

**JURUPA COMMUNITY SERVICES DISTRICT
RIVERSIDE, CALIFORNIA**



COMMUNITY SERVICES DISTRICT

Proudly serving Jurupa Valley and Eastvale

**PROPOSAL DOCUMENTS, CONTRACT,
AND PROJECT SPECIFICATIONS**

FOR

**ANNUAL SEWER REPAIR AND REPLACEMENT
PROJECT (PYRITE / 60 FWY)**

JCSD P.N. C245123

BOARD OF DIRECTORS

Betty Folsom, President
Anthony Herda, Vice President
Kenneth J. McLaughlin, Director
Lupe R. Nava, Director
Bart Moreno, Director

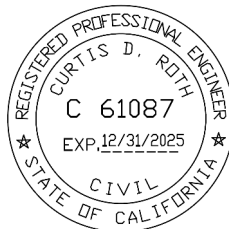
GENERAL MANAGER

Chris Berch, P.E.

GENERAL COUNSEL

Best, Best & Krieger LLP

JANUARY 2025



Prepared by

DRP ENGINEERING, INC.
1111 Corporate Center Drive, Suite #303
Monterey Park, California 91754
(626) 693-2966

TABLE OF CONTENTS*

	<u>Page</u>
NOTICE INVITING BIDS	Notice-1
BIDDING DOCUMENTS.....	BD-1
CONTRACT	Contract-1
GENERAL CONDITIONS	GC-1
SPECIAL REQUIREMENTS	SR-1
BASIC SPECIFICATIONS	
<u>Section</u>	<u>Specification Title</u>
A	General Specifications..... A-1
A1	Unit Price A1-1
D	Sewer Pipeline Materials Specifications D-1
E	Sewer Pipeline Construction Specifications..... E-1
F	Traffic ControlF-1

APPENDIX

APPENDIX A – STANDARD DRAWINGS

APPENDIX B – GEOTECHNICAL REPORT

APPENDIX C – POTHOLING REPORT SAMPLE OF FORMAT

APPENDIX D – JURUPA VALLEY ENCROACHMENT PERMIT

APPENDIX E – LIST OF APPROVED MANUFACTURED MATERIALS

APPENDIX F - SAMPLE PROJECT SIGN

APPENDIX G – OVERFLOW EMERGENCY RESPONSE PLAN (OERP)

APPENDIX H – CALTRANS ENCROACHMENT PERMITS MANUAL

APPENDIX I – SUPPLEMENTARY POTHOLING DATA

APPENDIX J – CALTRANS ENCROACHMENT PERMIT

APPENDIX K – MWD CROSSING APPROVAL

* The sections of this Specification are divided by inserts. A more detailed Table of Contents for the Bidding Documents, Contract, General Conditions, Special Requirements, Technical Specifications and Basic Specifications and other sections are included at the beginning of those portions of the Specification.

NOTICE INVITING BIDS

JURUPA COMMUNITY SERVICES DISTRICT

NOTICE INVITING BIDS

FOR

ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT
PYRITE / 60 FWY
JCSD P.N. C245123

Prospective bidders are hereby notified that the Jurupa Community Services District, California (District) will receive sealed bid proposals for the Jurupa Community Services District's **Annual Sewer Repair and Replacement – Pyrite / 60 FWY Project, JCSD P.N. C245123**

The project consist of furnishing, installing, testing and making operational approximately 135 L.F. of 8-inch diameter SDR-35 PVC sewer main, 235 L.F. of 10-inch diameter SDR-35 PVC sewer main, 3,720 L.F. of 12-inch diameter SDR-35 PVC sewer main, 660 L.F. of 15-inch SDR-35 sewer main, 717 L.F. of 10-inch diameter SDR-35 within 18-inch Steel Pipe sewer main, 41 L.F. of 12-inch diameter SDR-35 within 18-inch Steel Pipe sewer main, twenty-four 48-inch diameter manhole, one 60-inch diameter manhole, five 60-inch diameter shallow manhole; all connections to existing sewer main all appurtenances; and all associated paving, trenching, and surface restoration; removal of or abandonment of existing sewer main, reconnection of sewer laterals; import materials; excavation, backfilling, compaction, paving, traffic control and all other work and materials to complete the contract work. The successful Contractor shall furnish all labor, material, transportation, tools, supplies, plant, equipment, and appurtenances, unless specifically excepted, for the satisfactory completion of the entire contract work, in accordance with the Specifications and Drawings.

Such bid proposals will be received until **10:00 a.m. on Thursday, February 27, 2025**, VIA EMAIL ONLY at which time and place such bids will be publicly opened and read. DO NOT DELIVER BIDS TO DISTRICT OFFICES. Award, if made, will be made to one Bidder. Bids received after this time will be returned unopened.

Questions from prospective bidders affecting interpretation or corrections related to the Plans and Specifications received after 5:00 p.m. on **February 13, 2025** will not be answered.

The Engineer's Estimated Construction Cost is **\$4,870,000**. All work under this contract shall be completed and operational within **Three Hundred (300) calendar days** from the date District gives written "Notice of Award" to the Contractor.

Each proposal must be accompanied by: (a) cash; (b) a certified or cashier's check made payable to the "Jurupa Community Services District"; (c) equivalent cash or securities pursuant to Section 995.710 of the Code of Civil Procedure, or (d) a bid bond payable to "Jurupa Community Services District" executed by the bidder as principal and surety as obligor in an amount equal to ten percent (10%) of the maximum amount of the bid. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be a California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The cash, check, equivalent cash or securities, or bid bond shall be given as a guarantee that the bidder, if an award is made to the bidder in accordance with the terms of said bidder's proposal, shall provide the payment and performance bonds and insurance certificates and endorsements as required herein within ten (10) calendar days after notification of the award of the Contract to the bidder. Failure to provide the required documents may result in forfeiture of the bidder's bid deposit or bond to the District and the District may award the Contract to the next lowest responsive, responsible bidder, or may call for new bids; the bidder shall also:

- a. Execute a contract in the District's standard form together with the Labor Code certification thereon. Said contract shall incorporate by reference the Notice Inviting Bids; the Proposal; Bidder's Plan for Construction; Bidder's Statement of Experience, Financial Condition and References; Bidding Sheet; General Conditions; Special Requirements; Basic Specifications; Technical Specifications; and Drawings;
- b. Furnish a performance bond as required thereby with a corporate surety or sureties satisfactory to the District, or equivalent cash or securities for the faithful performance of the said contract. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be a California admitted surety insurer, as

defined in Code of Civil Procedure Section 995.120. Said performance bond shall be for an amount of not less than one hundred percent (100%) of the total bid price;

- c. Furnish also a labor and materials payment bond with a corporate surety or sureties satisfactory to the District. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be a California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. Said bond shall be for an amount of not less than one hundred percent (100%) of the total bid price;
- d. Furnish certificates of insurance and endorsements, evidencing that all insurance coverage required by the Contract has been secured.

All contract construction shall be by an organization which has had successful experience in the construction of facilities of the TYPE & SIZE SPECIFIED, OR COMPARABLE. Each bidder shall be a licensed contractor pursuant to the Business and Professions Code and shall be licensed in the following appropriate classification(s) of contractor's license(s), for the work bid upon, and must maintain the license(s) throughout the duration of the Contract: Class "A" (General Engineering) **OR** other license(s). If the bidder is a specialty contractor, the bidder is alerted to the requirements of Business and Professions Code Section 7059. The District requires the Contractor to self-perform fifty-five percent (55%) of the work bid upon.

The District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general rate for holiday and overtime work in the locality in which the work is to be performed for each craft, classification, or type of workman needed to execute the contract. The Contractor shall obtain a copy of the prevailing rates of per diem wages from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov/dlsr/. In the alternative, the Contractor may view a copy of the prevailing rates of per diem wages at the District's principal office located at the address set forth in the second paragraph of this Notice Inviting Bids. Please note that the prevailing wage for this project shall be based on those wages in effect at the time of bid opening.

Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to perform the work available to interested parties upon request, and shall post copies at the Contractor's

principal place of business and at the job site. The successful bidder and all subcontractor(s) under him, shall comply with all applicable Labor Code provisions, which include, but are not limited to the payment of not less than the required prevailing rates to all workers employed by them in the execution of the Contract, the employment of apprentices, the hours of labor and the debarment of contractors and subcontractors. Contractor shall defend, indemnify and hold the District, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the prevailing wage laws. The Contractor shall forfeit, as a penalty to the District, \$200.00 for each calendar day or portion thereof for each workman paid less than the said stipulated prevailing rates for any work done under the contract by him or by any subcontractor under him in violation of the California Labor Code.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the Bidder's and its subcontractors' current registration with the Department of Industrial Relations. If awarded a Contract, the Bidder and its subcontractors of every tier shall maintain active registration with the Department of Industrial Relations for the duration of the Project. It shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements

If the bidder's maximum bid is \$1,000,000 or more, each bidder shall submit the certification required by the Iran Contracting Act of 2010 as required by Public Contract Code section 2204.

Contractor may, at his sole cost and expense, substitute securities equivalent to any monies withheld by the District to ensure performance under the Contract. Such securities shall be deposited with the District, or with a state or federally chartered bank as escrow agent, who shall pay such monies to the Contractor upon satisfactory completion of the Contract. The Contractor shall be the beneficiary of any securities substituted for monies withheld and shall receive any accrued interest thereon. Securities eligible for substitution shall include those listed in Public Contract Code Section 22300. Please refer to applicable portions of Section 45 of the General Conditions and the Escrow Agreement for Security Deposits In Lieu of Performance Retention included with the Contract Documents.

The District shall award the Contract for the work to the lowest responsive, responsible bidder. The District reserves the right to reject any or all bids, to waive any irregularities or informalities in any bids or in the bidding process. No bidder may withdraw his bid for 90 days after bid opening.

THE BIDDERS ARE URGED TO PAY PARTICULAR ATTENTION TO BIDDING DOCUMENTS SECTION A "INSTRUCTION TO BIDDERS", ITEM 2 "COMPLETION OF BID PROPOSAL AND SUPPORTING DOCUMENTS."

Complete electronic (CD) copies of all documents and specifications with which all bid items must comply will be available from Jurupa Community Services District. Digital copies of the bid documents are only available for download at the following website: <https://www.jcsd.us/business/contracts-bid-opportunities>

It is the responsibility of each prospective bidder to check the website on a daily basis through the close of bids for any applicable addenda or updates and to furnish the Jurupa Community Services District with current prospective bidder contact information for JCSD to update the Plan Holder List on the website. Prospective bidders are encouraged to submit a completed and signed Plan Holder's Information Form to JCSD. Addenda and other updates will be posted to the posting website by JCSD.

The Bidder shall examine carefully the site of the proposed contract work. The submission of a bid proposal shall be conclusive evidence that the Bidder has investigated the project site and is satisfied as to the conditions to be encountered.

There will be no specific site tour/inspection by the District for the project.

Please contact Jurupa Community Services District Bids at 951-685-7434 ext., or e-mail jcsdbids@jcsd.us, for question pertaining to the project.

Dated: January 17, 2025

/s/ Eddie Rhee
Engineering Manager

BIDDING DOCUMENTS

TABLE OF CONTENTS
OF BIDDING DOCUMENTS

	<u>Page</u>
A. INSTRUCTIONS TO BIDDERS	BD-1
1. Qualified Bidders	BD-1
2. Completion of Bid Proposal and Supporting Documents.....	BD-1
3. Omissions and Discrepancies	BD-2
4. Signature and Seal	BD-2
5. Bid Proposal Guaranty	BD-2
6. Packaging and Delivery of Bid Proposal and Guaranty	BD-3
7. Withdrawal of Bid Proposal	BD-4
8. Modification of Bid Proposal	BD-4
9. Opening and Awarding of Bids	BD-4
10. Retention of Proposal Guarantees	BD-5
11. Bond(s) and Certificates of Insurance Required of Successful Bidder.....	BD-5
12. Execution of Contract	BD-6
13. Special Instructions	BD-6
14. Mathematical Errors	BD-6
15. Addenda to Contract Documents	BD-7
16. Interpretation of Plans and Documents	BD-7
17. Examination of Contract Documents	BD-7
18. Inspection of Site; Pre-Bid Conference and Site Walk.....	BD-8
19. Basis of Award; Balanced Bids.....	BD-8
20. Disqualification of Bidders; Interest in More than One Bid.....	BD-8
21. Filing of Bid Protests.....	BD-8
22. Retention and Substitution of Security.....	BD-9
23. Prevailing Wage	BD-9
24. Debarment of Contractors and Subcontractors	BD-9
25. Iran Contract Act Certification.....	BD-10
26. Request for Substitutions	BD-10
27. Sales and Other Applicable Taxes, Permits, Licenses Rand Fees.....	BD-10

TABLE OF CONTENTS
OF BIDDING DOCUMENTS
(continued)

	<u>Page</u>
B. BIDDER'S PROPOSAL WITH SUPPORTING DOCUMENTS	BD-11
1. Proposal	BD-11
2. Bidder's Plan for Construction	BD-13
3. Bidder's Statement of Experience, Financial Condition and References	BD-16
4. Bidding Sheet	BD-17
a. Supplemental Instructions	BD-17
b. Bid Item Schedule	BD-18
5. Bidder's Statement	BD-24
6. Non-Collusion Declaration	BD-27
7. Bid Bond	BD-28
8. Iran Contracting Act Certification	BD-30

BIDDING DOCUMENTS

A. INSTRUCTIONS TO BIDDERS

1. Qualified Bidders

Bidders are advised that in selecting a Contractor, the Owner shall award the Contract for the work to the lowest responsive, responsible bidder. The Owner reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process. The use of substitute bid forms other than clear and correct photocopies of those provided by the Owner will not be permitted. The Owner requires that each bidder be properly licensed and sign and submit with their proposal the attached statement of his experience, current financial condition, and references. Please note that similar information is required in the attached Bidder's Plan for Construction with respect to any proposed subcontractor. **Perspective bidders are encouraged to submit completed and signed Plan Holder's Information Form. Failure to provide completed and signed Plan Holder's Information Form may result in late / no notification. Addenda and other updates will be issued via facsimile, email, District website or any combination thereof, and only to perspective bidders that provide the required information.**

2. Completion of Bid Proposal and Supporting Documents

Each bidder shall complete each blank of each page of the attached Bid Proposal and supporting documents including Bidder's Plan for Construction, Bidder's Statement of Financial Conditions and References, and Bidding Sheet. Bidders shall fill in all blank spaces (including inserting "N/A" where applicable) and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. Deviations in the bid form may result in the bid being deemed non-responsive.

The Owner may in its discretion reject any bid to which the bidder has added conditions, limitations, provisions or any interlineations or alterations. The Owner will not consider alternative proposals unless they are called for by these instructions or the supplemental instructions appearing in the bidding documents themselves.

3. Omissions and Discrepancies

Should a bidder find discrepancies in, or omissions from the Special Requirements, Basic Specifications, Technical Specifications, Drawings, or other documents bound herein, or should he be in doubt as to their meaning, he should immediately notify the Owner by submission of a written request for an interpretation or correction. Such submission, if any, must be sent to JCS D Bids by email at jcsdbids@jcsd.us. The Owner may post to the website a written instruction to all bidders in the form of an addendum.

4. Signature and Seal

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom. If the bid proposal is made by an individual, it shall be signed and his full name and his address shall be given; if it is made by a co-partnership, it shall be signed with the co-partnership name by one of the partners, who shall sign his own name and, in addition, the name and address of each partner shall be given; if it is made by a corporation, the name of the corporation shall be signed by its duly authorized officer, or officers, attested by the corporation seal, and the names and titles of all current officers of the corporation shall be given.

5. Bid Proposal Guaranty

Each bid shall be accompanied by: (a) cash; (b) a certified or cashier's check made payable to the "Jurupa Community Services District"; (c) equivalent cash or authorized securities pursuant to Section 995.710 of the Code of Civil Procedure or (d) a bid bond payable to "Jurupa Community Services District" executed by the bidder as principal and surety as obligor in an amount not less than 10% of the maximum amount of the bid. Each bid proposal shall be accompanied by a certified or cashier's check, bid bond on the form provided by Owner, or equivalent cash or authorized securities, for an amount of not less than 10 percent of the amount named in the Bidding Sheet. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The cash, check or bid bond shall be given as a guarantee that the bidder shall execute the Contract if it be awarded to the bidder, shall provide the payment and performance bonds and insurance certificates and endorsements as required herein within ten (10) calendar days after notification of the award of the Contract to the bidder. Failure to provide the required documents may result in forfeiture of the bidder's bid deposit or bond to the Owner and the Owner may award the

Contract to the next lowest responsive, responsible bidder, or may call for new bids

Said check or bond shall be made payable to the Owner and shall be given as a guarantee that the bidder will enter into the contract described in the Notice Inviting Bids herein if awarded the work. By submitting a proposal, each bidder agrees that its failure to enter the Contract if awarded the work would result in damage to the Owner and that it would be impracticable or extremely difficult to ascertain the actual amount of that damage. If the successful bidder fails to execute the Contract within the time period provided in Instruction No. 12 on the attached page, his bid security shall be forfeited in full to the Owner, except to the extent that Sections 5100 et. seq. of the California Public Contract Code apply.

6. Packaging and Delivery of Bid Proposal and Guaranty

Once the Bid Proposal and Supporting Documents herein have been completed and signed as set forth above, they shall be assembled electronically along with a copy of the Bid Proposal Guaranty and any proposed sketches and brochures required by these instructions, into a PDF file and send via email to the contact listed below.

No consideration shall be given by the Owner to bid proposals received after the date and time set by the Notice Inviting Bids herein for the opening of bids. No oral or telephonic bids will be considered. No forms transmitted via facsimile, or any other electronic means will be considered unless specifically authorized by Owner as stated in the Notice Inviting Bid.

Bid instructions are as follows:

- Potential bidders who wish to submit a bid to JCSD must submit their bid electronically (PDF format) to JCSD Bids email jcsdbids@jcsd.us.

Email subject shall read “Bid from Contractor’s Name JCSD Project No. C245123”.

- Bids will be sent to JCSD Bids by **February 27th, 2025 no later than 10:00 a.m.**; all bids received after 10 a.m. will be **rejected**.
- Bidders are encouraged to send their electronic bids utilizing the **DELIVERY and READ RECEIPT enabled**.

The delivery receipt will be the bidder’s verification that the bid has been sent to JCSD prior to the insert time a.m./p.m. deadline; all electronic files must be less than 20MB, as this is JCSD’s limit for email submissions

- After 10 a.m./p.m. – all bidders will call the following to hear the bids read out loud:

1. 1-415-915-0466

2. Phone Conference ID: 123 336 558#

Note: Contractors may protect their bid (PDF file) with password and provide the password in a subsequent email by 10:05 a.m.

- Immediately following the conference call bid, JCSD will post bid results on JCSD website.

7. Withdrawal of Bid Proposal

The bidder may, without prejudice, withdraw his bid proposal at any time prior to the date and time set by the Notice Inviting Bids herein for the opening of bids; provided, that any request to withdraw must be in writing and duly executed by the bidder or the bidder's duly authorized representative and delivered to the Owner's Secretary at the address set forth in Instruction 6 herein. Any request to withdraw a bid after bid opening shall meet all requirements of Public Contract Code section 5100 et seq. and must be submitted in writing within five (5) working days, excluding Saturdays, Sundays and State holidays, specifying in detail the mistake.

8. Modification of Bid Proposal

Any bidder who may wish to modify the bid proposal previously submitted by him may do so only by (a) following the withdrawal procedure set forth in Instruction 7 hereof prior to the date and time set by the Notice Inviting Bids herein for the opening of bids, and (b) submitting a substituted bid proposal which conforms to the requirements set forth in Instructions 1, 2, 4, 5, and 6 hereof. A bid proposal shall be deemed withdrawn once it has been delivered by the Owner to the one requesting withdrawal, either by personal delivery or deposit in the United States mail, addressed to the address originally given by the bidder. After withdrawal the Owner will not recognize modifications of bid proposals attempted by methods other than as set forth in this Instruction 8.

9. Opening and Awarding of Bids

All Bid Proposals shall be read at the time and place set forth in the Notice Inviting Bids herein. Bidders and their authorized representatives are invited to be

present. The award, if made, shall be made within ninety (90) days of the opening. The Owner's policy is to award to the lowest responsible, responsive bidder who can comply with the projected delivery and/or completion schedules. However, the Owner reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process. Notice of Award shall be made to a successful bidder in writing mailed to the address set forth on the signature page of the Bidding Documents.

In accordance with Labor Code section 1773.3, the District may be required to provide notice of the award to the Department of Industrial Relations on the Form PWC-100. The bidder who is awarded the Contract shall submit to the District a completed Form PWC-100 including identification of the worker classifications for the bidder and all listed subcontractors, within three (3) days of the award. Failure to provide a completed Form PWC-100 prior to execution of the Contract may result in forfeiture of the Bidder's bid guaranty to the District, and the District may award the Contract to the next lowest responsive and responsible bidder, or may call for new bids.

10. Retention of Proposal Guarantees

Upon award to the lowest responsive, responsible bidder, the security of an unsuccessful bidder shall be returned in a reasonable period of time, but in no event shall that security be held by the Owner beyond 60 days from the time the award is made.

11. Bond(s) and Certificates of Insurance Required of Successful Bidder

The successful bidder shall, upon receipt of notice of acceptance of his bid, promptly secure with a responsible corporate surety or sureties, a faithful performance bond or equivalent cash or authorized securities in an amount of not less than 100 percent of the total bid price, conditioned upon a faithful performance by said bidder of all requirements under the Contract.

In addition, the successful bidder shall promptly secure with a reasonable corporate surety or sureties, a labor and material payment bond in an amount of not less than 100% of the total bid price, conditioned upon payment in full of the claims of all persons performing labor upon or furnishing materials to be used in or furnishing appliances or power contributing to the work to be performed under the Contract.

The successful bidder shall also furnish certificates of insurance and endorsements as evidence of coverage in accordance with the General Conditions.

All bonds shall be subject to the approval of the Owner, and shall be in the same form as the Contract Performance Bond and Labor and Materials Bond specified by the Owner herein. All Certificates of Insurance shall be subject to the approval of the

Owner. Personal sureties and unregistered surety companies are unacceptable. The surety insurer for all bonds shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120.

12. Execution of Contract

The bidder to whom award is made shall execute a written contract with the Owner on the form of Contract provided herein (which shall incorporate by reference the Proposal; Bidder's Plan for Construction; Bidder's Statement of Experience, Financial Condition and Reference; Bidding Sheet; General Conditions; Special Requirements; Basic Specifications; Technical Specifications, and Drawings), together with the Labor Code Certification therein, and furnish good and approved bonds or substitution and Certificates of Insurance as required in the preceding paragraph within ten calendar days from the date of mailing the Notice of Award from the Owner to the bidder, as set forth above, of the acceptance of their proposal.

If the successful bidder fails or refuses to enter into the Contract, as herein provided, or to conform to any of the stipulated requirements in connection therewith, the proposal guaranty shall be forfeited in full to the Owner, except to the extent that Sections 5100 et. seq. of the California Public Contract Code apply. If the successful bidder refuses or fails to execute the Contract, the Owner may award the Contract to the bidder whose proposals is the next lowest responsive, responsible bidder to said Owner; and such bidder shall fulfill every stipulation embraced herein as if he were the party to whom the first award were made.

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom. A corporation to which an award is made will be required, before the Contract is finally executed, to furnish evidence of its corporate existence and of the authority of the officer signing the Contract and bond for the corporation to so sign.

13. Special Instructions

Bidders are advised that supplemental instructions applicable to this project are set forth in paragraph "a" of the Bidding Sheet.

14. Mathematical Errors

In the event the Owner determines that there has been a mathematical error on the Bidding Sheet resulting from incorrect multiplication of unit prices times quantities,

or incorrect addition of bid prices to determine the total bid, unit prices shall control and the multiplication and the total bid amount shall be corrected accordingly prior to evaluating the bid. Any request to withdraw a bid after bid opening shall meet all requirements of Public Contract Code section 5100 et seq. and must be submitted in writing within five (5) working days, excluding Saturdays, Sundays and State holidays, specifying in detail the mistake.

15. Addenda to Contract Documents

The Project Engineer will transmit addenda to the Contract documents to the fax number or mailing/street address provided by the bidder. However, the Project Engineer is neither responsible for verifying bidder's contact information nor ensuring that the bidder receives all addenda information. It shall be the bidder's responsibility to be sure that he has received all applicable project addenda prior to submitting his bid proposal. To this end, each bidder should contact Project Engineer at 909-315-9778 or by email JCSDBids@jcsd.us or go to the District's website <https://www.jcsd.us/bids> to verify that they have received all addenda issued, if any, at least 72 hours prior to the bid opening. Failure to acknowledge receipt of all addenda may result in bid rejection. Owner reserves right to revise bid documents prior to bid opening date

16. Interpretation of Plans and Documents

If any bidder contemplates submission of a bid for the proposed work and is in doubt as to the true meaning of any part of the plans, specifications or other proposed Contract documents, or finds discrepancies in, or omissions from, the drawings or specifications, bidder may submit by fax or email to the **JCSD Bids** at Jcsdbids@jcsd.us, a written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery and confirmation of receipt. Any interpretation or correction of the proposed documents shall be made only by addendum duly issued and copy of such addendum will be mailed or delivered to each person receiving a set of such documents. **Interpretations or corrections received within seven (7) days prior to Bid Opening will not be answered.** The Owner will not be responsible for any other explanation or interpretations of the proposed documents. No person is authorized to make any oral interpretation of any provision in the Contract documents to any bidder, and no bidder should rely on any such oral interpretation.

17. Examination of Contract Documents

The District has made copies of the Contract available, as indicated above. bidders shall be solely responsible for examining the work site and the Contract, including any addenda issued during the bidding period, and for informing itself with respect to local labor availability, means of transportation, necessity for security, laws

and codes, local permit requirements, wage scales, local tax structure, contractors' licensing requirements, availability of required insurance, and other factors that could affect the work. Bidders are responsible for consulting the standards referenced in the Contract. Failure of bidder to so examine and inform itself shall be at its sole risk, and no relief for error or omission will be given except as required under State law.

18. Inspection of Site; Pre-Bid Conference and Site Walk

Each prospective bidder is responsible for fully acquainting itself with the conditions of the work site (which may include more than one site), as well as those relating to the construction and labor of the work, to fully understand the facilities, difficulties and restrictions which may impact the cost or effort required to complete the work.

19. Basis of Award; Balanced Bids

If the District proceeds to award the Contract, the award shall be to the lowest responsive, responsible bidder submitting a responsive bid. The District may reject any bid which, in its opinion, when compared to other bids received or to the District's internal estimates, does not accurately reflect the cost to perform the work. The District may reject as non-responsive any bid which unevenly weights or allocates costs, including but not limited to overhead and profit to one or more particular bid items.

20. Disqualification of Bidders; Interest in More than One Bid

No bidder shall be allowed to make, submit or be interested in more than one bid. However, a person, firm, corporation or other entity that has submitted a subproposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a subproposal or quoting prices to other bidders submitting a bid to the District. No person, firm, corporation, or other entity may submit a subproposal to a bidder, or quote prices of materials to a bidder, when also submitting a prime bid for the same work.

21. Filing of Bid Protests

Submitted bids will be timely made available for review upon request of any bidder. Bidders may file a "protest" of a Bid with the District's Project Engineer. The protest must:

- Be filed in writing within five (5) business days after the bid opening date;
- Clearly identify the specific irregularity or accusation;

- Clearly identify the specific District staff determination or recommendation being protested;
- Specify, in detail, the grounds of the protest and the facts supporting the protest;
- Include all relevant, supporting documentation with the protest at time of filing;
- If the protest does not comply with each of these requirements, it may be rejected without further review; and
- If the protest is timely and complies with all of the above requirements, the District's Project Engineer, or other designated District staff member, shall review the basis of the protest and all relevant information. The District will provide a written response to the protestor.

22. Retention and Substitution of Security

The Contract calls for monthly progress payments based upon the percentage of the work completed. Unless otherwise specified in the Notice Inviting Bids, the District will retain five percent (5%) of each progress payment as provided by the Contract. At the request and expense of the successful bidder, the District will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300.

23. Prevailing Wage

The District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract. These rates are on file and available at District's office as stated in the Notice Inviting Bid or may be obtained online at <http://www.dir.ca.gov/dlsr>. Bidders are advised that a copy of these rates must be posted by the successful Bidder at the job site(s). Bidder must also be registered with the California Department of Industrial Relations to qualify for an award to perform this contract.

24. Debarment of Contractors and Subcontractors

In accordance with the provisions of the Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Section 1777.1 or Section 1777.7 of the Labor Code. Any subcontract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a

subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the work shall be returned to the District. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor used on the work.

25. Iran Contract Act Certification

Each bidder shall submit the certification required by the Iran Contracting Act of 2010, Public Contract Code section 2200 et seq. as provided with the Bid Documents.

26. Request for Substitutions

The successful bidder shall comply with the substitution request provisions set forth in the Contract. Any deadlines for substitution requests which occur prior to the bid opening date are set forth in the Special Requirements.

27. Sales and Other Applicable Taxes, Permits, Licenses and Fees

Contractor and its subcontractors performing work under this Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the work will be located, unless otherwise expressly provided by the Contract.

B. BIDDER'S PROPOSAL WITH SUPPORTING DOCUMENTS

**ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT
PYRITE / 60 FWY
JCSO PROJECT NO. C245123**

TO THE PRESIDENT OF THE BOARD OF DIRECTORS, JURUPA COMMUNITY SERVICES DISTRICT ("THE OWNER")

1. PROPOSAL

The undersigned proposes to furnish all labor, materials, (except those materials to be furnished by Owner) equipment and methods necessary to properly construct and complete for the Owner the **ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT – PYRITE / 60 FWY, JCSO PROJECT NO. C245123** as set forth in the Bidding Sheet, and in accordance with Bidder's Plan for Construction accompanying this proposal and incorporated herein by reference. The undersigned also declares that, as bidder, we have carefully examined the location of the proposed work, and have read and examined the Contract (including the Special Requirements, Basic Specifications, Technical Specifications, and Drawings and other documents incorporated therein by reference).

The undersigned hereby declares, as bidder, that the only persons or parties interested in this proposal as principals are those named herein, that this bid is made without any connection with any other person or persons making a bid for the same purposes; except for any other division of the undersigned which may submit an independent bid; that the bid is in all respects fair and without collusion or fraud; that he has read the Notice Inviting Bids and the Instruction to Bidders and agrees to all the stipulations contained therein; that he has examined the form of Contract, (including the Special Requirements, Basic Specifications, Technical Specifications, and Drawings and other documents incorporated therein by reference); that in exchange for consideration of his bid proposal by the Owner he proposes, in the event his bid as submitted on the attached and incorporated Bidding Documents be accepted by the Owner, to contract in the said form to furnish and provide the items mentioned in this proposal and in the said form of Contract and in the Special Requirements, Basic Specifications, Technical Specifications, and Drawings, and to furnish and provide the

same within the time stipulated therein; and he will accept as full payment therefor the prices named in said Bidding Sheet.

The Bidder further agrees that he shall execute such Contract within ten days from the date of mailing to him of written notice of the Owner's acceptance of this proposal and within same time shall furnish the required faithful performance bond or securities as permitted by Code of Civil Procedure Section 995.710, the labor and material payment bond, and certificates of insurance and endorsements, and that upon failure to do so within said time, then the proposal guarantee accompanying this proposal shall become the property of the Owner as liquidated damages for such failure or refusal and shall be deposited as monies belonging to the Owner; provided, that if said Bidder shall execute the Contract and furnish the required bonds and certificates of insurance and endorsements within the time aforesaid, his proposal guarantee shall be returned to him upon request within ten days thereafter or otherwise destroyed if so requested.

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignments shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

2. BIDDER'S PLAN FOR CONSTRUCTION

Replies to these inquiries must be full and explicit.

A. Each bidder is required to inspect this proposed work. When, by whom, and in what manner was this proposed work inspected on behalf of the Bidder:

B. Explain your plan or layout for performing the proposed work, including description of any proposed construction plan and detail construction program

C. List the name and address of each subcontractor who will perform work in or about the work or improvement, or who will specifically fabricate and install a portion of the work according to detailed drawings contained in the plans and specifications, in excess of one-half of one percent of your total bid, and a statement of the portion of the work which will be done by each subcontractor. Only one subcontractor may be listed for each portion of the work. Each subcontractor must be registered with the Department of Industrial Relations to perform public work. Failure to include a subcontractor's registration number may result in the bid being non-responsive.

Subcontractor (a):

Name: _____
Address: _____
Portion of Work: _____
License No: _____
DIR Registration
Number: _____

Subcontractor (b):

Name: _____
Address: _____
Portion of Work: _____
License: _____
DIR Registration
Number: _____

Subcontractor (c):

Name: _____
Address: _____
Portion of Work: _____
License: _____
DIR Registration
Number: _____

Subcontractor (d):

Name: _____
Address: _____
Portion of Work: _____
License: _____
DIR Registration
Number: _____

D. For each subcontractor listed under paragraph C herein, provide the following information concerning years and examples of experience of each subcontractor's present organization in similar work:

NAME OF SUBCONTRACTOR	YRS OF EXPERIENCE OF SUBCONTRACTOR PRESENT ORGANIZATION	DATE OF COMPLETION OF SIMILAR JOBS (AT LEAST 2 COMPLETED) WITHIN PAST 3 YRS	NAMES AND ADDRESSES OF OWNERS OF LISTED SIMILAR JOBS
a. _____ _____	_____ Yrs.	Job #1 _____	_____ _____
		Job #2 _____	_____ _____
b. _____ _____	_____ Yrs.	Job #1 _____	_____ _____
		Job #2 _____	_____ _____
c. _____ _____	_____ Yrs.	Job #1 _____	_____ _____
		Job #2 _____	_____ _____
d. _____ _____	_____ Yrs.	Job #1 _____	_____ _____
		Job #2 _____	_____ _____

**3. BIDDER'S STATEMENT OF EXPERIENCE, FINANCIAL
CONDITION AND REFERENCES**

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

The following outline is a record of the undersigned Bidder's experience in construction of the three (3) most recent projects of a type similar in magnitude and character to that contemplated under this Contract. Include the location of each project as well as the name, address, and phone number of the owner, and name of individual to contact.

1. Owner' Name: _____
Contact Person: _____
Address of Owner: _____
Phone: _____
Project Description: _____

Amount of Contract: _____ Completion Date: _____

2. Owner' Name: _____
Contact Person: _____
Address of Owner: _____
Phone: _____
Project Description: _____

Amount of Contract: _____ Completion Date: _____

3. Owner' Name: _____
Contact Person: _____
Address of Owner: _____
Phone: _____
Project Description: _____

Amount of Contract: _____ Completion Date: _____

As a part of this supporting document, submit a signed financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of your financial condition. The Bidder may submit this supporting document in a sealed envelope labeled "CONFIDENTIAL".

4. BIDDING SHEET

a. Supplemental Instructions

1. Bidders are advised that:

- a. The Bidders shall submit a price for all bid item numbers under Bid Schedule I.
- b. Award, if made, will be for Bid Schedule I and will be made to one bidder only.
- c. All work under this Contract shall be completed in accordance with the Contract Completion Schedule(s) stated in the Special Requirements; AND THAT THE GENERAL CONDITIONS HEREIN CONTAINS A SECTION TITLED "LIQUIDATED DAMAGES".
- d. All contract construction shall be by an organization which has had successful demonstrable experience in the construction of facilities OF THE TYPE SPECIFIED, OR COMPARABLE.
- e. The Owner reserves the right to vary the amount of work under the Contract, and may add or deduct from the various bid numbers at the unit prices shown on the Bidding Sheet, and as a result of this prerogative, there will be no claim for damages or profits, real or anticipated.
- f. Bid items must include a proportional amount of profit, overhead, etc., within the bid price for each bid item number, since the schedule of bid item numbers under which award is to be made will be determined by Owner after bids have been received.
- g. The Bidder shall submit his proposal on the bidding documents within the separately bounded Bid Proposal Documents booklet (Volume II) containing the Notice Inviting Bids and the Proposal Documents.

2. To complete this Bidding Sheet, use the blanks provided to fill in the bid prices at which you propose to furnish the scheduled construction, including all labor, materials, (other than materials supplied by the Owner), equipment, work, and methods necessary to complete the work in accordance with the Contract Completion Schedule located in the Special Requirements. Bid item descriptions are described within the Basic Specification Section A1 – Unit Prices. Fill in the figures for the unit prices, extensions and sum of extensions (Total Bid) for all Bid Schedules and/or Bid Items shown on the Bidding Sheet. Figures and words must be inserted for the "Total Bid". If any discrepancy exists, the Owner may recalculate the bid price on the basis of the unit price and bidder agrees to be bound by such recalculation.

b. Bid Item Schedule

The undersigned hereby proposes to furnish and install the following items of construction⁽¹⁾ for the Owner, all in strict accordance with the attached and/or incorporated Special Requirements, Basic Specifications, Technical Specifications, and Drawings, including all labor, materials, equipment, work, method, etc., necessary to complete the work in accordance with the stated completion schedule(s); for the following bid prices:

BID SCHEDULE I

ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT – PYRITE / 60 FWY JCSD PROJECT NO.: C245123 SEWER PIPELINE AND APPURTENANCES					
Item No.	Description	Qty.(1)	Unit	Unit Bid Price*	Bid Extension*
101	Mobilization / Demobilization ⁽²⁾	1	LS	---	\$
102	Furnish and Install 8-inch dia. SDR-35 PVC Sewer	135	LF	\$	\$
103	Furnish and Install 10-inch dia. SDR-35 PVC Sewer	235	LF	\$	\$
104	Furnish and Install 12-inch dia. SDR-35 PVC Sewer	3,720	LF	\$	\$
105	Furnish and Install 12-inch dia. SDR-35 PVC Sewer within 18-inch Casing	41	LF	\$	\$
106	Furnish and Install 10-inch dia. SDR-35 PVC Sewer within 18-inch Casing	717	LF	\$	\$
107	Furnish and Install 14-inch dia. HDPE DR-11 (Fusion Welded joints) Sewer with Polyethylene Wrap and 1-Sack Slurry Backfill	122	LF	\$	\$
108	Removal of Existing Sewer and Construct 15" PVC SDR-35 Pipe Sewer	660	LF	\$	\$
109	Furnish and Install 48-inch Dia. Manhole Per JCSD Std Dwg. S-7	24	EA	\$	\$

**ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT – PYRITE / 60 FWY
JCSD PROJECT NO.: C245123 SEWER PIPELINE AND APPURTENANCES**

Item No.	Description	Qty.(1)	Unit	Unit Bid Price*	Bid Extension*
110	Furnish and Install 48-inch Dia. External Manhole Drop as shown on Sheet 10 of Construction Plans	1	EA	\$	\$
111	Furnish and Install 60-inch Dia. Manhole Per JCSD Std Dwg. S-7	1	EA	\$	\$
112	Furnish and Install 60-inch Dia. Shallow Manhole Per JCSD Std Dwg. S-15	5	EA	\$	\$
113	Jack/Bore 12" PVC SDR-35 Sewer with 18-inch Steel Casing	41	LF	\$	\$
113A	Jacking Pit per Sheet 6 of Construction Plans	1	LS	---	\$
113B	Receiving Pit per Sheet 6 of Construction Plans	1	LS	---	\$
114	Abandon and Cap Existing Sewer Main per Specifications	5,000	LF	\$	\$
115	Abandon and Backfill Existing Sewer Manholes	16	EA	\$	\$
116	Removal and Dispose of Existing Manhole	4	EA	\$	\$
117	Reconnect Sewer Lateral Services	19	EA	\$	\$
118	Reconnection at STA. 10+00.00 per Detail 4A on Sheet 4 of Construction Plans	1	LS	---	\$
119	Reconnection at STA. 13+14.00 per Detail 4B on Sheet 4 of Construction Plans	1	LS	---	\$
120	Reconnection at STA. 10+00.00 (Galena St) per Detail 5 on Sheet 5 of Construction Plans	1	LS	---	\$

**ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT – PYRITE / 60 FWY
JCSD PROJECT NO.: C245123 SEWER PIPELINE AND APPURTENANCES**

Item No.	Description	Qty.(1)	Unit	Unit Bid Price*	Bid Extension*
121	Reconnection at STA. 10+73.00 (Cassidy Cir) per Detail 6 on Sheet 6 of Construction Plans	1	LS	---	\$
122	Reconnection at STA. 34+74.00 per Detail 7A on Sheet 7 of Construction Plans	1	LS	---	\$
123	Reconnection at STA. 36+00.00 per Detail 7B on Sheet 7 of Construction Plans	1	LS	---	\$
124	Reconnection at STA. 38+37.00 per Detail 7C on Sheet 7 of Construction Plans	1	LS	---	\$
125	Reconnection at STA. 43+43.50 per Detail 8 on Sheet 8 of Construction Plans	1	LS	---	\$
126	Reconnection at STA. 65+92.50 per Detail 10 on Sheet 10 of Construction Plans	1	LS	---	\$
127	Pre-Construction CCTV Inspection of Sewer Main	1	LS	---	\$
128	Post-Construction CCTV Inspection of Sewer Main	1	LS	---	\$
129	Trench and Excavation Sheeting, Shoring, and Bracing for Protection of the Life and Limb per OSHA and Caltrans Requirements, Including Development of a Plan and Implementation	1	LS	---	\$
130	Development and Implementation of Sewer Bypass Facilities and Sewage Spill Prevention Plan	1	LS	---	\$
131	Development of Engineer Signed Traffic Control Plans and Obtain Approval	1	LS	---	\$

**ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT – PYRITE / 60 FWY
JCSD PROJECT NO.: C245123 SEWER PIPELINE AND APPURTENANCES**

Item No.	Description	Qty.(1)	Unit	Unit Bid Price*	Bid Extension*
132	Implement Approved Traffic Control	1	LS	---	\$
133	Replace Damaged Traffic Signal Loops and Video Monitoring in Kind	10	EA	---	\$
134	Replace Traffic Striping and Pavement Markings	1	LS	---	\$
135	Air Testing in New Pipe	1	LS	---	\$
136	Vacuum Test Manholes	1	LS	---	\$
137	Prepare SWPPP/BMP, Obtain Approval, Implement and Monitoring Program	1	LS	---	\$
138	Furnish, Install, and Maintain two (2) project signs and Four (4) CMS Signs	1	LS	---	\$
139	Apply for, Obtain, and Comply with Jurupa Valley Encroachment Permit	1	LS	---	\$ 20,000
140	Allowance to Apply for, Obtain, and Comply with Caltrans Permit	1	LS	---	\$ 20,000
141	Maintain Updated As-Builts and Provide Final Record Drawings	1	LS	---	\$
142	Unknown or Unmarked Utility Crossing	15	EA	\$	\$
143	Pothole Existing Utilities at all Crossings, Confirm Connection Points and Provide Report	100	EA	\$	\$
144	Grinding and 0.125-ft Thick Asphalt Concrete Capping	220,000	SF	\$	\$
145	Pavement Removal, Disposal and Replacement from Mainline Trench per City of Jurupa Valley Requirements	5,800	LF	\$	\$

**ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT – PYRITE / 60 FWY
JCSD PROJECT NO.: C245123 SEWER PIPELINE AND APPURTENANCES**

Item No.	Description	Qty.(1)	Unit	Unit Bid Price*	Bid Extension*
146	Slurry Backfill, Compact, Restore Mainline Trench Zone as Shown on Plans and Per Construction Note 15	158	LF	\$	\$
147	Slurry Backfill and Encasement Per Detail A on Sheet 3 and Construction Note 24, in Lieu of Other Bedding and Backfill	2	EA	\$	\$
148	Remove and Replace Existing Cross Gutters, Drains, Curbs, Driveways, Sidewalks, Hardscapes, Mailboxes in Kind	1	LS	---	\$
149	Pre-construction Survey and Construction Staking	1	LS	---	\$
150	Allowance for Repair of Unknown or Unmarked Water and Gas Crossings	5	EA	\$	\$
151	Allowance to Slurry Backfill within Pipe Trench	300	LF	\$	\$
152	Allowance for Hard Rock Excavation, Removal, and Disposal if Encountered	200	CY	\$	\$
153	Stub-outs at STA. 65+52.25 per Detail 9 on Sheet 10 of Construction Plans	1	LS	---	\$
154	Remove AC, Backfill, Compaction, Restore AC for Non-Mainline Trench	1	LS	---	\$
155	Restore Mainline Trench Base Pave and Compact	5,800	LF	---	\$

(1)Quantities (except for “Lump Sum” item numbers) are estimated and are for the purpose of comparing bids only. Payment will be based upon actual quantities furnished, installed or constructed in accordance with the Contract Documents.

*The above prices include any amount payable by the Owner for taxes by reason of this contract.

(2)Payment shall not exceed 5% of total for Bid Schedule. Initial payment of 50% for mobilization, then payment of 25% upon halfway through the project and the final 25% payment during demobilization.

Total Bid Schedule I.....\$ _____ *

(Sum of Extension Nos. 101 thru 155)

(Figures)

"TOTAL BID" Schedule I: _____ Dollars*

(Words)

**PROPOSAL
BIDDING SHEET SUMMARY**

(to be filled in by Bidder)

TOTAL BID PRICE FOR BID SCHEDULE I (Nos. 101 thru 155) \$ _____*

TOTAL BID PRICE FOR SCHEDULES I \$ _____

DOLLARS

(DOLLAR AMOUNT IN WRITTEN FORM)

* Prices include any amount payable by the Owner for taxes by reason of the Contract.

5. BIDDER'S STATEMENT

1. Names and addresses of all members of co-partnership or names and titles of all officers of the corporation.

2. The bidder declares that the surety or sureties named in the space provided below has agreed to furnish bonds in the aggregate amounts set forth in the Instruction to Bidders, in the event the Contract is awarded on the basis of this proposal.

Name(s) and address(es) of surety or sureties agreeing to furnish bond.

Corporation organized
under the laws of the
State of:

Name of Bidder:

California Contractor's
License No. _____

Bidder's Address

License Expiration Date:

License Class _____

Bidder's Phone Number

Bidder's Fax Number

Bidder hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered with the Department of Industrial Relations to perform public works.

DIR Registration Number:

I declare under penalty of perjury under the laws of the State of California that the foregoing representations are true and correct.

By: _____

(Bidder's Signature)

(Typed or Printed Name)

Title

6. NON-COLLUSION DECLARATION

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

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

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

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

(Signature)

(Typed Name)

SUBSCRIBED BEFORE ME on this ____ day of _____, 20____.

NOTARY PUBLIC

My Commission Expires: _____

7. BID BOND

The makers of this bond are, _____,
_____, as Principal, and
_____, as Surety and
are held and firmly bound unto the Jurupa Community Services District, hereinafter
called the District, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID
PRICE of the Principal submitted to DISTRICT for the work described below, for the
payment of which sum in lawful money of the United States, well and truly to be made,
we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly
and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the
Principal has submitted the accompanying bid dated _____, 20 ____, for
**Annual Sewer Repair and Replacement Project – Pyrite / 60 FWY, JCSD Project
No. C245123.**

If the Principal does not withdraw its bid within the time specified in the
Contract; and if the Principal is awarded the Contract and provides all documents to the
District as required by the Contract (including the Special Requirements, Basic
Specifications, Technical Specifications, and Drawings and other documents
incorporated therein by reference); then this obligation shall be null and void.
Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change,
extension of time, alteration or addition to the terms of the Contract shall in affect its
obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by the District and
judgment is recovered, the Surety shall pay all litigation expenses incurred by the
District in such suit, including reasonable attorneys' fees, court costs, expert witness
fees and expenses.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporation.

SURETY:

BIDDER:

By: _____

By: _____

Title: _____

Title: _____

Attest: (If Corporation)

Attest: (If Corporation)

Title: _____

Title: _____

(SEAL)

(SEAL)

STATE OF CALIFORNIA

COUNTY OF _____

On _____, before me, _____, Notary Public, personally appeared _____, 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 signatures(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

8. IRAN CONTRACTING ACT CERTIFICATION

(Public Contract Code Section 2200 *et seq.*)

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

- The Contractor is not:
 - (i) identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or
 - (ii) a financial institution that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.
- The District has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the District will be unable to obtain the goods and/or services to be provided pursuant to the Contract.
- The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

Signed: _____

Titled: _____

Firm: _____

Date: _____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

CONTRACT

TABLE OF CONTENTS
OF CONTRACT

	<u>Page</u>
Contract	Contract-1
A. Recitals.....	Contract-1
B. Agreements	Contract-1
1. Incorporation Of Documents.....	Contract-1
2. Contractor's Basic Obligation	Contract-2
3. The Owner's Basic Obligation	Contract-2
4. Time For Completion	Contract-3
5. Liquidated Damages	Contract-3
6. Successors Bound	Contract-3
Certification Of Contractor In Accordance with Labor Code Section 1861	Contract-4
Contract Performance Bond.....	Contract-5
Contractor/Principal	Contract-7
Certificate As To Corporate Principal	Contract-8
Payment Bond (Labor And Materials).....	Contract-9
Certificate Of Insurance	Contract-12
Commercial General Liability Endorsement.....	Contract-13
Automobile Liability Special Endorsement.....	Contract-14
Workers' Compensation And Employer's Liability Special Endorsement	Contract-15
Escrow Agreement For Security Deposits In Lieu Of Retention.....	Contract-16

JURUPA COMMUNITY SERVICES DISTRICT

CONTRACT

**ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT – PYRITE ST / 60
FWY, JCSD P.N. C245123**

THIS CONTRACT is made and entered into this _____ day of _____
_____ in the year Two Thousand _____, by and between the Jurupa Community
Services District hereinafter designated as the "Owner", and _____
hereinafter designated as the "Contractor".

A. RECITALS

1. The Contractor, in response to a Notice Inviting Bids issued by the Owner,
has submitted a bid proposal for Annual Sewer Repair and Replacement Project
– Pyrite St. / 60 Fwy, JCSD Project No. C245123
_____.

2. The Owner has duly opened and considered the said bid proposal, and has
duly awarded said bid to the Contractor, in accordance with said Notice Inviting
Bids and has given written notice of said award to the Contractor on _____
_____, 20_____.

3. The Contractor has obtained and delivers concurrently herewith all
appropriate certificates of insurance and endorsements, a performance bond or
equivalent substitute, and a labor and material payment bond with corporate surety
or sureties satisfactory to the Owner, each for not less than 100% of the total bid
price.

4. The Contractor shall perform all work within the time stipulated in the
Contract and shall provide all labor, materials, equipment, tools, utility services,
and transportation to complete all of the work required in strict compliance with the
Contract Documents as specified herein.

B. AGREEMENTS

1. Incorporation of Documents

This Contract includes, and there are hereby incorporated by reference the
following documents which are attached and bound and/or incorporated herewith,
together with any addenda thereto which may hereafter be executed by both

Parties, Notice Inviting Bids, The Proposal; Bidder's Plan for Construction; Bidder's Statement of Experience, Financial Condition, and References; Bidding Sheet; Contractor's Certification in accordance with Labor Code 1861; General Conditions; Special Requirements; Basic Specifications; and Drawings. Said documents shall by this reference, be incorporated with like effect as if their provisions were each separately and expressly set forth here.

2. Contractor's Basic Obligation

The Contractor promises and agrees at the Contractor's own cost to furnish to the Owner all materials (except those materials to be furnished by Owner), labor, tools, and equipment necessary to complete Annual Sewer Repair and Replacement Project – Pyrite St. / 60 Fwy, JCSD Project No. C245123 as awarded by the Owner, for a total of \$_____, including taxes, as specified in the Bidding Sheet; and in addition, Additive Bid Item(s) NONE, Deductive Bid Item(s) NONE, and Additive/Deductive Bid Item(s) NONE; at the time and place and in the quantity specified in the Bidding Sheet and/or the Special Requirements hereto attached and incorporated, all subject to and in accordance with the terms and conditions contained herein and in the General Conditions and in strict compliance with and in conformity to the Special Requirements, Basic Specifications, and Drawings hereto attached and/or incorporated. The following shall be at the risk of the Contractor: All loss and damages which may arise out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise or be encountered in the prosecution of the work until its acceptance by the Owner, together with all risks of any description in connection with the work and any and all expenses incurred by or in consequence of any suspension or discontinuance of the work, except such as in the specifications are expressly stipulated to be borne by the Owner.

3. The Owner's Basic Obligation

The Owner hereby promises and agrees with the Contractor to engage and does hereby engage said Contractor as an independent contractor to furnish the materials and/or to perform the work according to the terms and conditions herein contained and referred to for the sum aforesaid and hereby contracts to pay the same at the time, in the manner, and upon the conditions set forth herein, in the General Conditions, Special Requirements, Basic Specifications, and the Drawings.

4. Time for Completion

The work shall be commenced on the date stated in the Owner's Notice to Proceed. The Contractor shall complete all work required by the Contract within **Three Hundred (300)** calendar days from the commencement date stated in the Notice of Award. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the work.

5. Liquidated Damages

In accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the Owner the sum of **Two Thousand Dollars (\$2,000)** for each and every calendar day of delay beyond the time prescribed in the Contract for finishing the work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the Owner may deduct that amount from any money due or that may become due the Contractor under the Contract. This section does not include recovery of other damages specified in the Contract.

6. Successors Bound

The parties hereto do for themselves, their heirs, executors, administrators, successors, and assigns agree to the full performance of all of the provisions herein contained. Contractor may not, either voluntarily or by action of law, assign any obligation assumed by Contractor hereunder without the prior written consent of the Owner.

[SIGNATURES ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF; The parties hereto have caused this Contract to be executed the day and year first above written.

ATTEST:

Jurupa Community Services District,

By

Chris Berch, P.E., General Manager

Contractor
(Signature of Contractor must be notarized)

Approved as to form and execution:

By

Counsel for
Jurupa Community Services District

Title

Secretary

Dated: _____, 20____

Corporate Seal (if a corporation)

**CERTIFICATION OF CONTRACTOR
IN ACCORDANCE WITH LABOR CODE
SECTION 1861**

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

Contractor's Authorized Representative

CONTRACT PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, _____ (hereinafter referred to as "District") has awarded to _____, (hereinafter referred to as the "Contractor") _____ an agreement for Annual Sewer Repair and Replacement Project – Pyrite St. / 60 Fwy, JCSD Project No. C245123 (hereinafter referred to as the "Work").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract for the Work dated _____, (hereinafter referred to as "Contract"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract to perform the terms thereof and to furnish a bond for the faithful performance of said Contract.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the District in the sum of _____ DOLLARS, (\$_____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, their heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the District, its officers and agents, as stipulated in said Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Contract, unless otherwise provided for in the Contract, the guarantee obligation shall hold good for a period of one (1) year after the acceptance of the work by District, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the District from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the District's rights or the

Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

As a part of the obligation secured hereby and in addition to the face amount specified above, there shall be included costs and reasonable expenses and fees including reasonable attorney's fees, incurred by District in enforcing such obligation.

Whenever Contractor shall be, and is declared by the District to be, in default under the Contract, the Surety shall remedy the default pursuant to the Contract, or shall promptly, at the District's option:

- (1) Take over and complete the work in accordance with all terms and conditions in the Contract; or
- (2) Obtain a bid or bids for completing the work in accordance with all terms and conditions in the Contract and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the District, and make available as work progresses sufficient funds to pay the cost of completion of the work, less the balance of the Contract price, including other costs and damages for which Surety may be liable. The term "balance of the Contract price" as used in this paragraph shall mean the total amount payable to Contractor by the District under the Contract and any modification thereto, less any amount previously paid by the District to the Contractor and any other set offs pursuant to the Contract.
- (3) Permit the District to complete the work in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the work, less the balance of the Contract price, including other costs and damages for which Surety may be liable. The term "balance of the Contract price" as used in this paragraph shall mean the total amount payable to Contractor by the District under the Contract and any modification thereto, less any amount previously paid by the District to the Contractor and any other set offs pursuant to the Contract.

Surety expressly agrees that the District may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the work nor shall Surety accept a bid from Contractor for completion of the work if the District, when declaring the Contractor in default, notifies Surety of the District's objection to Contractor's further participation in the completion of the work.

The 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 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 and the provisions of Section 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

CONTRACTOR/PRINCIPAL

Name

By: _____

SURETY:
By: _____
Attorney-In-Fact

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$_____.
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety) _____

(Name and Address of Agent or Representative for service of process in California, if different from above) _____

(Telephone number of Surety and Agent or Representative for service of process in California) _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

ACKNOWLEDGMENT

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

State of California

County of _____

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____,
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.

Signature _____ (Seal)

I, _____, certify that I am the _____ Secretary of the corporation named as principal to the within bond; that _____ who signed the said bond on behalf of the principal was then _____ of said corporation; that I know his/her/their signature, and his/her/their signature thereto is genuine; and that said bond was duly signed, sealed and attested for and in behalf of said corporation by authority of its governing board.

(Corporate Seal)

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

PAYMENT BOND (LABOR AND MATERIALS)

KNOW ALL MEN BY THESE PRESENTS

THAT WHEREAS, _____ Jurupa Community Services District
(hereinafter referred to as "District") has awarded to _____
_____, (hereinafter referred to as the "Principal") _____
a contract for the work described as follows: Annual Sewer Repair and Replacement
Project – Pyrite St. / 60 Fwy, JCSD Project No. C245123 as set forth in the Contract for
the Work dated _____, (hereinafter referred to as "Contract"),
the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said Contract;
providing that if said Principal or any of its subcontractors shall fail to pay for any
materials, provisions, provender, equipment, or other supplies used in, upon, for or about
the performance of the work contracted to be done, or for any work or labor done thereon
of any kind, or for amounts due under the Unemployment Insurance Code or for any
amounts required to be deducted, withheld, and paid over to the Employment
Development Department from the wages of employees of said Principal and its
subcontractors with respect to such work or labor the Surety on this bond will pay for the
same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety,
are held and firmly bound unto the District in the penal sum of
_____ Dollars (\$_____) lawful money of the United
States of America, for the payment of which sum well and truly to be made, we bind
ourselves, our heirs, executors, administrators, successors and assigns, jointly and
severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, their
subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay
any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials,
provisions or other supplies, 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 amounts due under
the Unemployment Insurance Code with respect to work or labor performed under the
contract, or for any amounts required to be deducted, withheld, and paid over to the
Employment Development Department or Franchise Tax Board from the wages of
employees of the contractor and their subcontractors pursuant to Section 18663 of the
Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties
will pay for the same, in an amount not exceeding the sum herein above specified, and
also, in case suit is brought upon this bond, all litigation expenses incurred by the District
in such suit, including reasonable attorneys' fees, court costs, expert witness fees and
investigation expenses.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the

Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or District and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of their claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned and the provisions of Section 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed unoriginal thereof, have been duly executed by the Principal and Surety above named, on the _____ day of _____ 20____ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

(Corporate Seal of Principal if corporation,)

Principal (Property Name of Contractor)

By: _____
Signature of Contractor

Seal of Surety

Surety

ACKNOWLEDGMENT

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.

State of California

County of _____

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____ ,
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.

Signature _____ (Seal)

By _____
Attorney in Fact

NOTE: A copy of the power of attorney to local representatives of the bonding company must be attached hereto.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ Secretary of the corporation named as principal to the within bond; that _____ who signed the said bond on behalf of the principal was then _____ of said corporation; that I know his/her/their signature, and his/her/their signature thereto is genuine; and that said bond was duly signed, sealed and attested for and in behalf of said corporation by authority of its governing board.

(Corporate Seal)

CERTIFICATE OF INSURANCE				ISSUE DATE (MM/DD/YY)		
PRODUCER		THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.				
		COMPANIES AFFORDING COVERAGE				
INSURED		Company Letter A				
		Company Letter B				
		Company Letter C				
		Company Letter D				
		Company Letter E				
COVERAGES						
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.						
CO LT R	TYPE OF INSURANCE	POLICY NO.	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCURANCE <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT. <input type="checkbox"/> _____ <input type="checkbox"/> _____				GENERAL AGGREGATE	\$
					PRODUCTS-COMP/OP AGG.	\$
					PERSONAL & ADV. INJURY	\$
					EACH OCCURRENCE	\$
					FIRE DAMAGE (Any one fire)	\$
					MED. EXPENSE (Any one person)	\$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> GARAGE LIABILITY <input type="checkbox"/> _____				COMBINED SINGLE LIMIT	\$
					BODILY INJURY (Per Person)	\$
					BODILY INJURY Per Accident	\$
					PROPERTY DAMAGE	
	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE	\$
					AGGREGATE	\$
	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY				STATUTORY LIMITS	
					EACH ACCIDENT	\$
					DISEASE -- POLICY LIMIT	\$
					DISEASE -- EACH EMPLOYEE	\$
THE FOLLOWING PROVISIONS APPLY: 1. None of the above-described policies will be canceled until after 30 days' written notice has been given to the Owner at the address indicated below. 2. The Owner, the members of its governing body, its officers, employees, agents and volunteers are added as insured on all liability insurance policies listed above. 3. It is agreed that any insurance or self-insurance maintained by the Owner will apply in excess of and not contribute with the insurance described above. 4. The Owner is named as a loss payee on the property insurance described above, if any. 5. All rights of subrogation under the property insurance policy listed above have been waived against the Owner 6. The worker's compensation insurer named above, if any, agrees to waive all rights of subrogation against the Owner for injuries to employees of the insured resulting from work for the Owner or use of the Owner's premises or facilities.						
CERTIFICATE HOLDER ("OWNER")			CANCELLATION SHOULD ANY OF THE ABOVE-DESCRIBED POLICIES BE CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL THIRTY (30) DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NMAED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES AUTHORIZED REPRESENTATIVE			

COMMERCIAL GENERAL LIABILITY ENDORSEMENT

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS

Insurer:	<i>This Endorsement Changes The Policy Please Read it Carefully</i>
Policy Number:	
Endorsement Number:	

POLICY TYPE: This endorsement modifies insurance provided under the following:

Commercial General Liability Coverage

SCHEDULE:

Name of Public Entity ("Additional Insured")

If no entry appears above, the information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.

WHO IS AN INSURED is amended to include as an Additional Insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that Additional Insured by or for you.

<p><i>Modifications to Policy:</i></p> <ol style="list-style-type: none"> 1. The Additional Insured shown in the Schedule above includes the members of its governing body, its officers, employees, agents and volunteers. 2. This insurance shall be primary as respects the Additional Insured shown in the Schedule above, or if excess, shall stand in an unbroken chain of coverage excess of the Named Insured's scheduled underlying primary coverage. In either event, any other insurance maintained by the Additional Insured shown in the Schedule above shall be in excess of this insurance and shall not be called upon to contribute with it. 3. This insurance shall afford coverage at least as broad as the latest version of Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001). 4. The insurance afforded by this policy shall not be canceled except after thirty days prior written notice by certified mail return receipt requested has been given to the Additional Insured.

AUTHORIZED REPRESENTATIVE:

Broker/Agent Underwriter _____

I, _____,
(print/type name) warrant that I have authority to bind the above-mentioned insurance company and by my signature hereon do so bind this company to this endorsement.

Signature of Authorized Representative

Address

Phone Number

Date Signed

AUTOMOBILE LIABILITY SPECIAL ENDORSEMENT

For _____ (The Owner)

SUBMIT IN DUPLICATE

	ENDORSEMENT NO.	ISSUE DATE (MM/DD/YY)
PRODUCER	POLICY INFORMATION: Insurance Company: Policy No.: Policy Period: (from) _____ (to) _____ LOSS ADJUSTMENT EXPENSE <input type="checkbox"/> Included in Limits <input type="checkbox"/> In Addition to Limits	
	<input type="checkbox"/> Deductible <input type="checkbox"/> Self-Insured Retention (check which) of \$ _____	
NAME INSURED	APPLICABILITY. This insurance pertains to the operation and/or tenancy of the named insured under all written agreements and permits in force with the Additional Insured unless checked here <input type="checkbox"/> in which case only the following specific agreements and permits with the City are covered: ADDITIONAL INSURED AGREEMENTS/PERMITS	
TYPE OF INSURANCE <input type="checkbox"/> Commercial Auto Policy <input type="checkbox"/> Business Auto Policy <input type="checkbox"/> Other _____	OTHER PROVISIONS	
LIMIT OF LIABILITY	CLAIMS: Underwriter's representative for claims pursuant to this insurance.	
\$ _____ per accident, for bodily injury and property damage.	Name: _____ Address: _____ Telephone: (_____) _____	
<p>In consideration of the premium charged and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any endorsement now or hereafter attached thereto, it is agreed as follows:</p> <ol style="list-style-type: none">1. ADDITIONAL INSURED. The Owner, the members of its governing body, its officers, employees, agents and volunteers are included as insureds with regard to damages and defense of claims arising from: the ownership operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Named Insured or for which the Name Insured is responsible.2. CONTRIBUTION NOT REQUIRED. As respects work performed by the Named Insured for or on behalf of the Additional Insured, the insurance afforded by this policy shall: (a) be primary insurance as respects the Additional Insured; or (b) stand in an unbroken chain of coverage excess of the Named Insured's primary coverage. Any insurance or self-insurance maintained by the Additional Insured shall be excess of the Named Insured's insurance and not contribute with it.3. CANCELLATION NOTICE. With respect to the interests of the Additional Insured, this insurance shall not be canceled, except after thirty (30) days prior written notice, by receipted delivery, has been given to the Additional Insured.4. SCOPE OF COVERAGE. This policy affords coverage at least as broad as: (1) If primary, Insurance Services Office form number CA0001, Code 1 ("any auto"); or (2) If excess, affords coverage which is at least as broad as the primary insurance forms referenced in the preceding section (1). <p>Except as stated above, nothing herein shall be held to waive, alter or extend any of the limits, conditions, agreements or exclusions of the policy to which this endorsement is attached.</p>		
ENDORSEMENT HOLDER		
OWNER	AUTHORIZED REPRESENTATIVE <input type="checkbox"/> Broker/Agent <input type="checkbox"/> Underwriter <input type="checkbox"/> _____ I, _____, (print/type name) warrant that I have authority to bind the above mentioned insurance company and by my signature hereon do so bind this company to this endorsement. Signature _____ (original signature required) Telephone: (_____) _____ Date Signed: _____	

WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY SPECIAL ENDORSEMENT

WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY SPECIAL ENDORSEMENT		SUBMIT IN DUPLICATE	
SUBMIT IN DUPLICATE			
For _____ (The Owner)	ENDORSEMENT NO.	ISSUE DATE (MM/DD/YY)	
PRODUCER	POLICY INFORMATION: Insurance Company: Policy No.: Policy Period: (from) _____ (to) _____		
NAMED INSURED	OTHER PROVISIONS		
CLAIMS: Underwriter's representative for claims pursuant to this insurance. Name: _____ Address: _____ Telephone: _____	EMPLOYERS LIABILITY LIMITS \$ _____ (Each Accident) \$ _____ (Disease – Policy Limit) \$ _____ (Disease – Each Employee)		
In consideration of the premium charged and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any endorsement now or hereafter attached thereto, it is agreed as follows:			
1. CANCELLATION NOTICE. This insurance shall not be canceled, except after thirty (30) days prior written notice, by receipted delivery, has been given to the Owner.			
2. WAIVER OF SUBROGATION. This insurance company agrees to waive all rights of subrogation against the Owner, the members of its governing body, its officers, employees and volunteers for losses paid under the terms of this policy which arise from the work performed by the Named Insured for the Owner.			
Except as stated above, nothing herein shall be held to waive, alter or extend any of the limits conditions, agreements or exclusions of the policy to which this endorsement is attached.			
ENDORSEMENT HOLDER	AUTHORIZED REPRESENTATIVE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
OWNER	_____ _____ _____ _____ _____		

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between

whose address is _____
hereinafter called "Owner," _____
whose address is _____
hereinafter called "Contractor" and _____
whose address is _____
hereinafter called "Escrow Agent."

For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

- (1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for _____
Annual Sewer Repair and Replacement Project – Pyrite St. / 60 Fwy, JCSD
Project No. C245123 in the amount of _____
(\$ _____) dated _____
_____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the escrow agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of _____, and shall designate the Contractor as the beneficial Owner.
- (2) The Owner shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.
- (3) When the Owner makes payment of retention earned directly to the escrow agent, the escrow agent shall hold them for the benefit of the Contractor until such time as the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the escrow agent directly.
- (4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.

(5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

(6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

(7) The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the Owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.

(8) Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:

On behalf of Contractor:

Title

Title

Name

Name

Signature

Signature

Address

Address

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their property officers on the date first set forth above.

Owner:

Contractor:

Title

Title

Name

Name

Signature

Signature

Escrow Agent:

Title

Name

Signature

Address

GENERAL CONDITIONS

TABLE OF CONTENTS
OF GENERAL CONDITIONS

	<u>Page</u>
1. Definitions	GC-1
2. Authority of the Manager	GC-2
3. Legal Address of Contractor.....	GC-3
4. Contractor Responsibility	GC-3
5. Contractor's Liability	GC-9
6. Safety	GC-9
7. Trespass	GC-11
8. Insurance	GC-11
9. Agents of Owner not Personally Liable	GC-15
10. Subcontracts	GC-15
11. Assignment Forbidden	GC-16
12. Lines, Grades, and Measurements	GC-16
13. Domestic Materials and Machinery (See Note).....	GC-17
14. No Discrimination	GC-17
15. Eight-Hour Law	GC-17
16. Prevailing Rates of Wages	GC-18
17. Mandatory Certification of Contractor and Employment of Apprentices	GC-19
18. Payment of Wages.....	GC-19
19. Overtime - No Extra Compensation	GC-20
20. Time For Completion And Liquidated Damages.....	GC-20
21. Changes And Extra Work.....	GC-21
22. Inspection.....	GC-25
23. Examination of Work	GC-26
24. Defective Materials.....	GC-26
25. Unpaid Claims.....	GC-26
26. Partial Estimates and Payments	GC-27
27. Final Estimate and Payment	GC-28
28. Sales and Use Taxes	GC-29
29. Payment Only in Accordance with Contract	GC-29
30. Moneys to be Retained	GC-29
31. Contractor's Claims	GC-30

32.	Recovery of Damages	GC-30
33.	Acceptance of the Work Not a Waiver	GC-30
34.	Maintenance and Guaranty	GC-30
35.	Suspension of Contract.....	GC-31
36.	Additional Surety	GC-32
37.	Termination of Contract.....	GC-32
38.	Right to Occupy Completed Portions of Work.....	GC-36
39.	Cooperation with Other Contractors and Governmental Agencies....	GC-36
40.	Clayton Act or Cartwright Act	GC-37
41.	Contract Funds.....	GC-37
42.	Precedence	GC-38
43.	Excavations: Discovery of Hazardous Conditions	GC-39
44.	Resolution of Claims	GC-40
45.	Contractor Eligibility to Perform on Public Works Projects	GC-42
46.	Release	GC-42
	Conditional Waiver and Release on Final Payment (Form)	GC-42
	Unconditional Waiver and Release on Final Payment (Form)	GC-43

“GENERAL CONDITIONS”

1. Definitions

Wherever words defined here, or pronouns used in their stead, occur in any of the contract documents, they shall have the following meanings:

a. The word "Owner" or "District" shall mean the Jurupa Community Services District. The term "Agent" when used with reference to the District, shall include the District's officers, agents, consultants and employees.

b. The term "General Manager of the Jurupa Community Services District shall mean the person designated by the Board of Directors of the Jurupa Community Services District to have charge, supervision, and administration of the Jurupa Community Services District and shall be hereinafter called the "Manager".

The Manager may, at his option, designate a person or persons to represent her to have charge, supervision, administration, inspecting, and reporting on the work as it progresses. This person shall be considered the "Owner's Representative".

c. The word "Contractor" shall mean the successful bidder who is entering into this contract with the Jurupa Community Services District, Riverside County, California, for the furnishing of the material, equipment, and/or services specified in this contract, and the legal representatives of said party, or the agent appointed to act for said party in the execution of the contract. Said party is referred to throughout the contract documents as if of the singular number and the masculine gender. The Contractor shall hold a valid Contractor's license in accordance with the provisions of Division 3, Chapter 9 of the Business and Professions Code of the State of California, and all amendments thereto.

d. "Project Engineer" shall mean the Registered Professional Engineer designated by the Owner to give the work general engineering supervision. The term "Project Engineer" shall mean the independently contracting professional consultant retained by the Owner on an ongoing basis to perform engineering services on behalf of the Owner and to advise the Owner's Board of Directors and staff on engineering matters. Under this contract the Project Engineer is the Agent of the Owner and the General Manager for all purposes, and shall initiate such action, or carry out such instructions, or both, as is required to assure full compliance by the Contractor with these contract documents. The Project Engineer has full authority and responsibility, consistent with the Manager's instructions,

for contract compliance, and shall make all technical engineering decisions hereunder.

e. "Owner Property" shall mean any work site upon which the Contractor shall be required to perform under the contract including private property, property owned in-fee by the Owner of upon which it holds an appropriate lease, right of way, license, or encroachment permit.

f. **"Liquidated Damages" as defined under Section 20 of this General Conditions shall be \$2,000 per day.**

g. "County" whenever used shall mean Riverside County, California.

2. Authority of the Manager

a. Power of Decision. The Manager shall decide every question regarding the interpretation of these contract documents or the true meaning or import of any provisions contained therein. A dispute which arises from the Manager's final decision shall be submitted to independent arbitration, if mutually agreeable to the parties; otherwise by litigation in a court of competent jurisdiction.

b. No Power to Waive Contract. It is expressly agreed that neither the Manager nor any of his assistants or agents, shall have any power to waive the obligation of the contract for the performance of work and/or furnishing by the Contractor of the equipment and/or material conforming to the Special Requirements, Basic Specifications, Plans, Technical Specifications, and Standard Drawings.

c. Access to Contractor's Plant. The Manager, his assistants, inspectors, and agents shall at all times have immediate access to all parts of the Contractor's plant(s) where the production of any equipment and/or material for delivery under this agreement is in progress and shall be afforded there, without charge to the Owner, full facilities for determining that all said equipment and/or material is being produced so as to comply strictly with the Special Requirements, Basic Specifications, Plans, Technical Specifications, and Standard Drawings.

d. Access to Site of Work. The Manager, his assistants, inspectors, and agents shall at all times have immediate access to the site of the work and to all parts of the Contractor's plant used in conjunction with work being performed hereunder on Owner property and shall be afforded there, without charge to the Owner, full facilities for determining that all said work is being performed so as to comply strictly with the Special Requirements, Basic Specifications, Plans, Technical Specifications, and Standard Drawings.

3. Legal Address of Contractor

The address given at the end of the Contractor's proposal herein, is designated as the place to which all notices, letters, and other communications to the Contractor shall be mailed or delivered. The mailing to or delivering at the above named place of any notice, letter, or other communication to the Contractor shall be deemed sufficient service thereof upon the Contractor. The date of service shall be the date of such mailing or delivery. Such address may be changed at any time by a written notice signed by the Contractor and hand delivered to the Manager. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter, or other communication upon the Contractor personally.

Pursuant to Public Contract Code section 9201, the District shall provide Contractor with timely notification of the receipt of any third-party claim relating to the Contract.

4. Contractor Responsibility

a. Cooperation with Manager. The Contractor shall comply with all orders of the Manager in regard to maintaining an adequate progress, but neither the making of such demands nor the failure of the Manager to make such demands shall relieve the Contractor of his obligation to secure the quality of equipment and/or material and/or performance of work and the rate of delivery of said equipment and/or material and/or completion of work as stipulated in the contract, and the Contractor alone shall be responsible for the safety, efficiency, and adequacy of his plant, equipment, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operation.

b. Examination of Site and Documents. Before commencing any portion of the Work, Contractor shall again carefully examine the Special Requirements, Basic Specifications, Plans, Technical Specifications, and Standard Drawings, has visited and examined the delivery route(s) and the installation site for equipment and/or materials which he has agreed to supply herein, and/or the work site upon which he has agreed to perform herein and is familiar with local conditions which may affect his manufacture and delivery of the said equipment and/or materials, and/or performance of said work, and that except as provided herein he will make no claims for additional compensation over and above the quotations set forth in the Bidding Documents because of difficulties, real or anticipated. Contractor shall immediately notify the Owner's Representative of any potential error, inconsistency, ambiguity, conflict or lack of detail or explanation. If Contractor performs, permits, or causes the performance

of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any subcontractor proceed with Work if uncertain as to the applicable requirements. Contractor is solely responsible for the means and methods utilized to perform the Work. In no case shall the Contractor's means and methods deviate from commonly used industry standards.

c. Contractor Furnish Information. Before proceeding with the erection of temporary structures, including sheeting, bracing, upon the property of the Owner, the Contractor shall furnish the Manager with information and drawings of all such structures as may be required by the Manager. Drawings and prints in such detail as may be required of articles, machinery, or fabricated materials entering into permanent construction which are by the Special Requirements, Basic Specifications, Plans, Technical Specifications, and Standard Drawings, required to be furnished by the Contractor and of which detailed drawings are not furnished by the Owner, shall be submitted by the Contractor for approval and shall become the property of the Owner; such approval shall not, however, operate to waive or modify any provision or requirement contained in the Special Requirements, Basic Specifications, Plans, Technical Specifications, and Standard Drawings.

d. Specifications and Drawings. The Contractor shall keep at his place(s) of work hereunder a copy of the Special Requirements, Basic Specifications, Plans, Technical Specifications, and Standard Drawings and shall at all times give the Manager access thereto. The Contractor shall check all dimensions and quantities on the drawings or schedules herein contained or given to him by the Manager and shall notify the Manager of all errors therein which may be discovered by examining and checking the drawings. He shall not take advantage of any error or omission in the Plans, Special Requirements, Basic Specifications, or in the Standard Drawings or schedules, as full instructions will be furnished by the Manager should such error omission be discovered, and the Contractor shall carry out such instructions as if originally specified. In the event of conflicts between the Specifications and Drawings, the requirements of the Specifications shall take precedence over those of the Drawings.

e. Risk of Loss. Until by the formal acceptance by the Owner of the performance of the Contractor hereunder, either by furnishing equipment and/or materials or by performance of work, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements and from any other cause, whether arising from the execution or from the non-execution of the work.

The Contractor shall rebuild, repair, restore and replace, and make good all injuries or damages to any portion of that which he is to improve, provide or complete thereunder occasioned by any of the above causes before completion and acceptance and shall bear the expense thereof, except for such injuries or damages as are occasioned by acts of the Federal Government or the public enemy, and only to the extent of 5% of the contract amount where such injuries or damages are proximately caused by an act of God. In case of suspension of work from any cause whatsoever, the Contractor shall be responsible for all equipment and/or materials then upon Owner property and shall properly store them, if necessary, and shall erect temporary structures where necessary in so doing. Nothing in this contract shall be considered as vesting in the Contractor any right of property in materials used after they have been attached or affixed to the work or the soil upon Owner real property but all such materials shall upon being so attached or so affixed, become the property of the Owner.

f. Copyrights and Patents. The Contractor shall and does hereby hold and save the Owner, its officers, agents, and employees harmless from liability of any nature and kind, including costs and expenses, for or on account of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article or appliance, manufactured, furnished, or used by him in the performance of this contract, including their use by the Owner unless otherwise specifically stipulated in this contract.

g. Contractor's Personal Attention and Supervision. The Contractor shall give his personal attention constantly to the faithful prosecution of the work, and shall be present, either in person or be represented by a duly authorized and competent representative, on the site of the work, continually during progress of any work hereunder upon Owner property, to receive directions or instruction from the Manager. Whenever the Contractor is not present on any part of the said work where it may be desired to give directions, orders may be given by the Manager and shall be received and obeyed by the superintendent or foreman who may have charge of the particular part of the work in reference to which orders are given.

h. Materials and Workmanship. All materials furnished by the Contractor shall be new and of the best quality for their particular use. Work shall be performed by skilled workmen fully qualified for their trade, and shall be subject to the approval of the Manager.

The Contractor shall submit to the Manager samples, specimens, or test pieces of such materials to be furnished or used in the work as the Manager may require. All materials must be of the specified quality and

equal to approved sample, if samples have been submitted. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from the Special Requirements, Basic Specifications, Plans, or the Standard Drawings.

Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of the Work and shall be stored properly and protected as required by the Contract documents. Contractor shall be entirely responsible for damage or loss by weather or other causes to materials or Work.

No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the Work and agrees upon completion of all work to deliver the Work to the District free from any claims, liens, or charges.

Materials shall be stored on the Work site in such manner so as not to interfere with any operations of the District or any independent contractor.

i. Testing. The testing of any materials or of any portions of the job under construction shall be at the option of the Owner's field representative. The Contractor shall furnish, without charge, any materials requested for testing in accordance with Section 4 of the Greenbook, Standard Specifications for Public Works Construction (latest edition). The Contractor shall also provide access to any area of the job for testing. The charges for normal testing will be paid by the Owner. Normal testing shall be deemed to be the testing required by the Standard Specifications and/or the Inspector. Extra testing required, due to test failures, will be at the Contractor's expense, either as a billing or as a deduction from contract payment. The Contractor shall notify the Owner's field representative of the readiness of any phase of construction to be tested and shall not proceed with any subsequent phase of work until the results of the test are known and approved. Testing shall be performed by a private laboratory, selected by the Owner.

j. Laws and Regulations. The Contractor shall keep himself fully informed of all laws, ordinances and regulations in any manner affecting those engaged or employed on the contract work, or the materials used in the contract work, or in any way affecting the conduct of the contract work, and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency should be discovered in this contract, or in the Special Requirements, Basic

Specifications, Plans, or Standard Drawings herein referred to, in relation to any such law, ordinance, regulation, order, or decree, the Contractor shall forthwith report the same in writing to the Manager. He shall at all times himself observe and comply with and shall cause all his agents and employees to observe and comply with all such applicable laws, ordinances, regulations, orders, and decrees in effect or which may become effective before completion of this contract; and shall protect and indemnify the Owner and its officers and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulations, order, or decree, whether by himself, by his employee or by a subcontractor. Except as otherwise explicitly provided elsewhere in the Special Requirements, Basic Specifications, Plans, or Standard Drawings, all permits and/or licenses necessary to the prosecution of the contract work shall be secured by the Contractor at his own expense, and he shall pay all taxes properly assessed against his equipment or property used or required in connection with the work.

k. Removing Obstructions and Maintenance of Existing Improvements. When the work hereunder involves performance upon Owner property, and when the proper completion of the said work requires their temporary or permanent removal, the Contractor shall, at his own expense, remove, and without unreasonable delay temporarily or permanently replace or relocate in a workmanlike manner and to the satisfaction of the Owner and of any other person or agency having jurisdiction, all water pipes, gas pipes, drainage lines, irrigation lines, sewer lines, pipelines, conduits, culverts, roads, driveways, fences, bridges, railroad tracks, wires, poles, towers, retaining walls, buildings, curbs, gutters, concrete walks, trees, shrubs, lawns, and all other improvements of whatsoever character not required by law to be removed by the owner thereof; and all such improvements temporarily removed shall be maintained until permanently replaced, all at the Contractor's expense.

Where the work is to be constructed in or adjacent to areas which have been improved by lawns, trees, shrubs, or gardens, the Contractor shall remove such trees or plants as may be necessary for the prosecution of the work and give them proper care and attention until the work has been satisfactorily completed, after which the Contractor shall replace them in as nearly the original condition and location as is reasonably possible. Where it is necessary to deposit the excavated materials on lawns during the process of construction, the Contractor shall first lay burlap or canvas on the lawn to prevent contact between the excavated material and the lawn.

Unless otherwise indicated in the Special Requirements, Basic Specifications, Technical Specifications, Plans, and Standard Drawings, or

unless otherwise cared for by the owner of a public utility or franchise, all water, gas, oil, or irrigation lines, lighting, power, or telephone conduits or wires, or sewer lines, structures, or house connections in place, and all other surface or subsurface structures or lines shall be maintained by the Contractor and shall not be disturbed, disconnected, or damaged by him during the progress of the work; provided, that should the Contractor in the performance of the work disturb, disconnect, or damage any of the above, all expenses, of whatever nature, arising from such disturbance, or in the replacement or repair thereof, shall be borne by the Contractor. However, in accordance with Section 4215 of the California Government Code, the Contractor shall be compensated for the cost of locating and repairing damage to main or trunkline utility facilities located on the jobsite, not due to the failure of the Contractor to exercise reasonable care; for costs of removing or relocating such utility facilities not indicated in the Contract Documents with reasonable accuracy; and for the operating costs for equipment on the project necessarily idled during such work.

At least two working days prior to commencing any excavation pursuant to this Contract, the Contractor shall contact Underground Service Alert or other appropriate regional notification center if the excavation will be conducted in an area which is known, or reasonably should be known, to contain subsurface installations.

I. Clean Up. Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment. Contractor shall not store debris under, in, or about the premises. Upon completion of Work, Contractor shall clean the interior and exterior of the building or improvement including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected so surfaces are free from foreign material or discoloration. Contractor shall clean and polish all glass, plumbing fixtures, and finish hardware and similar finish surfaces and equipment and contractor shall also remove temporary fencing, barricades, planking and construction toilet and similar temporary facilities from site. Contractor shall also clean all buildings, asphalt and concrete areas to the degree necessary to remove oil, grease, fuel, or other stains caused by Contractor operations or equipment.

Contractor shall fully clean up the site at the completion of the Work. If the Contractor fails to immediately clean up at the completion of the Work, the District may do so and the cost of such clean up shall be charged back to the Contractor.

5. Contractor's Liability

Contractor shall defend (with counsel of District's choosing), indemnify and hold the District, its officials, officers, agents, employees, and representatives free and harmless from any and all claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or equity, regardless of whether the allegations are false, fraudulent, or groundless, to property or persons, including wrongful death, to the extent arising out of or incident to any acts, omissions or willful misconduct of Contractor, its officials, officers, employees, agents, consultants and contractors arising out of or in connection with the performance of the Work or this Contract, including claims made by subcontractors for nonpayment, and including without limitation the payment of all consequential damages and other related costs and expenses. Contractor shall defend, at Contractor's own cost, expense and risk, with counsel of District's choosing, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against District, its officials, officers, agents, employees and representatives. To the extent of its liability, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against District, its officials, officers, employees, agents, employees and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse District, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code Section 2782.

6. Safety

a. The Contractor shall be responsible for all damages to persons or property that occur as a result of the Work. Contractor shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final acceptance by the District. All Work shall be solely at the Contractor's risk. Contractor shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Contractor shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the site where Work is being performed. Contractor shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction.

b. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from the Owner's Representative, is hereby permitted to act to prevent such threatened loss or injury; and Contractor shall so act, without appeal, if so

authorized or instructed by the Owner's Representative or the District. Any compensation claimed by Contractor on account of emergency work shall be determined by and agreed upon by the District and the Contractor.

c. Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.

d. Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures and to avoid damage thereto, and Contractor shall repair any damage thereto caused by the Work operations. Contractor shall:

- 1) Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.
- 2) Provide substantial barricades around any shrubs or trees indicated to be preserved.
- 3) Deliver materials to the Work site over a route designated by the applicable local jurisdiction.
- 4) Provide any and all dust control required and follow the applicable air quality regulations as appropriate. If the Contractor does not comply, the District shall have the immediate authority to provide dust control and deduct the cost from payments to the Contractor.
- 5) Confine Contractor's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the Owner's Representative. Contractor shall not unreasonably encumber the Work site with its materials.
- 6) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved civil engineer or land surveyor, at no cost to the District.
- 7) Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to the District.

- 8) Preserve and protect from injury all buildings, pole lines and all direction, warning and mileage signs that have been placed within the right-of-way.
- 9) At the completion of work each day, leave the Work site in a clean, safe condition.
- 10) Comply with any stage construction and traffic handling plans. Access to residences and businesses shall be maintained at all times.

These precautionary measures will apply continuously and not be limited to normal working hours. Full compensation for the Work involved in the preservation of life, safety and property as above specified shall be considered as included in the prices paid for the various contract items of Work, and no additional allowance will be made therefor.

e. Should damage to persons or property occur as a result of the Work, Contractor shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The District shall be entitled to inspect and copy any such documentation, video, or photographs.

7. Trespass

The Contractor shall be responsible for all damage or injury which may be caused on any property by trespass of the Contractor, his agents, employees or subcontractors in the course of performance of work hereunder, whether the said trespass was committed with or without the consent or knowledge of the Contractor.

8. Insurance

a. *General:* Promptly, upon execution of the contract and prior to commencement of any work, Contractor shall furnish the Owner certificates of insurance covering all policies providing the insurance required hereunder. Said certificates shall be signed on behalf of the insurer by an authorized representative thereof and his signature shall be notarized.

Contractor agrees, upon written request, to furnish Owner with copies of all required policies, certified by an authorized representative of the insurer. All insurance issued under the provisions of this section shall be issued in a form and by insurance organizations approved by the Owner, prior to commencement of performance hereunder.

b. *Time for Compliance:* The Contractor shall not commence work under this Contract until he has provided evidence satisfactory to the Owner that he has secured all insurance required under this section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until he has provided evidence satisfactory to the Owner that the subcontractor has secured all insurance required under this section.

c. *Minimum Requirements:* Contractor shall, at his expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, the Contractor's agents, representatives, employees or subcontractors. Contractor shall also require all of his subcontractors to procure and maintain the same insurance for the duration of the Contract. Such insurance shall meet at least the following minimum levels of coverage:

Minimum Scope of Insurance: Coverage shall be at least as broad as the latest version of the following:

(1) *General Liability:* Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001).

(2) *Automobile Liability:* Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto).

(3) *Workers' Compensation and Employers' Liability:* Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(4) *Builders'/All Risk:* Builders'/All Risk insurance covering for all risks of loss (including earthquakes and floods if requested by the Owner). Earthquake and flood are not requested by the Owner.

Minimum Limits of Insurance: Contractor shall maintain limits no less than:

(1) *General Liability:* \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

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

(3) *Workers' Compensation and Employer's Liability:* Workers' compensation limits as required by the Labor Code of the State of California. Employers Liability limits of \$1,000,000 per accident for bodily injury or disease.

(4) *Builders'/All Risk:* Completed value of the project.

d. *Insurance Endorsements:* The insurance policies shall contain the following provisions, or Contractor shall provide endorsements on forms supplied or approved by the Owner to add the following provisions to the insurance policies:

(1) *General Liability:* (1) The Owner, its directors, officers, employees, agents and volunteers, Albert A. Webb Associates, if any shall be covered as additional insureds with respect to the work or operations performed by or on behalf of the Contractor, including materials, parts or equipment furnished in connection with such work; and (2) the insurance coverage shall be primary insurance as respects the Owner, its directors, officers, employees, agents and volunteers, Albert A. Webb Associates or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the Owner, its directors, officers, employees, agents and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it.

(2) *Automobile Liability:* (1) The Owner, its directors, officers, employees, agents and volunteers, Albert A. Webb Associates, if any shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible; and (2) the insurance coverage shall be primary insurance as respects the Owner, its directors, officers, employees, agents and volunteers, Albert A. Webb Associates or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the Owner, its directors, officers, employees, agents and volunteers, Albert A. Webb Associates shall be excess of the Contractor's insurance and shall not be called upon to contribute with it.

(3) *Workers' Compensation and Employers Liability Coverage:* The insurer shall agree to waive all rights of subrogation against the Owner, its directors, officers, employees, agents and volunteers, Albert A. Webb Associates for losses paid under the terms of the

insurance policy which arise from work performed by the Contractor.

(4) *All Coverages:* Each insurance policy required by this contract shall be endorsed to state that: (1) coverage shall not be canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Owner; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the Owner, its directors, officials, officers, employees, agents and volunteers, Albert A. Webb Associates, if any.

e. *Builder's/All Risk Policy Requirements:* The builders'/all risk insurance shall provide that the Owner be named as loss payee. In addition, the insurer shall waive all rights of subrogation against the Owner. The making of progress payments to the Contractor shall not be construed as creating and insurable interest by or for the Owner, or as relieving the Contractor or its subcontractors of any responsibility for loss from any direct physical loss, damage or destruction covered by the builders'/all risk policy occurring prior to final acceptance of the work by the Owner.

f. *Separation of Insureds; No Special Limitations:* All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the Owner, its directors, officers, employees, agents and volunteers and named consultants, if any.

g. *Deductibles and Self-Insurance Retentions:* Any deductibles or self-insured retentions must be declared to and approved by the Owner. Contractor shall guarantee that, at the option of the Owner, either: (1) the insurer shall reduce or eliminate such deductibles or self-insurer retentions as respects the Owner, its directors, officers, employees, agents and volunteers; or (2) the Contractor shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

h. *Acceptability of Insurers:* Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Owner.

i. *Verification of Coverage:* Contractor shall furnish Owner and named associates, if any, with original certificates of insurance and endorsements effecting coverage required by this contract. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and

shall be on forms supplied or approved by the Owner. All certificates and endorsements must be received and approved by the Owner before work commences. The Owner reserves the right to require complete, certified copies of all required insurance policies, at any time.

j. *Subcontractors*: All subcontractors shall meet the requirements of this Section before commencing work. In addition, Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

9. Agents of Owner not Personally Liable

No agent of the Owner shall be personally responsible for any liability arising under this contract, and no claim shall be made or filed, and neither the Owner nor any of its agents shall be liable for or held to pay any money, except as specifically provided in this contract.

10. Subcontracts

a. The provisions of the Subletting and Subcontracting Fair Practices Act found in the California Government Code are incorporated herein and made a part hereof by this reference. Each bidder shall set forth in his proposal the name and location of the place of business of each subcontractor who will perform work or labor or render service to the general contractor in or about the construction of the work, or who will specifically fabricate and install a portion of the work or improvement according to detailed drawings contained in the plans and specifications, such work being in an amount in excess of one-half of one percent (1/2 of 1%) of the general contractor's total bid.

b. It is the Owner's intent that the work shall be performed and constructed by a Contractor who is staffed and equipped to construct the major portion of the work with his own directly employed personnel and with the minimum feasible subcontracting. Subcontracting may be permitted by the Owner to such extent as is shown to be necessary or advantageous to the Contractor without injury to the intent and interests of the Owner. In general, it is the Owner's intent that subcontracting shall be limited to not more than forty-five percent (45%) of the value of the work. Any bid proposing subcontracting in excess of this limit is subject to rejection at the discretion of the Owner.

c. A copy of each subcontract, if in writing, or if not in writing then a written statement signed by the Contractor, giving the name of the subcontractor, and the terms and conditions of such subcontract, shall be

filed with the Manager before the subcontractor begins work. Each subcontract shall contain a reference to the agreement between the Owner and the Contractor, and the terms of that agreement and all parts thereof shall be made a part of such subcontract insofar as applicable to the work covered thereby. Each subcontract shall provide for its annulment by the Contractor at the order of the Manager, if, in the Manager's opinion, the subcontractor fails to comply with the requirements of the principal contract insofar as the same may be applicable to his work. Nothing herein contained shall create any contractual relation between any sub-contractor and the Owner or relieve the Contractor of any liability or obligation hereunder.

d. The Contractor is hereby alerted to provisions of Section 7107 of the Public Contract Code, requiring the Contractor to pay to each of its subcontractors from whom retention has been withheld, each subcontractor's share of the retention received, within 7 days from the time that all or any portion of such retention proceeds are received by Contractor from the Owner.

11. Assignment Forbidden

The Contractor shall not assign, transfer, convey or otherwise dispose of this contract, or of his right, title or interest in or to the same or any part thereof, without the previous consent in writing of the Manager; and he shall not assign by power of attorney, or otherwise, any of the moneys to become due and payable under the contract, unless by and with the like consent signified in like manner. If the Contractor shall, without such previous written consent, assign, transfer, convey, or otherwise dispose of the contract, or of his right, title or interest therein, or of any of the moneys to become due under the contract to any other person, company, or other corporation, the contract may, at the option of the Owner, be terminated and revoked, and the Owner shall thereupon be relieved and discharged from any and all liability and obligation growing out of the same to the Contractor, and to his assignee or transferee. No right under the contract, nor any right to any money to become due hereunder, shall be asserted against the Owner in law or equity by reason of any so-called assignment of the contract, or any part thereof, or by reason of the assignment of any moneys to become due hereunder, unless authorized as aforesaid by the written consent of the Manager.

12. Lines, Grades, and Measurements

Unless otherwise provided in the Special Requirements, any and all lines and grades will be furnished by the Owner. The Contractor shall provide such materials and give such assistance as may be required. The Contractor shall preserve all bench marks, monuments, survey marks, and stakes upon Owner property, and in case of their removal or destruction by him, his employees, or

subcontractors, he shall be liable for the cost of their replacement. The Contractor shall keep the Manager informed, a reasonable time in advance, of the times and places at which he intends to do work, in order that lines and grades may be furnished, that inspection may be provided and that necessary measurements for record and payment may be made with the minimum of inconvenience to the Manager or delay to the Contractor. Whenever the Manager finds it necessary to carry on his operations outside of regular working hours or at other times when the work of the Contractor is not in progress, the Contractor shall furnish all necessary service and assistance. No payment shall be made to the Contractor for any of the work or delay occasioned by giving lines and grades, or making other necessary measurements, or by inspection.

13. Domestic Materials and Machinery (See Note)

In the performance of this contract, there shall be used only such unmanufactured articles, materials and supplies as have been mined or produced in the United States, and only such manufactured articles, materials and supplies as have been mined, produced, or manufactured, as the case may be, in the United States, substantially all from materials produced in the United States in accordance with Section 4300 through 4305 of the Government Code of California, except to the extent, if any, that such provision may be superseded by any law or treaty of the United States. (Note: This provision is included within the General Conditions as required by the provisions of Sections 4300-4305 of the Government Code. However, the Owner will not enforce this provision by reason of Bethlehem Steel Corp. v. Board of Commissioners (1969) 276 C.A. 2d 221, which held Sections 4300-4305 to be unconstitutional.)

14. No Discrimination

The Contractor shall not discriminate in the employment of persons upon the contract work because of their race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex except as provided in Section 1420 of the California Labor Code. The Contractor shall require a clause to this effect to be included in every subcontract to perform work under this contract.

15. Eight-Hour Law

Except as otherwise provided the California Labor Code, eight hours of labor shall constitute a legal day's work, and the time of service of any workman employed on the work shall be limited and restricted to eight hours during any one calendar day, and forty hours in any one calendar week, except when payment of overtime is made. The Contractor shall be subject to Civil liabilities and penalties for each workman employed in the execution of this contract by him, or by any subcontractor under him, for each calendar day during which such

workman is not paid for overtime in violation of the provisions of said Labor Code.

16. Prevailing Rates of Wages

The Contractor is aware of the requirements of Labor Code Sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this Work involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Agreement from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov/dlsr/. In the alternative, the Contractor may view a copy of the prevailing rates of per diem wages at the District. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to perform the Work available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Work site. Contractor shall defend, indemnify and hold the District, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

The Contractor and each subcontractor shall forfeit as a penalty to the District not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the stipulated prevailing wage rate for any work done by him, or by any subcontract under him, in violation of the provisions of the Labor Code. The difference between such stipulated prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor. Contractor shall post, at appropriate conspicuous points on the Work site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

In accordance with Labor Code section 1771.4, the Contractor and each subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations on a weekly basis and in the format prescribed by the Department of Industrial Relations, which may include electronic submission. Contractor shall comply with all requirements and regulations from the Department of Relations relating to labor compliance monitoring and enforcement.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The Contractor shall have an affirmative obligation to verify that all subcontractors are currently and validly registered with the Department of Industrial Relations and shall not permit a subcontractor of any tier to perform work on the project without first verifying the subcontractor's registration. The Contractor shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain valid registration for the duration of the project.

17. Mandatory Certification of Contractor and Employment of Apprentices

This contract shall not prevent the employment of properly indentured apprentices in accordance with the California Labor Code, and no employer or labor union shall refuse to accept otherwise qualified employees as indentured apprentices on the work performed hereunder solely on the ground of race, creed, national origin, ancestry, color or sex. Every qualified apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade in which he or she is employed, and shall be employed only in the craft or trade to which he or she is indentured.

If California Labor Code Section 1777.5 applies to the Contract Work, the Contractor and any subcontractor hereunder who employ workmen in any apprenticeable craft or trade shall apply to the joint apprenticeship committee administering applicable standards for a certificate approving the Contractor and any subcontractor for the employment and training of apprentices. Upon issuance of this certificate the Contractor and any subcontractor shall employ the number of apprentices provided for therein, as well as contribute to the fund to administer the apprenticeship program in each craft or trade in the area of the work hereunder.

The parties hereto expressly understand that the responsibility for compliance with this Section No. 17 and with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code in regard to all apprenticeable occupations lies with the Contractor.

18. Payment of Wages

The issuance as payment for wages of any evidence of indebtedness is prohibited unless the same is negotiable and payable on demand without discount. Wages must be paid at least semi-monthly on regular pay days established in advance, and shall include all amounts for labor or services performed by employees of every description, as required under the California Labor Code.

19. Overtime - No Extra Compensation

Overtime work shall not entitle the Contractor to any compensation for any contract item in addition to that stipulated in the contract for the kind of work performed, even though such overtime or legal holiday work may be required under emergency conditions and may be ordered by the Manager. In case of extra work ordered by the Manager under the provisions hereof, no additional payment will be made to the Contractor because of the payment by him of overtime or legal holiday rates for such work, unless the use of overtime or legal holiday rates in connection with such extra work is specifically ordered by the Manager and then only to such extent as extra payment is regularly being made by the Contractor to his men for overtime or legal holiday work of a similar nature in the same locality.

20. Time For Completion And Liquidated Damages

a. **Time for Completion/Liquidated Damages.** Work shall be commenced within ten (10) days of the date stated in the District's Notice to Proceed and shall be completed by Contractor in the time specified in the Contract Documents. The District is under no obligation to consider early completion of the Work; and the Contract completion date shall not be amended by the District's receipt or acceptance of the Contractor's proposed earlier completion date. Furthermore, Contractor shall not, under any circumstances, receive additional compensation from the District (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the Contractor and the Contract completion date. If the Work is not completed as stated in the Contract Documents, it is understood that the District will suffer damage. In accordance with Government Code Section 53069.85, it is impractical and infeasible to determine the amount of actual damage that the District would suffer due to late completion, and therefore it is agreed that Contractor shall pay to the District as fixed and liquidated damages, and not as a penalty, the sum stipulated in the Contract for each day of delay until the Work is fully completed. Contractor and its surety shall be liable for any liquidated damages. Any money due or to become due the Contractor may be retained to cover liquidated damages.

b. **Inclement Weather.** Contractor shall abide the Owner's Representative's determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Work schedule.

c. **Extension of Time.** Contractor shall not be charged liquidated damages because of any delays in completion of the Work due to unforeseeable causes beyond the control and without the fault or

negligence of Contractor (or its subcontractors or suppliers). Contractor shall within five (5) days of identifying any such delay notify the District in writing of causes of delay. The District shall ascertain the facts and extent of delay and will grant an extension of time for completing the Work when, in its judgment, the facts justify such an extension. Time extensions to the Work shall be requested by the Contractor as they occur and without delay. No delay claims shall be permitted unless the event or occurrence delays the completion of the Work beyond the Contract completion date.

d. **No Damages for Reasonable Delay.** The District's liability to Contractor for delays for which the District is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall the District be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs. Damages caused by unreasonable District delay, including delays caused by items that are the responsibility of the District pursuant to Government Code section 4215, shall be based on actual costs only; no proportions or formulas shall be used to calculate any delay damages.

21. Changes And Extra Work

a. Change Order Work.

1) The District, without invalidating the Contract, may order changes in the Work consisting of additions, deletions or other revisions, the Contract amount and Contract time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in the Contract amount or the Contract time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.

2) All claims for additional compensation to the Contractor shall be presented in writing before the expense is incurred and will be adjusted as provided herein. No work shall be allowed to lag pending such adjustment, but shall be promptly executed as directed, even if a dispute arises. No claim will be considered after the work in question has been done unless a written contract change order has been issued or a timely written notice of claim has been made by Contractor. Contractor shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on

account of any decrease or deletion of any item or portion of Work to be done. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract, and shall be subject to all terms, conditions and provisions of the original Contract.

- 3) Owner Initiated Change. The Contractor must submit a complete cost proposal, including any change in the Contract time, within seven (7) Days after receipt of a scope of a proposed change order, unless the District requests that proposals be submitted in less than seven (7) Days.
- 4) Contractor Initiated Change. The Contractor must give written notice of a proposed change order required for compliance with the Contract Documents within seven (7) Days of discovery of the facts giving rise to the proposed change order.
- 5) Whenever possible, any changes to the Contract amount shall be in a lump sum mutually agreed to by the Contractor and the District.
- 6) Price quotations from the Contractor shall be accompanied by sufficiently detailed supporting documentation to permit verification by the District.
- 7) If the Contractor fails to submit the cost proposal within the seven (7) Day period (or as requested), the District has the right to order the Contractor in writing to commence the work immediately on a force account basis and/or issue a lump sum change to the contract price in accordance with the District's estimate of cost. If the change is issued based on the District estimate, the Contractor will waive its right to dispute the action unless within fifteen (15) Days following completion of the added/deleted work, the Contractor presents written proof that the District's estimate was in error.
- 8) Estimates for lump sum quotations and accounting for cost-plus-percentage work shall be limited to direct expenditures necessitated specifically by the subject extra work, and shall be segregated as follows:
 - (a) Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the extra work is done, plus

employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

- (b) Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight and delivery. Materials cost shall be based upon supplier or manufacturer's invoice. If invoices or other satisfactory evidence of cost are not furnished within fifteen (15) Days of delivery, then the Owner's Representative shall determine the materials cost, at its sole discretion.
- (c) Tool and Equipment Use. No payment will be made for the use of small tools, tools which have a replacement value of \$1,000 or less. Regardless of ownership, the rates to be used in determining equipment use costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed.
- (d) Overhead, Profit and Other Charges. The mark-up for overhead (including supervision, on-site and home office overhead) and profit on work added to the Contract shall be according to the following:
 - i. "Net Cost" is defined as consisting of costs of labor, materials and tools and equipment only excluding overhead and profit. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and subcontractors at cost only, without mark-up.
 - ii. For Work performed by the Contractor's forces the added cost for overhead and profit shall not exceed fifteen (15%) percent of the Net Cost of the Work.

- iii. For Work performed by a subcontractor, the added cost for overhead and profit shall not exceed fifteen (15%) percent of the Net Cost of the Work to which the Contractor may add five (5%) percent of the subcontractor's Net Cost.
 - iv. For Work performed by a sub-subcontractor the added cost for overhead and profit shall not exceed fifteen (15 %) percent of the Net Cost for Work to which the subcontractor and general contractor may each add an additional five (5 %) percent of the Net Cost of the lower tier subcontractor.
 - v. No additional mark up will be allowed for lower tier subcontractors, and in no case shall the added cost for overhead and profit payable by District exceed twenty-five (25%) percent of the Net Cost as defined herein.
- 9) For added or deducted Work by subcontractors, the Contractor shall furnish to the District the subcontractor's signed detailed estimate of the cost of labor, material and equipment, including the subcontractor markup for overhead and profit. The same requirement shall apply to sub-subcontractors.
- 10) For added or deducted work furnished by a vendor or supplier, the Contractor shall furnish to the District a detailed estimate or quotation of the cost to the Contractor, signed by such vendor or supplier.
- 11) Any change in the Work involving both additions and deductions shall indicate a net total cost, including subcontracts and materials. Allowance for overhead and profit, as specified herein, shall be applied if the net total cost is an extra; overhead and profit allowances shall not be applied if the net total cost is a credit. The estimated cost of deductions shall be based on labor and material prices on the date the Contract was executed.
- 12) Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the change order for work. No claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity

of changes and/or clarifications. The Contractor may not change or modify the District's change order form in an attempt to reserve additional rights.

- 13) If the District disagrees with the proposal submitted by Contractor, it will notify the Contractor and the District will provide its opinion of the appropriate price and/or time extension. If the Contractor agrees with the District, a change order will be issued by the District. If no agreement can be reached, the District shall have the right to issue a unilateral change order setting forth its determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. Such determination shall become final and binding if the Contractor fails to submit a claim in writing to the District within fifteen (15) Days of the issuance of the unilateral change order, disputing the terms of the unilateral change order.
- 14) No dispute, disagreement or failure of the parties to reach agreement on the terms of the change order shall relieve the Contractor from the obligation to proceed with performance of the work, including extra work, promptly and expeditiously.
- 15) Any alterations, extensions of time, extra work or any other changes may be made without securing consent of the Contractor's surety or sureties.

22. Inspection

All materials and equipment furnished and all work performed shall be subject to rigid inspection by Owner. Work performed in the absence of inspection may be required to be removed and replaced under the proper inspection, with the entire cost of removal and replacement borne by the Contractor, even if such work is not defective. Work covered up without authority of the Manager shall, upon order of the Manager, be uncovered to the extent required to permit inspection, repair or replacement, and thereafter shall be recovered, all at the Contractor's sole cost. Whenever the Contractor arranges to work outside regular or specified work periods or to vary the work period during any particular day, he shall give the Manager 24 hours notice so that inspection may be provided. Such work shall be performed without extra compensation, and Contractor shall pay for inspection services provided on Saturdays, Sundays and holidays in accordance with established Owner rates. Contractor shall bear all costs and fees incurred as a result of inspection services furnished by utilities or others.

23. Examination of Work

The Contractor shall furnish the Manager every reasonable facility for ascertaining whether the work is in accordance with the requirements and intention of the Special Requirements, Basic Specifications, Plans, and Standard Drawings, even to the extent of uncovering or taking down portions of finished work which have been previously approved or authorized to be covered. Should such previously approved work thus exposed or examined prove satisfactory, the uncovering or taking down and the replacing of the covering or the making good of the parts removed shall be included in the contract estimates and will be paid for at the contract prices for the kind of work done or as extra work, as determined by the Manager; but should the work exposed or examined prove unsatisfactory, the uncovering, taking down, replacing, and making good shall be at the expense of the Contractor, and he shall be charged with the cost to the Owner of any materials furnished by the Owner for the unsatisfactory work and its replacement in excess of the requirements for satisfactory original construction.

24. Defective Materials

a. The inspection of the work to be performed under the contract shall not relieve the Contractor of any of his obligations to fulfill his contract, as herein prescribed, and all defective materials or workmanship shall be made good notwithstanding the fact that such materials or workmanship may have been previously inspected by the Manager and accepted or estimated for payment. If the material or workmanship shall be found defective at any time before the final acceptance of the entire contract performance, the Contractor shall forthwith make good such defect, without compensation, in a manner satisfactory to the Manager. The Manager shall be the sole judge of determining whether any defective material or workmanship is the result of the materials and methods of the Contractor or whether the defects have been caused by other contractors of the Owner having the responsibility of supplying the material.

b. If the Contractor shall fail or neglect to make ordered repairs of defective material or workmanship or to remove condemned material from the work within ten (10) days after the service by the Manager of an order to do such repair work or remove such materials, the Manager, acting on behalf of the Owner, may make the ordered repairs or remove the condemned materials and deduct the cost thereof from any moneys due the Contractor.

25. Unpaid Claims

Pursuant to Section 9356 of the California Civil Code, upon or before completion of work agreed to be performed or at any time prior to the expiration

of the period within which claims may be filed for record, certain persons claiming to have performed labor or furnished material, supplies, or services toward the performance of this contract may file with the Owner a verified statement of such claim, stating in general terms the kind of labor and materials and the name of the person to or for whom the same was done or furnished or both, together with a statement that the same has not been paid. If so, or if any person brings any action against the Owner or against any officer thereof to enforce such claim, the Owner shall withhold from the money under its control so much of said money due or to become due the Contractor under this Contract as shall be sufficient to satisfy and discharge the amount claimed and potential costs of suit, but in no event less than one and one-fourth (1-1/4) times the amount claimed. However, if the Owner in its discretion permits the Contractor to file such additional bond as is authorized by Section 9364 of the Civil Code in a penal sum equal to one and one-fourth (1-1/4) times the amount of the claim, the Owner shall not thereafter withhold said money on account of the claim.

26. Partial Estimates and Payments

Each month the Contractor shall submit to the Manager a written request for payment, together with such supporting data as the Manager may request, covering the amount of work then completed. Further, supporting data shall include an updated project schedule, proof that as-built drawings are being maintained, certified payrolls, and other information the Manager determines is pertinent to satisfying the Owner that the Contractor is meeting the requirements of the contract documents. Failure to provide said supporting data shall be grounds for the Owner to reject or delay the subject Partial Payment Estimate until said supporting information is provided to the satisfaction of the Owner. Such request and supporting data shall be submitted at least five (5) days prior to the regular meeting of the Board of Directors of the Owner to permit approval during such month. Upon receipt of such request and supporting data, the Manager shall establish estimates of the amount of work satisfactorily performed by the Contractor, and shall determine the value thereof. Upon approval by the Manager, payment will be made within ten (10) days after the date of said regular meeting, in the amount of ninety-five percent (95%) of the estimated value of such work. Review and payment of such requests by the Owner under this section are also subject to provisions of Section 20104.50 of the California Public Contract Code, summarized below:

Upon failure to make any undisputed progress payment within thirty (30) days after receipt of an undisputed and properly submitted request for payment from Contractor, as set out below, the Owner shall pay interest to Contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the California Code of Civil procedure.

Each request for payment shall be reviewed by the Manager as soon as practicable after receipt for the purpose of determining that the

payment request is a proper payment request. Any request for payment determined by the Manager not to be proper and suitable for payment shall be returned to Contractor as soon as practicable, but not later than seven (7) days after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reason why the payment request is not proper.

The number of days available to the Owner to make a payment without incurring interest pursuant to Section 20104.50 of the California Public Contract Code shall be reduced by the number of days by which the Owner exceeds the seven day return requirement set forth herein. For purposes of Section 20104.50 of the California Public Contract Code, a "progress payment" includes all payments properly due to the Contractor, except that portion of the final payment designated by this Contract as retention earnings.

27. Final Estimate and Payment

Contractor shall be entitled to final payment of unpaid and undisputed amounts due on the Contract within 60 days after completion of the Work, as hereinafter provided. Prior to that date, Owner will prepare a final estimate of the Work done by Contractor and compute therefrom the total value of the Work done by Contractor, from which Owner will deduct: (a) all previous partial payments made to Contractor under this Contract, (b) any amounts to be deducted from the Contract pursuant to the terms of the Contract, (c) 150% of all unpaid Contract amounts then in dispute, and (d) 125% of all stop notices then on file with Owner. The net amount shall be paid to Contractor upon Contractor's transmittal to Owner of the properly executed release, upon the form provided by Owner, releasing Owner from all claims or liability relating to undisputed Contract amounts for work performed in relation to said amounts. Amounts withheld from final payment pending resolution of disputes, or to satisfy third-party claims or stop notices, will be subsequently released to Contractor according to the terms of such settlements as may be subsequently reached between the parties thereto.

It shall be understood and agreed by Contractor that all partial payments are estimates only and may be revised, adjusted, and corrected at the time of computing final payment. For purposes of final payment on the Contract, the term "completion" shall mean any of the following:

- a. Occupation, beneficial use, and enjoyment of the Work, performed pursuant to the Contract, excluding any operation only for testing, start-up, or commissioning, by Owner or its agent, accompanied by cessation of labor on the Contract.
- b. Acceptance of the Work by Owner.

c. Cessation of labor on the Contract for a continuous period of 100 days or more, due to factors beyond Contractor's control.

d. After commencement of the Work on the Contract, cessation of labor for a continuous period of 30 days or more, if Owner has filed for record a Notice of Cessation or a Notice of Completion.

28. Sales and Use Taxes

The Contract price includes all taxes, and the Contractor shall pay all taxes of any nature due and payable by the Owner or by the Contractor to the State of California and its political subdivisions or to any charter city, and all taxes of every nature due and payable by the Owner or by the Contractor to the United States of America or any of its agencies in connection with any or all of the work or equipment provided for in the Contract. This shall include, but not be limited to, sales taxes and use taxes.

29. Payment Only in Accordance with Contract

The Contractor shall not demand or be entitled to receive payment for the work to be performed and/or equipment and/or materials furnished, or any portion thereof, except in the manner set forth in the Contract; nor unless each and every one of the promises, agreements, stipulations, terms, and conditions herein contained to be performed, kept, observed, and fulfilled on the part of the Contractor shall have been performed, kept, observed, and fulfilled, and the Manager shall have accepted the work.

30. Moneys to be Retained

The Owner may keep any moneys which would otherwise be payable at any time hereunder and apply the same, or so much as may be necessary therefor, to the payment of any expenses, losses, or damages as determined by the Manager, incurred by the Owner for which the Contractor is liable under the Contract. The Owner shall also withhold all forfeited funds pursuant to Labor Code Section 1727.

Pursuant to Section 20104.6 of the California Public Contracts Code, the Owner shall be entitled to withhold from final payment any unpaid contract amount which is the subject of a claim by the Contractor to be resolved pursuant to Section 44 of the General Conditions, pending final resolution of the claim.

31. Contractor's Claims

No claim shall be made or be filed and neither the Owner nor any employee of the Owner nor any of its agents shall be liable or held to pay any money, except as specifically provided in the contract.

32. Recovery of Damages

The making of an estimate and payment in accordance therewith shall not preclude the Owner from demanding and recovering from the Contractor such damages as it may sustain by reason of his failure to comply with the Special Requirements, Basic Specifications, Plans, and/or Standard Drawings.

33. Acceptance of the Work Not a Waiver

Neither the acceptance by the Owner or its Manager or any of its employees, nor any order, measurements, or certificate by the Engineer, nor any payment of money by the Owner or any of its officers, nor any payment for or acceptance of the whole or any part of the work by the Manager or the Owner, nor any extension of time, nor any possession taken by the Owner or its employees shall operate as a waiver of any portion of this contract or of any power herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other or subsequent breach.

34. Maintenance and Guaranty

a. The Contractor hereby guarantees that all materials and workmanship furnished by him under the contract will meet fully all requirements thereof as to quality of workmanship and of materials furnished by him. The Contractor hereby agrees to replace all materials and pay for all installation costs, made necessary by defects in materials or workmanship supplied by him, that become evident within one year after the date of final payment and pay for all work necessary to remove, restore, and replace the materials to full serviceability and to full compliance with the requirements of the Special Requirements, Basic Specifications, Plans, and/or Standard Drawings, including the test requirements set forth herein for any part of the materials furnished hereunder which, during said one-year period, are found to be deficient with respect to any provision of the Special Requirements, Basic Specifications, Technical Specifications, Plans, and Standard Drawings. The Contractor also agrees and does hereby hold the Owner harmless from claims of any kind which may arise from damage due to said defects. The Contractor shall replace all defective materials promptly upon receipt of written orders for same from the Manager. If the Contractor fails to replace all defective materials promptly, the Owner may secure the service of others to do this work, and the Contractor and his surety shall

be liable to the Owner for the cost, including removal and replacement thereof.

b. The guarantees, indemnifications and agreements set forth in Subsection a. hereof are secured by the Contract Performance Bond provided by the Contractor herein, and for this purpose said bond shall remain in force for a period of one year after the date of the final payment.

35. Suspension of Contract

a. If the equipment and/or material to be furnished or the work to be performed by the Contractor under the contract shall be abandoned by the Contractor, or if the Contractor shall make a general assignment for the benefit of his creditors or be adjudicated a bankrupt, or if a Receiver of his property or business be appointed by a court of competent jurisdiction, or if his contract shall be assigned by him otherwise than hereinbefore specified, or if, at any time, the Manager shall be of the opinion that the performance of the contract is unnecessarily or unreasonably delayed, or that the Contractor is willfully violating any of the conditions or covenants of the contract, or of the Specifications, or is executing the same in bad faith or not in accordance with the terms thereof, or if the terms of the contract be not fully completed within the time named in the contract for its completion or within the time to which the completion of the contract may have been extended, as hereinbefore provided, the Manager acting on behalf of the Owner may, by written notice, instruct the Contractor to suspend the operation of all or any part of the contract, and the Contractor shall do so and shall resume the same only upon written instruction by the Manager.

b. Upon such suspension of the contract, the Owner may procure the equipment and/or the materials, and/or performance of the work necessary to fulfill the contract requirements in such manner as it may deem proper. In so doing, the Owner may take possession of and use any and all materials, plant, tools, equipment, supplies and property of every kind which may be provided by the Contractor upon the Owner property for the purposes of his work. The Owner may procure other equipment and/or materials and provide labor for the completion of the same, or contract therefor, and charge the expense of completion by either method to the Contractor. These charges shall be deducted from such moneys as may be due or may at any time hereafter become due the Contractor under and by virtue of this contract or any part thereof. In case such expense shall exceed the amount which would have been due the Contractor under the contract if the same has been completed by him, the Contractor shall pay the amount of such excess to the Owner and in case such expense shall be less than the amount which would have been payable under this contract if the same had been completed by the

Contractor, he shall have no claim to the difference, except to such extent as may be necessary, in the opinion of the Manager, to reimburse the Contractor or the Contractor's sureties for any expense properly incurred for plant, camp, equipment, materials, supplies, and labor devoted to the prosecution of the work of which the Owner shall have received the benefits and which shall not have been otherwise paid for by the Owner. In computing such expense so far as it shall relate to plant and equipment taken over by the Owner, the salvage value of such plant and equipment at completion of the work shall be deducted from the depreciated value thereof at the time taken over by the Owner, and the difference shall be considered as an expense. Evidence of such expense, satisfactory to the Manager, shall be required, and all necessary estimates and appraisements shall be made by him. When any particular part of the work is being carried on by the Owner, by contract or otherwise, under the provisions of this section, the Contractor shall continue the remainder of the work in conformity with the terms of his contract and in such manner as in nowise to hinder or interfere with the persons or workers employed, as above provided, by the Owner, by contract or otherwise, to do any part of the work or to complete the same under the provisions of this section.

c. In the determination of the question whether there has been such noncompliance with the contract as to warrant its suspension or the procurement of the materials elsewhere by the Owner as herein provided, the decision of the Manager shall be final. Suspension of the contract or any portion thereof shall operate only to terminate the right of the Contractor to proceed with the furnishing of the equipment and/or material, or performing the work covered by the contract or the suspended portions thereof. All other stipulations of the contract shall be and remain in full force and effect after such suspension and until the contract shall have been completed and final payment or final adjustments of accounts made.

36. Additional Surety

If, during the continuance of the contract, any of the sureties upon the performance bond in the opinion of the Manager, are or become insufficient, he may require additional sufficient sureties, which the Contractor shall furnish to the satisfaction of the Manager within fifteen (15) days after notice, and in default thereof, the contract may be suspended with the same force and effect as provided in Section 37.

37. Termination of Contract

37.1 Owner May Terminate for Cause.

37.1.1 Owner may, without prejudice to any other right or remedy, serve written notice upon Contractor of its intention to terminate this Contract in whole or in part if the Contractor:

(i) refuses or fails to prosecute the Work or any part thereof with such diligence as will ensure its completion within the Contract Time; (ii) fails to complete the Work within the required time; (iii) files a bankruptcy petition or is adjudged a bankruptcy; (iv) makes a general assignment for the benefit of its creditors; (v) has a receiver appointed; (vi) refuses or fails to supply enough properly skilled workers or proper materials to complete the Work; (vii) fails to make prompt payment to subcontractors or for material or labor; (viii) disregards Applicable Laws, other requirements or instructions of Owner; or (ix) violates any of the provisions of the Contract Documents.

37.1.2 The Notice of Default and Intent to Terminate shall state the reasons for termination. Unless within five (5) Days after the service of such notice, Contractor resolves the circumstances giving rise to the Notice of Default to Owner's satisfaction, or makes arrangements acceptable to Owner for the required corrective action, Owner may terminate this Contract. In such case, Contractor shall not be entitled to receive any further payment until the Work has been finished. Owner may take over and complete the Work by any method it may deem appropriate, including enforcement of the Project Performance Bond. Contractor and its surety shall be liable to Owner for any excess costs or other damages incurred by Owner to complete the Work. If Owner takes over the Work, Owner may, without liability for so doing, take possession of and utilize in completing the Work such materials, appliances, plant, and other property belonging to the Contractor as may be on the Site.

37.2 Owner May Terminate for Convenience.

37.2.1 In addition to its right to terminate this Contract for default, District may terminate the Contract, in whole or in part, at any time upon seven (7) Days written notice to Contractor. The Notice of Termination shall specify that the termination is for the convenience of Owner, the extent of termination, and the effective date of such termination ("Effective Date of Termination").

37.2.2 After receipt of Notice of Termination, and except as directed by Owner, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:

- 37.2.2.1 Stop Work as specified in the Notice.
- 37.2.2.2 Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.
- 37.2.2.3 Leave the Site and any other property upon which the Contractor was working in a safe and sanitary manner such that it does not pose any threat to the public health or safety.
- 37.2.2.4 Terminate all subcontracts and purchase orders to the extent that they relate to the portions of the Work terminated.
- 37.2.2.5 Place no further subcontracts or orders, except as necessary to complete the remaining portion of the Work.
- 37.2.2.6 Submit to Owner, within fifteen (15) Days from the Notice of Termination, all of the documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of Owner's exercise of its right to terminate this Contract pursuant to this clause, which costs the Contractor is authorized under the Contract Documents to incur, shall: (i) be submitted to and received by Owner no later than thirty (30) Days after the Effective Date of the Notice of Termination; (ii) describe the costs incurred with particularity; and (iii) be conspicuously identified as "Termination Costs Occasioned by Owner's Termination for Convenience."
- 37.2.2.7 Owner's total liability to Contractor by reason of the termination shall be limited to the total (without duplication of any items) of:
 - 37.2.2.7.1 The reasonable cost to the Contractor for all Work performed prior to the Effective Date of Termination, including the Work done to secure the Project for termination. Reasonable cost may not exceed the applicable percentage completion values derived from the progress schedule and the Cost Breakdown. Deductions shall be made for cost of materials to be retained by the Contractor, cost of Work defectively performed, amounts realized by sale of materials, and for other appropriate credits or offsets against cost of Work as allowed by the Contract Documents.
 - 37.2.2.7.2 When, in Owner's opinion, the cost of any item of Work is excessively high due to costs incurred to remedy or replace

defective or rejected Work, reasonable cost to be allowed will be the estimated reasonable cost of performing the Work in compliance with requirements of the Contract Documents and excessive actual cost shall be disallowed.

- 37.2.2.7.3 Any Work required by the Termination for Convenience that is not included in Contract Documents will be negotiated pursuant to the Contract Change Order provisions.
- 37.2.2.7.4 Reasonable costs to the Contractor of handling material returned to vendors, delivered to District or otherwise disposed of as directed by District.
- 37.2.2.7.5 A reasonable allowance for the Contractor's internal administrative costs in preparing termination claim.
- 37.2.2.7.6 Reasonable demobilization costs, and reasonable payments made to Subcontractors or suppliers on account of termination.
- 37.2.2.8 In no event shall Owner be liable for unreasonable costs incurred by the Contractor or subcontractors after receipt of a Notice of Termination. Such non-recoverable costs include, but are not limited to, the cost of or anticipated profits on Work not performed as of the date of termination, post-termination employee salaries, unreasonable post-termination administrative expenses, post-termination overhead or unabsorbed overhead, surety costs of any type, costs of preparing and submitting the Owner's termination claim, attorney fees of any type, and all other costs relating to prosecution of a claim or lawsuit.
- 37.2.2.9 Owner shall have no obligation to pay the Contractor under this Article unless and until the Contractor provides Owner with updated and acceptable as-built drawings and Record Documents for Work completed prior to termination as required by the Contract Documents.
- 37.2.2.10 In arriving at the amount due the Contractor under this clause there shall be deducted in whole, or in the appropriate part(s) if the termination is partial:
 - 37.2.2.10.1 All unliquidated advances or other payments on account previously made to the Contractor, including without limitation all payments which are applicable to the terminated portion of the Contract Documents,

- 37.2.2.10.2 Any claim Owner may have against the Contractor in connection with the Work or any amounts that may be withheld in accordance with the Contract Documents, and
- 37.2.2.10.3 The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by the Contractor and not otherwise recovered by or credited to Owner.
- 37.2.3 These provisions are in addition to and not in limitation of any other rights or remedies available to Owner.
- 37.2.4 Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss or consequential damages arising out of or resulting from such termination
- 37.3 Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, Owner may immediately order Contractor to cease Work until such safety or liability issues are addressed to the satisfaction of Owner or the Contract is terminated.
- 37.4 If Owner terminates Contractor for cause, and if it is later determined that the termination was wrongful, such default termination shall automatically be converted to and treated as a termination for convenience. In such event, Contractor shall be entitled to receive only the amounts payable under this section, and Contractor specifically waives any claim for any other amounts or damages, including, but not limited to, any claim for consequential damages or lost profits.

38. Right to Occupy Completed Portions of Work

The Owner may wish to occupy or place in service portions of the completed work before final completion of the contract work and shall be at liberty to do so, but such occupancy or placing in service of any completed portion of the work shall not void the contract nor relieve the Contractor of his responsibility of protection and care of all work until final completion and acceptance of the entire work, provided, however, that expense directly attributable to operation and placing in service the portions of the work shall not be chargeable to the Contractor.

39. Cooperation with Other Contractors and Governmental Agencies

The Contractor shall be responsible for ascertaining the nature and extent of any simultaneous, collateral and essential work by others. The Owner, its

workers and Contractors, and others, shall have the right to operate within or adjacent to the worksite to perform such work.

Where the pipeline and structures are constructed within the right-of-way under the jurisdiction of other governmental agencies having jurisdiction over the right-of-way, contractor shall comply with all requirements of said agencies having jurisdiction over the right-of-way.

Where the same subject matter is covered by the specifications of two or more agencies, the specifications more restrictive on the Contractor shall govern in all cases.

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

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

Should the Contractor be delayed by the Owner, and such delay could not reasonably have been foreseen and prevented by the Contractor, the Engineer will determine the extent of the delay, the effect of the delay on the project as a whole, and any commensurate extension of time.

40. Clayton Act or Cartwright Act

In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 422f the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

41. Contract Funds

At his own request and expense, the Contractor may substitute equivalent security for money that is withheld to ensure performance in the following manner, and in accordance with Section 22300 of the California Public Contract Code. For purposes of Section 22300 of the Public Contract Code, the term "satisfactory completion of the contract" means the time the Owner has issued

written final acceptance of the Work and filed a Notice of Completion as required by law and provisions of the Contract Documents.

a. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the Owner, or with a state or federally chartered bank in California as the escrow agent who shall pay such monies to the Contractor upon satisfactory completion of the contract.

b. Alternatively, the Contractor may request, at the expense of the Contractor, that the Owner make payment of retention earned directly to the Escrow Agent. The Contractor may, at his expense, direct the investment of the payments into securities and receive the interest earned on those investments upon the same terms provided for in Section 22300 of the Public Contract Code. The Escrow Agent shall pay to Contractor all securities, interest, and payments received by the Escrow Agent from the Owner pursuant to such Section, upon satisfactory completion of the Contract. The Contractor shall pay to each subcontractor, not later than twenty days following receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each subcontractor, on the amount of retention withheld to ensure the performance of the Contractor.

c. Securities eligible for investments shall include those listed in Section 16430 of the California 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 Contractor and the Owner. The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon.

d. Pursuant to conditions of Section 22300 of the Public Contract Code, any escrow agreement entered into pursuant to these conditions shall be executed pursuant to the form included in these Contract Documents.

42. Precedence

In event of conflict between various provisions of the plans and specifications, the provisions more restrictive of the Contractor shall apply. In event of conflict that cannot be resolved by restrictiveness, the document highest in precedence shall control. The precedence shall be:

- a. Federal and State requirements (where applicable)
- b. Permits from Agencies having jurisdiction
- c. Contract

- d. Addenda, most recent first
- e. Plans (Drawings)
- f. Special Requirements
- g. Technical Specifications
- h. General Conditions
- i. Proposal/Bidding Documents
- j. Standard Drawings
- k. Referenced Standard/Basic Specifications

With reference to the Drawings, the order of precedence shall be as follows:

- a. Figures govern over scaled dimensions
- b. Detail drawings govern over general drawings
- c. Addenda/Change Order drawings govern over Drawings
- d. Drawings govern over standard drawings

43. Excavations: Discovery of Hazardous Conditions

a. Pursuant to Section 7104 of the California Public Contract Code, should services performed under this Contract include the digging of trenches or other excavation extending deeper than four feet below the surface, the Contractor shall, while performing such excavation, promptly, and before the following conditions are disturbed, notify the Owner, in writing of any:

(1) material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the California Health & Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law;

(2) subsurface or latent physical conditions at the site differing from those indicated; or

(3) unknown physical conditions at the site of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.

b. Upon such notification, the Owner shall promptly investigate such conditions. If the Owner finds that the reported conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work, the Owner shall issue a Change Order or similar contract modification pursuant to the procedures described in this Contract.

c. In the event a dispute arises between the Owner and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by this Contract, but shall proceed with all work to be performed under this Contract. The Contractor shall retain any and all rights provided either by contract or by law which pertains to the resolution of disputes and protests between the contracting parties.

44. Resolution of Claims

Claims governed by this Section may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the change order procedures contained herein, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Section must be filed no later than the date of final payment. The claim shall be submitted in writing to the District and shall include on its first page the following in 16 point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing in this Section is intended to extend the time limit or supersede notice requirements otherwise provided by the contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

Supporting Documentation. The Contractor shall submit all claims in the following format:

1. Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made.
2. List of documents relating to claim:
 - a. Specifications
 - b. Drawings
 - c. Clarifications (Requests for Information)
 - d. Schedules
 - e. Other
3. Chronology of events and correspondence
4. Analysis of claim merit
5. Analysis of claim cost
6. Time impact analysis in Critical Path Method format

Any separate demand by the Contract in an amount of \$375,000 or less for payment of money or damages arising from work done by or on behalf of the Contractor pursuant to this contract, payment of which is not otherwise expressly

required by this Contract, or any separate demand by the Contractor the amount of which is disputed by the Owner, shall be resolved pursuant to Sections 20104 et seq. of the California Public Contract Code, as may be amended. These sections are summarized as follows:

a. For any claim, as defined in Section 20104 of the California Public Contract Code, by the Contractor of an amount less than \$50,000, the Owner will respond in writing within forty-five days of receipt of the claim, or may request in writing, within thirty days of receipt of the claim, any additional documentation supporting the claim or related to any defenses the Owner may have against such claim. The Owner's written response to the claim, as further documented, shall be submitted to the Contractor within fifteen days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional documentation, whichever is greater.

b. For claims, as defined in Section 20104 of the California Public Contract Code, by the Contractor for an amount above \$50,000 and up to \$375,000, the Owner shall respond in writing to all written claims within sixty days of receipt of the claim, or may request in writing within thirty days of receipt of the claim any additional documentation supporting the claim or related defenses which the owner may have against such claim. The Owner's written response to the claim as further documented shall be submitted to the Contractor within thirty days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional documentation, whichever is greater.

c. If the Contractor disputes the Owner's written response, or the Owner fails to respond within the time prescribed, the Contractor may notify the Owner, in writing, either within fifteen days of receipt of the Owner's response or within fifteen days of the Owner's failure to respond within the statutorily prescribed time, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon demand, the Owner shall schedule a meet and confer conference within thirty days for settlement of the dispute.

d. If the meet and confer process does not produce an agreement, the Contractor may file a claim pursuant to Government Code Sections 900, et seq. The period of time within which to file such a claim shall be as defined in Section 20104.2 (e).

e. The procedures for any civil action brought by the Parties to resolve such claims shall be those set forth in Section 20104.4 of the California Public Contract Code, a summary of which is set forth below:

(1) Within sixty days, but no earlier than thirty days, following the filing of responsive pleading, unless waived by mutual stipulation of both parties, the court shall submit the matter to a non-binding mediation. The mediation process shall commence within thirty days of the submittal, and shall be concluded within fifteen days from the commencement of the mediation process, except as may be otherwise required by Section 20104.4 of the Public Contract Code.

(2) If the matter remains in dispute after mediation, the case shall be submitted to judicial arbitration. Such proceedings shall be conducted, and arbitrator appointed, pursuant to provisions of Section 20104.4 of the Public Contract Code.

(3) Any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to the payment of costs and fees, also pay the attorneys' fees on appeal of the other party.

f. In any suit filed pursuant to these provisions, the Owner shall pay interest at the legal rate on any arbitration award or judgment in favor of the Contractor. The interest shall begin to accrue on the date the suit is filed in a court of law.

45. Contractor Eligibility to Perform on Public Works Projects

Pursuant to Public Contract Code Section 6109, contractors or subcontractors who are ineligible to perform work on a public works project pursuant to Section 1777.1 or Section 1777.7 of the California Labor Code shall not be allowed to perform any portion of the work contemplated herein. Any subcontract between the contractor and a debarred subcontractor shall be void as a matter of law, and the debarred subcontractor shall not receive any payment for performing such work. Any public money that has been paid to the debarred subcontractor on the project shall be returned to the Owner. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the project.

46. Release

Contractor shall be required to execute the "RELEASE" form provided as follows prior to receiving final payment for the contract work. Prior to the District making final construction contract payment to the Contractor, the Contractor shall supply the District with fully executed Contractor, Subcontractor and Material Suppliers "Unconditional Lien" releases.

CONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT’S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant:

Name of Customer:

Job Location:

Owner:

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant’s receipt of payment from the financial institution on which the following check is drawn:

Maker of Check:

Amount of Check: \$

Check Payable to:

Exceptions

This document does not affect any of the following:

Disputed claims for extras in the amount of: \$ _____

Signature

Claimant’s Signature:

Claimant’s Title:

Date of Signature:

UNCONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant:

Name of Customer:

Job Location:

Owner:

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

Exceptions

This document does not affect any of the following:
Disputed claims for extras in the amount of:

\$ _____

Signature

Claimant's Signature:

Claimant's Title:

Date of Signature:

SPECIAL REQUIREMENTS

TABLE OF CONTENTS
OF SPECIAL REQUIREMENTS

		<u>Page</u>
1.	THE REQUIREMENT	SR-1
2.	LOCATION OF CONTRACT WORK SITE	SR-1
3.	STANDARD MANUAL	SR-1
4.	CONTRACT COMPLETION SCHEDULE	SR-2
5.	CONTRACT DRAWINGS.....	SR-2
6.	RIGHTS-OF-WAY	SR-4
7.	PERMITS AND FEES	SR-5
8.	DATA TO BE SUBMITTED BY CONTRACTOR	SR-10
9.	MATERIAL FURNISHED BY CONTRACTOR	SR-13
10.	MATERIAL FURNISHED BY OWNER.....	SR-13
11.	CONTRACTOR'S SCHEDULE OF WORK	SR-13
12.	MANHOLE CONSTRUCTION.....	SR-15
13.	BEDDING REQUIREMENTS	SR-15
14.	TEMPORARY SEWER BYPASS / PHASING PLAN.....	SR-16
15.	ABANDONMENT OF EXISTING SEWER FACILITY	SR-16
16.	REMOVAL OF EXISTING SEWER FACILITY	SR-17
17.	POTHOLING OF EXISTING UTILITIES BY CONTRACTOR.....	SR-18
18.	EXISTING UNDERGROUND UTILITIES	SR-20
19.	ALLOWABLE VARIATIONS IN PIPELINE ALIGNMENT	SR-20
20.	ACCESS TO CONFINED SPACES IN EXISTING STRUCTURES...	SR-21
21.	CONSTRUCTION WATER	SR-22
22.	CONSTRUCTION STAKING.....	SR-22
23.	SEWER AND WATER LATERAL PROTECTION AND RESTORATION	SR-25
24.	REMOVAL AND DISPOSAL OF ASBESTOS CEMENT PIPE.....	SR-25
25.	TRAFFIC CONTROL	SR-26
26.	PRECONSTRUCTION AUDIO VIDEO	SR-27
27.	CONSTRUCTION VIDEO PHOTOGRAPHY	SR-27
28.	SPOIL MATERIAL FROM PIPELINE CONSTRUCTION	SR-28
29.	MOIST OR WET SOIL	SR-28
30.	PROTECTION/ACCESS OF PRIVATE PROPERTIES.....	SR-28
31.	PROTECTION OF EXISTING IMPROVEMENTS, RESTORATION OF WORK SITE AND DISPOSAL OF SPOIL AND WASTE MATERIALS.....	SR-29
32.	GEOLOGICAL INFORMATION.....	SR-30
33.	MAINTAINING SEWER SERVICE.....	SR-31
34.	PROTECTION OF SURVEY MONUMENTS.....	SR-32
35.	PROJECT SIGNAGE	SR-32
36.	NOTIFICATION AND COORDINATION.....	SR-33
37.	EQUIPMENT AND MATERIALS STORAGE.....	SR-33
38.	SECURING OF TRENCHES.....	SR-33
39.	DEMOLITION, SALVAGE AND ABANDONMENT.....	SR-34
40.	RESTORATION OF NON-PAVED AREAS	SR-34

41.	SCHEDULE OF VALUES.....	SR-34
42.	MISCELLANEOUS SPECIAL CONDITIONS	SR-35
43.	GAS COMPANY REQUIREMENTS.....	SR-40
44.	COVID-19.....	SR-41
45.	PAVEMENT REPAIR, REPLACEMENT, AND RECAPPING.....	SR-41
46.	COMPLIANCE WITH STORM WATER REGULATIONS (NPDES) ...	SR-41
47.	COMPENSATION FOR UNKNOWN UTILITY	SR-43
48.	HARD ROCK REMOVAL	SR-43
49.	MATERIAL TRACKING.....	SR-44

SPECIAL REQUIREMENTS

FOR

ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT –

PYRITE / 60 FWY

JCSD PROJECT NO.: C245123

1. THE REQUIREMENT

The Contractor shall construct the specified project for the Jurupa Community Services District, Jurupa Valley, California; furnishing all labor, materials (except those materials to be furnished by Owner), equipment, and methods necessary to complete said construction, in order to provide the Owner with complete, correctly operating pipeline facilities with appurtenances, all in accordance with the Contract Documents.

2. LOCATION OF CONTRACT WORK SITE

The Contract work site is in the City of Jurupa Valley of Riverside County, California.

3. STANDARD MANUAL

The Jurupa Community Services District "Standards Manual", Latest Edition (including all Addendums), is hereby incorporated into these Specifications, and in case of conflict the highest and most stringent requirement shall govern. Copies of the "Standards Manual" are available at the District office for review and/or purchase by prospective bidders.

Contractor shall furnish and install all facilities in accordance with the latest revision of the Jurupa Community Services District's (District) Standard Specifications and Standard Drawings for Water Facilities are available from the District. The Contractor shall be in possession of District's Specifications and Standard Drawings on the job site at all times. Any construction and/or materials not covered in District Standards shall be approved by the District prior to construction.

4. CONTRACT COMPLETION SCHEDULE

All work under Bid Schedule I shall be completed and operational (including all pavement repairs and final clean up) within **300 calendar days** following the Owner provides written "Notice of Award" of contract.

The contract completion schedules are firm and will not change regardless of the combination of Bid Schedules awarded. Completion time in calendar days includes Saturdays, Sundays, and holidays.

IF CONTRACTOR DOES NOT CONFORM TO THE ABOVE LISTED CONTRACT AND COMPLETION SCHEDULES, THEN THE OWNER WILL ENFORCE THE AGREEMENT IN THE CONTRACT APPENDIX TITLED "LIQUIDATED DAMAGES".

5. CONTRACT DRAWINGS

The Contract work to be executed under these specifications, its location, nature, size and extent, and the form and detail of its various features are shown on the listed Drawings, which are hereby made a part of these Specifications.

ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT –

PYRITE / 60 FWY

JCSD PROJECT NO.: C245123

Sheet No. Sub-Title

1	Title Sheet
2	General Notes, Legend, and Abbreviations
3	Sheet Index, Construction Notes, and Street Sections
4	Pyrite Street Plan and Profile Sta. 10+00.00 to Sta. 15+00.00
5	Pyrite Street Plan and Profile Sta. 15+00.00 to Sta. 24+00.00
6	Pyrite Street Plan and Profile Sta. 24+00.00 to Sta. 33+00.00
7	Pyrite Street Plan and Profile Sta. 33+00.00 to Sta. 42+00.00
8	Pyrite Street Plan and Profile Sta. 42+00.00 to Sta. 51+00.00
9	Pyrite Street Plan and Profile Sta. 51+00.00 to Sta. 60+00.00
10	Pyrite Street Plan and Profile Sta. 60+00.00 to Sta. 66+00.00
11	Pavement Restoration Pyrite Street Sta 10+00.00 to 31+00.00
12	Pavement Restoration Pyrite Street Sta 31+00.00 to 55+00.00
13	Pavement Restoration Pyrite Street Sta 55+00.00 to 66+00.00
14	Striping Restoration Pyrite Street Sta 10+00.00 to 31+00.00
15	Striping Restoration Pyrite Street Sta 31+00.00 to 55+00.00
16	Striping Restoration Pyrite Street Sta 55+00.00 to 66+00.00

Together With:

8 1/2" x 11" Standard Drawings; attached in the back of these Specifications.

<u>Standard No.</u>	<u>Title</u>
S-1	General Bedding Details
S-2	General Bedding Details Flexible Gravity Pipe
S-4	Typical Sewer Concrete Encasement Detail
S-5	Typical Sewer Lateral
S-6A	Deep Lateral Flexible Gravity Pipe
S-7	Precast Concrete Manhole
S-15	Precast Shallow Manhole
S-16	Sewer Protection Detail
S-17	Remodeling Details for Sewer Laterals
S-23	Manhole Cover – Locking Device
S-24	Temporary Manhole Plug
Std. No. 209	Cross Gutter and Spandrel
Std. No. 818	Utility Trench Backfill

The Contractor's submittal Drawings and information under section titled "Data to be Submitted by the Contractor", as approved by the Engineer, are hereby made a part of the Contract Drawings.

6. RIGHTS-OF-WAY

A. GENERAL

Construction under this Contract is located upon the land and/or near existing interference facilities under the jurisdiction of the following organizations:

1. Jurupa Community Services District
2. City of Jurupa Valley
3. Jurupa Unified School District
4. California Department of Transportation (CALTRANS)
5. State Regional Water Resources Control Board (SWRCB)
6. Metropolitan Water District (MWD)
7. Southern California Gas Company Distribution
8. Southern California Edison Company
9. Crown Castle
10. Santa Ana Watershed Protection Agency
11. California Department of Toxic Substance Control
12. MCI (Verizon Business)
13. Spectrum
14. California Department of Transportation (Caltrans)
15. AT&T
16. Riverside County Flood Control and Water Conservation District (RCFCWCD)
17. Glen Avon Elementary School

It shall be the Contractor's responsibility to conduct all their operations within the public right-of-way and easements provided for them as shown on the Drawings.

B. JURUPA COMMUNITY SERVICES DISTRICT EXISTING INTERFERENCE AND EASEMENTS

The District's existing water and sewer facilities are shown on the contract drawings, in accordance with the aerial survey and/or recorded locations per the District's atlas sheets. In areas outside of existing street right-of-way, the District will obtain temporary construction easements for the Contractor's use.

It shall be the Contractor's responsibility to conduct all their operations within the easements (permanent or temporary) provided for them as shown on the drawings. Additional easements that may be required by the Contractor to complete the work as hereby proposed shall be obtained by the Contractor at his own expense.

C. OTHER UTILITIES AND ORGANIZATIONS

The existing underground facilities are shown on the contract drawings in accordance with recorded locations per the particular utility's atlas sheets. Refer to section titled "Permits and Fees" for additional information.

7. PERMITS AND FEES

A. GENERAL

Contractor shall secure at Contractor's own expense all permits (including riders) and/or licenses necessary to the prosecution of the contract work, except for any permits and/or licenses stated herein to have been secured and paid for by the Owner. The Contractor shall also be liable for any expense, of any kind, associated with any permit or license, including those obtained by the Owner, in excess of payments made prior to contract award.

B. RULES AND REGULATIONS OF UTILITIES AND OTHER ORGANIZATIONS

The Contractor shall determine and comply with all the applicable rules and regulations of the utilities and organizations listed in Paragraph "A" of section titled "Rights-of-Way" of these Special Requirements. The Contractor shall contact all of the listed utilities and/or organizations prior to the start of construction so they may mark the exact location of their facilities or utilities that may be in conflict with this project.

The cost of any work necessitated for the convenience of the Contractor during construction is reimbursable to that particular utility or organization, and the Contractor shall pay such charges to said utility or organization at no additional cost to the District.

C. CITY OF JURUPA VALLEY

Contractor shall contact City of Jurupa Valley to determine applicable permit requirements including but not limited to, traffic control, pavement removal and restoration, working area, staging area and working hours prior to bid the project, apply for, obtain, and pay for the Encroachment Permit, all Rider Permits and Extensions. Contractor shall include all such expenses in the bid proposal and no additional compensation will be made for such expenses and no time will be awarded in the event the encroachment permit is delayed.

The Contractor shall determine and comply with all City rules and regulations applicable to the contract work, including complying with the City's Best Management Practices (BMP) requirements for storm water control and protecting, at no additional cost to the District.

The Encroachment Permit from the City of Jurupa Valley is applicable to various City roads affected by the contract work. Refer to Appendix D.

The Contractor shall assume night work for any construction activity within the intersection and vicinity of Mission Blvd and Pyrite

Street, unless the contractor makes special arrangements with the City of Jurupa Valley. No additional compensation will be approved.

The Contractor shall assume that all Work in the vicinity and north of Mission Blvd are subjected to Holiday Moratorium, between December 20th to January 4th, unless the contractor makes special arrangements with the City of Jurupa Valley. No additional compensation will be approved.

The Contractor shall obtain a business license from City of Jurupa Valley, if required by the City. The Contractor shall pay the associated fee at his own expense.

Replacement paving in all paved roads, grinding and capping, traffic control, restriping, special trench backfill, special class 2 aggregate base requirements, etc. shall be in accordance with the City of Jurupa Valley Standards and City of Jurupa Valley permit requirements. The Contractor shall notify the City of Jurupa Valley Permit Section at (951) 332-6464 at least two (2) working days prior to starting construction. If the proposed pipeline crosses a paved street at an angle other than 90 degrees, the limits of pavement grind and overlay shall be at right angles to the street centerline and shall encompass the entire trench paving. Contractor shall replace or repair any damaged or altered existing improvement within public right-of-way as direct by the City Engineer.

D. METROPOLITAN WATER DISTRICT (MWD)

Contractor shall coordinate with MWD and notify Rudy Diaz by telephone (951) 710-5570 or cell (909) 573-5569 at least three working days before starting any work in the vicinity of MWD's facilities.

E. CALTRANS

Contractor shall coordinate with CALTRANS on the requirements of encroachment permit including but not limited to,

traffic control, pavement removal and restoration, working area, staging area, and working hours prior to the bid of the project. Contractor shall include at his own expense in the bid proposal and no additional compensation will be allowed. JCSD has secured and paid for the general permits. JCSD will perform and pay for freeway ground settlement monitoring per Caltrans' requirements. Contractor shall be responsible to apply, pay the fee and obtain the needed duplicated permits. Contractor shall submit shoring/sheeting plan (prepared by a licensed structural engineer, reviewed, signed, and stamped by another licensed engineer). The encroachment general permits will be provided to the contractor.

F. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
SANTA ANA REGION PERMIT

Contractor shall channel (using sandbags or other means) flushing flow. Contractor shall protect all property from flooding and other damage during flushing operations. Contractor shall post "flooding ahead" signs in streets as required and as directed. Because of demand on existing water system, Cities may require Contractor to flush the pipeline over several days, in the evenings, weekends, or holidays.

Contractor shall not allow any discharges from the construction site which may have an adverse effect on receiving waters of the United States.

Contractor shall, at Contractor's expense, obtain a discharge permit from the California Regional Water Quality Control Board, Santa Ana Region (Regional Board) for discharge of water from trench dewatering, line flushing, and testing operations. A copy of said discharge permit shall be provided to the Owner. Contractor shall comply with conditions therein and perform the monitoring required. If the Regional Board determines that a discharge permit is not required for said work, then the Contractor shall comply with any and all applicable criteria and conditions established by the Regional Board, including compliance with the requirements of the General

Water Discharge Requirements for Discharges to Surface Waters which pose an insignificant De Minimus threat to water quality (Order No. 98-67).

Order No. 98-67 includes submittal of a Notice of Intent and a waste discharge report to the Regional Board. In addition, Template Monitoring and Reporting Program No. 98-67, appended to Order No. 98-67, includes the following monitoring and reporting requirements:

- (a) Estimate and report daily discharge flow, collect samples of each discharge and have them analyzed for the 8 parameters listed on Pages 2 and 3 of the Template Monitoring and Reporting Program No. 98-67. All samples shall be representative of the waste discharge under conditions of peak load.

All sample collection, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" promulgated by the U. S. Environmental Protection Agency (40 CFR 136). All samples analyses shall be performed by an analytical laboratory certified by the California Department of Health Services to perform such analyses.

- (b) Report any discharge which is in violation of the discharge specifications (Order No. 98-67) to the Regional Board, Santa Ana Region within 24 hours.
- (c) Notify the Regional Board 5 days before commencing any discharge.
- (d) Prepare monthly monitoring reports for submittal to the Regional Board. The reports shall include:
 - 1) Results from all analyses for the previous month.
 - 2) Daily flow data.

- 3) A report detailing Contractor's compliance or noncompliance with Order No. 98-67 and the discharge authorization letter.

H. GLEN AVON ELEMENTARY SCHOOL

Contractor shall coordinate with Glen Avon Elementary School to minimize disruption for access during school hours. Contractor shall coordinate at least 21 working days prior to performing any construction activity adjacent to the school. Contractor to solicit input from the school to determine and execute construction activity during times that minimize disruption. Contractor shall assume that no work is allowed during pick up and drop of times. Minimize traffic control during pick up and drop off time.

Contractor is required to complete the work within STA. 27+00.00 to STA. 35+75.00 on Pyrite Street within the school's summer vacation months, unless the contractor makes special arrangements with Glen Avon Elementary School and the City of Jurupa Valley. No additional compensation will be approved.

8. DATA TO BE SUBMITTED BY CONTRACTOR

Contractor shall submit to the Engineer for approval detailed shop drawings and schedule. No pipe and other facilities shall be manufactured until the drawings have been approved. Owner may require electronic color copy (PDF) and/or seven (7) copies of submittals. The Owner will review and return the initial submittals within fifteen (15) working days. Resubmittals will be reviewed and returned within ten (10) working days following receipt.

The Engineer's approval of the Contractor's submittal data shall not relieve the Contractor from having the entire responsibility for the correctness of details and dimensions. The Contractor shall assume all responsibility and risk for misfits due to any errors in the Contractor's submittal data. The Contractor is hereby notified that any proposed deviation for the contract document shall be clearly indicated on each submittal; and if not so, submittal may be subject to rejection.

The contractor shall also field verify the ground elevation of proposed sewer manholes prior to sewer manhole submittal.

The contractor shall, prior to preparation of pipe shop fabrication drawings (immediately after the "Notice-to-Proceed"), determine in field the O.D. cylinder dimension of the existing pipelines at all connections, and shall be responsible for all field measurements at their own costs.

Successful Bidder shall submit a construction schedule within ten (10) calendar days following award of contract. The schedule shall conform to the completion schedule stated herein, and shall show dates for beginning and completing all aspects of contract work, including potholing of utility crossings and expected dates for beginning and completing all aspects of contract work, including expected dates (both delivery and installation) for the required submittal data. Bidder shall understand that this schedule will be tentative, and subject to modification and updating by the Contractor (as approved by the District) as the contract work progresses. The schedule shall generally provide the following main items along with corresponding details listed under "Schedule".

In addition to the above, the Contractor shall submit to the Engineer for approval, manufacturer's data sheets, brochures, etc. for appurtenant materials, shoring and bracing design, etc. A list of the minimum required submittals is as follows:

Schedule

- Overall Schedule and Plan
- Schedule and Plan for portion fronting Glen Avon Elementary School
- Submittals
- Review and approval period
- Material delivery
 - Installation
 - Testing and Bypass Procedure
 - Final site work and cleanup
- Schedule/Phasing of Construction

Pipeline Material

- PVC Gravity Sewer Pipe
- HDPE Gravity Sewer Pipe

- Polyethylene Liner
- All Pipe Fittings
- Pipe Layout Drawings
- Casing Pipe and Spacers
- Annular Space Filling Plan
- CML/CMC WSP Shop Drawings

Appurtenant Submittals

- Field survey elevation where the proposed manholes are
- Manholes
- Manhole Frame and Cover
- External Manhole Drop
- Clean-out Lid
- Warning Marking Tape and Tracer Wire

Miscellaneous

- Schedule of Values
- Construction Schedule (see Section entitled “Contractor’s Schedule of Work” for details)
- Potholing Report
- SWPPP and BMP as Required by the City of Jurupa Valley
- Copies of Permit Required (NDPES, Excavation, etc.)
- Copies of Permits and Riders Required to be Obtained by Contractor
- Air Testing and Vacuum Testing Procedure
- Pothole information for Utilities (per Attached Sample in Appendix)
- Method to protect existing utilities in proximity
- Dewatering equipment and detailed procedures
- Sheeting and Shoring Details
- Construction Phasing Plan
- Testing Plan (Sewer)
- Detailed Sewer Bypass Plans and OERP
- Sewage Spill Prevention Plan
- Concrete Mix Design
- AC Paving Mix Design
- Aggregate Base Gradation
- Traffic Control Plan
- Confined Space Certification per JCSD Requirements (Entrant, attendant, and supervisor)
- Injury and Illness Prevention Program (IIPP)
- Emergency Response Plan

- Bypass Plans
- Thermoplastic Striping

Contractor shall submit the Pipeline Testing Procedures within one week from Notice to Proceed for District review and approval. Contractor shall allow time for District's review in his schedule and no additional time will be awarded, no exception. These procedures shall be submitted prior to commencement of work and no additional time will be awarded to the contract due to failure to submit these procedures on a timely manner.

The Engineer's approval of the Contractor's submittal data shall not relieve the Contractor from having the entire responsibility for the correctness of details and dimensions. The Contractor shall assume all responsibility and risk for misfits due to any errors in the Contractor's submittal data.

9. MATERIAL FURNISHED BY CONTRACTOR

The Contractor shall furnish all materials (except those materials which may be furnished by Owner stated in Section 10 herein) necessary to complete the contract work, all in strict accordance with the Special Requirements, Basic Specifications, and Drawings.

In addition, the Contractor shall furnish all labor, skills and services required for the installation of all materials (including those materials which may be furnished by Owner stated in Section 10 herein) to provide the Owner with a complete project, in accordance with the Special Requirements, Basic Specifications and Drawings.

10. MATERIAL FURNISHED BY OWNER

The Owner will not be furnishing any equipment.

11. CONTRACTOR'S SCHEDULE OF WORK

Within seven calendar days from the time the Contract is executed, the Contractor shall submit practicable schedules shown the order in which the Contractor proposes to carry on the work. Additionally, the contractor shall submit the anticipated starting and completion dates for these activities, including expected dates (both delivery and installation) for the required submittal data. The Contractor's schedule shall reflect progress of project as work is being

completed. The schedule shall generally provide the following main items along with corresponding details:

- Pre-Construction Video (above ground)
- Pre-Construction Sewer Video (sewer pipeline)
- Potholing
- Pre-construction Survey Ground Elevations where the sewer manholes are proposed
- Submittals
- Submittal Review and Approval Period
- Material Delivery
- Traffic Control Plans submittal and approval process with City of Jurupa Valley
- Schedule of construction
 - Potholing and verify existing facilities
 - Permits needed for construction
 - Installation
 - Testing
 - Abandonment
 - Demolition
 - Final walk through, site work, cleanup
 - Punch Lists

Contractor shall submit updated project schedules to District as follows:

- Once per month after Contractor receives written "Notice of Award" of contract
- Twice per month when Contractor has mobilized for construction
- Any time a change in the schedule and/or change in work has occurred
- Submitted with progress pay requests (status/completion items as shown on the schedules shall be consistent with the progress pay requests)

The District reserves the right to approve or alter the Schedule proposed by the Contractor, prior to the start of work. Additionally, the District may establish priorities for completion of certain parts of the work which may be

necessary to provide certain services or which the District may deem advisable in the interest of public safety and convenience.

The construction schedules submitted shall be consistent in all respects with the time requirements of the contract.

12. MANHOLE CONSTRUCTION

All sewer manholes are to be constructed in accordance with JCSD Standard Detail Drawings S-7, unless specifically stated on the construction drawings. All couplings shall be ARC as approved by the JCSD. In existing non-paved areas, the contractor shall install a 6-foot by 6-foot square concrete pad around manholes at existing ground surface elevation and sewer markers. The pad shall be minimum of 6- inch thick. Manhole rim elevation shall be 3-inches above the existing grade unless stated otherwise on the construction drawings. Contractor shall install a water-tight manhole lid with an approved locking mechanism per Construction Drawings. In the paved streets Contractor shall construct a concrete collar around manholes. The collar shall be 1 foot in width (5' OD, 2' ID), and 6-inches in depth. Where called out on the project plans, the cost for furnishing and installing a pad, collar, watertight or locking lid shall be included in the unit price per manhole, and no additional compensation will be made, therefore.

13. BEDDING REQUIREMENTS

All bedding shall be of the type indicated on the plans and shall be in accordance with JCSD Standard Detail Drawings S-2, and the Basic Sewer Pipeline Construction Specifications (Sections entitled "Pipe Bedding" and "Trench Backfill and Compaction Requirements"). The cost for furnishing and installing the bedding (and pipe zone) material shall be included in the unit price per linear foot of water pipe, and no additional compensation will be made, therefore.

14. TEMPORARY SEWER BYPASS / PHASING PLAN

Portions of the proposed sewer will require connection to the existing sewer main and removal and replacement of existing piping in the same alignment; therefore, sewer flows will need to be temporary bypassed at certain locations. The Contractor shall generate, and submit to the Owner, a "Phasing / Sewer Bypass Plan" that details the general order of construction, complete with details of where, when and how the Contractor plans to bypass the existing line work. Proposed sewer bypass shall only be utilized temporarily during normal work hours, and the existing sewer shall be put back into service each day. The temporary bypass will be allowed to operate overnight only with specific approval by the Owner. Requests for overnight bypass shall be detailed in the submitted "Phasing / Sewer Bypass Plan".

The Contractor shall arrange for, furnish, and install all required bypass equipment, pumping trucks, generators, piping, fittings, connections, etc. required to temporarily bypass the existing sewer flows during construction of new sewer installation.

The associated costs of sewer bypass should be covered in Bid Item 131

15. ABANDONMENT OF EXISTING SEWER FACILITY

Where called out on the project plans, the Contractor shall abandon existing sewer pipeline and manholes per "Green Book Section 306-5," applying the following procedures:

1. The interfering portion of the "to be abandoned" sewer pipeline shall be removed, and the remaining open portion shall be plugged and securely sealed.
2. The seal shall consist of a wall of concrete not less than 6-inches thick or an 8-inch thick wall of brick and mortar
3. Contractor shall remove the upper portion of manholes (cover, frame, and grade rings) to 2-foot minimum depth.

4. The bottoms of abandoned manholes shall be adequately perforated to prevent any entrapment of water
5. Contractor shall bulkhead all existing manhole inlets and outlets with minimum 12-inches of 4,000 psi concrete or non-shrink grout for permanent blockage
6. The abandoned manhole shall then be filled with sand compacted to a relative compaction of 90 percent
7. Contractor shall use mechanic plug to temporary block outlet in manholes
8. The abandoned sewer pipeline shall be flushed, filled with slurry, capped, and abandoned in place.

All costs for the sewer pipeline and manhole abandonment are included within the bid items. No further compensation for abandonment will be made.

16. REMOVAL OF EXISTING SEWER FACILITY

Some sections of the existing sewer need to be completely removed. The Contractor shall completely excavate and remove the existing sewer pipeline and manholes, applying the following procedures:

1. The designated section(s) of the sewer pipeline shall be removed, and any remaining open portions of pipe shall be plugged and securely sealed. If any existing pipe is encountered that is not shown on the plans, it shall not be removed until the Owner has been notified of its presence and approved its removal.
2. Any necessary end seals (at points of removal) shall consist of a wall of concrete not less than 6-inch thick or an 8-inch thick wall of brick and mortar.
3. Contractor shall remove all sections of the existing manholes (cover, frame, rings, & base). Manhole frames and covers/lids shall be

salvaged to the JCSD operations yard. All other removed materials of the existing sewer and shall be transported appropriately offsite for disposal.

4. Areas disturbed by removal shall be backfilled in accordance with the sections of these specifications applicable to adjacent construction.

All costs for the sewer pipeline and manhole removal are included under Bid Items. No further compensation for abandonment will be made.

17. POTHOLING OF EXISTING UTILITIES BY CONTRACTOR

The Engineer has shown from a record research the approximate location of known underground interference facilities. Contractor shall field determine the exact location and depth of all existing underground interference and immediately notify the Engineer in the event there is a conflict with the proposed pipeline alignment or grades. Contractor shall "pothole" all utility line crossings and at specified locations on the plans, unless the utility performs the potholes, in which event Contractor shall pay any potholing charges from the utility. The Owner reserves the right to make minor adjustments (12-inch) in alignment and grade, **all at no additional cost to the Owner and no time extension will be awarded.**

The horizontal position of existing underground utilities, including existing water mains, as shown on the drawings, has been determined by record. Where no elevation is shown, the Contractor shall excavate the utilities shown to be within the construction area, and verify their position prior to construction. Any variation from the positions shown on the drawings with the position determined by verification shall be immediately reported to the Engineer.

Adjustments to the alignment and depth of the proposed improvements shall be made based on the actual position and condition of the existing utilities as determined from the above verification.

Where underground main distribution conduits such as water, gas, sewer, electric power, telephone or cable television are shown on the Plans, the

Contractor, for the purpose of preparing a Bid, shall assume that every property parcel will be served by at least one (1) service connection for each type of utility.

Prior to submitting shop drawings, the Contractor shall pothole and expose the existing sewer lines where connections will occur and verify the elevation, location, configuration and angle. Approval by the District of a proposed connection to the District facility does not imply approval of the correctness of the elevation and/or location shown on the plans. Contractor shall make any and all adjustments, provide all fittings, make any field adjustment required to meet field conditions.

In addition to the above required potholing, Contractor is required to pothole existing fiber optic facility at the crossing of the proposed facilities and the existing fiber optic conduit as shown on the Drawings. Contractor shall assume all responsibility for any and all damage to the fiber optic facility.

Contractor shall submit a signed report to the District describing the findings of the potholing efforts prior to commencement of construction. See Appendix section of these specifications for sample. Said report shall include at the minimum: the vertical and horizontal locations of the potholed facilities, the sizes and material of the conduits and pipe, and the orientation of the facilities. If Contractor does not report any conflict regarding the existing facilities and the proposed facilities, the District will assume that the proposed design is sufficient. If significant interference is found on existing facility during the initial potholing efforts, Contractor shall begin construction on the portion of the proposed improvements with no conflicts to accommodate re-designing efforts. If, during construction a conflict between facilities arises, all additional costs for re-designing the proposed pipeline shall be borne by Contractor no additional cost and delay will be awarded to the Contractor.

In addition to the requirements provided above, the format of the report and scheduling of the pothole efforts shall be as follows. The report shall document field data including, but not limited to: date, street name, stationing per contract drawings, utility, size, top and bottom depth, materials, conflict.

Contractor shall submit the signed pothole report within twenty (20) calendar days from date of "Notice to Proceed". In the pothole report, Contractor shall identify all conflicting utilities and confirm that there are no conflicts on all other utilities.

As provided in Section 4216 of the California Government Code, at least two (2) working days prior to commencing any excavation, if the excavation will be conducted in an area which is known, to contain subsurface installations, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California) and obtain an inquiry identification number.

18. EXISTING UNDERGROUND UTILITIES

Contractor shall understand that the existing underground facilities as shown on Drawings are from record only, and NO FIELD CHECK was made to establish their exact location. Also, other underground facilities may exist. Therefore, it shall be Contractor's responsibility to locate, protect, preserve, etc., all existing underground or overhead facilities, in accordance with other applicable provisions of Special Requirements, Basic Specifications, and Drawings.

19. ALLOWABLE VARIATIONS IN PIPELINE ALIGNMENT

The pipeline alignment, as shown on the Plans, was determined from record land net data and interference information obtained from utility agencies. The alignment shown on the Drawings is the alignment for bidding purposes. After the award and prior to the commencement of construction, it will be necessary to review the pipeline alignment with the potholing information conducted and submitted by Contractor prior to Contractor's submittal of pipe fabrication and shop drawings, since experience shows that field conditions can often be different than recorded information regarding interference facilities.

The basic procedure to be used to verify (or adjust) pipeline alignment prior to submittal of pipe fabrication and shop drawings is as follows:

- A. Using the pipeline alignment shown on the Plans as a guide, Contractor shall field pothole all underground utilities needed along the route of the pipelines.

- B. Contractor shall submit potholing report prior to submittal of pipe fabrication and shop drawings for approval. The report shall include the horizontal and vertical location of those utilities and point of connections. Contractor shall identify the conflicts with installation of the water pipelines. Contractor shall also validate the horizontal alignment location and vertical profile shown on the construction drawings if no conflict exists.
- C. Upon receiving the potholing report the Engineer will review or, where necessary, make modifications to accommodate the utility conflict.
- D. Contractor shall then submit pipe fabrication and shop drawings based on the modified construction drawings
- E. The specifications provide that the Owner may vary pipe alignment a small amount 12 inches or less (ALL AT NO ADDITIONAL COST TO THE OWNER AND NO TIME EXTENSION WILL BE AWARDED).

These modifications shall be recorded by the Contractor on the "As-Built" drawings.

20. ACCESS TO CONFINED SPACES IN EXISTING STRUCTURES

The Contractor's attention is directed to the General Industry Safety Orders of the State of California, Article 108, Permit-Required Confined Spaces, Section 5157 (Refer to California Code of Regulations, Title 8, Confined Spaces, Sections 5156, 5157 and 5158).

The Contractor shall provide personnel and equipment, including standby personnel, observers, and authorized competent person, to stand by while entrants are inside the space, as well as temporary ventilation equipment or self-contained breathing apparatus. The contractor shall assist the Owner's Representatives in obtaining access to permit-required confined spaces.

The Contractor shall provide proof of confined space training for all staff including entrant, supervisor, and attendant. Proof of confined space training will need to be included as a submittal and will be subject to review by JCSD.

21. CONSTRUCTION WATER

The Contractor shall arrange, pay for and furnish construction water from the existing water systems located in the general vicinity of the contract work (Jurupa Community Services District). The Contractor shall pay for, furnish and install all necessary piping, all certified backflow assembly devices, fittings, connections, pumps, water trucks, gauges, hydrant meters, etc., in accordance with the regulations of the providing agencies, required to provide approved facilities to deliver construction water to the jobsite for all construction activities, flushing, disinfection, testing and filling into pipelines to be constructed herein. All costs associated with the Contractor providing construction water shall be included in the appropriate bid items. Facilities installed or equipment traffic generated by the Contractor on existing streets and properties shall not restrict and impede access to vehicles, pedestrians, and property owners.

When backflow assembly devices are removed, relocated, and reinstalled due to District requests, construction activities, Contractor's convenience, or for any other reason or requirement, the Contractor shall re-certify the backflow assembly devices prior to using said device. All costs shall be included in the appropriate bid items.

22. CONSTRUCTION STAKING

A. Pre-Construction Survey

Prior to start of construction, Contractor shall perform pre-construction field survey in order to obtain current, existing topography of the project site prior to disturbance. The field topo and boundary survey shall encompass all existing improvements, elevations, plantings, surfaces, trails, dirt roads, grades, sidewalks, streets, pavements, all above ground features, elevations, layout of gates, posts, fencing, signs and any other above ground improvements. This work shall be performed by a Licensed Land Surveyor registered in the State of California. The survey plans shall be signed and sealed by the Licensed Land Surveyor and shall be submitted to the District for records. This survey shall be utilized by the Contractor to re-establish pre-existing grades and restore the site to existing conditions.

B. Surveying and Staking

The Contractor will provide all construction staking in accordance with Contract Documents. One (1) set of stakes must be provided at 25-foot stations plus horizontal and vertical angle points and appurtenance outlets for the sewerline. Any costs for restaking due to stakes lost during construction and/or due to any other cause, shall be the responsibility of the Contractor. If the Contractor requires additional staking, the Contractor will be responsible for the additional survey/staking costs. All plans, descriptions and calculations related to surveying including grade sheets, shall be signed and stamped by the Contractor's Land Surveyor, or Professional Engineer authorized by the State of California to practice land surveying.

The Contractor shall provide the District all cut or grade sheets and survey data within no more than two working days after staking and no less than three days prior to construction for any particular phase of the construction work.

C. Lines and Grades

All work under this Contract shall be built in accordance with the lines and grades as shown on the drawings. Distance and measurements, except elevations and structural dimensions, are given and made on horizontal planes. For pipeline work, the surveyor will provide offset line and grade stakes at ground level and furnish cut sheets. The Contractor shall be responsible to transfer of such line and grade into the trench for construction of the work and for accuracy of the transfer cost of transfer shall be included in the unit bid for the work and no extra compensation will be made to the Contractor. The Contractor shall preserve bench marks, survey stakes, and points sets for lines, grades, or measurement of the work in their proper places until authorized by the Project Engineer to remove them. The Contractor shall provide the Engineer with Cut Sheets for approval a minimum of three (3) working days prior to commencing construction. All issues with the staking shall be specifically marked on the cut or grade sheets when these are provided to the District and submitted as an RFI for specific resolution.

D. Potholing

The Contractor shall provide coordinates and elevations, (x, y and z coordinates) of all potholing. The coordinates shall be referenced to the plan provided by the Engineer. Survey of all potholing locations shall be considered part of the construction staking and included in the bid item. No additional compensation will be allowed.

E. Data Provided by the Owner

The Owner or Engineer shall provide the design data in AutoCad/Civil 3D 2015 format with control data (Northing, Easting) for monumentation shown on recorded maps only. Control data provided by the Owner shall be verified for conformance to the recorded map by the Contractor prior to use for any purpose. The Contractor is responsible for determining if any conflict exists. The Owner makes no representation as to the compatibility of this Data with your hardware or your software beyond the specified release of referenced specifications. The Data provided is part of the Owner's proprietary instruments of service and shall not be used by the Contractor or anyone else receiving this datum through or from the Contractor for any purpose other than as a convenience for construction staking services for this project. To the extent that the Data is electronic files, those files are not the approved construction documents. Further, differences may exist between this Data and corresponding hard-copy, engineering documents or recorded survey documents. In the event that a conflict arises between the signed, recorded or sealed hard-copy survey documents or construction documents ("Hard-Copy Documents") prepared by the Owner and the electronic files, the Hard-Copy Documents shall govern. The Contractor is responsible for determining if any conflict exists. By use of this Data, the Contractor is not relieved of his duty to fully comply with the contract documents, including, and without limitation, the need to check, confirm and coordinate all dimensions and details, take field measurements, verify field conditions and coordinate your work with that of other contractors for the project. To the extent that the Data is intended to be used for staking and/or grading of property, the Contractor should be aware that the Data was prepared anticipating that a duly licensed and qualified Land Surveyor

would perform on-site interpretation, verification, cross-checking and field-correction of the Data at the time of actual staking of the property prior to grading.

If changes are required to the original design, the Owner will provide to the Contractor redlined changes on the original plans in PDF format only of the approved changes.

23. SEWER AND WATER LATERAL PROTECTION AND RESTORATION

The exact location of existing sewer and water laterals and their depths are not known. Contractor shall contact the District for assistance regarding the approximate location of laterals, and Contractor shall be required to use caution when excavating near suspected locations of laterals. In case of damage to the existing laterals as a result of construction, the Contractor shall make the necessary repairs at his expense. All couplings used shall be ARC as approved by the District.

All sewer lateral replacement, due to being damaged shall be performed in accordance with JCSD Std. Dwg. No. S-5 and S-17. All water lateral replacements, due to being damaged, shall be performed in accordance with JCSD Std. Dwg. No. A-10, D-1, D-1B, D-2, and/or D-3.

24. REMOVAL AND DISPOSAL OF ASBESTOS CEMENT PIPE

If Asbestos Cement Pipe (ACP) are encountered, it shall be removed and disposed of in accordance with all applicable local and state laws. All work involved in the removal, salvage or disposal of ACP shall be the responsibility and at the expense of the Contractor.

All scrap ACP shall be properly manifested and prepared for transport following state and local criteria. The scrap material shall be delivered to a landfill permitted for disposal of asbestos containing materials.

Small pieces of ACP less than three feet long must have all broken edges encapsulated (sealed) with an approved product and double wrapped in a durable 6 mil plastic which is properly sealed to prevent expulsion of dust particles.

Intact ACP over three feet long does not have to be double wrapped in 6 mil plastic. Any broken edges; however, must be encapsulated with an approved product. Certane 1000 Post Removal Encapsulant or equal.

Asbestos containing pipe will be accepted into the landfill if the pipe is intact and if broken edges are encapsulated using approved products and

techniques. Small pieces of asbestos containing pipe less than three feet long must have any broken edges adequately encapsulated and it must be double wrapped in a durable 6 mil plastic which is properly sealed to prevent the expulsion of dust particles.

The landfill will accept a maximum of two packaged loads per day per generator, unless prior approval has been obtained from the Solid Waste Division.

Each load must be accompanied by manifest indicating that ACP was properly disposed on and not the Owner's responsibility. The completed copy of the manifest shall be returned to the Owner after disposal.

25. TRAFFIC CONTROL

It shall be the Contractor's responsibility to maintain traffic warning signs, barricades, flagmen, and other traffic control devices as required to maintain traffic, and as required by agencies having jurisdiction over the roadways in the work area. It shall be the responsibility of the Contractor to investigate with various agencies having jurisdiction over the right-of-way in work area to determine the extent of traffic control that may be required. The Contractor shall be responsible for traffic control during the work activities as well as for all surveying and inspection activities which subject any employee to traffic danger of any kind. The Contractor shall maintain access to properties adjacent to the construction area at all times.

It shall be the Contractor's responsibility to have a traffic control plan prepared under the supervision and signed by a Civil Engineer registered in the State of California for work done in the street right-of-way and implement said plans. It shall be the Contractor's responsibility to obtain approval of said traffic control plan from the City of Jurupa Valley prior to working in said road right-of-way. This plan shall include but not be limited to signing plan, traffic control plan, detour plan, etc. Contractor shall comply with any and all work hour requirements stipulated by City of Jurupa Valley and Caltrans such as night work, limited work hours, etc. and all costs and time shall be included at no additional cost to the contract.

The Contractor shall account for this additional cost in the appropriate bid item numbers in the Bid Schedule. The Contractor shall comply with all provisions of the City of Jurupa Valley Encroachment Permit with respect to maintaining the flow of traffic during construction. The Contractor shall account

for all costs associated with the preparation and implementation of the traffic control, permit, and riders in the appropriate bid item numbers in Bid Schedule. No additional cost or time will be awarded to the contract due to delays in the permit process and traffic control plans review and approval process.

26. PRECONSTRUCTION AUDIO VIDEO

The Contractor shall decide with a professional photographer, approved by the Owner, to prepare a full color pre-construction audio and video tape of the project site with the Inspector present prior to mobilizing and provide the Owner with a digital copy. Contractor shall email or submittal through CIPO or FTP or flash drive which are all acceptable.

27. CONSTRUCTION VIDEO PHOTOGRAPHY

A. Description

This Section covers pre-construction video photography of the work area to support proof of pre-existing pavement conditions and sign locations for visual comparison to the post-construction conditions. The requirements specified in the Condition of Contract also form part of this Section.

B. Video Photography

Provide video and audio DVD of the site prior to placing markings of any kind on the pavement, sawcutting or removal of materials. The DVD shall be new and previously unexposed and shall be playable on a DVD player and computer.

The video company shall be a professional photographer approved by the Owner. The video shall be in full color.

C. Description

Identify each DVD on its cover. List name of project, orientation of view, date and time of view, name and address of photographer.

D. Technique

Provide factual presentation. Provide correct exposure and focus, high resolution and sharpness. Video and audio capture of the

construction area from a vehicle moving at a slow rate of speed to permit Owner to view the DVD and determine pre-existing conditions. Provide audio explanation of pavement failure areas and of other items which require special notation.

Areas of local distress shall be video captured with the camera held without moving, using zoom control to record pavement cracking and alligating.

E. Submittals

Contractor shall deliver the DVD within three (3) calendar days after exposure with transmittal letter. The Owner will retain one of each DVD which will be the permanent record.

28. SPOIL MATERIAL FROM PIPELINE CONSTRUCTION

Excess soils from excavations shall be removed and disposed entirely at the Contractor's expense off the project site to an approved disposal area through the County or City. In no instance shall these soils become a public nuisance or threat to public safety.

29. MOIST OR WET SOIL

In the area of overly moist or wet soil, Contractor shall be responsible to spread the moist soil, dry, and mix with dry soil prior to use as backfill material. Contractor shall include cost of all necessary labor, material, equipment, and services associated with spreading, drying and mix with soil operation in the bid proposal and no additional cost shall be allowed.

30. PROTECTION/ACCESS OF PRIVATE PROPERTIES

Protection of private properties adjacent to the Project site against flooding and other hazards caused by construction is of the utmost importance. All protection and safety measures shall be provided by the Contractor. All costs for this Work shall be included in the original bid and no additional compensation will be allowed. The Contractor shall protect in place or replace in kind all driveway approaches, landscaping, fencing, wall, mailboxes, landscaping, etc. disturbed by the Work. Contractor will be required to provide complete unobstructed access to each resident's driveway at the end of every workday. Contractor shall be responsible for providing emergency vehicle access to each resident's house

and around the work site at ALL times. Contractor shall notify the local fire department, sheriff department and ambulance services and provide them with access routes through the construction area and a schedule indicating when access through any street will be obstructed by performance of the Work.

Contractor shall comply with local ordinances concerning noise abatement. Noise suppression shall be practiced at all times to minimize disturbance to persons living or working nearby, and to the general public. Measures for noise suppression shall include, but are not limited to, equipping all internal combustion engines with critical residential silencers, shielding noise-producing operations and equipment from nearest areas of occupancy, and conducting operations in the most effective manner to minimize noise generation consistent with prosecution of the Contract in a timely and economic manner.

Sound levels shall be kept below 65 dba, 10 minute LEQ, at all times, as measured at any neighboring residence. Should complaints be filed by surrounding property owners with the Code Enforcement Division of Jurupa Valley, the Contractor shall submit a noise monitoring report, which will include steps to mitigate the excessive noise levels.

All costs associated with this special condition, including all compliance, reporting, monitoring, and mitigation activities, shall be Contractor's sole responsibility and included in the bid, and no additional compensation will be allowed.

31. PROTECTION OF EXISTING IMPROVEMENTS, RESTORATION OF WORK SITE AND DISPOSAL OF SPOIL AND WASTE MATERIALS

Contractor shall complete operations so that existing improvements (including road and other paved surfaces adjacent to or in the vicinity of the work site) are not damaged. Contractor shall repair and restore, at Contractor's expenses, all disturbed or damaged private or public improvements which results from Contractor's operations (except that which is specifically a part of the contract work) to the satisfaction of the District, or the agency having jurisdiction over said improvements.

All work sites shall be restored to pre-job conditions and shall meet the requirements of the Owner, and Agencies who have jurisdiction and property owner(s). The Contractor shall repair or replace at his expense the damages as directed by the Owner.

The Owner is obligated to keep visual impact of the work sites to a minimum; therefore, the Contractor is required to restore all areas altered by construction to pre-existing conditions, unless shown otherwise on the Drawings. Such areas shall include, but shall not be limited to areas used for travel, parking, and storage of vehicles, equipment and materials or adjacent areas impacted by facilities construction.

The Contractor shall be responsible for the proper disposal of all waste materials resulting from project operations, including rubbish, packaging materials, discarded equipment parts, and damaged construction materials, in a manner and at locations suitable to the Owner and all health and other regulatory agencies.

32. GEOLOGICAL INFORMATION

It is the Contractor's responsibility to examine the site and perform any and all testing and evaluations necessary from which to draw conclusions regarding:

1. The ease or difficulty of excavation.
2. The presence, nature and extent of any rock.
3. The depth and quantity of groundwater.
4. The stability of excavations.
5. The suitability and quantity of excavated materials for pipe bedding and backfill or sources for importing bedding and backfill materials.
6. All excavation shall be unclassified and it shall be the Contractor's responsibility prior to submitting his proposal to familiarize himself with the conditions that he may encounter during construction of the Contract Work. All costs for excavation for all soils conditions (including any groundwater or required rock excavation) shall be included in the Contractor's applicable bid prices for constructing the various improvement facilities and no additional compensation shall be made therefore.
7. The following geotechnical investigation and report was prepared: A geotechnical investigation by Ninyo & Moore was performed to evaluate the surface and subsurface conditions on August 15, 2024 to provide recommendations for engineering design. Said report is attached to these specifications under Appendix B.

Where investigations of subsurface conditions have been made by the District in respect to foundation or other structural design, and that information is shown in the plans, or included in the Specifications, said information represents only the statement by the District as to the character of material which has been actually encountered by it in its investigation, and is only included for the convenience of bidders. Investigations of subsurface conditions are made for the purpose of design, and the District assumes no responsibility whatever in respect to the sufficiency or accuracy of borings or of the log of test borings or other preliminary investigations, or of the interpretation thereof, and there is no guaranty either expressed or implied, that the conditions indicated are representative of those existing throughout the work, or any part of it, or that unlooked for developments may not occur. Making such information available to bidders is not to be construed in any way as waiver of the provisions of the first part of this article and bidders must satisfy themselves through their own investigations as to conditions to be encountered.

The geotechnical material contained in these bidding documents is intended only to assist Contractor in preparing his bid and to provide information regarding geotechnical construction requirements. The District does not guarantee the present or future validity of this material, and the material is in no way to be construed as a warranty of geologic conditions. Personal investigation by the Contractor is mandatory so that he can satisfy himself with regard to all geologic conditions affecting the Work hereunder. All costs for excavation for all soils and soils conditions shall be in the Contractor's bid prices for the applicable site Work and facilities, and no additional compensation shall be made therefore.

33. MAINTAINING SEWER SERVICE

MINIMAL INTERRUPTION OF SEWER SERVICES - While installing a new pipeline to replace an existing pipeline providing sewer service to users along the line, the service to a given user shall not be interrupted except for the required period to transfer that service from the old line to the new line. This period of time shall not exceed 4 hours. The Contractor shall make provisions necessary, at no additional cost to the Owner, to keep the old main in service until the new main has been completed and is ready for service transfer.

Transfers shall not be made until the new line has been installed, disinfected, tested and placed in service.

34. PROTECTION OF SURVEY MONUMENTS

It shall be the Contractor's responsibility to protect all existing survey monuments, if possible. If a survey monument is going to be disturbed, the monument shall be tied out prior to start of construction and reset after construction. Removal of such monuments or displacement thereof shall require their resetting per the existing type of monument. The cost of tie-out resetting such monuments shall be the financial responsibility of the Contractor. Contractor is advised that tie-out and resetting of monuments must be done by a registered civil engineer authorized to practice land surveying or licensed land surveyor at no additional cost to the contract. The following table summarizes survey monuments within the project area that requires protection, tie-out, resetting. This information is provided for assistance to the Contractor only and may not be all inclusive. The Contractor shall field verify all monuments utilizing a Professional Licensed Land Surveyor registered in the State of California. Work performed under the Section, including monument presentation, shall comply with Business and Profession Code Section 8771.

35. PROJECT SIGNAGE

The Contractor shall construct and maintain two (2) project signs with the following included:

**ANNUAL SEWER REPAIR AND REPLACEMENT PROJECT – PYRITE /
60 FREEWAY AREA, JCSD PROJECT NO. C245123**

JCSD Contact: (951) 685-7434

The signs shall be 4 feet x 8 feet and erected and maintained by the Contractor at or near the project site. Sign locations will be coordinated with JCSD. Signs shall be made of ¾" thick AC exterior plywood. Signs shall be white with black lettering and multi-colored logos. Paint and lettering is all weather grade and suitable for long term outdoor exposure throughout the duration of the project. Contractor shall provide for all maintenance, repair, restoration as required, provide for all graffiti abatement, all at no additional cost to the contract for the duration of the project. The signs shall be prepared in a professional manner.

The Contractor shall submit a prototype of the signs with the final sign/lettering dimensions, lettering layout, font size and type to JCSD for approval prior to construction. The signs shall include, but not be limited to the following:

- Project Title
- Total Project Cost
- Project Dates
- Estimated Construction Duration
- Community Involvement Contact
- JCSD Color Logo
- Names of Board of Directors on the upper left corner

A sample of project signage is attached in Appendix F for reference.

36. NOTIFICATION AND COORDINATION

The Contractor shall be responsible to notify the public and businesses, offices, schools and provide property owners in the vicinity areas. The Contractor shall also accommodate his construction schedule to provide access. Contractor shall include all costs associated in his bid proposal. Neither additional expenses compensation nor time extension will be allowed.

37. EQUIPMENT AND MATERIALS STORAGE

It is the Contractor's responsibility to legally store equipment and materials associated with the performance of the work. If the Contractor has arranged for temporary storage on private property outside of the public right-of-way, the Contractor shall provide to the Owner a copy of the written agreement between the landowner and the Contractor.

38. SECURING OF TRENCHES

All trenches with pavement cut/removal must be backfilled and temporary pavement (2" minimum) placed (flush) at the end of each workday. City of Jurupa Valley Encroachment Permit requirements shall govern if more stringent. For site with non-paved surfaces, provide gravel surfaces. The Contractor will be required to provide complete unobstructed access to each resident's driveway at all times.

During the construction and installation of proposed pipelines and facilities close to existing utilities, the Contractor shall provide all necessary means to protect in place and support all existing utilities, existing backfill material, existing pavement, etc. If surrounding backfill and paving fails during construction, Contractor shall provide for all restoration of backfill, compaction, sub-base, base pavement, grind and cap per City of Jurupa Valley Road Improvement Standards and Specifications and support and protect utilities at no additional cost to contract.

39. DEMOLITION, SALVAGE AND ABANDONMENT

Sewer pipeline facilities shall be abandoned, and demolished as part of this project. Procedures for abandoning and demolishing of said facilities are outlined in the Green Book and on the plans and specifications as applicable. All pipes and facilities to be abandoned in place shall be bulkhead plugged and sealed with water tight cement.

The Contractor shall properly dispose of buried pipelines proposed to be removed, backfill and compact per plans, specifications and Green Book. Any abandoned pipelines planned to be left in place, Contractor shall dewater pipeline and abandoned in place and properly bulkhead all ends. Contractor shall cut/remove all abandoned sewer facilities, appurtenances, etc. backfill, compact and restore surface to match surroundings.

40. RESTORATION OF NON-PAVED AREAS

For all disturbed non-paved areas, such as dirt shoulders, unimproved areas, trails, lawns, turf, etc. due to Contractor's activities. Contractor shall restore and re-compact these areas per the applicable sections of these Plans and Specifications. Contractor shall coordinate with and restore said areas to the satisfaction of the City of Jurupa Valley's inspector, property owner, agencies/entities having jurisdiction of said properties. Contractor shall provide for all equipment, effort, labor, materials all at no additional cost to the contract.

41. SCHEDULE OF VALUES

A. GENERAL

Contractor shall provide a Schedule of Values (cost breakdown of ALL lump sum bid items) for the contract work. The Schedule of Values shall be subject to Owner approval.

All lump sum items ("LS" as listed on the Biding Sheet) shall be paid for at the price indicated in the Bid; with the exception that if no work is performed on a particular bid item or the item is deleted by the Owner, then that particular item will become a "no pay" item. In the event a portion of the lump sum bid item is provided, that completed portion will be paid in accordance with the approved cost item breakdown (Schedule of Values).

The lump sum bid price shall include furnishing all labor, materials, equipment, methods, etc. necessary to complete the work for the specified bid item as described on the Bidding Sheet, the Plans and Specifications.

B. SCHEDULE OF VALUES

Within ten (10) days following the date the Owner issues the written "Notice to Proceed", Contractor shall submit a detailed price breakdown ("Schedule of Values") of all lump sum bid items indicated on the Bidding Sheet. The price breakdown shall include quantities, unit prices and any other information required insufficient detail to enable it to be used by Owner in reviewing and approving Contractor's progress pay estimates. Such price breakdown shall be in accordance with the bid items and sub-items indicated on the Bidding Sheet and the major components of the Work as contained in the Contract Documents. Include all subcontractor/supplier agreements showing the dollar value of these agreements to justify the schedule of values, and showing separate line items for the material costs and installation costs.) Provide any separate material cost breakdowns that may be required pursuant to the Special Requirements. The price breakdown shall be subject to Owner approval.

42. MISCELLANEOUS SPECIAL CONDITIONS

A. PROJECT MEETING

- (1) **ATTENDEES.** Unless otherwise specified or required by the Owner, the meetings shall be attended by the Owner, the Engineer, the Inspector, and the Contractor and his Superintendent. Subcontracts may attend when involved in

the matters to be discussed or resolved but only when requested by the Owner, Engineer, or Contractor.

- (2) **MEETING RECORDS.** The Owner will record minutes of each meeting and will furnish copies to the Contractor within five (5) working days thereafter. If the Contractor does not submit written objection to the contents of such minutes within seven (7) days after presentation to him, it shall be understood and agreed that the Contractor accepts the minutes as a true and complete record of meeting.
- (3) **MEETING SCHEDULE.** The dates, times and locations for the progress meeting shall be agreed upon and recorded at the preconstruction conference. Then after, changes to the schedule shall be by agreement between the Owner and Contractor, with appropriate written notice to all parties involved.
- (4) **PRECONSTRUCTION CONFERENCE.** Prior to issuance of the Notice to Proceed, a preconstruction conference shall be held at the location, date, and time designated by the Owner. In addition to the attendees named herein, the meeting shall be attended by the representatives of regulatory agencies having jurisdiction of the project, Owners and Operators of affected utilities, if required, and such other persons the Owner may designate.
- (5) **EXECUTION AND SUBMITTAL OF DOCUMENTS.** At the preconstruction conference, unless otherwise specified or agreed by the Owner and Contractor, the Contract Agreement shall be executed by the parties hereto and the Contractor shall present to the Owner the Bonds, certificates of insurance, progress schedule, schedule of values, written safety program, and all other preconstruction documents required of him by the Contract Documents.
- (6) **AGENDA.** In general, the matters to be discussed or resolved and the instructions and information to be furnished

to or given by the Contractor at the preconstruction conference include:

- a) Progress meeting schedule.
- b) Progress schedule and schedule of values submitted by Contractor.
- c) Communication procedures between the parties.
- d) The names and titles of all persons authorized by the Contractor to represent and execute documents for him with samples of all authorized signatures.
- e) The names, addresses, and telephone numbers of all those authorized by the Contractor to act for him in emergencies.
- f) Construction permit requirements, procedures, and posing.
- g) Public notice of starting Work.
- h) Procedures concerning the installation of Work on public or private property not owned by the Owner.
- i) Interfaces with the Contractors or with utility owners.
- j) Access and rights-of-way furnished by the Owner.
- k) Forms and procedures for Contractor's submittals.
- l) Change Order forms and procedures.
- m) Payment application forms and procedures and the revised progress schedule and reports to accompany the applications.
- n) Contractor's safety and training program, and designation of the Contractor's Safety officer and his qualifications.
- o) First-aid and medical facilities to be furnished by Contractor.
- p) Contractor's provisions for barricades, traffic control, utilities, sanitary facilities, and other temporary facilities and controls.
- q) Project sign for Owner if required by the Specifications.
- r) Engineer, Inspector and his duties.
- s) Construction surveyor and initiation of surveying services.

- t) Testing laboratory or agency, and testing procedures.
 - u) Methods of construction proposed by the Contractor.
 - v) Equipment proposed for use during construction by the Contractor.
 - w) Procedures for payroll and labor cost reporting by the Contractor.
 - x) Procedures to ensure nondiscrimination in employment on and for the Work.
 - y) Issuance of the Notice to Proceed.
 - z) Matters concerning construction within the city/county (traffic, police, fire, mail and waste collection services).
- (7) PROGRESS MEETINGS. The meetings shall be held on a weekly basis in accordance with the agreed schedule. All matters bearing on the progress and performance of the Work since the preceding progress meeting shall be discussed and resolved, including without limitation any previously unresolved matters, deficiencies in the Work or the methods being employed for Work, and problems, difficulties, or delays which may be encountered.
- (8) SPECIAL MEETINGS. Upon appropriate notice to the other parties, special meetings may be called by the Owner, Engineer, or Contractor. Special meetings will be held where and when designated by the Owner for the following purposes unless the matters are resolved at the preconstruction conference or at subsequent progress meetings.
- (9) REGULATORY AGENCIES. When requested, the Contractor shall attend meetings held or required by the governmental regulatory agencies having jurisdiction of the Project or by various California State agencies or Owners of affected utilities.

B. REIMBURSEMENT TO OWNER FOR COMPACTION RE-TESTS

The Owner will arrange for a soils engineering laboratory to perform the trench compaction testing for the water pipelines. The Owner will pay for required compaction tests, with the exception that the Owner shall be reimbursed by the Contractor for any compaction tests that fail to meet the minimum relative compaction requirements. The Bidder is hereby notified that the amount of the reimbursement to the Owner shall be Seventy-Five Dollars (\$75.00) for each required retest for insufficient compaction, said amount including costs for testing, overhead and administration.

C. PARTIAL PAYMENT REQUESTS

Contractor shall submit all invoicing and requests for payment for completed portions of the work directly to the District for approval on the District's approved form. Said invoicing shall be submitted at intervals no less than 30 calendar days and shall include an updated project schedule and updated as-built drawings for processing.

D. CONTRACTOR'S FIELD SUPERINTENDENT

The Contractor shall be required to have a field superintendent, from his organization, on the jobsite during construction activities, to manage the affairs of the Contractor and to receive directions or instruction from the District or Engineer. Contractor shall provide the District with a 24 hour emergency phone number for field superintendent prior to beginning of construction.

E. COOPERATION WITH OTHER CONTRACTORS

The Contractor shall cooperate with other Contractors that may be working within the project area, as directed by the District.

F. REQUIRED CERTIFIED PAYROLL SUBMITTALS

The District shall require the Contractor to submit Certified Payroll records per Section entitled "Prevailing Wage" of the General Provisions. The Contractor shall prepare said certified payroll records on a form acceptable to and approved by the

Owner; and the certified payroll records shall be submitted with each partial payment request.

G. AS-BUILT DRAWINGS

The Contractor shall be responsible for maintaining one up-to-date set of as-built drawings, on the job site, available for review by the Owner representative. These drawings shall be clean, neat, and legible and show deviations from the original plan and profile design. This set of as-built drawings shall be submitted for review on the monthly basis and given to Owner upon project completion. The Notice of Completion will not be filed until Owner receives the as-built drawings.

Failure to provide acceptable up-to-date as-built drawings as required herein is considered a material breach of the Contract and shall result in withholding of progress payments and/or final payment at the sole discretion of Owner. Failure to submit the final as-built drawings shall of and by itself be grounds for assessment of liquidated damages not withstanding any other contractual action which may be taken.

Full compensation for conforming to the above requirement will be considered as included in the prices bid for various contract items of work and no additional compensation will be allowed therefore.

43. GAS COMPANY REQUIREMENTS

When performing work and construction activities within the Gas Company (Distribution and Transmission) crossings and parallels, the Contractor shall follow the Gas Company's work requirements.

1. Contractor shall coordinate with the Gas Company (Distribution and Transmission) and schedule the appropriate Gas Company representative to be on-site when working in areas of the gas lines and when gas lines require protecting and supporting in place. If the representative is not available, the Contractor shall adjust his work and schedule as required.

2. For locations of jack/bore and casing installations, the Contractor must verify all existing gas lines (horizontally and vertically) prior to construction. Refer to plan notes for additional information.
3. All work, labor, equipment, provisions, materials to accommodate these Gas Company (Distribution and Transmission) shall be included in the contract all at no additional cost and no additional time shall be awarded.

44. COVID-19

Contractor shall follow all federal and state guidelines in regards to COVID-19 requirements such as, but not limited to face coverings, social distancing, crew size limitations, safety of general public as well as agencies involved. All cost shall be included in the project and no additional compensation shall be made therefore.

45. PAVEMENT REPAIR, REPLACEMENT, AND RECAPPING

Pavement replacement and trench repair shall comply with the City of Jurupa Valley encroachment permit requirements. City of Jurupa Valley Encroachment Permit requirements shall govern if more stringent. Unless otherwise noted within the permit materials/requirements shall consist of Class II aggregate base, base pavement PG-64-10B (3/4" max), cap pavement PG-64-10 C2 (1/2" max), grind and overlay. Contractor shall adjust the unit prices of associated bid items based upon the equipment used. No additional compensation will be granted. Refer to County of Riverside's Std. No. 818 for pavement and trench repair requirements.

46. COMPLIANCE WITH STORM WATER REGULATIONS (NPDES)

Contractor, as JCSD's authorized representative, shall comply with the regulatory requirements of the State Water Resources Control Board's (SWRCB) Order No. 2009-0009 DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Runoff Associated with Construction Activity, copies of which are available on SWRCB website at: <http://www.swrcb.ca.gov/stormwtr/construction.html>.

The Contractor, as JCSD's authorized representative shall have a Qualified SWPPP Developer determine the Risk Level/LUP Type and prepare a Contractor and QSD Certified Storm Water pollution and Prevention Plan Storm Water

Pollution and Prevention Plan in accordance with Order No. 2009-0009 DWQ, NPDES General Permit No. CAS000002. The Contractor shall submit both paper and electronic copies of the SWPPP to the JCSD within two weeks of the contract start date. The JCSD, upon approval of the SWPPP, shall electronically file Permit Registration Documents (PRDs) using the Stormwater Multi Application Reporting & Tracking System (SMARTS) and shall mail the Notice of Intent (NOI) and appropriate annual fee to the State Water Resources Control Board. SWRCB will process the PRDs and a Waste Discharge Identification Number (WDID) will be assigned to the project. JCSD will forward the completed NOI including the WDID to the Contractor upon receipt.

The Contractor, as JCSD's authorized representative, shall always maintain a copy of the SWPPP on the job site for review and inspection by the Regional Water Quality Control Board. Documents that shall be available on site include but are not limited to the SWPPP that is monitored as needed for current conditions; construction site monitoring plan (CSMP); required daily/weekly and extended inspection checklists, pre, during, and post rain event inspection checklists; pre, during, and post-rain event reports; quarterly non-stormwater monitoring reports; and Rain Event Action Plans (Risk Level 2 and 3 projects only).

The Contractor, as JCSD's authorized representative, shall have a Qualified SWPPP Practitioner (QSP) available at all times to implement the SWPPP in compliance with Order No. 2009-0009 DWQ including but not limited to training/certification requirements for key personnel implementing the SWPPP/BMPs etc.; performance of daily/weekly inspection reports; performance of all required monitoring and reporting including monitoring data/records and visual monitoring records; and maintaining records of corrective actions taken and not taken. Submittal of daily/weekly inspections and monthly reports to JCSD in compliance with the permit is required by the end of each month. The Annual Report, in accordance with Section XVI of Order No. 2009-0009 DWQ, NPDES General Permit No. CAS000002, must be submitted to JCSD by July 31 of each year. The Contractor's QSP must be registered in SMARTS so JCSD may link the QSP to the project in SMARTS as a Data Submitter.

The JCSD, at its discretion, may withhold payment and/or return pay requests if the contractor fails to submit monthly reports by the last working day of the

month, properly maintain records, or otherwise comply with the permit requirements.

The contractor shall include all costs for preparation of the SWPPP, record keeping, implementation, and reporting requirements of the permit. No additional compensation will be allowed.

47. COMPENSATION FOR UNKNOWN UTILITY

Compensation for the unit bid price for unknown utility shall include compensation for loss of production, idle time, backfill, slurry backfill (up to 5 cubic yard) if needed, installing under, support, overhead, or any other cost associated with the unknown utility if multiple conduits are crossing within 5-feet of each other they (may be in-cased in concrete) shall be considered a single crossing.

48. HARD ROCK REMOVAL

Excavation encountered during pipeline trenching for this project that cannot be excavated by use of a CAT 345, Komatsu 400 or equivalent while using heavy duty buckets or buckets more suitable for difficult trenching conditions, and requires blasting and/or special breaker equipment (as determined by the Engineer and approved by Owner) will be paid for under the rock excavation bid item provided on the Bidding Sheet. Normal trench excavation is defined and shall include those materials that are capable of being removed by the aforementioned excavating equipment in good operating condition; and being operated diligently and efficiently by an experienced operator. In addition to the above described criteria, material will be classified within trench excavation which, when tested, indicates seismic velocities below 4500 feet per second. Any tests requested by Contractor which fail to show velocities in excess of 4500 feet per second shall be paid for by the Contractor, at no additional cost to the District. It is noted that the correlation between rippability of in-trench soils and the capability of heavy excavators to rip such materials is not exact. Also, Contractor shall understand that the criteria and definition of rock excavation (as stated herein) must be met for payment under this provision under the Contract; all other excavation shall be considered normal trenching with payment to be made under the Contractor's unit bid price for pipeline installation as indicated on the Bidding Sheet. Accordingly, it shall be the

responsibility of the Bidder to perform any additional, independent evaluation of the rippability of the existing on-site materials prior to submitting a bid proposal.

Contractor shall notify Owner immediately, both verbally and in writing, if conditions are such that rock excavation is expected to be necessary. All rock excavation shall be performed under direct inspection by District's Project Inspector. No payment shall be made for rock removed prior to inspection and measurement by the District's Project Inspector. The District, at its option, may consider alternate measures including the adjustment of line and grade in lieu of rock excavation.

Payment for rock excavation will be made on a cubic yard (CY) basis in accordance with the unit bid price for "Hard Rock Excavation, Removal and Disposal". Unit bid price shall include cost of removal and disposal of the unsuitable material. Should the rock removal create a shortage of backfill material, the Contractor shall provide additional backfill material in accordance with the import backfill provisions of these Special Requirements. Rock excavation volume (CY) for payment purposes will be calculated using the "Average End Area" method (Refer to Attachment B for example calculation methodology). Maximum trench width for payment purposes shall be in accordance with the Excavation/Backfill Detail; with all measurements (stations, lengths, depths, etc.) as confirmed by Inspector.

The Bid Sheet shows an estimated quantity only; and there shall be no increase/decrease allowed on the unit price based upon any quantity variance.

The Contractor shall hire, pay for, and make arrangements for the seismic study and investigation to determine the seismic velocities and related properties of the materials pertaining to the Hard Rock Removal section. Contractor shall incorporate all efforts into their construction schedule including the timing for the required investigation, reports, efforts, etc. All reports, results, studies, supporting data shall be provided to the District in coordination with progress payments. All cost associated with the seismic study and investigation efforts shall be the responsibility of the Contractor at no additional cost to the District.

49. MATERIAL TRACKING

The contractor will collect all the information noted in the table below. During construction, the contractor shall fill in the attached sheet provided

electronically and submit it to the District once all water/recycled water service lines/ and meters have been installed. The cost of this task should be included in the bid item for Record Drawings/As-Builts. No separate or additional compensation shall be allowed.

Material Tracking Summary Table

Address	Existing (JCSD Side)				New Facilities (JCSD Side)			Existing (Customer Side)			New Facilities (Customer Side)		Notes
	Meter No.	Diameter	Pipe Material	Is there any lead material (Y/N)	Meter No.	Diameter	Pipe Material	Diameter	Pipe Material	Is there any lead material (Y/N)	Diameter	Pipe Material	
Kennedy St.													
8954	40332281												
8902	40332551												
8942	40332282												
8956	40332283												
8920	40337513												
8936	40310465												
8930	35926752												
64TH St.													
8921	34978377												
8908	34978409												
8913	36263477												
8901	36263475												
8900	35977983												
8870	35778466												
8863	40332332												
63RD St.													
8914	40332345												
8904	40332344												
8895	40310595												
8874	33670904												
8875	40332348												
8872	40332347												
Archer St.													
6261	18092783												
6277	18433890												
6307	40332356												
6306	33670898												
6314	40332357												
6317	40332349												
6319	40332350												
6322	36263509												
6332	40332351												

BASIC SPECIFICATIONS
SECTION A

GENERAL SPECIFICATIONS

BASIC SPECIFICATION

SECTION A

GENERAL SPECIFICATIONS

TABLE OF CONTENTS

	<u>Page</u>
1. REFERENCE SPECIFICATIONS.....	1
2. CONTRACTOR'S SCHEDULE OF WORK.....	1
3. INSPECTION.....	2
4. DEFECTIVE WORKMANSHIP AND MATERIAL.....	3
5. SANITATION.....	3
6. FIRST AID AND PROTECTIVE FACILITIES.....	4
7. CONTRACTOR TO PROVIDE FACILITIES FOR EMPLOYEES.....	4
8. POWER.....	4
9. CLEANUP.....	4
10. UTILITIES AND EASEMENTS.....	5
11. RELATIONSHIP WITH OTHER GOVERNMENTAL AGENCIES.....	5
12. EXPOSURE OF UTILITIES IN ADVANCE OF WORK.....	5
13. ADVANCE NOTIFICATION OF AGENCIES.....	6
14. CROSSING, PROTECTION, AND/OR RELOCATION OF UTILITIES.....	6
A. General.....	6
B. Utilities Shown on Plans or Found Through Field Markings or Potholing.....	7
C. Special Water/Sewer Crossings.....	7
D. Relocation of Utilities by the Contractor for Their Own Convenience.....	8

BASIC SPECIFICATION
SECTION A
GENERAL SPECIFICATIONS
TABLE OF CONTENTS
(continued)

	<u>Page</u>
E. Service Connections.....	8
F. Utility Conflicts with Proposed Improvements.....	8
G. Unknown Utilities Discovered During Construction	8
H. Responsibility of the Contractor.....	10
15. PROTECTION OF FACILITIES OTHER THAN UTILITIES.....	10
16. GROUND WATER.....	10
17. CONSTRUCTION WATER.....	10
18. WATER SUPPLY FOR COMPACTION AND DUST CONTROL.....	11
19. TRAFFIC CONTROL.....	11
20. ACCESS TO ADJACENT PROPERTIES	11
21. CONSTRUCTION STAKING.....	12
23. RECORD DRAWINGS	14
24. RE-PLANTING	14
25. EROSION CONTROL.....	15
A. General.....	15
B. Preparation.....	15
C. Material.....	15
D. Protection for Steep Slopes.....	15
26. CONTRACTOR'S SUBMITTALS	16
27. RESPONSIBILITY FOR MATERIAL FURNISHED BY THE DISTRICT	17
28. ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR	17
29. HANDLING AND STORAGE OF MATERIALS.....	17
30. GEOTECHNICAL SERVICES.....	17
31. EARTHWORK.....	18

BASIC SPECIFICATION
SECTION A
GENERAL SPECIFICATIONS
TABLE OF CONTENTS
(continued)

	<u>Page</u>
A. General.....	18
B. Clearing and Grubbing	19
C. Grading Along Pipeline.....	20
D. Trench Excavation.....	20
E. Trench and Excavation Shoring	22
F. Pipe Bedding	23
G. Crushed Rock Bedding.....	24
H. Trench Backfill and Compaction Requirements.....	25
I. Structure Excavation and Backfill	30
J. Control of Water	31
K. Payment	31
32. STEEL CASING	31
33. JACKED STEEL CASING.....	32
A. Submittal	33
B. Potholing of Existing Utilities	34
C. Permit Provisions and Requirements	34
D. Casing Spacers	35
E. Installation of Steel Casing.....	36
F. Installation of Carrier Pipe	37
34. SUBSTITUTIONS	38
35. WORKERS	39
36. REMOVAL OF HAZARDOUS WASTE	39
37. AIR POLLUTION CONTROL	40
38. COMPLIANCE WITH STATE STORM WATER PERMIT	40
39. EXCESSIVE NOISE	41
40. DOCUMENT RETENTION AND EXAMINATION.....	42
41. SOILS INVESTIGATION	42

BASIC SPECIFICATION
SECTION A
GENERAL SPECIFICATIONS
TABLE OF CONTENTS
(continued)

	<u>Page</u>
42. STATE LICENSE BOARD NOTICE	42
43. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY	43
44. PROHIBITED INTERESTS.....	43
46. OWNERSHIP OF DRAWING	43
47. NOTICE OF TAXABLE POSSESSORY INTEREST	43
48. SUBMITTALS OF ALL SAMPLES, MATERIAL LISTS AND CERTIFICATIONS.....	44

BASIC SPECIFICATIONS
SECTION A

GENERAL SPECIFICATIONS

1. REFERENCE SPECIFICATIONS

The following published reference specification shall hereby become part of these specifications.

- A. State of California, Department of Transportation, "Standard Specifications", (Latest Edition).
- B. The Greenbook "Standard Specifications for Public Works Construction", Latest Edition, published by Building News, Inc., 990 Park Center Drive, Suite E, Vista CA 92081. Part I of the "Standard Specifications for Public Works Construction" shall apply to work accomplished under the contract except as herein modified.

2. CONTRACTOR'S SCHEDULE OF WORK

Within seven (7) days from the time the Contract is executed by all parties and at such other times as may be requested by the District, the Contractor shall submit to the District a detailed construction schedule which shall show the order in which the Contractor proposes to carry on the work, the dates at which the Contractor will start the several parts of the work, and the estimated dates of completion of the several parts. The District reserves the right to approve or alter the Schedule proposed by the Contractor, prior to the start of work.

The District may establish priorities for completion of certain parts of the work which may be necessary to provide certain services or which District may deem advisable in the interest of public safety and convenience.

The construction schedule and supplementary construction schedules submitted shall be consistent in all respects with the time requirements of the contract.

The receipt or written approval of any schedules by the Owner's Representative or the District shall not in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Work. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Work within the specified Contract time period. If the required schedule is not received by the time the first payment

under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed, and accepted by the Owner's Representative.

- a. Schedule Contents. The schedule shall allow enough time for inclement weather. The schedule shall indicate the beginning and completion dates of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Work within the time specified for completion. Schedule duration shall match the Contract time. Schedules indicating early completion will be rejected.
- b. Schedule Updates. Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the Owner's Representative whenever requested to do so by Owner's Representative and with each progress payment request. The Owner's Representative may withhold progress payments or other amounts due under the Contract Documents if Contractor fails to submit an updated and accurate construction schedule.

3. INSPECTION

All work and materials furnished under these specifications shall be subject to rigid District inspection and acceptance.

The Contractor shall notify the District at least two working days in advance of any work to be done, in order that inspection, including that of on-site materials, may be provided with a minimum of inconvenience to the District or delay to the Contractor. The Contractor shall perform construction only in the presence of a District inspector unless written permission to work during the absence of an inspector has been granted by the District or inspector. Any work done in the absence of an inspector without permission shall be subject to rejection.

The District shall at all times have access to the work during its construction and shall be furnished with every reasonable facility for ascertaining that materials and workmanship are in accordance with the requirements of these Specifications.

When required, the Contractor shall notify the District a sufficient time in advance of manufacture or production of materials to be supplied, in order that the District may arrange for shop or plant inspection and testing. The District shall have access to all parts of the shop or plant where material subject to inspection is being manufactured.

All materials shipped prior to having satisfactorily passed such testing and inspection by the District shall not be used unless approved by the District.

The Contractor shall also furnish the District duplicate, certified copies of all factory and mill test reports when required by the District.

Work or materials failing to conform to these Specifications may be rejected at any time.

The District has made the necessary arrangements for inspection (general, geotechnical and specialties) of Contractor's work during the District's field services' regular (i.e., 7:00 a.m. to 3:30 p.m., Monday through Friday) 40-hour work week. If the Contractor works more than an 8-hour day, a 40-hour week, and/or District observed holidays, the financial responsibility for ALL added inspection shall be the responsibility of the Contractor. The prevailing hourly rates for inspection are on file with the District. Such prevailing rates will be applied at 1-1/2 times the regular rates for periods over 8 hours a day and/or 40 hours per week and/or District observed holidays and 2 times the regular rates for periods over 12 hours in one (1) day.

4. DEFECTIVE WORKMANSHIP AND MATERIAL

The Contractor shall promptly remove from the premises all work and materials condemned by the District as failing to conform to the contract, whether incorporated or not, and the Contractor shall promptly replace and re-execute the Contractor's own work in accordance with the contract and without expense to the District and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement and pay for reinspection costs.

If the Contractor does not remove such condemned work or materials within a reasonable time after notice, the District may remove them and store the materials at the expense of the Contractor. If the Contractor does not pay the expenses of such removal within 10 days' time after such removal, the District may, upon thirty days' written notice, sell such materials at auction or at private sale and shall account for the net proceeds thereof after deducting all the costs and expenses that should have been borne by the Contractor.

5. SANITATION

All work areas shall be maintained in a neat, clean, sanitary condition. Fixed and portable toilets, which are made inaccessible to flies, shall be provided wherever needed for use of employees, and their use shall be strictly enforced. Toilets shall be kept supplied with toilet paper and shall have workable door fasteners. Toilets shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by CAL-OSHA regulation. The toilets shall be maintained in a sanitary condition at all times. Use of toilet facilities in the Work under construction shall not be permitted. Any other sanitary facilities required by CAL-OSHA shall be the responsibility of the Contractor. All waste and refuse from sanitary facilities provided by the Contractor or from any source related to Contractor's operations shall be taken care

of in a sanitary manner, satisfactory to the District, and in accordance with the laws and regulations pertaining thereto. Contractor shall rigorously prohibit and prevent committing of nuisance within the work site area or upon the District's right-of-way or adjacent to private property. Contractor shall furnish all facilities and means for proper sanitation of the work, and shall protect and save harmless the District, its officers and employees from any liability resulting from improper or insufficient sanitation.

6. FIRST AID AND PROTECTIVE FACILITIES

First aid facilities and supplies shall be kept on the jobsite. Instructions in first aid shall be given, and Contractor shall provide emergency first aid treatment and supplies for the Contractor's employees sufficient to comply with all legal requirements.

7. CONTRACTOR TO PROVIDE FACILITIES FOR EMPLOYEES

Contractor shall, at their own expense, provide all labor, materials, equipment, and facilities which may be required to carry out effectively the provisions of these specifications. Contractor shall receive no additional payment therefore, and all compensation to be received for such work shall be included in the prices bid on the Bidding Sheet.

8. POWER

The Contractor shall provide, at their own expense, all necessary power required for their operations under the contract. The Contractor shall provide and maintain in good order such modern power equipment and installation as shall be adequate, in the opinion of the District, to perform in a safe and satisfactory manner the work required by the Contract.

9. CLEANUP

THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, the Contractor shall keep the premises occupied by the Contractor and the project site in a neat and clean condition, and free from unsightly accumulation of rubbish, excess construction materials, and excess excavated materials. The Contractor shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other cleaning methods.

Materials and equipment shall be removed from the site as soon as they are no longer necessary.

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

Excess excavated material from the pipe trench shall be removed from the site immediately. Sufficient material may remain for use as backfill if approved to be suitable backfill by the Engineer. Forms and form lumber shall be removed from the site as soon as practicable after stripping.

FAILURE OF THE CONTRACTOR TO COMPLY WITH THE DISTRICT'S CLEANUP ORDERS MAY RESULT IN AN ORDER TO SUSPEND WORK UNTIL THE CONDITION IS CORRECTED. No additional compensation or extension of time will be allowed as a result of such suspension.

The Contractor shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate the regulations of any legally constituted authority.

Upon completion of work and before the final pay estimate is submitted, the Contractor shall, at their own expense and cost, satisfactorily dispose of or remove from the vicinity of the work all plants, buildings, rubbish, unused materials, concrete forms, and other equipment and materials belonging to them or used under their direction during the construction, and in the event of their failure to do so, the same may be removed and disposed of by the District at the Contractor's expense.

10. UTILITIES AND EASEMENTS

The plan portion of each sheet indicates the general location of underground utilities as shown on available records. No attempt has been made to show service connections other than those services improved as part of the contract work. The plans also indicate the location of public right-of-way lines and easements that will be acquired by the District. It shall be the Contractor's responsibility to conduct all their operations within the rights-of-way and easements as shown on these plans.

11. RELATIONSHIP WITH OTHER GOVERNMENTAL AGENCIES

Where the pipeline and structures are constructed within the rights of way under the jurisdiction of other governmental agencies, Contractor shall comply with all requirements of said agencies. Where the same subject matter is covered by the specifications of two or more agencies, the specifications more restrictive on the Contractor shall govern in all cases.

12. EXPOSURE OF UTILITIES IN ADVANCE OF WORK

It shall be the Contractor's responsibility to determine the exact location and depth of all utilities and service connections. The Contractor shall also determine the type, material, and condition of any utility which may be affected by or affect the work. The Contractor shall have all utility companies field locate and mark all underground lines before the start of construction. Utilities to be potholed shall include all those identified in the plans as well as those field marked by utilities.

In order to provide sufficient lead time to resolve unforeseen conflicts, order materials and take other appropriate measures to ensure that there is no delay in work, the CONTRACTOR SHALL POTHOLE ALL UTILITIES THAT MUST BE CROSSED OR CLOSELY PARALLELED PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL THEN IMMEDIATELY PROVIDE THE LOCATION AND DEPTH OF THE "POTHOLED" UTILITIES TO THE ENGINEER. The Contractor shall expose all service connections before excavation in the area. All costs incurred in exposing utilities shall be borne by the Contractor.

THE DISTRICT RESERVES THE RIGHT TO MAKE MINOR ADJUSTMENTS IN PIPELINE ALIGNMENT AND GRADE, ALL AT NO ADDITIONAL COST TO THE DISTRICT.

Failure of the Contractor to comply with these provisions will result in an order to suspend work until these provisions are complied with, and no additional compensation or extension of time will be allowed as a result of such suspension. Payment per bid item or spread.

13. ADVANCE NOTIFICATION OF AGENCIES

It shall be the Contractor's responsibility to determine and notify those agencies requiring advance notification for inspection or other purposes before beginning construction in any area of concern to said Agency. A minimum of two working days advance notice shall be given to the various agencies before beginning construction in the area unless specific advance times and requirements are stated in these detailed specifications or required by the Agency.

14. CROSSING, PROTECTION, AND/OR RELOCATION OF UTILITIES

A. General

Utilities for the purpose of these specifications shall be considered as including, but not limited to, and irrespective of ownership; Pipelines (including irrigation mains), conduits, transmission lines, and appurtenances of "Public Utilities" (as defined in the Public Utilities Act of the State of California) and those of private industry, business, or individuals solely for their own use or for use of their tenants; and storm drains, sanitary sewer, street lighting, traffic signal systems, duct banks, telephone cable, transmission cables, and completely buried structures.

The District has made an earnest effort to locate and indicate on the drawings all utilities which exist within the limits of the work. However, the accuracy and completeness of the utilities indicated on the drawings are not guaranteed. If utilities are shown in profile, the depth indicated is based on general practice and is not guaranteed at any specific location. No attempt has been made

to show service connections on the plans. It shall be the responsibility of the Contractor to determine the exact location of all utilities and their service connections. The Contractor shall have the utility companies field locate their utilities before excavation. The Contractor shall verify with each utility company the extent to which they will field locate their utilities. Where required, field location by Contractor forces shall be included in the contract price for which such work is appurtenant thereto and no additional allowance will be made, therefore. The Contractor shall make their own investigation as to the location and type of existing utilities and their appurtenances and service connections which may be affected by the contract work and shall notify the District as to any utility located by the Contractor which has been incorrectly shown or omitted from the drawings.

B. Utilities Shown on Plans or Found Through Field Markings or Potholing

Where utilities cross or parallel the pipeline trench but do not conflict with the permanent work to be constructed, the Contractor shall protect the utility in place unless otherwise indicated on the plans. The Contractor shall notify the utility owner at least two working days in advance of the crossing or parallel construction and will coordinate the construction schedule with the utility service requirements.

Unless otherwise provided in the specifications, full compensation for crossing or paralleling of utilities shown on the plans shall be included in the contract unit price for which such work is appurtenant thereto and no additional allowance will be made. Said various contract prices shall include all labor, materials, tools, and equipment necessary or incidental to the work.

C. Special Water/Sewer Crossings

At the locations shown on the plans or if the vertical separation between the outside of the sewer or recycled water pipe and the outside of the water pipe at crossings is less than one (1) foot, and when directed by the District, the Contractor shall provide the construction required per the detail shown on the plans and per the California Department of Public Health Water/Sewer Special Construction Requirements. The special construction will be deleted at locations shown if the vertical separation of the waterline above the sewer line is 1 foot or greater.

The District hereby reserves the right to increase or decrease this item from the quantity shown on the Proposal forms without altering the unit price bid per each. Payment will be made in accordance with the unit bid price provided on the Bidding Sheet; in the event no item for said special construction work is designated on the Bidding Sheet, Contractor shall be paid under the "Extra Work" provisions of the General Conditions.

D. Relocation of Utilities by the Contractor for Their Own Convenience

The temporary relocation or the alteration of any utility desired by the Contractor solely for their own convenience in the performance of the contract work, to a position or condition other than that provided for in the specifications or shown on the drawings, shall be the Contractor's own responsibility, and the Contractor shall make all arrangements with the property owners regarding such work. Any costs of such work for the Contractor's own convenience shall be absorbed in the unit prices or included in the lump sum amounts bid for the various contract items.

E. Service Connections

Compensation for service connection crossings (not shown on the Plans) shall be included in the contract price for which such work is appurtenant thereto and no additional allowance will be made.

F. Utility Conflicts with Proposed Improvements

If a utility, whether shown on the plans or not, should intersect the proposed improvement at grade anywhere along the line of the improvement, the Contractor shall immediately notify the District. The Contractor may be advised to continue with the construction, leaving sufficient "gap" in the Contractor's construction as determined by the District as may be necessary to accommodate a resolution of the conflict, to be completed after the conflict has been resolved. In addition, the Contractor shall notify the District in writing, stating the nature of the conflict, location by schedule, sheet number, name of the street or location of easement, and the station at which the conflict occurred. The District shall, within a reasonable time, make the necessary arrangements to resolve the conflict. Completion of the gap after the resolution of the conflict shall not be just cause for additional compensation. Such completion of the "gap" shall be started within three working days after the Contractor has been notified of resolution of the conflict and completed in a workmanlike manner within reasonable time thereafter. When directed or approved by the District, changes in line or grade of any structure being built may be made in order to avoid utilities. Any additional costs because of such changes will be paid for as a bid item or as "Extra Work".

G. Unknown Utilities Discovered During Construction

(Not including service connections)

Parallel Utilities Not in Conflict. When said utility is more or less parallel with, and any portion of it does not lie within the trench prism specified hereinabove, the Contractor shall advise the District thereof, and in cooperation with the owner of the utility, provide and place the necessary support, if any, for proper protection to

ensure continuous and safe operation of the utility. All costs of such work shall be borne by the Contractor.

The alteration, relocation, or proper support and protection shall be done and paid for as follows:

(1) Protection Only. Upon disclosing a utility in the course of excavation that was not indicated on the drawings or marked in the field and is in conflict with the proposed permanent works, the Contractor shall immediately investigate if it is abandoned. The Contractor shall protect it in place if the utility is deemed live, determination of the abandonment cannot be assessed in a timely manner, or the owner wants the line protected. The Contractor will be required to protect the existing utility in place and construct the proposed facility under (or over) the unknown utility per the plans. Abandoned lines needing protection only for the initial crossing of an abandoned utility that conflicts with the proposed project in more than one location; and only if the Contractor did protect the abandoned utility in place. No compensation will be allowed if the line is deemed inactive and removable.

(2) Protection and Relocation/Alteration. When the said utility is found to occupy the space required to be occupied by a part of the permanent works to be constructed or to lie parallel to the permanent work and within the trench prism defined by the minimum allowable trench excavation consistent with safety and the rules, orders, and regulations of local, State and Federal agencies having jurisdiction; the District will arrange for the relocation or alteration of said utility or proposed permanent works, or the District will require the Contractor to do same as "Extra Work" or if covered as a separate bid item.

Where unit bid items are included in the proposal, compensation for items (1) and (2) above will be at a unit price per each in accordance with the proposal. The number of such conflicts is estimated, and the District hereby expressly reserves the right to add to the number shown or decrease from the number shown or to totally delete the item for unknown utility crossings at no change in the unit price per each. Compensation for any downtime shall be included in the Contractor's unit bid item for unknown utilities. No additional compensation for downtime shall be allowed.

Time extension for such crossings shall be determined by the District and shall be added to the total time for completion allowed and for which no liquidated damages will be assessed. If a bank of conduits (same utility or different utilities) is encountered, either stacked horizontally and/or vertically, they shall be considered a single crossing. Similarly, conduits of the same utility or different

utilities horizontally separated within 5 feet of each other shall also be regarded as a single crossing.

H. Responsibility of the Contractor

The Contractor shall be held responsible for all costs for the repair of any and all damage to the contract work or to any utility (whether previously known or disclosed during the work), as may be caused by the Contractor's operations. Utilities not shown on the drawings to be relocated or altered by others shall be maintained in place by the Contractor.

At the completion of the contract work, the Contractor will leave all utilities and appurtenances in a condition satisfactory to the utility owners and the District.

15. PROTECTION OF FACILITIES OTHER THAN UTILITIES

It shall be the Contractor's responsibility to protect in place or remove and replace to original condition all existing facilities. The existing natural and man-made features and elevations on the plans are shown by topography. The accuracy of the topography shown is not guaranteed. It shall be the Contractor's responsibility to familiarize themselves with the conditions of proposed work and to identify by field investigation those features, whether or not shown on the plans, which require removal and replacement or protection in place. These features include, but are not limited to, fences, cross gutters, roads, sidewalks, driveways, curbs and gutters, power poles, signs, drainage structures, trees, landscaping, etc.

The Contractor shall repair all existing structures which may be damaged as a result of the work under the contract. Reconstruction shall be of the same type and material as the existing facility and shall be of equal quality or better than the original work.

Full compensation for complying with these requirements shall be considered as included in the price bid for the various items of work, and no additional compensation shall be made, therefore.

16. GROUND WATER

Contractor shall investigate the possibility of ground water prior to submitting bid and shall assume all cost and liabilities incurred, should a ground water problem arise.

17. CONSTRUCTION WATER

The Contractor shall make all arrangements to furnish all construction water, all at no cost to the District, unless otherwise stated in the Special Requirements herein.

Bidder should contact District prior to submitting bid for further information regarding District's policy on construction water.

The Contractor shall coordinate with the District to obtain and check-out the

District's hydrant meter including paying all deposits and fees. Refer to District Standard Drawing No. D-3 for Construction Meter Installation Detail.

18. WATER SUPPLY FOR COMPACTION AND DUST CONTROL

Contractor shall furnish and apply all water necessary for compaction and dust abatement purposes.

Contractor shall apply water to construction areas where dust conditions so warrant, as directed by the District.

The water supply and payment of fees shall be the responsibility of the Contractor, unless otherwise stated in the Special Requirements herein.

Full compensation for complying with these requirements shall be considered as included in the price bid for the various items of work, and no additional compensation shall be made, therefore.

19. TRAFFIC CONTROL

It shall be the Contractor's responsibility to maintain traffic warning signs, barricades, flagmen, and other traffic control devices as required to maintain two-way traffic, and as required by agencies having jurisdiction over the roadways in the work area. It shall be the responsibility of the Contractor to investigate with various agencies having jurisdiction over the right-of-way in work area to determine the extent of traffic control that may be required by each agency.

Also, it shall be the Contractor's responsibility to provide all traffic control devices to ensure a safe working environment for any associated project work such as survey, geotechnical and materials testing, etc., that is required.

Full compensation for compliance with those provisions shall be considered as included in the bid unit price for various items, and no other compensation shall be made, therefore.

20. ACCESS TO ADJACENT PROPERTIES

Contractor shall at all times provide access to the properties in the area of work, unless otherwise approved by District. The Contractor shall be responsible for providing adequate advance notice to properties that will not have access. It shall be the responsibility of the Contractor to provide such temporary structures in the area of work to provide reasonable access to the properties. At least one (1) lane on cross streets shall be available at all times for use of vehicles and emergency equipment.

Full compensation for compliance with these provisions shall be considered as included in the bid unit price for various items, and no other compensation shall be made, therefore.

21. CONSTRUCTION STAKING

A. Surveying and Staking

The Contractor will provide all construction staking in accordance with Contract Documents. One (1) set of stakes must be provided at 25-foot stations plus all horizontal and vertical angle points and appurtenance outlets for the gravity sewer pipelines. One (1) set of stakes must be provided at 50-foot stations plus all horizontal and vertical angle points and appurtenance outlets for the waterline and sewer force mains. Any costs for re-staking due to stakes lost during construction shall be the responsibility of the Contractor. If the Contractor requires additional staking, the Contractor will be responsible for the additional survey/staking costs. All plans, descriptions and calculations related to surveying including grade sheets, shall be signed, and stamped by the Contractor's Land Surveyor, or Professional Engineer authorized by the State of California to practice land surveying.

The Contractor shall provide the District all cut or grade sheets and survey data within no more than two working days after staking and no less than three days prior to construction for any particular phase of the construction work.

B. Lines and Grades

All work under this Contract shall be built in accordance with the lines and grades as shown on the drawings. If changes are required from the original design plans for whatever reason, the Contractor is responsible for revising the staking accordingly. Distance and measurements, except elevations and structural dimensions, are given and made on horizontal planes. For pipeline work, the surveyor will provide offset line and grade stakes at ground level and furnish cut sheets, therefore; the Contractor shall be responsible to transfer of such line and grade into the trench for construction of the work and for accuracy of the transfer cost of transfer shall be included in the unit bid for the work and no extra compensation will be made to the Contractor. The Contractor shall preserve benchmarks, survey stakes, and points sets for lines, grades, or measurement of the work in their proper places until authorized by the Project Engineer to remove them. The Contractor shall provide the Engineer with Cut Sheets for approval at minimum of three (3) working days prior to commencing construction. All issues with the staking shall be specifically marked on the cut or grade sheets when these are provided to the District and submitted as an RFI for specific resolution.

C. Potholing

The Contractor shall provide coordinates and elevations, (x, y and z coordinates) of all potholing. The coordinates shall be referenced to the plan provided by the Engineer. Survey of all potholing locations shall be considered part of the construction staking and included in the bid item. No additional compensation will be allowed.

D. Data Provided by the Owner

The Owner or Engineer shall provide the original design data in AutoCAD/Civil 3D format with control data (Northing, Easting) for monumentation shown on recorded maps only. Control data provided by the Owner shall be verified for conformance to the recorded map by the Contractor prior to use for any purpose. The Contractor is responsible for determining if any conflict exists.

The Owner makes no representation as to the compatibility of this Data with your hardware or your software beyond the specified release of referenced specifications.

The Data provided is part of the Owner's proprietary instruments of service and shall not be used by the Contractor or anyone else receiving this datum through or from the Contractor for any purpose other than as a convenience for construction staking services for this project.

To the extent that the Data is electronic files, those files are not the approved construction documents. Further, differences may exist between this Data and corresponding hard-copy, engineering documents or recorded survey documents. In the event that a conflict arises between the signed, recorded or sealed hard-copy survey documents or construction documents ("Hard-Copy Documents") prepared by the Owner and the electronic files, the Hard-Copy Documents shall govern. The Contractor is responsible for determining if any conflict exists. By the use of this Data, the Contractor is not relieved of their duty to fully comply with the contract documents, including, and without limitation, the need to check, confirm and coordinate all dimensions and details, take field measurements, verify field conditions, and coordinate your work with that of other contractors for the project.

To the extent that the Data is intended to be used for staking and/or grading of property, the Contractor should be aware that the Data was prepared

anticipating that a duly licensed and qualified Land Surveyor would perform on-site interpretation, verification, cross-checking, and field-correction of the Data at the time of actual staking of the property prior to grading.

If changes are required to the original design, the Owner will provide to the Contractor redlined changes on the original plans in PDF format only of the approved changes.

22. PROTECTION OF SURVEY MONUMENTS

It shall be the Contractor's responsibility to protect all of the existing survey monuments. Removal of such monuments or displacement thereof shall require their resetting to the existing type of monument. The cost of resetting such monuments shall be the financial responsibility of the Contractor. Contractor is advised that resetting of monuments must be done by a registered civil engineer or licensed land surveyor. Should the Contractor anticipate removal of any survey monuments, the Contractor shall include the cost of resetting of the same in the various items of work.

23. RECORD DRAWINGS

The Contractor SHALL PROVIDE and keep up to date, a complete "as-built" record set of blue-line prints, which shall be corrected daily and show every change from the original Drawings and Specifications and the exact "as-built" locations, measurements, sizes, and kinds of equipment. Prints for this purpose shall be obtained from the Engineer at cost. This set of Drawings shall be kept on the work site and shall be used only as a record set. The Engineer shall require that these drawings be presented monthly for review prior to any progress payment being made. At the completion of construction, the Contractor shall deliver said record set of prints to the District and will be required to certify the accuracy of the Record Drawings.

24. RE-PLANTING

Where cultivated and maintained ground covers in lawns, parkways or easements have been removed for installation of pipelines or other facilities, the Contractor shall restore or replace such ground cover in kind, or per plans, by re-planting or resodding, after the backfill in the trench or excavation has been consolidated and the construction area graded and cleared of rocks and other objectionable material as required by these specifications. After re-planting, the areas shall be covered with a suitable mulch.

Where natural vegetation has been removed for installation of pipelines, after the installation, compaction, grading, and clearing has been completed, the Contractor shall re-plant such areas in accordance with Section 25 - "Erosion Control" of these Basic General Specifications.

All costs to the Contractor for restoration, replacement, re-planting or resodding shall be absorbed in the Contractor's bid for the applicable unit prices per linear foot of pipe and no other compensation will be made, therefore.

25. EROSION CONTROL

A. General

The Contractor shall provide erosion control measures as defined herewith on all areas where the natural vegetation has been disturbed by the construction of the facilities. If a ground cover other than natural vegetation has been disturbed, this section does not apply, and the Contractor shall replace said ground cover in kind.

B. Preparation

After the backfill has been compacted and the pipeline tested, the Contractor shall remove and dispose of rocks and debris from the area to be reseeded. No seeding shall be performed during windy weather or when the ground is too wet or in an untillable condition. The fertilizer and seed shall be spread before the straw cover material is applied. Commercial fertilizer shall not be applied until after the seed has been sown.

C. Material

Materials shall consist of the following: Seed - The seed shall consist of the following mixture: Crested wheatgrass, 47 percent; Intermediate Wheatgrass, 27 percent; Wimmera Ryegrass, 13 percent; Blando Ryegrass, 13 percent. The seed shall be spread at the rate of 100 pounds per acre and shall be applied by the use of a "Cyclone Seed Sower" or equal. Fertilizer - The fertilizer shall be Ammonium Phosphate (16-20-0) spread at the rate of 300 pounds per acre and shall be applied by the use of a "Cyclone Seed Sower" or equal. Mulch - After the application of the seed and fertilizer, new straw (stable bedding straw shall not be used) shall be uniformly spread at the approximate rate of four tons per acre. The straw shall then be "Mulched" into the ground by use of a "wire" roller or other approved equipment.

D. Protection for Steep Slopes

In cases where the grade over the pipeline exceeds 25 percent slope the Contractor shall provide additional erosion control measures to stabilize the backfill material. The Contractor shall submit to the Engineer for the Engineer's approval, special engineering details of the method to be used.

Full compensation for complying with the requirements of this section shall be included in the unit price per linear foot of pipe installed and no other compensation shall be made, therefore. Bidder's attention is specifically called to

the fact that the responsibility of determining the amount and the type of erosion protection shall rest with the prospective bidder.

26. CONTRACTOR'S SUBMITTALS

Contractor shall check and verify all field measurements and shall submit with such promptness as to provide adequate time for review and cause no delay in the Contractor's own work or in that of any other contractor, subcontractor, or worker, with an electronic (pdf) copy of all shop or setting drawings, calculations, schedules, and materials list, and all other provisions required by the Contract.

Contractor shall make any corrections required by the Owner's Representative, and email to the Owner's Representative corrected copies in pdf format and furnish such other copies as may be needed for completion of the work.

Whenever called for in these Specifications or on the Drawings, or where required by the District, the Contractor shall furnish to the Construction Manager, and District's Representative, for review an electronic submittal of good quality, color, in pdf format.

A Letter of Transmittal shall be included with each submittal and shall include a completed Submittal Review Form (see Appendix) and shall list of the numbers of the drawings submitted. All drawings must be marked with the name of the project and the name of the Contractor and be numbered consecutively. All drawings must be complete in every respect.

Responses and comments to the submittals will be e-mailed in PDF format. No hard copies will be sent. The Construction Manager will respond directly to the Contractor and will copy the District's Representative.

Revisions indicated on submittals shall be considered as changes necessary to meet the requirements of the Contract Drawings and Specifications and shall not be taken as the basis of claims for extra work. Submittals that are not approved will be returned to the Contractor for corrections and re-submittal. Incomplete submittals will not be accepted.

It is considered reasonable that the Contractor shall make a complete and acceptable submittal to the District by the second submission of a submittal item. The District reserves the right to withhold monies due the Contractor to cover additional costs of review beyond the second submission.

Approval of shop drawings will be general and shall not relieve the Contractor from the responsibility for proper fitting and construction of the work, nor from furnishing the material and work required which may not be indicated in the shop drawings when approved; neither does it relieve the Contractor from responsibility for errors in shop drawings.

Example submittals include, but are not limited to the following:

- A. All materials provided by the Contractor
- B. All appurtenances provided by the Contractor
- C. Miscellaneous
 - (1) Pothole information for utilities
 - (2) Copies of permits required to be obtained by the Contractor
 - (3) SWPPP
 - (4) Pre-Construction Video
 - (5) Schedule of construction (with key milestones provided)
 - (6) Waterline filling, disinfection, and flushing procedures
 - (7) Sewer bypass plan
 - (8) Safety program

27. RESPONSIBILITY FOR MATERIAL FURNISHED BY THE DISTRICT

The Contractor's responsibility for material furnished by the District shall begin upon the Contractor's acceptance at the point of delivery to the Contractor. All material shall be examined by the Contractor and District. The Contractor shall immediately (upon delivery) notify the District of any material the Contractor perceives to be defective in manufacture or otherwise damaged. Should the District concur that the material should not be utilized the material will be replaced by the District. Material furnished by the District in good condition and accepted by the Contractor, which is later discovered to have been damaged, shall be replaced by the Contractor at the Contractor's expense. The Contractor shall be responsible for the safe storage of all materials until they have been incorporated in the completed project.

28. ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR

If the Contractor, either before commencing work or in the course of the work, finds any discrepancy between these Specifications and drawings, or between either of them and the physical conditions at the site of the work, or finds any error or omission in any of the drawings or in any survey, the Contractor shall promptly notify the Engineer in writing of such discrepancy, error, or omission.

29. HANDLING AND STORAGE OF MATERIALS

All materials shall be handled in such a manner as to prevent damage and, in the case of water system work, maintain sanitary conditions. All materials for use in the work shall be stored by the Contractor in such a manner as to prevent damage from exposure to the elements, admixture of foreign materials or from any other cause. The Contractor shall be entirely responsible for damage or loss by weather or other causes as to work under the Contract.

30. GEOTECHNICAL SERVICES

All construction operations should be observed by a representative of the geotechnical engineer. The presence of the geotechnical engineer's field representative will be for the purpose of providing observation and field testing to ascertain that the in-place density of compacted fill meets the project specifications, and will not include any supervising or directing of the actual work of the contractor, the Contractor's employees, or agents. Neither the presence of the geotechnical engineer's field representative nor the observations and testing by the geotechnical engineer shall excuse the Contractor in any way for defects discovered in the Contractor's work. It is understood that the geotechnical engineer will not be responsible for job or site safety on this project, which will be the sole responsibility of the contractor. **CONTRACTOR TO PROVIDE SAFE ACCESS FOR GEOTECHNICAL IN CONFORMANCE WITH OSHA STANDARDS AT NO ADDITIONAL COST TO THE DISTRICT.**

Dependent upon the circumstances of each particular project, as determined by the District, geotechnical services may include full time monitoring and testing or part time, periodic monitoring and testing.

31. EARTHWORK

A. General

Earthwork shall conform to the requirements of the agency having jurisdiction but shall not be less than herein specified. Earthwork shall be performed in accordance with the requirements of Section 19 of the Specifications entitled: "State of California, Department of Transportation, Standard Specifications", Latest Edition, insofar as the same may apply and except as herein modified.

All excavations and embankments required to complete the work as specified herein shall be unclassified and made to the lines and grades shown upon the plans, or as staked in the field. (ALL EXCAVATION SHALL BE UNCLASSIFIED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY PRIOR TO SUBMITTING THEIR PROPOSAL TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS THAT THEY MAY ENCOUNTER DURING CONSTRUCTION.) Excavated materials not required or approved by the Engineer for fill, embankments or backfills shall become the property of the Contractor and shall be disposed of at the Contractor's own expense.

All excavations shall be protected and supported as required for safety and in the manner set forth in the rules, orders and regulations prescribed by the Division of Industrial Safety of the State of California.

All trenches and excavations shall be backfilled overnight and on weekends and holidays. Barriers shall be placed at each end of all excavations, and at such places as may be necessary along excavations from sunset each day to sunrise of the next day until such excavation is entirely refilled. (BACKFILL SHALL BE COMPLETE AND STREETS OPEN TO TRAFFIC BY 5:00 P.M. UNLESS OTHERWISE APPROVED OR REQUIRED BY THE DISTRICT AND/OR JURISDICTIONAL AGENCY.)

No excavated material shall be deposited on private property unless written permission of the Property Owner thereof is secured by the Contractor, or specifically provided for on these plans and in these specifications. Copies of said written permission, duly signed by the Property Owners of the private property involved, shall be furnished to the District by the Contractor before any excavated material is placed outside the limits of the established right-of-way. Free access must be provided to all driveways, access roads, water valves, hydrants, other utility appurtenances, etc.

Any water that may be encountered or may accumulate in the excavation shall be pumped out or otherwise removed as necessary to keep the bottom of the excavation free and clear of water during the progress of the work.

All backfill and pipe bedding material shall conform to the requirements herein this section, the provisions of the Agency having jurisdiction, pipe manufacturer's requirements, and the requirements of the contract and drawings. The Contractor shall remove and legally dispose of any nonconforming material including but not limited to pipe material, trash, debris, nonconforming fill, pavement, etc. all at no additional cost to the contract.

B. Clearing and Grubbing

Areas where construction is to be performed shall be cleared of all rubbish and other objectionable material of any kind, which, if left in place, would interfere with the proper performance or completion of the contemplated work, would impair its subsequent use or form obstructions therein. Trees and other landscaping, unless otherwise specifically identified on the plans for removal, shall not be destroyed, and such measures as are necessary shall be taken by the Contractor for the protection thereof. Organic material from clearing and grubbing operations will not be incorporated in excavation backfill.

It shall be the Contractor's responsibility to remove and dispose of all excess material resulting from clearing and grubbing operations at Contractor's own expense. The Contractor shall make their own arrangements for disposal sites at

the Contractor's own expense, at which said material may be wasted. Full compensation for clearing and grubbing shall be included in the contract unit price for which such work is appurtenant thereto, and no additional allowance will be made, therefore.

C. Grading Along Pipeline

The Contractor shall perform all grading to provide a working pad along the pipeline. The pad grade shall follow the existing ground grade as nearly as possible. If unnecessary excessive overcutting occurs during this operation, the Contractor may be required to replace all such overcut material and recompact to 90%, or to do other remedial work as directed by the District, all at no cost to the District.

D. Trench Excavation

(1) General

Excavation for water (potable, non-potable, and recycled)/sewer pipe, fittings, and appurtenances shall be in open trench to the depth and in the direction necessary for the proper installation of the same as shown on the plans or as otherwise directed by the District. Trench banks shall be kept as near vertical as is safe, and where necessary shall be properly braced and sheeted, in accordance with the provisions of the Section herein entitled "Trench and Excavation Shoring". The trench bottom shall be graded to provide a smooth, firm, and stable foundation at every point throughout the length of the pipe. For sewer pipe, at each joint the bottom of the trench shall be recessed in such a manner as to relieve the bell or coupling of all load.

Where the excavation has been made deeper than necessary, the Contractor shall furnish crushed rock, sand, or other material approved by the District for bedding to provide uniform support under the lower third of the depth of the pipe barrel. The cost of the material and labor to place and compact to achieve a firm and stable foundation herein specified shall be included in the unit price bid for the size of pipe laid thereon.

(2) Limit of Excavation

Except with specific approval of the Engineer, no more than 500 feet of open trench shall be excavated in advance of laying of pipe.

(3) Tunneling

Tunneling will be permitted only where native earth is of such firmness that it will remain in its original position, without sloughing off, throughout the work of excavation and backfilling; if sloughing occurs, the roof of the tunnel shall be broken down and the trench excavated as an open trench as herein specified.

(4) Trench Widths

(a) Water

As stated elsewhere in these Specifications, all trenches shall have vertical sides, unless District may designate otherwise. Trench width shall be such that ample working room shall be provided on either side of pipe, provided that width of ditch measured at top of pipe shall not exceed 3 pipe diameters or 3 feet, whichever is greater. In the event of cave-ins of trench sides where aforesaid width is exceeded, District may, at the District's discretion, require Contractor to use concrete or other means of special backfill for a vertical distance of not less than one-fourth (1/4) the outer pipe diameter. The cost of the labor and material to provide the concrete cradle, if required, shall be the responsibility of the Contractor, and no additional compensation will be made, therefore.

(b) Sewer (Gravity lines)

The maximum allowable trench width, at the top of the pipe, is the outside diameter of the barrel plus 12 inches on either side of the exterior of the pipe barrel. Where the trench width at the top of the pipe is wider than 12 inches on either side of the exterior of the pipe barrel, the pipe shall be backfilled from the bottom of the trench to a level one-fourth (1/4) of the diameter above the center of the pipe with 3/4-inch crushed rock or as directed by the District. The cost of the labor and material to provide crushed rock encasement, if required, shall be the responsibility of the Contractor, and no additional compensation will be made, therefore.

(5) Blasting

Use of explosives on the work shall be subject to approval of the District. All operations involving handling, storage and use of explosives

shall be conducted with every precaution prescribed by Construction Safety Orders of Division of Industrial Safety, State of California, and by local laws and regulations. Only competent, reliable persons working under experienced supervision shall be permitted to use explosives. Contractor will be held responsible for and shall make good any damage caused by blasting or otherwise resulting from disposition or use of explosives on the work. Contractor shall obtain, at no additional cost to the District, blasting permit(s) that may be required.

(6) Grading for Pipeline Appurtenances

The Contractor shall perform all rough and fine grading to provide a graded area, sloped to drain, extending 3' minimum radially outside the limits of each air valve or blow-off installation as directed by the District in the field to assure accessibility.

The Contractor shall perform all rough and fine grading to provide a graded area, sloped to drain, extending 4' minimum radially outside the limits of each complete fire hydrant installation to assure accessibility. The location and elevation of graded pad for each fire hydrant installation will be directed by the District in the field.

E. Trench and Excavation Shoring

Pursuant to Section 6705 of the Labor Code of the State of California, in advance of any excavation pursuant to this contract, Contractor shall submit to the District for the District's acceptance a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer. Nothing in this provision shall be deemed to allow the use of a shoring, sloping, or protective system less effective than that required by the "Construction Safety Orders". Reference shall also be made to the rules, orders, and regulations of the Division of Industrial Safety of the State of California, latest edition, and the U.S. Department of Labor, Safety and Health Standards for Construction, latest edition.

FULL COMPENSATION FOR COMPLYING WITH THESE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED WITHIN THE CONTRACT UNIT OR LUMP SUM BID PRICES PAID FOR THE VARIOUS ITEMS ON THE BIDDING SCHEDULE, AND NO ADDITIONAL ALLOWANCE WILL BE MADE THEREFORE.

F. Pipe Bedding

(1) General

(a) Potable, Non-Potable, and Recycled Water

Clean sand having a minimum sand equivalent of not less than 30 without crushed rock or concrete cradle shall be used unless otherwise shown on Drawings or ordered by District. The bottom of trench shall be excavated uniformly to firm grade as indicated on the Standard Drawings.

Trench bottom shall be given a final trim such that each pipe section when first laid will be continuously in contact with ground along extreme bottom of pipe. At each joint in the water pipe, the bottom of the trench shall be recessed in such a manner as to relieve the bell of the pipe of all loads. Rounding out trench to form a cradle for pipe will not be required. Jetting should not be used to compact the bedding material and the pipe zone.

Where bottom of excavation is in rock, which cannot be excavated to provide uniform bearing for the pipe, Contractor shall over excavate a minimum of 6 inches below design grade, and refill in 3" thick compacted layers with selected excavated materials or provide imported backfill material per applicable standard detail drawing.

(b) Sewer

All pipe bedding shall be of the type indicated on the plans and shall be in accordance with the pipe bedding Standard Drawings included in these Specifications.

Bedding shall be sand, gravel or crushed aggregate having a minimum sand equivalent of not less than 30 or having a coefficient of permeability greater than 0.001 centimeters per second. (COMPENSATION FOR BEDDING MATERIAL AS INDICATED ON THE PLANS SHALL BE INCLUDED IN THE CONTRACTOR'S BID FOR THE APPLICABLE UNIT PRICES PER LINEAR FOOT OF PIPE AND NO ADDITIONAL COMPENSATION WILL BE MADE THEREFORE.) Minimum compaction for all pipe bedding shall be 90% relative compaction.

Where native material is acceptable for bedding as approved by the Engineer (sand equivalent of 30 or greater) the trench bottom shall be graded to provide smooth, firm, and stable foundation at every point throughout the length of the pipe. At each joint in the pipe, the bottom of the trench shall be recessed in such a manner so that the load will be carried uniformly throughout the length of pipe, including the bell or collar.

Where bottom of excavation is in rock, which cannot be excavated to provide uniform bearing for the pipe, Contractor shall over excavate a minimum of 6 inches below design grade, and refill in 3" thick compacted layers with selected excavated materials or provide imported backfill material per applicable standard detail drawing.

(2) Unstable Material

Where material at the bottom of the trench is found to be unstable, soft, or spongy, such material shall be removed to a depth as determined by the Engineer and replaced with Special Crushed Rock Bedding as specified in Section 1-G herein.

(3) Rock

Where rock is encountered, it shall be removed below grade, and the trench backfilled with suitable material to provide a compacted earth cushion with a thickness under the pipe of not less than 1/2-inch per inch of nominal diameter of the pipe to be installed, with a minimum allowable thickness of 6-inches. Where a special bedding class is indicated on the plans, the depth indicated on the Standard Drawing shall be increased to that stated herein, all at no additional cost to the Owner.

CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR ABOVE MENTIONED WORK.

G. Crushed Rock Bedding

When specified on the plans or when groundwater is encountered in the excavation, or when soft, spongy, and unstable material is encountered in the bottom of the trench, and when approved by the District, the material in the bottom of the trench shall be removed to a depth directed by the District and replaced with well graded 3/4-inch maximum crushed rock bedding as specified below. The crushed rock bedding shall be installed and compacted as shown on the Standard

Drawing attached to these Specifications, or with no standard drawing place crushed rock bedding 8" min. thickness (90% min. compaction) under bottom of pipe. The 3/4-inch maximum crushed rock material shall be approved by the District before use.

Crushed rock shall be the product of crushing rock or gravel. Fifty percent of the particles retained on a 3/8-inch sieve shall have their entire surface area composed of faces resulting from fracture due to mechanical crushing. Not over 5% shall be particles that show no faces resulting from crushing. Less than 10% of the particles that pass the 3/8-inch sieve and are retained on the No. 4 sieve shall be waterworn particles. Gravel shall not be added to crushed rock. Crushed rock shall have the following gradation:

Sieve Sizes	3/4-inch Max Crushed Rock % Passing
1"	100
3/4"	90-100
1/2"	30-60
3/8"	0-20
No. 4	0-5
No. 8	--

Crushed Rock Bedding, where ordered by the District, shall be paid for at the unit price per ton complete in place, if Bidding Sheet so indicates, otherwise total cost of crushed rock bedding shall be borne by the Contractor.

Payment for trench width for Crushed Rock Bedding shall be limited to a maximum width of three (3) outside pipe diameters or the actual width, whichever is less. Any trench excavation beyond the maximum width limit shall be filled and compacted with crushed rock per the Standard Drawing, and the COST OF THE ADDITIONAL BEDDING SHALL BE BORNE BY THE CONTRACTOR.

THE DISTRICT RESERVES THE RIGHT TO INCREASE OR DECREASE THIS ITEM WITHOUT CHANGE IN UNIT PRICE OF THIS ITEM OR ANY OTHER ITEM.

H. Trench Backfill and Compaction Requirements

(1) General Requirements

All excavations shall be backfilled with compacted material to level of original ground surface, unless otherwise shown on Drawings or ordered by District. Materials used for backfill shall be selected excavated material

approved by the Engineer with sand equivalent (S.E.) of 30 or greater, or Engineer approved clean sand with minimum S.E. 30, crushed miscellaneous base (CMB), or crushed aggregate base (CAB), and shall be placed as shown on Drawings or as specified in these Specifications or any specifications made a part hereof by reference, or as directed by District. Backfill materials shall not be dropped directly on structures or pipeline, and all materials placed within 12" of pipe or structure shall be free from rocks or boulders larger than 2" maximum dimension and from unbroken masses of earthy materials which might lodge and thereby cause unfilled pockets in excavations.

Warning Tape shall be installed 8 to 12 inches centered and above the top of pipe zone and shall run continuously for the entire length of piping. Warning Tape shall be a minimum of 3 inches wide and be colored and labeled with minimum 1-inch high letter as follows:

- Potable water: blue tape with black printing "CAUTION BURIED WATER LINE BELOW"
- Sewer: green tape with black printing "CAUTION BURIED SEWER LINE BELOW"
- Recycled water: purple tape with black printing "CAUTION BURIED RECYCLED LINE BELOW"
- Non-potable water: yellow tape with black printing "CAUTION BURIED NON-POTABLE LINE BELOW"

(2) Backfill Procedure

Material used in backfilling first layer shall be cohesionless, sandy loam, sandy, or sandy gravel material obtained from required excavation or from approved borrow areas. Material shall not contain any rocks or other hard material detrimental to good bedding of pipe or that might be damaging to protective pipe coating. Pipe zone shall be filled to 12" over top of pipe. Balance of trench shall be filled with material in layers not exceeding 3' in depth. Soils shall be compacted to 90% of the laboratory maximum dry density or the project specifications.

At the end of the work period, backfill shall be performed with proper backfill and compaction pursuant to provisions and requirements herein to allow temporary pavement and access for traffic. At the start of the next

work period, Contractor shall excavate back at least five (5) linear feet of trench from previous work period. As the pipeline construction commences, perform backfill and compaction pursuant to the provisions and requirements herein.

For locations where temporary steel plates are allowed by the jurisdictional agency, Contractor may employ the following method for end of work period backfill placement. The backfill for the remaining five to ten (5 to 10) linear feet of trench can be non-compacted. Set temporary steel plates for the non-compacted area recessed into the surrounding pavement pursuant to the transportation agency requirements. At the start of the next work period, as backfill continues, the five to ten (5 to 10) linear feet of backfill from previous shift is to be watered and compacted for the bottom lift. All non-compacted backfill is used for the bottom lift.

Contractor shall understand that procedure for backfill outlined hereinabove is general and that conditions may be encountered where, due to a change in type of soil, methods specified hereinabove. Contractor will be required to compact as District may direct or as specified elsewhere in these Specifications or any specifications made a part hereof by reference.

Along road or street right of way, ENTIRE TRENCH SHALL BE BACK-FILLED AS PRESCRIBED BY AGENCY HAVING JURISDICTION. At a minimum, all trench backfill shall be compacted to 90% of maximum density as determined by ASTM D 1557 (most current), in all streets and easements, public and private, from the pipe zone to the bottom of the base and 95% to within 12 inches of the bottom of the base material. The base material shall be the thickness required by the jurisdictional agency or per plans and compacted to 95% relative compaction.

For trenches deeper than 10 feet, 95% compaction is required above the pipe zone up to 10 feet from the street subgrade. 90% compaction is required within 10 feet of the street subgrade.

(3) Pipe Protection

Before backfilling, conductor tubes, if used, shall be strutted sufficiently to prevent distortion while compacting backfill. All struts shall be removed after compacting backfill. After insertion of pipe, conductor tubes shall be grouted with either dry sand or cement grout, at District's option.

Before backfilling, mortar-lined and coated steel pipe, 30" diameter and larger, shall be either filled with water or braced with studs sufficiently to prevent distortion while compacting backfill. All bracing shall be removed after compacting backfill.

(4) Backfill Material - Pipe Zone (Sewer)

After the sewer pipe has been laid and inspected as herein specified, the trench shall be backfilled from the level of the bedding shown on the Standard Drawings, to a height of one (1) foot above the top of the pipe with specially selected and carefully compacted material which shall be clean, fine earth or sand, free from large stones or lumps. Backfilling shall be carried on simultaneously on each side of the pipe to assure proper protection of the pipe. Minimum compaction for all pipe zone material shall be 90% relative compaction.

(5) Backfill Material - Above Pipe Zone (Sewer)

From the top of the pipe zone backfill to ground surface, the material for backfill may contain stones ranging in size up to 6-inches in diameter, in quantity not exceeding 40 percent of the volume when said coarse materials are well distributed throughout the finer materials so as to eliminate voids and the specified compaction may be attained. Rocks greater than 2-1/2 inches in any dimension will not be permitted in backfill placed within one foot of pavement subgrade.

(6) Compaction Tests

The compaction test, as required by the District, that meets the required compaction, shall be paid for directly to the testing laboratory by the District. The minimum District requirements are as follows: Compaction tests shall be made at intervals not greater than 100' and one (1) test every 1' maximum vertical increment of compacted trench backfill. Additionally, at least 50% of all service laterals shall be tested. The tests shall be made in accordance with either the Sand Cone Method (ASTM D1556) or the nuclear gauge testing methodology (ASTM D6938) at rates (i.e. 1 sand cone method to "10" nuclear gauge tests) specified by the District and at varying depths.

It should be noted that dependent upon the circumstance of each project (e.g. quantity of earthwork involved), compaction testing could be administered on a full-time basis. The test interval may range from 40' to

100' and shall include 100% of all service laterals. Therefore, the Contractor shall be prepared to perform backfill and compaction in lifts and allow for the testing to occur during backfill operations, providing for all safety, protection, shielding, entry support for geotechnical testing personnel. The Contractor shall incorporate this testing procedure in their efforts and schedules at no additional cost to the contract.

Compaction testing is required at all manholes. Manhole compaction testing will be required at 1' maximum vertical increment of excavation backfill.

It shall be the Contractor's responsibility to pay for all compaction tests that indicate insufficient compaction in the area where the Contractor has previously indicated that compaction was completed.

The Contractor shall provide, at the Contractor's own expense, all labor and equipment necessary access all compaction test holes. Choice of location of all tests will be made by the District. The aforementioned labor and equipment shall be readily available to perform the necessary work when required. Should the Contractor not be ready to perform such work in support of conducting the compaction test, and standby charges are incurred by the District for such a delay, the Contractor shall be responsible for payment of said standby charges.

It shall be the Contractor's responsibility to advise the District two working days prior to requiring compaction tests.

(7) Compaction Requirements Under Agency Permit

Where the permit of a governing agency sets forth requirements for compaction more stringent than those stated herein, the Contractor shall adhere to the Agency requirements in addition to JCSD requirements.

(8) Excess Excavated Material

The Contractor shall make the necessary arrangements for and shall remove and dispose of all excess or unsuitable material off site or at a location approved by the District. All costs for the disposal of excess or waste material shall be borne by the Contractor.

It is the intent of these specifications that all surplus material not required or approved by the Engineer for backfill shall be disposed of by the Contractor outside the limits of the public rights-of-way.

Excavated material shall not be deposited on private property unless written permission from the Property Owner thereof is secured by the Contractor. Copies of said written permission, duly signed by the Property Owner of the private property, shall be furnished to the District by the Contractor before such material is placed on private property.

(9) Imported Backfill Material

Whenever the excavated material is, in the opinion of the District, unsuitable for backfill, the Contractor shall arrange and furnish imported backfill material. Such backfill material shall comply with the requirements of pipe bedding in Section 31.F.(1) herein.

Full compensation for disposing of unsuitable material, as well as for providing suitable material as herein specified, shall be paid for at unit price per ton of such material delivered and placed in accordance with backfill requirements, if Bidding Sheet so indicates, otherwise total cost of Imported Backfill Material shall be borne by the Contractor.

Contractor is hereby notified that the actual quantity of imported backfill material specified herein cannot be determined at this time. The District is anticipating a condition that may not exist; therefore, the quantities are fictitious for the purpose of comparing bids and the District reserves the right to reduce, to totally delete, or increase, the quantity of imported backfill material required without any consideration for adjustment in unit price of this item or any other item if the material is not needed or the final quantities are substantially different from those shown on the bidding schedule.

I. Structure Excavation and Backfill

Structure excavation shall include the removal of all material of whatever nature necessary for the construction of foundations and other structures in accordance with the plans.

In operating compacting equipment near structures, care shall be used to prevent the displacement of, or injury to, the structure. Backfill shall be carried up evenly on all sides in accordance with the soils engineer's recommendations.

No backfilling shall be done until concrete is thoroughly set and is safe to withstand the load.

All excavation shall be unclassified, and it shall be the Contractor's responsibility prior to submitting their proposal to familiarize themselves with the conditions that the Contractor may encounter during construction.

Full compensation for complying with the above requirements for structure excavation and backfill shall be considered as included in the lump sum bid for a structure, and no other compensation shall be made, therefore.

J. Control of Water

The Contractor shall provide and maintain at all times during construction, ample means, and devices with which to promptly remove and dispose of all water entering the excavations or other parts of the work. No concrete footings or floors shall be laid in water, nor shall water be allowed to rise over them until the concrete or mortar has set at least eight hours. Water shall not be allowed to rise unequally against walls for a period of 28 days. Ground water shall not be allowed to rise around pipe installations until jointing compound in the joints has set.

The Contractor shall dispose of the water from the work in a suitable manner without damage to adjacent property. No water shall be drained into work built or under construction. Water shall be disposed of in such a manner as not to be a menace to the public health.

Dewatering for structures and pipelines shall commence when ground water is first encountered and shall be continuous until such times as water may be allowed to rise in accordance with the provisions of this Section.

K. Payment

Payment for earthwork and for conforming to all of the provisions of these specifications, unless otherwise specified herein and itemized in the bid schedule, shall be considered to be included in the contract unit or lump sum prices paid for the various items of work wherein earthwork is required, and no additional allowance will be made, therefore.

32. STEEL CASING

Steel casing shall be butt welded of sheets conforming to ASTM Specification A283/A283M or A53/A53M and shall be constructed at the location shown on the plans or as directed by the District. Construction shall be made by open trench. If the Contractor elects to install the key thing pipe by jacking, the provisions of these specifications for jack steel casing pipe shall apply. However, payment shall be at the bid unit price for steel casing.

The key theme pipe shall have a steel thickness not less than 1/4 inch. It shall be the Contractor's responsibility for selecting a size of casing, at or above the minimum specified, in order that the installation may be done with a significant degree of accuracy. Any and all increased costs resulting from the Contractor's use of steel casing pipe with greater diameter or thickness than the minimum specified shall be borne by the Contractor.

Carrier pipe conforming to these specifications for the designated pipe shall be installed within the casing pipe to the lined and grades shown on the plans. The carrier pipe shall be supported on Advanced Products & Systems Casing Spacers and Insulators, PSI Pipeline Seal and Insulator Inc., Cascade Water Works Manufacturing Co., or District approved equal. The ends of the steel casing shall be sealed with synthetic rubber and seals were stainless steel band straps with a weep hole installed at lower end for drainage. The annular space between the steel casing and carrier pipe shall be left empty unless grouting is specified by the Engineer or on the plans.

Measurement for payment for casing pipe, excluding carrier pipe within said casing, shall be made along the centerline of the casing pipe between the limits shown on the plans and/or staked in the field.

Payment for steel casing pipe will be at the contract unit price per linear foot for steel casing pipe in accordance with these plans and specifications. Payment shall be full compensation for furnishing all labor, excavation, backfill, steel casing pipe, shoring, equipment, services, transportation, sandy cement, concrete, grouting operations described herein, and other pertinent items of labor and material required to complete the work. The water carrier pipe will be paid for under the bid item for pipe.

33. JACKED STEEL CASING

The Work of this section includes the furnishing and installing jack steel casing under roadways, railroads, storm drain facilities and other major pipelines, facilities, or structures; including all labor, excavation, backfill, boring, jacking, steel casing pipe, shoring, equipment, services, transportation, sand cement, concrete, grouting, and other pertinent items of labor and material required to complete the work. Jacked steel casing and bore installations shall be installed only by a qualified company regularly engaged in this specialty work.

Jacked steel casing shall be butt welded of sheet conforming to ASTM Specification A283/A283M and shall be constructed in accordance with the provisions of Section 306-2 of the "Standard Specifications for Public Works Construction", Latest Edition, except as herein specified or Northwest Pipe Co. Perma Lok steel casing conforming to ASTM 36, ASTMA 515, grade 60 or ASTMA 572, grade 42.

The casing pipe shall have a steel thickness not less than 3/8 inch. The casing pipe shall be a minimum of 20 feet in length to a maximum of 40 feet in length. Any and all increased costs resulting from the Contractor's use of steel casing pipe with greater diameter or thickness than the minimum specified shall be borne solely by the Contractor.

Steel casing pipe of the minimum size and thickness specified shall be installed in place by jacking and boring methods without the use of water or air at the locations shown on the plans, and to grades required to install carrier pipe. If the bore casing is equal to or exceeds 18-inches in diameter and the length of the bore exceeds 80-feet in length, the contractor shall bore using a track machine, unless otherwise directed by the District.

Voids, if developed outside the casing and within limits for boring or jacking, from any cause such as removal of rocks encountered in boring, shall be filled with lean grout forced in under pressure by insertion of a grout pipe outside of the casing. The lean grout shall consist of one part of portland cement to not more than four parts of sand by volume, placed at low pressure. Grout pressure is to be controlled so as to avoid deformation of the casing. Sand for grout to be placed outside the casing shall be of such fineness that 100% will pass a No. 8 sieve and no less than 35% will pass a No. 50 sieve.

If the Contractor is not ready to place the pipe in the casing at the time of completion of boring and jacking operations, the ends shall be bulk headed, and the approach trenches in public streets shall be backfilled, temporary surfacing placed thereon, and the affected portion of the street reopened to traffic. For short (overnight) duration, the trenches may be securely covered with armored plates to allow for uninterrupted traffic.

The contractor shall be responsible for maintaining the specified line and grade, and preventing settlement of overlying structures, or other damage due to the boring and jacking operations. Except as otherwise indicated in this Section of the Specifications, the Contractor shall comply with the applicable provisions of latest adopted edition of the Standard Specifications for Public Works Construction (SSPWC) together with any latest Supplement Amendment. Additionally, jacked steel casing shall be in accordance with applicable ASTM Standards.

A. Submittal

(1) The following shall be submitted:

- (a) Submittals for jacking or boring operation shall be in accordance with SSPWC Section 306-2.1 unless indicated otherwise.

- (b) The Contractors attention is directed to the provisions for “Shoring and Bracing Drawings” in Section 6705 of the California Labor Code. If such plan varies from the shoring system standards established in the Construction Safety Orders of the State of California, such alternative systems plans shall be prepared by a civil or structural engineer licensed in the State of California.
- (c) Casing installation schedules which include schedules of excavation, pipeline installation, and backfill operations.
- (d) Material list including diameter, thickness, and class of steel casing.
- (e) Detailed locations and sizes of all boring or jacking and receiving pits.
- (f) Shop drawings of casing insulators (spacers) and end seals including manufactures’ catalog information.
- (g) Permits associated with boring or jacking operations.
- (h) Pressure concrete mix design and bracing plans to prevent the carrier pipe from shifting or floating in accordance with SSPWC Section 306-2.3.

B. Potholing of Existing Utilities

Contractor shall be required to pothole any existing underground utilities crossing the proposed jacked steel casing installation that may potentially interfere with the installation. Refer to Special Conditions.

C. Permit Provisions and Requirements

- (1) Contractor shall be responsible for obtaining any required permits other than those indicated in the Special Conditions to be obtained by the District. Contractor shall comply with and adhere to all permit requirements at no additional cost to the Owner.
- (2) Where Agency permit provisions differ from the specification requirements stated herein, the highest and most stringent standard

or requirement shall govern; and Contractor shall construct the installation to said higher standard at no additional cost to the District.

D. Casing Spacers

Casing isolators/spacers shall have a minimum 14-gauge steel band and where required, 10-gauge risers. The band, risers and connecting studs shall be welded and cleaned at the factory before the application of a fluidized bed fusion bonded PVC coating of between 10-16 mils thickness. The PVC coating shall provide good resistance to acids and alkalis and excellent resistance under ASTM B117 salt spray tests. The isolators/spacers shall have a flexible PVC inner liner of 0.09-inch thickness with a durometer "A" 85-90 hardness and a minimum 58,000-volt dielectric strength. The runners shall be high pressure molded glass reinforced polymer with a minimum compressive strength of 18,000 psi per ASTM D638. The runners shall be 2.0 inch in width and a minimum of 7.0 inches long for C8G-2 models and 11" for C12G-2 models (polyethylene runners are not an acceptable alternative). The runners shall be attached to the band or riser by 3/8" welded steel studs and lock nuts which shall be recessed far below the wearing surface on the runner. The recess shall be filled with a corrosion inhibiting filler. The band section shall be bolted together with cadmium plated studs, nuts, and washers. End seals shall be made of synthetic rubber. Banding straps shall be made of stainless steel.

Products of the type indicated shall be made by one of the following:

- (1) Casing Spacers – Pipeline Seal and Insulator Inc. Model C12G-2, Advance Products & Systems Inc. Model S/12, or approved equal.
- (2) End Seals – Pipeline Seal and Insulator Inc. Model S, C or W, Advance Products & Systems Inc. Model AC or AW, or approved equal.

The Contractor shall give the District a minimum of three (3) days advance notice of the start of an excavation or boring operation. All work shall be performed in the presence of the District, unless the District has granted prior approval to perform such work in its absence. All welding procedures used to fabricate steel casings shall be pre-qualified under the provisions of ANSI/AWS D1.1. Welding procedures shall be required for, but not necessarily limited to, longitudinal and girth or special welds for pipe cylinders, casing joint welds, reinforcing plates and grout coupling connections. No exterior or interior joints of the carrier pipe shall

have mortar grout applied over a seam until the seam has cooled. Exterior and interior joints of the carrier pipe shall be mortar coated and lined in the field.

E. Installation of Steel Casing

- (1) JACKING HEAD: A steel jacking head shall be fitted to the lead section of the casing in such a manner that it extends around the entire outer surface of the steel casing and projects at least 18 inches beyond the driving end of the casing. The jacking head shall not protrude more than 1/2 -inch outside of the outer casing surface. The head shall be securely anchored to prevent any wobble or alignment variation during the boring or jacking operations. To minimize voids outside the casing, excavation shall be carried out entirely within the jacking head and not in advance of the head. Excavated materials shall be removed from the casing as the boring or jacking operation progresses and no accumulation of excavated materials within the casing shall be permitted.
- (2) JACKING PIT: The excavations for the boring or jacking operations shall be adequately shored to safeguard existing substructures and surface improvements and to ensure against ground movement in the vicinity of the jack supports. Heavy guide timber, structural steel, or concrete cradles of sufficient length shall be provided to assure accurate control of boring or jacking alignment. The Contractor shall provide adequate space within the excavation to permit the insertion of the lengths of casing to be bored or jacked. Timbers and structural steel sections shall be anchored to ensure action of the jacks in line with the axis of the casing. A bearing block, consisting of a timber or structural steel framework, shall be constructed between the jacks and the end of the casing to provide uniform end bearing over the perimeter of the casing and distribute the jacking pressure evenly.
- (3) CONTROL OF ALIGNMENT AND GRADE: The Contractor shall control the application of the jacking pressure and excavation of materials ahead of the casing as it advances to prevent the casing from becoming earthbound or deviating from the required line and grade. The Contractor shall restrict the excavation of the materials to the least clearance necessary to prevent binding in order to avoid loss of ground and consequent settlement or possible damage to overlying structures.

- (4) GROUTING: Not used.
- (5) INSTALLATION: The installation of the casing shall be in accordance with the SSPWC Section 306-2.1 and subject to the approval of the agency having jurisdiction over the area containing the boring or jacking operations.

F. Installation of Carrier Pipe

- (1) JOINTS: All joints of the carrier pipe within the casing shall be in accordance with District Standards.
- (2) INSTALLATION OF PIPE: The end seals shall be pulled on (in case of pull-on type of seals) and the casing spacers shall be installed over the carrier pipe at the proper location, in accordance with the casing spacers manufacturer's instructions. Care shall be taken not to damage the carrier pipe coating or the inner coating of casing pipe while installing the carrier pipe. The position of the runners in the carrier pipe and casing shall be as indicated and shall be uniform throughout the casing length. Line and grade of the carrier pipe shall be installed as specified on the plans and deviations shall be permitted. During installation, rifling (rotating) of the carrier within the casing can occur and can be a cause of line and grade discrepancies. Take necessary measures to prevent rifling. Guides may be installed as necessary to prevent rifling (rotating) of the carrier pipe during installation.
- (3) TESTING OF THE CARRIER PIPE: Testing of the carrier pipe shall be completed prior to strapping the end seals.
- (4) END SEALS: After the carrier pipe has been tested, the end seals shall be strapped by stainless steel bands in accordance with the manufacturer's instructions.
- (5) CLOSING OF PITS: After equipment and excavated materials from the boring or jacking operations have been removed from the jacking pit, the Contractor shall prepare the bottom of the jacking pit as a pipe foundation. The Contractor shall remove all loose and disturbed materials below pipe grade to undisturbed earth and re-compact the material.

Measurement for payment for casing pipe excluding carrier pipe within said casing shall be made along the centerline of the casing pipe between the limits shown on the plans and/or staked in the field.

Payment for jacked steel casing pipe will be at the contract unit price per linear foot for jacked steel casing pipe placed in accordance with these plans and specifications. Payment shall be full compensation for furnishing all labor, excavation, backfill, boring, jacking, steel casing pipe, shoring*, equipment, services, transportation, sand cement, concrete, all grouting operations described herein, and other appurtenant items of labor and material required to complete the work. The water carrier pipe will be paid for under the bid item for pipe. The ends of the casing pipe shall be closed using an end seal as manufactured by Advanced Products and Systems, Inc. or District approved equal. Brick and mortar are not acceptable.

34. SUBSTITUTIONS

- A. Pursuant to Public Contract Code Section 3400(b) the District may make a finding that is described in the invitation for bids that designates certain products, things, or services by specific brand or trade name.
- B. Unless specifically designated in the Contract Documents, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer as substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in the Contract Documents. However, the District may have adopted certain uniform standards for certain materials, processes and articles.
- C. Contractor shall submit requests, together with substantiating data, for substitution of any "or equal" material, process or article no later than thirty-five (35) days after award of the Contract. To facilitate the construction schedule and sequencing, some requests may need to be submitted before thirty-five (35) days after award of Contract. Provisions regarding submission of "or equal" requests shall not in any way authorize an extension of time for performance of this Contract. If a proposed "or equal" substitution request is rejected, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as

* Shoring shall be by steel shield from top of bore pit excavation to bottom, unless otherwise directed by Engineer.

to the equality of any material, process or article shall rest with the Contractor. The District has the complete and sole discretion to determine if a material, process or article is an “or equal” material, process or article that may be substituted.

- D. Data required to substantiate requests for substitutions of an “or equal” material, process or article data shall include a signed affidavit from the Contractor stating that, and describing how, the substituted “or equal” material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted “or equal” material, process or article, and substantiates that it is an “or equal” to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted “or equal” material, process or article. Failure to submit all the required substantiating data, including the signed affidavit, to the District in a timely fashion will result in the rejection of the proposed substitution.
- E. The Contractor shall bear all of the District’s costs associated with the review of substitution requests.
- F. The Contractor shall be responsible for all costs related to a substituted “or equal” material, process or article.
- G. Contractor is directed to the Special Conditions (if any) to review any findings made pursuant to Public Contract Code section 3400.

35. WORKERS

- A. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Work any unfit person or anyone not skilled in the Work assigned to the Contractor.
- B. Any person in the employ of the Contractor whom the District may deem incompetent or unfit shall be dismissed from the Work and shall not be employed on this Work except with the written approval of the District.

36. REMOVAL OF HAZARDOUS WASTE

Should Contractor encounter material reasonably believed to be polychlorinated biphenyl (PCB) or other toxic wastes and hazardous materials which have not been rendered harmless at the Work site, the Contractor shall immediately stop work at the

affected Work site and shall report the condition to the District in writing. The District shall contract for any services required to directly remove and/or abate PCBs and other toxic wastes and hazardous materials, if required by the Work site(s), and shall not require the Contractor to subcontract for such services. The Work in the affected area shall not thereafter be resumed except by written agreement of the District and Contractor.

37. AIR POLLUTION CONTROL

Contractor shall comply with all air pollution control rules, regulations, ordinances, and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

Without limiting the foregoing, Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management District (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are broader, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify District against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in Section 5 of the General Conditions.

38. COMPLIANCE WITH STATE STORM WATER PERMIT

- A. Contractor shall be required to comply with all conditions of the State Water Resources Control Board ("State Water Board") National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity ("Permit") for all construction activity which results in the disturbance of in excess of one acre of total land area or which is part of a larger common area of development or sale. Contractor shall be responsible for filing the Notice of Intent and for obtaining the Permit. Contractor shall be solely responsible for preparing and implementing a Storm Water Pollution Prevention Plan ("SWPPP") prior to initiating Work. In bidding on this Contract, it shall be Contractor's responsibility to evaluate the cost of procuring the Permit and preparing the SWPPP as well as complying with the SWPPP and any necessary revision to the SWPPP. Contractor shall comply with all requirements of the State Water Resources

Control Board. Contractor shall include all costs of compliance with specified requirements in the Contract amount.

- B. Contractor shall be responsible for procuring, implementing, and complying with the provisions of the Permit and the SWPPP, including the standard provisions, monitoring and reporting requirements as required by the Permit. Contractor shall provide copies of all reports and monitoring information to the Owner's Representative.
- C. Contractor shall comply with the lawful requirements of any applicable municipality, the District, drainage district, and other local agencies regarding discharges of storm water to separate storm drain system or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.
- D. Storm, surface, nuisance, or other waters may be encountered at various times during construction of the Work. Therefore, the Contractor, by submitting a Bid, hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.
- E. Failure to comply with the Permit is in violation of federal and state law. Contractor hereby agrees to indemnify and hold harmless District, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which District, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the Permit arising out of or in connection with the Work, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the District, its officials, officers, agents, employees or authorized volunteers. District may seek damages from Contractor for delay in completing the Contract in accordance with the Contract Documents, caused by Contractor's failure to comply with the Permit.

39. EXCESSIVE NOISE

- A. The Contractor shall use only such equipment on the Work and in such state of repair so that the emission of sound therefrom is within the noise tolerance level of that equipment as established by CAL-OSHA.
- B. The Contractor shall comply with the most restrictive of the following: (1) local sound control and noise level rules, regulations, and ordinances and (2) the requirements contained in these Contract Documents, including

hours of operation requirements. No internal combustion engine shall be operated on the Work without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage or be determined to be ineffective or defective, the Contractor shall promptly remove the equipment and shall not return said equipment to the job until the device is repaired or replaced. Said noise and vibration level requirements shall apply to all equipment on the job or related to the job, including but not limited to, trucks, transit mixers or transit equipment that may or may not be owned by the Contractor.

40. DOCUMENT RETENTION AND EXAMINATION

- A. In accordance with Government Code Section 8546.7, records of both the District and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.
- B. Contractor shall make available to the District any of the Contractor's other documents related to the Work immediately upon request of the District.
- C. In addition to the State Auditor rights above, the District shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the District, for a period of four (4) years after final payment.

41. SOILS INVESTIGATION

When a soils investigation report for the Work site is available, such report shall not be a part of the Contract Documents. Any information obtained from such report as to subsurface soil condition, or to elevations of existing grades or elevations of underlying rock, is approximate only and is not guaranteed. Contractor acknowledges that any soils investigation report (including any borings) was prepared for purposes of design only and Contractor is required to examine the site before submitting its bid and must make whatever tests it deems appropriate to determine the underground condition of the soil.

42. STATE LICENSE BOARD NOTICE

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation.

Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

43. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the District in order that proper steps may be taken to have the change reflected on the Contract.

44. PROHIBITED INTERESTS

No District official or representative who is authorized in such capacity and on behalf of the District to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting, or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

45. PATENT FEES AND ROYALTIES

The Contractor shall include in its bid amount the patent fees or royalties on any patented article or process furnished or used in the Work. Contractor shall assume all liability and responsibility arising from the use of any patented, or allegedly patented, materials, equipment, devices or processes used in or incorporated with the Work, and shall defend, indemnify and hold harmless the District, its officials, officers, agents, employees and representatives from and against any and all liabilities, demands, claims, damages, losses, costs and expenses, of whatsoever kind or nature, arising from such use.

46. OWNERSHIP OF DRAWING

All Contract Documents furnished by the District are District property. They are not to be used by Contractor or any subcontractor on other work nor shall Contractor claim any right to such documents. With exception of one complete set of Contract Documents, all documents shall be returned to the District on request at completion of the Work.

47. NOTICE OF TAXABLE POSSESSORY INTEREST

In accordance with Revenue and Taxation Code Section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

48. SUBMITTALS OF ALL SAMPLES, MATERIAL LISTS AND CERTIFICATIONS

- A. Contractor shall furnish to the Owner's Representative for approval, prior to purchasing or commencing any Work, a log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the specifications. The log shall indicate whether samples will be provided in accordance with other provisions of this Contract.
- B. Contractor will provide samples and submittals, together with catalogs and supporting data required by the Owner's Representative, to the Owner's Representative within a reasonable time period to provide for adequate review and avoid delays in the Work.
- C. These requirements shall not authorize any extension of time for performance of this Contract. Owner's Representative will check and approve such samples, but only for conformance with design concept of work and for compliance with information given in the Contract Documents. Work shall be in accordance with approved samples and submittals.

BASIC SPECIFICATIONS

SECTION A1

UNIT PRICES

PART 1 - GENERAL

1.01 Description

- A. Measurement and payment for Bid Items listed in proposal shall be based upon use of lump sum or unit price method. Changes and Extra Work in Work shall be accomplished as provided in General Conditions.
- B. Payment for the Work in each Section of these Contract Documents shall be included as part of the lump sum or unit price bid amount for which such Work is appurtenant.
 - 1. No additional payment will be made for Work described in any Section for which no express bid item is provided.

PART 2 - MATERIALS

2.01 Protecting Existing Utilities

- A. Payment for locating, potholing, exposing, and protecting existing utilities will be included in price bid for Work items for which such Work is appurtenant.
- B. Payment for abandoning or removing existing utilities will be included in price bid for Work items for which such Work is appurtenant.
- C. Utility Protection or Relocation by Contractor as Shown in Contract Documents: When work on a utility is shown within Contract Documents to be done by Contractor, but is not included as a separate bid item, Contractor shall make arrangements and coordinate with utility owner regarding schedule for performance of Work. Costs for such Work shall be included in unit prices or lump sum amounts bid for the various Contract items. Submit proposed method of relocation or protecting utility for review. Review by Owner will not relieve Contractor of any responsibility.
- D. Utility Relocation by Contractor for Contractor's Convenience: Temporary relocation or alteration of any utility, desired by Contractor solely for their convenience in performance of Work, to a position or condition other than that provided for on Contract Documents shall be Contractor's own responsibility. Make arrangements with utility or property owners regarding such Work. Repair, replacement or relocation of buried utilities shall be completed at Contractor's expense by either Utility's forces, or by contractor accepted by Utility in writing and properly licensed to perform Work. Costs of such Work for Contractor's convenience shall be absorbed in unit prices or lump sum amounts bid for the various Contract items at no additional cost to Owner.
- E. Utility Relocations by Owner: When Contract Documents indicate a utility is to be relocated, altered, or reconstructed by forces other than Contractor, Owner

will conduct negotiations in respect to such work and work will be done at no cost to Contractor. No additional compensation will be given for delays or inconvenience by others to finish their work on schedule due to unforeseen difficulties.

- F. Unknown Utility Installation by Others During Contract Work: If utility is disclosed or installed subsequent to award of Contract, and utility is not shown on Contract Documents, with reasonable accuracy, and said utility is found to occupy space required to be occupied by Work, Owner's Representative will determine whether utility requires locating, relocating, removal, repair of damages, alteration, support or protection.
1. Perform Work in accordance with Contract Documents provided or accepted by Owner and in accordance with the following:
 - a. Where undisclosed utilities are discovered and located by Contractor when performing this Contract, immediately notify Owner in writing.
 - b. When said utility is found to occupy space required to be occupied by part of permanent Works to be constructed under Contract or parallel to permanent works and within vertical planes on each side at distance away equal to maximum allowable trench width measured in plane 12" above top of pipe, exclusive of branches or other facilities, as specified in Contract Documents, or to be within specified excavation pay lines (when such are specified in Contract Documents); Owner will arrange for relocation or alteration of said utility or require Contractor to do same.
 - c. Utilities found to cross excavation, but not intercepting permanent Work to be constructed or interfering with construction shall be maintained in place at Contractor's expense.
 - d. Utilities interfering with construction techniques used shall be protected or relocated.
 - e. When utilities roughly parallel new Work and portions of utilities do not lie within vertical planes specified above, or do not lie within excavation paylines (when such are shown in Contract Documents), advise Owner thereof, and in cooperation with utility owner, provide and place support for proper protection to guarantee continuous and safe operation of utility.
 - f. Maintain continuous sanitary sewer service. Should existing sanitary sewer or maintenance hole extend within proposed excavation, submit method of construction or support for acceptance by Owner, and assume responsibilities therefore. Costs for such work shall be borne by Contractor.
 - g. If work is done by others, provide time and working space for protection and relocation required.
 - h. Owner will compensate Contractor for their direct costs of locating, relocating, removal, repair, support or protecting undisclosed utilities, together with cost of equipment used for Work necessarily idled during such Work.
 - i. Contractor will not be entitled to extra compensation or extension of time when Extra Work is required to repair damage to undisclosed utilities

caused by failure of Contractor to exercise reasonable care.

- j. Contractor will not be entitled to compensation for indirect or consequential costs or damages incurred as a result of Extra Work required.
- k. When directed or accepted by Owner, changes in line or grade of structure being built may be made to avoid utilities.
- l. Additional costs because of such changes will be paid for by Change Order as Extra Work.

2.02 Increases in Payment due to Unanticipated Overexcavation during Trenching

- A. No payment will be made for overexcavation except where overexcavation is authorized in writing by Owner's Representative.
- B. Excavations not extending below a horizontal plane 18" below pipe inverts or outside vertical planes 18" on each side of constructed pipe ODs will be considered to fall within the limits of reasonable excavation and will not be credited as Extra Work.
- C. Owner-directed excavation outside these limits will not be considered Extra Work until at least 1000' or 5% of the total trench length, whichever is greater, has required overexcavation outside these limits.
- D. After 1000' or 5% of the total trench length has required Owner-directed overexcavation outside these limits, Contractor shall notify Owner's Representative of their intent to charge for subsequent overexcavation as Extra Work.
- E. Subsequent Work requiring excavation outside these limits 18" below or on either side of pipelines will be credited as Extra Work for volumes outside the limiting prism.

PART 3 - EXECUTION

3.01 Scope

- A. This section defines Bid Items listed in Bid schedule and describes measurement and payment provisions for each item.

3.02 Specification Sections with No Bid Item

- A. Where specification sections are included but no pay item(s) are expressly set forth for Work within those sections, include costs of Work described within those sections under bid items for Work for which the Work within those specification sections is appurtenant.

3.03 Bid Item 101 – Mobilization/Demobilization

- A. Amount bid for Mobilization/Demobilization shall not exceed 5.0% of Contractor's Bid total. Amounts bid in excess of stipulated 5.0% cap will not be paid until project completion.
- B. Payment for this item will be made at lump sum price listed in Bid Schedule under Item Number 101, which price shall constitute full compensation for mobilize, provide bonds and insurance, obtain required permits, take preconstruction photos and videos, prepare project schedule, construct temporary bypass facilities, secure construction water, construct temporary traffic control facilities, construct temporary noise attenuation facilities, establish of safety programs per OSHA requirements, locate existing utilities, verify field conditions and electrical requirements, perform required surveys, testing, site maintenance and cleanup, sign removal, removing and reinstalling existing site facilities as required, and compliance with Specifications.
- C. Work to be paid for under this item shall also include, but not be limited to, furnishing, setting up, and removing Contractor's operations at project site including temporary offices, buildings, trailers, utilities, services, sanitary facilities, staging areas, and temporary fencing and security.
- D. Work to be paid for under this item shall also include, but not be limited to, protecting existing survey monuments in place and, if Contractor's operations disturb such monuments, hiring registered land surveyor to reestablish and reset disturbed monuments.
- E. Work to be paid for under this item shall include, but not be limited to, temporary bypass facilities including connections to existing buried or above-ground piping, piping, valves, concrete coring, pumping facilities, electrical Work, fencing, protecting and securing temporary equipment and appurtenant Work to maintain Owner's facilities in operation throughout construction.
- F. Work to be paid for under this item shall also include, but not be limited to, payment for demobilization, removal of temporary facilities, cleanup of construction site, providing record drawings, operation and maintenance manuals, and warranties, complete in place.
- G. Payment for verification of field dimensions and utility locations will be included in price bid for items of Work which may require relocation or refitting if field dimensions differ from those shown on plans.
- H. Payment for Bid Item No. 101 Mobilization / Demobilization shall be made according to the following schedule upon acceptance from Owner:
 - I. Upon completion of mobilization, 50% of amount bid for this item (or 50% of stipulated 5.0% cap, whichever is less, will be made to Contractor with first progress payment.
 - J. Once total amount of progress payments earned to date exceeds 50% of original contract amount, payment to 75% of amount bid for this item (or 75%

of stipulated 5.0% cap, whichever is less, will be paid to Contractor as part of next monthly partial payment estimate of the total amount earned to date.

- K. Remainder will be paid as part of final contract payment upon project completion.

3.04 Bid Items 102, 103 & 104 – Furnish and Install SDR-35 PVC Sewer

- A. Payment shall be at the unit price per lineal foot in place measured along the longitudinal axis between the center of the Manholes.
- B. Measurement will be based on lineal footage of pipeline installed, measured in horizontal plane at centerline of pipe. Laying lengths of in-line appurtenances will not be deducted from pipe length.
- C. Work to be paid for under this item shall include, but not be limited to, new PVC sewer pipe of size, class and type shown including: protecting existing utilities and surface improvements; trench excavation; removal of interfering slurry or concrete; bedding per JCSD Std Dwg. S-2; pipe; backfill and base paving; connection to new manholes; fittings, spools, joints, couplings, gaskets, hangers, supports, brackets, saddles, outlets; preparation, compaction and testing of subgrade beneath new improvements in accordance with geotechnical report requirements; leak testing; removal of interfering pipe; abandonment of existing sewer; disposal of excess excavated material; replacement and restoration of surface features where shown (unless otherwise covered by other bid items); temporary and permanent surface restoration; cleanup and any appurtenant Work as required by the Contract Documents for a complete installation.

3.05 Bid Item 105 & 106 – Furnish and Install SDR-35 PVC Sewer within Steel Pipe Casing

- A. Payment shall be at the unit price per lineal foot in place measured along the longitudinal axis between the center of the Manholes.
- B. Measurement will be based on lineal footage of pipeline installed, measured in horizontal plane at centerline of pipe. Laying lengths of in-line appurtenances will not be deducted from pipe length.
- C. Work to be in compliance with Appendices H and J - Caltrans Encroachment Permit and Manual
- D. Work to be paid for under this item shall include, but not be limited to, new PVC sewer and Steel Casing pipe of size, class and type shown in Construction Plans; including: protecting existing utilities and surface improvements; removal of interfering slurry or concrete; bedding per JCSD Std Dwg. S-2A; pipe; backfill; connection to new manholes; fittings, spools, joints, couplings, gaskets, hangers, supports, brackets, saddles, outlets, pipe spacers, casing and carrier pipe voids to be filled with slurry; preparation, compaction and testing of subgrade beneath new improvements in accordance with geotechnical report requirements; leak testing; removal of interfering pipe; abandonment of existing sewer; disposal of excess excavated material;

replacement and restoration of surface features where shown (unless otherwise covered by other bid items); temporary and permanent surface restoration; cleanup and any appurtenant Work as required by the Contract Documents for a complete installation.

3.06 Bid Item 107 – HDPE Sewer with Polyethylene Wrap and 1-Sack Slurry Backfill

- A. Payment shall be at the unit price per lineal foot in place measured along the longitudinal axis between the center of the Manholes.
- B. Measurement will be based on lineal footage of pipeline installed, measured in horizontal plane at centerline of pipe. Laying lengths of in-line appurtenances will not be deducted from pipe length.
- C. Work to be paid for under this item shall include, but not be limited to, new fusion welded HDPE DR-11 sewer pipe of size, class and type shown including: protecting existing utilities and surface improvements; trench excavation; removal of interfering slurry or concrete; bedding per JCSD Std Dwg. S-2; pipe; 1-sack slurry bedding and backfill, base paving; connection to new manholes; fittings, spools, joints, couplings, gaskets, hangers, supports, brackets, saddles, outlets; preparation, compaction and testing of subgrade beneath new improvements in accordance with geotechnical report requirements; polyethylene wrap; leak testing; removal of interfering pipe; abandonment of existing sewer; disposal of excess excavated material; replacement and restoration of surface features where shown (unless otherwise covered by other bid items); temporary and permanent surface restoration; cleanup and any appurtenant Work as required by the Contract Documents for a complete installation.
- D. Work shall also adhere to any additional requirements by Metropolitan Water District for the crossing of their pipeline.

3.07 Bid Items 108 – Removal of Existing Sewer and Construct SDR-35 PVC Sewer

- A. Payment shall be at the unit price per lineal foot in place measured along the longitudinal axis between the center of the Manholes.
- B. Measurement will be based on lineal footage of pipeline installed, measured in horizontal plane at centerline of pipe. Laying lengths of in-line appurtenances will not be deducted from pipe length.
- C. Work to be paid for under this item shall include, but not be limited to, cutting and removal of existing sewer mains and installation of new main in same or adjacent alignment per Contract Documents, including: pipe cutting and removal, proper disposal of removed pipe and appurtenances, new PVC sewer pipe of size, class and type shown, protecting existing utilities and surface improvements; trench excavation; removal of interfering slurry or concrete; bedding; pipe; backfill and base paving; connection to new manholes; fittings, spools, joints, couplings, gaskets, hangers, supports, brackets, saddles, outlets, ; preparation, compaction and testing of subgrade beneath new improvements in accordance with geotechnical report requirements; leak

testing; removal of interfering pipe; abandonment of existing sewer; disposal of excess excavated material; replacement and restoration of surface features where shown (unless otherwise covered by other bid items); temporary and permanent surface restoration; cleanup and any appurtenant Work as required by the Contract Documents for a complete installation.

3.08 Bid Items 109 and 111 – Furnish and Install 48- and 60-inch Dia. Manhole

- A. Measurement will be based on quantity of items constructed.
- B. Work to be paid for under this item shall include work described in Special Requirements. Work to include, but not be limited to: the excavation, removing, loading, hauling, disposing, all disposal fees of interfering pipe and excess soil; construction of sewer manhole per JCSD DWG S-7; backfill , compaction and testing per geotechnical report and testing; compaction testing; concrete collar around manhole, manhole frame and cover; final setting of manhole at pavement elevation; base material; lining of manhole and the base as required, and all associated work as indicated on the Plans and called for in the Specifications as required for a complete installation.

3.09 Bid Item 110 – Furnish and Install 48-inch Dia. External Manhole Drop

- A. Measurement will be based on quantity of items constructed.
- B. Work to be paid for under this item shall include work per plans and as described in Special Requirements. Work to include, but not be limited to the excavation, removing, loading, hauling, disposing, all disposal fees for any interfering pipe and excess soil; construction of external sewer drop on proposed manhole, PVC pipe and fittings; core drilling; 1-sack slurry backfill and encasement; cleanout frame cover, concrete collar around cleanout; base material, and all associated work as indicated on the Plans and called for in the Specifications as required for a complete installation.

3.10 Bid Item 112 – Furnish and Install 60-inch Dia. Shallow Manhole

- A. Measurement will be based on quantity of items constructed.
- B. Work to be paid for under this item shall include work described in Special Requirement. Work to include, but not be limited to: the excavation, removing, loading, hauling, disposing, all disposal fees of interfering pipe and excess soil; construction of sewer manhole per JCSD DWG S-15; backfill , compaction and testing per geotechnical report and testing; compaction testing; concrete collar around manhole, manhole frame and cover; final setting of manhole at pavement elevation; base material; lining of manhole and the base as required, and all associated work as indicated on the Plans and called for in the Specifications as required for a complete installation.

3.11 Bid Item 113 – Jack/Bore 12-inch PVC SDR-35 with 18-inch Steel Casing

- A. Payment shall be at the unit price per lineal foot in place measured along the longitudinal axis between the ends as installed.
- B. Work to be paid for under this item shall include, but not be limited to, carrier pipe of size, steel casing pipe of size, class and type shown including: protecting existing utilities and surface improvements; trench excavation; shoring; bedding; pipe; backfill and base paving; fittings, spools, joints, couplings, gaskets, hangers, supports, brackets, saddles, outlets; preparation, compaction and testing of subgrade beneath new improvements in accordance with geotechnical report requirements; leak testing; removal of interfering pipe; abandonment of existing sewer; disposal of excess excavated material; replacement and restoration of surface features where shown (unless otherwise covered by other bid items); temporary and permanent surface restoration; traffic control; cleanup and any appurtenant Work as required by the Contract Documents for a complete installation.

3.12 Bid Item 113A & 113B – Jacking and Receiving Pits per Sheet 6 of Construction Plans

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include, but not be limited to: excavation of jacking and receiving pits; shoring; backfill of excavation; site restoration; traffic control; bedding; protection of existing utilities; disposal of excess excavated material; replacement and restoration of surface features (unless otherwise covered by other bid items); cleanup and any appurtenant Work as required by the Contract Documents for completion of work. Contractor to construct to a depth and dimension necessary to complete the work associated with Bid Item 113.

3.13 Bid Item 114 – Abandon and Cap Existing Sewer Main Per Specifications

- A. Payment shall be at the unit price per lineal foot in place measured along the longitudinal axis between the ends as installed.
- B. Work to be paid for under this item shall include, but not limited to, abandonment of existing sewer main, flushing, slurry backfill of abandoned sewer pipe, sealing / capping with a minimum 6-inch thick concrete or 8-inch thick wall of brick and mortar, and any appurtenant work as required by the Contract Documents.

3.14 Bid Item 115 – Abandon and Backfill Existing Sewer Manhole

- A. Measurement will be based on quantity of items abandoned and removed.
- B. Work to be paid for under item shall include, but not limited to the abandonment and backfill of existing Manhole. Work to encompass the removal of the upper portion of manholes, perforation of invert of manhole, plugging of all manhole inlet and outlets, backfilling with sand, and all associated work as indicated on the Plans and called for in the Specifications for a complete abandonment.

3.15 Bid Item 116 – Removal and Dispose of Existing Manhole

- A. Measurement will be based on quantity of items removed.
- B. Work to be paid for under item shall include, but not be limited to the removal of existing manholes; excavation, removing, loading, hauling (unless otherwise covered by other bid items); removal of interfering pipe; proper disposal, all disposal fees; and all associated work as indicated on the Plans and called for in the Specifications for the complete removal of existing sewer manhole.

3.16 Bid Item 117 – Reconnect Sewer Lateral Services

- A. Measurement will be based on quantity of items constructed.
- B. Work under this item include, but not limited to furnishing all labor, materials, and equipment to restore sewer service laterals, including but not limited to: determining the exact locations of laterals; maintaining sewer service during construction; pipe, fittings; installation and connection of laterals to new sewer; excavation, bedding, backfill, compaction and compaction testing; protection of existing utilities; restoration of temporary and permanent surface features; leak testing; cleanup; and any appurtenant Work as required by the Contract Documents for a complete installation.

3.17 Bid Item 118 & 119 – Reconnection at STA. 10+00.00 & 13+14.00 per Detail 4A & 4B on Sheet 4 of Construction Plans

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include, but not be limited to: the reconnection to existing sewer; pipe penetration; reconfiguration of channels within manhole as required; plugging of abandoned manhole outlet/inlets; main size pipe and fittings for reconnection to existing sewer and connection to manhole; removal of interfering pipe to nearest joint; excavation, bedding, backfill, compaction and compaction testing; restoration of temporary and permanent surface features; shoring, and all associated work to construct reconnection as indicated on the Plans and called for in the Specifications for a complete installation.
- C. Work excluded from this bid item includes construction of manhole, installation sewer main, and removal of existing manhole. Construction manhole is included in Bid Items 109 to 112. Installation of sewer main are included in Bid Items 102 to 108. Removal of existing manhole is included in Bid items 116. No additional compensation will be allowed.

3.18 Bid Item 120 – Reconnection at STA. 10+00.00 (Galena St) per Detail 5 on Sheet 5 of Construction Plans

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include, but not be limited to: the reconnection to existing sewer; pipe penetration; reconfiguration of channels within manhole as required; main size pipe and fittings for reconnection to existing sewer and connection to manhole; removal of interfering pipe to

nearest joint; excavation, bedding, backfill, compaction and compaction testing; restoration of temporary and permanent surface features; shoring, and all associated work to construct reconnection as indicated on the Plans and called for in the Specifications for a complete installation.

- C. Work excluded from this bid item includes construction of manhole, installation sewer main, and removal of existing manhole. Construction of manhole is included in Bid Items 109 to 112. Installation of sewer main are included in Bid Items 102 to 108. No additional compensation will be allowed.

3.19 Bid Item 121 – Reconnection at STA. 10+73.00 (Cassidy Cir) per Detail 6 on Sheet 6 of Construction Plans

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include, but not be limited to: protection of existing manhole; reconfiguration of channels within manhole as required; plugging of abandoned manhole outlet/inlets; manhole coring; main size pipe and fittings for reconnection to existing manhole; removal of interfering pipe to nearest joint; excavation, bedding, backfill, compaction and compaction testing; restoration of temporary and permanent surface features; shoring, and all associated work to construct reconnection as indicated on the Plans and called for in the Specifications for a complete installation.
- C. Work excluded from this bid item includes installation sewer main and abandonment of existing sewer. Installation of sewer main are included in Bid Items 102. Abandonment of existing sewer is included in Bid items 114. No additional compensation will be allowed.

3.20 Bid Items 122, 123, & 124 – Reconnection at STA. 34+74.00, 36+00.00, and 38+37.00 per Detail 7A, 7B, & 7C on Sheet 7 of Construction Plans

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include, but not be limited to: the reconnection to existing sewer; installation of 6-inch and 8-inch PVC pipe, pipe penetration; reconfiguration of channels within manhole as required; plugging of abandoned manhole outlet/inlets; main size pipe and fittings for reconnection to existing sewer and connection to manhole; removal of interfering pipe to nearest joint; excavation, bedding, backfill, compaction and compaction testing; restoration of temporary and permanent surface features; shoring, and all associated work to construct reconnection as indicated on the Plans and called for in the Specifications for a complete installation.
- C. Work excluded from this bid item includes construction of manhole, installation sewer main, and removal of existing manhole. Construction of manhole is included in Bid Items 109 to 112. Installation of sewer main are included in Bid Items 102 to 108. Abandonment of existing manhole is included in Bid items 115. No additional compensation will be allowed.

3.21 Bid Items 125 – Reconnection at STA. 43+43.50 per Detail 8 on Sheet 8 of Construction Plans

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include, but not be limited to: the reconnection to existing sewer; installation of 6-inch PVC pipe, pipe penetration; reconfiguration of channels within manhole as required; plugging of abandoned manhole outlet/inlets; main size pipe and fittings for reconnection to existing sewer and connection to manhole; removal of interfering pipe to nearest joint; excavation, bedding, backfill, compaction and compaction testing; restoration of temporary and permanent surface features; shoring, and all associated work to construct reconnection as indicated on the Plans and called for in the Specifications for a complete installation.
- C. Work excluded from this bid item includes construction of manhole, installation sewer main, and removal of existing manhole. Construction of manhole is included in Bid Items 109 to 112. Installation of sewer main are included in Bid Items 102 to 108. Abandonment of existing manhole is included in Bid items 115. No additional compensation will be allowed.

3.22 Bid Item 126 – Reconnection at STA. 65+92.50 per Detail 10 on Sheet 10 of Construction Plans

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include, but not be limited to: the reconnection to existing sewer; pipe penetration; reconfiguration of channels within manhole as required; plugging of abandoned manhole outlet/inlets; main size pipe and fittings for reconnection to existing sewer and connection to manhole; removal of interfering pipe to nearest joint; excavation, bedding, backfill, compaction and compaction testing; restoration of temporary and permanent surface features; shoring, and all associated work to construct reconnection as indicated on the Plans and called for in the Specifications for a complete installation.
- C. Work excluded from this bid item includes construction of manhole, installation sewer main, and removal of existing manhole. Construction of manhole is included in Bid Items 109. Construction of external manhole drop included in Bid Items 110. Installation of sewer main are included in Bid Items 102 to 108. Removal of existing manhole is included in Bid items 115. No additional compensation will be allowed.

3.23 Bid Item 127 – Pre-Construction CCTV Inspection of Sewer Main

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not limited to furnishing all labor, materials, and equipment to perform a pre-construction CCTV inspection from manhole-to-manhole for each sewer pipe segment. The work shall include but is not limited to providing cameras, monitors, cables, and other equipment necessary to inspect sewer lines to confirm the existing condition of the existing

sewer main, location of service connections for reconnection to new sewer main, and all appurtenant Work as required by the Contract Documents.

3.24 Bid Item 128 – Post-Construction CCTV Inspection of Sewer Main

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not limited to furnishing all labor, materials, and equipment to perform a post-construction CCTV inspection from manhole-to-manhole for each installed sewer segment. The work shall include but is not limited to providing cameras, monitors, cables, and other equipment necessary to inspect the newly construction sewer lines, location of service reconnections, and all appurtenant Work as required by the Contract Documents.

3.25 Bid Item 129 – Trench and Excavation Sheeting, Shoring, and Bracing for Protection of Life and Limb per OSHA and Caltrans Requirements, Including Development of a Plan and Implementation

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not limited to developing a plan and implementing all trench and excavation sheeting, shoring, and bracing for protection of life and limb per OSHA and Caltrans Requirements. Plans shall be prepared by qualified engineer and approved, signed, and stamped by another qualified licensed engineer. No additional compensation will be allowed.

3.26 Bid Item 130 – Development and Implementation of Sewer Bypass Facilities and Sewage Spill Prevention Plan

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not limited to, developing a bypass plans and submitting for review and approval; furnishing, operating, and removing all bypass equipment such as by-pass pumps, pumping trucks, generators, fittings, connections, pneumatic plugs, compressors, hoses or temporary bypass piping, and all other work necessary to continue service without interruption as required by the Contract Documents. Items removed may contain hazardous materials and shall be properly disposed of. Temporary bypass piping shall at the minimum be 2-ply high temperature hose or approved equal by the District.
- C. Work under this item shall include the submission of different bypass plans at each separate project locations.

3.27 Bid Item 131 – Prepare and Submit Engineer Signed Traffic Control Plans and Obtain Approval

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include work described in Special Requirements, but not limited to, traffic control prepared and signed by registered Civil Engineer

and submission of plans to City of Jurupa Valley and Caltrans for approval. No additional compensation will be allowed.

3.28 Bid Item 132 – Implement Traffic Control Facilities

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not limited to, furnishing, installing, maintaining, and removing all traffic control devices, including signs, barricades, lights, cones, providing flaggers, and all other work necessary to provide vehicular and pedestrian traffic control in and around the construction sites as shown on the approved Traffic Control Plans, WATCH Manual, and required by regulatory agencies and associated permits.

3.29 Bid Item 133 – Replace Damaged Traffic Signal Loops and Video Monitoring in Kind

- A. Measurement will be based on quantity of items constructed.
- B. Work under this item shall include, but not limited to, providing all necessary labor, material, tool, equipment to replace damaged traffic signal loops and video monitoring in kind during construction. Actual payment shall be on a time and material basis. No additional compensation will be allowed.

3.30 Bid Item 134 – Replace Traffic Striping and Pavement Markings

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not limited to, replacing existing pavement striping, removal of temporary construction striping and replacement of striping conforming to Contract Documents, public agency permits, and as required by City of Jurupa Valley Encroachment Permit and Temporary Striping.

3.31 Bid Item 135 – Air Testing in New Pipe

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include work described in Specification Section E, to include but not be limited to, furnishing, all labor, materials and equipment to perform air testing. If groundwater conditions are encountered above the new sewer pipe, to also perform Water Infiltration Test.

3.32 Bid Item 136 – Vacuum Test Manhole

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include work described in Specification Section E, to include but not be limited to, furnishing, all labor, materials and equipment to perform vacuum testing of manholes.

3.33 Bid Item 137 – Prepare SWPPP/BMP, Obtain Approval, Implement and Monitoring Program

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include preparing and obtain approval of SWPPP/BMP plan. Work to include furnishing and installing all necessary excavation safety measures according to contract documents, including, but not limited to sheeting, shoring and bracing or equivalent method for protection of life and limb in trenches and open excavation in conformance with applicable safety orders, complete in place.

3.34 Bid Item 138 – Furnish, Install, and Maintain Two (2) Project Signs and Four (4) CMS Signs

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not be limited to, furnishing, installing, maintaining, relocating, and removing project signs and CMS signs as directed by the Owner. Project signs shall be furnished and placed per Specifications. Contractor shall coordinate with the City of Jurupa Valley to ensure placement and content of CMS signs adhere to the City's requirements.

3.35 Bid Item 139 – Allowance to Apply for, Obtain, and Comply with Jurupa Valley Encroachment Permit

- A. No measurement will be made for this allowance Bid Item.
- B. Stipulated allowance in Bid Form to be set aside as allowance for Owner to reimburse Contractor for the costs associated with permitting and fees. Owner shall delete any remaining amounts not used.
- C. Work under this item shall include reimbursement for permit fees and inspection fees required by governing agencies. Contractor shall review contract documents for construction permit requirements and apply and obtain all required Construction Permits and pay all fees and deposits as required by the Owner, City of Jurupa Valley, and all other permitting agencies. Payment for this item of work will not be considered paid in full until all work is complete and accepted by the permitting agencies. Payment to the Contractor will not include deposits that are refunded or are returnable to the Contractor for following the terms and requirements of the permit. The District will only reimburse for direct fees required by the permit and will not be reimbursing for labor, markups, or resubmittals required to obtain the permits. Contractor shall submit receipts to the District to receive reimbursement.

3.36 Bid Item 140 – Allowance to Apply for, Obtain, and Comply with Caltrans Permit

- A. No measurement will be made for this allowance Bid Item.
- B. Stipulated allowance in Bid Form to be set aside as allowance for Owner to reimburse Contractor for the costs associated with permitting and fees. Owner shall delete any remaining amounts not used.

C. Work under this item shall include reimbursement for permit fees and inspection fees required by California Department of Transportation (Caltrans). Contractor shall review contract documents for construction permit requirements and apply and obtain Caltrans Permit and pay all fees and deposits as required by Owner, Caltrans, and all other permitting agencies. Payment for this item of work will not be considered paid in full until all work is complete and accepted by the permitting agencies. Payment to the Contractor will not include deposits that are refunded or are returnable to the Contractor for following the terms and requirements of the permit. The District will only reimburse for direct fees required by the permit and will not be reimbursing for labor, markups, or resubmittals required to obtain the permits. Contractor shall submit receipts to the District to receive reimbursement.

3.37 Bid Item 141 – Maintain Updated As-Builts and Provide Final Record Drawings

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not limited to, maintaining up-to-date set of as-built drawings, red lines markings outlining deviations from original construction drawings, and submittal of as-built drawings to Owner on a monthly basis for review. No additional compensation will be allowed.

3.38 Bid Item 142 – Unknown or Unmarked Utility Crossing

- A. Measurement will be based on quantity of items constructed.
- B. Work under this item shall include work as described in Special Requirements and include, but not limited to, compensation for unknown utility resulting in loss of production, idle time, backfill, slurry backfill (up to 5 cubic yard) if needed, installing under, support, overhead, or any other cost associated with unknown utility. Actual payment shall be on a time and material basis and shall be further negotiated with the Owner. Owner shall delete this Bid Item if no unknown or Unmarked utilities are crossed during construction.

3.39 Bid Item 143 – Pothole Existing Utilities at all Crossing, Confirm Connection Points and Provide Report

- A. Measurement will be based on quantity of items constructed.
- B. Work under this item shall include, but not limited to, verification and potholing of all existing utilities that are being crossed by the new sewer or that may interfere with the installation of the Project. This item shall include potholing utilities either shown on plans or whose presence, in the case of utility laterals (gas, sewer, water, etc.), may be inferred from surface features, plus one additional pothole for every 1000-LF or fraction thereof of pipeline or utility trench.
- C. Work also includes the submission of the signed potholing reports to JCSD at a minimum of twenty (20) calendar days from date of Notice to Proceed.

3.40 Bid Item 144 – Grind and 0.125-ft Thick Asphalt Concrete Capping

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include work described in Section E of Specification, but not limited to labor, materials, and equipment to remove existing asphalt concrete and install asphalt concrete cap along the main line trench and service laterals and as directed by the Contract Documents and per the requirements of the City of Jurupa Valley, for a complete installation.

3.41 Bid Item 145 – Pavement Removal, Disposal and Replacement from Mainline Trench per City of Jurupa Valley Requirements

- A. Payment shall be at the unit price per lineal foot in place measured along the longitudinal axis between the ends as installed.
- B. Work under this item shall include work described in Section E of Specification, but not limited to pavement sawcutting, removal and haul away, excavating pipe trench, tunneling, temporary resurfacing, permanent resurfacing, traffic control, temporary and permanent removal or replacement where required of existing improvements (exclusive of utilities) which interfere with construction (includes all existing improvements located outside the traveled roadway, such as curb, sidewalk, driveways, sprinklers, parkways, etc.), disposing of all excess excavated or removed material, and all other labor, equipment and material incident to the installation of sewer main and pipe appurtenances.

3.42 Bid Item 146 – Slurry Backfill, Compact, Restore Trench Zone as Shown on Plans and Per Construction Note 15

- A. Payment shall be at the unit price per lineal foot.
- B. Work under this item shall include, but not limited to slurry backfill as shown on the plan; preparation, replacement and restoration of temporary and permanent surface features where shown (unless otherwise covered by other bid items); disposal of excess excavated material, and applicable landfill and disposal fees. Limits of work as shown on plans or as directed by JCSD or inspector.

3.43 Bid Item 147 – Slurry Backfill and Encasement Per Detail A on Sheet 3 and Construction Note 24, in Lieu of Other Bedding and Backfill

- A. Measurement will be based on quantity of items constructed.
- B. Work under this item shall include, but not limited to slurry backfill and encasement of pipe in lieu of bedding per specifications and as shown on the plan; preparation, temporary and permanent replacement or restoration of surface features where shown (unless otherwise covered by other bid items); disposal of excess excavated material, and applicable landfill and disposal fees.

3.44 Bid Item 148 – Remove and Replace Existing Cross Gutters, Drains, Curbs, Driveways, Sidewalks, Hardscapes, Mailboxes in Kind

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include, but not limited to, providing all necessary labor, material, tool, equipment to remove and replace damaged cross gutters, drains, curbs, driveways, sidewalks, and mailboxes in kind. Concrete repairs shall include the entire affected panel between the nearest panel joints. No additional compensation will be allowed for this Bid Item.

3.45 Bid Item 149 – Pre-construction Survey and Construction Staking

- A. No measurement will be made for this lump sum Bid Item.
- B. Work under this item shall include work described in Special Requirements, but not limited to, pre-construction survey and surveying and staking. As part of pre-construction survey, to field survey existing topo to include existing improvements, elevations, plantings, surfaces, trails, dirt roads, grades, sidewalks, streets, pavements, manhole rim elevations, all above ground features, layout of gates, posts, fencing, signs and any other above ground improvements. Surveying and staking to encompass construction staking.

3.46 Bid Item 150 – Allowance for Repair of Unknown or Unmarked Water and Gas Crossings

- A. Measurement will be based on quantity of items constructed.
- B. Stipulated allowance in Bid Form to be set aside as allowance for Owner to reimburse Contractor for the repair of unknown or unmarked water and gas crossings. Contractor shall take care to locate and protect in place all water and gas lateral crossings prior to excavation. Actual payment shall be on a time and material basis and shall be further negotiated with the Owner. Reimbursement for repairs of water and gas crossings will not exceed more than 20% of all total crossing and no additional compensation will be awarded. Owner shall delete this Bid Item if not required during construction.
- C. Work under this item shall include work as described in Special Requirements and include, but not limited to, compensation for unknown utility resulting in loss of production, idle time, backfill, slurry backfill (up to 5 cubic yard) if needed, installing under, support, overhead, or any other cost associated with unknown crossing.

3.47 Bid Item 151 – Allowance to Additional Slurry Backfill within Pipe Trench

- A. Payment shall be at the unit price per lineal foot.
- B. Stipulated allowance in Bid Form to be set aside as allowance for Owner to reimburse Contractor for the slurry backfill within pipe trench as directed by the Owner. Actual payment shall be on a time and material basis and shall be further negotiated with the Owner. Owner shall delete this Bid Item if no slurry backfill within pipe trench is required during construction.

C. Work under this item shall include, but not be limited to, furnishing all labor, materials and equipment for the installation of slurry backfill in lieu of native and/or imported sand within the pipe trench as per the direction of the Owner. Item includes the hauling and disposal of excavated soils.

3.48 Bid Item 152 – Hard Rock Excavation, Removal, and Disposal if Encountered

A. Payment shall be at the unit price per cubic yard.

B. Stipulated allowance in Bid Form to be set aside as allowance for Owner to reimburse Contractor for the excavation, removal, and disposal of hard rock if encountered. Actual payment shall be on a time and material basis and shall be further negotiated with the Owner. Contractor shall provide evidence of encountered hard rock and be subjected to review by Owner and Owner's geotechnical team. Owner must agree to the determination of encountered hard rock prior to reimbursement of stipulated allowance. Owner shall delete this Bid Item if no hard rock is encountered during construction.

C. Work under this item shall include work as described in Special Requirements, but not be limited to, furnishing all labor, materials and equipment for the excavation, removal, and disposal of hard rock. Item includes the hauling and disposal of excavated soils and hard rock.

3.49 Bid Item 153 – Stub-outs at STA. 65+52.25 per Detail 9 on Sheet 10 of Construction Plans

A. No measurement will be made for this lump sum Bid Item.

B. Work to be paid for under this item shall include, but not be limited to: the construction of pipe stub-outs; pipe penetration; reconfiguration of channels within manhole as required; plugging or capping for stub-outs; construct 8-inch dia. PVC pipes and lengths per Detail 9 on Sheet 10; fittings to connect to new manhole; excavation, bedding, backfill, compaction and compaction testing; restoration of temporary and permanent surface features; shoring, and all associated work to construct stub-out as indicated on the Plans and called for in the Specifications for a complete installation.

C. Work excluded from this bid item includes construction of manhole, installation sewer main. Construction of manhole is included in Bid Items 109. Installation of 10-inch sewer main is included in Bid Items 103. No additional compensation will be allowed.

3.50 Bid Item 154 – Remove AC, Backfill, Restore AC for Non-Mainline Trench

A. No measurement will be made for this Lump Sum Bid Item.

B. Work under this item shall include work described in Section E of Specification, but not limited to pavement sawcutting, removal and haul away, excavating non-mainline trench, temporary resurfacing, permanent resurfacing, traffic control, temporary and permanent removal or replacement where required of existing improvements (exclusive of utilities) which interfere with construction (includes all existing improvements located outside the traveled roadway, such as curb, sidewalk, driveways, sprinklers, parkways, etc.), disposing of all

excess excavated or removed material, and all other labor, equipment and material incident to the installation of pipe appurtenances.

3.51 Bid Item 155 – Restore Mainline Trench Base Pave and Compact

- A. Payment shall be at the unit price per lineal foot in place measured along the longitudinal axis between the ends as installed.
- B. Work under this item shall include work described in Section E of Specification, but not limited to the restoration of trench base paving, compaction of base paving, traffic control, disposing of all excess excavated or removed material, and all other labor, equipment and material incident to the installation of sewer main and pipe appurtenances.
- C. The permanent trench base paving shall be constructed to be 1-inch above the existing.

BASIC SPECIFICATIONS
SECTION D
SEWER PIPELINE MATERIALS SPECIFICATIONS

TABLE OF CONTENTS

	<u>Page</u>
1. General.....	D-1
2. Gravity Mains	D-1
A. Vitrified Clay Pipe (VCP).....	D-1
B. Polyvinyl Chlorine (PVC) Plastic Pipe (4" to 15" Dia.).....	D-1
C. Acrylonitrile-Butadiene-Styrene (ABS) (4" & 6" Dia.)	D-2
D. High-Density Polyethylene (HDPE).....	D-2
3. Forcemains	D-2
A. Polyvinyl Chloride Plastic Pipe (PVC), (4" to 12" Dia.).....	D-2
B. High-Density Polyethylene (HDPE).....	D-2

BASIC SPECIFICATIONS

SECTION D

SEWER PIPELINE MATERIALS SPECIFICATIONS

1. GENERAL

Where alternate pipeline materials are allowed by the District, the Contractor shall select such materials and construction methods as will result in a satisfactory completed project. All pipe materials shall be new and unused unless otherwise specified. Materials and strength of pipe shall be as shown on the plans or as specified herein.

2. GRAVITY MAINS

A. Vitrified Clay Pipe (VCP)

(1) General

Vitrified clay pipe and fittings shall not be used for proposed pipelines. However, VCP pipe exists the District's sewer system.

(2) Joints

Existing joints in vitrified clay pipe shall be repaired using a factory-made mechanical compression joint, consisting of a plastic material (Polyurethane), or a factory applied rubber coupling, and shall be produced by a District Approved Manufacturer and shall conform with the requirements of Section 208.2.3 Type "G" Joints of the "Standard Specifications for Public Works Construction", Latest Edition. Note the requirements in Section II.G.2.

B. Polyvinyl Chlorine (PVC) Plastic Pipe (4" to 15" Dia.)

PVC solid wall pipe shall meet the requirements of ASTM Designation D-3034, SDR 26 or 35. Whenever portions of the proposed sewer construction are to be installed on the radius of a curve, the minimum radius and installation of the pipe shall be in accordance with the manufacturer's recommendations.

C. Acrylonitrile-Butadiene-Styrene (ABS) (4" & 6" Dia.)

Acrylonitrile-Butadiene-Styrene (ABS) solid wall pipe shall meet the requirements of ASTM designation D-2751, SDR 23.5 or 35.

D. High-Density Polyethylene (HDPE).

HDPE pipe shall meet the minimum requirements of AWWA C906 and have a minimum thickness of DR 11 and shall be color green. Pipe sizing shall be based on outer diameter (O.D.).

3. FORCEMAINS

A. Polyvinyl Chloride Plastic Pipe (PVC), (4" to 12" Dia.)

The pipe to be used shall be rubber gasket joint polyvinyl chloride pressure pipe, Class 235 or 305, conforming to AWWA C909 -(latest), outside dimensions of cast-iron pipe, plain end x gasket bell ends.

Fittings shall be ductile iron ANSI/AWWA C153(latest), 250 psi rated working pressure, interior lining with 3M Scotchkote 134, fusion-bonded epoxy, 2 coats at 8 mils each coat for a total of 16 mils, mechanical joint ends (MT) to fit Class 235 and 305 PVC - C909 pipe.

When flanged fittings are specified or required, the fittings shall be ductile iron conforming to AWWA C110/ANSI A21.10, Latest.

Locator wire shall be installed over all PVC force mains. Locator wire shall be 14-1 solid insulated copper wire (UF), in a continuous strand, placed on top of pipe and secured with tape. Locator wire shall be brought to the surface at all appurtenances (i.e. sewer air valves, sewer cleanouts, etc.), thus providing continuous "looping" between the appurtenances and the water main. All splices to locator wire shall be made with direct bury connectors.

B. High-Density Polyethylene (HDPE)

See previous specification under Gravity Mains.

BASIC SPECIFICATIONS
SECTION E

SEWER PIPELINE CONSTRUCTION
SPECIFICATIONS

BASIC SPECIFICATIONS

SECTION E

SEWER PIPELINE CONSTRUCTION SPECIFICATIONS

TABLE OF CONTENTS

	<u>Page</u>
1. Sewer Pipe Installation	E-1
A. General	E-1
B. Installation of Pipelines	E-1
C. Sewer Constructed on Radius	E-1
D. Cleaning.....	E-2
E. Plastic Sewer Systems	E-2
F. Measurement and Payment.....	E-7
G. Payments to Contractor for Completed Work	E-8
2. Manholes.....	E-8
A. General.....	E-8
B. Precast Concrete Sections	E-8
C. Manhole Bases.....	E-9
D. Manhole Frames and Covers.....	E-9
E. Standard Manholes.....	E-10
F. Joint Wrap in Groundwater Conditions	E-10
G. Testing of Manholes.....	E-10
H. Lining of Manholes.....	E-11
3. Sewer Laterals.....	E-11
A. General.....	E-12
B. Materials	E-12
C. Tees and Wyes.....	E-12
D. Construction.....	E-12
E. Payment.....	E-12
4. Tests for Leakage in Sewer.....	E-13
A. General.....	E-13
B. Air Testing (Gravity Sanitary Sewers).....	E-13

BASIC SPECIFICATION
SECTION E
SEWER PIPELINE CONSTRUCTION SPECIFICATION
TABLE OF CONTENTS
(continued)

		<u>Page</u>
	C. Water Infiltration Test (Gravity Sanitary Sewers)	E-14
	D. Force Main Pressure Test.....	E-15
5.	Concrete Work.....	E-15
	A. General.....	E-15
	B. Portland Cement Concrete Classification	E-16
	C. Class "B" Concrete Encasement.....	E-16
	D. Reinforced Concrete Encasement	E-16
6.	Pavement Removal and Replacement	E-17
	A. General.....	E-17
	B. Pavement Cutting	E-17
	C. Permanent Trench Pavement	E-18
	D. Asphalt Concrete Cap.....	E-18
7.	Connections to Existing Manholes.....	E-18
8.	Temporary Handling of Sewage	E-19
9.	Video Inspection.....	E-19
9a.	Video Inspection Company Requirements	E-20
10.	Vacuum Testing of Manholes	E-21
	A. General.....	E-21
	B. Pre Versus Post Backfilling Test Criteria	E-21
	C. Reference Standard.....	E-22
	D. Manhole Preparation.....	E-22
	E. Basic Field Testing Procedure	E-22
	F. Minimum Test Times – Standard Manholes.....	E-23
	G. Inspection and Re-Testing.....	E-23
	H. Approved Vacuum Testing Companies.....	E-24
13.	Sewage Spill Containment Plan and Sewer Bypass/Phasing Plan.....	E-24
	A. General.....	E-24

BASIC SPECIFICATIONS
SECTION E
SEWER PIPELINE CONSTRUCTION SPECIFICATIONS
TABLE OF CONTENTS
(continued)

	<u>Page</u>
B. Sewage Spill Containment Plan and Sewer Bypass Phasing Plan.....	E-24
C. Sewer Bypass.....	E-25
D. Existing Sewer Flows.....	E-25

BASIC SPECIFICATIONS
SECTION E

SEWER PIPELINE CONSTRUCTION SPECIFICATIONS

1. SEWER PIPE INSTALLATION

A. General

The Contractor shall furnish and install all sewer pipeline material required for the construction of the sewer and appurtenances as herein specified and shown on the Drawings. All pipeline material shall be installed per manufacturer's published recommendations and per the applicable published standards for the particular material being installed unless otherwise modified herein. In case of any conflict, the most stringent and highest requirement shall govern, and the Contractor shall adhere to said requirement, all at no additional cost to the District.

B. Installation of Pipelines

Pipe laying shall proceed up-grade with the spigot ends of bell-and-spigot pipe pointing in the direction of the flow. Each pipe shall be laid true to line and grade and in such manner as to form a close concentric joint with the adjoining pipe, following manufacturer's instructions for the specific jointing method being used. Any pipe which exceeds 1/2-inch from true alignment, settlement, or joint offset after laying shall be taken up and relayed at the Contractor's expense. The SAG measuring device shall be approved by the District. The SAG measuring device shall have a scale to measure the depth of flow to the invert of the pipe and shall be placed in front of the camera. The Contractor shall clean the pipe by balling.

Notwithstanding prior factory or yard inspection, the District shall have the right to reject any damaged or defective pipe found on the job which in the District's opinion will affect the durability of the installation, and the District may order its removal from the work.

C. Sewer Constructed on Radius

Whenever portions of the proposed sewer construction are to be installed on the radius of a curve, the minimum radius and installation of the pipe shall be in accordance with the manufacturer's recommendations.

D. Cleaning

Before final acceptance of sewer facilities or prior to putting any sewer into service, all sewer facilities shall be visually checked and all foreign objects, materials or obstructions removed from the facilities. The District shall require that the facilities be cleaned by flushing, balling, rodding or other means so that the materials may be removed from the system.

E. Plastic Sewer Systems

(1) General

These provisions establish the requirements for the use of plastic pipe (i.e., PVC) for house lateral and main line sewer construction. Use is limited to those projects which are approved in writing by the District.

Plastic pipe may only be used where indicated on plans approved by the District. Where plastic pipe is used, one type shall be used between consecutive manholes and shall include the house laterals in that system. When pipe and fittings are fabricated by the same manufacturer, contractor will not be allowed to use fittings from other manufacturers.

Plastic pipe shall not be used for sewers serving industrial areas, or areas that, in the opinion of the District, are likely to be rezoned to industrial zones.

(2) Care & Handling

Pipe shall be stored at the jobsite in unit packages provided by the manufacturer. Caution shall be exercised to avoid compression, damage or deformation to bell ends of the pipe. If pipe is to be exposed to direct sunlight for more than 14 days, pipe must be covered with an opaque material while permitting adequate air circulation above and around the pipe to prevent excessive heat accumulation.

If pipe is strung along trench prior to installation, string only pipe to be used within a 24-hour period; all pipe is to be laid on a flat surface. The interior as well as all sealing surfaces of pipe, fittings, and other accessories shall be kept free from dirt and foreign matter. Gaskets shall be protected from excessive exposure to heat, direct sunlight, ozone, oil and grease. Solvent cement when used shall be stored in tightly sealed containers away from excessive heat.

(3) Mandrel Test of ABS & PVC Pipe

Following the placement and densification of backfill and prior to the placing of permanent pavement, all main line pipe shall be cleaned and then mandrelled to measure for obstructions (deflections, joint offsets and lateral pipe intrusions). A rigid mandrel, approved by the Engineer, with a circular cross section having a diameter of at least 95% of the specified average inside diameter, shall be pulled through the pipe by hand.

Ninety-five (95%) of the specified average inside diameter for flexible plastic pipe taken from the appropriate ASTM requirements are as follows:

Pipe Nominal Dia.	ABS Solid Wall (ASTM D-2751) SDR		PVC Solid Wall (ASTM D-3034) SDR	
	23.5"	35"	35"	26"
4"	3.62"	3.69"	3.975"	3.891"
6"	5.33"	5.45"	5.915"	5.793"
8"	N/A	N/A	7.920"	7.754"
10"	N/A	N/A	9.900"	9.692"
12"	N/A	N/A	11.78"	11.538"

(4) High Density Polyethylene (HDPE) Pipe

All laying, slip lining, jointing, testing for defects and for leakage shall be performed in the presence of the District's authorized representative and will be subject to the District's approval before acceptance.

Installation shall conform to the requirements of ASTM D 2321, ASTM D 2774, ASTM F 585, instructions furnished by the pipe manufacturer and supplementary requirements or modifications specified herein. Wherever the requirements of this Section and the aforementioned requirements are in conflict, the more stringent provision shall apply.

HDPE pipe shall be limited for use in easements at the direction of the District. HDPE pipe may be laid with a horizontal curvature; however, the curvature radius shall be no greater than 50-percent of the pipe manufacturer's recommendations.

SHIPMENT, STORAGE AND HANDLING

The Manufacturer shall package products for shipment in a manner for safe transport by commercial carrier. The carrier shall use the appropriate methods and intermittent checks to ensure the pipe is properly supported, stacked and restrained during transport such that the pipe is not nicked, gouged or physically damaged.

When delivered, a receiving inspection shall be performed and any shipping damage shall be reported to the Manufacturer.

Pipe shall be stored at the job site in unit package provided by the manufacturer. The Contractor shall take every precaution to avoid compression damage or deformation to the pipe and to the ends of the pipe. The pipe shall be stored in such a way as to prevent sagging or bending and shall be protected from exposure to direct sunlight. Gaskets should be stored in a cool, dark place out of the direct rays of the sun, preferably in the original cartons.

The Contractor shall prevent undue scratching or gouging of the pipe in storage and handling of the pipe. Sections of the pipe with cuts or gouges in excess of 10% of the pipe wall thickness shall be cut out and removed. The undamaged portions of the pipe shall be rejoined using the heat fusion joining method.

When lifting and handling with slings, only wide fabric slings capable of safely carrying the load shall be used to lift, move or lower pipe and fittings. Metal, wire rope or chains shall not be used. Slings shall be of sufficient capacity for the load and shall be inspected before use. Worn or defective equipment shall not be used.

JOINING

HEAT FUSION JOINING: Joints between plain end pipes and fitting shall be made by butt fusion and joints between the main and saddle branch fittings shall be made using saddle fusion using only procedures that are recommended by the pipe and fittings Manufacturer. External beads produced by the heat fusion

procedure shall not be removed, but internal beads shall be removed. The Contractor shall ensure that persons making heat fusion joints have received training in the Manufacturer's recommended procedure. The Contractor shall maintain records of trained personnel and shall certify that training was received not more than 12 months before commencing construction. The Contractor shall schedule a time to have the pipe Manufacturer provide training to the Contractor's pipe installer and the District's representative.

MECHANICAL JOINING: Polyethylene pipe and fittings may be joined together or to other materials by means of flanged connections (flange adapters and back-up rings) or mechanical couplings designed for joining HDPE pipe or for joining HDPE pipe to another pipe material such as PVC. Mechanical couplings shall be fully pressure rated and fully thrust restrained such that when installed in accordance with the Manufacturer's recommendations, a longitudinal load applied to the mechanical coupling will cause the pipe to yield before the mechanical coupling disjoins. External joint restraints shall not be used in lieu of fully restrained mechanical couplings. When an outside diameter compression mechanical coupling is used, a stainless steel stiffener shall be installed in the bore of the HDPE pipe.

MECHANICAL JOINT AND FLANGE INSTALLATION: Mechanical joints and flange connections shall be installed in accordance with the Manufacturer's recommended procedure. Flange faces shall be centered and aligned to each other before assembling and tightening of the bolts. In no case shall the flange bolts be used to draw the flanges into alignment. Bolt threads shall be lubricated and flat washers shall be fitted under the flange nuts. Bolts shall be evenly tightened according to the tightening partner and torque step recommendations of the Pipe Manufacturer. The final tightening torque shall be 100 ft-lbs. or less as recommended by the Pipe Manufacturer.

LARGE DIAMETER FITTINGS: Fabricated directional fittings 16 inches IPS and larger shall be butt fused to the end of the pipe. The flange directional outlet connections shall be made up in the trench.

EXCAVATION, BEDDING AND BACKFILL

EXCAVATION: Trench excavations shall conform to the plans and drawings or as otherwise authorized noted. The Contractor shall remove excess groundwater if any encountered. The trench walls shall be shored or reinforced when necessary. The Contractor shall take all the necessary precautions to ensure a safe working environment.

BEDDING: Pipe shall be laid on grade and on stable foundation. Unstable or "mucky" trench bottom soils shall be removed and a 6-inch bedding of compacted material shall be installed to the pipe bottom grade. Excess groundwater shall be removed from the trench before laying the bedding and the pipe. A trench cut in rock or stony soils shall be excavated 6 inches below the pipe bottom grade and brought back to grade with compacted bedding. All ledge rock, boulders and large stones shall be removed.

BACKFILLING: Backfilling shall be performed in accordance with the Manufacturer's recommendations and with the District's Standard Plans. Compacted material shall be at least 90% Relative Compaction (R.C.) in 6-inch lifts.

FINAL BACKFILLING: Final backfill shall be placed and compacted to finish grade in accordance with the Manufacturer's recommendations and with the District's Standard Plans. Native soils without debris, stones, boulders, clumps, clods or the like larger than 8 inches may be used.

FIELD TESTING

BUTT FUSION TESTING: On every day that butt fusions are to be made, the first fusion of the day shall be a trial fusion. The trial

fusion shall be allowed to cool completely, then fusion test straps shall be cut out. The test straps shall be 12-inch minimum or 30 times the wall thickness in length with the fusion in the center and 1-inch minimum or 1.5 times the wall thickness in width. Bend the test strap until the ends of the strap touch. If the fusion fails at the joint, a new trial fusion shall be made and the procedure to be repeated. The butt fusion procedure shall not commence until the trial fusion has passed this test.

HYDROSTATIC PRESSURE AND LEAKAGE TESTING:

The Contractor shall perform hydrostatic pressure and leakage test in accordance to the District Standards and in strict accordance with the Manufacturer's recommendations. In the event the section of pipe being tested fails, the Contractor shall locate and repair failure at no additional cost to the Contact. Test results shall have the full acceptance of the District prior to passing. No leakage will be allowed for butt fusion joints.

F. Measurement and Payment

Unless specifically otherwise provided for in these Specifications, full compensation for the work required for a complete installation of sewer pipeline shall be considered included in the bid unit price per linear foot of pipe, and no other compensation shall be made therefore.

Measurement for payment of pipe shall be on the basis of the horizontal linear footage constructed by the Contractor, complete in place. Measurement will exclude the space occupied by structures constructed by the Contractor. Pipe stubs of one pipe length or less installed in manholes shall be included in the price for manholes and will not be included in the measurement for pipe.

Where excavation depth breakdowns are indicated on the Bidding Sheet, the depths (sewer invert to ground surface) shall be determined by the cut sheets prepared by the survey crew.

Where the offset stake elevation varies more than 0.5 feet from the pipe centerline elevation (at the ground surface), the survey crew will take elevation shots to determine the actual cut from ground surface to invert of pipe. Using this procedure, the payment depth will be based upon average depth between 25 foot interval stations.

The District reserves the right to revise pipeline grades, and the Contractor shall trench and lay accordingly. Payment for said grade revisions shall be based upon the unit bid price for the appropriate size and depth category, and no additional compensation shall be made therefore.

G. Payments to Contractor for Completed Work

NO PARTIAL PAYMENT SHALL BE GIVEN TO THE CONTRACTOR FOR CONSTRUCTION OF THE SYSTEM UNTIL THE PORTION OF THE SYSTEM FOR WHICH THE PAYMENT IS TO BE MADE HAS BEEN TESTED AND THE ENGINEER HAS CERTIFIED THAT THE SYSTEM IS SUBSTANTIALLY COMPLETED AND READY FOR USE.

Consideration for partial payment may be given prior to the Contractor completing the permanent pavement (excluding AC Cap), provided the delay of placing the permanent paving was, in the opinion of the Engineer, due to causes beyond the control of the Contractor.

The Engineer may establish priorities for completion of certain parts of the work which may be necessary to provide certain services or which the Engineer may deem advisable in the interests of public safety and convenience.

2. MANHOLES

A. General

The manholes shall be constructed in accordance with the Standard Drawing, and at the locations shown on the plans. All concrete used in the manholes shall be Class "A" Concrete, as provided in Section 5 of these Basic Construction Specifications, unless otherwise indicated herein.

B. Precast Concrete Sections

Precast manhole sections shall conform to the size, shape, form and details shown on the Standard Drawing. The precast cylinder units and precast eccentric top sections shall meet the strength requirements for "Precast Reinforced Concrete Manhole Risers and Tops", ASTM C478. The Contractor shall submit shop drawings of the precast manhole Contractor proposes to use. Each manhole section shall be sealed with an approved preformed, permanently flexible gasket to form a watertight joint. Sealed joints shall conform to ASTM C-990; and shall not shrink, harden or oxidize upon aging. Precast concrete rings are to be joined and sealed with CS-102B butyl/bitumen blended sealant as manufactured by ConSeal of New Carlisle, Ohio. Manhole sections shall be set perfectly plumb.

Sections of various heights shall be used in order to bring the top of the manhole ring and cover to the elevation shown on the plans.

C. Manhole Bases

Manhole bases shall be constructed of Class "A" concrete poured against native undisturbed material and to the form and dimensions shown on the Standard Drawing. If the Contractor over-excavates beyond the vertical dimensions shown on the Standard Drawing, the depth of concrete below the invert of the pipe shall be increased to greater than the 9" minimum as required to meet undisturbed material; all at no additional cost to the District.

Concrete shall be poured to a level ring-section seating surface, with the base centered over the sewer intersection unless otherwise specified. A metal forming ring shall be used to form a level joint groove in the manhole base. The groove will receive the first precast section to form a watertight joint.

Concrete shall be allowed to reach sufficient compressive strength prior to the installation of the precast manhole sections.

Connections of plastic sewer pipe to a manhole shall be watertight. All PVC or other flexible pipes entering or leaving concrete structures, including manholes, shall have a rubber sealing gasket, as supplied by the pipe manufacturer, firmly seated perpendicular to the pipe axis, around the pipe exterior and cast into the structure as a water stop. Additional requirements may be imposed by the District for manhole connections in projects constructed in areas of high or potentially high groundwater.

Precast manhole bases WILL NOT be allowed.

D. Manhole Frames and Covers

Manhole frames and covers shall be in accordance with the Standard Drawing. All frames and covers shall be traffic strength and shall be monogrammed according to the agency having jurisdiction. All frames and covers shall be composite material, EJ Series per District Standard Drawing No. S-7, Sheet 2 of 2.

The elevations at which manhole frames and covers are to be set shall conform to the requirements set forth on the plans, but in all cases shall be governed by the District in the field. Manholes shall not be constructed to final grade until final paving has been completed. Where the cover is in existing pavement or in the traveled way of the existing road shoulder, it is to be placed flush with the

existing surface. Where the cover is in unpaved areas, it shall be set per the Standard Drawing.

Manhole frames shall be set at the required grade and shall be securely attached to the top precast manhole shaft unit with a grout bed and filled as shown on the Standard Drawing. After the frames are securely set in the place provided herein, covers shall be installed and all necessary cleaning and scraping of foreign materials from the frames and covers shall be accomplished to ensure a fine satisfactory fit. All costs of setting and securing manhole frame and cover sets in place as herein provided, including all necessary concrete work, shall be considered as included in applicable contract unit prices and no additional allowance will be made therefore.

E. Standard Manholes

Standard manholes shall be constructed in accordance with the Standard Drawing and at the locations shown on the plans. Materials and construction of standard manholes shall conform in all respects to the applicable provisions of these specifications.

Standard manholes shall be either four-(4)-foot, five-(5)-foot, or six-(6)-foot diameter as shown on the plans. Full compensation for a complete installation of standard manholes shall be paid for at bid unit price per each and no other compensation will be made therefore.

F. Joint Wrap in Groundwater Conditions

In conditions where groundwater exists (or where the soils report indicates it could potentially exist) external wrap all joints with an approved joint wrap impermeable to the groundwater. Joint wrap shall be a minimum of 65 mils thickness with width at least four (4) inches either side of concrete section joint. Product shall be ConWrap as manufactured by ConSeal of New Carlisle, Ohio. The external wrap shall be installed in addition to the required joint sealant per Section E.2.B herein.

G. Testing of Manholes

(1) Ground Water Conditions - Infiltration Test

All manholes in areas where ground water exists over the top of the pipe shall be water tested. All pumping of ground water shall be discontinued for at least three (3) days, after which the manhole shall be tested for infiltration. The inlet(s) and outlet of each manhole shall be

plugged. Test for a minimum of thirty (30) minutes. No visible leakage shall be allowed.

(2) Vacuum Testing

All manholes shall be vacuum tested. Refer to Section E.12 herein for specific requirements.

H. Lining of Manholes

Utilithane 1600 Polyurethane Coating, 30SPL, as manufactured by Prime Coatings Inc. is ASTM D16, Type V, elastomeric, high build, corrosion and abrasion resistant, 100-percent pure polyurethane and 100-percent solids (no solvents) containing no volatile organic compounds or fillers.

Hydrogen sulfide resistant and tested by City of Los Angeles per SSPWC Greenbook Section 211-2. The service duty to be for new concrete sanitation wastewater structures, minimum of 150 mils thickness. Adhesion strength to concrete substrate per ASTM D4541 elcometer pull test, with primer, adhesion meets or exceeds 200 psi or the cohesive strength of the concrete substrate. The following are the minimum properties:

- (1) Shore D Hardness ASTM D2240: D66-70
- (2) Tensile Strength ASTM D638 IV: 3,000 psi
- (3) Tear Resistance ASTM D624: 191 psi
- (4) Elongation at Break ASTM D638 IV: 43 to 50%
- (5) Flexibility ASTM D1737: Zero Bend on 1/2" Mandrel at 20 mils
- (6) Dielectric Strength ASTM D149: Greater than 350 volts/mil
- (7) Abrasion Resistance ASTM D4060, CS-17: 378 mg
Weight Loss 1,000 gms/cycle
- (8) Impact Resistance ASTM G14: 140 in-lbs.

Apply Utilithane LTE 900 Primer for use with concrete substrate. Perform surface preparation per manufacturer's recommendations.

3. SEWER LATERALS

A. General

The sewer laterals shall be constructed as shown on the Standard Drawing. Sewer laterals of the size called for on the plans shall be installed at approximately the locations shown on the plans. The exact location will be determined in the field by the District or private developer. The Contractor shall field reference each lateral connection with a surface marker. The marker shall be as specified on the Standard Drawing.

B. Materials

All sewer laterals shall be constructed using PVC pipe, and shall meet the requirements of ASTM D-3034.

C. Tees and Wyes

Tees and wyes shall be of the same material as the sewer main and the longitudinal barrel of the tee or wye shall be of the same size as the sewer main. Tees or wyes of the size called for on the plans shall be installed at approximately the locations shown on the plans. The exact location will be determined in the field by the District or private developer. A suitable plug shall be provided and installed prior to backfilling operations to ensure a watertight joint.

D. Construction

All sewer laterals shall be installed per the Standard Drawing. In no case shall any lateral be constructed at less than two percent (2%) slope unless shown on plans. The sewer lateral shall be constructed a minimum distance of five (5) feet horizontally from existing water services.

Unless otherwise approved by the District, any required saddle connections to existing mains shall be made with an approved sewer tapping machine. The Contractor shall submit to the District the Contractor's proposed method for tapping, including manufacturer's tapping equipment descriptions, etc.

E. Payment

Sewer laterals shall be paid for at the unit price per foot bid, measured in a horizontal plane along the centerline of the sewer lateral from the centerline of the main sewer to the property line. Said prices per linear foot shall be considered full compensation for furnishing all pipe and fittings, other materials, equipment and labor necessary to install the pipe; including clearing and grubbing, pavement removal and replacement, placement of bedding in the locations shown on the

plans in accordance with the Standard Drawings and specifications, removal and/or replacement of existing interfering improvements; and all other work pertinent to installing the sewer lateral complete in place and for which no additional compensation shall be made therefore.

In payment for tees and wyes, compensation shall be made for each tee and wye installed at the unit price bid, excepting for tees and wyes installed for cleanouts, compensation for which shall be included in the price per cleanout. The portion of the tee or wye covered by such compensation shall be considered to be the branch portion.

4. TESTS FOR LEAKAGE IN SEWER

A. General

All the tests for exfiltration from, and infiltration into the system shall be in accordance with Section 306-1.4 of the "Standard Specifications for Public Works Construction", Latest Edition, except as modified herein. The method of testing and testing equipment shall be approved by the District.

The Contractor shall, at the Contractor's own expense, furnish all materials for making the tests required under the direction of the District.

If the leakage or infiltration, as shown by the tests, exceeds the standard set forth in said section, Contractor shall, at no additional cost to the District, make the necessary repairs by methods approved by the Engineer to correct the deficiencies. All tests must be completed before the street or trench is resurfaced with permanent pavement replacement, but after complete installation and trench compaction of all facilities within a particular section between manholes.

Full compensation for testing shall be included in the bid price of various items of work, and no other compensation shall be made therefore.

B. Air Testing (Gravity Sanitary Sewers)

The Contractor shall test all sewers by means of the air test specified herein, unless otherwise directed by the District. -The air test shall be in accordance with ASTM C828 Standard Test Methods (Latest Edition) for clay pipes and ASTM F1417 (, Latest Edition), for PVC pipeline installationspipes.

Air shall be introduced into the pipeline until 4.0 psi gauge pressure has been reached, at which time the flow of air to the pipe shall be shut off. After the

temperature has stabilized the air pressure shall be permitted to drop and, when the internal pressure has reached 3.5 psi gauge, the time lapse required for the air pressure to drop to 2.5 psi gauge shall be measured. The time lapse required for the air pressure to decrease from 3.5 to 2.5 psi (gauge) shall not be less than that calculated based upon equations from ASTM C828 and ASTM F1417 (PVC).

For clay pipes, An alternate method of determining the allowable time lapse is to utilize the tables from the National Clay Pipe Institute (NCPI) publication entitled "Low Pressure Air Test for Sanitary Sewers". Tables shall be utilized by taking the next highest main line and lateral lengths in the table which exceeds the actual main line and lateral lengths.

_____ If the time lapse exceeds that calculated or shown in the NCPI tables, the pipe shall be presumed to be within acceptable limits; if the time lapse is less, the Contractor shall make the necessary corrections to reduce the leakage to acceptable limits by repair methods approved by the District.

C. Water Infiltration Test (Gravity Sanitary Sewers)

Where ground water conditions are encountered and the water level prior to any pumping or dewatering operations is above the top of the proposed sewer pipe, then the Water Infiltration Test shall be used in lieu of the air test specified in Section 5-B of these Basic Specifications. The Water Infiltration Test shall be in accordance with Section 306-1.4.3 of the Standard Specifications for Public Works Construction, Latest Edition, except as herein modified.

The infiltration shall not exceed 0.0016 gallons per hour per foot of sewer, per inch of pipe diameter. The test shall be run for a minimum period of two (2) hours. The Contractor shall furnish all labor, materials, equipment required for the infiltration test, at no additional cost to the District.

If ground water conditions are such that the ground water level is between the flow line of the proposed sewer pipe and the top of the pipe, both the air test and the water infiltration test shall be conducted at no additional cost to the District. In such a case, the section of pipe being tested shall be deemed acceptable only if it passes both the air test and the water infiltration test.

D. Force Main Pressure Test

Field hydrostatic test and leakage test shall be performed in accordance with all provisions of Section C12, (Water Pipeline Construction Specifications) with the following modifications. Air testing WILL NOT be allowed.

The test pressure at the location of the testing equipment shall be computed on the basis of the relative elevations of the test gauge and the lowest point in the section being tested, and shall result in a pressure of 150 percent of the design pressure at the lowest point in said section. The test pressure at the highest point in the test section shall be not less than 120 percent of design pressure. The test pump and gauge shall be connected to the force main at a location other than the highest point in the line, to facilitate release of air from the high point.

THE MEASURED LEAKAGE SHALL NOT EXCEED 2 GALLONS PER INCH DIAMETER OF PIPE PER 1000 FEET OF PIPE PER 24 HOURS. Should leakage exceed this amount, the section being tested will be considered defective and Contractor shall determine points of leakage, make necessary repairs, and conduct a second test. This procedure shall be continued until leakage equals or is less than the allowable minimum.

5. CONCRETE WORK

A. General

Concrete shall be composed of portland cement, natural aggregates, and water proportioned to produce required strength and well mixed into required consistency, Type II-V for all concrete in contact with wastewater.

Portland cement concrete for manhole bases, cradles, encasements, thrust blocks and structures shall be composed of portland cement, fine aggregate, coarse aggregate and water proportioned and mixed in accordance with the requirements of Section 90 of the State of California Department of Transportation Standard Specifications, except as may be herein modified.

Concrete for manhole bases, cradles and encasements, and all other concrete structures, shall be constructed to the lines and grades and in accordance with the design shown in the details on the plans.

Prior to placing any concrete, the Contractor shall submit to the District the design mix proposed to be used. Said mix shall set forth the weights of cement, sand, coarse aggregate and the amount of water to be used. (Source of supply

shall also be furnished to the District.) The proposed mix shall be approved by the District prior to placing any concrete.

B. Portland Cement Concrete Classification

Concrete Class	Compressive Strength @ 28 days (psi)	Sacks of Cement/CY
"A"	3,500	6
"B"	2,500	5
"C"	2,000	4
"D"	4,000	7

The amount of free water used in concrete shall not exceed 312 pounds per cubic yard, plus 20 pounds for each required 100 pounds of cement in excess of 564 per cubic yard.

Additional cement and a modified concrete mix, as approved by Engineer, will be required for situations requiring pumping of concrete.

C. Class "B" Concrete Encasement

Class "B" concrete shall be used for unreinforced concrete encasements that may be required by unforeseen field conditions. The quantity shown on the proposal is an estimate. The District hereby reserves the right to reduce this item to a small percentage of that shown on the proposal forms, delete it or increase it, without altering the unit price bid for cubic yard of concrete.

The unit price bid for cubic yard of concrete shall include furnishing all materials and labor and equipment to properly place the concrete as may be required, and no other compensation shall be made therefore.

D. Reinforced Concrete Encasement

At the locations shown on the plans, and in accordance with the detail shown on the plans and/or Standard Drawing, and these Basic Specifications, the Contractor shall construct reinforced concrete encasement around the sewer carrier pipe. Concrete for reinforced concrete encasement shall be Class "A". Reinforcing steel (unless otherwise indicated) shall be No. 4 bar, billet steel having minimum yield point of 60,000 psi, formed and spaced as shown on the plans or the Standard Drawing.

Payment for reinforced concrete encasement shall be at the unit price per cubic yard of concrete for the section as shown on the plans or Standard Drawing, and no other compensation will be made therefore.

6. PAVEMENT REMOVAL AND REPLACEMENT

A. General

Pavement removal and replacement for all public roads, including aggregate base and temporary paving where required, shall comply with all the requirements of the agency issuing the Encroachment Permit. In roads established under formation of a special road district, the specifications of the Encroachment Permit shall apply. Any private roads and streets, including driveways in which the surface is removed or damaged, shall be restored to the original grade and crown by the Contractor. Removed or damaged sections shall be restored with the type of improvements (or better) conforming to that which existed at the time the Contractor entered upon the work.

It shall be the responsibility of the bidder to satisfy themselves as to the existing pavement sections prior to submitting their bid.

Full compensation for temporary and permanent resurfacing, including the replacement of base material as required, shall be included in the unit bid price for pavement removal and replacement per linear foot of mainline trench. Any required pavement removal and replacement for manholes, house connection laterals, or other appurtenances shall be considered included in the bid price for the various items, and no additional compensation shall be made therefore.

B. Pavement Cutting

Pavement shall be saw cut to a straight edge parallel to the pipe alignment prior to excavation. Method of pavement cutting shall be as specified by the Agency having jurisdiction. Under no circumstances shall excavation be started prior to scoring of pavement. If the adjacent pavement is disturbed during the Contractor's operation, the pavement shall be recut on a straight line to remove the damaged pavement before resurfacing. Portland cement concrete pavement and sidewalk shall be saw cut. Pavement cutting shall be considered included in the bid price for pavement removal, disposal and replacement, and no additional compensation shall be made therefore.

C. Permanent Trench Pavement

The permanent trench pavement shall be in accordance with the Agency having jurisdiction. If not specifically addressed by the road agency's permit, the existing pavement shall be saw cut and the permanent trench base paving shall be constructed to be flush with existing so that the asphalt concrete is smooth, true to grade and cross section thus providing an even driving surface without undulations. The completed base paving surface shall be provided as described herein whether an asphalt concrete cap is specified or not specified. Should an asphalt concrete cap be required, Contractor shall grind down the base paving prior to placement of the A.C. cap.

D. Asphalt Concrete Cap

Where required by the agency issuing the Encroachment Permit or other agency having jurisdiction, an asphalt concrete cap shall be placed along the length of the trench. The installation of the asphalt concrete cap shall be in accordance with the specifications and policies of the agency having jurisdiction. Where the asphalt concrete cap is not specifically stated in the applicable permit or on the drawings, and when directed by the District, the minimum cap shall be a grinded 0.10-foot thick, 12-foot wide section centered over the center of the trench or the traveled way, and pulled with a "Barber Greene" or equivalent.

Full compensation for placement of asphalt concrete cap, where required, shall be included in the unit bid price per linear foot of mainline trench. Any required asphalt concrete cap for house connection laterals or other appurtenances shall be considered included in the bid price for the various items, and no additional compensation shall be made therefore.

7. CONNECTIONS TO EXISTING MANHOLES

The Contractor shall make connections to existing manholes at the location and elevation shown on the plans and as verified in the field by the Contractor. Where new flow-through channels have to be cut in the existing manhole base, they shall be cut so that the resulting section is smooth and conforms to the intended shape. Deviation from form and grade shall not be greater than 1/4 inch. The channel surface shall be smoothed with epoxy mortar. The new PVC sewer shall be firmly embedded in epoxy grout where it joins the existing manhole.

Payment for connections to existing manholes shall be included in the contract price paid for the various items of work wherein connections to existing manholes are required, and no additional allowance will be made therefore.

8. TEMPORARY HANDLING OF SEWAGE

Certain work in connection with tying into existing sewers and manholes, may require the temporary handling of sewage either by temporary bypass lines, pumping, bulkheading at low flows, or other means, to be approved by the District. Sewage so diverted shall be handled in a manner such that all sewage shall be contained and properly disposed of so as not to create a public nuisance or health hazard. No extra compensation will be allowed in connection with the temporary diversion of sewage, and all such costs shall be included in the various contract unit prices.

Should the Contractor's operation result in fine(s) from other agency jurisdictions or result in the District's need for cleanup assistance, the payment of such fines and District assistance shall be the responsibility of the Contractor.

9. VIDEO INSPECTION

Upon successful completion of the final leakage test for the sewer including manhole vacuum testing, and after base rock placement and compaction is complete, the contractor shall notify the District that the pipeline system is ready for video inspection. Said notification shall be made at least five working days in advance of the actual video inspection date. The video inspection will be made by a video inspection company approved by the District and hired by the Contractor. Video inspection shall be made in the presence of the District or the District's representative. Prior to the video inspection, the contractor shall be responsible to provide the following items:

- A. Clean sewer pipelines free of all dirt, rock, debris, etc.
- B. Water source with an adequate amount water, pipe, hose, etc. to place enough water in the pipelines to evaluate pipeline alignment "SAGS".
- C. Driveable truck access to each manhole within the system to be videoed.
- D. Provide all traffic control methods required.

Should any of the aforementioned items not be in compliance by the time the video inspection is to occur, the contractor shall be subject to compensating the District for all costs incurred.

Full compensation to the contractor for complying with the above requirements shall be considered as included in the contract lump sum provided for such work and no additional allowance will be made therefore.

Upon completion of the video for the subject sewerlines, the video inspection company will provide the District with the DVD (video file format to be viewable on a standard DVD player/computer and/or as approved by the District) and a written report detailing the condition of the interior of the mainline and joints. Subsequent to review of the DVD and report by the District, the District will notify the Contractor that the Contractor may then proceed with completion of the project; or the District will provide a list of corrective measures that must occur prior to acceptance.

Should remedial activities be necessary, the reconstruction methodology shall be approved by the District prior to commencement of the work. Upon completion of the remedial construction, the contractor shall once again notify the District that the sewerlines are ready for a video inspection. The District reserves the right to re-video any portions of the sewer system they determine may have been affected by the reconstruction work activities. Further, all related costs including but not limited to reconstruction materials, labor, equipment, video inspection, District and other agency inspection, and administrative costs shall be borne by the contractor.

9A. VIDEO INSPECTION COMPANY REQUIREMENTS

(Closed Circuit Television Inspection - CCTV)

1. Rotating lens camera with articulating head.
2. Scanning capabilities of 360°.
3. Operative in 100% humidity conditions.
4. Lighting for the camera shall minimize reflective glare.
5. Lighting and camera quality shall be suitable to provide clear, in focus picture of the entire periphery of the pipe for all conditions.
6. Camera focal distance shall be adjustable through a range from 6" to infinity.
7. Remote reading distance (footage) counter shall be accurate to one percent (1%) over the length of the particular section being inspected. Provide depth gauge for SAG measurement acceptable to District.
8. The camera, television monitor, and other components of the color video system shall be capable of producing a minimum of 350 line resolution.
9. Documentation consisting of a DVD (video file format to be viewable on a standard DVD player/computer and/or as approved by the District) and a

written report detailing the condition of the mainline and joints shall be submitted to the District inspector immediately following the video inspection. Each disc shall be labeled with the project or subdivision name, number and pipe run numbers it contains. Each disc shall be delivered in a plastic case. District will also accept the following formats: Thumb Drive and Cloud Service.

10. All video equipment used for domestic sewer systems shall be certified for domestic sewerline inspection only.
11. The CCTV camera operator shall stop at each defect and pipe joint and televise the entire joint with the pan and tilt feature on the head of the camera, initially, in a complete counterclockwise direction followed by a complete clockwise direction. If a defect is found, the CCTV operator will “home up” the camera prior to defining the defect and determining it’s size and location. The CCTV operator will also stop and record any questionable item such as a stain, crack, paint mark, shadow found or character change in a pipe being inspected. In other words, the CCTV operator must stop, record and note anything questionable no matter how minor. The Engineer, as defined by JCSD Standard Specifications, not the CCTV operator, will decide if a questionable items is a “problem event” when that Engineer reviews the video inspection. Refer to Appendix P entitled “Closed Circuit Television (CCTV) Inspection Standards for Acceptance of New Sewers” of the District’s Standards Manual for additional requirements.

10. VACUUM TESTING OF MANHOLES

A. General

All manholes shall be vacuum tested unless otherwise waived in writing by the District. Vacuum testing shall be performed either pre or post backfilling in accordance with the criteria stated herein. In all cases vacuum testing shall be performed prior to video inspection.

Contractor shall be solely responsible for safe access to the manholes and all necessary safety measures required for the vacuum testing.

B. Pre versus Post Backfilling Test Criteria

- (1) All manholes with depths from rim to pipe flowline less than or equal to twelve (12) feet shall be vacuum tested prior to backfilling.

(2) All manholes with depths greater than twelve (12) feet from rim to pipe flowline shall be vacuum test post backfilling.

C. Reference Standard

Unless otherwise modified herein, vacuum testing shall be in accordance with ASTM C1244-11.

D. Manhole Preparation

(1) Plug and seal all lift holes.

(2) Care shall be taken to affect a seal between the vacuum base and the manhole rim. Pipe plugs shall be secured to prevent movement while the vacuum is drawn.

(3) All pipe entering the manhole shall be temporarily plugged, taking care to securely brace the pipes and plugs to prevent them from being drawn into manhole.

E. Basic Field Testing Procedure

(1) The test head gauge shall be placed at the top of the manhole in accordance with the manufacturer's recommendations.

(2) A vacuum of 10 inches of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head closed, and the vacuum pump shut off. The time shall be measured for the vacuum to drop to 9 inches of mercury.

(3) The manhole shall pass if the time for the vacuum reading to drop from 10 inches of mercury to 9 inches of mercury meets or exceeds the values indicated in the table under Par. F.

(4) If the manhole fails the initial test, necessary repairs shall be made in accordance with a submitted plan and method approved by the District. The manhole shall then be re-tested until a satisfactory test is obtained. All repairs shall be the sole responsibility of the Contractor.

F. Minimum Test Times – Standard Manholes

(1) Testing Criteria

Depth of Manhole (feet)	Diameter of manhole (feet.)		
	4	5	6
	Time (Sec.)		
Up to 8 feet	20	26	33
10	25	33	41
12	30	39	49
14	35	46	57
16	40	52	67
18	45	59	73
20	50	65	81
22	55	72	89
24	59	79	97
26	64	85	105
28	69	91	113
30+	74	98	121

For manholes deeper than thirty (30) feet or larger than six (6) feet in diameter contact District for specific requirements.

(2) Testing Form and Certification

Submit testing form to District for approval. Include the following as a minimum:

- Date of Test
- Project Description
- General Contractor
- Agent/Company Performing Test
- Specific Location, Including Station and Manhole Number
- Detailed Test Results
- Certification Signed by Testing Company

G. Inspection and Re-Testing

The Inspector shall be notified when the testing will be performed and by whom. The inspector shall witness testing to verify procedures are being followed correctly, and must be given at least 48 hours notice.

Retesting manholes more than once may result in additional inspection fees chargeable to the Contractor.

H. Approved Vacuum Testing Companies

Vacuum testing shall be performed by Old Castle Precast of Riverside, California or other qualified testing organization approved by the District. Submit qualified testing company along with suitable documentation if alternate is proposed.

13. SEWAGE SPILL CONTAINMENT PLAN AND SEWER BYPASS/PHASING PLAN

A. General

The provisions stated herein shall apply whenever:

1. Existing residential/commercial sewer laterals are specified or indicated on the drawings to be disconnected from the existing sewer line and reconnected to the new line.
2. An existing sewer main is to be removed and replaced with a new sewer main at or near the same location.

Under either of the two cases, flows from the residential/commercial customers shall be contained and bypassed so that service is not interrupted.

B. Sewage Spill Containment Plan and Sewer Bypass Phasing Plan

The Contractor shall generate, and submit to the District at the Pre-Construction Meeting, a "Sewage Spill Containment Plan and Sewer Bypass Phasing Plan" that details the general order of construction, complete with details of where, when, and how the Contractor plans to bypass the existing sewer lateral and mainline flows. Proposed sewer bypass shall only be utilized during normal working hours, and the existing sewer shall be put back into service each day. The temporary bypass will be allowed to operate overnight only with specific written approval by the District. Requests for overnight bypass shall be detailed in the submitted plan. Unless otherwise approved by the District, residential customers may have their service interrupted for no more than 8 hours. Contractor shall provide sanitary sewer services, in accordance with Section A, to residential customers (services for each home) during construction if their service will be interrupted. Sewer service for commercial customers along the proposed

alignment shall not be interrupted by construction. Contractor shall identify all commercial customers in the plan.

C. Sewer Bypass

The Contractor shall arrange for, furnish, install and maintain all required bypass equipment, pumps, generators, piping, fittings, connections, etc. required to bypass the existing sewer flows during construction. All bypass equipment shall be installed and be made immediately operable to provide complete redundancy (primary and backup systems) to handle peak flow. Contractor shall provide for personnel to continuously monitor the bypass system.

D. Existing Sewer Flows

Refer to the Special Requirements section of the specifications for existing sewer flows. If information is not provided in Special Requirements, contact the District.

BASIC SPECIFICATIONS
SECTION F

TRAFFIC CONTROL SPECIFICATIONS

BASIC SPECIFICATIONS
SECTION F
TRAFFIC CONTROL SPECIFICATIONS
TABLE OF CONTENTS

	<u>Page</u>
1. Public Convenience and Safety.....	F-1
A. General.....	F-1
B. Pavement Striping/Marking.....	F-2
2. Traffic and Access.....	F-3
A. General.....	F-3
B. Pedestrian Traffic.....	F-4
3. Street Closures, Detours, Barricades.....	F-4
A. General.....	F-4
B. Signs.....	F-5
C. Barricades.....	F-6
D. Delineators.....	F-6
E. High Level Warning Devices.....	F-6
F. Flashers.....	F-7
G. Flashing Arrow Signs.....	F-7
H. Flagger Control.....	F-7
4. Special Hazardous Substances and Processes.....	F-8
A. Edison Energized Conductors.....	F-8
B. Emergency Provisions.....	F-8
5. Traffic Control.....	F-8
A. General.....	F-8
B. Parking Restrictions.....	F-10
C. Notification to Businesses and Residences.....	F-10
D. Street Closures/Full or Partial.....	F-10
E. Drive Approaches and Pedestrian Access.....	F-10
F. Observation of Job Site.....	F-11
6. Detectors.....	F-11
7. Payment.....	F-12

BASIC SPECIFICATIONS

SECTION D

TRAFFIC CONTROL SPECIFICATIONS

1. PUBLIC CONVENIENCE AND SAFETY

A. General

It is the Contractor's responsibility to comply with the following requirements and to make any adjustments necessary to provide a route around or through the work area that is clear of obstructions and is signed and delineated in accordance with standard industry practice, applicable County standards, Cities requirements, Caltrans standards, current California Manual on Uniform Traffic Control Devices for Streets and Highways, the Work Area Traffic Control Handbook, Encroachment Permit requirements, and the following requirements.

Failure to comply with these requirements will result in an order to cease all work within the public street. Any deviation from these requirements shall require written approval from the Cities and JCSD.

Maintaining traffic shall conform to the Caltrans provisions in 7-1.02 "Load Limitations", 7-1.06 "Safety and Health Provisions", 7-1.08 "Public Convenience", 7-1.09 "Public Safety", and 12-3.04 "Portable Delineators" of the Standard Specifications, the Manual of Traffic Controls, the Section of these contract documents entitled "Insurance - Hold Harmless", and these Special Provisions.

All existing traffic control signs and street name signs shall be maintained in visible locations as directed by the Engineer. The Contractor shall cover conflicting signs and remove conflicting striping and pavement markings.

All warning lights, signs, flares, barricades and other facilities for the sole convenience and direction of public traffic shall be furnished and maintained by the Contractor. All signs shall conform to and be placed in accordance with the

California Manual on Traffic Control Devices for Street and Highways Supplement latest edition and its approved changes.

All construction signs shall be either covered or removed when not required by the nature of the work or if no present hazard to the motorist exists.

No payment for extra work will be allowed for work performed as specified in Section 12-2.02 (Flagging Costs) of the Standard Specifications. Flagging costs will be borne entirely by the Contractor.

All temporary travel lanes shall be a minimum of twelve feet in width unless otherwise authorized by the Cities or shown on the JCSD provided Traffic Control Plan. In addition, lane clearance shall be a minimum of five feet from an open excavation with Type II barricades with "OPEN TRENCH" C27 (CA) signs spaced every 150-feet, and two feet from a curb or other vertical obstruction.

The Contractor shall provide access for USPS, refuse collection, and other service providers on regular basis.

When traffic is diverted from the existing pavement, suitable surfacing shall be provided and shall be approved by the Cities.

The Contractor shall provide personnel who will be responsible for the maintenance of all traffic control devices and will be available on a 24-hour basis. The names and telephone numbers of these personnel shall be submitted to District, County, Cities, and Engineer prior to the start of any construction. The job site shall be inspected daily, during weekends and holidays, and any adjustments, corrections or repairs that are determined to be necessary for the proper operation of the traffic control system shall be made immediately.

B. Pavement Striping/Marking

Temporary striping shall be immediately provided any time the existing striping is removed or the effectiveness is reduced. Temporary striping shall also be provided immediately after paving operations are complete and prior to the opening of the roadway or lanes just paved.

Re-striping will be required under the following conditions:

1. When traffic is to be diverted to the left of an existing double yellow centerline for two or more consecutive nights.
2. When the work area is adjacent to an intersection and results in a transition within the intersection.
3. When the traffic lane is continuously obstructed for more than one week on any street that has two or more lanes in a single direction
4. In other unusual situations where traffic and physical conditions, such as speed or restricted visibility, require special treatment.

The Contractor shall notify the Cities if re-striping is required. The City shall determine the extent of striping removal and re-striping. When temporary pavement striping or markers are provided, the existing striping or markers must be removed or covered by the Contractor. The installation of temporary striping or pavement markers will be done by the Contractor.

2. TRAFFIC AND ACCESS

A. General

When driveways are inaccessible due to the Contractor's work they shall be blocked by two Type II barricades or one Type I barricade and two delineators. Driveways that are ramped or planked for temporary access shall be provided with a barricade or delineator at each side. The Contractor shall give a two week notice to affected property owners prior to blocking any driveways. All driveways shall be open and accessible during non-working hours. If driveways or parking lots are inaccessible due to the Contractor's work, the Contractor shall provide temporary parking in the construction zone or offsite. The Contractor shall provide a safe and accessible path from temporary parking location to home or business.

Construction equipment, or vehicles not actively engaged in the work shall not be parked in such a manner as to restrict or obstruct the traffic flow.

Construction spoils or materials may be stored in the same lanes as the work obstruction provided they remain a minimum of two feet from the travel lane and do not restrict or obstruct the traffic flow.

B. Pedestrian Traffic

When the work area encroaches upon a sidewalk, walkway or crosswalk area, the Contractor shall give special consideration to separating the pedestrian from the work area. The passageway for pedestrians shall be at least four feet in width, free from obstructions, free of abrupt changes in grade, well defined, and meet ADA requirements. Any obstructions in the walkway shall be illuminated during hours of darkness. Minimum vertical clearance to any obstruction within the walkway shall be seven feet.

Where walks are closed by construction, an alternate walkway shall be provided, preferably within the parkway. Where it is necessary to divert pedestrians into the parking lane of a street barricading or delineation shall be provided to separate the pedestrian walkway from the adjacent traffic lane. At no time shall pedestrians be diverted into a portion of the street used for vehicular traffic.

At locations where adjacent alternate walkways cannot be provided, appropriate signs and barricades must be installed at the limits of construction and in advance of the closure at the nearest crosswalk or intersection to divert pedestrians across the street.

3. STREET CLOSURES, DETOURS, BARRICADES

A. General

The Contractor shall not close additional streets except as shown on the Traffic Control Plans within the City without first obtaining the approval of the City. Traffic control and detour diagrams shall be submitted by the Contractor as required by the City and JCSD.

During paving operations, delineators are to be spaced no more than 25-feet apart. At all access points such as intersecting streets, alleys and driveways, barricades and/or delineators shall be provided at five-foot intervals to

prevent vehicular access to the paving area. Where access from an intersecting street is prohibited, a "Road Closed" sign shall be provided at the nearest prior intersection. "No Left Turn" signs shall be provided to prevent traffic from crossing new pavement.

B. Signs

All signs and barricades shall be provided, installed, maintained and removed by the Contractor.

Signs may not be attached to utility poles, public agency sign posts or trees.

The use of any "Regulatory" signs must be approved by the Cities.

Existing "Regulatory" and/or "Warning" signs within or adjacent to the work area must be maintained by the Contractor. Any signs which are damaged or found to be missing during the course of construction shall be replaced by the Contractor. If existing signs are not appropriate for traffic conditions in the work area, the Cities shall be notified to determine if the signs shall be covered, replaced or relocated.

Whenever the Contractor's operations require that parking be restricted, the Contractor shall notify the Cities, and install temporary "No Parking" signs 48 hours in advance of the restriction. Once the signs are installed the Contractor shall notify the Cities Inspector.

All signs shall be free of any contaminants that reduce the visibility or reflectivity, shall be placed so as to be clearly visible to on-coming traffic and shall resist displacement. The center of signs shall be at least 4-1/2 feet above the roadway. Vertical clearance for signs where pedestrian traffic is permitted shall be seven feet. "Advance Warning" signs shall be located on the right hand side of traffic lanes. On a divided highway, supplemental advance warning signs shall be placed on the divider.

Signs to be used during darkness shall be reflectorized or illuminated.

All signs shall be removed or covered when work is not in progress or the lane/street closure is not in effect.

C. Barricades

Barricades shall not be placed in a moving lane of traffic without advance warning, such as a high level warning device and appropriate delineation. A single barricade shall not be placed alone in the traveled way.

When barricades are used to close a street they should be placed so there is no gap large enough for a vehicle to pass, except where necessary to provide access for local traffic or emergency vehicles.

Type II barricades mounted with flashers shall be installed around work areas in parkways.

Markings on barricade rails shall be alternate orange and white stripes sloping downwardly toward the travel lane at an angle of 45 degrees. The entire area of white and orange shall be reflectorized.

The predominant color for other barricade components shall be white. Owner identification shall not be imprinted on the reflectorized face of any rail.

D. Delineators

Where traffic is diverted to the left of an existing double yellow centerline, into a painted median, or into a left turn lane, delineators shall be utilized beyond the work area to return traffic to normal lanes.

Delineator shall be of a material that will withstand impact without appreciable damage to the device, the striking vehicle or passing traffic.

E. High Level Warning Devices

High level warning devices shall be at least 9-feet high with legs, base or truck mounting designed to resist overturning in brisk winds. Sandbags may be used to add weight to the base or legs. High level warning devices shall be equipped with a yoke at the top to accommodate at least three flags. Flags shall be fabricated of high visibility orange material and equipped with stays to keep the flags extended. Torn or dirty flags shall be immediately replaced.

High level warning devices shall be used at locations where construction or maintenance work is being performed within or immediately adjacent to a traffic lane.

F. Flashers

Flashers shall be used only to outline the work area or to provide advance warning. Flashers shall not be used to channelize traffic, to separate opposing traffic or to delineate the path that traffic is to follow. Flashing yellow lights used for advance warning must be clearly distinguishable from the primary delineation and shall be seen above the normal reflectorized units.

G. Flashing Arrow Signs

Flashing arrow signs are sign panels with a matrix of electric lights, capable of sequential arrow displays.

Flashing arrow signs are required on all lane closures where the street has two or more travel lanes in each direction.

H. Flagger Control

Flaggers are required:

1. Where workers or equipment intermittently block a traffic lane.
2. Where two directions of traffic will be using one lane (one flagger is required for each direction of traffic).
3. Where the absence of a flagger would create an undesirable situation for the public and/or workers.

Flaggers should be alert, intelligent, neat in appearance, having good hearing and eyesight, and be capable of commanding the traveling public. They should be stationed far enough from the work to slow down or stop vehicles before they enter the work area.

A symbol sign of a flagger shall be placed as far ahead of the flagger as practicable.

All flaggers shall be provided with an orange jacket (or vest) for daytime use and a reflectorized belt and suspender harness for use at night. During daylight hours, flaggers shall be equipped with a sign paddle. At night, flaggers shall use a red light.

4. SPECIAL HAZARDOUS SUBSTANCES AND PROCESSES

A. Edison Energized Conductors

Contractor hereby promises and agrees that in the performance of the work specified in this contract, it will employ and utilize only qualified persons, as hereinafter defined, to work in proximity to Edison's secondary, primary and transmission facilities. The term "qualified person" is defined in Title 8, California Administrative Code, Section 2700, as follows:

"Qualified Person". A person who by reason of experience or instruction is familiar with the operation to be performed and the hazards involved."

Contractor further promises and agrees that the provisions of this paragraph shall be and are binding upon any subcontractor or subcontractors that may be retained by it, and that Contractor shall take such steps as are necessary to assure compliance by said subcontractor or subcontractors with the requirements of this paragraph.

B. Emergency Provisions

Unusual conditions may arise on the work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage of life and property, due directly or indirectly to the prosecution of the work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

5. TRAFFIC CONTROL

A. General

The work to be performed under these items consist of full compensation for furnishing all labor, materials, tools and equipment for constructing temporary signing and striping for construction area traffic control in accordance with these

Special Provisions and the Traffic Control Plans, including but not necessarily limited to the following:

1. Construction area signs
2. Traffic control system
3. Type I, II, III barricades
4. Removal and reconstruction of traffic striping
5. "K-railing"
6. Portable delineator
7. Cover roadside sign; and
8. Flashing arrow boards

In addition to Section 7-10 of the State Standard Specifications, the installation of temporary signing and striping for construction area traffic control shall conform to Section 12, "Construction Area Traffic Control Devices"; Section 56-2, "Roadside Signs"; and Section 84, "Traffic Stripes and Pavement Markings", of the State Standard Specifications. Signs and barricades may be relocated and reused for successive construction phases, however, signs and barricades shall not be relocated until they are no longer necessary for the construction phase where they were originally required.

All traffic control devices must be in place and in proper working condition before the start of work each day. If it is found that traffic control devices are out of place or in a broken or inoperative condition, work will be halted until the necessary corrections are made.

Traffic control at intersections shall be adjusted to allow traffic access to the intersection immediately after construction is complete enough to allow safe use of the roadway.

B. Parking Restrictions

Parking within the areas of improvement may be restricted during construction operations. Temporary "No Parking" signs shall be provided and posted by the Contractor two (2) working days in advance of construction. The "No Parking" signs shall clearly state the date and hours during which the restriction is effective. "No Parking" sign shall include the city code. Permission and requirements shall be obtained from the Project Engineer for any "No Parking" signs to be posted on existing trees, utility poles, and traffic signs.

C. Notification to Businesses and Residences

All adjacent businesses and residences shall be duly notified by the Contractor, in writing (in English and Spanish), of his proposed operation. Notice shall be delivered at least two weeks prior to start of construction. The Contractor shall be responsible for reproduction of the letters. Renotification will be required if the Contractor's schedule is altered, or other delays occur which affect the project's schedule.

D. Street Closures/Full or Partial

In case of full closure, the Contractor shall provide barricades and reflectorized "Road Closed to Through Traffic" signs at the intersections immediately in advance of all such closures at entrances to the closure, and all detour route signing. Access to local residences shall be maintained at all times as well as access for emergency and other service vehicles. Detour signs shall be posted on wood or metal posts. Signs shall not be posted on any tree, utility pole, or traffic sign.

E. Drive Approaches and Pedestrian Access

At least one driveway must remain open to commercial establishments at all times. The Contractor shall make provisions to interrupt the construction to allow access to existing driveways in the event such access is determined necessary by the Cities.

Access to all driveways in the area of construction shall be open and accessible during nonworking hours. The Contractor shall keep open all

driveways except for short periods of time as outlined in Section 7-10, "Public Convenience and Safety".

Adequate provisions for pedestrian access shall be the responsibility of the Contractor at all locations.

F. Observation of Job Site

The Contractor shall appoint a person responsible to drive, observe, and maintain the job site during weekends and holidays to ensure that the safety of the public, both motoring and pedestrian, is preserved.

The name and telephone number of the person appointed by the Contractor to drive and maintain the site during weekends and holidays shall be supplied to the Project Engineer and Owner prior to start of any work.

6. DETECTORS

The Contractor shall install temporary or permanent detector loops within 24 hours after temporary or permanent pavement installation.

Detector loops' configuration shall be Type E unless otherwise shown on the construction plan, in the Special Provisions or as directed by the Engineer.

Limit Line detector loop configuration shall be modified Type E with diagonal saw cuts and wire winding conforming to Type D loop configuration.

Detector loops' wire shall be Type 2.

Detector loops' lead-in cable shall be Type B.

Detector loops' curb terminations shall be Type A in accordance with Standard Plans ES-5D.

Loop sealant shall be the Hot-Melt Rubberized Asphalt sealant type, unless otherwise directed by the Engineer. Loop conductors and sealant shall be installed on the same day the loop slots are cut.

All detector loops shall be tested sequentially by the following methods:

- impedance (measured by mega ohms)
- resistance (measured by ohms)

- inductance (measured in microhenries)

7. PAYMENT

Full compensation, except as otherwise provided herein, for conforming to the requirements of this article, Traffic Control Plans, Transportation Management Plan, and furnishing, installing and maintaining all traffic control devices, additional wireless detection related equipment, temporary and permanent detector loops, temporary pavement markings, construction signs, traffic directing services, and all the other items shall be paid for on a lump sum basis, and no additional compensation will be allowed therefore.

Progress payments for work under this Section will be computed at the percentage of the total Contract work completed as of the progress payment, excluding contract change orders. The total payments not-to-exceed the total cost for each item. Payment for these Items at the price bid per lump sum (all inclusive) shall be considered as full compensation for doing all work as specified herein and no additional compensation will be allowed therefore.