B. Excavate trench in the compacted backfill or embankment.

3.05 LOCATION OF EXCAVATED MATERIAL

- A. During trench excavation, place the excavated material only within the working area. Do not obstruct any roadways or streets. Do not place trench spoil over pipe, buried utilities, manholes, or vaults. Conform to federal, state, and local codes governing the safe loading of trenches with excavated material.

3.06 DEWATERING

Provide and maintain means and devices to remove and dispose of water entering the trench excavation during the time the trench is being prepared for the pipe laying, during the laying of the pipe, and until the backfill at the pipe zone has been completed. These provisions shall apply during both working and nonworking hours, including lunchtime, evenings, weekends, and holidays. Dispose of the water in a manner to prevent damage to adjacent property and in accordance with regulatory agency requirements. Do not drain trench water through the pipeline under construction.

3.07 FOUNDATION STABILIZATION

- A. After the required excavation has been completed, the Owner will inspect the exposed subgrade to determine the need for any additional excavation. It is the intent that additional excavation be conducted in all areas within the influence of the pipeline where unacceptable materials exist at the exposed subgrade. Overexcavation shall include the removal of all such unacceptable material that exist directly beneath the pipeline to a width 24 inches greater than the pipe outside diameter and to the depth required.
- B. Place filter fabric on the bottom of the trench and up the sides a sufficient height to retain rock refill material. Backfill the trench to subgrade of pipe base with rock refill material for foundation stabilization. Place the foundation stabilization material over the full width of the trench and compact in layers not exceeding 8 inches deep to the required grade. Foundation stabilization work shall be executed in accordance with a change order.
- C. Rock refill used by the Contractor for his convenience will not be cause for any additional payment.

3.08 INSTALLING BURIED PIPING

- A. Grade the bottom of the trench to the line and grade to which the pipe is to be laid, with allowance for pipe thickness. Remove hard spots that would prevent a uniform thickness of bedding. Place the specified thickness of pipe base material over the full width of trench. Grade the top of the pipe base ahead of the pipe laying to provide firm, continuous, uniform support along the full length of pipe, and compact to the relative compaction specified herein. Before laying each section of the pipe, check the grade and correct any irregularities.
- B. Excavate bell holes at each joint to permit proper assembly and inspection of the entire joint. Fill the area excavated for the joints with the bedding material specified or indicated in the drawings for use in the pipe zone. If no bedding material is specified or indicated, use imported sand.
- C. Inspect each pipe and fitting before lowering the buried pipe or fitting into the trench. Inspect the interior and exterior protective coatings. Patch damaged areas in the field with material recommended by the protective coating manufacturer. Clean ends of pipe thoroughly. Remove foreign matter and dirt from inside of pipe and keep clean during and after installation.
- D. Handle pipe in such a manner as to avoid damage to the pipe. Do not drop or dump pipe into trenches under any circumstances.

- E. After pipe has been bedded, place pipe zone material simultaneously on both sides of the pipe, in maximum 6-inch lifts, keeping the level of backfill the same on each side. If no pipe zone material is specified or indicated, use imported sand. Carefully place the material around the pipe so that the pipe barrel is completely supported and no voids or uncompacted areas are left beneath the pipe. Use particular care in placing material on the underside of the pipe to prevent lateral movement during subsequent backfilling.
- F. Compact each lift to the relative compaction specified herein.
- G. Push the backfill material carefully onto the backfill previously placed in the pipe zone. If no backfill material is otherwise specified or indicated, use granular material for backfill. Do not permit free-fall of the material until at least 2 feet of cover is provided over the top of the pipe. Do not drop sharp, heavy pieces of material directly onto the pipe or the tamped material around the pipe. Do not operate heavy equipment or a sheepsfoot wheel mounted on a backhoe over the pipe until at least 3 feet or one-half of the internal diameter, whichever is greater, of backfill has been placed and compacted over the pipe.
- H. When the pipe laying is not in progress, including the noon hours, close the open ends of pipe. Do not allow trench water, animals, or foreign material to enter the pipe.
- I. Keep the trench dry until the pipe laying and jointing are completed.

3.09 BACKFILL COMPACTION

- A. As shown on plans (C-101 Detail 2), utilize "Future Street Surface" detail per City of Santa Maria Standards. Use 90% relative compaction around the pipe zone and 95% relative compaction up to grade. Pavement to be repaired during street paving.

3.10 MATERIAL REPLACEMENT

Remove and replace any trenching and backfilling material that does not meet the specifications, at the Contractor's expense.

3.11 PLACING SAND-CEMENT SLURRY BACKFILL

Place sand-cement slurry backfill in a uniform manner that will prevent voids in or segregation of the material. Remove foreign material that falls into the excavation or trench. Do not commence backfilling over or place any material over the slurry cement backfill until at least four hours after placing the sand-cement slurry.

END OF SECTION

SECTION 400500 GENERAL PIPING REQUIREMENTS

PART 1 - GENERAL

1.01 DESCRIPTION

This section describes the general requirements for selecting piping materials; selecting the associated bolts, nuts, and gaskets for flanges for the various piping services in the project; and miscellaneous piping items.

1.02 SUBMITTALS

- A. Submit shop drawings in accordance with General Provisions.
- B. Submit affidavit of compliance with referenced standards (e.g., AWWA, ANSI, ASTM, etc.).
- C. Submit certified copies of mill test reports for bolts and nuts, including coatings if specified. Provide recertification by an independent domestic testing laboratory for materials originating outside of the United States.
- D. Submit manufacturer's data sheet for gaskets supplied showing dimensions and bolting recommendations.

1.03 DEFINITIONS OF BURIED AND EXPOSED PIPING

- A. Buried piping is piping buried in the soil, commencing at the wall or beneath the slab of a structure. Where a coating is specified, provide the coating up to the structure wall. Unless detailed otherwise, coating shall penetrate wall no less than 1 inch. Piping encased in concrete is considered to be buried. Do not coat encased pipe.
- B. Exposed piping is piping in any of the following conditions or locations:
 - 1. Above ground.
 - 2. Inside buildings, vaults, or other structures.
 - 3. In underground concrete trenches or galleries.

1.04 PIPING SERVICE

Piping service is determined by the fluid conveyed, regardless of the pipe designation. For example, pipes designated "Air Low Pressure," "Air High Pressure," and "Air" are all considered to be in air service.

PART 2 - MATERIALS

2.01 MATERIALS SELECTION AND ALTERNATIVE MATERIALS

- A. The drawings may show alternative piping materials for certain services. In such cases, the same pipe material shall be used for all pipe sizes in all locations for the given piping service. Do not intermix piping materials.

2.02 THREAD FORMING FOR STAINLESS STEEL BOLTS

Form threads by means of rolling, not cutting or grinding.

2.03 BOLTS AND NUTS FOR FLANGES FOR DUCTILE-IRON PIPING

- A. Bolts and nuts for buried or submerged Class 125 or 150 flanges shall be Type 304 stainless steel conforming to ASTM A193 (Grade B8) for bolts and ASTM A194 (Grade 8) for nuts.
- B. Fit shall be Classes 2A and 2B per ASME B1.1 when connecting to cast-iron valves having body bolt holes.
- C. Provide washers for each nut. Washers shall be of the same material as the nuts.

2.04 GASKETS FOR FLANGES FOR DUCTILE-IRON PIPING AND FITTINGS IN WATER SERVICE

Gaskets shall be full face, 1/8-inch thick, cloth-inserted rubber, with a Shore "A" hardness of 75 to 85. Gaskets shall be suitable for a water pressure of 200 psi at a temperature of 180°F. Gaskets shall have "nominal" pipe size inside diameters not the inside diameters per ASME B16.21. Products: Garlock Style 9200 or equal.

PART 3 - EXECUTION

3.01 RAISED FACE AND FLAT FACE FLANGES

Where a raised face flange connects to a flat-faced flange, remove the raised face of the flange.

3.02 INSTALLING FLANGED PIPING

- A. Set pipe with the flange bolt holes straddling the pipe horizontal and vertical centerline. Install pipe without springing, forcing, or stressing the pipe or any adjacent connecting valves or equipment. Before bolting up, align flange faces to the design plane within 1/16 inch per foot measured across any diameter. Align flange bolt holes within 1/8-inch maximum offset.
- B. Inspect each gasket to verify that it is the correct size, material, and type for the specified service and that it is clean and undamaged. Examine bolts or studs, nuts, and washers for defects such as burrs or cracks and rust and replace as needed.
- C. Clean flanges by wire brushing before installing flanged fittings. Clean flange bolts and nuts by wire brushing, lubricate carbon steel bolts with oil and graphite, and tighten nuts uniformly and progressively.
- D. Bolt lengths shall extend completely through their nuts. Any that fail to do so shall be considered acceptably engaged if the lack of complete engagement is not more than one thread.

- E. Do not use more than one gasket between contact faces in assembling a flanged joint.
- F. Tighten the bolts to the manufacturer's specifications, using the recommended cross bolt pattern in multiple steps of increasing torque, until the final torque requirements are achieved. Do not over torque.
- G. If flanges leak under pressure testing, loosen or remove the nuts and bolts, reset or replace the gasket, reinstall or retighten the bolts and nuts, and retest the joints. Joints shall be watertight.

3.03 INSTALLING BLIND FLANGES

- A. At outlets not indicated to be connected to valves or to other pipes and to complete the installed pipeline hydrostatic test, provide blind flanges with bolts, nuts, and gaskets.
- B. Coat the inside face of blind flanges per Section 099000, System No. 7.

3.04 INSTALLATION OF STAINLESS STEEL BOLTS AND NUTS

Prior to assembly, coat threaded portions of stainless steel bolts and nuts with lubricant.

END OF SECTION

SECTION 400520 MANUAL VALVES

PART 1 - GENERAL

1.01 DESCRIPTION

This section includes materials, testing, and installation of manually operated valves

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Cold-Applied Wax Tape Coating: 099752.
- B. Polyethylene Sheet Encasement (AWWA C105): 099754.
- C. General Piping Requirements: 400500.

1.03 SUBMITTALS

- A. Submit shop drawings in accordance with General Provisions.
- B. Submit manufacturer's catalog data and detail construction sheets showing all valve parts. Describe each part by material of construction, specification (such as AISI, ASTM, SAE, or CDA), and grade or type.
- C. Show valve dimensions including laying lengths. Show port sizes. Show dimensions and orientation of valve actuators, as installed on the valves. Show location of internal stops for gear actuators. State differential pressure and fluid velocity used to size actuators. For worm-gear actuators, state the radius of the gear sector in contact with the worm and state the handwheel diameter.
- D. Show valve linings and coatings. Submit manufacturer's catalog data and descriptive literature.
- E. Submit two copies of a report verifying that the valve interior linings and exterior coatings have been tested for holidays and lining thickness. Describe test results and repair procedures for each valve. Do not ship valves to project site until the reports have been returned by the Owner's Representative and marked "Resubmittal not required."

PART 2 - MATERIALS

2.01 GENERAL

- A. Install valves complete with operating handwheels or levers, chainwheels, extension stems, floor stands, gear actuators, operating nuts, chains, and wrenches required for operation.
- B. Valves shall have the name of the manufacturer and the size of the valve cast or molded onto the valve body or bonnet or shown on a permanently attached plate.
- C. For buried locations, valves with mechanical joint ends may be substituted for the flanged ends specified provided the mechanical joint ends are compatible with the pipe ends.

2.02 VALVE ACTUATORS

- A. Provide 2-inch AWWA operating nuts for buried and submerged valves.
- B. Design gear actuators assuming that the differential pressure across the plug, gate, or disc is equal to the test pressure of the connecting piping and assuming a fluid velocity of 16 fps. Size actuators using a minimum safety factor of 1.5 for valves in open/close service and 2.0 in modulating service.
- C. Gear actuators shall be enclosed, oil lubricated, with seals provided on shafts to prevent entry of dirt and water into the actuator. Gear actuators for valves located above ground or in vaults and structures shall have handwheels. The actuators for valves in exposed service shall contain a dial indicating the position of the valve disc or plug. Gear actuators for buried or submerged valves shall have 2-inch-square AWWA operating nuts.
- D. For buried or submerged service , provide watertight shaft seals and watertight valve and actuator cover gaskets. Provide totally enclosed actuators designed for buried or submerged service.
- E. Traveling nut and worm and gear actuators shall be of the totally enclosed design so proportioned as to permit operation of the valve under full differential pressure rating of the valve with a maximum pull of 80pounds on the handwheel or crank. Provide stop limiting devices in the actuators in the open and closed positions. Actuators shall be of the self-locking type to prevent the disc or plug from creeping. Design actuator components between the input and the stop-limiting devices to withstand without damage a pull of 200 pounds for handwheel or chainwheel actuators and an input torque of 300 foot-pounds for operating nuts when operating against the stops.
- F. Handwheel diameters for traveling nut actuators shall not exceed 8 inches for valves 12 inches and smaller.
- G. Self-locking worm gear shall be a one-piece design of gear bronze material (ASTM B427; or ASTM B84, Alloy C86200), accurately machine cut. Actuators for eccentric and lubricated plug valves may use ductile-iron gears provided the gearing is totally enclosed with spring-loaded rubber lip seals on the shafts. The worm shall be hardened alloy steel (ASTM A322, Grade G41500 or G41400; or ASTM A148, Grade 105-85), with thread ground and polished. Support worm-gear shaft at each end by ball or tapered roller bearings. The reduction gearing shall run in a proper lubricant. The handwheel diameter shall be no more than twice the radius of the gear sector in contact with the worm. Worm-gear actuators shall be Limitorque Model HBC, EIM Series W, or equal.
- H. Design actuators on buried valves to produce the required torque on the operating nut with a maximum input of 150 foot-pounds.
- I. Valve actuators, handwheels, or levers shall open by turning counterclockwise.

2.03

2.03 BOLTS AND NUTS FOR FLANGED VALVES

Bolts and nuts for flanged valves shall be as described in Section 400500.

2.04 GASKETS FOR FLANGES

Gaskets for flanged end valves shall be as described in Section 400500.

2.05 PAINTING AND COATING

- A. Line the interior metal parts of metal valves 4 inches and larger with epoxy, excluding seating areas and bronze and stainless steel pieces. Apply lining at the place of manufacture.
- B. Alternatively, line and coat valves with fusion-bonded epoxy.
- C. Test the valve interior linings and exterior coatings at the factory with a low-voltage (22.5 to 80 volts, with approximately 80,000-ohm resistance) holiday detector, using a sponge saturated with a 0.5% sodium chloride solution. The lining shall be holiday free.

2.06 PACKING, O-RINGS, AND GASKETS

Unless otherwise stated in the detailed valve specifications, packing, O-rings, and gaskets shall be one of the following nonasbestos materials:

- A. Teflon.
- B. Kevlar aramid fiber.
- C. Acrylic or aramid fiber bound by nitrile. Products: Garlock "Bluegard," Klinger "Klingersil C4400," or equal.
- D. Buna-N (nitrile).

2.07 RUBBER SEATS

Rubber seats shall be made of a rubber compound that is resistant to free chlorine and monochloramine concentrations up to 10 mg/L in the fluid conveyed.

2.08 VALVES

- A. Gate Valves:

1. Cast-Iron Resilient Wedge Gate Valves 3 Through 20 Inches (AWWA C509):

Valves shall comply with AWWA C509 and the following. Valves shall be of the bolted-bonnet type with nonrising stems. Valve stems shall be Type 304 or 316 stainless steel or cast, forged, or rolled bronze. Provide operating nut for buried valves. Provide handwheel for exposed valves. Stem nuts shall be made of solid bronze. Bronze for internal working parts, including stems, shall not contain more than 2% aluminum or more than 7% zinc. Bronze shall conform to ASTM B62 or ASTM B584 (Alloy C83600), except the stem bronze shall have a minimum tensile strength of 60,000 psi, a minimum yield strength of 30,000 psi, and a minimum of 10% elongation in 2 inches (ASTM B584 or B763, Alloy C87600 or C99500). Body bolts shall be Type 316 stainless steel. End connections for

exposed valves shall be flanged. End connections for buried valves shall be mechanical joint type.

Provide reduction thrust bearings above the stem collar. Stuffing boxes shall be O-ring seal type with two rings located in stem above thrust collar. Each valve shall have a smooth unobstructed waterway free from any sediment pockets.

Valves shall be lined and coated at the place of manufacture with either fusion-bonded epoxy or heat-cured liquid epoxy. Minimum epoxy thickness shall be 8 mils.

Manufacturers: Clow R/W, AVK, M&H C509, Waterous Series 500, or equal.

PART 3 - EXECUTION

3.01 VALVE SHIPMENT AND STORAGE

- A. Provide flanged openings with metal closures at least 3/16-inch thick, with elastomer gaskets and at least four full-diameter bolts. Install closures at the place of valve manufacture prior to shipping. For studed openings, use all the nuts needed for the intended service to secure closures. Alternatively, ship flanged valves 3 inches and smaller in separate sealed cartons or boxes.
- B. Provide threaded openings with steel caps or solid-shank steel plugs. Do not use nonmetallic (such as plastic) plugs or caps. Install caps or plugs at the place of valve manufacture prior to shipping. Alternatively, ship valves having threaded openings or end connections in separate sealed cartons or boxes.
- C. Store resilient seated valves in sealed polyethylene plastic enclosures with a minimum of one package of desiccant inside. Store resilient seated valves in the open or unseated position. Valves with adjustable packing glands shall have the packing gland loosened prior to storage. Inspect valves at least once per week, replace desiccant if required and repair damaged storage enclosures. Do not store valves with resilient seats near electric motors or other electrical equipment.
- D. Inspect valves on receipt for damage in shipment and conformance with quantity and description on the shipping notice and order. Unload valves carefully to the ground without dropping. Use forklifts or slings under skids. Do not lift valves with slings or chain around operating shaft, actuator, or through waterway. Lift valves with eyebolts or rods through flange holes or chain hooks at ends of valve parts.
- E. Protect the valve and actuators from weather and the accumulation of dirt, rocks, and debris. Do not expose rubber seats to sunlight or ozone for more than 30 days. Also, see the manufacturer's specific storage instructions.
- F. Make sure flange faces, joint sealing surfaces, body seats, and disc seats are clean. Check the bolting attaching the actuator to the valve for loosening in transit and handling. If loose, tighten firmly. Open and close valves having manual or power actuators to make sure the valve operates properly and that stops or limit switches are correctly set so that the valve seats fully. Close valve before installing.

3.02 FACTORY PRESSURE TESTING

- A. Hydrostatically test the valve pressure-containing parts at the factory per the valve specification or per the referenced standard. If no testing requirement is otherwise specified or described in the referenced standards, then test with water for 30 minutes minimum at a pressure of 1.5 times the rated pressure but not less than 20 psig. Test shall show zero leakage. If leaks are observed, repair the valve and retest. If dismantling is necessary to correct valve deficiencies, then provide an additional operational test and verify that the valve components function.
- B. The chloride content of liquids used to test austenitic stainless steel materials shall not exceed 50 ppm. To prevent deposition of chlorides as a result of evaporative drying, remove residual liquid from tested parts at the conclusion of the test.

3.03 INSTALLING VALVES—GENERAL

- A. Remove covers over flanged openings and plugs from threaded openings, after valves have been placed at the point to which the valves will be connected to the adjacent piping. Do not remove valves from storage cartons or boxes until they are ready to be installed.
- B. Handle valves carefully when positioning, avoiding contact or impact with other equipment, vault or building walls, or trench walls.
- C. Clean valve interiors and adjacent piping of foreign material prior to making up valve to pipe joint connection. Prepare pipe ends and install valves in accordance with the pipe manufacturer's instructions for the joint used. Do not deflect pipe-valve joint. Do not use a valve as a jack to pull pipe into alignment. The installation procedure shall not result in bending of the valve/pipe connection with pipe loading.
- D. Make sure valve ends and seats are clean. Check exposed bolting for loosening in transit and handling and tighten to manufacturer's recommendations. Open and close the valve to make sure it operates properly and that stops or limit switches are correctly set so that the vane, ball, gate, needle, diaphragm, disc, plug, or other seating element seats fully. Close the valve before installing. Check coatings for damage and repair. Handle valves carefully when positioning, avoiding contact or impact with other equipment or structures.
- E. Prior to assembly, coat threaded portions of stainless steel bolts and nuts with lubricant.

3.04 INSTALLING BURIED VALVES

- A. Connect the valve, coat the flanges, apply tape wrapping or polyethylene encasement, and place and compact the backfill to the height of the valve stem.
- B. Place block pads under the extension pipe to maintain the valve box vertical during backfilling and repaving and to prevent the extension pipe from contacting the valve bonnet.
- C. Mount the upper slip pipe of the extension in midposition and secure with backfill around the extension pipe. Pour the concrete ring allowing a depression so the valve box cap will be flush with the pavement surface.

3.05 FIELD COATING BURIED VALVES

- A. Wrap buried metal valves 6 inches and larger with polyethylene sheet per Section 099754.

3.06 ASSEMBLING JOINTS

- A. Bolt holes of flanged valves shall straddle the horizontal and vertical centerlines of the pipe run to which the valves are attached. Clean flanges by wire brushing before installing flanged valves. Clean flange bolts and nuts by wire brushing, lubricate threads with oil and graphite, and tighten nuts uniformly and progressively. If flanges leak under pressure testing, loosen or remove the nuts and bolts, reseal or replace the gasket, reinstall or retighten the bolts and nuts, and retest the joints. Joints shall be watertight.
- B. Clean threaded joints by wire brushing or swabbing. Apply Teflon joint compound or Teflon tape to pipe threads before installing threaded valves. Joints shall be watertight.
- C. Install lug-type valves with separate hex head machine bolts at each bolt hole and each flange (two bolts per valve bolt hole).

- D. Install grooved-end couplings for valves in accordance with Section 400500.

3.07 INSTALLING EXTENSION STEM GUIDE BRACKETS

Install at 6- to 8-foot centers. Provide at least two support brackets for stems longer than 10 feet, with one support near the bottom of the stem and one near the top.

3.08 MOUNTING GEAR ACTUATORS

The valve manufacturer shall select and mount the gear actuator and accessories on each valve and stroke the valve from fully open to fully closed prior to shipment.

3.09 FIELD INSTALLATION OF GEAR ACTUATOR

Provide the actuator manufacturer's recommended lubricating oil in each actuator before commencing the field testing.

3.10 VALVE FIELD TESTING

- A. Test valves for leakage at the same time that the connecting pipelines are hydrostatically tested. See Section 400515 for pressure testing requirements. Protect or isolate any parts of valves, actuators, or control and instrumentation systems whose pressure rating is less than the pressure test. Valves shall show zero leakage. Repair or replace any leaking valves and retest.
- B. Operate manual valves through three full cycles of opening and closing. Valves shall operate from full open to full close without sticking or binding. Do not backfill buried valves until after verifying that valves operate from full open to full closed. If valves stick or bind, or do not operate from full open to full closed, repair or replace the valve and repeat the tests.
- C. Gear actuators shall operate valves from full open to full close through three cycles without binding or sticking. The pull required to operate handwheel- or chainwheel-operated valves shall not exceed 80 pounds. The torque required to operate valves having 2-inch AWWA nuts shall not exceed 150 ft-lbs. If actuators stick or bind or if pulling forces and torques exceed the values stated previously, repair or replace the actuators and repeat the tests. Operators shall be fully lubricated in accordance with the manufacturer's recommendations prior to operating.

END OF SECTION

SECTION 400722 FLEXIBLE PIPE COUPLINGS AND EXPANSION JOINTS

PART 1 - GENERAL

1.01 DESCRIPTION

This section includes materials and installation of flexible gasketed sleeve-type compression pipe couplings for connecting different pipe materials.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Cold-Applied Wax Tape Coating: 099752.
- B. Polyethylene Sheet Encasement (AWWA C105): 099754.
- C. General Piping Requirements: 400500.

1.03 SUBMITTALS

- A. Submit shop drawings in accordance with General Provisions.
- B. Submit manufacturer's catalog data on couplings and joints. Show manufacturer's model or figure number for each type of coupling or joint for each type of pipe material for which couplings and joints are used. Show coatings.
- C. Submit manufacturer's recommended torques to which the coupling bolts shall be tightened for the flexible gasketed sleeve-type compression pipe couplings.
- D. Show materials of construction by ASTM reference and grade. Show dimensions.
- E. Show number, size, and material of construction of tie rods and lugs for each thrust harness on the project.

PART 2 - MATERIALS

2.01 COUPLING SYSTEM DESIGN AND COMPONENT UNIT RESPONSIBILITY

The coupling manufacturer shall furnish the gaskets, bolts, nuts, glands, end rings, and hardware for pipe couplings of all types and shall design these components as an integral system. Design the gaskets for the coupling and appropriately size to provide a watertight seal at the design pressure and temperature. Ship gaskets, bolts, nuts, glands, end rings, and hardware for pipe couplings with the pipe coupling and clearly label indicating the origin of the material, including place and date of manufacture. Package the manufacturer's printed installation instructions with each pipe coupling.

2.02 RESTRAINED PIPE COUPLINGS

- A. Couplings shall have center sleeves and end rings made of ductile iron conforming to AWWA C219, Section 4.
- B. Restrained coupling shall be EBAA Series 200 PV, Dresser Style 711, Romac Series 611, or equal.

2.03 TRANSITION COUPLINGS

Couplings for connecting different pipes having different outside diameters shall be: Dresser Style 62 or 162, Smith-Blair Series 413, Baker Series 212 or 220, or equal. Couplings shall have an internal full circumference ring pipe stop at the midpoint of the coupling. Inside diameter of coupling pipe stop shall equal inside diameter of smaller diameter pipe.

2.04 FLANGED COUPLING ADAPTERS FOR CAST IRON, DUCTILE-IRON, AND PVC PIPE

- A. Adapters for cast- and ductile-iron pipe 12 inches and smaller shall be cast iron: Dresser Style 128, Smith-Blair Series 912, Romac FCA, or equal.
- B. Flange ends shall match the flange of the connecting pipe; see detail piping specifications.

2.05 BOLTS AND NUTS FOR FLANGES

See Section 400500.

PART 3 - EXECUTION

3.01 INSTALLATION OF PIPE COUPLINGS

- A. Clean oil, scale, rust, and dirt from pipe ends. Clean gaskets in flexible pipe couplings before installing.
- B. Do not spring flanges or ends of connecting piping into position. Separately work connecting piping system into position to bring the piping flanges or ends into alignment with the matching coupling flanges or joints. Do not move couplings to achieve piping alignment.
- C. Line up pipe flange bolt holes with coupling or joint flange bolt holes within 1/16 inch maximum offset from the center of the bolt hole to permit insertion of bolts without applying any external force to the piping.
- D. Flange face separation shall be within the gasket spacing $\pm 1/16$ inch. Use only one gasket per flanged connection.
- E. Lubricate bolt threads with graphite and oil prior to installation.
- F. Thoroughly clean contact surfaces of gaskets and pipe ends of flexible pipe couplings just prior to assembly for a distance equal to center-sleeve length plus 2 inches. Install flexible pipe couplings such that the center sleeves are centered over the gap between the ends of the pipes being joined. Install centerline gaps per AWWA C219, Table 5 unless otherwise indicated. Install harnessed flexible pipe couplings in straight-run piping such that 50% of the total travel of the center sleeve or permissible centerline gap is available for expansion and 50% of the travel is available for contraction. In assembling the bolted or studded harnesses of flexible pipe couplings, tighten the nuts gradually and equally at diametrically opposite sides until snug. Do not misalign the harness bolts or studs. Tighten such that bolts or studs carry equal loads. Do not use wrenches or power fastening tools to tighten the nuts.

3.02 PAINTING AND COATING

- A. Coat buried pipe couplings (including joint harness assemblies), transition couplings, segmented sleeve couplings, and flanged coupling adapters with High solids epoxy or phenolic epoxy having a minimum volume solids of 80% (ASTM D2697). Then wrap the couplings with cold-applied wax tape per Section 099752 and with polyethylene wrap per Section 099754.

END OF SECTION