TEHAMA COUNTY SANITATION DISTRICT NO. 1
DEPARTMENT OF PUBLIC WORKS
9380 San Benito Avenue
Gerber, CA 96035-9701
(530) 385-1462
(530) 385-1189 Fax

Road Commissioner
Surveyor
Engineer
Public Transit
Flood Control & Water
Conservation District
Sanitation District No. 1

NOTICE TO CONTRACTORS

NOTICE IS HEREBY GIVEN that the Board of Directors of the Tehama County Sanitation District No. 1 will receive bids for the Closed-Circuit Television (CCTV) Inspection of Wastewater Collection System project.

Bids shall be submitted on the forms included in the Project Manual and securely bound. Bid documents can be examined at area Builder's Exchanges. Documents are available for download on CIP List (www.CIPLIST.com). Copies are on file and open to public inspection at Tehama County Public Works, 9380 San Benito Avenue, Gerber, CA 96035.

Project documents are available for viewing on the Tehama County Public Works website at http://www.tehamacountypublicworks.ca.gov/engineering/projects.html

Copies are on file and open to public inspection at Tehama County Public Works, 9380 San Benito Avenue, Gerber, CA 96035. No pre-bid meeting is scheduled for this project.

Bids must be received at **Tehama County Public Works Department, 9380 San Benito Avenue, Gerber, CA 96035** no later than **3:00 PM on April 7, 2017,** at which time the Project Coordinator will open said bids. Bids shall be submitted in sealed envelopes and marked in the upper left hand corner Closed-Circuit Television (CCTV) Inspection of Wastewater Collection System together with the name and address of the bidder. The bids will be opened and read publicly and bidders or their agents are invited to be present.

Pursuant to Section 1770 and following the Labor Code, the Contractor for the work will be required to pay, at least, the general prevailing wage rates as determined by the Director of the Department of Industrial Relations of the State of California. Questions or wage rates pertaining to the general prevailing wage should be directed to: Division of Labor Statistics and Research, P.O. Box 420603, San Francisco, CA 94142-0603 or http://www.dir.ca.gov/DLSR/PWD/TEH.xls

Bid Bond, Labor and Material Bond and Performance Bond are required. The County reserves the right to reject any and all bids and waive any informalities or irregularities in the bidding. Each bidder must be appropriately licensed in the State of California for this project as required by law.

Gary B. Antone, P.E., P.L.S.
Director of Public Works

_____

Date: _____

Publish in the Red Bluff Daily News on March 10 and March 23, 2017. Send proof of publication and invoice to: Tehama County Public Works, 9380 San Benito Avenue, Gerber, CA 96035. Prior to publication, please email proof to Nichole Bethurem at nbethurem@tcpw.ca.gov

BID PACKET

TEHAMA COUNTY

SANITATION DISTRICT NO. 1

CLOSED-CIRCUIT TELEVISION (CCTV) INSPECTION OF MINERAL WASTEWATER COLLECTION SYSTEM

BIDS DUE ON OR BEFORE

3:00 PM

FRIDAY, APRIL 7, 2017

This project has been funded wholly or in part by the United States Environmental Protection Agency and the State Water Resources Control Board. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency or the State Water Resources Control Board, nor does the EPA or the Board endorse trade names or recommend the use of commercial products mentioned in this document

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Gary B. Antone, P.E., P.L.S.
Director of Public Works

_____

Date: _____

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TEHAMA COUNTY SANITATION DISTRICT NO. 1

CLOSED-CIRCUIT TELEVISION INSPECTION OF MINERAL WASTEWATER COLLECTION SYSTEM

PROJECT DESCRIPTION

Project Location: Mineral Wastewater Collection System
37735 Hwy. 36E. Mineral, CA 96061

Project Description:

The project entails sanitary sewer pipeline flushing and cleaning, closed circuit television (CCTV) inspection of pipelines and manholes, audio-visual recording of pipeline interiors of approximately 5,400 lineal feet of 8 inch and 11,680 lineal feet of 6 inch pipeline with vehicular access, approximately 2,020 lineal feet of 6 inch pipeline with easements, 49 sewer manholes with vehicular access, 12 sewer manholes with easements, removal of debris, documentation of changed conditions on mapping sheets, delivery of inspection results, and all other associated work required to perform CCTV inspection of sewer pipelines and manholes, within the Mineral Wastewater Collection System.

This is only a summary. See entire project documents for full scope of the project.

BIDDING REQUIREMENT SUMMARY

1. PROJECT TITLE:	CCTV Inspection Mineral Wastewater Collection System
2. PROJECT LOCATION:	37735 Hwy 36E, Mineral
3. BID OPENING DATE:	April 7, 2017 @ 3:00 PM
4. BID OPENING LOCATION:	Tehama County Public Works 9380 San Benito Avenue Gerber, CA 96035
5. PRE-BOD MEETING:	N/A
6. BID SECURITY:	10% of maximum amount of bid
7. CONSTRUCTION TIME PERIOD:	90 Calendar Days
8. LICENSE REQUIREMENTS:	Class A
9. LIQUIDATED DAMAGES:	$250.00 per day
10. LABOR AND MATERIALS PAYMENT BOND:	100% of total bid
11. PERFORMANCE BOND	100% of total bid
12. PREVAILING WAGE RATES	Yes
13. BID VALID FOR:	60 days
14. ESTIMATE OF PROJECT COSTS:	$60,000
15. NON-REFUNDABLE DEPOSIT FOR CONTRACT DOCS	N/A

16. BUILDERS EXCHANGES ISSUED CONSTRUCTION DOCUMENTS:

Shasta Builders Exchange

5800 Airport Road
Redding, CA 96002
(530) 221-5556
(530) 221-2140 (FAX)

Valley Contractors Exchange

951 East 8th Street
Chico, CA 95928
(530) 343-1981
(530) 343-3503 (FAX)

Sacramento Builders Exchange

1331 T Street
Sacramento, CA 95814
(916) 442-8991
(913) 446-3117 (FAX)

CMD Group

leah.dearce@cmdgroup.com

(770) 209 -3396
(678) 680-0698

Documents are available for download at www.CIPLIST.COM

INSTRUCTIONS TO BIDDERS

TEHAMA COUNTY SANITATION DISTRICT NO. 1

Bid Proposal

Each bid shall be made on the proposal form furnished by Tehama County Sanitation District No. 1 (District) and shall be in accordance with the Drawings, Specifications, any Addenda issued prior to bid opening, and all other Contract Documents; and shall be accompanied by a certified check, cashier's check or bidders bond, payable to Tehama County Sanitation District No. 1, for a sum of not less than ten (10%) percent of the amount of the bid, as a guarantee that the bidder will enter into the Contract for the work, the full amount of such guarantee to be forfeited to the District should said bidder fail to enter into said Contract. The successful bidder shall be required to furnish a Faithful Performance Bond for the amount of not less than one hundred percent (100%) of the contract price, and a Labor and Materials Bond for the amount of not less than one hundred percent (100%) of the contract price; said bonds to be secured from a surety company authorized to do business in the State of California.

The proposal shall be made on the form bound herein. The bid shall be enclosed in a sealed opaque envelope bearing the name of the bidder and name of project. The proposal shall be delivered by the time and to the place stipulated in the Notice to Contractors. It is the bidder's sole responsibility to see that his proposal is received in proper time. Any proposal received after the scheduled closing time for receipt of proposals will be returned to the bidder unopened. Prior to the time fixed for bid opening the proposal may be withdrawn by the bidder by means of a written request, signed by the bidder or his properly authorized representative. Such written request must be delivered to the place stipulated in the Notice to Contractors for receipt of proposals.

The proposals will be publicly opened and read at the time and place stipulated in the Notice to Contractors.

Unauthorized conditions, limitations, or provisions attached to a proposal will render it informal and may cause its rejection. The completed proposal forms shall be without interlineation, alterations, or erasures. Alternative proposals will not be considered unless called for. Oral, telegraphic, or telephonic proposals or modifications will not be considered.

All items on the bid form shall be filled out; numbers shall be filled out; numbers shall be stated both in writing and in figures; words shall be given priority over figures and the signatures of all individuals shall be in longhand. In the event there is more than one (1) bid item in the bidding schedule, the bidder shall furnish a price for all bid items in the schedule, and failure to do so will render the proposal informal and may cause its rejection. In the event there are unit price bid items in the bidding schedule and the amount indicated for a unit price bid item does not equal the product of the unit price and quantity, the unit price shall govern and the amount will be corrected accordingly. In the event there is more than one (1) bid item in the bidding schedule and the total indicated for the schedule does not agree with the sum of the prices bid on the individual items, the prices bid on the individual items shall govern and the total for the schedule will be corrected accordingly.

In case of refusal or failure to enter into said Contract, the check or bond, as the case may be, shall be forfeited to the District. If the bidder elects to furnish a bid bond as the proposal guarantee, he shall use the bid bond form bound herein.

Before submitting a proposal, the bidder shall carefully examine the Drawings, Specifications, any Addenda issued prior to bid opening, and all other Contract Documents; and he shall visit the site of the Work. It will be assumed that the bidder is familiar with existing site conditions and that he has a clear understanding of the requirements of the Contract regarding the furnishing of materials and performance of work. Should a bidder find discrepancies in, or omissions from, the Drawings, Specifications, or Contract Documents, or should he be in doubt as to their meaning, he should at once notify the Tehama County Sanitation District No. 1 who will send written instructions or clarifications to all bidders. The District will not be responsible for any oral instructions.

Every bidder shall, in his bid, set forth the name and location of business of each subcontractor who will perform work, labor or service to the bidder in excess of one-half of one percent (1/2%) of the bidder's total bid. If the bidder fails to specify a subcontractor as stated above, he agrees to perform that portion himself. The successful bidder shall not, without the consent of the District, substitute any person or firm as subcontractor in place of the subcontractor designated in the original bid.

Every bidder shall submit a completed Non-Collusion Affidavit with the bid.

Bid Review

No bid proposal shall be considered as low bidder or apparent low bidder until after all bids have been analyzed by the District. If required by the District, the bidders shall submit any information requested to evaluate the bids, including subcontractors` written bids, bonds, cost breakdowns, financial status, work experience and status of license.

Bid Selection

Contract for work will be executed with a contractor who is licensed in accordance with applicable state law.

A bidder may be relieved of his bid, and his bid security returned, by action of the Board of Directors provided he has given the District written notice within five (5) days after the opening of bids of a mistake, or other cause for the request, and specifying in detail the reason for the request.

More than one (1) proposal from an individual, partnership, corporation or association under the same or different names will not be considered. Reasonable grounds for believing that any bidder is interested in more than one (1) proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. If there is reason for believing that collusion exists among the bidders, all bids will be rejected and none of the participants in such collusion will be considered in future proposals.

Upon request, the District will return all proposal guarantees to their respective bidder within ten (10) days after award of the Contract, except those accompanying proposals submitted by the three (3) lowest responsible bidders.

Bid Award

Award of a Contract, if awarded, will be made to the lowest responsible bidder whose proposal complies with all the requirements prescribed. Any such award will be made within sixty (60) calendar days after opening of the proposals. The District reserves the right to reject any or all bids, to waive any informality or irregularity in a bid, and to make award in the interests of the District.

The bidder to whom award is made shall execute a written Contract with the District on the form of agreement provided, and shall secure all insurance and bonds required by the Specifications.

Failure or refusal to enter into a contract within ten (10) days as herein provided, or to conform to any of the stipulated requirements in connection therewith, shall be just cause for annulment of the award and the forfeiture of the proposal guarantee. If the successful bidder refuses or fails to execute the Contact, the District may award the Contract to the second lowest responsible bidder. If the second bidder refuses or fails to execute the Contract, the District may award the Contract to the third lowest responsible bidder. On the failure or refusal of such second or third lowest bidder to execute the Contract, such bidder's guarantees shall be likewise forfeited to the District.

Addenda

Any Addenda issued during the time of bidding, or forming a part of the Documents issued to the bidder for the preparation of his bid, shall be covered in the bid and shall be made a part of the Contract. Receipt of all addenda shall be acknowledged on the proposal form in the space provided therefore.

Time of Completion and Liquidated Damages

The contractor shall commence work within ten (10) working days from the date of a written "Notice to Proceed" issued by the District and shall diligently prosecute same to completion before the expiration of 90 calendar days.

It is agreed by the parties to the Contract that in case all the Work called for under the Contract is not completed within the number of days specified, damage will be sustained by the Tehama County Sanitation District No. 1; and that it will be impractical to ascertain actual damages and it is therefore agreed the Contractor will pay to the District the sum set forth herein per day for each working day delay in completing the Work in excess of the number of days prescribed; and the Contractor agrees to pay said liquidated damages and agrees that the District may deduct the amount thereof from money due or that may become due to the Contractor under the Contract.

The Contractor shall pay to the Tehama County Sanitation District No. 1 the sum of two hundred fifty dollars ($250.00) for each and every calendar days delay in finishing the work in excess of the number of days prescribed above.

Form of Agreement

The form of agreement, which the successful bidder will be required to execute, if awarded the work, is attached hereto and is made a part hereof.

Wages

The attention of the bidder is called to the fact that the schedule of prevailing rates of pay for each craft or type of workman needed to execute the Work shall not be less than the minimum rates of pay as established in pursuance of the provisions of Section 1773 of the Labor Code of the State of California, which Code requires the establishing of such rates for the locality. The Code reads: "Nothing shall prohibit the payment of more than the general prevailing rate of wages to any workman employed on public work".

A copy of the current prevailing wage rates for this locality is available from the Department of Industrial Relations and the Tehama County Sanitation District No. 1.

All bidders shall check the available source of labor supply and obtain information with reference to the working days of various crafts and the rates of wages being paid in the immediate vicinity of the place where the Work contemplated by these Specifications is to be performed.

It is intended that prevailing rates of wages and working hours shall be in accordance with those established by jurisdictional authorities of the vicinity in which the Work is to be performed. If rates established are in excess of those prevailing, the prevailing rates shall govern, but in no instance shall the District be held responsible for rates of wages paid which are below those prevailing.

Withheld Contract Funds/Substitution of Securities

The successful bidder shall be permitted to substitute securities for any moneys withheld by the District to ensure performance under the executed Contract. At the request and expense of the successful bidder, securities equivalent to the amount to be withheld shall be deposited with the District, or with a state or federally chartered bank in California as escrow agent, to ensure performance under the Contract. Upon satisfactory completion of the Contract, unused securities shall be returned to the Contractor.

Alternately, on written request of the successful bidder, the District shall make payments of the retention earnings directly to an escrow agent at the expense of the successful bidder. The successful bidder, at his expense, may direct the investment of the payments into securities and the successful bidder shall receive the interest earned on the investments on the same terms provided for securities deposited by contract. Upon satisfactory completion of the Contract, the successful bidder shall receive from the escrow agent all unused securities, interest and payments received by the escrow agent from the District.

Securities eligible for deposit shall include those listed in Section 16430 of the Government Code, 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 successful bidder and the District. The successful bidder shall be the beneficial owner of any securities substituted for moneys to be withheld, and shall receive any interest accrued upon the unused amount.

If security is deposited with a state or federally chartered bank as Escrow Agent, it is agreed that the successful bidder and the District will enter into an escrow agreement with the Escrow Agency in form substantially similar to that which is on file with the District and available for review.

Debarment Policy

It shall be the policy of the Board of Directors of the Tehama County Sanitation District No. 1 No. 1 to prohibit any party or entity listed in the Excluded Parties System (EPLS), maintained by the General Services Agency of the United States Government, from participating in any contract, agreement, or other business relationship with Tehama County Sanitation District No. 1.

Non-Resident Contractor

The State of California Franchise Tax Board requires that whenever payments are made to a non-resident, independent contractor in excess of $1,500 for services rendered, 7.0% of the gross amount must be withheld. A non-resident is anyone who is not a resident of California. A corporation is also subject to the withholding requirements if it is neither incorporated nor qualified to do business in the State of California. Unless the Franchise Tax Board has authorized a reduced rate or waiver of withholding and District is provided evidence of such reduction/waiver, all nonresident contractors will be subject to the withholding. It is the responsibility of the Contractor to submit the Waiver Request (Form 588) to the Franchise Tax Board as soon as possible in order to allow time for the Franchise Tax Board to review the request.

Public Works Contractor Registration Program

No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public works on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

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

License

The Contractor and all subcontractors must be licensed under the laws of the State of California at the time this Contract is awarded, and for its full duration.

The Contractor shall possess a Class A License.

PROPOSAL BID FORMS

TEHAMA COUNTY SANITATION DISTRICT NO. 1

Board of Directors

Tehama County Sanitation District No. 1

Red Bluff, CA

Board Members:

The undersigned bidder, _____in accordance with the Notice to Contactors, hereby proposes and agrees to furnish any and all services necessary to perform all work required by the Contract Documents for the:

CLOSED-CIRCUIT TELEVISION INSPECTION OF

MINERAL WASTEWATER COLLECTION SYSTEM

Including, but not limited to, furnishing all required labor, materials, taxes, permits, insurance, bonds, transportation, scaffolding, equipment, facilities, utilities, and incidentals.

If awarded the Contract, the undersigned hereby agrees that within ten (10) working days after receipt of the Contract from the District, he will sign the Contract in the required form, of which the Notice to Contractors, Instructions to Bidders, Proposal, Drawings, Specifications, and all Addenda issued prior to the opening of bids, are a part.

The undersigned agrees to complete all work required under the Contract within 90 calendar days, and accept in full payment the price named in the Bid Proposal, which is bound herein and made a part of this proposal.

The undersigned declares that he has carefully checked all of the figures submitted on the Bid Forms and understands that the District will not be responsible for errors or omissions on the part of the undersigned in making up this bid.

Bidder hereby certifies that the Bidder has reviewed and understands the insurance coverage requirements and bonding requirements, as specified in the General Conditions, Article 5 – Bonds and Insurance. Should the Bidder be awarded the contract for the work, Bidder further certifies that the Bidder can meet the specified requirements for bonding and insurance, including insurance coverage of the subcontractors, and agrees to name the Tehama County Sanitation District No. 1, its elected officials, officers, and employees as additional insured for the work specified. The undersigned agrees to secure the required insurance and bonds and submit them prior to or concurrent with the return of the signed Contract.

Accompanying this proposal is a "Cashier's Check", "Certified Check" or "Bidder's Bond", as the case may be, in an amount equal to at least ten percent (10%) of the total of the bid.

_____	_____
Name (Print)	Representing (Firm)
_____	_____
Signature	Title

_____

Business Address

Taxpayer Identification Number: _____

Contractor's License Number: _____

Department of Industrial Relations (DIR) Registration Number: _____

Receipt of the following Addenda is hereby acknowledged:

Addendum No. ____ Bidder's Initials: _____

Addendum No. ____ Bidder's Initials: _____

Addendum No. ____ Bidder's Initials: _____

PROPOSAL FOR

CLOSED-CIRCUIT TELEVISION INSPECTION OF

MINERAL WASTEWATER COLLECTION SYSTEM

The undersigned bidder hereby proposes and agrees to furnish any and all services necessary to perform all work required by the Contract Documents.

BID:

Furnish all labor, materials, taxes, insurance, bonds, transportation, equipment, facilities, utilities, and incidentals for the **Closed-Circuit Television Inspection of Mineral Wastewater Collection System** for the sum listed below.

BID AMOUNT:

_____ Dollars
(written numbers)

$ _____
(figures)

Bidder: _____

Date:_____

CLOSED-CIRCUIT TELEVISION INSPECTION OF MINERAL WASTEWATER COLLECTION SYSTEM

LIST OF SUBCONTRACTORS

Pursuant to Public Contract Code 4104, the undersigned bidder shall list the name and location of business of each Subcontractor who will perform work, labor or service to the bidder under this Contract in excess of one-half of one percent (1/2%) of the total amount shown in the bid, and shall also list the item or portions of the Work which will be done by such Subcontractor for any item or portion of Work to be performed.

LIST OF SUBCONTRACTORS:

All blanks below must be completed for each subcontractor. Failure to do so may cause your bid to be declared nonresponsive.

Subcontractor:

Name: _____

Location of place of business:_____

License No. _____

Work to be done:_____

Subcontractor:

Name: _____

Location of place of business:_____

License No. _____

Work to be done:_____

Subcontractor:

Name: _____

Location of place of business:_____

License No. _____

Work to be done:_____

Subcontractor:

Name: _____

Location of place of business:_____

License No. _____

Work to be done:_____

Subcontractor:

Name: _____

Location of place of business:_____

License No. _____

Work to be done:_____

Subcontractor:

Name: _____

Location of place of business:_____

License No. _____

Work to be done:_____

No Contractor may perform work on a public works project with a Subcontractor who is ineligible to perform work on a public works project pursuant to Section 1777.1 or 1777.7 of the Labor Code.

Closed-Circuit Television Inspection of Mineral Wastewater Collection System

INFORMATION REQUIRED OF BIDDERS

The bidder is required to supply the following information.

1. Firm Name: _____

2. Representative _____

3. Title: _____

4. Business Address: _____

5. Telephone:_____ Cell Phone: _____FAX: _____

6. Email Address: _____

7. California Contractor License(s)

   No(s): _____ Type(s): _____

8. California Department of Industrial Relations Registration No. _____

NON-COLLUSION AFFIDAVIT

TEHAMA COUNTY SANITATION DISTRICT NO. 1

TO BE EXECUTED BY THE BIDDER AND SUBMITTED WITH THE BID

TO: Tehama County Sanitation District No. 1
State of California

_____ deposes and says that he or she is _____(title) of _____, the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true and further, that the bidder has not directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

(The above certificate must be signed and filed with the District along with the bid)

Signed_____ Date_____

BIDDER'S BOND

(Public Contract)

KNOW ALL MEN BY THESE PRESENTS: That as Principal _____ (herein called "Principal") and as surety _____(hereinafter called "Surety" are held and firmly bound unto the Tehama County Sanitation District No. 1 (herein called the "Obligee"), in the just and full sum of ten percent (10%) of the total amount of the base bid submitted by Principal for the herein described work of improvement, which sum is Dollars ($_____) lawful money of the United States of America, for the payment of which, well and truly to be made, we hereby bind ourselves and our, and each of our, heirs, executors, administrators, successors, and assigns, jointly and severally firmly by these presents.

WHEREAS, Principal is bidding, or is about to bid, for the following described work of improvement, all in accordance with the Notice to Contractors and the Contract Documents for the project entitled:

Closed-Circuit Television Inspection of Mineral Wastewater Collection System

NOW, THEREFORE, THE CONDITION OF THE OBLIGATION IS SUCH THAT, if Obligee shall make an award to Principal for said work of improvement according to the terms of such bid, and Principal shall duly execute, or cause to be executed, and delivered to Obligee the Contract, bonds, and evidence of insurance coverage as, and within the time, required by the Contract Documents for the above-named project, which Contract Documents are incorporated herein by this reference, then this obligation shall be null and void; OTHERWISE, it shall remain in full force and effect, and if Obligee shall make such an award to Principal and Principal shall fail to execute, or caused to be executed and delivered to Obligee said instruments as required by the Contract Documents, then surety will pay Obligee the full sum of the bond

No extension of time granted to the Principal and no change or alteration in any of the terms of the bid or bid requirement, whether made after notice or not, shall release or otherwise affect the obligations of Surety hereunder, and Surety waives notice of any such extension, change, or alteration. Surety, by the execution of this bond, represents and warrants that this bond has also been duly executed by Principal with proper authority, and Surety hereby waives any defense which it might have by reason of any failure of Principal to execute or properly execute this bond.

In the event suit is brought upon this bond by Obligee and judgment is recovered by Obligee, court costs, including reasonable attorneys' fees, shall be an additional obligation of this bond for which Principal and Surety shall be liable.

Signed and sealed the _____ day of _____, 20_____

_____	_____
PRINCIPAL (Notary Certificate Attached)	SURETY (Notary Certificate Attached)

NOTE TO SURETY COMPANY: The following form of acknowledgment should be used. If any other form of acknowledgment is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

NOTARY ACKNOWLEDGMENT

STATE OF _____

COUNTY OF _____

On _____, before me, _____, a Notary Public in
Name of Notary Public

and for said State, personally appeared _____,
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

_____ (SEAL)
Signature of Notary Public

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

NOTARY ACKNOWLEDGMENT

STATE OF _____

COUNTY OF _____

On _____, before me, _____, a Notary Public in
Name of Notary Public

and for said State, personally appeared _____,
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

_____ (SEAL)
Signature of Notary Public

AGREEMENT FORM

THIS AGREEMENT, entered into as of _____, 20_____, is between the Mineral Sanitation District No. 1, a public entity, organized and existing pursuant to the laws of the State of California (hereinafter called the "DISTRICT") and _____**,** (hereinafter called the "CONTRACTOR"),

WHEREAS, the Contractor has been awarded the contract for the work hereafter mentioned:

Closed-Circuit Television Inspection of Mineral Wastewater Collection System

WITNESSETH:

That the parties hereto mutually agree to the terms and conditions hereinafter set forth.

I. CONTRACT DOCUMENTS

The Items hereinafter enumerated as the Contract Documents shall form a part of this Contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. Work called for in any one Contract Document and not mentioned in another is to be performed and executed the same as if mentioned in all Contract Documents, the table of contents, titles, and headings contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect or limit the interpretations of the provisions to which they refer.

The "Contract Documents", sometimes also referred to as the Contract, consist of the completed Form of Proposal submitted by the Contractor to whom the Contract is awarded, the Instructions to Bidders insofar as they relate to events which will occur or actions to be taken after the submission of the Proposal, this Agreement to which the General Conditions are attached, the General Conditions, the Supplementary Conditions, the Drawings and Specifications and any modifications of any of the foregoing in the form of addenda or otherwise effected in accordance with the terms of the Contract.

The sections of the DISTRICT's Specifications and the titles of the Drawings, with their assigned numbers and their date of issue, are listed in the Contract Documents.

II. DEFINITIONS

Unless otherwise specifically provided herein, all words and phrases defined in the General Conditions shall have the same meaning and intent in this Agreement.

III. SCOPE OF THE CONTRACT

The CONTRACTOR shall perform, within the time stipulated, the Contract as herein defined, and shall furnish all labor, tools, equipment, apparatus, facilities, labor and material and transportation necessary to perform and complete in a good workmanlike manner to the satisfaction of the DISTRICT, all the work called for, and in the manner

designated in, and in strict conformity with, the Contract Documents entitled: “Closed-Circuit Television Inspection of Mineral Wastewater Collection System”.

IV. CONTRACT PRICE

The DISTRICT agrees to pay and the CONTRACTOR agrees to accept, in full payment for the work included in the Bid the total sum of:

_____ ($_____).
(amount in words)

V. CONTRACT TIME, COMPLETION, AND CHANGES

A. Notice to Proceed

Within 90 days of the opening of bids the successful low bidder will be authorized by written notice to proceed with the work. The bidder shall have no claim against the DISTRICT, or its officers, employees, agents, consultants, project manager or architect because of failure to issue the Notice to Proceed.

B. Commencement and Prosecution of Work

The CONTRACTOR shall commence the work on or before 10 days from and after the date specified in the written "Notice to Proceed," and will diligently prosecute the work to final completion. Said Notice to Proceed shall be issued following execution of the Agreement, the filing by the CONTRACTOR of the required bonds and proof of insurance. The continuous prosecution of work by the CONTRACTOR shall be subject only to delays as defined in this section of this Agreement.

C. Time of Completion

The entire work shall be brought to substantial completion in the manner provided for in the Contract Documents in a period of 90 working days from and after the date assigned in the Notice to Proceed. The date, 90 working days from and after the date of the Notice to Proceed, shall be hereinafter called the "Estimated Completion Date" unless extensions of time are granted in accordance with the Contract Documents for Category A or B Delays as defined in this section of this Agreement. Failure to substantially complete the work within the above times and in the manner provided for by the Contract Documents shall subject the CONTRACTOR to liquidated damages as hereinafter stipulated in this Agreement. Time is and shall be of the essence in these Contract Documents.

D. Changes in the Work

Changes in the work made and extensions of time of completion made necessary by reason thereof shall not in any way release any guarantee given by the CONTRACTOR pursuant to the provision of the Contract Documents, or the contract let hereunder, nor shall such changes in the work relieve or release the

Sureties on bonds executed pursuant to the said provisions. The Sureties, in executing such bonds, shall be deemed to have expressly agreed to any such change in the work and to any extension of time made by reason thereof. The DISTRICT agrees that no changes in the work shall be ordered which will necessitate an extension of the substantial completion time beyond the fixed completion date.

E. Extensions of Time

In the event it is deemed necessary by the DISTRICT to extend the time of substantial completion of the work to be done under this contract beyond any required dates of completion herein specified, such extensions shall in no way release any guarantee given by the CONTRACTOR pursuant to the provisions of the Contract Documents, or the contract let hereunder, nor shall such extension of time relieve or release the sureties on the bonds executed pursuant to said provisions. The sureties in executing such bonds shall be deemed to have expressly agreed to any such extension of time. The amount of time allowed in any Extension of Time shall be limited to the period of the delay-giving rise to the same as determined by the DISTRICT.

F. Prevailing Wages

Pursuant to Section 1770 et seq. of the Labor Code the CONTRACTOR for the work will be required to pay, at least, the general prevailing wage rates as determined by the Director of the Department of Industrial Relations of the State of California. Questions pertaining to the general prevailing wage rates should be directed to the Division of Labor Statistics and Research, P.O. Box 603, San Francisco, CA 94101, Ph. (415) 703-4774.

G. Category A Delays

For the purpose of these Contract Documents, the term "Category A Delays" shall mean, and is limited to, delays caused directly by acts of God; acts of the public enemy; fire, riots, insurrections; epidemics; quarantine restrictions; strikes; lockouts; sit-downs; acts of a governmental agency; priorities or privileges established for the manufacture, assembly or allotment of materials necessary in the construction of the work by order, decree or otherwise of the United States or by any department, bureau, commission, committee, agent, or administrator of any legally constituted public authority; changes in the work ordered by the DISTRICT insofar as they necessarily require additional time in which to substantially complete the work; the prevention by the DISTRICT of the CONTRACTOR from commencing or prosecuting the work because of the acts of others, excepting the CONTRACTOR'S subcontractors; or the prevention of the CONTRACTOR from commencing or prosecuting the work because of a city-wide failure of public utility service.

Inclement weather shall not be a prima facie reason for the granting of an extension of time, and the CONTRACTOR shall make every effort to continue work under

prevailing conditions. The DISTRICT may, however, grant an extension of time if an unavoidable delay as a result of inclement weather in fact occurs, and such shall then be classified as a "Category A Delay".

The term "Category A Delay" shall specifically not include (i) any delay which could have been avoided by the exercise of care, prudence, foresight and diligence on the part of the CONTRACTOR; (ii) any delay in the prosecution of parts of the work, which may in itself be unavoidable but which does not necessarily prevent or delay the prosecution of other parts of the work, nor substantial completion of the whole work within the time specified; (iii) any reasonable delay resulting from time required by the DISTRICT for review of plans submitted by the CONTRACTOR and for the making of surveys, measurements and inspection; and (iv) any delay arising from an interruption in the prosecution of the work on account of the reasonable interference from other contractors employed by the DISTRICT which does not necessarily prevent the completion of the whole work within the time specified.

H. Category B Delays

For the purposes of these Contract Documents, the term "Category B Delays" shall mean delays caused directly by loss or damage to the project caused by the perils covered by the Builder's Risk insurance provided for by the Agreement or by any war declared by an enactment of the Congress of the United States of America.

VI LIQUIDATED DAMAGES

The provisions for Liquidated Damages appearing in the General Conditions, Article 12, are incorporated by reference as if fully set forth herein. Liquidated damages of $250.00 per day will be charged the CONTRACTOR for each day of delay beyond the substantial completion date.

VII NOTICE OF DELAY

The CONTRACTOR shall promptly notify the DISTRICT in writing of any anticipated delay in the prosecution of the work, and, in any event, promptly upon the occurrence of a delay. Said notice shall constitute an application for an extension of contract time only if it is in compliance with the provisions of Article 12. Failure by the CONTRACTOR to make a timely request will result in a waiver of the right to such extension. CONTRACTOR shall take notice of General Conditions, Article 12, affecting the time period in which to claim an extension of the contract time for physical conditions and limitations set forth in the General Conditions, Article 12. The DISTRICT may take steps to prevent the occurrence of continuance of the delay and/or may determine to what extent the completion of the work is delayed thereby.

VIII NO WAIVER OF RIGHTS

Neither the inspection by the DISTRICT or its agents, nor any order or certificate for the payment of money, nor any payment for, nor acceptance of the whole or any part of the

work by the DISTRICT, nor any extensions of time, nor any position taken by the DISTRICT or its agents shall operate as a waiver of any provision of this Contract, or of any power herein reserved to the DISTRICT or any right to damage herein provided, nor shall any waiver of any breach of this Contract be held to be a waiver of any other or subsequent breach. All remedies provided in this Contract shall be taken and construed as cumulative, that is in addition to each and every other remedy herein provided; and the DISTRICT shall have any and all equitable and legal remedies which it would in any case have.

IX AGREEMENT CONTROLS

In the event of a conflict between the Contract Documents, the conflict shall be resolved by giving precedence in the following order: (1) This Agreement Form; (2) the General Conditions and General Requirements; (3) the Supplementary Conditions; (4) the Notice to Contractors; (5) the Instructions to Bidders; (6) the Technical Specifications text; (7) the Drawings (Plans).

X COPYRIGHT/WORK PRODUCT

CONTRACTOR agrees that all title, rights including but not limited to copyrights and any intellectual property rights, interest, and or patents to any and all film footage, audio recordings, digital data, or data of any kind, which contractor creates for DISTRICT under this agreement, is the sole and exclusive property of the DISTRICT which may not be reproduced without prior written consent of DISTRICT. CONTRACTOR hereby irrevocably grants to DISTRICT exclusively all right, title, and interest in and to the any and all film footage, audio recordings, digital data, or data of any kind, and any derivative work, or work product, and to all copyright or other proprietary rights therein that CONTRACTOR may obtain without further consideration, free from any claim, lien for balance due, or rights of retention thereto on the part of CONTRACTOR. CONTRACTOR also acknowledges that the Parties do not intend CONTRACTOR to be a joint author of any and all film footage, audio recordings, digital data, or data of any kind, or any derivative work, or work product, within the meaning of the Copyright Act of 1976, as amended, and that in no event shall CONTRACTOR be deemed a joint author thereof.

CERTIFICATION

DISTRICT:

BY: _____ DATED_____
CHAIRMAN, TEHAMA COUNTY
SANITATION DISTRICT NO. 1

CONTRACTOR

BY: _____ DATED_____
Contractor

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS: That, WHEREAS, the MINERAL SANITATION DISTRICT NO. 1 (hereinafter called "DISTRICT"), has conditionally awarded to (here insert full name and address or legal title of CONTRACTOR)

_____
_____
_____

As Principal (hereinafter called "CONTRACTOR") a Contract for **Closed-Circuit Television Inspection of Mineral Wastewater Collection System** in the said Tehama County, in accordance with and consisting of the specifications prepared by the Mineral Sanitation District , at 9380 San Benito Ave., Gerber, CA 96035, which Contract also consists of all other parts of the Contract Documents for said project, which Contract is made a part hereof by reference, and is hereinafter referred to as the Contract, and WHEREAS said CONTRACTOR is required under the terms of said Contract to furnish a bond for the Faithful Performance of said Contract,

NOW, THEREFORE, we the CONTRACTOR and (here insert full name and address or legal title of Surety)

_____
_____
_____

as Surety (hereinafter called "Surety") are held and firmly bound unto Tehama County Sanitation District No. 1, California (hereinafter called "DISTRICT") in the sum of _____ Dollars ($_____), in lawful money of the United States, for the payment of which sum well and truly to be made CONTRACTOR and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, unless the above bounden CONTRACTOR, his heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and will and truly keep and perform the covenants, conditions and agreements in additions or alterations 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 DISTRICT, Architect and their employees and their consultants, and their agents, as therein stipulated, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

CONTRACTOR agrees not to assign this Contract except upon the written consent and approval of the DISTRICT or their successor and assigns.

And Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of The Principal and Surety do hereby represent, warranty and guarantee, that

the Surety is an “Admitted surety” as that term is, or may be, defined by California statute, regulation or the Department of Insurance.

IN WITNESS THEREOF, the above bounden parties have executed this instrument under their several seals this _____day of _____, 20____, the name and corporate seal of each corporate party being affixed hereto and these presents duly signed by its undersigned representatives, pursuant to its governing body.

SIGNED AND SEALED THIS _____ day of _____, 20_____.

_____
Print name of Contractor

By _____
Signature

_____
Title of Signer

_____
Surety Name

By _____
Attorney-in-Fact
(Acknowledgment by Notary Public required)

_____
Title

(SURETY SEAL)

NOTE TO SURETY COMPANY:

The following form of acknowledgment shall be used. If any other form of acknowledgment is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact for each bond issued.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

NOTARY ACKNOWLEDGMENT

STATE OF _____

COUNTY OF _____

On _____, before me, _____, a Notary Public in
Name of Notary Public

and for said State, personally appeared _____,
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

_____ (SEAL)
Signature of Notary Public

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: That WHEREAS, the Tehama County Sanitation District No. 1 has awarded to (here insert the full name and address or legal title of Contractor)

_____

_____

hereinafter called "Contractor") a Contract for **Closed- Circuit Television Inspection of Mineral Wastewater Collection System** in the said Tehama County, in accordance with and consisting in part of plans and specifications prepared by DISTRICT, which Contract also consists of all other parts of the Contract Documents for said project, which Contract is made a part hereof by reference, and is hereinafter referred to as the Contract, and WHEREAS said CONTRACTOR is required under the terms of said Contract to furnish a bond in connection with said contract, providing that if said CONTRACTOR, or any of his subcontractors, shall fail to pay for any materials, provisions, pro vendor or other supplies, or equipment used, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, then the Surety on this Bond will pay for the same in an amount not exceeding the sum specified in this Bond, and also, in case suit is brought upon the Bond, a reasonable attorney's fee to be fixed by the Court.

NOW, THEREFORE, we the Contractor and (here insert full name and address or legal title of Surety)

_____

_____

as Surety (hereinafter called "Surety") are held and firmly bound unto the Mineral Sanitation Tehama County Sanitation District No. 1, California (hereinafter called DISTRICT") in the sum of _____Dollars ($_____), in lawful money of the United States, for the payment of which sum, well and truly to be made, Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if said Contractor, his heirs, executors, administrators, successors or assigns, or his subcontractors, shall fail to pay for any materials, provisions, provender or other supplies, or equipment used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or shall fail to pay any other amount due to any person named in Section 9100 of the Civil Code, or shall fail to pay any amounts due under the Unemployment Insurance Act with respect to such work or labor performed by any such person, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and his/her subcontractors pursuant to Section 18664 of the Revenue and Taxation Code, with respect to such work and labor, then the Surety on this Bond will pay for the same, in an amount not exceeding the sum specified in this Bond, and also, in case suit is brought upon this Bond, a reasonable attorney's fee to be fixed by the Court.

This Bond shall insure to the benefit of any and all persons, companies, corporations, political subdivisions and State agencies, entitled to file claims under the provisions of Section 9100 of the Civil Code of the State of California, as now in effect and as the same may be

amended or superseded from time to time, so as to give a right of action to them, or their assigns, if any suit is brought upon this Bond.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way 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 contract or to the work or to the specifications.

The Principal and Surety do hereby represent, warranty and guarantee, the Surety is an "Admitted Surety" as that term is, or may be defined by California statute, regulation or the Department of Insurance.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporate party being affixed hereto and these present duly signed by its undersigned representative, pursuant to authority of its governing body.

SIGNED AND SEALED THIS _____ day of _____, 20_____

_____
Print name of Contractor

By_____
Signature

_____
Title of Signer

_____
Surety Name

By_____
Attorney-in-Fact

(Acknowledgment by Notary Public required)

_____
Title

(SURETY SEAL)

NOTE TO SURETY COMPANY:

The following form of acknowledgment shall be used. If any other form of acknowledgment is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact for each bond issued.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

NOTARY ACKNOWLEDGMENT

STATE OF CALIFORNIA)

) ss.

COUNTY OF TEHAMA))

On _____, before me, _____, a
Name of Notary Public

Notary Public in and for said State, personally appeared_____,
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the forgoing paragraph is true and correct.

WITNESS my hand and official seal

_____ (SEAL)

Signature of Notary Public

GENERAL CONDITIONS

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ARTICLE 1 - DEFINITIONS

Whenever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

1.1 Agreement - The written and signed contract between the County and the General Contractor that is entitled "Agreement."

1.2 Application for Payment - The form furnished by the County to be used by the Contractor in requesting progress payment. This includes the schedule of values and an affidavit of Contractor that progress payments received on account of the work have been applied by Contractor to discharge in full all of the Contractor's obligations as reflected in prior Applications for Payment and otherwise.

1.3 Architect - The person licensed by the State of California (architect or engineer) who is fully responsible for the Contract Drawings and Project Manual, Addenda and modifications.

1.4 Bid - The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the work to be performed.

1.5 Bidder - Any person, firm or corporation, licensed in the State of California, submitting a bid for the work.

1.6 Bonds - Bid, performance, and *labor and material* payment bonds and other instruments of security, including lien and stop-notice bonds, furnished by the Contractor and his Surety in accordance with the Contract Documents.

1.7 Calendar Day (or "Day") - A day of twenty-four hours measured from one midnight to the next midnight, Pacific time. Unless otherwise indicated, a "day" shall mean a calendar day.

1.8 Change Order - A written order, issued by the Project Manager to Contractor, signed by the Project Manager, Architect and County authorizing an addition, deletion or revision in the work, or an adjustment in the contract price or the contract time.

1.9 Contract Completion Date - The date established in the Contract Documents for the completion of the construction phase of the project, namely, the Estimated Completion Date and Fixed Completion Date.

1.10 Contractor - The person, firm or corporation with whom County has executed the Agreement and who is fully responsible for the performance of the work.

1.11 Contract Documents - The Agreement, Addenda, Contractor's Bid, the Bonds, and Notice of Award, these General Conditions, Supplementary Conditions, Specifications, Plans, Drawings and Modifications. The Contract Documents form the Contract for Construction. This Contract represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be modified or amended only by a Modification as defined in these General Conditions.

1.12 Contract Price - The total amount stated in the Agreement as payable to Contractor for the performance of the work under the Contract Documents, including authorized adjustments thereto.

1.13 Contract Time - The total amount stated in the Agreement for the completion of the work.

1.14 County – County of Tehama, a public entity organized and existing pursuant to the laws of the State of California and the Owner of the Project.

1.15 Drawings - The drawings and/or plans which show the character and scope of the work to be performed, and which have been prepared or approved by the Architect and are referred to in the Contract Documents.

1.16 Field Order - A written order issued by the Project Manager which clarifies or interprets the Contract Documents in accordance with paragraph 9.2, or orders minor changes in the work in accordance with paragraph 11.3.

1.17 Furnish - To "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."

1.18 General Conditions - That part of the Contract Documents which sets forth many of the rights, responsibilities and relationships of the parties involved or of the contract.

1.19 General Requirements - The General Requirements are contained in Division 1 of the Specifications in these Contract Documents. The General Requirements are the administrative functions which the Contractor is bound to perform by the Contract.

1.20 Inspector - An authorized representative of the Tehama County who is assigned to make a detailed inspection of any or all portions of the work or materials thereof.

1.21 Install - Describes operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations."

1.22 Instructions to Bidders - That part of the Bidding Requirements which contain the format of the bid, and the availability of the Contract Documents.

1.23 Notice of Award - The written notification to the Contractor, from the Owner, of the Owner's intent to execute the Contract.

1.24 Notice to Bidders - A notice contained in the Bidding Requirements informing prospective bidders of the opportunity to submit bids on a project and setting forth the procedures for doing so.

1.25 Notice to Proceed - The written notice given by the County to Contractor fixing the date on which Contractor shall start to perform his obligations under the Contract Documents.

1.26 O.P.C.I. - Owner purchased/Contractor receives, stores, and installs.

1.27 Per - In accordance with or in compliance with.

1.28 Progress Payment - Payment for work completed by measuring the work in place and applying the percentage complete of the measured amount to a previously agreed unit cost to determine the total payment.

1.29 Project - The entire work to be performed as provided in the Contract Documents.

1.30 Project Manager - The authorized representative of Tehama County.

1.31 Project Manual - A part of the Contract Documents containing Introductory Information, Bidding Requirements, Contracting Requirements, Specifications, and Opening and Room Finish Schedules bound in one or more volumes.

1.32 Project Work Schedule - A diagram showing proposed times of starting and completing various elements of the work.

1.33 Provide - "To furnish and install, complete and ready for the intended use."

1.34 Punch List - A list, made near the completion of work, indicating items to be furnished or work to be performed by the Contractor or Subcontractor in order to complete the work as specified in the Contract Documents.

1.35 Schedule of Values - A statement furnished by the Contractor to the Project Manager reflecting the portions of the contract sum allotted for the various parts of the work.

1.36 Shop Drawings - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a subcontractor, manufacturer, supplier or distributor and which illustrate in detail the equipment, material or some portion of the work.

1.37 Specifications - The portion of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the work.

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

1.39 Substantial Completion, Date of - The date as certified by the County in a Notice of Completion pursuant to paragraph 14.8 of these General Conditions.

1.40 Work - The completed construction in the manner required by the Contract Documents. This includes without limitation all labor, services, and supervision necessary or appropriate to produce such construction, all materials, supplies and equipment incorporated or to be incorporated in such construction, and all obligations, duties and responsibilities with respect to such construction set forth in the Contract Documents.

1.41 Working Day - Any day not a legal holiday, Saturday or Sunday.

ARTICLE 2 - PRELIMINARY MATTERS

2.1 Execution of Agreement:

2.1.1 The Agreement and such other Contract Documents as designated by the County, shall be executed in three counterparts and delivered by the Contractor to the County within fifteen (15) days of the Notice of Award. County will execute and deliver one counterpart to Contractor within ten (10) days of receipt of the executed Agreement from Contractor.

2.2 Delivery of Bonds:

2.2.1 Prior to execution of the Agreements by the Contractor, Contractor shall deliver to County such Bonds as he is required to furnish in accordance with the Contract Documents.

2.3 Copies of Documents:

2.3. 1 County shall furnish to Contractor 5 copies of the Contract Documents for the execution of the work. Additional copies will be furnished at cost of reproduction upon request.

2.4 Contractor's Pre-Start Representations:

2.4.1 Contractor represents that he has familiarized himself with, and assumes full responsibility for having familiarized himself with, the nature and extent of the Contract Documents, work, locality and with all local conditions including federal, state and local laws, ordinances, rules and regulations that may in any manner affect performance of the work, and represents that he has correlated his study and observations with the requirements of the Contract Documents.

2.4.2 Contractor also represents that he has familiarized himself with all surveys and investigation reports of surface and latent physical and that he has correlated the results of all such data with the requirements of the Contract Documents.

2.5 Commencement of Time; Starting the Project

2.5. 1 The contract time will commence on the date fixed by the Notice to Proceed. The Contractor shall start to perform the work under the Contract Documents on or before the tenth working day after the date assigned in the Notice to Proceed.

2.5.2 The provisions set forth in Section VI of the Agreement are incorporated by reference as if fully set forth herein.

2.6 Before Starting Construction:

2.6. 1 The Contractor shall carefully study and compare the Contract Documents; check and verify pertinent figures shown thereon; and verify all applicable field measurements prior to undertaking each part of the work. He shall at once report in writing to the Project Manager any conflict, error or discrepancy which he may discover. Contractor shall be responsible for exercising reasonable care and skill in reviewing the Contract Documents to determine whether there is any conflict, error or discrepancy therein, and shall be responsible for notifying the Project Manager. No claim for additional compensation shall be made by the Contractor for extra work created by Contract Document conflicts, errors or discrepancies which a reasonable Contractor would have discovered prior to commencing work.

2.6.2 Contractor shall submit the required Schedule of Values and activity cost information in accordance with the General Requirements of these specifications.

2.6.3 The Contractor shall furnish the County all certificates of insurance required by the Contract Documents after the "Notice of Conditional Award" and prior to the "Notice to Proceed," in types and amounts set forth in Article 5.

ARTICLE 3 - CORRELATION, INTERPRETATION, AND INTENT OF CONTRACT DOCUMENTS

3.1 It is the intent of the Contract Documents to describe a complete project to be constructed. As stated in paragraph 1.11, the Contract Documents comprise the entire contract between County and Contractor. They may be altered only by a Modification, as defined in paragraph 1.11.

3.2 The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. Work not specifically covered in the Contract Documents shall nonetheless be required if it is consistent therewith and is reasonably inferable therefrom as being

necessary or appropriate to produce the intended results. Should the Contractor discover a conflict, error, or discrepancy in the Contract Documents, he (she) shall immediately call it to the attention of the County in writing before proceeding with the work affected. Contractor agrees that proceeding with work without first giving such notice shall constitute a waiver by Contractor of any claim for additional time or money. Where there is a conflict, the Contract Documents, Specifications shall govern over the drawings; figure dimensions and drawings shall govern over scale drawings. Words and abbreviations that have technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

ARTICLE 4 - AVAILABILITY OF LANDS, PHYSICAL CONDITIONS, *AND* REFERENCE POINTS

4.1 Availability of Lands:

4.1.1 County shall furnish the lands upon which the work is to be done, right-of-way for access thereto, and other such lands which are designated in the Contract Documents for the use of the Contractor. Contractor shall provide all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 Physical Conditions:

4.2.1 The Contractor shall immediately, and before any such conditions are disturbed, notify the Project Manager in writing of subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents; or unknown and unforeseen physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents. The Project Manager shall promptly investigate the conditions, and if he finds that such conditions do materially so differ to cause an increase or decrease in the time required for performance of the work, an appropriate adjustment in Contract Time may be made in accordance with Article 12 of these General Conditions. The Contract Documents may be modified by Change Order accordingly. In no event shall Contractor be entitled to increased compensation for such differing conditions, unless provided for in such Change Order.

4.2.2 No increase of time under paragraph 4.2 shall be allowed unless the Contractor shall have given the written notice described in paragraph 4.2.1 not later than 24 hours after such conditions are discovered, and before such conditions are disturbed. Contractor shall not proceed with the work affected by such conditions until directed in writing by Project Manager. Furthermore, no increase shall be given unless it is shown that Contractor's own investigation was done competently and did not disclose the error or condition. Failure of Contractor to give written notice and providing an opportunity for the Project Manager to investigate shall constitute a waiver by Contractor of any claim for additional time or money.

4.2.3 Groundwater, in whatever amount or condition, shall be deemed usual and ordinarily encountered and generally recognized as inherent in the work of the character provided for in the Contract Documents. Dewatering is the responsibility of the Contractor. No claim for a Modification of Contract time or price will be allowed for such conditions.

4.3 Reference Points:

4.3.1 County shall provide engineering reference points as shown on the plans for construction. Contractor shall be responsible for surveying and laying out work unless otherwise provided in the Contract Documents, and shall protect and preserve the established reference points and shall not change or relocate them without the prior written approval of Project Manager.

Contractor shall report to Project Manager whenever any reference point is lost or destroyed or requires relocation because of changes in grades or locations. The cost of replacing and accurately relocating all reference points so lost, destroyed or moved shall be borne by the Contractor.

ARTICLE 5 - BONDS AND INSURANCE

5.1 Contractor's Liability Insurance

5.1.1: Contractor shall obtain and maintain continuously comprehensive general liability insurance and/or other insurance necessary to protect the public with limits of liability of not less than $1,000,000 combined single limit bodily injury and property damage per occurrence with a $1,000,000 combined single limit annual aggregate with appropriate coverage endorsements to include broad-form contractual, broad form property damage, contractor's protective, product/completed operations, auto and non-owned auto, personal injury, and fire-legal liability where applicable. The general aggregate limit shall apply separately to this project, or Contractor shall provide insurance with a general aggregate limit of $2,000,000.

5.1.2 The Contractor, upon notification of receipt by the County of any cancellation notice shall file with the County a replacement certificate with another insurance company meeting the financial requirements of the County and the coverage requirements. Failure to maintain any of the above required insurance shall require the immediate discontinuation of work until replacement insurance is furnished to the County. All payments due or that become due will be withheld until notice of replacement is received. Any failure to maintain insurance will be sufficient cause for termination of the contract.

5.1.3 Automobile Liability Insurance: Contractor shall carry Bodily injury and Property Damage liability including coverage for owned, hired and non-owned automobiles. The limits of liability shall be not less than $1,000,000 Bodily Injury, $300,000 Property Damage or $1,000,000 Combined Single Limit Bodily Injury and Property Damage

5.1.4 As evidence of the insurance required by this agreement, certificates of workers compensation, general liability and automobile liability shall be furnished to the County before any work is commenced by the Contractor.

5.1.5 General Liability and Automobile Liability insurance shall include "County of Tehama, its elected officials, officers, and employees as an additional insured", and shall not be reduced or canceled without 30 days written prior-notice certain to the County. Contractor shall provide the County a certificate of insurance and an additional insured endorsement as evidence of insurance protection provided which lists "County of Tehama" as the certificate holder. Insurance certificates provided by any insurance company or underwriter shall not contain the language "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company", or similar language. If Contractor has employees, he/she shall obtain and maintain continuously workers' compensation insurance to cover Contractor and Contractor's employees and partners.

5.2 Builders Risk Insurance

The Contractor will not be required to obtain Builder's Risk Insurance. The Contractor will be responsible for building materials not installed and for the Contractor's tools, other equipment or supplies. The Contractor shall also be required to protect the construction project as stipulated elsewhere in this contract.

5.3 Performance, Payment, and Other Bonds

5.3.1 Prior to the commencement of any work, Contractor shall furnish performance and payment bonds as security for the faithful performance and payment of all Contractors' obligations under the contract documents. These bonds shall be in amounts at least equal to the contract price and in a form satisfactory to County. Surety company providing said bonds shall have a Best financial rating of at least A-: VII and be licensed in the State of California.

5.3.2 If at any time the Surety on any bond furnished by Contractor is adjudicated bankrupt, commences any proceeding under the Bankruptcy law of the United States, becomes insolvent, makes a general assignment for the benefit of creditors or has its right to do business terminated in California, or for any other reason is unable or unwilling to continue in business, Contractor shall within five calendar days thereafter substitute another bond in a Surety who meets the County's financial rating requirement.

5.4 Responsibility for Damage:

5.4.1 Approval of the Contractor's insurance by the Owner shall not decrease the extent to which the Contractor or any subcontractor may be held responsible for payment of any and all damages resulting from Contractor's operations.

5.4.2 The Contractor shall assume the defense of and indemnity and save harmless Tehama County, its elected officials, officers and employees, as well as the Project Manager, Architect and the officers, agents and employees of each of them, from any and all loss, liability or damage including attorney's fees and from all suits, actions, damages or claims of every nature and description to which they may be subjected or put by reasons of injury to persons or property arising out of, in connection with, or incident to the execution of the work or resulting from the active or passive negligence or carelessness on the part of the Contractor, Contractor's employees or agents in the delivery of materials and supplies by its employees or agents, including any failure to fulfill the terms of all laws and regulations which apply to this Contract together with any infringement or alleged infringement of the patent rights of any person or persons, firm or corporation in consequence of the use in or about the said work of any article or materials; and the County shall have the right to estimate the amount of such damage and to cause the Contractor to pay same, and the amount to be paid for such damage shall be deducted from the money due to the Contractor under this Contract; or the whole or so much of the money due or to become due to the Contractor under this Contract, as may be considered necessary by the County, shall be retained by the County until such suits or claims for damages shall have been settled or otherwise disposed of and satisfactory evidence to that effect furnished to the County. Contractor shall assume the defense of and indemnity and save harmless Tehama County, its elected officials, officers and employees, as well as the Architect, Project Manager and the officers, agents and employees of each of them in respect to any mechanics lien, foreclosure actions filed by any subcontractor or material man relative to the construction.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.1 Supervision and Superintendent:

6.1.1 Contractor shall supervise and direct the work effectively, efficiently and with his best skill and attention. He shall have sole responsibility for the means, methods, techniques, sequences, procedures of construction, and for coordinating all portions of his work under the Contract Documents. Contractor shall be responsible for the finished work complying accurately with the Contract Documents.

6.1.2 The Contractor shall designate in writing, before starting work, the name, qualifications and experience of his proposed representative who must be approved by the Project Manager. Said representative shall have authority to represent and to act for the Contractor. Said authorized representative shall be present at the site of work at all times while work is in progress. Arrangements for responsible supervision, acceptable to Project Manager, shall be made for emergency work required during periods when work is suspended.

6.1.3 The Contractor shall notify the Project Manager, in writing, when he desires to change his representative. He shall provide all necessary information regarding his new representative when submitting request for approval. Any substitute representative shall require the approval of the Project Manager, which may not be unreasonably withheld.

6.1.4 In emergencies when the Contractor or his authorized representative is not present on any particular part of the work, directions will be given by the Project Manager and obeyed by the superintendent or foreman in charge of the particular work. Such directions will be confirmed in writing to the Contractor's authorized representative.

6.1.5 The Contractor shall identify, in writing, the individuals who are authorized to sign Change Orders to the Contract.

6.1.6 The Contractor shall remove his representative from the work and propose a substitute if Project Manager reasonably concludes that such representative is unable or unwilling to properly supervise the work in such a manner as to ensure its timely and successful completion in accordance with Contract Documents.

6.1.7 The Contractor shall maintain daily job site activity logs which record: location and number of all manpower on the site by his own and subcontractors' forces; all work being performed and whether such work is part of the base contract or change order; all work being performed and whether such work is part of the base contract or change order; all construction equipment in use, and not in use, and reasons why not in use; weather and site conditions; and delays or obstructions to the work. The Contractor shall sign the log representing that the information contained therein is true, accurate and complete.

6.2 Verified Reports

6.2.1 The Contractor shall completely fill out, sign and date the appropriate Verified Reports, as required by Sections 4-214, 4-240 and 4-249 of Title 24, Part I, California Code of Regulations. Copies of these reports shall be sent to the County.

6.3 Labor, Materials and Equipment

6.3.1 Contractor shall provide competent, suitable qualified personnel to survey and lay out the work and perform construction as required by the Contract Documents. Contractor shall at all times enforce strict discipline and good order on the project. He shall not employ on the work any unfit person or anyone not skilled in the task assigned to him.

6.3.2 Contractor shall furnish all materials, equipment, labor, transportation, and machinery, tools, appliances, other facilities and incidentals necessary for the execution, testing, initial operation and completion of work.

6.3.3 All materials and equipment incorporated in the work shall be new, except as otherwise provided in the Contract Documents. If required by Architect or Project Manager, Contractor shall

furnish satisfactory evidence as to the kind, quality, source and purchase of materials and equipment.

6.3.4 All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instruction of the applicable manufacturer, fabricator or processors.

6.4 Substitute Materials or Equipment:

6.4.1 The Specifications may permit Contractor to furnish or use a substitute that is equal to any material or equipment specified. Unless otherwise expressly provided in the Specifications, in accordance with Public Contract Code section 3400, whenever the contract documents refer to a named manufacturer or named product, the named manufacturer or named product shall be deemed to be followed by the words “or equal” so that bidders may furnish any equal material, product, thing, or service in accordance with the procedures set forth herein. If the Contractor wishes to furnish or use a proposed substitute, he shall, promptly and within 20 days of the Notice to Proceed, make written application to the Architect for approval of such substitute, certifying and warranting in writing that the proposed substitute will perform the functions called for by the Contract Documents, be of the same quality as that specified and be suited to the same use. Contractor shall state whether or not its incorporation in or use in connection with the project is subject to payment of any license fee or royalty and also shall identify all variations of the proposed substitute from that specified and indicate available maintenance service. No substitute shall be ordered or installed without the written approval of the Architect whose decision as to substitutions shall be final and conclusive. Architect may require Contractor to furnish other such data about the proposed substitute that Architect considers pertinent.

6.4.2 No substitution shall be ordered or installed without such supplemental performance guarantee and bonds as County may require, all of which shall be furnished at Contractor's expense. Contractor shall be responsible for determining the required delivery date for incorporation into the work and shall certify that this date has been confirmed with the supplier of the substituted item.

6.5 Subcontractors:

6.5.1 Contractor shall investigate and assure himself and the County of the experience and skill of all subcontractors performing work specified by the Contract Documents as well as the financial stability of such subcontractors. Contractor shall not recommend any subcontractor or other person or firm, whether initially or as a substitution against whom County, at County's sole discretion, may have reasonable objection. If County who has no duty to investigate, but has the right to do so, after due investigation, has a reasonable objection to any subcontractor, supplier or material man proposed by Contractor, Contractor shall propose an acceptable substitute.

6.5.2 Contractor shall be fully responsible for all acts and omissions of his subcontractors, and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between the County, Project Manager or Architect and any subcontractor, or other person or organization having a direct contact with the Contractor, nor shall it create any obligation on the part of County, Project Manager or Architect to pay or see to the payment of any monies due any subcontractor or other persons or organizations.

6.5.3 The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the work among subcontractors or delineating the work to be performed by any specific trade. Neither the Architect, nor Project Manager, nor County will act as arbiter to determine subcontract limits.

6.5.4 Contractor agrees to bind specifically every subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the County including, but not limited to, all time and notification requirements.

6.5.4 All work performed for Contractor by a subcontractor shall be pursuant to an appropriate agreement between Contractor and subcontractor which shall contain provisions for the waiver of all rights the contracting parties may have against one another for damages caused by fire or other perils covered by insurance. Contractor shall pay each subcontractor a just share of any such insurance moneys received by Contractor.

6.6 Patent Fees and Royalties

6.6.1 Contractor shall pay license fees and royalties and assume all costs incident to the use, in the performance of the work, of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, device or product is specified in the Contract Documents for use in the performance of the work, and to the actual knowledge of County and Architect its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by County in the Contract Documents. Contractor shall indemnify and hold harmless County, Project Manager, their employees, officers and agents, and Architect, his consultants, and anyone directly or indirectly employed by either of them from and against consultants' and other experts' fees and expenses arising out of any infringement of patent rights incident to the use in the performance of the work or resulting from the incorporation in the work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with alleged infringement of such rights.

6.7 Permits & Utility Costs:

6.7.1 Permits: Contractor shall be responsible to obtain all building permits, construction permits, fugitive dust permits, fees and licenses necessary for the prosecution of the work. The County will make payment of permit fees directly to the permitting agency. The Contractor shall be responsible for all delays in obtaining all permits, licenses, and utility connection agreements. No delay claim may be made by Contractor for any delay in obtaining any permit, license or utility connection agreement.

6.8 Laws and Regulations:

6.8.1 Contractor shall give notices and comply with all laws, ordinances, rules and regulations applicable to the work. Contractor shall use reasonable care and skill in determining whether or not the Specifications or Drawings are at variance therewith, and, if he observes such variance, he shall give the Project Manager and Architect prompt written notice thereof. If Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Project Manager and Architect, he shall bear all costs arising therefrom.

6.9 Taxes:

6.9.1 Contractor shall pay all sales, consumer use and other similar taxes required to be paid by him in accordance with the law of the place where the work is to be performed.

6.10 Use of the Premises:

6.10.1 Contractor shall confine his equipment, the storage of materials and equipment and the operations of his workmen to areas permitted by law, ordinance, permits or the requirements of the County and of the Contract Documents, and shall not unreasonably encumber the premises with materials or equipment.

6.10.2 Contractor shall not load nor permit any part of any structure to be loaded with weight that will endanger the structure, nor shall he subject any part of the work to stresses or pressure that will endanger it.

6.11 Record Drawings:

6.11.1 Contractor shall keep one current record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the Architect and Project Manager at all times, and shall be reviewed monthly concurrent with the Progress Payment Request. Upon completion of the project the Contractor shall deliver the record documents to the Project Manager for review and approval. These record documents shall be prepared in accordance with Section 01720 of the Specifications.

6.12 Safety and Protection:

6.12.1 Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. He shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss:

6.12.1.1 All employees on the work and other persons who may be affected thereby:

6.12.1.2 All the work and all materials or equipment to be incorporated therein, whether in storage on or off the site; and

6.12.1.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, pavements, roadway, structures and utilities not designated for removal, relocation or replacement in the course of construction.

6.12.1.4 The Contractor represents that he has read and is thoroughly familiar with the California State Occupational Safety and Health Act, and regulations for construction promulgated thereunder, and agrees to comply with the Act and all such regulations applicable to the performance of the work. The Contractor accepts the duty of enforcing those regulations by federal, state or County Safety and Health Inspectors at the Contractor's work place at the job site or any area within the limits of construction and of the outcome of any such inspections. Contractor assumes exclusive responsibility for, and agrees to defend, indemnify and hold harmless Tehama County, Project Manager, Architect, and their elected officials, officers, agents, employees, consultants and representatives against all consequences of any violations of those regulations by the Contractor, including the payment of any fine, penalty and interest assessed in connection therewith, any court costs, undertakings, interest, and attorneys', accountants' consultants' and experts' expenses and fees incurred by the County.

6.12.2 Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He shall erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for its safety and protection. He shall notify owners

of adjacent utilities when prosecution of the work might affect them. All damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, and/or subcontractor, or anyone employed by them shall be remedied by Contractor at his own expense. Contractor's duties continue until such time as all the work is completed and Project Manager has issued a notice in accordance with paragraph 14.9 that work is acceptable.

6.12.3 Contractor shall designate a responsible member of his organization, at the site, satisfactory to the Project Manager, whose duty shall be the prevention of accidents. This person shall be Contractor's superintendent unless otherwise designated in writing by Contractor to Project Manager.

6.13 Shop Drawings, Product Data, and Samples:

6.13.1 Shop drawings, product data, and/or samples are required by the Specifications for certain portions of the work. These shall be submitted according to a schedule of submittals to be accepted by the Project Manager and Architect. Where a shop drawing, product data, or sample submittal is required by the Specifications, no related work shall be commenced until the submittal has been reviewed by the Architect. A copy of each reviewed shop drawing and each approved sample shall be kept in good order by Contractor at the site and shall be available to the Project Manager, Architect and Inspector.

6.13.2 The Contractor may submit a request for substitutions. The Contractor shall propose for approval all samples as specified or directed by the Architect. The provisions of subparagraph 6.4 shall apply in such case.

6.13.3 Contractor shall check and verify all field measurements and submit shop or setting coordination drawings in 1/4"=1'0" scale to verify clearances for various trades, and schedules required for the work of the various trades, with such promptness as to cause no delay to the work.

6.13.4 Samples: Unless otherwise specified, submit samples in triplicate and of adequate size to show the quality, type and finish. Label each sample with the manufacturer's name, material name and quality, the Contractor's name, the project name and other pertinent data. Submit, with samples in triplicate a transmittal letter requesting approval. Prepay transportation charges to the Architect's office on samples forwarded.

6.13.5 Contractor shall not order materials until receipt of written approval of shop drawings, product data, and samples.

6.13.6 Project Manager's or Architect's review of shop drawings and samples shall not relieve Contractor from his responsibility for any deviation from the requirements of the Contract Documents. Nor shall any action by Architect relieve Contractor from any responsibility for errors or omissions in the shop drawings.

6.14 Cleaning:

6.14.1 Contractor shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the work, and at the completion of the work he shall remove all waste materials, rubbish and debris from and about the premises, as well as all tools, construction equipment and machinery, and surplus materials. He shall leave the site clean and ready for occupancy by County. Contractor shall restore to original condition those portions of the site not designated for alteration by the Contract Documents.

6.15 Indemnification:

6.15.1 Contractor shall indemnify and hold harmless to the fullest extent permitted by law, Tehama County, Architect, Project Manager and their elected officials, officers, consultants, agents and employees, from and against all claims, damages, losses and expenses, including attorneys', accountants', consultants', and experts' fees and expenses, arising out of or resulting from the performance of the work attributable to bodily injury, sickness or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, and caused in whole or in part by any negligent or other act or omission of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether indemnification shall extend to claims, demands, or liability for injuries occurring after completion of the project as well as during the work's progress. Such obligation shall not be construed to negate, abridge or otherwise reduce any other obligation of indemnity which otherwise exists under the Contract Documents or at law as to any party or person described in this paragraph or otherwise.

6.15.2 In any and all claims against Tehama County, Architect, Project Manager, their elected officials, officers, employees, consultants or agents by an employee of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under subparagraph 6.15.1 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Contractor or any subcontractor under workmen's compensation acts, disability acts or other employee benefit acts.

6.16 Books and Records:

6.16.1 Contractor shall maintain books, records, documents and other evidence pertinent to the work in accordance with generally accepted accounting principles and practices. Such books, records, documents and other evidence shall be maintained for at least three years after the date of completion of the project. Access to the aforementioned books, records, documents and other evidence shall be available to the County or the Board, or any authorized representative of either, during the course of construction and for at least three years after completion of the project. Suitable facilities shall be provided for said access, and for the inspection and copying thereof.

ARTICLE 7 - WORK BY OTHERS

7.1 County may perform additional work related to the project or it may award other direct contracts therefore. Contractor shall afford the other persons or contractors who are parties to such direct contracts reasonable opportunity for the storage of materials and equipment and the execution of work. He shall properly connect and coordinate his work with theirs. No claim for time extension will be made by the Contractor due to any alleged problems or difficulties suffered due to work performed by others unless written notice within twenty-four hours of the commencement of said alleged delaying activities is given to the County.

7.2 If any part of Contractor's work depends, for proper execution or results, upon the work of any other such person or contractor, Contractor shall inspect and promptly report to Project Manager and Architect in writing any defects or deficiencies in such work that render it unsuitable for such proper execution and results. His failure so to report shall constitute an acceptance of the other work as fit and proper for the relationship of his work, except as to defects and deficiencies which may appear in the other work after the execution of his work.

7.3 Contractor shall do all cutting, fitting, and patching of his work that may be required to make the several parts come together properly and fit to receive or be received by such other

work. Contractor shall not endanger any work of others by cutting, excavating or otherwise altering their work, and will only cut or alter their work with the written consent of the County and of the other contractors whose work will be affected.

7.4 If the performance of additional work by other persons or contractors is not noted in the Contract Documents prior to the execution of the Agreement, written notice thereof shall be given to Contractor prior to starting any such additional work.

ARTICLE 8 - COUNTY'S RESPONSIBILITIES

8.1 Communications: County will forward all instructions and decisions to Contractor through the Project Manager.

8.2 Right to Stop Work: The County has the right to stop or suspend work, and to award other work.

8.3 Project Manager

8.3.1 The County will designate a Project Manager and assistants to enable it to carry out its responsibilities at the site. The Project Manager is the County's agent and shall act as directed by and under the supervision of the County Administrator.

8.3.2 The Project Manager will be the County's sole authorized representative for the project. All correspondence to Architect from Contractor will be copied to the Project Manager.

8.4 Disputes Resolution

8.4.1 A dispute, or claim, or other matter in question arising out of or relating to the Contract Documents which is not disposed of by agreement shall be decided by the Project Manager promptly and in writing as provided in the Contract Documents. The decision of the Project Manager shall be final and conclusive on the Contractor unless, within 5 days from the receipt of such decision, Contractor submits to Project Manager a written claims submission and documentation as defined in paragraph 8.6 below.

8.5 Disputed Work

8.5.1 Should Contractor object to any decision, order, directive, notice, action, or omission of Project Manager, Contractor may, within 5 days after receipt or occurrence of the same, or before commencing with the disputed work, whichever occurs first, furnish to Project Manager a written notice stating such objections.

8.5.2 Contractor shall furnish to Project Manager, beginning with the first day and at the end of each day detailed hourly records for labor, construction equipment, and services; and itemized records of materials and equipment used that day in performance of the disputed work. Such records shall be of a form approved by Project Manager. Such records shall be signed by Contractor and verified by Project Manager.

8.5.3 Failure by Contractor to furnish such written notice and records specified in 8.5.1 and 8.5.2 shall constitute a waiver of Contractor's right to furnish a claim for the disputed work.

8.6 Claims Submission and Documentation

8.6.1 Contractor may furnish a claim concerning a matter noticed in accordance with 8.5 to Tehama County Administrative Office, 727 Oak Street, Red Bluff CA 96080.

8.6.2 Contractor shall furnish 3 certified copies of claim documentation. The claim documentation shall be complete when furnished. The evaluation of the Contractor's claim will be based on County's records and the Contractor's furnished claim documentation.

8.6.3 Claim documentation shall conform to generally accepted auditing standards and shall be in the following format:

1. General Introduction

2. General Background

3. Issues

a) Index of Issues

b) For each Issue

1) Background

2) Chronology

3) Contractor's Position (reason for County's potential liability)

4) Supporting Documentation of Merit

5) Supporting Documentation of Damages

4. Critical Path Method Schedules, As-Planned and As-Built

5. Productivity Exhibits

6. Summary of Issues and Damages

8.6.4 Supporting documentation of merit for each issue shall be cited by reference, photocopied, or explained. Supporting documentation may include, but not be limited to general conditions, technical specifications, drawings, correspondence, conference notes, shop drawing, survey books, inspection reports, delivery schedules, test reports, daily reports, subcontracts, fragmentary critical path method schedules, photographs, technical reports, requests for information, field instructions, and other related records.

8.6.5 Supporting documentation of damages for each issue shall be cited, photocopied, or explained. Supporting documentation may include but not be limited to certified detailed labor, materials, equipment, and construction equipment and services costs; purchase orders; invoices; project as-planned and as-built costs; subcontractor payment releases; quantity reports; other related records; general ledger and any other accounting materials.

8.6.6 Each copy of claim documentation shall include the following certification:

1. I certify under penalty of perjury, according to the laws of the State of California that this claim is made in good faith, that the supporting documentation is accurate and complete to the best of my knowledge and belief; and that the amount requested accurately reflects the contract adjustments for which County is responsible.

2. Certification shall be signed in the same manner as the proposal was signed.

8.6.7 Should Contractor be unable to support any part of the claim and it is determined that such inability is attributable to falsity of such certification or misrepresentation of fact or fraud on the part of Contractor, Contractor shall be liable to County for three times the amount of damages which the County sustains, plus the cost of civil action and may be liable to the County for a civil penalty of up to ten thousand dollars for each false claim.

8.7 Decisions on Claims

8.7.1 Claims of Contractor arising under and by virtue of the contract will be decided by the County Steering Committee consisting of the County Administrator, County Counsel, the Architect and the Project Manager who will furnish the decisions to Contractor in writing.

8.8 Release of Undecided Claims

8.8.1 Undecided claims furnished to County Steering Committee before execution of the final release of claims provided in 8.6 and not excepted therefrom shall be deemed released by Contractor upon execution of such release and will not be further considered by County.

8.9 Exhaustion

8.9.1 Contractor must exhaust all remedies and comply with all dispute resolution procedures set forth in paragraph 8.4 prior to filing suit which names the County, Architect, Project Manager or any officer, employee, agent or affiliate thereof.

ARTICLE 9 - ARCHITECT'S STATUS DURING CONSTRUCTION

9.1 Visits to Site:

9.1.1 Progress and quality of the executed work and to determine if the work is proceeding in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site observations to check quality or quantity of the work. On the basis of on site observations as an Architect, the Architect will keep the Project Manager informed of progress of the work, and will endeavor to guard the County against defects and deficiencies in the work.

9.1.2 Architect and his representatives will have access to the work at all times for the observation of the building operations, including the right to accept or reject materials and/or workmanship. The Architect and his representatives shall perform their duties in accordance with Section 4-213 and 4-217, Title 24, California Code and Regulations.

9.1.3 In cases of emergency the Architect may give directions to the Contractor, his authorized representative, or if neither are available, to the superintendent or foreman in charge of the particular work concerning which directions are given. Such directions will be confirmed in writing by the Project Manager.

9.2 Clarifications and Interpretations:

9.2.1 Architect will issue with reasonable promptness through the Project Manager such written Field Orders, which will clarify or interpret the design intent of the Contract Documents as he may determine

to be necessary. These Field Orders shall not entitle Contractor to any adjustment to the contract price or time.

9.3 Rejecting Defective Work:

9.3.1 Architect and/or the Project Manager will have authority to disapprove or reject work which is "defective" (which term includes without limitation work that is unsatisfactory, faulty, does not conform to the requirements of the Contract Documents, does not meet the requirements of any inspection, test or approval referred to in paragraph 13.2, or has been damaged prior to approval of final payment). He will also have authority to recommend to the Project Manager that he require special inspection or testing of the work as provided in paragraph 13.4, whether or not the work is fabricated, installed or completed.

9.4 Shop Drawings and Samples:

9.4.1 The Architect is responsible for the review of samples. (See paragraph 6.13)

9.4.2 The Contractor shall submit for review, with reasonable promptness, all samples as specified or directed by the Architect. The Architect shall review samples, with reasonable promptness, only for conformance with the design concept of the project and for compliance with information given in the Contract Documents. The work shall be in accordance with reviewed samples.

9.5 Shop Drawings

9.5.1 The Architect shall review, with reasonable promptness, schedules and drawings for conformance with the design concept of the project and compliance with the Contract Documents. The Architect's review of such drawings or schedules shall not relieve the Contractor from responsibility for deviations from Drawings and Specifications, nor shall it relieve him from responsibility for errors in shop drawings or schedules.

9.5.2 Architect shall be permitted a reasonable time to review such drawings and no claim for time extension or damages will be allowed for this time.

9.5.3 Satisfactory shop drawings shall be so identified by Architect, dated, and a reproducible copy returned to the Contractor.

9.5.4 Should shop drawings be rejected, one reproducible copy set will be returned to the Contractor with indicated corrections and changes to be made. After making such corrections and changes, Contractor shall resubmit shop drawings, in numbers of copies required, until approval is obtained. Any corrections or changes indicated on the shop drawings shall not be considered as an extra work order.

9.6 Architect will be the interpreter of the design and technical requirements of the Contract Documents and the compliance by the Contractor therewith. Neither the Project Manager, Architect, nor County will be liable to the Contractor for the result of any interpretation or decision rendered in good faith. Disputes with respect to interpretations will be processed and resolved as provided for in paragraph 8.4.

9.7 Limitations on Architect's Responsibilities

9.7.1 Neither Architect's authority to act under this Article 9 or elsewhere in the Contract Documents, nor any finding or decision made by him in good faith, shall give rise to any duty or responsibility of Architect to Contractor, any subcontractor, any material man, fabricator, supplier or any of their agents or employees or any other person performing any of the work.

9.7.2 Architect will not be responsible for Contractor's means, methods, techniques, sequences, division and allocation of the work or procedures of construction, or the safety precautions and programs incident thereto, and he will not be responsible for Contractor's failure to perform the work in accordance with the Contract Documents.

9.7.3 Architect will not be responsible for the acts or omissions of Contractor, or any subcontractors, or any of his or their agents or employees, or any other persons at the site or otherwise performing any of the work.

9.7.4 Nothing in these General Conditions or in the Contract Documents shall be deemed to establish a contractual relationship, direct or otherwise, between Architect and Contractor.

ARTICLE 10 - CHANGES IN THE WORK:

10.1 The County may at any time or from time to time order additions, deletions or revisions in the general scope of the work without invalidating the Contract Documents and without notice to the sureties.

10.2 Changes will be authorized by a Change Order. Upon receipt of a Change Order, Contractor shall immediately proceed with the work involved. All such work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the contract price or any extension or shortening of the contract time, an adjustment will be made as provided in Articles 11 and 12, on the basis of a claim made by either Contractor or County.

10.3 Changes, Omissions, or Additions shall be made only through a standard written order of the Architect and approved by the Owner. Change Orders will be issued only before or at the time of change, and the expense or responsibility for any change or damage without said order shall rest entirely with the Contractor.

10.4 County may order minor changes or alterations in the work not involving extra costs or extension of time, and not inconsistent with the overall intent of the Contract Documents. Such changes may be ordered by a Field Order.

10.5 When necessary, in order to avoid delay to the work, the Project Manager may authorize the Contractor to proceed with the work pending completion of a change order. This prior authorization may be verbal; however, it must be confirmed in writing as soon as possible by the authorizing individual. Whenever work is to proceed on the basis of such prior authorization, the Contractor must be notified in writing to proceed with the work pending approval of the change order. In the case of a change order requested by the Contractor, the County must have positive assurance that he will execute the change order before allowing work to proceed. Preparation and final approval of change orders for work covered under prior authorization must be actively pursued. Prior authorization does not include authority to make payment for the work.

10.6 No claims for adjustment of contract price or time for delays or costs due to material shortage, transportation difficulties, labor shortage, or dewatering, will be paid by County except as defined in *sub*paragraphs 12.1.2 and 12.1.3.

10.7 Additional work performed by Contractor without authorization of a change order shall be at his own expense. Contractor shall not be entitled to an increase in the contract price or an extension of the contract time, except in the case of an emergency as provided in subparagraphs 6.1.4 or 9.1.3, for such work performed without a change order.

10.8 The County may order changes in the work. Notwithstanding any dispute or controversy that may arise in connection with a claim for adjustment of contract price, in the event of such changes Contractor shall proceed with the work promptly and diligently upon written order from Project Manager. The contract price may be changed pursuant to Article 11 without notice to the Surety.

10.9 In the event that there is any dispute between County and Contractor with relation to any payment to be made under this contract, whether by reason of change order; progress payment; or otherwise, Contractor shall submit a claim pursuant to Articles 11 and 12 but will not be entitled to walk off the job or stop work in any manner and is under a full obligation to complete each and every term and condition of the contract.

10.10 Dispute resolutions provisions of paragraphs 8.5 and 8.6 are applicable to changes in the work except as in Articles 11 and 12.

ARTICLE 11 - CHANGE OF CONTRACT PRICE

11.1 Contract Price:

11.1.1 The Contract Price constitutes the total amount payable to Contractor for performing the work under the Contract Documents. All duties, responsibilities and obligations assigned to or undertaken by Contractor in respect to work under the Contract Documents shall be at his expense without change of the Contract Price.

11.1.2 If Contractor wishes to make a claim for an increase to the contract price, he shall give Project Manager written notice thereof not later than five (5) days after the occurrence of the event giving rise to such claim. Within ten (10) days thereafter, Contractor shall supply all supporting documents for such claim, including but not limited to time slips for labor and time slips for equipment. Failure to provide all supporting documents shall constitute a waiver of such claim by Contractor.

11.1.3 The written notice shall set forth the reasons for which the Contractor believes additional compensation is due, the nature of the costs involved and the amount thereof. The notice must be given to the Project Manager prior to Contractor's performing the work-giving rise to the claim for additional compensation.

11.1.4 Differences between the parties arising under and by virtue of the contract shall be brought to the attention of the respective parties at the earliest possible time in order that such matters may be promptly settled. The Contractor hereby agrees that he shall have no right to additional compensation for any claim for which written notice was not filed in strict compliance with this paragraph.

11.2 The cost or credit to the County resulting from a change in the work, from a prior authorization, or from any claim for an increase or decrease in the contract price shall be determined by the Project Manager in one of the following ways:

11.2.1 By a lump sum properly itemized, and showing direct cost and markup, and supported by such substantiating data as may be required by the Project Manager to permit evaluation; allowable markup shall not in any case exceed the amount set forth below:

1. For work performed by the Contractor's own forces, for changes up to $30,000.00, an additional 10% for overhead and 5% for profit may be added;

2. For changes in excess of $30,000, the sums in excess of $30,000 are allowed an additional 8% for overhead and 5% for profit;

3. For work performed by subcontractors, the subcontractors' billings shall be limited to the markups as described for the Contractor, except the Contractor may add 10% to the gross amount as set forth by the subcontractor, as his fee for coordinating and implementing such changed work by the subcontractor;

4. Overhead includes, but is not limited to, the costs of bonds, insurance, supervision, office expense, management, transportation and small tools allowance.

11.2.2 Where the work involved is related to unit prices, by application of unit prices to quantities involved; or

11.2.3 On the basis of force account as provided for in paragraph 11.3 which shall be employed only at the Project Manager's sole discretion, which shall not be an election of the Contractor.

11.2.4 All work undertaken by prior authorization shall be on the basis of force account, until and unless a lump sum is agreed upon.

11.3 Force Account 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 Project Manager and compensation will be determined as follows:

11.3.1 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 "Labor," "Materials" and "Equipment Rental," except where agreement has been reached to pay in accordance with Section "Work Performed by Special Forces or Other Special Services."

11.3.2 To the total direct costs computed as provided in Sections "Labor," "Materials," and "Equipment Rental," there will be added a markup as defined in paragraph 11.2.1.

11.3.3 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 "Labor," "Materials," and "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 therefore.

11.3.4 When extra work paid for on a force account basis is performed by forces other than the Contractor's organization, the Contractor shall reach agreement with such other forces as to the distribution of the payment made by the Owner of such work. No additional payment therefore will be made by the Owner by reason of the performance of the work by a subcontractor or other forces.

11.3.4.1 Labor - The Contractor will be paid the cost of labor for the workmen (including foremen when authorized by the Project Manager) 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:

11.3.4.2 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.

11.3.4.3 Labor Surcharge - To the actual wages, as defined in Section 11.4.2 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 part of the contract. Said labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws, specifically worker's compensation, social security, Medicare, Federal unemployment insurance, State unemployment insurance and State training taxes, and for all other payments made to, or on behalf of, the workmen, other than actual wages as defined in Section 11.4.2 and subsistence and travel allowance as specified in Section 11.3.4.4.

11.3.4.4 Subsistence and Travel Allowance - The actual subsistence and travel allowance paid to such workmen.

11.3.4.5 Materials - The Owner 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:

11.3.4.6 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 Project Manager plus the actual costs, if any, incurred in the handling of such materials.

11.3.4.7 If the materials are obtained from a supply or a 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.

11.3.4.8 If the cost of such materials is, in the opinion of the Project Manager, excessive, then the cost of such materials shall be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned delivered to the job site, less any discounts as provided in Section 11.4.1.

11.3.4.10 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. If it is deemed necessary by the Project Manager to use equipment not listed in the said publication, a suitable rental rate for such equipment will be established by the Project Manager. The Contractor may furnish any cost data, which might assist the Project Manager in establishment of such rental rates.

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 11.4.1(1) "Labor."

All equipment shall, in the opinion of the Project Manager, 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's approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment that 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 $150 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore.

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

11.3.4.11 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 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 ½ hour of operation.

(2) When daily rates are listed, less than 4 hours of operation shall be considered to be ½ day of operation.

11.3.4.12 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, 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 Project Manager in advance.

(2) The Owner 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 Project Manager 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:

Hours Equipment is in Operation	Hours to be Paid
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 ½ hour of operation.

When daily rates are listed, payment for ½ day will be made if the equipment is not used. If the equipment is used, payment will be made for one day.

(6) Should the Contractor desire the return of the equipment to a location other than its original location, the Owner 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 Project Manager determines that such extra work required 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 Project Manager 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:

(a) The Project Manager shall specifically approve the necessity for the use of particular equipment on such work.

(b) The Contractor shall establish to the satisfaction of the Project Manager that such equipment cannot be obtained from his normal equipment source or sources and those of his subcontractors.

(c) The Contractor shall establish to the satisfaction of the Project Manager that the proposed equipment rental rate for such equipment from his proposed source is reasonable and appropriate for the expected period of use.

(d) The Project Manager shall approve the equipment source and the equipment rental rate to be paid by the County before the Contractor begins work involving the use of said equipment.

11.3.4.13 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 11.3.4.10, "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 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 will be added to the cost of labor described herein, in accordance with provision in Section 11.3.4.3 "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 for in Section 11.3.1 "Work Performed by Contractor."

11.4.1 Work Performed by Special Forces or Other Special Services - When the Project Manager and the Contractor, by agreement, determine that a special service for an item of extra work cannot be performed by the forces of the Contractor or those of any of his subcontractors, such services or extra work item may be performed by a specialist. Invoices for such service of 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 impractical 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 job site, the charges for that portion of the extra work performed in such facility, may, by agreement, be accepted as a specialty billing.

To the specialist invoice price, less a credit to the County 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 11.3.1 "Work Performed by Contractor."

11.4.2 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.

11.5 The amount of credit to be allowed to County for any change which results in a net decrease in cost of the work, will be the amount of the actual net decrease as determined by the Project Manager. When both additions and credits are involved in any one change, any Contractor's fee under paragraph 11.3.3 shall be calculated on the basis of the net increase, if any.

11.6 Whenever the cost of any work is to be determined pursuant to paragraph 11.3, Contractor will submit in form prescribed by County an itemized cost breakdown together with supporting data.

11.7 Disputes, claims and matters in question arising out of or relating to the interpretation of implementation of Article 11 shall be submitted and resolved in accordance with paragraph 8.5.

11.8 Cash Allowances - NOT APPLICABLE

Contract Change Order Form

11.9 All parties agree that the following form shall be used for all change orders:

CONTRACT CHANGE ORDER NO._____

Date _____

Sheet _____ of_____

_____. You are hereby directed to make the herein-described changes from the plans and specifications, or do the following described work in accordance with applicable provisions of the Contract Documents. Work described herein shall include furnishing of all materials, equipment, labor and services necessary for its completion.

This Change Order constitutes a full accord and satisfaction as to claims for all additional costs and extensions of the contract time relating to the portion of the work described under the term "Item." The execution of this Change Order is a waiver of any rights or claims by the Contractor to any additional compensation for the "Item" work or extensions of the contract time for that work.

ITEM:

The above changes result in the following adjustments to the Contract Price:

Add/Deduct $_____.

Contract Time is increased/decreased/unchanged _____working days by this Change Order.

I, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree to do the work above specified and will accept as full payment therefore the prices shown above.

SUBMITTED BY:

_____

ARCHITECT

RECOMMENDED FOR APPROVAL:

By_____

By_____ PROJECT MANAGER

CONTRACTOR

By_____ Date_____

Title

Date_____ APPROVED BY:

_____

COUNTY APPROVAL:

By_____

PUBLIC WORKS DIRECTOR

Date_____ Date_____

Distribution:
District (Master)
Contractor (Master)

Architect (Copy)
Project Manager (Copy)

CONTRACT CHANGE ORDER NO. _____
PROJECT _____
Date: _____

The Contract is changed as follows:

CCO #	COR #	DESCRIPTION		AMOUNT
		Requested by: Reason:	ADD	
		Requested by: Reason:	ADD	
		Requested by: Reason:	ADD	
		Requested by: Reason:	ADD	
		Requested by: Reason:		
		TOTAL CHANGE ORDER NO. ___	**ADD**	**$0.00**

The original Contract Sum	$0
Net Change by previously authorized Change Orders	$0
The Contract Sum prior to this Change Order	$0
The Contract Sum will be increased by this Change Order in the amount of	$0
The New Contract Sum including this Change Order will be	**$0**
The Contract Time will be extended	(-0-) work days

ARTICLE 12 - CHANGE OF THE CONTRACT TIME

12.1 Contract Time

12.1.1 The County may extend, reduce or adjust the contract time without invalidating the Contract Documents and without notice to the Surety. The contract time may only be changed by a change order. Any claim for an extension in the contract time shall be based on written notice to Project Manager within five (5) days of commencement of the event giving rise to the claim. The notice shall set forth the reasons for the delay, the date of its commencement, the extent of the delay, together with such supporting data as may be required by Project Manager. Change in the contract time shall be incorporated in a change order. Failure to present notice of claim in writing within the stated five days constitutes a waiver for any delay claim.

12.1.2 In the event it is deemed necessary to extend the time for completion of the work, such extensions shall in no way release any guarantee given by the Contractor pursuant to the provisions of the Contract Documents, or the contract let hereunder, nor shall such extension of time relieve or release the Sureties on the bonds executed pursuant to said provision. The Sureties in executing such bonds shall be deemed to have expressly agreed to any such extension of time. The amount of time allowed in any extension of time shall be limited to the period of the delay giving rise to the same as determined by the County.

12.1.3 The amount of time extension, if any, to which the Contractor is entitled shall be determined by the Project Manager. No damages of any sort shall be paid to Contractor for delay, disruption, halting, cessation or temporary abandonment, no matter from what cause. Parties acknowledge that on this project, revisions to the plans and specifications will be needed, and Contractor waives, by entering into the Agreement with County, any damages caused by such revision or any other source during the term of this contract. Notwithstanding any dispute which may arise in connection with a claim for adjustment of the contract time, Contractor shall proceed with the work promptly and directly.

12.2 Liquidated Damages

12.2.1 The work prescribed by the Contract Documents must be completed within the time set forth in the Agreement, or damage will be sustained by the County. Any delay could cause delay to operations of the County depriving the County of the scheduled beginning of the use of the facility under construction. The parties hereto recognize that, because of the foregoing special circumstances, it is impractical and extremely difficult to fix the actual damages.

12.2.2 Accordingly, the parties hereto agree, and by execution of the Agreement the Contractor acknowledges that he understands, has ascertained and agrees, that the Contractor shall pay to the County, as liquidated damages, and not as a penalty or forfeiture, the amounts herein set forth for the failure of the Contractor to substantially complete the entire work within the time specified.

12.2.3 Time is therefore of the essence in these Contract Documents and it is imperative that the work included in these Contract Documents be substantially completed within the specified time.

12.2.4 Since it is impossible or extremely impractical, presently, to determine the actual amount of damages which the County will sustain by reason of such delay, it is, therefore, agreed that the Contractor will pay to the County liquidated damages in the amount as set forth in subparagraph 12.2.6, for each and every calendar day beyond the time set forth in the Agreement, as adjusted, until the time of completion as determined in paragraph 14.5. The Contractor agrees to promptly pay such liquidated damages as are herein provided. In case the same are not so paid,

Contractor agrees that the County may deduct the amount thereof from any money due or that may become due the Contractor under the contract.

12.2.5 The parties have endeavored to estimate the actual damages likely to be suffered by the County in the event of a delay in completion beyond the time set forth in the Agreement, and agree that the amount is a reasonable estimate of the County's actual damages and are just and reasonable sums under the circumstances presently existing.

12.2.6 It is agreed that the amount of liquidated damages to be paid by the Contractor to the County for failure to complete the entire work specified by the Contract Completion Date or to meet any deadline set forth in the Agreement for the completion of specified work (as extended, if applicable) is two hundred fifty dollars and no/cents ($250.00) for each calendar day, continuing after the Substantial Completion Date, as indicated in the Agreement, to the date of actual substantial completion, or until the time of completion of the work necessary to meet such a deadline, as the case may be.

12.2.7 In the event the Contractor shall become liable for liquidated damages under this Section, the County in addition to all other remedies provided by law, shall have the right to require the Project Manager to withhold any and all retained percentages of payments, subject to the requirements of Sections 4590 and 14402.5 of the California Government Code, which would otherwise be or become due the Contractor until the liability of the Contractor under this Section has been finally determined. The County shall have the right to use and apply such retained percentages, in whole or in part, to reimburse the County for all liquidated damages due or to become due to the County. Any remaining balance of such retained percentages shall be paid to the Contractor only after discharge in full of all liability incurred by the Contractor under this Section or otherwise. If the retained percentage is not sufficient to discharge all such liabilities of the Contractor, the Contractor shall continue to remain liable to the County until all such liabilities are satisfied in full.

12.2.8 Such amount will be in each case the actual cash value agreed upon as the loss to the County resulting from the Contractor's default.

12.2.9 Disputes, claims and matters in question arising out of or relating to the interpretation or implementation of Article 12 shall be submitted and resolved in accordance with paragraph 8.4.

ARTICLE 13 - WARRANTY AND GUARANTEE; TEST AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.1 Warranty and Guarantee

13.1.2 Contractor warrants and guarantees to County that all materials and equipment will be unless otherwise specified, all work will be of good quality, free from faults or defects, in accordance with the requirements of the Contract Documents and of any inspections, tests or approvals referred to in paragraph 13.2. All unsatisfactory work, all faulty or defective work, and all work not conforming to the requirements of the Contract Documents at the time of acceptance thereof or of such inspections, tests or approvals shall be considered defective. All defective work, whether or not in place, may be rejected, corrected or accepted as the County may direct.

13.2 Tests and Inspections

13.2.1 If laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to be specifically inspected, tested or approved by some public body, Contractor shall assume full responsibility therefore, pay all costs in connection therewith, and furnish the

Project Manager with the required certificates of inspection, testing or approval. All other inspections, tests and approvals required by the Contract Documents shall be performed by County and the costs be paid by County unless otherwise specified.

13.2.2 Contractor shall give Project Manager and Architect timely notice of readiness of the work for all inspections, tests or approvals. If any such work required so to be inspected, tested or approved is covered before such inspections, tests, or approvals are made, without written approval of the Project Manager, it must, if requested by the Project Manager or Architect, be uncovered for observation, and such uncovering and replacement shall be at Contractor's expense.

13.2.3 Neither observations by Project Manager and Architect nor inspections, tests or approvals shall relieve Contractor from his obligations to perform the work in accordance with the requirements of the Contract Documents.

13.2.4 Any defective work, which may be discovered before final acceptance of the work, shall be corrected immediately by the Contractor, and any unsatisfactory materials shall be rejected, notwithstanding that they may have been overlooked by an inspector. The inspection of the work shall not relieve the Contractor of any of his obligations to perform satisfactory work as herein prescribed.

13.2.5 Failure or neglect on the part of the County or any of its authorized agents to condemn or reject bad or inferior work or materials shall not be construed to imply an acceptance of such work or materials if it becomes evident at any time prior to final acceptance of the work; neither shall it is construed as barring the County at any subsequent time from recovery of damages or of such a sum of money as may be needed to build all portions of the work in which fraud was practiced or improper materials used whenever found.

13.3 Access to Work

13.3.1 The County and its representative and the Architect and his representatives will at all times have access to the work. Contractor shall provide proper and safe facilities for such access and observation of the work and also for any inspection or testing thereof by others.

13.4 Uncovering the Work

13.4.1 Work, which is supposed to be tested prior to covering or inspecting, and which has been covered prior to testing or inspection must, if requested by Project Manager or Architect, be uncovered for observation and replaced at Contractor's expense.

13.4.2 The Project Manager may request any work to be uncovered and inspected and tested. If such work is found to be defective, Contractor shall bear the expense of uncovering, exposure, inspection, testing, correction and recovering. If the work is not found to be defective, Contractor shall be allowed an increase in contract price and, if necessary, an extension of time to cover all-time and cost expended. Such increase and extension shall be granted pursuant to Articles 10, 11, and 12.

13.5 County May Stop the Work

13.5.1 If the work is defective, or Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, or if Contractor fails to make prompt payments to subcontractors or for labor, materials or equipment, County may order Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated. This right of County to stop the work

shall not give rise to any duty on the part of County to exercise this right for the benefit of Contractor or any other party.

13.6 Correction or Removal of Defective Work

13.6.1 The Project Manager may require the Contractor, prior to approval of final payment, without cost to County and as specified by Project Manager, to either correct any defective work, whether or not fabricated, installed or completed, or, if the work has been rejected by Project Manager or Architect, remove it from the site and replace it with nondefective work. If Contractor does not correct such defective work or remove and replace such rejected work within a reasonable time, all as specified in a written notice from Project Manager, County may have the deficiency corrected or the rejected work removed and replaced by other persons. All direct or indirect costs of such correction or removal and replacement, including compensation for additional professional services, shall be paid by Contractor. Contractor shall also bear the expenses of making good all work of others destroyed or damaged by his correction, removal or replacement of his defective work.

13.6.2 The Contractor shall remove from the site within 48 hours, when so directed by the Project Manager, any materials which are not in conformance with the Contract Documents.

13.7 One Year Correction Period

13.7.1 If, after the approval of final payment and prior to the expiration of one year after the date of Notice of Completion or such longer periods of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, Contractor shall promptly, without cost to County and in accordance with County's written instructions, either correct such defective work, or, if it has been rejected by County, remove it from the site and replace it with nondefective work. If Contractor does not promptly comply with the terms of such instructions, County may have the defective work corrected or the rejected work removed and replaced by other persons and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by Contractor. The requirements of this paragraph shall be cumulative with such other indemnification, warranties and guarantees as provided by the Contract Documents, at law and in equity, and shall not be deemed a limitation of any sort on the rights and remedies of the County against the Contractor

13.7.1.1 The warranties, extended warranties and guarantees in these General Conditions and in the Specification shall be cumulative with such other indemnification, warranties and guarantees as provided by the Contract Documents, or at law or in equity, and shall be deemed a limitation of any sort on the rights and remedies of the County against the Contractor.

13.8 Acceptance of Defective Work

13.8.1 If, instead of requiring correction or removal and replacement of defective work, County prefers to accept it, it may do so. In such case, if acceptance occurs prior to approval of final payment, a change order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the contract price; or, if the acceptance occurs after approval of final payment, an appropriate amount shall be paid by Contractor to County.

13.9 Work Neglected by Contractor

13.9.1 If Contractor fails to prosecute the work in accordance with the Contract Documents, including any requirements of the construction schedule, County may give Contractor written

notice. Contractor shall respond to County within 24 hours' receipt of said notice, and conform to said notice within 7 days. County may, without prejudice to any other remedy it may have, make good deficiencies, and the cost thereof (including compensation for additional professional services) shall be charged against Contractor. If the payments then or thereafter due Contractor are not sufficient to cover such amount, Contractor shall pay the difference to County.

ARTICLE 14 - PAYMENTS AND COMPLETION

14.1 Schedules:

14.1.1 Work Schedule and activity cost data developed in connection therewith as described in the General Requirements. No progress payment will be made until after the Schedule has been updated as of the date of application. The activity cost data will be incorporated into the form of Application for Payment furnished by the County.

14.2 Application for Progress Payment:

14.2.1 Once a month Contractor shall submit to Project Manager and Architect for review an Application for Payment filled out and signed by Contractor covering the work completed as of the date of the application and accompanied by such data, vouchers and schedules as may reasonably be required. No payment shall be made for any work or material not specifically incorporated in the project, except equipment purchased by Contractor, delivered to and stored in a bonded warehouse acceptable to the Owner. Payment for 95% of the invoiced value of such equipment may be made, subject to the inspection by and approval of the Owner. Equipment that qualified for such payment while not incorporated into the work, is limited to: special order transformers, generators, pumps, valves, and motors. Items which are "stock" or "off the shelf" which are readily available are not, under any circumstances, eligible for payment under this provision.

14.2.2 Mobilization, bonds, and insurance premiums will be paid as part of the first progress payment if these costs are identified as part of the cost allocation required under General Requirements, Section 01310. Each subsequent Application for Payment shall include an affidavit of Contractor stating that all previous progress payments received on account of the work have been applied to discharge in full all of Contractor's obligations reflected in prior Applications for Payment and otherwise. Failure to submit any data and affidavits as may be required by this paragraph shall be grounds for rejection of the Application for Payment. This payment will be made pursuant to paragraph 14.11

14.3 Contractor's Warranty of Title:

14.3.1 Contractor warrants and guarantees that title to all work, materials and equipment covered by any Application for Payment, whether incorporated in the project or not, will pass to County at the time of payment, free and clear of all liens, claims, security interests and encumbrances (hereinafter in these General Conditions referred to as "liens"). The County may, at any time, require the Contractor to post, at Contractor's expense, a lien release bond as to any lien filed against the project.

14.4 Approval of Payments:

14.4.1 The Project Manager will, within fifteen days after receipt of each Application for Payment, either indicate in writing his approval for payment or return the application to Contractor indicating his reasons for refusing to approve payment. County shall, within 30 days of presentation to it of

an approved Application for Payment, review said application and if found acceptable in form and amount, pay Contractor the amount approved.

14.4.2 The County will pay 95% of the amount due the Contractor as progress payments. The remaining monies will be paid pursuant to paragraph 14.9.1.

14.4.3 The Contractor may elect to receive 100% of payments due under the contract from time to time, without retention of any portion of the payment by the public agency, by depositing securities of equivalent value with the public agency in accordance with the provisions of Section 4590 of the Government Code. Such securities, if deposited by the Contractor, shall be valued by the public agency's Finance Director (Treasurer), whose decision on valuation of the securities shall be final.

14.4.4 The granting of any progress payment, or the receipt thereof by the Contractor, shall not constitute acceptance of the work or any portion thereof, and shall in no way lessen the liability of the Contractor to replace unsatisfactory work or material, though the unsatisfactory character of such work or material may not have been apparent or detected at the time such payment was made.

14.4.5 It is mutually understood and agreed that when under any provision of this contract the County shall charge any sum of money against the Contractor, the amount of such charge shall be deducted and retained by the County from the amount of the next succeeding progress estimate, or from any other moneys due or that may become due the Contractor on account of the contract. If on completion or termination of the contract such moneys due the Contractor are found insufficient to cover the County's charges against him the County shall have the right to recover the balance from the Contractor or his sureties.

14.4.6 The County may withhold up to 125% of the estimated cost of remedial work from payments otherwise due the Contractor, if in the judgment of the Project Manager or Architect the Contractor has failed to make satisfactory progress on the completion of remedial work, or is otherwise in violation of any requirement, duty, obligation or covenant contained in the Contract Documents. Such withholding is supplementary to the retention amount required by these Contract Documents.

14.4.7 County may refuse to approve the whole or any part of any payment because of subsequently discovered evidence, change in circumstances or the results of subsequent inspections or tests, and may nullify any such payments previously approved to such extent as may be necessary in their opinion to protect County from loss, because:

14.4.7.1 the work is defective, or completed work has been damaged requiring correction or replacement;

14.4.7.2 claims or liens have been filed, or there is reasonable cause to believe such may be filed;

14.4.7.3 the contract price has been reduced because of modification;

14.4.7.4 County has been required to correct defective work or complete the work;

14.4.7.5 of unsatisfactory prosecution of the work including failure to furnish acceptable submittals; or

14.4.7.6 the Contractor has failed to comply with the Contract Documents, direction of County or with the requirements of the law.

14.5 Notice of Completion:

14.5.1 Contractor will certify in writing to County, prior to final payment, that the entire project is substantially complete and request that County issue a Notice of Completion. Within a reasonable time thereafter, Project Manager, Contractor, and Architect shall make a review of completeness. If Project Manager does not consider the project substantially complete, Project Manager will notify Contractor in writing giving his reasons. If Project Manager considers the project substantially complete, Project Manager will prepare a provisional Notice of Completion which shall fix the tentative date of Substantial Completion and the responsibilities for maintenance and utilities. There shall be attached to the provisional certificate a list of items to be completed or corrected before final payment, and the provisional certificate shall fix the time within which such items be completed or corrected, said time to be within the contract time. Section 01700 shall apply to this paragraph.

14.5.2 Contractor shall have seven days after receipt of the provisional certificate during which he may make written objection to Project Manager as to any provisions of the provisional certificate or attached list. If, after considering such objection, Project Manager concludes that the project is not substantially complete, Project Manager will within seven days after submission of the objection notify Contractor thereof in writing stating the reasons. Upon Contractor's completion of the items listed on the provisional certificate, and upon satisfaction of the terms and conditions of the provisional certificate, the Project Manager shall issue a final Notice of Completion, which shall fix date as may be necessary or appropriate. Project Manager's determination of the date of Substantial Completion and other items under this paragraph shall be final and conclusive on Contractor. Section 01700 shall apply to this paragraph.

14.5.3 Project Manager shall have the right to exclude Contractor from the project site after the date of Substantial Completion, but Project Manager shall allow Contractor reasonable access to complete punch list items or perform correction and warranty work.

14.6 Partial Utilization:

14.6.1 Prior to final payment, Project Manager may request Contractor in writing to permit County to use a specified part of the project which it believes it may use without significant interference with construction of the other parts of the project. If Contractor agrees, it will certify to Project Manager and Architect that said part of the project is substantially complete and request Project Manager to issue a certificate of Substantial Completion for that part of the project. Within a reasonable time thereafter Project Manager, Contractor and Architect shall make an inspection of that part of the project to determine its status of completion. If Project Manager determines that such part is substantially complete, Project Manager shall issue a Certificate of Substantial Completion. If Project Manager does not consider that it is substantially complete, Project Manager will notify Contractor thereof in writing, giving its reasons. In case of partial utilization by the County, the provisions of General Requirements Section 01700 will govern with respect to the responsibilities of Contractor and County.

14.6.2 Partial utilization shall not limit any warranty or guarantee by the Contractor, nor shall it constitute a waiver of any right of the County, its successors or assigns.

14.7 Final Inspection:

14.7.1 The Contractor shall give written notice that the project is complete. Project Manager and Architect will make a final review of completeness with Contractor, and will notify Contractor in writing of all particulars in which this review reveals that the work is incomplete or defective. Contractor shall immediately take such measures as are necessary to remedy such deficiencies.

14.8 Final Application for Payment:

14.8.1 The Contractor shall complete all such corrections to the satisfaction of the Project Manager and deliver all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection and other documents required by the Contract Documents or by the Project Manager. He may then make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by such data as the Project Manager may reasonably require, together with complete releases - waivers of liens in a form satisfactory to the Project Manager. Contractor shall also be required to furnish receipts or releases in full; and affidavit that the releases and receipts include all labor, all payrolls, material and equipment for which a lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the work for which County or his property might in any way be responsible, have been paid or otherwise satisfied; and consent of the Surety to final payment. If any subcontractor, material man, fabricator or supplier fails to furnish a release or receipt in full, Contractor may be required at Project Manager's sole discretion to furnish a bond or other collateral satisfactory to Project Manager to indemnify County against any lien, stop notice, or any other loss or liability. This payment is made pursuant to paragraph 14.11 and Section 01700.

14.9 Approval of Final Payment:

14.9.1 If, on the basis of observation and review of the work during construction, final inspection and review of the final Application for Payment, as required by the Contract Documents, Project Manager is satisfied that the work has been fully and satisfactorily completed and that Contractor has fulfilled all his obligations under the Contract Documents, Project Manager will file a Notice of Completion and, within fifteen days after receipt of the final Application for Payment, approved by Project Manager, indicate in writing its approval for payment.

14.9.2 If, on the basis of observation and review of the work during construction, final inspection and review of the final Application for Payment, as required by the Contract Documents, Project Manager is not satisfied that the work has been fully and satisfactorily completed, and that Contractor has not fulfilled all his obligations under the Contract Documents, Project Manager will, within fifteen days after receipt of the final Application for Payment, indicate in writing his disapproval for payment. Thereupon Project Manager will give written notice to Contractor indicating in writing the reasons for refusing to approve final payment, in which case Contractor shall make the necessary corrections and resubmit the Application.

14.9.3 County shall make payment, including retention, to Contractor, pursuant to an approved final application for Payment, within 15 days of its approval, or on the 30th day following the recording of the Notice of Completion, whichever date is later. The approval and payment procedures described in paragraphs 14.10, 14.11, and 11.4 shall apply to this paragraph.

14.9.4 The Contractor and each assignee under any assignment in effect at the time of final payment shall, if required by the Project Manager, execute and deliver at the time of final payment and as a condition precedent to final payment, a release in form and substance satisfactory to and containing such exemptions as may be found appropriate by the County, discharging the County, Project Manager, and their elected officials, officers, agents, and employees of and from all liabilities, obligations and claims arising under this contract.

14.10 Contractor's Continuing Obligation:

14.10.1 Contractor's obligation to perform the work and complete the project in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment by County, nor the issuance of a Notice of Completion, nor any payment by County to Contractor under the Contract Documents, nor any use or occupancy of the project by County shall constitute an acceptance of work not in accordance with the Contract Documents.

14.11 Waiver of Claims:

14.11.1 The making and acceptance of each progress payment and of final payment shall constitute a waiver of all prior claims by Contractor against County which have not been brought to the notice of the County as provided in the Contract Documents.

14.11.2 If any claim or lien or stop-notice or any other demand for payment or security therefore, including claims or demands upon the performance and payment bond sureties, is made or filed with or against County, the project or the premises by any person claiming that Contractor or any subcontractor or other person under it has failed to perform its contractual obligations or to make payment for any labor, services, materials equipment, taxes or other items or obligations furnished or incurred for or in connection with the work, or if at any time there shall be evidence of such non-performance or non-payment or of any claim or lien or stop-notice or other demand for which, if established, County might become liable and which is chargeable to Contractor; or if Contractor or any subcontractor or other person under it causes damage to the work or to any other work on the project; or if the Contractor fails to perform or is otherwise in default under any of the terms or provisions of the Contract Documents, the Project Manager shall have the right to retain from any payment then due or thereafter to become due an amount which in his sole discretion he deems sufficient to:

14.11.2.1 satisfy, discharge and defend against any such claim or lien or stop-notice or other demand, or any action which may be brought or judgment which may be recovered thereon;

14.11.2.2 make good any such non-payment, nonperformance, damage, failure or default; and

14.11.2.3 compensate County for and indemnify it against any and all losses, liability, damages, costs and expenses (including attorneys', accountants', consultants' and experts' fees and costs) which may be sustained or incurred in connection therewith.

14.11.3 County shall have the right to apply and charge against Contractor as much of the amount retained as may be required for the foregoing purposes. If the amount retained is insufficient therefore, Contractor shall be liable for the difference and upon written demand immediately pay the same to the County. The provisions of this paragraph are in addition to such other rights and entitlements as the County may enjoy against Contractor as elsewhere provided in the Contract Documents, and at law and in equity.

14.11.4 Should any subcontractor, material man, supplier or other such person file or maintain any action on or respecting a claim of mechanic's lien, stop-notice, against payment or performance bond,

Contractor shall immediately and at his own expense procure, furnish and record appropriate release bonds in accordance with California Civil Code Section 8000 et. seq., and California Code of Civil Procedure Sections 405 through 405.24, inclusive. Upon Contractor's failure immediately to procure, furnish and record such release bonds, County shall have right to procure and record

such release bonds, and to retain from Contractor's payment the cost thereof. The provisions of this paragraph are in addition to such other rights and entitlements as enjoyed by the County against Contractor as elsewhere provided in the Contract Documents, and at law and in equity.

14.12 Price Reduction For Defective Cost or Pricing Data

14.12.1 If the Owner determines that any price (including profit) negotiated in connection with the contract, or any cost reimbursable under this contract, was increased by any significant sums because the Contractor, or any subcontractor furnished incomplete or inaccurate cost or pricing data or data not current, then such price or cost or profit shall be reduced accordingly and the contract shall be modified in writing to reflect such reduction. Failure to agree on a reduction shall be subject to the Disputes Resolution clause of this contract.

14.12.2 Since the contract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain subcontracts, the Contractor may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the Contractor. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by his lower tier subcontractors.

14.13 Covenant Against Contingent Fees

14.13.1 The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty the County shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

14.14 Gratuities

14.14.1 If the Owner finds, after notice and hearing, that the Contractor or any of the Contractor's agents or representatives offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of the Owner in an attempt to secure a contract or favorable treatment in the awarding, amending, or making any determinations related to the performance of this contract, the County may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this contract. The County may also pursue other rights and remedies that the law or this contract provides. However, the existence of the facts upon which the County makes such findings shall be in issue and may be reviewed in proceedings under the remedy clause of this contract.

14.14.2 In the event this contract is terminated as provided in this clause, the County shall be entitled (1) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the contract by the Contractor, and (2) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the County) which shall be not less than 3 nor more than 10 times the costs the Contractor incurs in providing any such gratuities to any such officer or employee.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.1 County May Suspend Work

15.1.1 The County may, at any time and without cause, suspend the work or any portion thereof by notice in writing to Contractor. Contractor shall resume the work when so ordered in writing by County.

15.2 County May Terminate

15.2.1 The County may, without prejudice to any other right or remedy and after giving Contractor and his Surety seven calendar days written notice, terminate the services of Contractor and take possession of the project and of all materials, equipment, tools, construction equipment and machinery thereon owned by Contractor, and finish the work by whatever method it may deem expedient, if the Contractor is adjudged as bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for Contractor or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws, or if he fails to supply sufficient skilled workmen or suitable materials or equipment, or if he fails to make prompt payments to subcontractors or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction, or if he disregards the authority of Project Manager, or if he otherwise violates any provisions of the Contract Documents. In such case Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price exceeds the direct and indirect costs of completing the project, including compensation for additional professional services, such excess shall be paid to Contractor. If the costs exceed such balance, Contractor shall pay the difference to County.

15.2.2 The termination of the Contractor's services by the County shall not affect any rights of the County against the Contractor then existing or which thereafter accrue. The retention of any payment of money by County due Contractor will not release the Contractor from liability.

15.2.3 The County may, after seven calendar days' written notice to Contractor, without cause and without prejudice to any other right or remedy, elect to abandon the project and terminate the agreement. In such case, Contractor shall be paid for all work then executed, any expense sustained, plus a reasonable profit.

15.2.4 The Contractor may not, under any condition, terminate or stop work because of a dispute, claim or any matter in controversy under the Contract Documents, then under submission, or previously resolved by a final and conclusive decision under paragraph 8.4.

ARTICLE 16 - MISCELLANEOUS

16.1 Giving Notice

16.1.1 Notice shall be deemed to have been validly given if delivered in writing to the individual or member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to him who gives the notice. Notice shall be effective as of the date of personal service or mailing.

16.2 General

16.2.1 All moneys not paid when due hereunder shall bear interest at the rate of 7% annually.

16.2.2 All specifications, drawings, and copies thereof furnished by the Architect shall be the property of County. They shall not be used on another project, and, with the exception of those

sets that have been signed in connection with the execution of the Agreement, shall be returned to the County on request upon completion of the project.

16.2.3 The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon Contractor by the General Conditions and the rights and remedies available to County and Project Manager thereunder, shall be in addition to, and shall not be construed in any other way as a limitation of, any rights and remedies available to them which are otherwise imposed or available by law, by special guarantee or by other provisions of the Contract Documents.

16.2.4 Should County or Contractor suffer injury or damage to his person or property because of any error, omission or act of the other or any of his employees or agents or others for whose acts he is legally liable, notice of said injury shall be made in writing to the County within five days of the first observance of such injury or damage.

16.2.5 The Contract Documents shall be governed by the laws of the State of California. In case any provision of the Contract Documents, including without limitation these General Conditions, shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any other way be affected or impaired.

16.2.6 No waiver by County of any provision of the Contract Documents, including without limitations these General Conditions, shall constitute a waiver of any other provision thereof.

16.2.7 The waiver of any instance is not a waiver in the second instance.

ARTICLE 17 - EQUAL OPPORTUNITY

17.1 The Contractor shall maintain policies of employment as follows:

17.1.2 The Contractor and all subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination.

17.2 See also Federal, State and County requirements in - SUPPLEMENTARY CONDITIONS.

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SUPPLEMENTARY CONDITIONS

SUPPLEMENTARY CONDITIONS

1. Statements and Payrolls

1.1 The Contractor and each subcontractor shall preserve his payroll records for a period of three years from the date of completion of this contract.

1.2 The Contractor shall submit weekly a copy of all payrolls to the Project Manager. The copy shall be accompanied by a statement signed by the employer or his agent indicating that the payrolls are correct and complete and that the wage rates contained therein are not less than those determined by the Department of Industrial Relations. The Contractor and subcontractor may use standard forms furnished by the Project Manager or any other form approved by the Project Manager. The Contractor shall be responsible for the submission of copies of payrolls of all subcontractors.

1.3 The payrolls and payroll records shall contain the full name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid. They shall also indicate apprentices and ratio of apprentices to journeymen. The employees' address and social security number need only appear on the first payroll on which his name appears.

1.4 If, on or before the 20th of the month, the Contractor has not submitted satisfactory payrolls for all work performed during the monthly period ending on or before the 6th of that month, the Owner will retain an amount equal to 5 percent of the estimated value of the work performed during the month from the next monthly estimate, except that such retention shall not exceed $10,000 nor be less than $1,000. Retention for failure to submit satisfactory payrolls shall be additional to all other retention's provided for in this contract. The retention for failure to submit payrolls for any monthly period will be released for payment on the monthly estimate for partial payments next following the date that all the satisfactory payrolls for which the retention was made are submitted.

2. Accident Prevention

2.1 Precautions shall be exercised at all times for protection of persons (including employees) and property. These shall include, but not be limited to, installation of adequate safety guards and protective devices for all equipment and machinery, whether used in the performance of work or permanently installed as part of the work. Contractor shall comply with all applicable laws relating to safety precautions, including safety regulations of CAL-OSHA.

2.2 Where conditions of the work present unreasonable risk or death to persons, or property damage, in the judgment of the Owner, it may direct Contractor at his sole expense, to close down the work and not commence work again until the hazardous condition is eliminated.

2.3 Nothing herein shall be deemed to allow use of shoring, sloping or protective system less effective than that required by the Construction Safety Orders of CAL-OSHA.

3. Air Pollution - State Requirements

3.1 In connection with Public Contracts Code Section 10231, Contractor and his subcontractors shall comply with all air pollution control rules, regulations, ordinances, and statutes which apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances, and statutes specified in Government Code Section 11017. Fugitive Dust Permit and construction emission dust/control plan will be required by the Tehama County Air Pollution Control District (TCAPCD). They advised that open burning without a permit is restricted.

4. Anti-Trust Claims

4.1 By execution of this contract, Contractor agrees to and does hereby assign to awarding body all right, title, and interest in and to all causes of action it may have under the Clayton Act (15 U.S.C. Sec. 15) Section 4 or under the Cartwright Act (Business and Professions Code) Section 16700 et. seq., arising from purchases of goods, services, or materials made in performance of this contract. The parties shall deem this assignment effective at the time of the tender of final payment to Contractor without further acknowledgment. Contractor shall include, or cause to be included, similar provision in any subcontract entered into for any part of the work of this contract.

5. Anti-Kick Back

5.1 The Contractor must comply with the provisions in the Copeland "Anti-Kick Back Act" (18 USC 874) as supplemented in Department of Labor Regulations (29 CFR, Part 3). This Act provides that each contractor shall be prohibited from inducing, by any means, any person employed in the construction, completion or repair of public work, to give up any part of the compensation to which he is otherwise entitled.

6. Equal Opportunity - Federal Requirements

6.1 Selection of Labor: During the performance of this contract, the Contractor shall not discriminate against labor from any other State, possession or territory of the United States.

6.2 Employment Practices: During the performance of this contract, Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contract will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment

advertising; layoffs or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Owner setting forth the provisions of this nondiscrimination clause.

b. The Contractor will, in all solicitation or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex or national origin.

c. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the Owner advising the said labor union or workers' representative of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations (41 CRF, Part 60) and relevant orders of the Secretary of Labor.

e. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and order of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations or orders, this contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts of Federally-assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

g. The Contractor will include the provisions of this Section in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor.

No otherwise qualified handicapped individual in the United States as defined in Section 7 (5) of the Rehabilitation Act of 1973 (P.L. 93-112) shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under this contract.

6.3 Air Pollution - Federal Requirements: The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act of 1970.

6.4 Assurance of Minority Business Enterprise Participation

6.4.1 The bidder's execution of the signature portion of this proposal shall also constitute execution of this assurance.

6.4.2 Disadvantaged Business Enterprises (40 CFR Part 33). The Recipient agrees to comply with the requirements of USEPA's Program for Utilization for Small, Minority, and Women's Business Enterprises. The DBE rule can be accessed at www.epa.gov/osbp. The Recipient shall comply with, and agrees to require its prime contractors to comply with 40 CFR Section 33.301, and retain all records documenting compliance with the six good faith efforts. (IUP)

7. Fair Employment Practices - State Requirements

7.1 In connection with the performance of work under this contract, Contractor agrees as follows:

a. Contractor will not willfully discriminate against any employee or applicant for employment because of race, color, religious creed, physical handicap, medical condition, marital status, ancestry, sex or national origin. Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, ancestry, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the awarding authority setting forth the provision of this Fair Employment Practices section.

b. Contractor will send to each labor union or representative of workers with which he has collective bargaining agreement or other contract or understanding, a notice, to be provided by awarding authority, advising said labor union or workers' representative of Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

c. Contractor will permit access to his records of employment, employment advertisements, application forms and other pertinent data and records by the Fair Employment and Housing Commission, awarding authority or any other appropriate agency of the State of California designated by awarding authority for purposes of investigation to ascertain compliance with Fair Employment Practices section of this contract.

d. A finding of willful violation of the Fair Employment Practices section of this contract or of the Fair Employment and Housing Act shall be regarded by awarding

authority as a basis for determining Contractor to be not a "responsible bidder" as to future contracts for which such Contractor may submit bids, for revoking the Contractor's prequalification rating, if any, and for refusing to establish, re-establish or re prequalification rating for the Contractor.

Contractor shall immediately notify Awarding Authority if it the Fair Employment and Housing Commission has determined that a complaint alleging that Contractor has violated the Fair Employment and Housing Act is valid. Contractor shall immediately provide to Awarding Authority any agreement Contractor entered into under Government Code section 12964 and immediately notify Awarding Authority of any civil action brought against Contractor pursuant to Government Code section 12964.

Awarding authority shall deem a finding of willful violation of the Fair Employment and Housing Act to have occurred upon receipt of notice any such notice from Contractor, the Fair Employment and Housing Commission, and or Superior or Federal Court.

Upon receipt of such written notice, Awarding authority shall notify Contractor that unless he demonstrates to the satisfaction of Awarding authority within a stated period that the violation has been corrected, his prequalification rating will be revoked at the expiration of such period.

e. Contractor agrees, that should the awarding authority determine the Contractor has not complied with the Fair Employment Practices section of this contract, then pursuant to Labor Code Sections 1735 and 1775, Contractor shall, as a penalty to the awarding authority, forfeit, for each calendar day, or portion thereof, for each person who was denied employment as a result of such non-compliance, the penalties provided in the Labor Code for violation of prevailing wage rates. Such moneys may be recovered from Contractor. Awarding authority may deduct any such damages from any moneys due Contractor from the State of California.

f. Nothing contained in this Fair Employment Practices Section shall be construed in any manner or fashion so as to prevent awarding authority of the State of California from pursuing other remedies that may be available at law.

Nothing contained in this Fair Employment Practices section shall be construed in any manner or fashion so as to require or permit hiring of an employee not permitted by the National Labor Relations Act.

g. Prior to award of the contract, Contractor shall certify to awarding authority that he has or will meet the following standards for affirmative compliance, which shall be evaluated in each case by awarding authority:

(1) Contractor shall provide evidence, as required by the awarding authority, that he has notified all supervisors, foremen, and other personnel officers in writing of the content of the anti-discrimination clause and their responsibilities under it.

(2) Contractor shall provide evidence, as required by awarding authority, that he has notified all sources of employee referrals (including unions, employment agencies,

advertisements, Department of Employment Development) of the content of the anti-discrimination clause.

(3) Personally, or through his representative, Contractor shall, through negotiations with unions with whom he has agreements, attempt to develop an agreement, which will:

(a) Spell out responsibilities for non-discrimination in hiring, referral, upgrading and training.

(b) Otherwise implement an affirmative anti-discrimination program in terms of the unions' specific areas of skill and geography, to the end that qualified minority workers will be available and given equal opportunity for employment.

(4) Contractor shall notify contracting agency of opposition to the anti-discrimination clause by individuals, firms or organizations during the period of its prequalification.

h. Contractor shall include the provisions of the foregoing paragraphs (a) through (g) in every first tier subcontract, so that such provisions will be binding upon each such subcontractor.

8. Additional Division of Labor Standards Enforcement Requirements

8.1 On each job site that is subject to compliance monitoring and enforcement by the Department of Industrial Relations, the prime contractor is required to post job site notices prescribed by regulation (See 8 Calif. Code Reg. §16451(d).

8.2 All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (AKA Division of Labor Standards Enforcement) in compliance with California SB 854.

DIVISION 01 – GENERAL REQUIREMENTS

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SECTION 01090

REFERENCE STANDARDS

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PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Quality assurance.

B. Schedule of references.

1.02 RELATED SECTIONS

A. Standards as noted in individual Sections of these Specifications.

1.03 QUALITY ASSURANCE

Contractor shall:

A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard by date of issue current on date of Contract Documents, unless specifically noted.

C. Obtain copies of standards when required by Contract Documents.

D. Maintain a copy of the applicable reference standards at jobsite during submittals, planning, and progress of the specified work, until Substantial Completion.

E. Should specified reference standards conflict with Contract Documents, request clarification from the District before proceeding.

F. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.04 SCHEDULE OF REFERENCES

AA Aluminum Association
818 Connecticut Avenue, N.W.
Washington, DC 20006

AABC Associated Air Balance Council
1000 Vermont Avenue, N.W.
Washington, DC 20005

AASHTO American Association of State Highway and Transportation Officials
444 North Capitol Street, N.W.
Washington, DC 20001

ACI American Concrete Institute
Box 19150

	Reford Station Detroit, MI 48219
AI	Asphalt Institute Asphalt Institute Building College Park, MD 20740
AIA	American Institute of Architects 1735 New York Avenue, N.W. Washington, DC 20006
AICS	American Institute of Steel Construction 400 North Michigan Avenue Eighth Floor Chicago, IL 60611
AISI	American Iron and Steel Institute 1000 16th Street, N.W. Washington, DC 20036
AITC	American Institute of Timber Construction 333 W. Hampden Avenue Englewood, CO 80110
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
APA	American Plywood Association Box 11700 Tacoma, WA 98411
ARI	Air-Conditioning and Refrigeration Institute 1501 Wilson Boulevard Arlington, VA 22209
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329
ASME	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWPA	American Wood-Preservers' Association 7735 Old Georgetown Road Bethesda, MD 20014
AWS	American Welding Society 550 LeJeune Road, N.W. Miami, FL 33135
AWWA	American Water Works Association 666 West Quincy Avenue Denver, CO 80235

CLFMI	Chain Link Fence Manufacturers Institute 1101 Connecticut Avenue, N.W. Washington, DC 20036
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumberg, IL 60195
DHI	Door and Hardware Institute 7711 Old Springhouse Road McLean, VA 22102
FGMA	Flat Glass marketing Association 3310 Harrison White Lakes Professional Building Topeka, KS 66611
FM	Factory Mutual System 1151 Boston-Providence Turnpike P.O. Box 688 Norwood, MA 01062
FS	Federal Specification General Services Administration Specifications and Consumer Information Distribution Section (WFSIS) Washington Navy Yard, Bldg. 197 Washington, DC 20407
GA	Gypsum Association 1603 Orrington Avenue Evanston, IL 60201
ICBO	International Conference of Building Officials 5360 S. Workman Mill Road Whittier, CA 90601
IEEE	Institute of Electrical and Electronics Engineers 345 East 47th Street New York, NY 10017
MFMA	Maple Flooring Manufacturers Association 60 Rivere Drive Northbrook IL 60062
MIL	Military Specification Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120
ML/SFA	Metal Lath/Steel Framing Association 221 North LaSalle Street Chicago, IL 60601
NCMA	National Concrete Masonry Association P.O. Box 781 Herndon, VA 22070

NEBB	National Environmental Balancing Bureau 8224 Old Courthouse Road Vienna, VA 22180
NEMA	National Electrical Manufacturers' Association 2101 "L" Street, N.W. Washington, DC 20037
NFPA	National Fire Protection Association Battery March Park Quincy, MA 02269
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077
PS	Product Standard U.S. Department of Commerce Washington, DC 20203
RIS	Redwood Inspection Service One Lombard Street San Francisco, CA 94111
RCSHSB	Red Cedar Shingle and Handsplit Shake Bureau 515 116th Avenue Bellevue, WA 98004
SDI	Steel Deck Institute P.O. Box 9506 Canton, OH 44711
SDI	Steel Door Institute 712 Lakewood Center North 14600 Detroit Avenue Cleveland, OH 44107
SIGMA	Sealed Insulating Glass Manufacturers Association 111 East Wacker Drive Chicago, IL 60601
SMACNA	Sheet Metal and Air Conditioning Contractor's National Association 8224 Old Court House Road Vienna, VA 22180
TCA	Tile Council of America, Inc. Box 326 Princeton, NJ 08540
UL	Underwriters' Laboratories Inc. 333 Pfingston Road Northbrook, IL 60062
WIC	Woodwork Institute of California 1331 T Street Sacramento, CA 95807

WCLIB West Coast Lumber Inspection Bureau
6980 S.W. Varns Road
Box 23145
Portland, OR 97223

WWPA Western Wood Products Association
1500 Yeon Building
Portland, OR 97204

1.05 SCHEDULE OF GOVERNING CODES

A. See Drawings for a list of applicable codes and regulations which shall govern, except where otherwise indicated.

B. Refer to individual Specification Sections for additional codes and regulations which shall apply to the individual Work of said Sections.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

A. All work shall be done in accordance with governing codes. A copy of each shall be kept at the jobsite at all times.

END OF SECTION

SECTION 01200

PROJECT MEETINGS

1.01 GENERAL

A. Meetings:

1. Project Manager will schedule regular project meetings as required. Contractor shall attend with appropriate staff, subcontractors, and suppliers.

2. Meetings shall include, but not be limited to:

a. Pre-construction conference

b. Work progress.

c. Schedule and coordination.

d. Payment review.

e. Changes in the work.

f. Pre-installation.

B. Administration: Project Manager will prepare agenda, conduct meetings, and distribute recorded proceedings and decisions to meeting participants and affected persons.

C. Project Manager and ARCHITECT: Will attend each meeting.

D. Space and Facilities: By Contractor at job site except Pre-construction *Conference* by Project Manager.

1.02 PRE-CONSTRUCTION CONFERENCE

A. With Contractor and subcontractors, within 10 days after Notice to Proceed. Time as determined by Project Manager.

1.03 PROGRESS MEETING

A. General: Not less than once a month on a regular, scheduled basis.

B. Attendance: Project Manager, Owner, ARCHITECT, Contractor, and subcontractors, sub-subcontractors, suppliers and others as required by the Project Manager.

1.04 GUARANTEE, BONDS, SERVICE AND MAINTENANCE CONTRACTS MEETING

A. General: Eleven months following date of final acceptance, meet to review guarantees, bonds, and service and maintenance contracts for materials and equipment.

B. Action: Repair or replace defective work. Extend service and maintenance contracts as desired.

C. Attendance: Project Manager, ARCHITECT, ARCHITECT's professional consultants as appropriate, Contractor, subcontractors, suppliers and others as appropriate to the agenda.

1.05 SPECIAL

Called by Project Manager as warranted by developed conditions.

END OF SECTION

SECTION 01300

SUBMITTALS

1.01 SECTION INCLUDES

A. Submittal procedures.

B. Construction progress schedules.

C. Schedule of Values.

D. Submittals and Shop Drawings.

E. Product Data.

F. Samples.

G. Mock-Ups.

H. Manufacturers' instructions.

I. Manufacturers' certificates.

1.02 RELATED SECTIONS

A. Section 1039 - Coordination and Meetings

B. Section 01310 - Construction Schedule

C. Section 01400 - Quality Control: Manufacturers' field services and reports.

D. Section 01600 - Material and Equipment / Substitutions.

E. Section 01700 - Contract Closeout: Contract warranty and manufacturer's certificates closeout submittals.

1.03 SUBMITTAL PROCEDURES

A. Timing:

1. Make submittals within the times specified herein. Do not submit all at one time. Submit in accordance with the sequence of procurement, fabrication and construction.

2. Make submittals far enough in advance of scheduled dates of installation to allow the time required for reviews, for securing necessary approvals, for possible revision and resubmittal, and for placing orders and securing delivery.

B. Identification:

1. Identify each submittal and resubmittal with the following information:

a. Project name and address as they appear on the Contract Documents.

b. Contract name and number.

c. Contractor's name and address.

d. Date of submission.

e. Numbering System: Submittals shall be identified by specification section (i.e., 02810-001, 07210-001, 11191-001, etc.) Any resubmittals shall be numbered sequentially according to the original submittal section, followed by the subscript ".1, .2, .3, etc. submittal number (i.e., 001.1, 001.2, etc.). Submittals and resubmittals shall be kept intact with the original number. Do not add new drawing or information outside the scope of the original submittal, unless specifically requested. Do not assign a new number for a resubmittal.

f. Reference: List Specification Section number and product reference as a cross-reference for each submittal.

2. Identify each submittal with the following additional identification:

a. Contractor's stamp with initials or signature, certifying to review of submittal, compliance with Contract Documents, and coordination with other impacted work, and verification of field measurements. The architect will return any submittal not bearing this stamp without being reviewed.

b. Drawing and Specifications SECTION numbers to which the submittal applies.

c. Subcontractor's or suppliers name and address.

d. Name and telephone number of the individual to contact for additional information regarding the submittal.

e. Whether it is an original or a resubmittal.

C. Coordination of Submittals:

1. General: Prior to submittal for the Architect's or consultant's review, as applicable, fully coordinate material as follows:

a. Determine and verify field dimensions and conditions, materials, catalog numbers, and similar data.

b. Coordinate shop drawing submittals with previously issued Addenda and Information Bulletins.

c. Coordinate with the various types of Work, and public agencies involved.

d. Secure necessary approvals from public agencies and others and signify by stamp, or other means, that approvals have been secured.

e. Unless otherwise specifically permitted by the Architect, make submittals in groups containing all associated items.

2. Completeness: Submittals shall be complete; partial submittals will be rejected for not complying with the Contract Documents.

D. Coordinate preparation and processing submittals with performance of construction activities.

1. Make submittals in groups containing associate items to ensure that information is available for checking each item when received.

a. Partial submittals may be rejected as not complying with requirements of Contract documents and Contractor shall be liable for any resulting delays.

2. Requests for deviation from Contract Documents shall be submitted for consideration before submittal of affected items. Only deviations, which have been previously accepted in writing, shall be included in submittals.

E. Place permanent label or title block on each submittal for identification. Indicate name or entity preparing each submittal in label or title block. See Paragraph 1.01.C herein for further information requirements on each submittal label or title block.

1. Provide space on label or beside title block to record Contractor's and Architect's review and approval markings and action taken.

F. Contractor's Review:

1. Review submittals for accuracy, completeness, and conformity with Contract Documents.

a. Submittal shall be construed as stipulating Contractor has thoroughly and completely reviewed, and coordinated data.

b. Submittals that indicate less than Contractor's full compliance will be returned without action.

c. Delays caused by failure to comply will not be acceptable basis for extension of Completion Time.

G. Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.

H. Package each submittal appropriately for transmittal and handling.

I. Project Architect's Review:

1. Submittals are reviewed for general conformance with design concept and general compliance with information given in Contract Documents only.

2. Review of separate item shall not indicate acceptance of assembly of which item is part.

J. Review shall not relieve Contractor from responsibility for errors or deviations from requirements of Contract Documents.

K. Submittal Log: Maintain accurate submittal log for duration of Contract. Indicate current status of all submittals at all times. Make submittal log available for the Project Manager's review upon request.

L. Resubmittals:

1. Subject to same terms and conditions as original submittal.

2. Project Architect will accept not more than one resubmittal.

a. Should additional resubmittals be required, Contractor shall reimburse Owner for Project Architect's account for time spent in processing additional resubmittals at rate of 2.5 times rate of Direct Personnel Expense (DPE). Direct Personnel Expense is defined as direct salaries of Project Architect's personnel engaged on Project and portion of costs of mandatory, and customary contributions and benefits related thereto, including employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, pensions, and similar contributions and benefits.

3. Claims will not be considered for Contractor's additional time or expense associated with resubmittals.

M. Revisions:

1. Make only those revisions required or accepted by Project Architect.

2. Identify all changes made since previous submittal.

N. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

O. Review or approval of any of the Contractor's submittals shall not relieve the Contractor of any of his/her responsibilities under the Contract for the successful completion of the Work in conformity with the requirements of the Drawings and Specifications. Any such review or approval shall not serve to waive any of the requirements of the Drawings or Specifications, nor to relieve the Contractor of any obligation thereunder. Defective, sub-standard, or non-complying work, materials, or equipment may be rejected, notwithstanding their previous review and/or approval.

P. Special Submittals: In addition to submittals required by the Contract Documents, Contractor shall submit the following:

1. Submittals required by governmental authorities and agencies of jurisdiction, as applicable.

Q. Substitutions: Refer to Section 01600.

1.04 CONSTRUCTION PROGRESS SCHEDULES

A. Refer to Section 01310.

1.05 SCHEDULE OF VALUES

A. Submit a typed schedule on AIA Form G703 or other approved 8-1/2" x 11" format; Contractor's standard media-driven printout will be considered on request.

B. Format: Table of Contents of Volume 2 Specifications, with modifications as may be directed by Owner; identify each line item with number and title of major Specification sections.

C. Include in each line item a directly proportional amount of contractor general conditions, overhead, and profit.

D. Revise schedule to list change orders for each Application for Payment.

1.06 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER SUBMITTALS

A. General:

1. Submit only as required by the various Specification SECTIONS. Do not submit shop drawings, product data, samples or other submittals, unless specifically required.

2. Submit in accordance with the accepted submittal schedule. Send copies of transmittals to the Owner.

3. Submit in the manner and quantities specified hereinafter.

4. Allow a minimum of 15 working days for processing by the Architect and his consultants, as applicable. Some submittals may require more processing time based upon consultant's input and the complexity of the submittal. If certain submittals are critical, they should be so identified at time of submission. If a specific submittal cannot be reviewed and returned within 15 working days, the Architect will develop with the Contractor a timely "turn-around" that will not impact the construction schedule.

B. Shop Drawings:

1. Submit in the quantity required to be returned, together with 2 additional copies of black-line or blue-line prints.

2. The Architect or his consultants, as applicable, will review the Shop Drawings; mark the drawings with required revisions; stamp the drawings and indicate "No Exceptions Noted," "Furnish as Corrected," "Revise and Resubmit," or "Rejected," and return the drawings. "Revise and Resubmit" or "Rejected" stamps shall not be construed by the Contractor as a valid reason for an extension of time.

3. Review the returned drawings and take appropriate action as indicated.

a. If drawings are marked "Revise and Resubmit," make revisions and indicate them with a "cloud," stamp and date, and resubmit in the same manner and number as for the original submittal.

b. If drawings are marked "Rejected," make a new submittal and submit in the same manner and number as for the original submittal.

c. If drawings are marked "No Exceptions Noted" or "Furnish as Corrected", print and distribute copies for Owner and Inspector, as well as those required for Contractor and Subcontractors.

4. The Architect or his consultants, as applicable, may review at their discretion up to one resubmittal and take action, as appropriate, in the same manner as for the original submittal. If more than one resubmittal is required, any associated costs as a result of additional reviews shall be an extra service of the Architect or his consultants, as applicable, and will be processed as a deductive Change Order in accordance with the GENERAL CONDITIONS and SUPPLEMENTARY CONDITIONS.

5. As with the original submittal, review the returned drawings and take appropriate action as indicated. As specified hereinabove, resubmit and revise until final action by the Architect or his consultants, as applicable. Final action is signified by the markings "No Exceptions Noted," or "Furnish as Corrected," on the returned drawings.

6. Following final action by the Architect or his consultants, as applicable, the Contractor shall make copies and distribute as required for accomplishment and inspection of the indicated Work.

7. Only those Shop Drawings which bear stamps showing final review of the Contractor, Architect, or the Architect's consultants, as applicable, shall be used.

8. Reproduction and Mailing Costs: The Contractor shall pay the reproduction and mailing costs of reproducibles and all prints.

9. Coordination drawings are a special type of Shop Drawing that show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or function as intended.

    a. Preparation of coordination Drawings is specified in Section 01040 “Project Coordination” and may include components previously shown in detail on Shop Drawings or Product Data.

    b. Submit coordination Drawings for integration of different construction elements. Show sequences and relationships of separate components to avoid conflicts in use of space.

C. Product Data:

1. Submit in the quantity required to be returned, together with two additional copies each of brochures, catalog cuts, and similar material.

2. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, rough-in diagrams and templates, wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."

   a. Submit number of copies which Contractor requires, plus four copies which will be retained.

   b. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:

      1. Manufacturer's printed recommendations
      2. Compliance with recognized trade association standards
      3. Compliance with recognized testing agency standards
      4. Application of testing agency labels and seals
      5. Notation of dimensions verified by field measurement
      6. Notation of coordination requirements

   c. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.

3. Review and processing of Product Data shall be the same as that for Shop Drawings.

D. Samples:

1. Submit in the size specified in the individual Specification SECTIONS, and in the quantity required to be returned to the Contractor, together with two additional Samples, which will be retained by the Architect or his consultants, as applicable.

2. Ship samples to the Architect's office, carriage prepaid.

3. Submit samples to illustrate functional and aesthetic characteristics of Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

4. Preliminary Submittals:

   a. Unless precise color, pattern, and texture or similar characteristics are specifically described, submit full set of choices for material or product.

   b. Preliminary submittals will be reviewed and returned with Project Architect's mark indicating selection and other action.

   c. Architect reserves right not to make individual determination or selections until all samples of all materials are submitted.

d. Submit samples of all selected colors, patterns, textures or other similar characteristics as selected by Project Architect.

5. Submit number of samples required by Contractor plus three that will be retained.

a. Where variation in color, pattern, texture or other characteristics are inherent in material or product, submit multiple units (not less than 3), that show approximate limits of variations.

b. Accepted samples will form standard of comparison for finished Work.

c. Defects, and deviations in excess of those in accepted samples, are unacceptable and are subject to rejection of completed Work.

6. Include identification on each sample, with full Project information, including:

a. Project name and location

b. Manufacturer and supplier

c. Name, finish, and composition of material

d. Location where material is to be used

e. Specification Section number.

7. Reviewed samples which may be used in the Work are indicated in individual specification sections.

8. Field Samples: Provide field samples as required by individual sections. Install samples in locations as directed, completed and finished.

E. Other Submittals: Submit as specified in the individual Specification Sections.

1. Distribute after review.

2. Unless specifically authorized in advance by the Owner, no fabrication or installation of any Product, material, component, or system of the Project shall begin until the specific submittals and shop drawings therefore (and/or other required submittal items, as may be applicable) have been reviewed by the Architect, and returned to the Contractor with indication that no exception is taken, or that the subject Work may be furnished as corrected on the shop drawings.

3. The Contractor shall inform each of his/her subcontractors and suppliers of the various requirements found throughout the Specifications concerning the submission of shop drawings and related submittals for review by the Architect.

4. Submittals and shop drawings prepared by the Contractor or his/her subcontractors or suppliers for submission to the Architect shall be checked by the Contractor before submission. In particular, the Contractor shall ascertain that the submittals and shop drawings meet all requirements of the Contract Documents and conform to the actual dimensions and conditions at the job site. Contractor shall be fully responsible for observing the need for and making any changes required by the equipment Contractor proposes to supply. If the submittals and shop drawings show variations from Contract Drawings or Specifications, whether because of standard practice or other reasons, the Contractor shall make special mention thereof in his/her letter of transmittal; if no specific mention of such variation is made the Contractor will not be relieved of the responsibility for completing the work in full accordance with the Contract Documents, even though

such shop drawings are noted "REVIEWED", "NO EXCEPTIONS TAKEN", or similar notation by the Architect.

5. Submittals and shop drawings shall be drawn to scale, shall show all necessary working and final dimensions and such details, sections, plans, and elevations (all properly cross-referenced to the Contract Drawings) as are necessary to clearly delineate arrangements, construction, and connection with other Work; and shall illustrate all Work contiguous with and having a bearing on Work indicated. Submittals and shop drawings shall indicate the Project name, the names of the Contractor and the subcontractor, the name or description of the equipment or articles shown, the manufacturers' names, and the kinds, types, grades, thickness, and finishes of materials or equipment to be installed in the work. Marked up copies of standard or "generic" product data, catalog cuts, manufacturer's drawings, etc., showing non-Project-specific conditions will not be acceptable, unless their specific application to the Project is clearly indicated.

6. Manufacturers' brochures shall be acceptable for submittals, provided that they comply with the requirements listed above and with applicable Sections of the Specifications. If manufacturers' brochures are used, they shall clearly and explicitly delineate what is being submitted.

7. Timeliness: Submittals and shop drawings shall be submitted in such time as to cause no delay in the orderly progress of Work, layout, or fabrication under the Contract. Proper allowances shall be made for checking by the Architect and such correcting, resubmission and re-checking as may be necessary.

8. The review of submittals and shop drawings by the Architect will be general, and shall not relieve the Contractor from his/her sole responsibility for errors or omissions of any sort; nor for proper fitting and construction of the Work; nor for the furnishing of materials or Work required by the Contract Documents but not shown; nor for required quantity of material; nor for correctness of dimensions. Any request by the Architect for change and corrections on shop drawings shall not be construed as an order of extra work under the Contract.

1.07 MOCK-UPS

A. Provide as required by individual Sections of the Specifications.

B. Refer also to Section 01400, Quality Control.

1.08 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual Specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, an finish, in quantities specified for Product Data.

B. Identify conflicts between manufacturers' instructions and Contract Documents.

1.09 MANUFACTURER'S CERTIFICATES

A. When specified in individual Specification Sections, submit manufacturers' certificate to the Owner for review, in quantities specified for Product Data.

B. Indicate that material(s) or Product(s) conform to or exceed specified requirements. Submit supporting reference data, affidavits, and certifications, as appropriate.

C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Owner.

END OF SECTION

SECTION 01310

CONSTRUCTION SCHEDULE

1.01 SCOPE

A. The work under this section consists of the planning, scheduling and reporting procedures required in conjunction with the progress of the work. It is the intent that the Contractor shall develop a schedule-demonstrating fulfillment of all contract requirements. The levels of detail and submittal procedures are described hereinafter.

B. The schedule shall be updated a minimum of once a month at a joint meeting with the Project Manager, General Contractor and required subcontractors.

C. Development and maintenance of the construction schedule and supplementary information as detailed hereinafter is the responsibility of he Contractor.

D. The Contractor shall use the accepted schedule at all times in planning, coordinating and performing the work under this contract including all activities of the subcontractors, vendors and suppliers.

1.02 THE COMPLETE PROJECT SCHEDULE

A. Within 10 working days after receipt of Notice to Proceed, the Contractor shall submit the schedule in accordance with all requirements of this section. The schedule shall reflect the Contractor's approach to scheduling the COMPLETE project, including all submittals; procurement and all required testing and operational requirements called for elsewhere in the documents.

B. Within 5 working days after receipt of the schedule, the Project Manager will meet with the Contractor for joint review, correction or adjustment of the proposed schedule. Within five (5) working days after the joint review, the Contractor shall if necessary revise and shall resubmit the COMPLETE Schedule to the Project Manager. The resubmission will be reviewed by the Project Manager, and, if found to be as previously agreed upon, will be accepted.

C. The accepted schedule shall constitute the project work schedule until subsequently revised in accordance with requirements of this section.

1.04 SCHEDULE REQUIREMENTS

A. The schedule shall show the sequence and interdependence of activities required for complete performance of all items of work under the contract or portion thereof

B. The Contractor shall submit the following supporting data with the submittal of his original CPM construction schedule:

1. The proposed number of working days per week.

2. The holidays to be observed during the duration of the contract (by day, month and year).

3. The planned number of shifts per day.

4. The number of hours per shift.

5. The planned usage of major construction equipment on the site, on a monthly basis.

6. The average weekly manpower usage for each trade to be employed on the project.

Any changes to the above information shall be submitted with successive updates and revisions.

C. To the extent that the schedule or any revised schedule shows anything not jointly agreed upon, it shall be deemed to have not been accepted by the Project Manager. Failure to include any element of work required for the performance of this contract shall not excuse the Contractor from completing all work required within any applicable completion date of each phase notwithstanding the Project Manager's acceptance of the schedule.

1.05 ACTIVITY COST DATA

A. The contractor shall furnish the Project Manager with a cost allocation (schedule of values) totaling to the contract amount, for all items detailed in the schedule. The Project Manager will prepare a Payment Request form this allocation. Once accepted by the Project Manager, the Payment Request form will become the basis for determining the progress payments for the balance of the project and the Contractor must submit his monthly Payment Request based upon progress reported on this form. No payment will be made unless supported by this Payment Request form completed to show monthly progress.

B. The cost distribution may include cost for delivered equipment and material and the Project Manager will pay for only such items as identified elsewhere in these Contract Documents. All costs represented will include a pro rata distribution for overhead and profit: No separate item shall be shown for overhead and profit.

C. Where the work of several trades is combined into one activity, the Contractor shall furnish for each such combined activity the cost breakdown of each trade on sheets separate from the network diagram. The sum of the costs for each trade shall equal the total dollar value of each such combined activity.

D. Revisions to the schedule may require reallocation of costs. Revised activity cost data shall be submitted with revised Schedules as necessary, and a revised Payment Request form will be provided after approval of revised cost allocations.

1.06 PROGRESS REPORTING, UPDATING, AND REVISIONS

A. On a date mutually agreed upon by the Project Manager and the Contractor, a job site progress meeting will be held each month at which time the schedule will be reviewed and updated. Attendees of this meeting shall include the Project Manager, the General Contractor and subcontractors if requested by the Project Manager. The Contractor shall have his copy of the Payment Request form and all other data required by the Contract Documents accurately filled in and completed prior to this meeting. Job progress and the Schedule will be reviewed to verify:

1. Payment due to the Contractor based on percentage complete of items in the submitted Payment Request form.

2. Logic, time and cost data for change order work that is to be incorporated into the schedule or Payment Request form.

3. Status of as-built record drawings and as-built record specifications.

B. The Contractor shall submit a narrative report as a part of his monthly progress review and update in a form agreed upon by the Contractor and the Project Manager.

The narrative report shall include:

1. Actual start and finish dates of activities completed during update period since the last accepted revision.

2. Explanation of all changes in logic or in the scheduled work sequence, in durations, manpower and equipment.

3. A description of the critical path for the remainder of the project.

4. An explanation of corrective action taken or proposed.

C. After each monthly update or revision, the Contractor shall submit to the Project Manager one complete schedule showing all revisions and changes in accordance with the monthly review meeting.

D. Within five (5) working days after receipt of notice from the Project Manager, the Contractor shall submit a revised Schedule for any of the following reasons:

1. When delay in completion of any activity or group of activities indicates an overrun of the contract time or milestone requirement, by 20 working days or ten percent (10%) of the remaining duration, whichever is less.

2. Delays in submittals or deliveries or work stoppage are encountered which make replanning or rescheduling of the work necessary.

3. The schedule does not represent the actual prosecution and progress of the project as being performed in the field.

E. Acceptance of any revised Schedule and all supporting data is contingent upon compliance with all other paragraphs of this section and any other previous agreements or requirements with or by the Project Manager.

F. The cost of revisions to the Schedule resulting from contract changes shall be included in the cost for the change in work, and shall be based on the complexity of the revisions or contract change, man-hours expended in analyzing the change, and the total cost of the change.

1.07 RESPONSIBILITY FOR COMPLETION

A. The Contractor agrees that whenever it becomes apparent from the monthly progress review meeting or the schedule that contract completion dates will not be met, he shall take some or all of the following action at no additional cost to the Owner:

1. Increase construction manpower in such quantities and crafts as will bring the progress of the work into conformance with all other requirements of this section.

2. Increase the number of working hours per shift, shifts per working day, workdays per week, the amount of construction equipment or any combination of the foregoing, to bring the scheduling and progress of the work into conformance with all requirements of the Contract Documents.

3. Reschedule the work under this contract in conformance with all other contract requirements to demonstrate completion of the contract work within the contract time.

1.08 ADJUSTMENT OF THE CONTRACT TIME

A. The contract time will be adjusted only for causes specified in the Contract Documents. In the event the Contractor requests an adjustment of the contract time, he shall furnish such justification, schedule data and supporting evidence as the Project Manager may deem necessary for a determination as to whether or not the Contractor is entitled to an adjustment of time under the provisions of the contract. Submissions of proof based on revised activity logic, durations and costs is obligatory with any request.

B. The Contractor shall submit each request for an adjustment in the contract time to the Project Manager in accordance with all other requirements of the Contract Documents. The Contractor shall include, as part of each request:

1. Justification for the delay in narrative form.

2. A subnetwork showing all CPM logic revisions, duration changes, and cost changes, for the work in question and its relationship to other activities on the Schedule.

C. The schedule must clearly display that the Contractor has used, in full, all the float time available for the work involved in this request. Actual delays in activities, which according to the schedule, do not affect the critical path work in the Schedule, will not be the basis for an adjustment to the contract time.

D. The Project Manager's determination as to the adjustment of the contract time shall be based upon the latest schedule that has been accepted at the time of the alleged delay and all other relevant information. The Contractor shall submit with every request, an updated Schedule whenever the actual field progress of the work does not conform to the accepted schedule in force at the time of the alleged delay. The data if approved by the Project Manager shall be included in the next monthly updating of the schedule.

E. The Project Manager shall, within a reasonable time after receipt of a request for extension of the contract time and supporting evidence, review the facts and shall advise the Contractor, in writing of his decision.

F. When the Project Manager has not yet made a final determination as to the adjustment of the contract time, and the parties are unable to agree as to the amount of the adjustment to be reflected in the Schedule, the Contractor shall reflect that amount of time adjustment in the Schedule as the Project Manager may determine to be appropriate for interim purposes. It is understood and agreed that any such interim determination by the Project Manager shall not be binding and shall be made only for the purpose of continuing to schedule the work until such time as the Project Manager has made a final determination as to any adjustment of the contract time. The Contractor shall revise the Schedule prepared thereafter in accordance with the final decision.

END OF SECTION

SECTION 01400

QUALITY CONTROL

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. Quality assurance and control of installation.

B. References.

C. Field samples.

D. Mock-ups.

E. Inspection Services.

F. Manufacturer's field services and reports.

1.02 RELATED SECTIONS

A. Section 01090 – Reference Standards.

B. Section 01300 – Submittals.

C. Section 01410 – Testing Laboratory Services.

D. Section 01600 – Material and Equipment / Substitutions: Requirements for material and product quality.

1.03 QUALITY ASSURANCE/CONTROL OF INSTALLATION

Contractor shall:

A. Monitor quality control over sub-contractors, suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of highest quality.

B. Comply fully with manufacturer's instructions, including each step in sequence.

C. Should manufacturers instructions conflict with Contract Documents, request clarification from the Architect before proceeding.

D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Perform work by persons qualified to produce workmanship of specified quality.

F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.04 REFERENCES

A. Conform to reference standard by date of issue current on date of Contract Documents.

B. Contractor shall obtain copies of standards when required by Contract Documents.

C. Should specified reference standards conflict with Contract Documents, Contractor shall request clarification from Architect before proceeding.

D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.05 FIELD SAMPLES

A. Contractor shall install field samples at the site as required by individual specification Section for review.

B. Acceptable samples represent the minimum required quality level for the Work.

C. Where field sample is specified in individual Sections to be removed, clear area after field sample has been accepted by Architect.

1.06 MOCK-UPS

A. Contractor shall assemble specified items, complete, with specified attachment and anchorage devices, seals, and finishes, as applicable.

B. Where mock-up is specified in individual Sections to be removed, Contractor shall clear the area after the mock-up has been accepted by Architect.

1.07 INSPECTION SERVICES

A. The District will provide services of a person or persons to perform inspection of the Project. Contractor shall:

1. Notify District at least 48 hours prior to expected time for operations requiring specific inspection.

2. Make arrangements with District's inspector(s) and pay for additional samples and tests required for Contractor's use.

1.08 MANUFACTURERS' FIELD SERVICES AND REPORTS

Contractor shall:

A. When specified in individual Specification Sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment and as applicable, and to initiate instructions when necessary.

B. Submit qualifications of observer to Project Manager 30 days in advance of required observations. The observer is subject to approval of District.

C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

D Submit report in duplicate within 30 days of observation to Project Manager for review.

END OF SECTION

SECTION 01410

TESTING LABORATORY SERVICE

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PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Selection and payment.

B. Contractor submittals.

C. Laboratory responsibilities.

D. Laboratory reports.

E. Limits on testing laboratory authority.

F. Contractor responsibilities.

G. Schedule of inspections and tests.

1.02 RELATED SECTIONS

A. Division 00 - Contract Conditions (General Provisions Paragraph 4-07).

B. Section 01090 - Reference Standards.

C. Section 01300 - Submittals: Manufacturer's certificates.

D. Section 01700 - Contract Closeout: Project Record Documents.

E. Drawings and individual Specification Sections: Inspections and tests required, and standards for testing.

1.03 REFERENCES

A. ANSI/ASTM D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.

B. ANSI/ASTM E329 - Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction.

C. The Geotechnical Investigation included as Appendix Item #1 of this Project Manual. (This report is provided for general information only, and neither the District nor the Architect warrants its accuracy or completeness.)

1.04 SELECTION AND PAYMENT

A. District will provide services of an independent testing laboratory to perform specified inspection and testing, or perform said inspection and testing in-house.

1.05 LABORATORY RESPONSIBILITIES

A. All concrete mixes are to be submitted for approval and the maximum slump shall be 4 inches unless otherwise approved. Concrete cylinders (3) will be taken for each type of

pour. The contractor has to hire a firm to text the cylinders at 7, 14 and 28 days. The contractor is to submit mix designs for approval.

1.06 CONTRACTOR RESPONSIBILITIES

Contractor shall:

A. Deliver to laboratory at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.

B. Cooperate with laboratory personnel, and provide access to the Work and to manufacturer's facilities.

C. Provide incidental labor and facilities to provide access to Work to be tested, to obtain and handle samples at the site or at source of products to be tested, to facilitate tests and inspections, storage and curing of test samples.

D. Notify Inspector and laboratory 24 hours prior to expected time for operations requiring inspection and testing services.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 SCHEDULES OF INSPECTIONS AND TESTS

A. As required by individual Specification Sections.

B. As required by Drawings.

END OF SECTION

SECTION 01500

TEMPORARY FACILITIES

1.01 GENERAL

A. Provide temporary facilities as shown or specified and as required to complete the work per Contract Documents.

B. Providing temporary facilities is the Contractor's sole responsibility, and is not limited to the minimums established by the requirements hereof. Except as otherwise indicated, the use of alternative temporary facilities equivalent to those specified is the Contractor's option, subject to the Project Manager's or the ARCHITECT's acceptance. Temporary construction facilities are defined to exclude tools and self-contained construction machines and equipment.

C. The types of temporary construction facilities as may be required for the project include:

1. Construction water distribution.

2. Dewatering facilities and drains.

3. Temporary enclosure.

4. Temporary heat

5. Ventilation and humidity control

6. Construction aids and miscellaneous facilities.

7. Temporary power distribution.

8. Temporary lighting.

1.02 QUALITY ASSURANCE

A. Regulations: Comply with governing regulations for the installation and use of temporary construction facilities, including health and safety regulations.

B. Standards: Comply with the "Manual of Accident Prevention in Construction" by AGC (AGC Safety Manual) and with NFPA Code 241 "Building Construction and Demolition Operations," and with ANSI AIO-Series standards "Safety Requirements for Construction and Demolition" and State of California Department of Indus-trial Relations, Division - Occupational Safety and Health CAC Title 8.

1.03 SUBMITTALS

A. General*:* Submit copies of whatever reports of inspections, tests, gauge readings and similar data and copies of permits and certificates have been secured for the operation of temporary construction facilities, including those used for dewatering, distributing power, lighting and similar operations.

1.04 JOB CONDITIONS

A. Schedule uses: Provide the temporary construction facilities ready for use at each location, at the time first needed to avoid delays in the performance of the work. Maintain, expand and modify as needed through the progress of work, and do not remove until no longer needed or replaced by authorized use of completed permanent facilities of the project.

B. Temporary use of permanent facilities: Regardless of previously assigned responsibilities for temporary facilities, the Installer of each permanent facility shall assume responsibility for its operation, maintenance and protection during use as a construction facility prior to the Project Manager's acceptance and assumed operation of the facility.

C. Conditions of use: Operate, maintain, control and protect temporary construction facilities in a manner which will prevent overloading, hazardous exposures, fire, disease, damage or deterioration of completed work, pubic nuisances, and similar deleterious effects.

1.05 MATERIALS OF TEMPORARY FACILITIES

A. General: Provide either new or used materials and equipment, which are in substantially undamaged condition. Provide materials and equipment which are recognized in the construction industry, by compliance with appropriate standards, as being suitable for the intended use in each case, and capable of being maintained properly through the course of anticipated use at the project site.

B. Water hoses: Where shut-off nozzles are used at the discharge of water hoses, provide heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system. Where non-potable water is used, provide adequate warning sign on discharge end of each length of hose.

C. Heating units: Provide temporary heating unites which have been tested and labeled by UL, FM, FIA or a recognized trade association relate to the fuel being consumed (AGA, NEMA, or other).

D. Tarpaulins: Waterproof and fire-retardant type, UL labeled with a flame-spread rating of 15 or less. Provide translucent type (Laminated polyethylene with nylon reinforcement, or similar) for temporary enclosure where work is being or will be performed.

E. Voltage differences: Provide identification warning signs at power outlets which are other than 110-120 volt power. Provide polarized outlets for plug-in type outlets.

F. Electrical power cords: Use only grounded extension cords; hard-service type where exposed to abrasion and traffic of any kind.

G. Lamps and light fixtures: Provide general service type incandescent lamps of the wattage indicated or required for adequate illumination. Where exposed to breakage by construction operations, protect lamps with guard cages or tempered glass enclosures. Provide exterior type fixtures where exposed to weather or moisture.

1.06 INSTALLATION OF TEMPORARY FACILITIES

A. General:

1. Use qualified tradesmen for the installation of temporary construction facilities. Locate facilities where they will serve the total project construction work adequately, and result in minimum interference with performance of the work. Relocate, modify and extend facilities as required during the course of the work, to properly accommodate the entire work of the project.

2. Changeover from the use of temporary facilities to the use of the permanent facilities at the earliest feasible date in each portion of the building. Do not use permanent water piping for the distribution of non-potable water.

B. Dewatering facilities and drains: For general temporary drainage and dewatering facilities and operations provide dewatering as required to maintain the site, excavations and the construction free of water.

C. Temporary Enclosure: Where required, provide temporary enclosure of materials, equipment, work in progress and completed portions of work, so as to afford protection for both the work and employees, from whatever ill effects may result from the work or the weather. Provide temporary enclosure wherever temporary heat is needed and permanent building enclosure is neither yet completed nor adequate for the containment of temporary heat. Coordinate temporary enclosures with ventilating and drying-of-the-work requirements, so as to avoid dangerous conditions and ill effects.

D. Temporary heat:

1. At each stage of construction in each portion of the building, restrict the selection of temporary heating facility to a method that is recognized as safe and without ill effect upon the work in place and being installed. Provide temporary heat wherever needed for the proper performance of the work, or for curing or drying of work recently installed, or for the protection of work in place from adverse effects of low temperatures or high relative humidity. Coordinate temporary heating with ventilation requirements to produce the indicated ambient condition required for the work, and at the same time to minimize the consumption of fuel or energy.

2. Except as otherwise indicated, maintain a minimum temperature of 45 degrees F in permanently enclosed portions of the building, and in areas where finished work has been installed.

E. Temporary ventilation: Ventilate wherever possible through the use of natural ventilation, utilizing temporary heat and temporary enclosures and openings to effect the needed movement of air where necessary. Operate units with filters and baffles to avoid the distribution of dust and to minimize other ill effects upon the work.

F. Construction aids and miscellaneous facilities: This category of temporary construction facilities includes scaffolding, ramps, runways, staging, temporary stairs, ladders, sheeting, shoring, cross-lot bracing, bridge, guard rails, barriers, closures, platforms, swing stages and temporary partitions. The design, construction and maintenance of these facilities is the sole responsibility of the Contractor. Provide whatever facilities are needed to accommodate the performance of the entire work of the project.

G. Temporary power distribution:

1. Provide a weatherproof, grounded, temporary power distribution system sufficient to accommodate the performance of the entire work of the project, including the use of tools, equipment and electrical construction machines, temporary electrical heating, the operation of test equipment and systems which cannot be delayed until permanent power connections are operable, temporary operation of other temporary facilities including permanent equipment and systems which must be placed in operation prior to use of permanent power connections (pumps, HVAC equipment, elevator, and similar equipment) and power for temporary operation of existing facilities (if any) at the site during change-over to the new permanent power system. Provide circuits of adequate size and proper power characteristics for each use. Run circuit wiring generally overhead, and rise vertically in locations where it will be the least exposed to possible damage from construction operations, and result in the least interference with the performance of the work. Provide rigid steel conduit or equivalent raceways for wiring, which must be exposed on grade, floors, decks or other recognized exposures to damage or abuse.

2. Provide overload-protected disconnect switch for each temporary power circuit, located at the power distribution center.

3. For general use of power hand tools and task lighting, provide temporary 4-gang outlets at each floor level, spaced so that each area of work can be reached with a 100' extension cord. Provide separate 110-120 volt, 20-amp circuit for each 4-gang outlet (4 outlets per circuit).

4. Provide metal conduit, tubing or armored cable for protection of temporary power wiring; except, at Contractor's option and where permitted by code, wiring of circuits not exceeding 110-120 volt, 20 amp rating may be nonmetallic sheathed cable in areas where located overhead and exposed for surveillance, Provide metal enclosures or boxes for wiring devices.

5. It is assumed that required electric welding, if any, will be powered by the use of engine-driven power-generator sets, not by power from the temporary system.

H. Temporary lighting:

1. General: Provide a general, weatherproof, grounded temporary lighting system in every area of construction work, as soon as the overhead floor/roof deck structure has been installed. Provide sufficient illumination for safe work and traffic conditions. Run circuit wiring generally overhead, and rise vertically in locations where it will be least exposed to possible damage from construction operations. Do not expose on grade, or other recognized areas of possible damage or abuse.

2. For general temporary lighting in construction areas, provide not less than one 200-watt incandescent lamp per 1000 square feet of floor area, uniformly distributed; or provide equivalent illumination of a similar nature. Provide not less than 100-watt incandescent lamps in corridors and similar traffic-ways spaced no more than 50' apart, except provide one lamp at each stairway or ladder landing.

3. Nonmetallic sheathed cable may, at Contractor's option and where permitted by code, be used for wiring lighting circuits where located overhead and exposed for surveillance. Provide metal conduit, tubing or armored cable where concealed or exposed to possible damage during construction operations. Do not wire temporary lighting with plain exposed (insulated) electrical conductors.

1.07 OPERATIONS AND TERMINATIONS:

A. Supervision: Enforce strict discipline in the use of temporary facilities. Limit availability of facilities to essential uses.

B. Maintained operations: Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour-per-day basis where required to achieve the indicated results in the work, and avoid the possibility of damage to the work and temporary facilities.

C. Prevent water-filled piping and vessels from freezing, whether temporary or permanent, by either draining or by insulation or heating.

D. Termination and removal:

1. At the time the need has ended for each temporary construction facility, or for a substantial element of the facility, or when it has been replaced by authorized use of a permanent facility, or no later than the time of substantial completion, promptly remove the temporary facility unless requested by the Project Manager to retain it

for a longer period of time. Complete the work, which may have been delayed because of interference's with temporary facilities, and restore work which may have been affected by temporary facilities. Repair damaged work, clean exposed surfaces, and replace work that cannot be satisfactorily restored. Except as otherwise indicated, the materials and equipment of temporary facilities remain the property of the contractors.

2. At the time of substantial completion clean and renovate permanent facilities, which have been used to provide temporary services during the construction period. Replace significantly worn parts and parts which may have been subjected to unusual operating conditions. Restore facilities to a substantially good-as-new condition in every respect. Replace used facilities that cannot be satisfactorily restored.

END OF SECTION

SECTION 01540

SECURITY AND PROTECTION

1.01 DESCRIPTION OF REQUIREMENTS

A. This section of General Requirements specifies minimum requirements of temporary provisions for security and protection not specified elsewhere. The providing of adequate security and protection is Contractor's sole responsibility, and is not limited to minimums established by requirements hereof. Except as otherwise indicated, use of alternative security and protection methods of facilities equivalent to those specified, is Contractor's option. The work of this section is not intended to include required insurance coverage, performance/payment bonds, individual provisions for safe performance of specific work, first aid requirements, general supervision, quality control, damage surveys, prequalification of construction personnel, temporary enclosure of completed work and stored materials, inspection and tests of the work, instructions to Owner's personnel and similar recognized protection/security provisions, which are, nevertheless, specified elsewhere in the Contract Documents, if required.

B. The types of security and protection facilities and services required for project (entire project not just work of contract) include but are not necessarily limited to the following:

1. Temporary fire protection.

2. Barricades, warning signs, lights.

3. Barrier fence enclosure.

4. Security enclosure and lockup of work.

5. Environmental protection. Coordinate permits with California Department of Fish and Game prior to commencing with the work (note: owner has paid the permit fee).

C. Coordinate with Owner to minimize conflict, and to facilitate Owner's operations. Coordinate with owner for a security plan, which will include ingress and egress, identification, protection of staff, materials and tools.

1.02 QUALITY ASSURANCE

A. Regulations: Comply with governing regulations for installation and operation of security and protection facilities, including rules and recommendations of fire departments, police rescue squads, watchman services and similar local organizations and companies.

B. Standards: Comply with NFPA Code 241 "Building Construction and Demolition Operations."

C. Responsibilities: The assignment of responsibilities for security and protection such as installation, maintenance and operation, is Contractor's obligation; refer to "Guidelines on Bid Conditions for Temporary Job Utilities and Services," by AGC and the Association of Specialty Contractors for industry recommendations.

1.03 JOB CONDITIONS:

A. Scheduled uses: Provide security and protection at times first needed at site; and maintain, expand and modify facilities as needed throughout construction period.

B. Temporary use of permanent facilities: The Installer of each permanent facility shall be required to assume responsibility for its operation, maintenance and protection during use (if any) as a temporary security or protection facility, prior to Owner's acceptance and assumed operation of facility.

C. Conditions of use: Use security and protection facilities and services in a safe, sanitary, lawful, and publicly acceptable manner, which will not interfere unduly with performance of the work nor result in other deleterious effect.

1.04 MATERIALS OF SECURITY AND PROTECTION FACILITIES

A. General: Provide either new or used materials and equipment, which are in substantially undamaged and serviceable condition.

B. Fire extinguishers: Provide type A fire extinguishers for temporary offices and similar spaces where there is minimal danger of electrical fires or grease-oil-flammable liquid fires. Otherwise, provide either type ABC dry chemical extinguishers or a combination of several extinguishers of NFPA-recommended types for exposure in each case.

C. Plywood: Provide exterior type, prime painted and finish painted. For fences and vision barriers provide minimum 5/8" thick plywood. For safety barriers and similar direct-contact uses, provide minimum 5/8" thick plywood.

1.05 INSTALLATION OF SECURITY/PROTECTION FACILITIES

A. General:

1. Use qualified tradesmen for installation of security and protection facilities. Locate facilities to serve total project construction work adequately, and to result in minimum interference with performance of the work. Relocate, modify and extend facilities as required during course of the work, to properly accommodate entire work of the project. Provide and maintain a reasonably neat and uniform appearance in security and protection facilities, acceptable to Project Manager.

2. Provide temporary security and protection facilities until time of substantial completion, or for longer periods of time as requested by Project Manager.

B. Temporary fire protection:

1. General:

a. During construction period and until time certain protection needs may be fulfilled by permanent facilities, install and maintain whatever types and forms of fire protection temporary facilities may be needed to adequately protect against fire losses which are reasonably predictable and controllable. Except as otherwise indicated or required, comply with the applicable recommendations of NFPA No. 10 "Portable Fire Extinguishers" for each area of each construction activity when combustible materials, flammable liquids and similar exposures to possible fires are present. Locate extinguishers where most convenient and effective for intended purposes. Store combustible materials in recognized fire-safe locations and containers.

b. The local fire authority shall be consulted regarding temporary fire protection.

2. Program: Develop and supervise an overall fire prevention and first-aid fire protection program for personnel at project site. Instruct personnel in methods and procedures of program; post warnings and information, and enforce strict discipline. Review needs with local fire department officials and establish procedures to be followed. Maintain unobstructed access to extinguishers, fire hydrants, temporary fire protection facilities, stairways, and other access routes for fighting fires.

3. Temporary water: Where temporary water outlets are available, provide hoses of adequate length to reach construction areas associated therewith. Hang hoses with warning sign, to effect that it is for fire protection and is not to be removed. Match hose sizes with outlet sizes, and equip with suitable nozzles.

C. Permanent fire protection: not applicable

D. Barricades, warning signs and lights: Comply with recognized standards and code requirements for erection of substantial and structurally adequate barricades where needed to prevent accidents and losses. Provide lighting where appropriate and needed for recognition of facility, including flashing red lights where appropriate.

E. Enclosure fence: Installed by others. (Contractor will be responsible for any damage to and replacement of temporary fencing.)

F. Security enclosure and lockup:

1. General: Install substantial and durable temporary enclosure of partially completed areas of construction, with locking entrances, adequate to prevent unauthorized entrance, vandalism, theft, and similar deleterious effects and violations of project security. It is recognized that enclosure fence around construction site does not provide adequate security against certain exposure to loss by theft and vandalism.

2. Storage: Where materials and equipment must be temporarily stored, prior to and during construction, and are of substantial value or attractive for possible theft, provide secure lockup and enforce strict discipline in connection with timing of installation and release of materials, so that opportunity for theft and vandalism is minimized.

G. Environmental protection: Provide protection facilities, operate temporary facilities, conduct construction activities, and enforce strict discipline for personnel at project site in ways and by methods which comply with environmental protection regulations, and which minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable and deleterious effects might result from performance of the work at project site. Avoid use of tools and equipment, which produce harmful noise; and restrict use of noise-making tools and equipment to hours or use which will minimize noise near project site.

1.06 TERMINATION AND REMOVAL

Maintain protection and security facilities and services in good operating condition through time of use and until completion and use of permanent work makes each temporary service unnecessary, or until Owner's occupancy has replaced the need for service or until its discontinuation has been otherwise authorized. Remove each facility promptly after its use has been terminated. Complete or restore permanent work that may have been delayed or otherwise affected by temporary facility. Replace work, which cannot be satisfactorily restored. Except as otherwise indicated materials and equipment of temporary security and protection facilities remain property of contractors.

END OF SECTION

SECTION 01590

TEMPORARY GENERAL SERVICES

1.01 DESCRIPTION OF REQUIREMENTS

A. Provide temporary services and facilities which will enable construction processes, and will accommodate other necessary activities at the project site. Providing adequate general services is the Contractor's sole responsibility, and is not limited to the minimums established by the requirements hereof. Except as otherwise indicated, the use of alternative general services equivalent to those specified is the Contractor's option, subject to the Project Manager's acceptance. Temporary general services exclude inspection and testing services, surveys, photographs, security provisions, protection, safety, final cleaning, startup of systems, instructions to Owner's personnel and other services which are recognized to be similar to the work of this section but are specified in other sections hereof, if required.

B. The types of temporary general services required for the project include, but are not necessarily limited to, the following:

1. Sanitary facilities.

2. Collection/disposal of waste materials.

3. Miscellaneous general services.

1.02 QUALITY ASSURANCE

A. Regulations: Comply with governing regulations for the installation and use of general service facilities, including health and safety regulations.

B. Standards: Comply with the "Manual of Accident Prevention in Construction" by AGC (AGC Safety Manual) and with NFPA Code 241 "Building Construction and Demolition Operations."

C. Responsibilities: Except as otherwise indicated, the assignment of responsibilities for installing facilities and performing general services, and for complying with trade regulations and union jurisdictions associated therewith, is the Contractor's obligation.

1.03 SUBMITTALS

Submit copies of inspection reports, certificates, permits and similar documentation required or issued in connection with general services.

1.04 JOB CONDITIONS

A. Scheduled uses: Provide temporary general services at the time first needed at the site; and maintain, expand and modify the facilities as needed throughout the construction period.

B. Conditions of use: Operate, maintain, control and protect general service facilities in a manner which will prevent fire, hazardous exposures, health problems, unsanitary conditions, pollution, contamination, discomfort to users, flooding, freeze-up, interference with the construction work, public nuisances and similar deleterious effects.

1.05 MATERIALS AND EQUIPMENT OF GENERAL SERVICES

A. General: Provide either new or used materials and equipment for general service facilities, which are in substantially undamaged and serviceable condition. Provide types and qualities, which are recognized in the construction industry as suitable for the intended use in each application.

B. Drinking water: Potable water approved by local health authorities.

C. Construction materials: For offices, fabrication shops, storage sheds and similar construction, provide standard manufactured prefabricated or mobile home construction insulated and weather-tight where indicated to be heated or air conditioned; or provide equivalent job-built construction. Equip each unit with locked entrances, operable windows, roofing, adequate foundations for usual loading including wind loads, serviceable finishes of the types indicated, and mechanical/electrical equipment as needed to achieve the ambient conditions indicated.

D. Self-contained toilet units: Single-occupant, self-contained units of the chemical aerated recirculation type fully enclosed with a glass fiber reinforced polyester shell or similar non-absorbent material, properly vented and maintained in operation.

E. Project Sign: Except as otherwise indicated, provide 4’ x 8’ exterior type, grade B-B with high density concrete form overlay plywood (PS 1), on design provided by Engineer. Provide exterior-grade enamel for painting sign panels and applying required graphics.

1.06 INSTALLATION OF GENERAL SERVICE FACILITIES

A. General: Locate facilities where they will serve the total project construction work adequately, and result in minimum interference with performance of the work. Relocate, modify and extend facilities as required during the course of the work, to properly accommodate the entire work of the project.

B. Sanitary facilities:

1. General: Sanitary facilities include toilets, wash facilities, and drinking water fixtures. Comply with governing regulations including safety and health codes for the type, number, location, operation, and maintenance of fixtures and facilities, but provide not less than the specified requirements. Install sanitary facilities in available locations which will best serve the needs of personnel at the project site.

2. Toilets: Choice of either self-contained toilet units or water/sewer connected temporary toilet installations (or both) is the Contractor's option to the extent permitted by governing regulations.

3. Drinking water fixtures: Supply drinking water for construction personnel by either water-system-connected drinking fountains or by containerized tap-dispensers with paper cups (or both) at Contractor's option.

C. Collection and disposal of wastes: Establish and enforce a daily system for collecting and disposing of waste materials from construction areas and elsewhere at the project site. Do not hold collected materials at the site for periods of more than 7 days, nor for periods of more than 3 days during hot weather (when daily temperatures can be expected to rise above 80 degrees F). Handle hazardous, dangerous, unsanitary, contaminated, polluting and similar harmful wastes separately from inert materials, by containerizing in an appropriate manner. Dispose of each category of waste material in a lawful manner. Do not bury or burn waste materials on the Owner's property.

D. Parking: Arrange for temporary surface parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking. Parking areas must be approved by Project Manager due to environmentally sensitive areas (i.e. vernal pools, wetlands)

E. Miscellaneous general services: Include whatever general services may be required, or are found to be necessary, for the accommodation of the work. The items of general service which may be needed include, but are not necessarily limited to, the installation of postal delivery service, parking spaces at the temporary offices, walkways in and around the construction area and personal protection items for employees and visitors.

1.07 OPERATIONS AND TERMINATIONS

A. Supervision: Enforce strict discipline in the use of general services at the project site. Limit availability of facilities to essential and intended uses, so as to minimize wastes and the possibility of abuses and the resulting unsanitary and hazardous or dangerous conditions. Do not allow temporary offices and similar temporary or permanent spaces to be used as living quarters, or for other unintended occupancies or uses.

B. Maintenance: Operate and maintain general services in good operating condition through the time of use, and until removal is authorized. Protect from damage by weather.

C. Termination and removal: When the need has ended for each temporary general service facility, or at the time of substantial completion, promptly remove the facility unless requested by the Project Manager to retain it. Complete or restore permanent work which may have been delayed or otherwise affected by the temporary facility. Replace work which cannot be satisfactorily restored. Except as otherwise indicated, the materials and equipment of temporary general services remain the property of the Contractor. Owner reserves the right to take possession of project identification signs.

END OF SECTION

SECTION 01600

MATERIAL AND EQUIPMENT / SUBSTITUTIONS

PART 1 - GENERAL

1.01 SECTIONS INCLUDES

A. Products.

B. Transportation and handling.

C. Storage and protection.

D. Product options.

E. Substitutions.

1.02 RELATED SECTIONS

A. Division 00 - Contract Conditions (General Provisions Paragraph 4-10).

B. Section 01300 - Submittals.

C. Section 01400 - Quality Requirements.

1.03 PRODUCTS

A. "Products" means new material, machinery, components, equipment, fixtures, assemblies, and systems forming the Work; and does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

B. Do not use material and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

C. Provide interchangeable components of the same manufacturer, for similar components.

D. Comply with Specifications, referenced standards, and applicable codes and regulations as minimum requirements.

E. Provide new materials except as specifically allowed by Contract Documents.

F. Provide equipment and systems composed of materials from a single manufacturer except where otherwise recommended by equipment or systems manufacturer or where otherwise indicated in Contract Documents.

1.04 WORKMANSHIP

Contractor shall:

A. Comply with industry standards and applicable codes except when more restrictive tolerances or requirements indicate more rigid standards or precise workmanship.

B. Perform work by persons qualified to produce workmanship of specified quality.

C. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking. Seismic and vertical load anchors shall conform to applicable code requirements.

D. Install products plumb, straight and true, and in correct relationship to adjacent materials, with hairline joints, free of rough, sharp or potentially hazardous edges.

1.05 MANUFACTURERS' INSTRUCTIONS

A. When work is specified to comply with manufacturer's recommendations or instructions, distribute copies to persons involved, and maintain one set in field office.

B. Perform work in accordance with details or recommendations and instructions and specified requirements.

C. Should a conflict existing between the Specifications and recommendations or instructions, consult with the District.

D. Where manufacturer's information notes special recommendations in addition to installation instructions, comply with both recommendations and instructions.

1.06 PRODUCT OPTIONS

A. Contractor shall provide products listed in the Contract Documents, products by manufacturers listed in the Contract Documents, and products meeting specified requirements.

B. Procedures are described for requesting substitution of unlisted materials in lieu of materials named in the Contract Documents.

C. Contractor's Options:

1. For products specified only by reference standard, select products meeting the referenced standard.

2. For products specified by naming one or more products or manufacturers, select products of any named manufacturer meeting the Specifications.

3. For a product or manufacturer not specifically named, submit a Request for Substitution.

4. Where terms "or equal", or "or approved equal", or similar references are made, submit a Request for Substitution for any product or manufacturer not specifically named in the Contract Documents.

1.07 SUBSTITUTIONS

A.. The Contractor may submit written requests for substitutions for specified products within fifteen days preceding bid date or within 5 days following date of receipt of Notice to Proceed. Requests received after the 5 days will not be considered except for the following reasons:

1. Product discontinued.

2. Insufficient quantity except as caused by failure to award subcontract in time, or failure to order products so as to insure delivery without delay of work.

3. Delays beyond control such as strikes, fires, and acts of nature, war or civil disorder.

4. Reasons supported by sufficient evidence to satisfy the Project Manager that the request should be allowed.

B. Submit four copies of each request for substitution. Include in each request:

1. Complete data indicating compliance of substitute with Contract Documents.

2. For products:

a. Product identification including name and address of manufacturer, source of supply nearest job site, contract specifications identification, and location in the work.

b. Product data: Description, performance and test data, reference standards; for substitute and specified item.

c. Samples, if requested.

d. Name and address of similar projects on which product was used and date of installation.

e. Deduction from contract price to be allowed for acceptance of substitutions.

3. For construction methods:

a. Detailed description of proposed methods.

b. Drawings illustrating methods.

4. Itemized comparison of specified and proposed methods or products.

5. Data relating to changes in construction schedule.

6. Accurate cost data on substitution com- pared to costs of specified item.

C. In making request for substitution the bidder or Contractor represents:

1. He has investigated the proposed substitute and determined that it is equal or superior in all respects to the specified item.

2. He will provide the same guarantee, warranty bonds or other assurances for the substitute as for the specified item.

3. He waives all claims for additional costs related to the substitution that may develop.

4 Cost data is complete and includes all related costs under his contract.

D. Substitutions will not be considered if:

1. They are shown or implied on other submittals without formal request per this section.

2. Acceptance will require substantial revision of the Contract Documents or the work.

E. Only one substitution will be considered for any one material. If the requested substitution is not accepted the originally specified product must be supplied.

F. Action on Requests for Substitution Approval of request will be documented by Change Order. Denial of request will be made by letter or RFI.

1.08 TRANSPORTATION AND HANDLING

Contractor shall:

A. Transport and handle products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.09 STORAGE AND PROTECTION

Contractor shall:

A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.

B. For exterior storage of fabricated products, place on sloped supports, above ground.

C. Provide off-site storage and protection when site does not permit on-site storage or protection.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

E. Store loose granular materials on solid flat surfaces in a well-drained area. Prohibit mixing with foreign matter.

F. Provide equipment and personnel to storage products by methods to prevent soiling, disfigurement, or damage.

G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION

SECTION 01700

PROJECT CLOSEOUT

1.01 DESCRIPTION OF REQUIREMENTS

A. Definitions: Closeout includes the general requirements near the end of the contract time, in preparation for final acceptance, final payment, normal termination of the contract, occupancy by the Owner and similar actions evidencing completion of the work. Specific requirements for individual units of work are specified in the specification sections. The time of closeout is recognized to be directly related to "Substantial Completion," and therefore may be either a single period for the entire work or a series of periods for individual parts of the work which have been certified as substantially complete at different dates.

1.02 PREREQUISITES FOR SUBSTANTIAL COMPLETION

A. General: Prior to requesting Project Manager's inspection for certification of substantial completion, as required by the General Conditions, complete the following and list known exceptions in request:

1. Submit last Progress Payment Request, with sworn statement showing 100 percent completion of the work, complete with associated releases, consents and supports.

2. Submit statement showing final accounting of changes to the contract price.

3. Advise Project Manager of pending insurance change-over requirements.

4. Submit special guarantees, warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.

5. Obtain and submit, operating certificates, final inspection/test certificates, and similar releases enabling Owner's full and unrestricted use of the work and access to services and utilities.

6. Submit record drawings, maintenance manuals, final project photographs, damage or settlement survey, property survey, and similar final record information.

7. Deliver tools, spare parts, extra stocks of materials, and similar physical items to Owner.

8. Complete start-up testing of systems, and instructions of Project Manager's operating/maintenance personnel.

9. Discontinue (or change over) and remove from the project site temporary facilities and services, along with construction tools and facilities, and similar elements.

10. Complete the final cleaning.

11. Touch-up and otherwise repair and restore marred exposed finishes.

B. Inspection procedures: Upon receipt of Contractor's request, Project Manager will either proceed with inspection or advise Contractor of prerequisites for inspection not fulfilled. The number of items to be corrected or completed will be averaged. When the average exceeds four items, the inspection will be stopped and the Contractor advised that the work is not ready for inspection. The Contractor shall then resume the work. Following initial complete inspection, Project Manager will either prepare certificate of substantial

completion, or advise Contractor of work which must be performed prior to issuance of certificate; and repeat inspection when requested and assured that work has been substantially completed. Results of completed inspection will form initial "punch-list" for final acceptance.

1.03 PREREQUISITES FOR FINAL ACCEPTANCE

Prior to requesting Project Manager's final inspection for certification of final acceptance and final payment, as required by the General Conditions, complete the following and list known exceptions (if any) in request:

A. Submit final payment request with final releases and supports not previously submitted and accepted. Include certificates of insurance for products and completed operations.

B. Submit updated final statement, accounting for additional changes to the contract price.

C. Submit certified copy of Project Manager's final punch-list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, endorsed and dated by the Project Manager.

1.04 RECORD DOCUMENT SUBMITTALS

A. General: Specific requirements for record documents are indicated in individual sections of these specifications. The general requirements are indicated in individual sections of these specifications. The general submittal requirements are indicated in section 01.300. Do not use record documents for construction purposes; protect from deterioration and loss in a secure fire-resistive location; provide access to record documents for the Project Manager's inspection during normal working hours.

B. Record drawings: Refer to Section 01720 - Record Documents.

C. Maintenance manuals: Organize maintenance-and-operating manual information into suitable sets of manageable size, and bind into individual binders properly identified and indexed (thumb-tabbed); Include emergency instructions, spare parts listing, warranties, guarantees, wiring diagrams, recommended "turnaround" cycles, inspection procedures, shop drawings, product data, and similar applicable information. Bind each manual of each set in a heavy-duty 2", 3-ring, vinyl-covered binder, and include pocket folders for folded sheet information. Mark identification on both the front and spine of each binder.

1.05 CLOSEOUT PROCEDURES

A. General operating/maintenance instructions: Arrange for each installer of work requiring continuing maintenance or operation (by the Owner) to meet with the Project Manager's personnel, at the project site, to provide basic instructions needed for proper operation and maintenance of the entire work. Include instructions by manufacturer's representative where installers are not expert in the required procedures. Review maintenance manuals, record documentation, tools, spare parts and materials, lubricants, fuels, identification system, control sequences, hazards, cleaning and similar procedures and facilities. For operational equipment, demonstrate start-up, shutdown, emergency operations, noise and vibration adjustments, safety, economy/efficiency adjustments, and similar operations. Review maintenance and operations in relation with applicable guarantees, warranties, agreements to maintain, bonds, and similar continuing commitments.

1.06 FINAL CLEANING

A. General: Special cleaning for specific units of work is specified in the sections of specifications.

B. Provide final cleaning of the work, at the time indicated, consisting of cleaning and grading the work area to its preconstruction condition prior to placing the final erosion control measures.

END OF SECTION

SECTION 01720

RECORD DOCUMENTS

1.01 DESCRIPTION OF REQUIREMENTS

A. Record documents include those documents or copies relating directly to the performance of the work, which the Contractor is required to prepare or maintain for the Owner's records, recording the work as actually performed. In particular, record documents show changes in the work in relation to the way in which it was shown and specified by the original contract documents; and show additional information of value to the Owner's records, but not indicated by the original contract documents. Record copies include newly-prepared drawings (if any are specified), marked-up copies of contract drawings and shop drawings, marked-up copies of specifications, addenda and change orders, marked-up product data submittals, record samples, field records for variable and concealed conditions such as excavations and foundations, and miscellaneous record information on work which is otherwise recorded only schematically or not at all. Certain individual work sections indicate specific record-copy requirements, which extend the requirements of this section.

B. Refer to Section 01700 for general closeout requirements related to the submittal of record copies.

1.02 RECORD DOCUMENTS

A. Record Drawings:

1. Mark-up procedures: During the progress of the work, maintain a white-print set (blue-line or black-line) of contract drawings and shop drawings, with mark-up of actual installations which vary substantially from the work as originally shown. Mark whatever drawings are most capable of showing the as-built condition, fully and accurately. Where shop drawings are marked-up, mark cross-reference on contract drawings at the corresponding location. Mark with erasable colored pencil, using separate colors where feasible to distinguish between changes for different categories of work at the same general location. Mark-up important additional information which was either shown schematically or omitted from original drawings. Give particular attention to information on work to be concealed that would be difficult to identify or measure and record at a later date. Note alternative numbers.

2. Preparation of transparencies:

a. In preparation for certification of substantial completion on the last major portion of the work, review the completed mark-up of record drawings with the Project Manager. Identify and date each updated drawing.

b. Printing of original drawings, with addition of contract modifications, to produce transparencies and other prints as required herein is the Engineer's responsibility.

3. Distribution: Upon completion of the record drawings, prepare three copies of each drawing, regardless of whether changes and additional information were recorded thereon. Organize each of the three copies into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set. Organize and bind the mark-up set of prints (maintained during the construction period) in the same manner. Submit mark-up set, three copy sets, and transparencies to Project Manager for Owner's records.

B. Record Specifications: During the progress of the work, maintain one copy of the specifications, including addenda, change order and similar modifications issued in printed form during construction, and mark-up variations (of substances) in the actual work in comparison with the test of specifications and modifications as issued. Give particular attention to substitutions, selection of options, and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation. Note related record drawing information and product data, where applicable. Upon completion of mark-up, submit to Project Manager for Owner's records.

END OF SECTION

END OF DOCUMENT

Tehama County
Sanitation District No. 1
Closed-Circuit Television Inspection of Mineral Wastewater Collection System

SPECIFICATIONS

SECTION 1 CCTV INSPECTION OF SANITARY SEWER PIPELINES AND MANHOLES

A. GENERAL

DESCRIPTION OF WORK: This section covers pipeline flushing and cleaning, closed circuit television (CCTV) inspection of sanitary sewer pipelines and manholes, audio-visual recording of pipeline interiors, documentation of changed conditions on mapping sheets, delivery of inspection results, and all other associated work required to perform CCTV inspection of sewer pipelines and manholes.

SUBMITTALS: The Contractor shall make the following submittals related to this Section:

A. Submittals required with bid documents:

1. List of references per Part B. QUALIFICATIONS Section A.
2. Documentation of current Certification of all PACP requirements listed in Part B QUALIFICATIONS Section B.

B. Submittals required seven (7) days prior to Preconstruction Meeting:

1. A contact name and phone number for the Contractor's designated representative who will be on-site during the cleaning and inspection work, as well as the designated representative's backup.
2. A work schedule that includes the anticipated start date, dates of CCTV inspection for every pipeline, and project end date.
3. A list of sewer cleaning equipment to be used, including manufacturers' specifications for each piece of equipment (e.g., truck), and its associated tools (e.g., nozzles).
4. A list of video camera equipment to be used, including manufacturers' specifications for each camera type.
5. Product information on the GPS device to be used. Sub-meter accuracy is required for data collection. GPS device shall be capable of real-time, on-device (SBAS) sub-meter accuracy or paired with post-processing software to achieve sub-meter accuracy. If post-processing is to be used, product information on processing software shall be provided. NAD83/California Zone 1, US survey feet shall be used.
6. Site-specific Health and Safety Plan, including sanitary sewer overflow and emergency response plan and private back-up spill response and restoration

plan in accordance with regulatory and District requirements.

7. Hard copies of the following notification flyers:

    a. Project Notice Flyers
    b. Door Hangers
    c. Private Property Access Notification

C. Submittals required during first week of Project.

1. Upon beginning of the Project, the Contractor shall CCTV at least three (3) segments or 1,000 feet of pipe and submit the data to the Owner to verify the CCTV database is compatible with the Owner's PACP database and the deliverables are acceptable to the Owner. The Owner shall verify acceptability of the deliverables within two (2) business days of receipt. After the Owner verifies compatibility of the inspection deliverables including the database and GIS compatibility, the contractor may proceed with the Project. This submittal shall also include verification the CCTV footage counter is ±2LF of the actual distance between manholes.

D. Submittals required weekly during the Project.

1. The Contractor shall electronically submit the previous week's completed Daily Inspection Report Forms to the District by 12:00 PM every Friday, see National Association of Sewer Service Companies (NASSCO) Appendix A.
2. The Contractor shall provide the District with requests for information, or requests to alter the work required per this specification, a minimum of 5 working days before affected work is planned to commence.
3. The Contractor shall provide the District with requests for the District to provide assistance with locating or accessing the work required per this specification, a minimum of 5 working days before the affected work is planned to commence.

E. Submittals required at the conclusion of the Project.

1. Completed GIS shapefile (ESRI ArcGIS Version 10.3 compatible) in NAD83 California Zone 1 Feet coordinates containing the GPS location of every access point and pipeline mapped.
2. Completed cleaning and CCTV inspection data and reports as described in the section titled CCTV Inspection Reports.
3. Completed marked-up sewer system maps as described in the section titled Documentation.

QUALITY ASSURANCE: All work shall be performed in accordance with NASSCO Pipeline Assessment and Certification Program (PACP) and Manhole Assessment and Certification Program (MACP) standards and procedures.

B. QUALIFICATIONS

A. The Contractor must have an on-site field supervisor with a minimum three (3) years of experience specializing in the televising of sewers. A foreman for each crew performing television inspection with a minimum of five years of experience specializing in that type of work may be substituted for the on-site field supervisor requirement. The Contractor shall provide the names, titles, phone numbers, and addresses of a minimum of two references that can be used to verify this experience. The references must be contract managers or persons of authority over cleaning and televising work performed by the Contractor. The Contractor with less than three (3) years of experience may complete work if they can demonstrate to the satisfaction of the District that they have the capabilities, overall experience, equipment, and expertise to satisfactorily complete the project in accordance with these specifications.

1. The Contractor shall also provide five (5) similar projects with inspection equipment as proposed for this project.
2. The Contractor must have foreman or supervisors meeting all pre-qualifications for the duration of the contract.

Documentation supporting the minimum experience of the contracting company and the project supervisor shall be submitted with the Proposal as noted. Current PACP Certification of all CCTV operators working on this project and current MACP certification of all personnel performing sanitary sewer manhole inspection shall be submitted. Failure to demonstrate experience and/or current certifications shall be grounds for rejection of the bid and/or individual personnel.

B. PACP Requirements

1. Current NASSCO PACP certification of all CCTV operators, working on this project, will be required for all CCTV work.
2. Database shall be an NASSCO-PACP (Current Version) Certified Database, capable of being directly exported to and manipulated in Excel or an equivalent program.
3. CCTV Software shall be NASSCO-PACP (Current Version) certified.
4. CCTV inspection shall be performed using software that provides a free software viewer providing access to all report information.
5. CCTV inspections (Video and Data Collected) will be delivered entirely in digital format.

C. COORDINATION & SCHEDULING

COORDINATION: The Contractor shall make provisions to ensure the District can be present whenever CCTV inspection work is being performed. While it is understood that the District may not always be present, the Contractor understands that the District may be present at various points during the work to verify that the quality requirements are adhered to throughout the work.

All work is anticipated to be completed during normal daytime working hours, flows permitting, between 7 a.m. and 7 p.m. Monday through Friday. No work will be allowed on Saturdays, Sundays, or holidays officially recognized by the District unless otherwise approved by the District. The Contractor shall notify the District in writing of his work schedule including hours to be worked and days off. The Contractor's representative shall be available at the work site during the hours indicated in the work schedule. The work schedule will be used by the District to schedule construction observation personnel. No work shall be permitted outside the hours and days indicated by the schedule unless otherwise approved by the District.

NIGHT WORK: Night work is not anticipated; however, if it is necessary, night work shall adhere to the following guidelines:

A. Night work shall be completed between 11:00 PM and 6:00 AM.
B. The Contractor shall submit detailed plans and descriptions outlining all provisions and precautions taken to complete night work as required.

C. If flow reduction to meet the requirements for the maximum depth of flow cannot be achieved during night work, the Contractor shall move on to the next pipe segment in the schedule, continuing work uninterrupted, and notify the District the following working day. The District will then decide if the pipe segment will be removed from the required project work.

If CCTV inspection work reveals any defects or conditions that could reasonably lead to a sewer pipeline blockage or pipe or manhole failure in the near future, the Contractor shall provide a summary list of those defects at the end of each working day to the District via email. The list shall include the pipe segment, footage from a specified access point, defect type, and electronic CCTV report (i.e., inspection report) with color picture(s). Should the defect limit the Contractor's ability to continue work on the subject line, the Contractor shall move on to the next pipeline on the schedule and continue work uninterrupted.

Any obstructions that prohibit the Contractor from completing an inspection of the entire pipeline segment (as described in Pipeline Inspection Section) shall be reported to the District at the end of the work day. At the District's request, after District clears the blockage, it may be requested the line be inspected again as additional work, but at the same unit price.

If for any reason the Contractor anticipates that a defect could result in a Sanitary Sewer Overflow within twenty-four (24) hours, the Contractor shall immediately contact the District via telephone or person-to-person correspondence to make them aware of the condition.

TRAFFIC CONTROL & ACCESS: The Contractor shall thoroughly inspect the roadway surface over which his equipment will move and attempt to schedule only that equipment which will not cause damage to existing roadways. If it is necessary to use equipment that damages the roadway, the Contractor shall be liable for this damage regardless of whether the road meets current design standards or whether loads by said equipment are allowable. The intent is that the Contractor be responsible for any damage caused by this project.

Repair made necessary from non-compliance shall be as directed by the District with the intent that repairs such as patching, grading, etc., shall result in a road surface at least equal to that on adjacent roadway. Appearance of the area shall weigh heavily in determining the extent of repair to be ordered. Cost of repairs shall be borne entirely by the Contractor.

The Contractor shall normally maintain a minimum one-way traffic access on all roadways at all times. At the end of each working day, the Contractor's operations shall be left such that two-way traffic shall be maintained. Flagmen shall be used at each end of the work area at any time two-way traffic is not being maintained.

The Contractor shall provide for continuous and uninterrupted pedestrian and vehicular access to each residence and commercial establishment adjacent to the work. The convenience of the general public and residents and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner. The Contractor shall keep the residents informed of his proposed work schedule in such a manner that residences will have adequate notice to move their vehicles if access to their dwelling will be temporarily interrupted. Any deviation from this requirement must have prior authorization from the District.

D. EQUIPMENT

CLEANING EQUIPMENT:

A. Cleaning equipment shall be capable of removing dirt, grease, rocks, sand, roots, and other materials and obstructions from sewer lines and manholes. Alternatives to equipment described herein require approval by District prior to commencing work.

B. High-velocity hydraulic equipment (hydroflusher) shall be truck or trailer mounted. The equipment shall carry a nominal 800-gallon minimum water tank and have a minimum of 650 feet of high-pressure hose with a selection of two or more cleaning nozzles. The equipment shall be capable of supplying water at 30 gallons per minute at a minimum working pressure of 750 pounds per square inch (PSI), and regulated to not exceed a maximum pressure of 1,500 PSI. All controls shall be located so that the equipment can be operated above ground at minimal interference to existing traffic and/or danger to the operator.

   1. The nozzles shall be capable of producing a scouring action for any pipeline size scheduled to be cleaned.
   2. Hydraulically propelled equipment such as root saws or rotating chain flails may be used upon approval by the District for each line segment.
   3. Hydraulically propelled equipment such as sewer balls or movable dams shall not be used.
   4. Due to possible accessibility constraints, additional lengths of high-pressure hose may be required.
   5. It shall be the Contractor’s responsibility to provide all equipment required to complete cleaning work.

C. Vacuum truck shall be a minimum 27-inch mercury (high-vacuum unit) with a positive displacement blower, which produces a minimum of 3,500 CFM air flow, 8-inch suction tubes, and 16 cubic yards of hauling capacity for debris and water mixture.

D. Power rodding machines shall be of a continuous rod-type capable of holding a minimum of 1,000 lineal feet of rod. The machine shall have a positive rod drive to produce a 2,000-pound rod pull. To ensure safe operations, the machine shall have a fully enclosed body and an automatic safety throw-clutch and other safety equipment required by law.

Power rodding machines shall be equipped with proper tools for all types of cleaning in the sizes of pipe in which work is to be performed.

CCTV INSPECTION EQUIPMENT:

A. The Contractor shall use a color pan and tilt camera or a side wall scanning (panoramic) camera specifically designed and constructed for sewer inspection. Each sewer to be televised shall be suitably isolated to control flow during the inspection. The Contractor shall provide a recording of the televised sewer inspection, locating each sewer service connection entering the sewer.

B. Lighting for the pan and tilt camera or side wall scanning camera shall provide a clear picture of the entire periphery of the existing sewer.

C. The pan and tilt camera shall pause, pan, and visually inspect all service connections, pipe ends, and maintenance or structural defects. If utilizing a camera with side wall scanning capabilities, pausing and panning of each lateral is not necessary during the inspection if the image clearly depicts the inside of the lateral for post processing. If a blockage cannot be removed and hampers the televising of the sewer in one direction then the Contractor shall attempt to complete the section by televising from the other manhole to complete the section, this reversal should immediately follow the initial direction. The Contractor must immediately report the obstruction to the Owner.

D. Side wall scanning inspection systems are imaging cameras that are capable of a continuous 360 degree image capture of the wall of the pipeline being inspected. These systems may have one or multiple cameras to capture the complete interior view of the pipeline. Due to the high resolution of the image quality, the inspections may be conducted at a higher speed than color pan and tilt CCTV method. Once the pipeline inspections are completed, the captured images must be linked with a companion software package that allows for identifying and coding defects and features in the pipeline. Typically, these systems provide a fold flat view and an perspective view (typical of CCTV) of the pipeline.

E. If the image quality is not adequate for post-inspection coding, the Contractor shall be required to repeat the survey at the Contractor's expense.

F. The Contractor shall perform all CCTV inspections in accordance with NASSCO's Pipeline Assessment Certification Program (PACP). CCTV inspections will be delivered entirely in electronic format. The entire survey shall be recorded in an approved electronic format submitted with electronic links between the data and the video. All television inspection reports shall be within +/- two (2) feet of the measured linear footage between manholes along the existing sewer centerline from the start of pipe to end of pipe. All Owner and PACP required header information must be fully and accurately entered on all CCTV reports. Work not following these specifications may be rejected for payment and the Contractor may be required to re-do the work at his own cost.

G. The Contractor shall provide a PACP certified operator on-site at all times during the entire survey. If video is to be coded separately from the actual recording, both the on-site Operator and the individual performing the PACP coding shall be PACP certified. The Contractor shall provide proof of certification prior to commencement of work, prior to a change in personnel involved in data collection, and as requested by the Owner.

H. CCTV Reports, logs, electronic reports, and worksheets must include the following information and conform to the applicable guidelines:

1. CCTV Reports, NASSCO PACP Certified Database, and electronic worksheets must accompany all inspection work.
2. All Owner and NASSCO PACP required header information must be fully and accurately entered on all CCTV reports.

I. The television camera used for the inspection shall be one specifically designed and constructed for operation in connection with sewer inspection and capable of operating in 100 percent humidity conditions.

J. Cameras used for CCTV inspection of manholes and pipelines six inches (6") in diameter and larger shall be of the articulating head type. The camera head shall have a 360-degree radial view rotating head capable of rotating to view manholes, pipelines, laterals, joints, and defects directly.

K. Cameras used for CCTV inspection of pipelines smaller than six inches (6") in diameter (where the camera defined in this Section does not fit) shall be self-leveling, contain a minimum of 200 feet of push cable, and capable of negotiating 90-degree bends in three-inch pipelines.

L. The television camera used for the inspection shall be in color format specifically designed and constructed for such inspections. Lighting and video quality shall be suitable to allow a clear and focused picture clearly showing the entire inside periphery of the sanitary sewer pipeline for a minimum of six lineal feet ahead of the camera.

M. The camera shall have a minimum capability of 600 lines of horizontal resolution at center; optimum imagery with minimum illumination; and meet requirements of EIA

Standard Video Signal.

N. The camera shall be equipped with a remote variable intensity control of the camera lights with remote control adjustments for focus and iris located at the monitoring station to ensure peak picture quality throughout all conditions encountered during the survey.

O. Focal distance shall be adjustable for cameras used to inspect manholes and pipelines six inches (6”) in diameter and larger.

P. Camera monitors shall be located where the District can view the monitor and make notes in addition to the operating technician. Monitors shall have a resolution capability of no less than 600 lines of horizontal resolution.

Q. The date of the survey, the identifying number (or location) of the beginning and ending manholes for the pipeline being surveyed, and a continuous forward and reverse read-out of the camera distance from the manhole of reference shall be continuously displayed on the monitors as part of the video presentation. The remote reading footage counter shall be accurate to within two-tenths of a foot.

E. WORKMANSHIP

SAFETY: The Contractor shall submit a site-specific Health and Safety Plan for the work to be performed in accordance with OSHA requirements.

The Contractor shall conduct operations during all phases of work in a manner that ensures public safety and causes as little inconvenience as possible to the traveling public and abutting property owners. Convenient access to driveways, houses, and buildings along the line of work shall be maintained.

EXAMINATION: The Contractor shall refer to Appendix A as data inputs for the matching PACP field shown in the table below. Where a data field is left blank in the Pipeline Record Data List, the Contractor shall consult the District and use best available data to complete the PACP form.

A. Perform an inspection of each pipeline segment in accordance with NASSCO PACP requirements.

1. Complete the following District-required mandatory fields in the header of the PACP form in addition to the identified PACP-defined mandatory fields:

Field Number	Entry
Field 3	Reviewed by
Field 4	Reviewer Certificate No.
Field 5	Owner
Field 6	Customer
Field 7	P/O Number
Field 8	Work Order Number
Field 9	Media Label
Field 10	Project
Field 12	Time
Field 14	Weather
Field 16	Date Cleaned
Field 17	Flow Control
Field 18	Purpose of Survey
Field 20	Inspection Technology Used
Field 22	Consequence of Failure
Field 23	Pressure Value
Field 24	Drainage Area
Field 25	Pipe Segment Reference
Field 28	Location Code
Field 29	Location Details
Field 35	Lining Method
Field 36	Coating Method
Field 37	Pipe Joint Length
Field 38	Total Length
Field 39	Length Surveyed
Field 40	Year Constructed
Field 41	Year Renewed
Field 43	Upstream MH Rim to Invert
Field 44	Upstream MH Rim to Grade
Field 45	Upstream MH Grade to Invert
Field 46	Upstream MH Northing
Field 47	Upstream MH Easting
Field 48	Upstream MH Elevation
Field 50	Downstream MH Rim to Invert
Field 51	Downstream MH Rim to Grade
Field 52	Downstream MH Grade to Invert
Field 53	Downstream MH Northing
Field 54	Downstream MH Easting
Field 55	Downstream MH Elevation
Field 56	MH Coordinate System
Field 57	MH Vertical Datum
Field 58	GPS Accuracy
Field 59	Additional Information

The Contractor shall refer to Appendix A as data inputs for the matching MACP field shown in the table below. Where a data field is left blank in the Manhole Record Data List, the Contractor shall consult the District and use best available data to complete the MACP form.

A. Manholes shall be inspected using standard NASSCO MACP methodology as a "Level 2" inspection and documented using an electronic MACP inspection report database.

1. Complete the following District-required mandatory fields in the header of the MACP form in addition to the MACP-defined mandatory fields:

Field Number	Entry
Field 3	Reviewed By
Field 4	Reviewer Certificate No.
Field 5	Owner
Field 6	Customer
Field 7	P/O Number
Field 8	Work Order
Field 9	Media Label
Field 10	Project
Field 12	Time
Field 14	Weather
Field 16	Date Cleaned
Field 20	Consequence of Failure
Field 21	Drainage Area
Field 27	Inflow Potential from Runoff
Field 28	Location Details
Field 31	Year Constructed
Field 32	Year Renewed
Field 37	Rim to Grade Exposed
Field 38	Northing
Field 39	Easting
Field 40	Elevation
Field 41	Coordinate System
Field 42	Vertical Datum
Field 43	GPS Accuracy
Field 44	Additional Information

Verify location of sewer pipelines and manholes to be inspected. Due to potential site constraints, the Contractor shall review the project site locations for accessibility. Entry onto private property without permission is not authorized, see COMMUNICATION WITH RESIDENTS below. The Contractor shall submit a daily list to the District of any residents or private land owners that deny access to inspection points. The Contractor shall work with the District to develop an alternative approach to inspecting the pipeline.
The District will be available to assist in the location/identification of manholes. It is anticipated that all manholes and the associated pipeline segments included in the schedule of inspections

for the project are accessible. If access to a manhole is required by the Contractor to complete the inspection services and none is available, the District will:

1. Provide access,
2. Negotiate with the Contractor to install access, or
3. Remove the pipe segment or manhole from the schedule of inspections.

COMMUNICATION WITH RESIDENTS: The Contractor shall notify residents and property owners of work according to the following specifications:

A. Distribute project notice flyer (Property Owner Primary Notification) to all properties within a 200-foot radius of any sewer pipes, manholes, or appurtenances to be inspected a minimum of ten (10) calendar days prior to commencing work.

B. Distribute door hangers (Property Owner Secondary Notification) to all properties in the areas scheduled for cleaning and/or inspection at least 48 hours in advance but no more than one week in advance of work to be performed. The Contractor is advised that these notices shall not be placed in mailboxes, as it is a violation of federal postal regulations.

C. Distribute a notice a minimum of 48 hours in advance but no more than 72 hours in advance to all private properties where entrance is required to access sewer manholes in easements.

D. All notification flyers shall include contact information for the Contractor and District. Exact contact names and numbers for the District shall be provided to the Contractor after award.

E. Provide notification to resident/owner of property the day of cleaning and/or inspection activities on private property through a knock on the door.

F. Exercise caution when conducting work so as not to cause damage to private property. The Contractor shall be solely responsible for any damage caused to private property and shall repair any such damage to a level approved by the District at no additional cost. The District shall be notified of all spills and damages that occur on private property. All clean-up and repair work on private property must be field verified and approved by the District before the Contractor performs any such work. All repairs shall meet District requirements.

G. Upon completion of work, the Contractor shall restore the area to pre-existing conditions and (if possible) notify the property owner when leaving the area.

H. The Contractor shall document pre-inspection and post-inspection conditions of private properties with digital photographs. Disputes with property owners will be settled through the use of photos that will document pre-inspection conditions. In the event that the Contractor fails to adequately document pre-construction

conditions, the Contractor shall be obligated to restore disputed landscaping, yards, improvements, etc., at the Contractor's expense and to the satisfaction of the District, and no additional compensation will be allowed therefore.

MANHOLE AND PIPE CLEANING AND PREPARATION: The Contractor shall prepare all manholes and piping for CCTV inspection to the following specifications:

A. Flush and clean pipeline interiors to remove sludge, dirt, sand, grit, stone, grease, roots, and other materials from pipe prior to CCTV inspection to ensure clear view of 95% of the interior diameter and to ensure ease of movement for the camera transport system.

B. A minimum of one operator and one laborer shall be at the job site at all times when cleaning is being performed.

C. Selection of the equipment to be used shall be based on the conditions of the manhole and pipeline segment at the time the work commences and in accordance with the requirements within this specification.

D. The Contractor shall be responsible for and repair any damage caused by their operations at no additional cost to the District, as described in this Section.

E. High-velocity hydraulic cleaning

1. The Contractor shall clean contiguous pipe segments in order from upstream to downstream in accordance with Pipe Record Data List.
2. When hydraulic cleaning equipment is used, the Contractor shall clean the pipeline with a minimum of two (2) passes of a high-velocity hydraulic cleaning machine.

    a. The Contractor shall subdivide individual manhole to manhole pipe segments into partial segments no more than 100 feet in length and clean downstream partial segment first, then next upstream partial segment all the way to downstream manhole, and continue this procedure until cleaning of entire manhole to manhole segment is complete.
    b. One pass shall be defined as completion of all partial segments.
    c. Segments requiring more than two passes to obtain a "Clear" ranking as defined in the Inspection Ranking Matrix (see Appendix B) shall be presented to the District immediately.
    d. Upon approval by the District, the Contractor shall continue cleaning segments with additional passes until a "Clear" ranking is obtained.

        i. The Contractor shall be paid per lineal foot for every complete set of two passes of cleaning per segment.
        ii. Partial payments for lines requiring additional passes but not a complete two-pass cleaning will be based on pre-approval by the District.
        iii. The Contractor shall obtain pre-approval of additional passes prior to

completing additional cleaning work.

iv. No additional payment will be made to the Contractor for additional cleaning work beyond two passes that is not pre-approved by the District.

3. The Contractor shall be responsible to plan and control the cleaning operations to prevent flooding and/or damage of the sewers and manholes and to prevent backflow into building structures through sewers and/or laterals.

F. The Contractor shall use rodding machines in instances where severe root intrusion or heavy grease is encountered.

G. If cleaning of an entire segment cannot be successfully performed from one manhole, the equipment shall be set up on the other manhole, and the Contractor shall attempt to clean the segment again. If, again, successful cleaning cannot be performed, or the equipment fails to traverse the entire manhole to manhole segment, it shall be assumed that a major blockage exists. Work shall be stopped on the segment in question, and the District shall be immediately notified. Where a broken pipe or a major blockage is suspected, the Contractor shall immediately notify the District and not proceed with additional cleaning, except at his own risk, without the specific written direction of the District. The Contractor shall move on to the next pipe segment on the schedule and continue work uninterrupted. At District's request, after District clears blockage, District may request the line be cleaned again as additional work, but at the same unit price.

H. The Contractor shall be responsible for procuring water used for sewer cleaning operation. Non-potable water is available at the Mineral Wastewater Treatment Plant.

I. Passing materials from manhole to manhole through the pipeline segments shall not be permitted. This could cause line stoppage, accumulations of sand in wet wells, or damage to pumping equipment. All solids or semi-solid material removed from the wastewater collection system during the cleaning operation shall be trapped and removed from the downstream manhole of the pipeline segment being cleaned and disposed of off-site in a lawful manner utilizing a vacuum truck.

J. The Contractor shall be responsible for disposal of all materials removed from the wastewater collection system as part of the work described herein. The Contractor may request a special arrangement with the District for temporary disposal of materials at the Mineral Wastewater Treatment Plant; however, all solid debris shall be removed from the site prior to completion of work. The Contractor shall submit a written request for such arrangements and obtain approval from the District prior to work. The District shall not be obligated to provide temporary storage.

K. Classification of the results of the cleaning activity shall be documented in the Daily Inspection Report Form (see Appendix A) for every pipe segment cleaned according to the ranking matrix included in Appendix B. A cleaning log shall be provided at the end of the project.

L. After cleaning the sewer mainline, the Contractor shall spray or wash down the interior walls of each manhole with a nozzle or gun using approximately 500 PSI of water.

1. The Contractor shall take care not to damage existing manhole walls with high pressure water cleaning activities.
2. If existing manholes show significant structural deterioration, the Contractor shall report the location and provide pictures of the condition to the District at the end of the work day prior to any cleaning in that area.

FLOW CONTROL: When and where significant flow reduction is necessary to meet the requirements for the maximum depth of flow, the Contractor shall utilize plug and release or flow through plugs as necessary to reduce flow in line to meet maximum depth requirements. The Contractor shall:

A. Furnish all materials, labor, equipment, power, and maintenance to control the flow of wastewater to below the maximum allowable depth of flow for the time required to complete CCTV inspection of the scheduled manholes and pipeline segments.

B. The maximum allowable depth of flow in pipelines to be inspected using CCTV equipment is 10% of the pipe diameter. The maximum allowable depth of flow in manholes to be inspected using CCTV equipment is ¾ of pipe diameter measured from the bottom of pipe at downstream outlet pipe invert. When the depth of flow in the sanitary sewer pipeline or manhole is above the maximum allowable, or inspection of the complete periphery of the pipe or manhole cannot effectively be conducted, one or more of the following methods of flow control shall be used, contingent upon approval by the District:

1. Plugging and Blocking: Plugs shall be inserted into sanitary sewer pipelines at a manhole upstream from the pipeline segment to be inspected. The plug shall be so designed that a portion of the sewer flows can be released periodically or continuously. Flows shall be substantially reduced or temporarily stopped to inspect the pipe in accordance with requirements.

   a. The Contractor shall be responsible to provide monitoring of the upstream sanitary sewer system (including laterals) to ensure plugging/blocking does not result in sanitary sewer overflows (SSO).
   b. Payment for plugging/blocking shall be included as part of lineal foot cost of CCTV inspection work.

2. Night Work: Although not anticipated, where high flows are encountered after pipelines have been cleaned, priority consideration shall be given to scheduling the CCTV inspection work for the late night hours between 11:00

PM and 6:00 AM.

a. Extra care shall be taken by the Contractor to minimize noise levels for all night work.
b. The Contractor shall be required to indicate night work on door hangers for residences within a 200-foot radius of manhole to manhole pipe segments scheduled for night work.
c. Additional per linear foot surcharge for night work shall be paid as a separate bid item, “Night Work Surcharge.”

    i. Night Work Surcharge per linear foot of the designated night work line segments shall be in addition to per linear foot payment for daytime CCTV inspection.

C. Methods of flow control shall not cause sanitary sewer overflows (SSO) or other prohibited discharges per State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. Penalties imposed on the District as a result of any discharge violation caused by the actions of the Contractor or its employees shall be borne in full by the Contractor.

1. All costs incurred by the District to respond to a sanitary sewer overflow will be deducted from the Contractor’s construction progress payments.
2. If an SSO occurs, the Contractor shall immediately stop the cause of the SSO, begin cleanup, and notify the District within 30 minutes of the spill.
3. At a minimum, the Contractor shall:

    a. Estimate the volume and duration of SSO, start time, and end time.
    b. Take digital photographs of spill.
    c. Document response and clean-up procedures.
    d. Provide all information relevant to the SSO to the District when requested.

CCTV PIPELINE INSPECTION: The Contractor shall furnish all materials, labor, equipment, software, power, and maintenance to complete CCTV inspection of the scheduled pipeline segments to the following specifications:

A. All CCTV inspections shall be performed using certified PACP software that provides a free viewing version for viewing and generating reports similar to the example report in Appendix C.

B. Perform CCTV inspection of each pipeline segment after, but within 96 hours of, the cleaning of that pipeline segment.

C. Televise all pipeline segments completely from starting manhole to ending manhole on the same video in a continuous run. Partial televising on one video and then completing the run on another is unacceptable unless an impassible condition is encountered and properly documented and a “reverse set-up” is completed (see Section H below). The camera shall travel in the direction of the

flow in the pipeline segment (i.e., downstream) unless there is no access to the upstream manhole or when a flushing inlet exists at the upstream end of the pipeline or when completing a “reverse set-up”. “Reverse set-ups” for convenience are not acceptable, unless pre-approved by the District at the District’s discretion. All costs associated with “reverse set-up” shall be included within the unit bid price for CCTV Inspection, and no additional payment shall be made therefore.

D. At the beginning of the inspection, capture video of the ground surface above the pipeline by positioning the camera to look over the top of the manhole in the direction of the downstream pipe segment.

E. Before placing the camera into the manhole, capture video looking down into the manhole with the outlet pipe positioned at 6 o’clock.

F. At the conclusion of the video inspection when the camera has reached the finish access point (i.e., manhole), turn the camera to look up at the bottom of the manhole before stopping the video capture.

G. If, during the inspection, the television camera will not pass through the entire line segment as a result of offset joints, broken pipe, protruding taps, or other obstructions, the Contractor shall set up his equipment so that the inspection can be performed from the destination manhole or other access points (i.e., a “reverse set-up”). If, again, the camera fails to pass through the entire pipeline segment, the Contractor shall move on to next pipe segment in schedule, continue work uninterrupted, and notify the District by the end of the work day.

H. If, during the inspection, the viewable portion of the pipe is reduced to less than 90% of the interior pipe diameter due to submerged lines or sags, the Contractor shall plug/block the upstream manhole(s) and vacuum clean or jet flush the line to remove or lower the standing water level and proceed concurrently with the television inspection. In the event the Contractor is still unable to televise the entire line and has demonstrated to the District that every reasonable effort has been made to dewater the pipeline, the Contractor will complete the inspection to the best of their ability in the reduced viewable pipe diameter condition and move on to the next setup.

I. The travel speed of the camera shall be uniform and shall not exceed 30 feet per minute. Any means of propelling the camera through the pipeline that would exceed this rate of speed or produce non-uniform or jerky movements shall not be acceptable. The camera shall be stopped and/or backed up to view and analyze apparent defects and unusual or uncommon conditions within the pipeline.

    1. Self-propelled cameras, manual winches, power winches, cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the pipeline segment.
    2. In no case shall the hose of a high-velocity water cleaning machine be

allowed for use as a tow cable.

J. Stop the camera a minimum of five (5) seconds at every lateral to look up the center of the lateral and see any apparent defects, broken pipe, root intrusion, or other defects. The lens and lighting shall be readjusted, if necessary, in order to ensure a clear, distinct, and properly lighted feature.

K. Minimize the amount of recorded video beyond the required time at each observation when the camera is stationary. Utilize a pause feature (or similar) within the software and/or video recording device to limit the amount of recorded video resulting from non-inspection related activities (e.g., adjustment of camera/lighting settings, equipment monitoring/adjustment, temporary release of flow).

L. Take still digital photos of all laterals, defects, and observations noted on the CCTV inspection report.

1. One digital still photo shall be taken looking down the center of the pipeline with the observation/defect in the photo.
2. One digital still photo shall be taken looking directly at the observation/defect.

CCTV MANHOLE INSPECTION: The Contractor shall furnish all materials, labor, equipment, software, power, and maintenance to complete CCTV inspection of the scheduled manholes to the following specifications:

A. Capture video of the inside of the manhole to document the condition of the manhole.

1. Video of manhole may be distinct video file separate from PACP inspection of manhole to manhole segment when PACP of that segment is not included in project work.

2. MACP inspection database shall include a data field that defines the video name of the distinct MACP or segment PACP video electronic file.
3. The Contractor shall capture MACP video during insertion process for PACP inspection of manhole to manhole segment if segment is part of project work. MACP video shall be logged and stored as a separate stand-alone electronic video file when PACP is not included.
4. Video shall include:

a. Capture one full turn of the camera (360 degree view) just above the frame of the manhole to capture video of the area surrounding the manhole.
b. Capture video of the manhole from the top of the manhole (i.e., the frame) to the bottom (i.e., the bench) with the camera pointed down as if inspecting a pipeline.
c. A rotation of camera with lens pointing toward manhole wall to document observations/defects.

d. A deliberate video of manhole channel, every pipe connection, bench and bench to barrel interface.

B. Capture still pictures of the inside of the manhole as needed to document:

1. Every MACP defect observation.
2. General condition of manhole chimney, cone, barrel, joints, bench and channel within the manhole.

FIELD QUALITY CONTROL: The Contractor shall provide an acceptable video and picture that is in focus, distinct, clear, and properly illuminated, with good contrast and without distortion. The picture shall be of true and adequate color and tint, free from interference and distortion. In addition to the above requirements, the Contractor shall meet the following specifications:

A. The video and picture shall show at least 90% of the pipe periphery above the waterline. All recording shall be in color, achieving and maintaining proper balance of tint and brightness.

B. The picture shall have adequate light to clearly ascertain any pipeline defects like cracks and their severity in addition to clearly seeing other features like laterals and joints.

C. The camera lens shall be kept clean and clear of any fogging due to oil, grease, or other material or debris. Material that obscures the lens shall be cleaned off before proceeding with the recording operation.

D. If debris or other obstructions cause reduced visibility, or if the image is obscured, the Contractor shall make reasonable attempts to clear the lens of the camera before continuing inspection.

E. The camera lens shall remain above the visible water level and may submerge only while passing through clearly identifiable line sags. If at any time the flow exceeds 10% of the diameter of the pipeline, the inspection must be stopped until the flow subsides or, if necessary, the Contractor shall implement an accepted method of flow control. High flows causing the depth of water to exceed the foregoing criteria shall be cause to reject the televised line segment.

F. The importance of accurate distance measurement is emphasized. The accuracy of the remote reading footage counter shall be verified by use of a walking meter, roll-a-tape, or other suitable device to the approval of the District prior to the commencement of work.

G. In the event that the segment or manhole being televised has substantial flow entering such that inspection of the sewer or manhole is impaired, the Contractor shall coordinate with the District and residents to have the flow temporarily stopped, bypassed, and/or reschedule television inspection of the particular segment or manhole to a time when the flow is reduced to permit proceeding with the CCTV inspection. The Contractor shall move to the next pipe segment or

manhole and continue work without delay.

H. Other unacceptable conditions that shall serve as a cause for rejection of submitted videos include, but are not necessarily limited to:

1. The loss of color or severe redness due to equipment malfunction and black-and-white pictures irrespective of quality.
2. Loss of vertical hold which impacts the ability to read and interpret the video.
3. Incorrect manhole identifications, or if it is not clear which line or manhole has been televised.
4. Inaccurate footage readings during any portion of the inspection.
5. Missing defects or observations required by PACP/MACP.
6. Failure to follow PACP/MACP procedures.
7. Any other unidentifiable defect such as equipment interference, equipment malfunctions, and blurred or obscured images from an unknown source that detracts from the ability to read the video with reliable accuracy.

RETRIEVAL OF EQUIPMENT: The Contractor shall retrieve television camera equipment stuck or lost in mains immediately at the time of incident. District personnel and equipment are not available to assist the Contractor in the retrieval of equipment. Following the retrieval of the camera equipment, the pipeline shall be restored according to current applicable standards and to the approval of the District. The Contractor shall be responsible for all private and public property restoration to the satisfaction of the District. No additional compensation will be made for any costs associated with retrieval of equipment.

DOCUMENTATION: The Contractor shall provide individual GIS shapefiles (ESRI ArcGIS Version 10.3 compatible) containing the GPS location of every manhole, access point, and pipeline mapped.

The Contractor will be provided three copies of system plan sheets. One copy shall be used for annotation purposes in the field during inspections. Annotations shall be transferred to a second, clean copy and submitted to the District upon completion of the project per the requirements of CCTV INSPECTION REPORTS.

The Contractor shall mark up the hardcopy maps to reflect the actual physical configuration of the collection system as discovered during inspection activities. Revisions to be documented on the hard copy maps include, but shall not be limited to the following:

1. Proper identification of pipeline segments that enter/exit each manhole.
2. Accurate location of each manhole (e.g., in the street vs. out of the street, to better reflect approximate length of pipeline segments, and whether in paved/unpaved area).
3. Accurate location of each pipeline segment, including the terminating upstream and downstream structure (i.e. manhole, flushing connection, etc.).

    a. Manholes, clean-outs, lamp holes, etc., shall be designated properly and consistent with the symbols used by the District and designated on the map legend.

4. Proper identification of assets (i.e., with the correct ID numbers).

    a. Use Asset ID provided in the Manhole and Pipeline Record Data List.
    b. If new assets are found, these are to be consistently and appropriately identified so that they can later be added to the District's collection system database.
    c. The Contractor shall use a numbering system for new assets that ensures a unique identification number for each asset. It shall include:

        i. Asset type abbreviation (i.e. SS, MH, CO, etc.).
        ii. Unique identification number.

CCTV INSPECTION REPORT: The Contractor shall evaluate the CCTV inspections against the video for accuracy and completeness prior to final submittal to the District for acceptance.

The Contractor shall keep a copy of the Pipeline Record Data List (see Appendix D) and Manhole Record Data List (see Appendix E) with highlighting over all pipes and manholes where cleaning and inspection has been completed and daily reports submitted to the District. This list shall be updated weekly at a minimum and made available electronically in scanned PDF format if so requested to communicate the Contractor's progress.

A clean copy of the marked-up Sewer System Maps shall be submitted to the District upon completion of all scheduled inspections.

A 3-ring binder containing complete hardcopies of all the inspection reports including color pictures of all defects shall be submitted to the District upon completion of all scheduled inspections.

All submitted data shall become the property of the District upon completion of the project.

The Contractor shall provide two USB 2.0 External Hard Drives (or approved equal) containing the following to the District. Each external hard drive shall provide adequate storage to allow all data to be submitted on a single device. The external hard drives shall become the property of the District. The cost of such devices shall be accounted for in the bid submitted by the Contractor, and no additional payment shall be made therefore.

1. PACP and MACP Standard Database (v6.0.4 or newer) containing the information collected during the cleaning and inspections, which is linked to digital video and digital still pictures associated with each inspection and a free version of viewing software compatible with the PACP/MACP certified software used to conduct the inspection. The Databases shall be capable of being directly exported to and manipulated in Excel or an equivalent program.

    a. Video imagery with audio track containing simultaneously recorded narrative commentary describing in detail the condition of pipeline interior.

i. Video shall be captured in AVI or MPG format.

b. Digital still photography of every observation.

i. One digital still photo shall be taken looking down the center of the pipeline with the observation/defect in the photo.
ii. One digital still photo shall be taken looking directly at the observation/defect.
iii. Digital photos shall be in JPEG format.

c. All links between database, videos, and digital images shall be operational.

2. PDFs of cleaning and CCTV inspection “Tabular” reports.

END OF SECTION

APPENDIX A

PACP Inspection Form
Header Section

General Information Red font fields = Mandatory, Black font fields = Optional

1. Surveyed by	2. Certificate No.		3. Reviewed by	4. Reviewer Certificate No.
5. Owner	6. Customer		7. P/O Number	8. Work Order Number
9. Media Label	10. Project	11. Date	12. Time	13. Sheet Number
14. Weather	15. Pre-Cleaning	16. Date Cleaned	17. Flow Control	18. Purpose of Survey
19. Direction of Survey	20. Inspection Technology Used		21. Inspection Status	
22. Consequence of Failure		23. Pressure Value		

Location

24. Drainage Area	25. Pipe Segment Reference	26. Street (Name & Number)
27. City	28. Location Code	29. Location Details

Pipe

30. Pipe Use	31. Height (Diameter)	32. Width	33. Shape
34. Material	35. Lining Method	36. Coating Method	37. Pipe Joint Length
38. Total Length	39. Length Surveyed	40. Year Constructed	41. Year Renewed

Measurements

42. Upstream MH No.	43. Upstrm MH Rim to Invert	44. Upstrm MH Rim to Grade	45. Upstrm MH Grade to Invert
46. Upstream MH Northing*	47. Upstream MH Easting*	48. Upstream MH Elevation**	
49. Downstream MH No.	50. Downstream MH Rim to Invert	51. Downstream MH Rim to Grade	
52. Downstream MH Grade to Invert	53. Downstream MH Northing*	54. Downstream MH Easting*	
55. Downstream MH Elevation**	56. MH Coordinate System*	57. MH Vertical Datum**	58. GPS Accuracy

59. Additional Information

*Entry required if Northing, Easting or Coordinate System data is recorded. **Entry required if Elevation or Vertical Datum data is recorded

Details Section

Distance (feet) (meters)	Video Ref.	Code	Continuous Defect	Value			Joint	Circumferential Location		Image Ref.	Remarks
		Group/ Descriptor/ Modifier		Dimension		%		At/From	To		
				1st	2nd						

PACP Inspection Form
Details Continuation Section

1. Surveyed by	5. Owner	11. Date	13. Sheet No.	42. Upstream MH No.	49. Downstream MH No.

Distance (feet) (meters)	Video Ref.	Code	Continuous Defect	Value			Joint	Circumferential Location		Image Ref.	Remarks
		Group/ Descriptor/ Modifier		Dimension		%		At/ From	To		
				1st	2nd						

Red font fields = Mandatory, Black font fields = Optional

MACP Inspection Form
Header Section

General Information

1. Surveyed By (1,2)	2. Certificate Number (1,2)	3. Reviewed By	4. Reviewer Certificate No.
5. Owner	6. Customer	7. P/O Number	8. Work Order
9. Media Label	10. Project	11. Date (1,2)	12. Time
13. Sheet Number (1,2)	14. Weather	15. Pre-Cleaning (2)	16. Date Cleaned
17. Purpose of Survey (1,2)	18. Inspection Level (1,2)	19. Inspection Status (1,2)	20. Consequence of Failure

Location

21. Drainage Area	22. MH/Access Point No. (1,2)	23. Street (1,2)	24. City (1,2)
25. Location Code (2)	26. Surface Type (2)	27. Inflow Potential from Runoff	
28. Location Details			

Manhole

29. MH Use (2)	30. Access Type (1,2)	31. Year Constructed
32. Year Renewed		33. Evidence of Surcharge (2)

Measurements

34. Rim to Invert (2)	35. Rim to Grade (2)	36. Grade to Invert (2)	37. Rim to Grade Exposed
38. Northing*	39. Easting*	40. Elevation**	41. Coordinate System*
42. Vertical Datum**		43. GPS Accuracy	

44. Additional Information

* Information required if Northing, Easting or Coordinate System data is recorded.

** Information required if Elevation or Vertical Datum data is recorded.

MACP Inspection Form
Manhole Component Observation Section

Cover

45. Type (2)	46. Shape (2)	47. Size (2)	48. Center Cover Size	49. Size Width (2)
50. Cover Material (2)	51. Hole Diameter (Vent) (2)	52. Hole Number (2)	53. Bearing Surface Diameter (2)	
54. Bearing Surface Width (2)	55. Cover/Frame Fit (2)	56. Cover Condition (1,2)		

Cover Insert

57. Insert Type (2)	58. Cover Insert Condition (2)

Cover Adjustment Ring

59. Ring Type (2)	60. Ring Material (2)	61. Ring Condition (1,2)	62. Ring Height

Frame

63. Frame Material (2)	64. Bearing Surface Width (2)	65. Bearing Surface Depth (2)	66. Clear Opening Diam (2)
67. Clear Opening Width (2)	68. Frame Condition (1,2)	69. Seal Condition (2)	70. Offset Distance (2)
71. Seal Inflow (2)	72. Frame Depth		

Chimney

73. Chimney Present (2)	74. First Material (2)	75. Second Material	76. Chimney I/I	77. Clear Opening
78. Chimney Depth (2)	79. Lining Interior	80. Lining Exterior	81. Chimney Condition (1)	

Cone

82. Type (2)	83. Material (2)	84. Depth (2)	85. Lining Interior	86. Lining Exterior	87. Cone Condition (1)

Wall

88. Wall Diameter (Length)	89. Wall by Size (Width)	90. Material (2)	91. Depth (2)
92. Wall Lining Interior	93. Wall Lining Exterior	94. Wall Condition (1)	

Bench

95. Bench Present (2)	96. Bench Material (2)	97. Bench Lining	98. Bench Condition (1)

Channel

99. Channel Installed (2)	100. Channel Material (2)	101. Type (2)	102. Exposure (2)	103. Channel Condition (1)

Steps

104. Number (2)	105. Material (2)

Additional Component Information

106. Additional Component Information

Pipe Connections

107. Pipe No. (2)	108. Clock Pos (2)	109. Rim to Invert (2)	110. Direction (2)	111. Material (2)	112. Shape (2)	113. Height (Diam) (2)	114. Width (2)	115. Cond (2)	116. Seal Cond (2)	117. Pipe Type (2)	118. Struct ID	119. Comment

1= Mandatory Level 1 Inspection Required, 2 = Mandatory Level 2 Inspection Required

MACP Inspection Form
Manhole Component Defect Section

1. Surveyed By (1.2)	5. Owner	11. Date (1.2)	13. Sheet Number (1.2)	22. MH/Access Point No. (1.2)

Depth (feet) (meter)	Video Ref	Component	Code	Continuous Defect	Value			Joint	Step	Circumferential Location		Img Ref	Remarks
			Group Descriptor Modifier		Dimension		%			At/ From	To		
					1st	2nd							

APPENDIX B

Classification of the results of the cleaning activity shall be documented for every pipe segment cleaned according to the following ranking matrix. Times and number of passes shown in the table below are for reference only and do not represent in any way the anticipated time or number of passes it will take to complete services required herein.

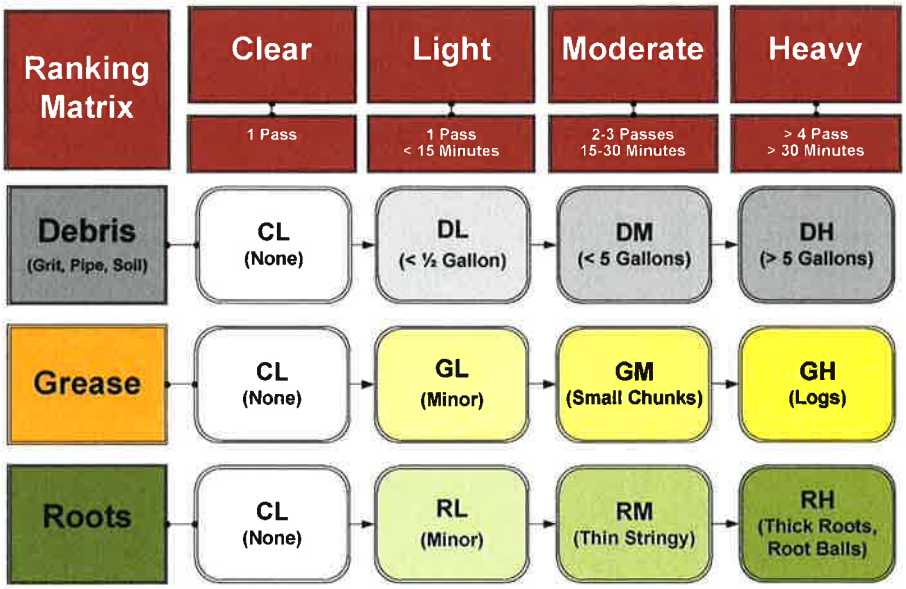


Figure 1 – Ranking Matrix for Results of Cleaning and Rodding Activities

APPENDIX C

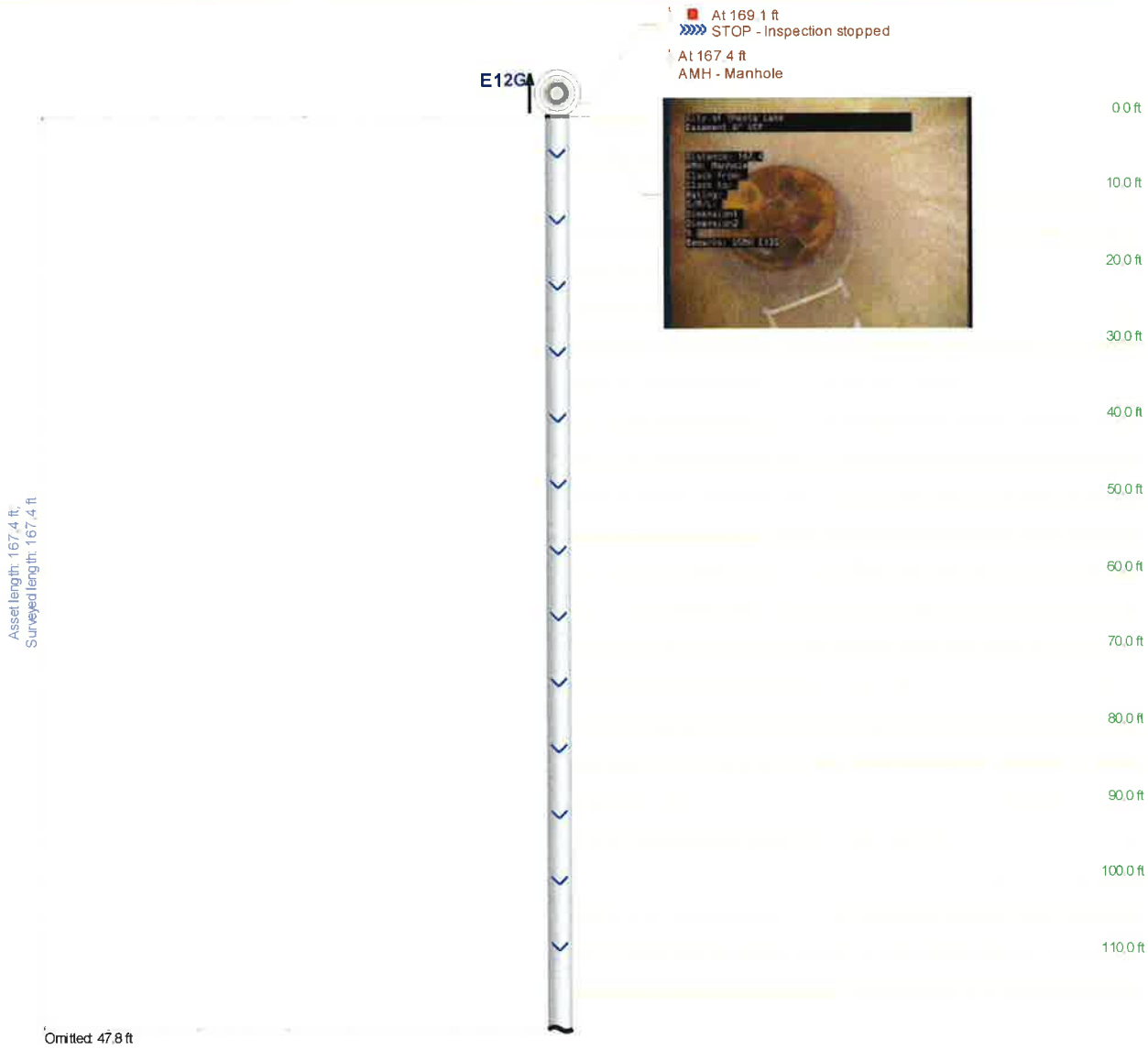
EXAMPLE REPORT

Main Inspection with Pipe-Run Graph and Images

Project Name:	Pipeline segment ref:	City:	Street:
City of Shasta Lake	33	City of Shasta Lake	Easement

Start date/time:	Width:	Height:	Material:	Location code:	Weather:
9/22/2014	0	6	VCP	D	1

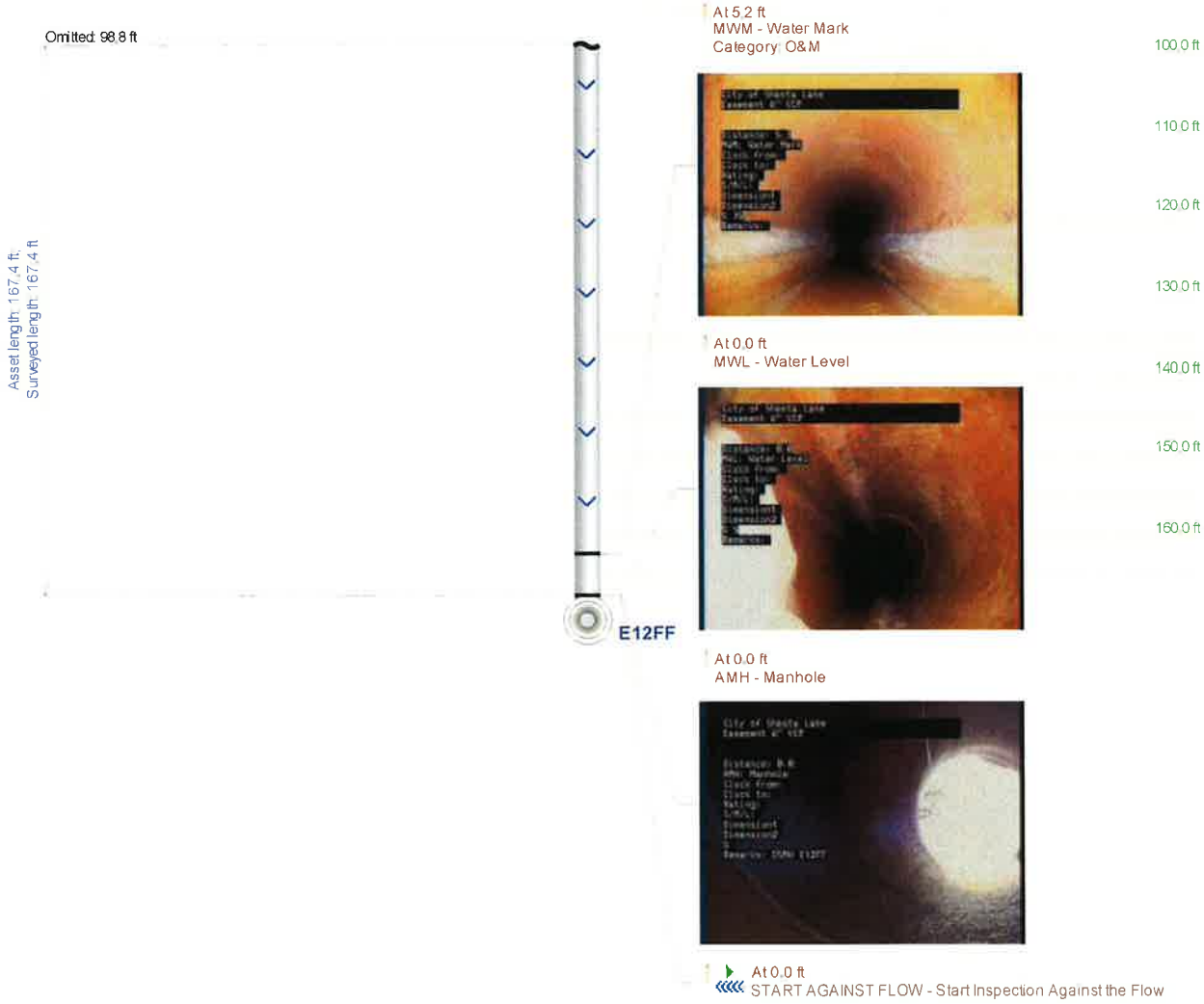
Direction:	Length surveyed:	Surveyed by:	Additional Info:
UPSTREAM	167.4	C. Holler	



Project Name:	Pipeline segment ref:	City:	Street:
City of Shasta Lake	33	City of Shasta Lake	Easement

Start date/time:	Width:	Height:	Material:	Location code:	Weather:
9/22/2014	0	6	VCP	D	1

Direction:	Length surveyed:	Surveyed by:	Additional info:
UPSTREAM	167.4	C. Holler	



EXAMPLE REPORT

PACP Sewer Report

Surveyed by:	Certificate No:	Owner:	Survey Customer	Drainage area:	Sheet number:
C. Holler	U-1211-13962		City of Shasta Lake		

Work order:	Pipeline segment ref:	Start date/time:		Street:	City:
	33	2014/09/22	09:31	Easement	City of Shasta Lake

Location details:	Upstream manhole No:	Rim to invert:	Grade to invert:	Rim to grade:
	E12G	6.1	6.1	0.0

Downstream manhole No:	Rim to invert:	Grade to invert:	Rim to grade:	Sewer use:	Direction:	Flow control:	Height:
E12FF	6.3	6.3	0.0	SS	U	N	6

Width:	Shape:	Material:	Ln. method:	Pipe joint length:	Total length:	Length surveyed:	Year laid:	Year renewed:	Media label:
0	C	VCP			167.4	167.4			CH092214

Purpose:	Sewer category:	Pre-cleaning	Date cleaned:	Weather:	Location code:	Additional info:
F		J	2014/09/18	1	D	

Starting access point:	Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:

	Structural					O&M					Overall Pipe	
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0	0
2	0	0				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				0	0					

Surveyed by:	Owner:	Start date/time:	Upstream manhole No:	Pipeline segment ref:	Sheet number:
C. Holler		2014/09/22	E12G	33	

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm) 1st	2nd	%	Joint	Circumferential Location At/From	to	Image Ref.	Family	Rating	Remarks
0.0	3	AMH										E12FF_City of Shasta Lake_20140922 09291.jpg			DSMH E12FF
0.0	21	MWL						5				E12FF_City of Shasta Lake_20140922 09292.jpg			
5.2	46	MWM						35				E12FF_City of Shasta Lake_20140922 09293.jpg	O&M		
167.4	505	AMH										E12FF_City of Shasta Lake_20140922 09294.jpg			USMH E12G

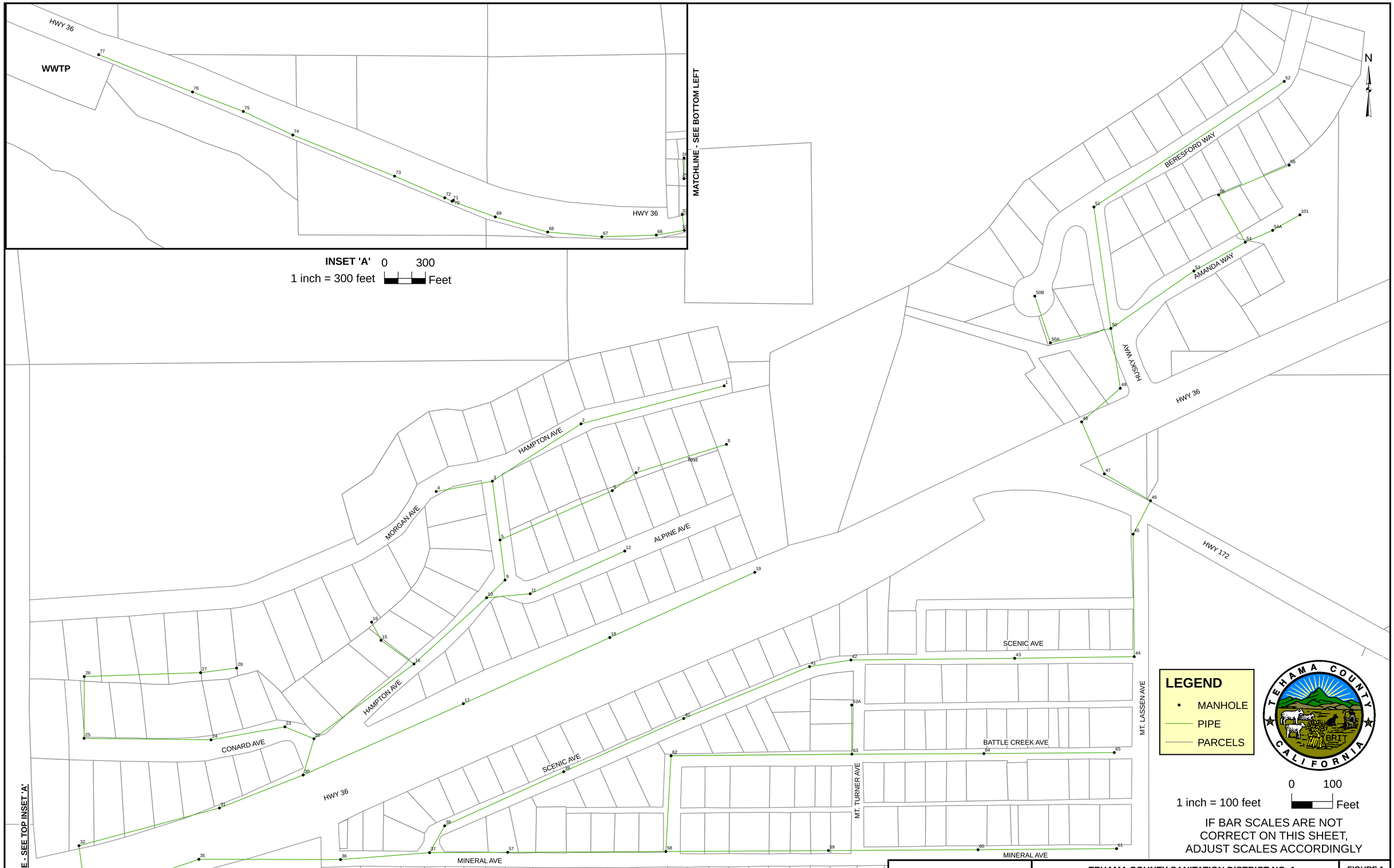
APPENDIX D

TEHAMA COUNTY SANITATION DISTRICT NO. 1 CCTV PROJECT PIPELINE RECORD DATA LIST							
	PIPE ID	FROM INV (FT)	TO INV (FT)	LENGTH (FT)	DIAMETER (IN)	Upstream MH	Downstream MH
1	1	4946.38	4942.60	557	6	52	51
2	3	4942.60	4915.51	300	6	51	50
3	5	4932.96	4928.17	187	6	56	55
4	7	4928.07	4923.65	133	6	55	54
5	9	4923.65	4919.31	144	6	54	53
6	11	4919.24	4915.53	246	6	53	50
7	13	4915.48	4909.32	148	6	50	49
8	15	4909.21	4902.98	125	6	49	48
9	17	4902.88	4899.51	139	6	48	47
10	19	4899.51	4898.21	130	6	47	46
11	21	4898.21	4896.58	92	6	46	45
12	23	4896.58	4894.39	300	6	45	44
13	25	4894.39	4889.64	292	6	44	43
14	27	4889.59	4880.54	400	6	43	42
15	29	4880.54	4879.57	102	6	42	41
16	31	4879.55	4870.72	332	6	41	40
17	33	4870.67	4864.68	320	6	40	39
18	35	4864.68	4858.70	319	6	39	38
19	37	4858.70	4858.08	75	6	38	37
20	39	4891.32	4886.09	318	6	65	64
21	41	4886.04	4879.80	322	6	64	63
22	45	4879.80	4878.83	441	6	63	62
23	47	4887.89	4882.26	338	6	61	60
24	49	4882.25	4876.28	365	6	60	59
25	51	4876.28	4868.79	397	6	59	58
26	53	4868.79	4865.36	386	6	58	57
27	55	4865.36	4858.08	190	6	57	37
28	57	4857.95	4855.08	218	8	37	36
29	59	4854.89	4850.18	346	8	36	35
30	61	4850.09	4846.96	223	8	35	34
31	63	4846.93	4845.92	67	8	34	33
32	65	4942.18	4940.14	362	6	1	2
33	67	4940.11	4923.95	257	6	2	3
34	69	4933.87	4923.94	139	6	4	3
35	71	4923.94	4902.77	145	6	3	5
36	73	4902.77	4890.74	99	6	5	9
37	75	4890.41	4885.40	63	6	9	10
38	77	4916.46	4915.52	231	6	8	7
39	79	4915.52	4915.31	73	6	7	6
40	81	4915.18	4902.77	299	6	6	5
41	83	4897.36	4886.82	253	6	12	11
42	85	4886.75	4885.40	107	6	11	10
43	87	4885.40	4874.31	240	6	10	14
44	89	4874.31	4864.78	305	6	14	22
45	91	4884.98	4877.68	388	6	19	18
46	93	4877.68	4868.34	392	6	18	17
47	95	4868.27	4859.55	428	6	17	30
48	97	4859.50	4855.13	220	6	30	31
49	99	4855.12	4847.71	355	6	31	32
50	101	4847.71	4846.12	118	6	32	33
51	103	4926.61	4926.59	89	6	28	27
52	105	4926.46	4903.00	284	6	27	26
53	107	4902.85	4879.13	151	6	26	25
54	109	4878.98	4877.69	310	6	25	24
55	111	4877.59	4872.85	183	6	24	23

TEHAMA COUNTY SANITATION DISTRICT NO. 1 CCTV PROJECT PIPELINE RECORD DATA LIST							
	PIPE ID	FROM INV (FT)	TO INV (FT)	LENGTH (FT)	DIAMETER (IN)	Upstream MH	Downstream MH
56	113	4872.80	4865.20	77	6	23	22
57	115	4864.76	4859.57	92	6	22	30
58	121		4923.66	73	6	54A	54
59	125	4916.82	4915.51	152	6	50A	50
60	135	4892.82	4874.31	99	6	15	14
61	145			76	6	101	54A
62	147		4916.84	120	6	50B	50A
63	149	4904.98	4893.00	50	6	16	15
64	151	4845.92	4843.32	208	8	33	66
65	153	4843.26	4837.59	399	8	66	67
66	155	4837.59	4836.59	398	8	67	68
67	159	4836.53	4835.54	399	8	68	69
68	161	4835.47	4834.62	336	8	69	71
69	163	4849.60	4834.64	11	6	70	71
70	165	4834.23	4834.08	59	8	71	72
71	167	4833.94	4832.94	400	8	72	73
72	169	4832.87	4824.35	804	8	73	74
73	171	4824.30	4823.19	401	8	74	75
74	173	4823.16	4821.69	398	8	75	76
75	175	4821.60	4819.74	739	8	76	77
76	177	4878.78	4868.79	234	6	62	58
77	179		4879.80	120	6	63A	63

APPENDIX E

TEHAMA COUNTY SANITATION DISTRICT NO. 1 CCTV PROJECT MANHOLE RECORD DATA LIST					
	MH ID	BID ITEM CATEGORY		MH ID	BID ITEM CATEGORY
1	1	Vehicular Access	40	44	Vehicular Access
2	2	Vehicular Access	41	45	Vehicular Access
3	3	Vehicular Access	42	46	Vehicular Access
4	4	Vehicular Access	43	47	Vehicular Access
5	5	Vehicular Access	44	48	Vehicular Access
6	6	Easement	45	49	Vehicular Access
7	7	Easement	46	50	Vehicular Access
8	8	Easement	47	51	Vehicular Access
9	9	Vehicular Access	48	52	Vehicular Access
10	10	Vehicular Access	49	53	Vehicular Access
11	11	Vehicular Access	50	54	Vehicular Access
12	12	Vehicular Access	51	55	Easement
13	14	Vehicular Access	52	56	Easement
14	15	Easement	53	57	Vehicular Access
15	16	Easement	54	58	Vehicular Access
16	17	Vehicular Access	55	59	Vehicular Access
17	18	Vehicular Access	56	60	Vehicular Access
18	19	Vehicular Access	57	61	Vehicular Access
19	22	Vehicular Access	58	62	Vehicular Access
20	23	Vehicular Access	59	63	Vehicular Access
21	24	Vehicular Access	60	64	Vehicular Access
22	25	Vehicular Access	61	65	Vehicular Access
23	26	Easement	62	66	Vehicular Access
24	27	Easement	63	67	Vehicular Access
25	28	Easement	64	68	Vehicular Access
26	30	Vehicular Access	65	69	Vehicular Access
27	31	Vehicular Access	66	70	Vehicular Access
28	32	Vehicular Access	67	71	Vehicular Access
29	33	Vehicular Access	68	72	Vehicular Access
30	34	Vehicular Access	69	73	Vehicular Access
31	35	Vehicular Access	70	74	Vehicular Access
32	36	Vehicular Access	71	75	Vehicular Access
33	37	Vehicular Access	72	76	Vehicular Access
34	38	Vehicular Access	73	77	Vehicular Access
35	39	Vehicular Access	74	101	Easement
36	40	Vehicular Access	75	50A	Easement
37	41	Vehicular Access	76	50B	Vehicular Access
38	42	Vehicular Access	77	54A	Easement
39	43	Vehicular Access	78	63A	Vehicular Access



PACE ENGINEERING
REDDING, CALIFORNIA

TEHAMA COUNTY SANITATION DISTRICT NO. 1

WASTEWATER COLLECTION SYSTEM
CCTV INSPECTION PROJECT

FIGURE 1
AUG 2016
JOB 288.36