



DISTRICT PIPELINE REPLACEMENT – 2026

CONTRACT DOCUMENTS

NOVEMBER 2025

Truckee Donner Public Utility District
11570 Donner Pass Road
Truckee, California 96160-0309
(530) 587-3896

TRUCKEE DONNER PUBLIC UTILITY DISTRICT

DISTRICT PIPELINE REPLACEMENT – 2026

CONTRACT DOCUMENTS, TECHNICAL SPECIFICATIONS AND DRAWINGS

These Contract Documents, Technical Specifications and Drawings were prepared by me or under my direction.



Neil D. Kaufman, California RCE No. 60420



11-10-25

Brian Wright, General Manager

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DIVISION 0

BIDDING REQUIREMENTS

SECTION 00030 – NOTICE TO BIDDERS

Notice is hereby given that the Board of Directors of Truckee Donner Public Utility District, Nevada County, California, herein referred to as the “DISTRICT”, will receive sealed bids at the District office, 11570 Donner Pass Road, Truckee California 96161 until 10:00 AM, Tuesday, January 15, 2026, at which time they shall be opened and publicly read for:

DISTRICT PIPELINE REPLACEMENT – 2026

The WORK of this Contract comprises the construction of the following:

- Approximately 2,600 feet of 6-inch and 8-inch pipeline
- Approximately 1,700 feet of 2-inch and 4-inch water service lateral
- Water meter boxes
- Fire hydrants and laterals
- Ancillary items such as fittings, valves, locator wire, marking tape and other appurtenances

Bidding Documents are provided to prospective Bidders to enable them to prepare a Bid. Documents required to be submitted with the Bid are identified in the Section 00100 - Instructions to Bidders.

This project is a public works project and is subject to compliance monitoring and enforcement by the California Department of Industrial Relations (DIR), in accordance with the California Labor Code Section 1770, et seq. No contractor or subcontractor may be listed on a bid for a public works project and no contractor or subcontractor may be awarded a contract for public works unless registered with the DIR, pursuant to Labor Code Section 1725.5.

The successful Bidder shall not pay less than the prevailing rate of per diem wages as determined by the Director of the DIR. Copies of the prevailing rate of per diem wages are on file with the DISTRICT and may also be found on the DIR website at www.dir.ca.gov/dlsr/statistics_research.html. Questions pertaining to predetermined wage rates should be directed to the California Division of Labor Statistics and Research,

No bid will be considered unless it is made on the form provided and accompanied by Certified Check, Cashier's Check, or Bidder's Bond for 10% of the amount of the Bid, made payable to the “Truckee Donner Public Utility District”. The above-mentioned check or bid bond shall be given as a guarantee that the Bidder executes the Contract, if it be awarded to it, in conformity with the Contract Documents. If a Bidder's Bond is used, the bond shall be conditioned such that the Bidder will pay the DISTRICT as liquidated damages the amount specified in the bond unless it enters into a Contract in accordance with its Bid and furnishes Performance and Payment Bonds as described below.

Within 15 days after the notification of the Award of the Contract, the successful bidder or bidders will be required to furnish Performance and Payment Bonds in an amount equal to one hundred percent (100%) of the Contract Price. Said bonds shall be secured from a Surety Company satisfactory to the DISTRICT.

Pursuant to Section 22300 of the Public Contract Code of the State of California, the Contract will contain provisions permitting the successful bidder to substitute securities for any moneys withheld by the District to ensure performance under the Contract.

Each Bid must conform to the requirements of the Contract Documents, all of which may be examined at the offices of the DISTRICT: 11570 Donner Pass Road, Truckee, California, 96161. Copies of the Contract Documents may be obtained in electronic format at no charge upon request.

The DISTRICT reserves the right to reject any and all bids, waive any irregularities or informalities in the bidding, be the sole judge of the suitability of the items offered, and to accept any bid that it determines to be in its best interest.

END OF SECTION 00030

SECTION 00100 – INSTRUCTIONS TO BIDDERS

1. NOTICE TO BIDDERS

Truckee Donner Public Utility District, hereinafter referred to as "DISTRICT," advises that sealed bids subject to the conditions contained herein, will be received at the DISTRICT office until 10:00 AM, Thursday, January 15, 2026 at which time they shall be opened and publicly read for:

DISTRICT PIPELINE REPLACEMENT – 2026

2. BID FORM

Bidders shall use the bid forms bound in these documents as Bid Forms. Each Bid must include the following:

- All pages of the Bid Forms (Section 00300)
- Certification Regarding Debarment and Other Matters (Section 00350)
- Iran Contracting Act Certification (Section 00360)
- Public Works Contractor Registration Certification (Section 00370)
- An acceptable bid security. The form of Bid Bond provided in Section 00435 – Bid Bonds may be used, or the Bidder may use another form of bid security as described in Article 1.5 of this Section.

It is not necessary for the Bidder to submit the entire set of Contract Documents with its bid.

3. DEFINED TERMS

Terms used in the Section 00100 – Instructions To Bidders, Section 00500 – Agreement, Section 00800 – Special Provisions have the meanings assigned to them in Article 1.1 of Section 00800 – Special Provisions.

4. COMPLIANCE WITH CONTRACTOR'S LICENSE LAWS

- A. Pursuant to Section 7028.15 of the Business and Professions Code and Section 3300 of the Public Contract Code, Bidders must possess licenses issued by the State of California Contractors License Board for performance of this Contract. Subcontractors must possess the appropriate licenses for each specialty subcontracted.
- B. Joint venture Bidders must possess a joint venture license. Each party to a joint venture must be properly licensed for the work of this Project.
- C. The following conditions shall also apply:
 1. No contractor or subcontractor may be listed on a Bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)]

2. No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5; and
3. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

5. BID SECURITY

Each Bid shall be accompanied by a certified or cashier's check payable to the order of the Truckee Donner Public Utility District, for a sum not less than 10% of the amount of the Bid, or accompanied by a Bid Bond on the form attached or other acceptable form in an amount not less than 10% of the amount of the Bid provided by a surety licensed to do business in the State of California and appearing on Treasury Department Circular 570, as amended, conditioned that the Bidder will pay the DISTRICT as liquidated damages the amount specified in the bond unless it enters into a contract in accordance with its Bid and furnishes the insurance certificate, and payment and performance bond herein mentioned, within fifteen (15) days from the date at which it is notified that it is the successful bidder.

6. EXAMINATION OF CONDITIONS

- A. Bidders shall satisfy themselves as to the conditions by personal examination of the Contract Documents and site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the proposed improvements and by other examinations and investigations that they may wish to make as to the nature of the work and the difficulties encountered.
- B. Submitting of a Bid shall constitute affirmation by the Bidder that they have complied with the following:
 1. Carefully examined the Contract Documents.
 2. Visited the site of the Work.
 3. Included in the Bid sum amounts sufficient to cover all items required by the Contract Documents and any applicable permits.
- C. The failure or omission of any Bidder to receive or examine any form, instrument, addendum, or other documents or the site of the proposed Work shall in no way relieve any Bidder from any obligation with respect to its Bid or the Contract.

7. INTERPRETATION OR CORRECTION OF CONTRACT

- A. The Bidder shall promptly notify the DISTRICT of any ambiguity, inconsistency, or error which they may discover in the Contract, or, if applicable, the site or local conditions.

- B. If the Bidder requires clarification or interpretation of the Contract, they shall make a written request to reach the DISTRICT at least seven (7) days prior to the scheduled bid opening. Questions may be sent via email to neilkaufman@tdpud.org.
 - C. Any interpretations, corrections, or changes to the Contract prior to the bid opening shall be made by addenda issued to all Bidders. Each Bidder shall acknowledge receipt of each addendum in the Bid Forms.
 - D. Interpretations, corrections, or changes of the Contract prior to Bid opening made in any other manner than as described above will not be binding, and Bidders shall not rely upon such interpretations, corrections and changes.
8. PRE-BID CONFERENCE
- A. A pre-bid conference will be held at 2:00 PM on Tuesday, December 16, 2025. The conference will be held at the District Office at 11570 Donner Pass Road, Truckee, California, 96161.
 - B. Attendance at the pre-bid-conference is OPTIONAL. Representatives of the DISTRICT will be present to discuss the Project. In response to questions arising at the conference, the DISTRICT will issue Addenda as the DISTRICT considers necessary.
 - C. A site tour will be included in the prebid conference. Bidders shall be responsible to furnish their own transportation and persons attending the conference and site tour shall comply with appropriate social distancing and personal protection requirements.
 - D. In the event of inclement weather, the DISTRICT reserves the right to change the format of the pre-bid conference. Such changes may include moving the pre-bid conference to an on-line platform such as GotoMeeting or Zoom, and/or creating a self-guided tour where interested Bidders may tour the Project site on their own. Any modifications to the pre-bid conference format will be communicated as an Addendum.
9. LISTING OF SUBCONTRACTORS
- A. Bidders shall list, in the Subcontractor List of the Bid Forms, the name, the location of the place of business, the California contractor license number, and public works contractor registration number issued pursuant to Section 1725.5 of the Labor Code of, and the portion of the Work to be performed by, each Subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the contract documents, in an amount in excess of one-half of 1 percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater.
 - B. The attention of Bidder is directed to Public Contract Code §4100, et seq. (Subletting and Subcontracting Fair Practices Act), related to penalties for use of unauthorized Subcontractors or by making unauthorized substitutions.

10. BIDDER QUALIFICATIONS

- A. Bids will be received from qualified Bidders only. By submitting a Bid, Bidder warrants that it has:
1. Adequate financial resources to accomplish Work required.
 2. Adequate equipment to accomplish Work required.
 3. Personnel with sufficient experience to accomplish Work required.
 4. Sufficient experience in the type of Work proposed.
 5. Not violated public works laws as set forth in Labor Code Section 1777.7 related to apprentice/journeyman ratio.
 6. The appropriate contractors' license for the Work to be performed (P.C.C. §3300), which the DISTRICT has determined to include: A-General Engineering or C-34 Pipeline.
 7. No pending claims regarding performance, failure to deliver, labor violations, etc.
 8. Ability to provide proof of Workers' Compensation, public liability and property damage insurance.

11. NONCOLLUSION AFFIDAVIT

In accordance with Public Contract Code Section 7106, Bidders are required to execute and submit the "Noncollusion Affidavit" included in the Bid Forms.

12. BID FORMS

- A. Bidders are furnished with Section 00300 - Bid Forms. The Bid Forms may contain a schedule of items requesting lump sum prices. It may also state estimated quantities of various kinds of Work to be performed, or materials to be provided, with a schedule of items for which unit prices are required.
- B. The unit prices or lump sum pricing must include full compensation for providing all labor, materials, services, tools, equipment and whatever else is required to perform all work in accordance with the requirements of the Contract Documents.
- C. All Bids must be submitted on the Bid Forms furnished by the DISTRICT, and the Bidder is solely responsible to diligently follow all directions required by the DISTRICT with respect to the completion and submission of the Bid Forms, including these Instructions and as required under the Bid Documents. A Bid not submitted on the form furnished by the DISTRICT, or that does not comply with the DISTRICT's directions with respect to the completion and submission of the Bid Forms, may be considered non-responsive by the DISTRICT in its sole discretion. The DISTRICT reserves all rights to reject any or all Bids, and to waive any minor irregularity in the completion of the Bid Forms, within its sole discretion.

- D. The Bid Forms, and all other Bid Documents shall be executed in accordance with applicable Laws and Regulations, and as required under the Contract Documents, subject to the following:
 - 1. Numbers shall be stated both in writing and in figures where so required.
 - 2. In case of a difference in written words and figures, the amount stated in written words shall govern.
 - 3. The completed forms shall be without interlineations, alterations, or erasures.
 - 4. A correction to mistakes made by Bidder on figures or statements shall be validated with signed initials by the person or persons signing the Bid Forms.
 - 5. The Bid shall be executed by the person or persons legally authorized to bind the Bidder, as required in Bid Forms.
 - 6. As stated in Bid Forms, by signing the Bid Forms, Bidder represents that the statements made therein and elsewhere in the Bid Documents are true and correct and subject to penalty of perjury under California law.
- E. Bids by corporations must be executed in the corporate name by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed by the secretary or an assistant secretary.
- F. Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature.
- G. The Bid shall contain an acknowledgement of receipt of all Addenda (the numbers of which must be filled in on the Bid Forms).

13. MANNER OF SUBMITTING BIDS

- A. Prior to submitting Bids, bidders must make sure that:
 - 1. The Bid is complete and signed.
 - 2. The Bid security in the proper amount is attached to the Bid package.
 - 3. The Bid schedule is complete and the totals are correct.
 - 4. The Bidder has acknowledged the receipt of any Addenda.
 - 5. The Bidder has familiarized itself with all applicable laws and regulations. It is the sole responsibility of the Bidder to ensure that its Bid is received at the proper time and at the proper location. Bids received after the time fixed for receiving them will not be considered.
 - 6. Late Bids will be returned by the DISTRICT to the Bidder unopened.

7. When submitting a bid, place the complete bid document in a sealed envelope, mark the envelope "Sealed Bid" and mail to District Pipeline Replacement – 2026 Bid, Attn: Contract Administrator, Truckee Donner PUD, 11570 Donner Pass Road, Truckee, CA 96161. Bid documents shall be submitted in hard copy. Bid packages submitted in electronic form shall not be acceptable.

B. The Bidder certifies that in submitting its Bid it has taken into account all conduct which can be reasonably expected arising out of social distancing requirements and changes in the nature of construction means and methods including as arising out of the health and safety directives issued by all applicable governmental agencies and levels (Federal, State and local) due to the COVID-19 pandemic, and related matters. Bidder expressly represents that it has, to the best of its ability, taken all such factors, directives and requirements into account in formulating its Bid for the Work and has satisfied itself that all such costs are included in the total Bid price set forth in its Bid.

14. BID MODIFICATIONS

Bids may be modified up until the time of bid opening. Modifications must be in writing and may be sent in writing only must comply with the bid requirements. Modifications received via telephone, facsimile machine, or electronic mail will not be allowed.

15. BID WITHDRAWAL

Bids may be withdrawn any time prior to the time set for Bid opening only by written request of the Bidder. Withdrawal of a Bid does not prejudice the right of the Bidder to file a new Bid at any time prior to the time fixed for receiving Bids in this Instruction to Bidders. Once Bids are opened, Bids may only be withdrawn in strict accordance with the provisions of Public Contract Code Sections 5100 through 5107. All Bids shall be deemed a firm offer for not less than forty-five (45) days after the date of the Bid opening.

16. POSTPONEMENT OF OPENING

The DISTRICT reserves the right to postpone the time and date of bid opening as the DISTRICT deems necessary. Such postponement will be conveyed to all Bidders by written or facsimile notice which will state the new opening time and date.

17. BIDS TO REMAIN SUBJECT TO ACCEPTANCE

All Bids will remain subject to acceptance for forty-five (45) days after the day of the Bid Opening, which may be extended by agreement between the Bidder and the DISTRICT. The DISTRICT may, in its sole discretion, release any Bid and return the Bid Security prior to that date.

18. ENVIRONMENTAL PROVISIONS

It shall be the duty of the Bidder to familiarize itself with, and to comply with applicable environmental laws for the Work.

19. AWARD OF CONTRACT

- A. Bidders must bid all of the items on the Bid Schedule. The DISTRICT intends to award one contract for the construction described in the Bid Schedule. The lowest Bid will be determined by the DISTRICT, based on the "Total Amount Of Bid" given on the bottom of the Bid Schedule Summary Table on Page 00300-2 of the Bid Forms.
- B. The DISTRICT reserves the right to reject any and all Bids and to waive any and all irregularities. The DISTRICT reserves the right to reject any nonconforming, nonresponsive, incomplete, unbalanced or conditional Bids.
- C. In evaluating Bids, the DISTRICT will consider whether or not the Bids comply with the prescribed requirements, and include such Alternates, unit prices and other data, as may be required in the Bid Forms and supplements thereto. Further, the DISTRICT may reject any Bid, which, in its opinion, 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.
- D. In the event that the product of a unit and an estimated quantity does not equal the extended amount quoted, the unit price shall govern, and the correct product of the unit price and the estimated quantity shall be deemed to be the amount bid. If the sum of two or more items in a bidding schedule does not equal the total amount quoted, the individual item amounts shall govern and the correct total shall be deemed to be the amount bid.
- E. All quantities stated on the Bid Schedule are estimates only. The DISTRICT in no way guarantees that the actual quantities for Work performed will be equal to or similar to the estimated quantities.
- F. If the Contract is to be awarded, the DISTRICT shall issue a Notice to Award, and the Contract will be awarded to the lowest qualified, responsible and responsive Bidder that in the DISTRICT's judgment will be in the best interests of the Project.

20. INSURANCE

The DISTRICT's requirements for insurance are set forth in Section 00500 - Agreement. The Successful Bidder shall purchase insurance from an insurance company or companies who meet the requirements as set forth in the Contract Documents, including, without limitation, Section 00500 - Agreement.

The Successful Bidder shall procure all insurance required under the Contract Documents, and deliver all required insurance certificates to the DISTRICT and Engineer prior to beginning work. In no case will the Notice to Proceed be considered as allowing the Work to begin until the insurance certificates are received by the DISTRICT, even though the Contract Time as stated in the Notice to Proceed will commence to run.

21. SIGNING OF AGREEMENT

When the DISTRICT gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within fifteen (15) days thereafter, the Successful Bidder shall sign and deliver the required number of counterparts of the Agreement together with the required Bonds to the DISTRICT. Within ten (10) days thereafter the DISTRICT will deliver one fully signed counterpart to the Successful Bidder.

22. RETAINAGE

The percentage of retainage that will be withheld from each Progress Payment is set forth in the Agreement. Pursuant to provisions of Section 22300 of the California Public Contract Code, the Bidder may substitute securities for any monies withheld by the DISTRICT to ensure performance of the Work.

23. CONTRACT

The Contract includes the Notice to Contractors, Instructions to Bidders, and Bidding Documents, Agreement, Performance and Payment Bond, Special Provisions, Technical Specifications, Change Orders, Field Orders, Drawings and Addenda and together they are the Contract Documents.

The Agreement, when executed, shall be deemed to include the entire agreement between the parties thereto, and the CONTRACTOR shall not claim any modification thereof resulting from any representation or promise made at any time by any officer, agent or employee of the DISTRICT or by any other person.

24. TIME OF COMPLETION

Pursuant to the provisions of Section 00500 – Agreement, the Work must be completed by October 30, 2026. It is anticipated that Board of Directors will award a contract at its February 4, 2026, meeting.

25. WAGE RATES

- A. Pursuant to provisions of the California Labor Code, the Director of Industrial Relations has ascertained the prevailing rate of per diem wages in the locality in which the work is to be performed, applicable to the work to be done. Copies of these wage determinations are on file with the DISTRICT.
- B. Bidders shall notify the DISTRICT promptly, in writing, of labor classifications not listed in the prevailing wage determination but necessary for the performance of the Work. When a labor classification not listed in the prevailing wage determination is necessary for the performance of the Work, the Bidder may be required to pay, for the classifications not listed, the rate applicable to the classification most closely related to that which is not listed.
- C. The Bidder shall pay not less than the prevailing rate of per diem wages determined by the Director of Industrial Relations, and the Bidder shall be responsible for its

Subcontractors paying not less than said per diem wages. The Bidder may be subject to penalties for paying less than the prevailing wages pursuant to provisions of California Labor Code, Section 1775.

26. BID PROTEST PROCEDURE

- A. All disputes and/or protests regarding the bidding process shall be subject to the following procedures. In submitting a Bid to the DISTRICT, the Bidder agrees to comply with and to be bound by these procedures.
- B. Any Bid protest must be submitted in writing and received by the DISTRICT before 5:00 p.m. on the fifth (5th) working day following Bid opening ("Bid Protest Deadline").
- C. The initial protest document must contain a complete statement of the basis for the protest, and all supporting documentation.
- D. The party filing the protest must have actually submitted a Bid for the Work. A subcontractor of a party submitting a Bid for the work may not submit a Bid protest. A party may not rely on the Bid protest submitted by another Bidder but must timely pursue its own protest.
- E. The protest must refer to the specific portion of the Contract Document which forms the basis for the protest.
- F. The protest must include the name, address and telephone number of the person representing the protesting party.
- G. The party filing the protest must, by or before the Bid Protest Deadline, and concurrent with its delivery to the DISTRICT, transmit (via fax or e-mail) a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest which may be adversely affected by the outcome of the protest, including the protested Bidder. Such parties shall include, without limitation, all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest. Evidence that the protesting Bidder has complied with this requirement shall be provided at the time the Bid protest is submitted to the DISTRICT.
- H. The protested Bidder may submit a written response to the protest, provided the response is received by the DISTRICT before 5:00 p.m., within five (5) working days after the Bid Protest Deadline or after receipt of the bid protest, whichever is sooner (the "Response Deadline"). The response must include all supporting documentation, and any materials submitted after the Response Deadline will not be considered. The response must include the name, address and telephone number of the person representing the protested Bidder.
- I. The procedure and time limits set forth in this paragraph are mandatory and are the Bidder's sole and exclusive remedy in the event of Bid protest. The Bidder's failure to timely comply with these procedures shall constitute a waiver of any right to further pursue the Bid protest including filing a Government Code Claim or legal proceedings.

END OF SECTION 00100

SECTION 00300 – BID FORMS

DISTRICT PIPELINE REPLACEMENT – 2026

TO: TRUCKEE DONNER PUBLIC UTILITY DISTRICT
11570 Donner Pass Road
Truckee, California 96161

ENTER INTO CONTRACT

The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with the DISTRICT in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid, and in accordance with the other terms and conditions of the Contract Documents.

ACCEPTANCE OF TERMS AND CONDITIONS

Bidder accepts all of the terms and conditions of the Notice to Bidders and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for forty-five (45) after the day of Bid opening.

RECEIPT OF ADDENDA

The undersigned Bidder acknowledges receipt of the following Addenda:

No. 1:	_____ signed	_____ dated
No. 2:	_____ signed	_____ dated
No. 3:	_____ signed	_____ dated
No. 4:	_____ signed	_____ dated
No. 5:	_____ signed	_____ dated
No. 6:	_____ signed	_____ dated
No. 7:	_____ signed	_____ dated
No. 8:	_____ signed	_____ dated
No. 9:	_____ signed	_____ dated

**DISTRICT PIPELINE REPLACEMENT – 2026
 BID SCHEDULE SUMMARY TABLE**

BID ITEM	DESCRIPTION	SUBTOTAL
A	Mobilization	_____
B	Total - Bid Schedule 1 – Ski Bowl Condominiums-Street A – Drawing P-1	_____
C	Total - Bid Schedule 2 – Ski Bowl Condominiums-Street B – Drawing P-2	_____
D	Total - Bid Schedule 3 – Ski Bowl Condominiums-Street D – Drawing P-3	_____
E	Total - Bid Schedule 4 – Ski Bowl Condominiums-Street E – Drawing P-4	_____
F	Total - Bid Schedule 5 – Donner Pass Road at Fire House – Drawing P-5	_____

Total Amount of Bid (Items A + B + C + D + E + F): _____

BID SCHEDULE 1 – SKI BOWL CONDOMINIUMS – STREET A – DRAWING P-1

BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	SUBTOTAL
1A	6" Water Main - Station 0+00 to Station 2+11	211	FT	_____	_____
1B	8" Water Main - Station 2+11 to Station 2+21	10	FT	_____	_____
1C	8" Water Main - Station 3+78 to Station 10+68.48	691	FT	_____	_____
1D	2" PE Water Service Lateral	300	FT	_____	_____
1E	Slipline 2" Water Service Lateral at Station 0+34	130	LF	_____	_____
1F	4" Water Service Lateral	20	LF	_____	_____
1G	Double Water Service (DS)	1	EA	_____	_____
1H	Six-Meter Water Service (6S)	1	EA	_____	_____
1I	1.5" Commercial Water Service	2	EA	_____	_____
1J	Connect to Exist 2" PE Water Service Lateral	5	EA	_____	_____
1K	Fire Hydrant Assembly	2	EA	_____	_____
1L	Tee/Valve Assembly at Station 1+63	1	LS	_____	_____
1M	Tee/Fire Hydrant Assembly at Station 2+11	1	LS	_____	_____
1N	Tee/Valve Assembly at Station 4+26	1	LS	_____	_____
1O	Connection to Existing 8" PVC Pipe at Station 2+21	1	LS	_____	_____
1P	Connection to Existing 8" MJ Tee at Station 3+78	1	LS	_____	_____
1Q	Connection to Existing 8" Steel Pipe at Station 10+68.48	1	LS	_____	_____
1R	Rock Excavation	30	HRS	_____	_____
1S	AC Pavement and Base - Roadways & Driveways	5,600	SF	_____	_____
1T	Additional ½" Thickness of AC Pavement	5,600	SF	_____	_____
1U	All Other Work Required by the Contract Documents	1	LS	_____	_____
Total – Bid Schedule 1:				_____	_____

BID SCHEDULE 2 – SKI BOWL CONDOMINIUMS – STREET B – DRAWING P-2

BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	SUBTOTAL
2A	8" Water Main	221	FT	_____	_____
2B	2" PE Water Service Lateral	70	FT	_____	_____
2C	4" Water Service Lateral	200	FT	_____	_____
2D	Double Water Service (DS)	1	EA	_____	_____
2E	Four-Meter Water Service (4S)	1	EA	_____	_____
2F	Six-Meter Water Service (6S)	3	EA	_____	_____
2G	Tee/Valve Assembly at Station 0+46	1	LS	_____	_____
2H	Tee/Valve Assembly at Station 1+06	1	LS	_____	_____
2I	Connection to Existing 8" Steel Pipe at Station 0+00	1	LS	_____	_____
2J	Connection to New 8" Valve at Station 2+20.15	1	LS	_____	_____
2K	Rock Excavation	10	HRS	_____	_____
2L	AC Pavement and Base - Roadways & Driveways	2,000	SF	_____	_____
2M	AC Pavement and Base - Paved Pathways	500	SF	_____	_____
2N	Additional ½" Thickness of AC Pavement	2,000	SF	_____	_____
2O	All Other Work Required by the Contract Documents	1	LS	_____	_____
Total – Bid Schedule 2:				_____	_____

BID SCHEDULE 3 – SKI BOWL CONDOMINIUMS – STREET D – DRAWING P-3

BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	SUBTOTAL
3A	8" Water Main	757	FT	_____	_____
3B	2" PE Water Service Lateral	175	FT	_____	_____
3C	4" Water Lateral	400	FT	_____	_____
3D	Four-Meter Water Service (4S)	2	EA	_____	_____
3E	Six-Meter Water Service (6S)	6	EA	_____	_____
3F	Fire Hydrant Assembly	2	EA	_____	_____
3G	Air Release Valve Assembly	1	EA	_____	_____
3H	Tee/Valve Assembly at Station 0+63	1	LS	_____	_____
3I	Tee/Valve Assembly at Station 2+25	1	LS	_____	_____
3J	Tee/Valve Assembly at Station 2+73	1	LS	_____	_____
3K	Tee/Valve Assembly at Station 4+90	1	LS	_____	_____
3L	Connection to Existing 8" PVC Pipe at Station 0+00	1	LS	_____	_____
3M	Connection to Existing 8" Steel Pipe at Station 7+56.19	1	LS	_____	_____
3N	Rock Excavation	30	HRS	_____	_____
3O	AC Pavement and Base - Roadways & Driveways	5,800	SF	_____	_____
3P	AC Pavement and Base - Paved Pathways	300	SF	_____	_____
3Q	Additional ½" Thickness of AC Pavement	5,800	SF	_____	_____
3R	All Other Work Required by the Contract Documents	1	LS	_____	_____
Total – Bid Schedule 3:				_____	_____

BID SCHEDULE 4 – SKI BOWL CONDOMINIUMS – STREET E – DRAWING P-4

BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	SUBTOTAL
4A	8" Water Main	385	FT	_____	_____
4B	2" PE Water Service Lateral	120	FT	_____	_____
4C	4" Water Lateral	250	FT	_____	_____
^A 4D	Double Water Service (DS)	1	EA	_____	_____
4E	Four-Meter Water Service (4S)	3	EA	_____	_____
4F	Six-Meter Water Service (6S)	2	EA	_____	_____
4G	Fire Hydrant Assembly	1	EA	_____	_____
4H	Tee/Valve Assembly at Station 1+01	1	LS	_____	_____
4I	Tee/Valve Assembly at Station 2+40	1	LS	_____	_____
4J	Tee/Valve Assembly at Station 3+48	1	LS	_____	_____
4K	Connection to Existing 8" Gate Valve at Station 0+00	1	LS	_____	_____
4L	Connection to Existing 8" Steel Pipe at Station 3+84.72	1	LS	_____	_____
4M	Rock Excavation	20	HRS	_____	_____
4N	AC Pavement and Base - Roadways & Driveways	3,300	SF	_____	_____
4O	AC Pavement and Base - Paved Pathways	350	SF	_____	_____
4P	Additional ½" Thickness of AC Pavement	3,300	SF	_____	_____
4Q	All Other Work Required by the Contract Documents	1	LS	_____	_____
Total – Bid Schedule 4:				_____	_____

BID SCHEDULE 5 – DONNER PASS ROAD AT FIRE HOUSE – DRAWING P-5

BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	SUBTOTAL
5A	8" Water Main	288	FT	_____	_____
5B	Connection to Existing 16" DI Pipe at Station 0+00	1	LS	_____	_____
5C	Connection to Existing 8" Gate Valve at Station 2+87.57	1	LS	_____	_____
5D	Rock Excavation	5	HRS	_____	_____
5E	AC Pavement and Base (trench restoration) – Donner Pass Road	450	SF	_____	_____
5F	AC Pavement and Base (trench restoration) – Fire House Parking Lot	1,100	SF	_____	_____
5G	Additional ½" Thickness of AC Pavement (trench restoration)	1,100	SF	_____	_____
5H	All Other Work Required by the Contract Documents	1	LS	_____	_____
Total – Bid Schedule 5:				_____	_____

CALIFORNIA CONTRACTOR'S LICENSE AND ENTITY INFORMATION

The terms used in this Bid are defined in the Section 00800 – Special Provisions and the Contract Documents and shall have the same meanings assigned to them. Bidder declares that it will possess a contractor’s license of the required classification, valid in the appropriate jurisdiction at the time of contract award.

Contractor's license number(s): _____

License classification(s): _____

License expiration date(s): _____

SUBMITTED on _____, 20_____.

Bidder must provide the following information if Bidder is:

An Individual/Sole Proprietorship:

Name (typed or printed): _____

By: _____ (SEAL)
(Individual's signature)

Doing business as: _____

Business Address: _____

Phone Number: () _____ FAX Number: () _____

Email Address of Authorized Representative: _____

A Partnership or LLC:

Partnership or LLC Name: _____(SEAL)

By: _____
(Signature of general partner or member -- attach evidence of authority to sign)

Name (typed or printed): _____

Business address: _____

Phone Number: () _____ FAX Number: () _____

Email Address of Authorized Representative: _____

A Corporation:

Corporation Name: _____

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____ (CORPORATE SEAL)

Attest: _____
(Signature of Corporate Secretary)

Business address: _____

Date of Qualification to do business is _____

Phone Number: () _____ FAX Number: () _____

Email Address of Authorized Representative: _____

A Joint Venture:

Joint Venture Name: _____ (SEAL)

By: _____
(Signature of joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

Phone Number: () _____ FAX Number: () _____

Email Address of Authorized Representative: _____

Joint Venture Name: _____ (SEAL)

By: _____
(Signature of joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

Phone Number: () _____ FAX Number: () _____

Email Address of Authorized Representative: _____

Each joint venture must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.

BIDDER'S DECLARATION

I declare under penalty of perjury under the laws of the State of California that the statements and representations in this Bid Forms are accurate, true and correct.

Dated _____ at _____, California.

By: _____

Print Name: _____

Title: _____

By signing the Bidders Declaration, the Bidder warrants the following:

NONCOLLUSION 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].

SUBCONTRACTOR LIST
(To be submitted with Bid)

Each Bidder shall set forth below with its Bid:

- A. In compliance with the provisions of Sections 4100 to 4114, inclusive, of the California Public Contract Code, and any amendments thereof, the undersigned Bidder lists the name, the location of the place of business, the California contractor's license number and public works contractor registration number issued pursuant to Section 1725.5 of the California Labor Code, and the portion of the Work to be performed by each Subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a Subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the contract documents, in an amount in excess of one-half of 1 percent of the prime contractor's total Bid. The Bidder shall only list one Subcontractor for each portion of the Work as is defined by the Bidder in its Bid.

- B. If the Bidder fails to specify a Subcontractor for any portion of the Work as above-stated, or if the Bidder lists more than one Subcontractor for the same portion of the Work, the Bidder agrees to perform that Work itself.

- C. Bidder understands that circumvention of the requirement to list Subcontractors by the device of listing one Subcontractor who will in turn sublet portions constituting the majority of the work is a violation of the Subletting and Subcontracting Fair Practices Act (Division 2, Part 1, Chapter 4, of the California Public Contract Code), and shall subject Bidder to the penalties set forth in said Act.

[NOTE: Reproduce page two of the Subcontractor List for additional listings needed beyond the length of this form.]

Subcontractor Name	Location of Subcontractor	
	License Number	
	DIR Registration Number	
	Portion of Work Activity (%)	

Subcontractor Name	Location of Subcontractor	
	License Number	
	DIR Registration Number	
	Portion of Work Activity (%)	
Subcontractor Name	Location of Subcontractor	
	License Number	
	DIR Registration Number	
	Portion of Work Activity (%)	
Subcontractor Name	Location of Subcontractor	
	License Number	
	DIR Registration Number	
	Portion of Work Activity (%)	
Subcontractor Name	Location of Subcontractor	
	License Number	
	DIR Registration Number	
	Portion of Work Activity (%)	

SECTION 00310 - MEASUREMENT AND PAYMENT

PART 1 -- GENERAL

1.1 SCOPE

- A. Payment for the various items of the Bid Schedule, as further specified herein, shall include all compensation to be received by the CONTRACTOR for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the WORK all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). No separate payment will be made for any item that is not specifically set forth in the Bid Schedule, and all costs therefor shall be included in the prices named in the Bid Schedule for the various appurtenant items of work.

1.2 PAYMENT FOR PAVEMENT RESTORATION

- A. Each Bid Schedule includes a combined bid item for the installation of A.C. pavement and base. The unit price given for the installation shall be based upon "Trench Restoration" as defined in Section 02460, Article 1.1.C for A.C. pavement. The unit price shall include the 8-inches of subgrade as required by the Contract Documents. For the purposes of bidding, the CONTRACTOR shall assume a pavement thickness of four inches, unless otherwise indicated.
- B. The DISTRICT has not determined the existing pavement thickness for each street within the project area. In some cases, the existing pavement thickness is greater than the four inches assumed in Article 1.2.A. Therefore, for bidding purposes, each Bid Schedule includes a bid item for the installation of an additional ½ inch thickness of A.C. pavement.
- C. The DISTRICT will determine the payment for pavement thickness as follows:
 1. If the existing pavement thickness is 4 inches or less, the CONTRACTOR shall be paid for pavement restoration based upon total square footage times the unit price given in the bid item for "A.C. Pavement and Base".
 2. If the existing pavement thickness is 4.5 inches, the CONTRACTOR shall be paid for pavement restoration based upon total square footage times the unit price given in the bid item for "A.C. Pavement and Base" plus the unit price given in the bid item for "Additional ½" Thickness of A.C. Pavement".
 3. If the existing pavement thickness is 5 inches, the CONTRACTOR shall be paid for pavement restoration based upon total square footage times the unit price given in the bid item for "A.C. Pavement and Base" plus two times the unit price given in the bid item for "Additional ½" Thickness of A.C. Pavement".
 4. For a pavement thickness greater than 5 inches, the payment will be calculated in a similar manner to Article 1.2.C.3.

1.3 PAYMENT FOR ROCK EXCAVATION

A. The DISTRICT determines the number of hours spent performing rock excavation as follows:

1. For power-operated hammers and rock saws, the measurement includes all time the equipment is in use on site. The time for mobilization of the equipment to the site and time spent removing the broken up rock from the trench shall not be due additional compensation.
2. For drilling and blasting, the measurement includes time spent drilling charge holes, time spent filling and preparing the charges, time spent backfilling over the charges, and time spent excavating the backfill from over the charges. The time for mobilization of the equipment to the site and time spent removing the broken up rock from the trench shall not be due additional compensation.

In the event that blasting results in more damage to the street than is customary, in the opinion of the DISTRICT, due to excess use of explosives, the CONTRACTOR shall not be due additional compensation for the time and expense incurred repairing or replacing the damaged asphalt.

3. Any exploratory drilling for rock shall be at the expense of the CONTRACTOR.

B. The quantity(ies) given in the Bid Schedule(s) for rock excavation are estimates based upon historic experience in the general vicinity and expected soil conditions. Detailed investigations of subsurface soil conditions have not been conducted in conjunction with the preparation of the Contract Documents. There is no guaranteed minimum quantity of rock excavation to be performed and there is no guaranteed minimum compensation to the CONTRACTOR associated with rock excavation.

1.4 MOBILIZATION

- A. No measurement shall be made for this item. The CONTRACTOR will be compensated for all mobilization and job set-up costs based on the lump sum price provided in the Bid Schedule.
- B. The amount entered in the Bid Schedule Summary Table for Mobilization shall not exceed five percent of the total amount of the Bid.

PART 2 – BID SCHEDULE 1 – SKI BOWL CONDOMINIUMS – STREET A – DRAWING P-1

2.1 FURNISH AND INSTALL 6-INCH WATER MAIN - STATION 0+00 TO STATION 2+11 (Bid Item No. 1A)

- A. Measurement of water main installed will be the actual centerline length of new 6-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The prices given by the CONTRACTOR for Bid Item 1A shall include all labor, equipment and materials necessary to provide all elements of the Project from Station 0+00 to Station

2+11 on Drawing P-1 as required by the Contract Documents except those itemized separately.

2.2 FURNISH AND INSTALL 8-INCH WATER MAIN - STATION 2+11 TO STATION 2+21 (Bid Item No. 1B)

- A. Measurement of water main installed will be the actual centerline length of new 8-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The prices given by the CONTRACTOR for Bid Item 1B shall include all labor, equipment and materials necessary to provide all elements of the Project from Station 2+11 to Station 2+21 on Drawing P-1 as required by the Contract Documents except those itemized separately.

2.3 FURNISH AND INSTALL 8-INCH WATER MAIN - STATION 3+78 TO STATION 10+68.48 (Bid Item No. 1C)

- A. Measurement of water main installed will be the actual centerline length of new 8-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The prices given by the CONTRACTOR for Bid Item 1C shall include all labor, equipment and materials necessary to provide all elements of the Project from Station 3+78 to Station 10+68.48 on Drawing P-1 as required by the Contract Documents except those itemized separately.

2.4 FURNISH AND INSTALL 2-INCH PE WATER SERVICE LATERAL (Bid Item No. 1D)

- A. Measurement of water service lateral installed will be the actual centerline length of new 2-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.
- C. This bid item shall apply at the following locations:
 - 1. Open cut portion of the 2" PE lateral at Station 0+34, offset left
 - 2. Connections to the two 2" PE laterals at Station 0+00
 - 3. Connections to the two 2" PE laterals at Station 1+63, offset right
 - 4. New lateral at Station 3+34, offset left
 - 5. New lateral at Station 5+11, offset right
 - 6. New lateral at Station 5+52, offset right
 - 7. New lateral at Station 7+03, offset left

- 2.5 SLIPLINE 2-INCH PE WATER SERVICE LATERAL AT STATION 0+34
(Bid Item No. 1E)
- A. Measurement of water service lateral installed will be the actual centerline length of new 2-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
 - B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.
- 2.6 FURNISH AND INSTALL 4-INCH WATER SERVICE LATERAL (Bid Item No. 1F)
- A. Measurement of water lateral installed will be the actual centerline length of new 4-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
 - B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.
- 2.7 FURNISH AND INSTALL DOUBLE WATER SERVICES (DS) (Bid Item No. 1G)
- A. Measurement of double water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.
- 2.8 FURNISH AND INSTALL SIX-METER WATER SERVICES (6S) (Bid Item No. 1H)
- A. Measurement of six-meter water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.
- 2.9 FURNISH AND INSTALL 1.5-INCH COMMERCIAL WATER SERVICES
(Bid Item No. 1I)
- A. Measurement of 1.5-inch commercial water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials

necessary to perform this Work, including reconnection of the existing customer service lateral to the new water service assembly.

2.10 CONNECT TO EXIST 2-INCH PE WATER SERVICE LATERAL (Bid Item No. 1J)

- A. Measurement of connections to existing water service laterals shall be based on a count of the number of connections installed as determined by the DISTRICT. The CONTRACTOR shall be paid for connections based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of connections installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. This bid item shall apply at the following locations:
 - 1. The 2" PE lateral at Station 0+34, offset left
 - 2. The two 2" PE laterals at Station 0+00
 - 3. The two 2" PE laterals at Station 1+63, offset right

2.11 FURNISH AND INSTALL FIRE HYDRANT ASSEMBLIES (Bid Item No. 1K)

- A. Measurement of fire hydrant assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of fire hydrants installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. The unit price given for a single Fire Hydrant Assembly shall include the lateral and the 6" isolation valve. For the purposes of Bidding, the CONTRACTOR shall assume fire hydrant laterals may be up to 18 feet in length. Any laterals longer than 18 feet shall be treated as Extra Work as described in the Contract Documents.

2.12 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 1+63
(Bid Item No. 1L)

- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 1L shall include furnishing and installing the following:
 - 1. One 6" MJ x 4" FL tee
 - 2. One 4" FL x MJ gate valve
 - 3. All other parts and accessories necessary for a complete and functioning installation

2.13 FURNISH AND INSTALL TEE/FIRE HYDRANT ASSEMBLY AT STATION 2+11
(Bid Item No. 1M)

- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.

- B. Bid Item No. 1M shall include furnishing and installing the following:
1. One 8" x 6" flanged tee
 2. One 6" FL x MJ gate valve
 3. One 8" x 6" flanged reducer
 4. One 6" FL x MJ adapter
 5. One 8" FL x MJ adapter
 6. One fire hydrant
 7. Up to 10 feet of 6" ductile iron pipe (fire hydrant lateral pipe)
 8. All other parts and accessories necessary for a complete and functioning installation
- 2.14 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 4+26 (Bid Item No. 1N)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 1N shall include furnishing and installing the following:
1. One 8" MJ x FL tee
 2. One 8" FL x MJ gate valve
 3. All other parts and accessories necessary for a complete and functioning installation
- 2.15 PERFORM CONNECTION TO EXISTING 8" PVC PIPE AT STATION 2+21 (Bid Item No. 1O)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 1O shall include furnishing and installing the 8" MJ sleeve.
- 2.16 PERFORM CONNECTION TO EXISTING 8" MJ TEE AT STATION 3+78 (Bid Item No. 1P)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- 2.17 PERFORM CONNECTION TO EXISTING 8" STEEL PIPE AT STATION 10+68.48 (Bid Item No. 1Q)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 1Q shall include furnishing and installing the following:
1. One 8" x 6" tapping sleeve
 2. One 6" flanged gate valve

3. One 8" x 6" flanged increaser
4. One 8" FL x MJ adapter
5. All other parts and accessories necessary for a complete and functioning installation

2.18 PERFORM ROCK EXCAVATION (Bid Item No. 1R)

- A. Measurement of rock excavation shall be based on measurement of the actual number of hours spent by performing rock excavation work as determined by the DISTRICT. The price given by the CONTRACTOR shall include all labor, equipment, materials and subcontractors necessary to perform this Work.
- B. The CONTRACTOR shall have the option of using power-operated hammers, rock saws, drilling and blasting or other appropriate rock excavation methods. The hourly rate listed shall include all compensation due to the CONTRACTOR for performing rock excavation. The CONTRACTOR **SHALL NOT** be entitled to any additional monies or compensation, including stand-by time for crew members idled during the performance of rock excavation. The CONTRACTOR shall not be due payment if its forces are unable to perform work while waiting for subcontractors or materials to arrive on the project site.
- C. The use of expansive compounds or similar methods that have a time delay associated with their effectiveness shall be reviewed on a case-by-case basis and the CONTRACTOR shall not be entitled to compensation while waiting for such methods to become effective.
- D. Section 02200 – Earthwork defines the level of effort required before the DISTRICT will consider excavation work to be rock excavation. In the event that the CONTRACTOR chooses to utilize excavation equipment with a flywheel horsepower lower than that given in Section 02200, the CONTRACTOR shall not be entitled to payment for rock excavation.

2.19 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – ROADWAYS & DRIVEWAYS (Bid Item No. 1S)

- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
- B. For Bid Item 1S, the CONTRACTOR shall assume an AC pavement thickness of four inches. Payment for additional AC to match the thickness of the existing road section shall be in accordance with Bid Item 1T.

2.20 FURNISH AND INSTALL AN ADDITIONAL ½-INCH OF A.C. PAVEMENT (Bid Item No. 1T)

- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage and additional thickness of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage and additional thickness of A.C. pavement installed. The price given by the

CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.

2.21 FURNISH AND INSTALL ALL OTHER WORK REQUIRED BY THE CONTRACT DOCUMENTS (Bid Item No. 1U)

- A. No measurement shall be made for this item. The CONTRACTOR will be compensated for all costs in this item based on the lump sum price provided in the Bid Schedule.
- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary for all WORK in the Contract Documents not covered by the other Bid Items required for successful completion of the pipeline and appurtenances indicated on Drawings P-1. Such WORK shall include, but is not limited to, pipeline pressure testing and disinfection, implementation of the stormwater pollution prevention plan, traffic control and abandonment of existing fire hydrants, services, pipelines and valves.

PART 3 – BID SCHEDULE 2 – SKI BOWL CONDOMINIUMS – STREET B – DRAWING P-2

3.1 FURNISH AND INSTALL 8-INCH WATER MAIN (Bid Item No. 2A)

- A. Measurement of water main installed will be the actual centerline length of new 8-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The prices given by the CONTRACTOR for Bid Item 2A shall include all labor, equipment and materials necessary to provide all elements of the Project from Station 0+00 to Station 2+20.15 on Drawing P-2 as required by the Contract Documents except those itemized separately.

3.2 FURNISH AND INSTALL 2-INCH PE WATER SERVICE LATERAL (Bid Item No. 2B)

- A. Measurement of water service lateral installed will be the actual centerline length of new 2-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.

3.3 FURNISH AND INSTALL 4-INCH WATER SERVICE LATERAL (Bid Item No. 2C)

- A. Measurement of water service lateral installed will be the actual centerline length of new 4-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.

- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.
- 3.4 FURNISH AND INSTALL DOUBLE WATER SERVICES (DS) (Bid Item No. 2D)
- A. Measurement of double water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.
- 3.5 FURNISH AND INSTALL FOUR-METER WATER SERVICES (4S) (Bid Item No. 2E)
- A. Measurement of four-meter water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.
- 3.6 FURNISH AND INSTALL SIX-METER WATER SERVICES (6S) (Bid Item No. 2F)
- A. Measurement of six-meter water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.
- 3.7 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 0+46 (Bid Item No. 2G)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
 - B. Bid Item No. 2G shall include furnishing and installing the following:
 - 1. One 8" MJ x 4" FL tee
 - 2. One 4" FL x MJ gate valve
 - 3. All other parts and accessories necessary for a complete and functioning installation
- 3.8 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 0+46 (Bid Item No. 2H)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.

- B. Bid Item No. 2H shall include furnishing and installing the following:
1. One 8" MJ x 4" FL tee
 2. One 4" FL x MJ gate valve
 3. All other parts and accessories necessary for a complete and functioning installation
- 3.9 PERFORM CONNECTION TO EXISTING 8" STEEL PIPE AT STATION 0+00
(Bid Item No. 2I)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 2I shall include furnishing and installing the 8-inch sleeve coupling.
- 3.10 PERFORM CONNECTION TO NEW 8" GATE VALVE AT STATION 2+20.15
(Bid Item No. 2J)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Payment for the new 8-inch gate valve shall be based upon Bid Item 1N.
- 3.11 PERFORM ROCK EXCAVATION (Bid Item No. 2K)
- A. Measurement of rock excavation shall be based on measurement of the actual number of hours spent by performing rock excavation work as determined by the DISTRICT. The price given by the CONTRACTOR shall include all labor, equipment, materials and subcontractors necessary to perform this Work.
- B. The CONTRACTOR shall have the option of using power-operated hammers, rock saws, drilling and blasting or other appropriate rock excavation methods. The hourly rate listed shall include all compensation due to the CONTRACTOR for performing rock excavation. The CONTRACTOR **SHALL NOT** be entitled to any additional monies or compensation, including stand-by time for crew members idled during the performance of rock excavation. The CONTRACTOR shall not be due payment if its forces are unable to perform work while waiting for subcontractors or materials to arrive on the project site.
- C. The use of expansive compounds or similar methods that have a time delay associated with their effectiveness shall be reviewed on a case-by-case basis and the CONTRACTOR shall not be entitled to compensation while waiting for such methods to become effective.
- D. Section 02200 – Earthwork defines the level of effort required before the DISTRICT will consider excavation work to be rock excavation. In the event that the CONTRACTOR chooses to utilize excavation equipment with a flywheel horsepower lower than that given in Section 02200, the CONTRACTOR shall not be entitled to payment for rock excavation.

- 3.12 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – ROADWAYS & DRIVEWAYS
(Bid Item No. 2L)
- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
 - B. For Bid Item 2L, the CONTRACTOR shall assume an AC pavement thickness of four inches. Payment for additional AC to match the thickness of the existing road section shall be in accordance with Bid Item 2N.
- 3.13 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – PAVED PATHWAYS
(Bid Item No. 2M)
- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
 - B. For Bid Item 2M, the CONTRACTOR shall assume an AC pavement thickness of three inches. Payment for additional AC to match the thickness of the existing pathway section shall be in accordance with Bid Item 2N.
- 3.14 FURNISH AND INSTALL AN ADDITIONAL ½-INCH OF A.C. PAVEMENT
(Bid Item No. 2N)
- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage and additional thickness of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage and additional thickness of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
- 3.15 FURNISH AND INSTALL ALL OTHER WORK REQUIRED BY THE CONTRACT DOCUMENTS (Bid Item No. 2O)
- A. No measurement shall be made for this item. The CONTRACTOR will be compensated for all costs in this item based on the lump sum price provided in the Bid Schedule.
 - B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary for all WORK in the Contract Documents not covered by the other Bid Items required for successful completion of the pipeline and appurtenances indicated on Drawings P-2. Such WORK shall include, but is not limited to, pipeline pressure testing and disinfection, implementation of the stormwater pollution prevention plan, traffic control and abandonment of existing fire hydrants, services, pipelines and valves.

PART 4 – BID SCHEDULE 3 – SKI BOWL CONDOMINIUMS – STREET D – DRAWING P-3

4.1 FURNISH AND INSTALL 8-INCH WATER MAIN (Bid Item No. 3A)

- A. Measurement of water main installed will be the actual centerline length of new 6-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The prices given by the CONTRACTOR for Bid Item 3A shall include all labor, equipment and materials necessary to provide all elements of the Project from Station 0+00 to Station 7+56.19 on Drawing P-3 as required by the Contract Documents except those itemized separately.

4.2 FURNISH AND INSTALL 2-INCH PE WATER SERVICE LATERAL (Bid Item No. 3B)

- A. Measurement of water service lateral installed will be the actual centerline length of new 2-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.

4.3 FURNISH AND INSTALL 4-INCH WATER SERVICE LATERAL (Bid Item No. 3C)

- A. Measurement of water service lateral installed will be the actual centerline length of new 4-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.

4.4 FURNISH AND INSTALL FOUR-METER WATER SERVICES (4S) (Bid Item No. 3D)

- A. Measurement of four-meter water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.

4.5 FURNISH AND INSTALL SIX-METER WATER SERVICES (6S) (Bid Item No. 3E)

- A. Measurement of six-meter water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.

4.6 FURNISH AND INSTALL FIRE HYDRANT ASSEMBLIES (Bid Item No. 3F)

- A. Measurement of fire hydrant assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of fire hydrants installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. The unit price given for a single Fire Hydrant Assembly shall include the lateral and the 6" isolation valve. For the purposes of Bidding, the CONTRACTOR shall assume fire hydrant laterals may be up to 18 feet in length. Any laterals longer than 18 feet shall be treated as Extra Work as described in the Contract Documents.

4.7 FURNISH AND INSTALL 1-INCH AIR VALVE ASSEMBLIES (Bid Item No. 3G)

- A. Measurement of air valve assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of air valve assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. The unit price given for a single Air Valve Assembly shall include the service saddle, the corporation stop valve, brass pipe lateral, the stop and waste ball valve and the precast concrete box with lid. For the purposes of Bidding, the CONTRACTOR shall assume brass pipe laterals may be up to 10 feet in length. Any laterals longer than 10 feet shall be treated as Extra Work as described in the Contract Documents.
- C. For bidding purposes, the CONTRACTOR shall assume that all air valve assemblies require traffic-rated boxes.

4.8 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 0+63 (Bid Item No. 3H)

- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 3H shall include furnishing and installing the following:
 - 1. One 8" MJ x 4" FL tee
 - 2. One 4" FL x MJ gate valve
 - 3. All other parts and accessories necessary for a complete and functioning installation

- 4.9 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 2+25 (Bid Item No. 3I)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 3I shall include furnishing and installing the following:
1. One 8" MJ x 4" FL tee
 2. One 4" FL x MJ gate valve
 3. Up to 10 feet or 4-inch pipe
 4. Two 4-inch MJ elbows
 5. All other parts and accessories necessary for a complete and functioning installation
- 4.10 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 2+73 (Bid Item No. 3J)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 3J shall include furnishing and installing the following:
1. One 8" MJ x 4" FL tee
 2. One 4" FL x MJ gate valve
 3. All other parts and accessories necessary for a complete and functioning installation
- 4.11 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 4+90 (Bid Item No. 3K)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 3K shall include furnishing and installing the following:
1. One 8" MJ x 4" FL tee
 2. One 4" FL x MJ gate valve
 3. All other parts and accessories necessary for a complete and functioning installation
- 4.12 PERFORM CONNECTION TO EXISTING 8" PVC PIPE AT STATION 0+00 (Bid Item No. 3L)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 3L shall include furnishing and installing the following:
1. One 8" x 6" tapping sleeve
 2. One 6" flanged gate valve

3. One 8" x 6" flanged increaser
 4. One 8" FL x MJ adapter
 5. All other parts and accessories necessary for a complete and functioning installation
- 4.13 PERFORM CONNECTION TO EXISTING 8" STEEL PIPE AT STATION 7+56.19
(Bid Item No. 3M)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
 - B. Bid Item No. 3M shall include furnishing and installing the following:
 1. One 8" x 6" tapping sleeve
 2. One 6" flanged gate valve
 3. One 8" x 6" flanged increaser
 4. One 8" FL x MJ adapter
 5. All other parts and accessories necessary for a complete and functioning installation
- 4.14 PERFORM ROCK EXCAVATION (Bid Item No. 3N)
- A. Measurement of rock excavation shall be based on measurement of the actual number of hours spent by performing rock excavation work as determined by the DISTRICT. The price given by the CONTRACTOR shall include all labor, equipment, materials and subcontractors necessary to perform this Work.
 - B. The CONTRACTOR shall have the option of using power-operated hammers, rock saws, drilling and blasting or other appropriate rock excavation methods. The hourly rate listed shall include all compensation due to the CONTRACTOR for performing rock excavation. The CONTRACTOR **SHALL NOT** be entitled to any additional monies or compensation, including stand-by time for crew members idled during the performance of rock excavation. The CONTRACTOR shall not be due payment if its forces are unable to perform work while waiting for subcontractors or materials to arrive on the project site.
 - C. The use of expansive compounds or similar methods that have a time delay associated with their effectiveness shall be reviewed on a case-by-case basis and the CONTRACTOR shall not be entitled to compensation while waiting for such methods to become effective.
 - D. Section 02200 – Earthwork defines the level of effort required before the DISTRICT will consider excavation work to be rock excavation. In the event that the CONTRACTOR chooses to utilize excavation equipment with a flywheel horsepower lower than that given in Section 02200, the CONTRACTOR shall not be entitled to payment for rock excavation.
- 4.15 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – ROADWAYS & DRIVEWAYS
(Bid Item No. 3O)
- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The

price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.

- B. For Bid Item 3O, the CONTRACTOR shall assume an AC pavement thickness of four inches. Payment for additional AC to match the thickness of the existing road section shall be in accordance with Bid Item 3Q.

4.16 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – PAVED PATHWAYS
(Bid Item No. 3P)

- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
- B. For Bid Item 3P, the CONTRACTOR shall assume an AC pavement thickness of three inches. Payment for additional AC to match the thickness of the existing pathway section shall be in accordance with Bid Item 3Q.

4.17 FURNISH AND INSTALL AN ADDITIONAL ½-INCH OF A.C. PAVEMENT
(Bid Item No. 3Q)

- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage and additional thickness of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage and additional thickness of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.

4.18 FURNISH AND INSTALL ALL OTHER WORK REQUIRED BY THE CONTRACT DOCUMENTS (Bid Item No. 3R)

- A. No measurement shall be made for this item. The CONTRACTOR will be compensated for all costs in this item based on the lump sum price provided in the Bid Schedule.
- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary for all WORK in the Contract Documents not covered by the other Bid Items required for successful completion of the pipeline and appurtenances indicated on Drawing P-3. Such WORK shall include, but is not limited to, pipeline pressure testing and disinfection, implementation of the stormwater pollution prevention plan, traffic control and abandonment of existing fire hydrants, services, pipelines and valves.

PART 5 – BID SCHEDULE 4 – SKI BOWL CONDOMINIUMS – STREET E – DRAWING P-4

5.1 FURNISH AND INSTALL 8-INCH WATER MAIN (Bid Item No. 4A)

- A. Measurement of water main installed will be the actual centerline length of new 6-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the

DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.

- B. The prices given by the CONTRACTOR for Bid Item 4A shall include all labor, equipment and materials necessary to provide all elements of the Project from Station 0+00 to Station 3+84.72 on Drawing P-4 as required by the Contract Documents except those itemized separately.

5.2 FURNISH AND INSTALL 2-INCH PE WATER SERVICE LATERAL (Bid Item No. 4B)

- A. Measurement of water service lateral installed will be the actual centerline length of new 2-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.

5.3 FURNISH AND INSTALL 4-INCH WATER SERVICE LATERAL (Bid Item No. 4C)

- A. Measurement of water service lateral installed will be the actual centerline length of new 4-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to provide a complete and functioning installation as required by the Contract Documents except those itemized separately.

5.4 FURNISH AND INSTALL DOUBLE WATER SERVICES (DS) (Bid Item No. 4D)

- A. Measurement of double water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.

5.5 FURNISH AND INSTALL FOUR-METER WATER SERVICES (4S) (Bid Item No. 4E)

- A. Measurement of four-meter water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.

5.6 FURNISH AND INSTALL SIX-METER WATER SERVICES (6S) (Bid Item No. 4F)

- A. Measurement of six-meter water service assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of meter assemblies installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work, including reconnection of the existing customer service laterals to the new water service assembly.

5.7 FURNISH AND INSTALL FIRE HYDRANT ASSEMBLIES (Bid Item No. 4G)

- A. Measurement of fire hydrant assemblies shall be based on a count of the number of assemblies installed as determined by the DISTRICT. The CONTRACTOR shall be paid for assemblies based on the unit prices shown in the Bid Schedule and on the DISTRICT'S count of the number of fire hydrants installed. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. The unit price given for a single Fire Hydrant Assembly shall include the lateral and the 6" isolation valve. For the purposes of Bidding, the CONTRACTOR shall assume fire hydrant laterals may be up to 18 feet in length. Any laterals longer than 18 feet shall be treated as Extra Work as described in the Contract Documents.

5.8 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 1+01 (Bid Item No. 4H)

- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 4H shall include furnishing and installing the following:
 - 1. One 8" MJ x 4" FL tee
 - 2. One 4" FL x MJ gate valve
 - 3. All other parts and accessories necessary for a complete and functioning installation

5.9 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 2+40 (Bid Item No. 4I)

- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 4I shall include furnishing and installing the following:
 - 1. One 8" MJ x 4" FL tee
 - 2. One 4" FL x MJ gate valve
 - 3. All other parts and accessories necessary for a complete and functioning installation

5.10 FURNISH AND INSTALL TEE/VALVE ASSEMBLY AT STATION 3+48 (Bid Item No. 4J)

- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid

Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.

- B. Bid Item No. 4J shall include furnishing and installing the following:
1. One 8" MJ x 4" FL tee
 2. One 4" FL x MJ gate valve
 3. All other parts and accessories necessary for a complete and functioning installation
- 5.11 PERFORM CONNECTION TO EXISTING 8" GATE VALVE STATION 0+00
(Bid Item No. 4K)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- 5.12 PERFORM CONNECTION TO EXISTING 8" STEEL PIPE AT STATION 3+84.72
(Bid Item No. 4L)
- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 4L shall include furnishing and installing the following:
1. One 8" x 6" tapping sleeve
 2. One 6" flanged gate valve
 3. One 8" x 6" flanged increaser
 4. One 8" FL x MJ adapter
 5. All other parts and accessories necessary for a complete and functioning installation
- 5.13 PERFORM ROCK EXCAVATION (Bid Item No. 4M)
- A. Measurement of rock excavation shall be based on measurement of the actual number of hours spent by performing rock excavation work as determined by the DISTRICT. The price given by the CONTRACTOR shall include all labor, equipment, materials and subcontractors necessary to perform this Work.
- B. The CONTRACTOR shall have the option of using power-operated hammers, rock saws, drilling and blasting or other appropriate rock excavation methods. The hourly rate listed shall include all compensation due to the CONTRACTOR for performing rock excavation. The CONTRACTOR **SHALL NOT** be entitled to any additional monies or compensation, including stand-by time for crew members idled during the performance of rock excavation. The CONTRACTOR shall not be due payment if its forces are unable to perform work while waiting for subcontractors or materials to arrive on the project site.
- C. The use of expansive compounds or similar methods that have a time delay associated with their effectiveness shall be reviewed on a case-by-case basis and the CONTRACTOR shall not be entitled to compensation while waiting for such methods to become effective.

- D. Section 02200 – Earthwork defines the level of effort required before the DISTRICT will consider excavation work to be rock excavation. In the event that the CONTRACTOR chooses to utilize excavation equipment with a flywheel horsepower lower than that given in Section 02200, the CONTRACTOR shall not be entitled to payment for rock excavation.
- 5.14 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – ROADWAYS & DRIVEWAYS
(Bid Item No. 4N)
- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
 - B. For Bid Item 4N, the CONTRACTOR shall assume an AC pavement thickness of four inches. Payment for additional AC to match the thickness of the existing road section shall be in accordance with Bid Item 4P.
- 5.15 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – PAVED PATHWAYS
(Bid Item No. 4O)
- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
 - B. For Bid Item 4O, the CONTRACTOR shall assume an AC pavement thickness of three inches. Payment for additional AC to match the thickness of the existing pathway section shall be in accordance with Bid Item 4P.
- 5.16 FURNISH AND INSTALL AN ADDITIONAL ½-INCH OF A.C. PAVEMENT
(Bid Item No. 4P)
- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage and additional thickness of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage and additional thickness of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
- 5.17 FURNISH AND INSTALL ALL OTHER WORK REQUIRED BY THE CONTRACT DOCUMENTS (Bid Item No. 4Q)
- A. No measurement shall be made for this item. The CONTRACTOR will be compensated for all costs in this item based on the lump sum price provided in the Bid Schedule.
 - B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary for all WORK in the Contract Documents not covered by the other Bid Items required for successful completion of the pipeline and appurtenances indicated on

Drawing P-4. Such WORK shall include, but is not limited to, pipeline pressure testing and disinfection, implementation of the stormwater pollution prevention plan, traffic control and abandonment of existing fire hydrants, services, pipelines and valves.

PART 6 – BID SCHEDULE 5 – DONNER PAS ROAD AT FIRE HOUSE – DRAWING P-5

6.1 FURNISH AND INSTALL 8-INCH WATER MAIN (Bid Item No. 5A)

- A. Measurement of water main installed will be the actual centerline length of new 6-inch pipe as determined by the DISTRICT. The CONTRACTOR will be paid for furnishing and installing water pipe based on the unit prices shown in the Bid Schedule and on the DISTRICT'S measurement of the length of installed pipe. No separate payment shall be made for any fittings or materials except those itemized in the Bid Schedule.
- B. The prices given by the CONTRACTOR for Bid Item 4A shall include all labor, equipment and materials necessary to provide all elements of the Project from Station 0+00 to Station 2+87.57 on Drawing P-5 as required by the Contract Documents except those itemized separately.

6.2 PERFORM CONNECTION TO EXISTING 16-INCH DI PIPE AT STATION 0+00 (Bid Item No. 5B)

- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.
- B. Bid Item No. 5B shall include furnishing and installing the following:
 - 1. One 16" x 8" tapping sleeve
 - 2. One 8" FL x MJ gate valve
 - 3. All other parts and accessories necessary for a complete and functioning installation

6.3 PERFORM CONNECTION TO EXISTING 8" GATE VALVE AT STATION 2+87.57 (Bid Item No. 5C)

- A. No measurement shall be made for this item. The CONTRACTOR shall be compensated for all Work performed under this item based on the lump sum price provided in the Bid Schedule. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary to perform this Work.

6.4 PERFORM ROCK EXCAVATION (Bid Item No. 5D)

- A. Measurement of rock excavation shall be based on measurement of the actual number of hours spent by performing rock excavation work as determined by the DISTRICT. The price given by the CONTRACTOR shall include all labor, equipment, materials and subcontractors necessary to perform this Work.
- B. The CONTRACTOR shall have the option of using power-operated hammers, rock saws, drilling and blasting or other appropriate rock excavation methods. The hourly rate listed shall include all compensation due to the CONTRACTOR for performing rock excavation. The CONTRACTOR **SHALL NOT** be entitled to any additional monies or compensation, including stand-by time for crew members idled during the performance

of rock excavation. The CONTRACTOR shall not be due payment if its forces are unable to perform work while waiting for subcontractors or materials to arrive on the project site.

- C. The use of expansive compounds or similar methods that have a time delay associated with their effectiveness shall be reviewed on a case-by-case basis and the CONTRACTOR shall not be entitled to compensation while waiting for such methods to become effective.
- D. Section 02200 – Earthwork defines the level of effort required before the DISTRICT will consider excavation work to be rock excavation. In the event that the CONTRACTOR chooses to utilize excavation equipment with a flywheel horsepower lower than that given in Section 02200, the CONTRACTOR shall not be entitled to payment for rock excavation.

6.5 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – DONNER PASS ROAD
(Bid Item No. 5E)

- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
- B. For Bid Item 5E, the CONTRACTOR shall assume an AC pavement thickness of nine inches. Payment for additional AC to match the thickness of the existing road section shall be in accordance with Bid Item 5G.

6.6 FURNISH AND INSTALL A.C. PAVEMENT AND BASE – FIRE HOUSE PARKING LOT
(Bid Item No. 5F)

- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.
- B. For Bid Item 5F, the CONTRACTOR shall assume an AC pavement thickness of four inches. Payment for additional AC to match the thickness of the existing pathway section shall be in accordance with Bid Item 5G.

6.7 FURNISH AND INSTALL AN ADDITIONAL ½-INCH OF A.C. PAVEMENT
(Bid Item No. 5G)

- A. Measurement of A.C. pavement shall be based on measurement of the actual square footage and additional thickness of A.C. pavement installed as determined by the DISTRICT. The CONTRACTOR shall be paid for A.C. pavement based on the unit prices shown in the Bid Schedule and on the DISTRICT'S determination of the square footage and additional thickness of A.C. pavement installed. The price given by the CONTRACTOR shall include all labor, equipment, and materials necessary to perform this Work.

- 6.8 FURNISH AND INSTALL ALL OTHER WORK REQUIRED BY THE CONTRACT DOCUMENTS (Bid Item No. 5H)
- A. No measurement shall be made for this item. The CONTRACTOR will be compensated for all costs in this item based on the lump sum price provided in the Bid Schedule.
 - B. The price given by the CONTRACTOR shall include all labor, equipment and materials necessary for all WORK in the Contract Documents not covered by the other Bid Items required for successful completion of the pipeline and appurtenances indicated on Drawing P-5. Such WORK shall include, but is not limited to, pipeline pressure testing and disinfection, implementation of the stormwater pollution prevention plan, traffic control and abandonment of existing fire hydrants, services, pipelines and valves.

- END OF SECTION -

**SECTION 00350 – CERTIFICATION REGARDING DEBARMENT
SUSPENSION AND OTHER RESPONSIBILITY MATTERS**

(To be submitted with Bid)

The Bidder certifies to the best of its knowledge and belief that it, and its principals:

- (A) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (B) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any State or local government entity;
- (C) Have not within a three year period preceding this Bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (D) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1) or (2) of this certification; and
- (E) Have not within a three-year period preceding this application/Bid had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this Bid or termination of the award.

Name of Bidder

Typed Name & Title of Authorized Representative

Signature of Authorized Representative

Date

I am unable to certify to the above statements. My explanation is attached.

END OF SECTION 00350

SECTION 00360 - IRAN CONTRACTING ACT CERTIFICATION

(To be submitted with Bid)

(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:

- (A) 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
- (B) 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.

END OF SECTION 00360

SECTION 00370 - PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION
(To be submitted with Bid)

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. See <http://www.dir.ca.gov/PublicWorks/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

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 as a contractor with the Department of Industrial Relations.

Name of Bidder: _____

DIR Registration Number: _____

Bidder further acknowledges:

- (A) Bidder shall maintain a current DIR registration for the duration of the project.
- (B) Bidder 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 registration status for the duration of the project.
- (C) Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Signature: _____

Name of Bidder: _____

Name: _____

Title: _____

Dated: _____

END OF SECTION 00370

SECTION 00435 – BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____

as Principal, and _____
as Surety, are hereby held and firmly bound unto _____

_____ as OWNER in the penal sum of

for payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____ day of _____ 2026.

The Condition of the above obligation is such that whereas the Principal has submitted to

a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the _____

NOW, THEREFORE;

- (A) If said BID shall be rejected, or
- (B) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attachment hereto (properly completed in accordance with said BID) and shall furnish a BOND for faithful performance of said Contract and for the payment of all persons performing labor and/or furnishing materials in connection therewith, and shall in all other respects perform the Agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the DISTRICT may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____ Principal

_____ Surety

By:

*IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

END OF SECTION 00435

SECTION 00500 – AGREEMENT

DISTRICT PIPELINE REPLACEMENT – 2026

This Agreement (“Agreement”) is entered into as of the ____ day of _____ 2026, by and between the Truckee Donner Public Utility District, a local public agency of the State of California (the "DISTRICT") and _____ ("CONTRACTOR").

The parties hereto agree as follows:

1. WORK

The CONTRACTOR agrees, for the consideration and under the terms and conditions set forth in this Agreement and the Contract Documents, to furnish and transport all necessary labor, services, materials, tools, equipment, implements, and appliances and any and all other expenses necessary or incidental to the performance of the Work within the Contract Time required to perform and completely finish in a workmanlike manner to the satisfaction and approval of the DISTRICT, free of any and all liens and claims of laborers, materialmen, suppliers, and subcontractors, and in conformity in all respects with all applicable federal, state, county and town ordinances, rules, and regulations, the public work of improvement, hereafter referred to as the “DISTRICT PIPELINE REPLACEMENT – 2026,” consisting of construction of approximately 2,600 feet of water pipeline, approximately 1,700 feet of water service lateral, water service boxes, fire hydrants, valves, fittings and related work hereafter referred to as the “Work” or the "Project", which is more fully described in the Contract Documents.

2. CONTRACT DOCUMENTS

A. The Contract Documents include the following:

1. Notice to Bidders (Section 00030);
2. Instructions to Bidders (Section 00100);
3. Bid Forms (Section 00300);
4. Noncollusion Affidavit (Section 00300);
5. Subcontractor List (Section 00300);
6. Experience Statement (Section 00300);
7. Measurement and Payment (Section 00310);
8. Certification Regarding Debarment, Suspension and Other Responsibility Matters (Section 00350);
9. Iran Contracting Certification (Section 00360);

10. Public Works Contractor Registration Certification (Section 00370);
11. Bid Bond (Section 00435);
12. Agreement (Section 00500);
13. Performance Bond (Section 00600);
14. Payment Bond (Section 00610);
15. Special Provisions (Section 00800);
16. Addenda numbers ____ through ____, inclusive;
17. Specifications;
18. Appendices:
19. Drawings;
20. Notice to Proceed; and
21. Executed Change Orders, if any, which may be effective after the date of this Agreement.

B. The CONTRACTOR shall keep on the Site a copy of the Contract Documents and shall at all times give the DISTRICT access thereto. The Contract Documents constitute the entire Agreement between the DISTRICT and the CONTRACTOR for the Work, and supersede all prior agreements, written or oral. It is the intent of the Contract Documents to include everything necessary for the proper execution of the Work as a complete functioning facility that serves the intended purpose. The CONTRACTOR shall provide all labor, material, equipment, and services required by the Contract Documents, or that may reasonably be inferred from the Contract Documents, as being required to perform the Work and produce the intended result. Words and abbreviations which have well known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

C. Whenever two or more standards or requirements appear in the Contract Documents, the highest standard, quality or requirement shall be applied and followed in the performance of the Agreement. In the case of conflict between terms of the Contract Documents, the following order of precedence shall apply:

1. In cases of discrepancy concerning dimension, quantity and location, the Drawings shall take precedence over the Specifications. Explanatory notes on the Drawings shall take precedence over conflicting drawn indications. Large-scale details shall take precedence over smaller scale details and figured dimensions shall take precedence over scaled measurement. Where figures are not shown, scale measurements shall be followed but shall in all cases be verified by measuring actual conditions of Work already in place. In cases of discrepancy concerning application of materials and non-technical requirements over materials, the Specifications shall take precedence over the Drawings.

2. For all other conflicts between portions or terms of the Contract Documents that cannot be resolved as set forth above, the following order of precedence shall apply:
 - a. Agreement;
 - b. General Conditions;
 - c. Specifications; and
 - d. Drawings.

3. CONTRACT PRICE

The DISTRICT shall pay to the CONTRACTOR as full compensation for the performance of the Agreement, subject to any additions or deductions as provide din the Contract Documents, and including all applicable taxes and costs, the sum of:

_____ Dollars (\$_____),
hereinafter referred to as the Contract Price.

4. CONTRACT TIME

Time is of the essence in the performance of the Work. The CONTRACTOR agrees to commence work within TEN (10) calendar days of the date stated in the DISTRICT's Notice to Proceed, unless other arrangements are made with the DISTRICT in writing, and agrees to carry out the Project at all times with the greatest possible dispatch and to complete the entire Project under this Agreement, as may be amended, no later than October 30, 2026, ("Contract Time"). The CONTRACTOR is referred to Section 00800 - Special Provisions for intermediate milestones. By its signature hereunder, CONTRACTOR agrees that the Contract Time, including with respect to the intermediate milestones set forth in the Special Provisions, is adequate and reasonable to complete the Work, however the time for completion may be extended by written agreement of the DISTRICT due to extraordinary weather conditions.

5. LABOR

A. In addition to any other requirements concerning labor pursuant to the Contract Documents and applicable California and federal law, the CONTRACTOR declares the Work will be conducted pursuant to the following requirements:

1. **Wage Scale.** CONTRACTOR and its subcontractors shall pay not less than the prevailing rate of wages in accordance with the Labor Code, which rates have been determined by the Director of the California Department of Industrial Relations and shall be made available through the DISTRICT, and a copy of which is also included with the Contract Documents, the provisions of which are hereby specified as the rate of prevailing wage to be paid workers on this Project, and the provisions of Labor Code Sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. shall be complied with. 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 her, or by any subcontract under him or her, 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 Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

2. **Payroll Records.** Pursuant to Labor Code Section 1776, the CONTRACTOR and each subcontractor shall maintain weekly certified payroll records showing the name, address, social security number, work classification, straight time and overtime hours paid each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the Work. CONTRACTOR shall certify under penalty of perjury that records maintained and submitted by CONTRACTOR are true and accurate. CONTRACTOR shall also require subcontractor(s) (s) to certify weekly payroll records under penalty of perjury. 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 ("DIR") on a weekly basis and in the format prescribed by the DIR, which may include electronic submission. CONTRACTOR shall comply with all requirements and regulations from the DIR relating to labor compliance monitoring and enforcement. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE. Any copy of records made available for inspection and furnished upon request to the public shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the CONTRACTOR or any subcontractor shall not be marked or obliterated.
3. In the event of noncompliance with the requirements pertaining to the preparation and submission of certified payroll records, the CONTRACTOR shall have ten (10) days in which to comply subsequent to receipt of written notice specifying any item or actions necessary to ensure compliance with this section. Should noncompliance still be evident after such ten (10) day period, the CONTRACTOR shall forfeit one hundred dollars (\$100.00) for each day, or portion thereof, for each worker until strict compliance is effectuated. Upon the request of the DIR, such penalties shall be withheld from contract payments.
4. **Hours of Labor.** Eight-hour labor constitutes a legal day's work.
5. **Apprentices.** In accordance with the provisions of Section 1777.5, 1777.6 and 1777.7 of the Labor Code, and in accordance with the regulations of the California Apprenticeship Council, properly registered, apprentices may be employed in the prosecution of the Work. Information relative to number of apprentices, identifications, wages, hours of employment and standards of working conditions shall be obtained from the Director of the Department of

Industrial Relations, who is the Administrative Officer of the California Apprenticeship Council.

- B. **Prohibited Employment Discrimination.** Attention is directed to Section 1735 of the California Labor Code, which reads as follows: "No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, mental condition, marital status, or sex of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter."
- C. The CONTRACTOR shall comply strictly with all applicable federal, state, and local requirements relating to the establishment of non-discriminatory practices in hiring and employment. During the performance of this Agreement, the CONTRACTOR and its subcontractors shall not deny the Agreement's benefits to any person on the basis of race, religion, color, ethnic group identification, national origin, ancestry, sex, age, physical or mental disability, medical condition, marital status, or sexual orientation, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religion, color, ethnic group identification, national origin, ancestry, sex, age, physical handicap, mental disability, medical condition, marital status, or sexual orientation. The CONTRACTOR shall ensure that the evaluation and treatment of employees and applicants for employment are free of such discrimination.
- D. The CONTRACTOR and its Subcontractors shall comply with the provisions of the Civil Rights Act of 1964 (42 United States Code, Section 1983), Executive Orders 11246, 11375 and 11478, the Fair Employment and Housing Act (California Government Code, Section 12900 et seq.), the regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.), and the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (California Government Code, Sections 11135-11139.5).
- E. The CONTRACTOR and its Subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- F. The CONTRACTOR shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.
- G. **Workers' Compensation Insurance.** In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860) and Chapter 4, Part 1, Division 4 (commencing with Section 3700) of the California Labor Code, the CONTRACTOR is required to secure the payment of compensation to his employees and shall for that purpose obtain and keep in effect adequate Workers' Compensation Insurance. The undersigned CONTRACTOR is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for Workers' Compensation claims or to undertake self-insurance in accordance with the provisions of that Code, and will comply with such provisions before commencing the performance of the Work in this Agreement.
- H. **Security for Compensation.** The CONTRACTOR hereby agrees that the provisions of Section 1775 of the California Labor Code will be complied with. The

CONTRACTOR further agrees to secure the payment of compensation to its employees in accordance with the provisions of Section 3700 of the California Labor Code.

6. INDEMNITY

- A. To the fullest extent permitted by law, the CONTRACTOR shall indemnify, defend (with independent counsel approved by the DISTRICT) and hold harmless the DISTRICT, and its directors, officers, employees, agents, representatives, and volunteers (the "Indemnified Parties"), from and against any and all liabilities (including without limitation all claims, losses, damages, penalties, fines, and judgments, associated investigation and administrative expenses, and defense costs, including but not limited to reasonable attorneys' fees, court costs and costs of alternative dispute resolution), in law and in equity, of every kind, nature or type that arise out of, pertain to, or relate to the performance of the Work, the CONTRACTOR's operations to be performed under the Contract Documents, the negligence, reckless, or willful misconduct of the CONTRACTOR or the acts or omissions of any employee, agent or subcontractor of the CONTRACTOR regardless of whether or not caused in whole or in part by a party indemnified hereunder (collectively "Claims" for purposes of this section); excepting therefrom only such Claims arising from the sole or active negligence or willful misconduct of the Indemnified Parties or defects in design furnished by those persons. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph. The provisions of this paragraph shall survive completion of the Work and/or the termination of this Contract. The provisions of this paragraph are not limited by the provisions of the Contract Documents relating to insurance. The CONTRACTOR's indemnification obligations shall apply to all damages or claims for damages suffered as a result of or by the CONTRACTOR's performance or operations regardless if any insurance is applicable or not.
- B. It is intended that this section shall comply with California Civil Code §§ 2782, et seq., to the extent applicable to the CONTRACTOR's obligations as set forth in this Section. If it is determined by a Court of competent jurisdiction that any aspect of this Section exceeds the restrictions or limitations under California law applicable to indemnity obligations, only that portion which exceeds the restrictions or limitations under California law shall be null and void, and all remaining indemnity obligations shall be fully enforceable to the fullest extent allowed under California law.
- C. In any and all Claims against the Indemnified Parties by any employee of the CONTRACTOR, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any subcontractor under Workers' or Workmen's Compensation Acts, disability benefit acts or other employee benefit acts.
- D. The CONTRACTOR's liability to the Indemnified Parties under this Section shall not be limited by any legal limitation on the amount or type of damages, compensation or benefits payable under workers' compensation acts, disability benefit acts or other employee benefit acts.

- E. The CONTRACTOR's liability insurance shall provide coverage for the CONTRACTOR's defense and indemnification obligations.

7. INSURANCE

The CONTRACTOR shall, at its sole cost, obtain and maintain, in force and effect for the duration of the Agreement, including the Warranty period, insurance that shall protect the CONTRACTOR and its Subcontractors and suppliers, and the DISTRICT against claims for injuries or death to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the CONTRACTOR, its agents, representative, employees or subcontractors and suppliers, and the following specific types of insurance coverages with limits not less than those set forth below, in a company or companies with a Best's rating of no less than A:VII and admitted to issue insurance in the State of California. Except for Builder's Risk Insurance as provided in this Section or as otherwise may be waived by the DISTRICT, in writing, in its sole discretion, the CONTRACTOR shall require compliance with all other Insurance Requirements as provided in this Section by its lower tier subcontractors.

- A. Workers' Compensation Insurance, including occupational illness or disease coverage, in accordance with the laws of the nation, state, territory or province having jurisdiction over the CONTRACTOR's employees and Employer's Liability Insurance with limits the greater of the statutory requirements, or \$1,000,000 per accident and, for bodily injury by disease, \$1,000,000 per employee. Coverage shall include all work covered under the U.S. Longshoreman's and Harbor Workers' Compensation Act and Jones Act in the event that they are applicable to the Work, or any aspect of the Work. The CONTRACTOR shall not utilize occupational accident or health insurance policies, or the equivalent, in lieu of mandatory Workers' Compensation insurance, or otherwise attempt to opt out of the statutory Workers' Compensation system. This insurance shall contain a waiver of subrogation (also known as "Transfer of Rights of Recovery Against Others to Us") against the DISTRICT and its Board members, officers, employees, agents and consultants. The obligations of CONTRACTOR, or its Subcontractors, under this provision shall apply regardless of whether or not the DISTRICT has received a waiver of subrogation from the insurer.
- B. Commercial General Liability Insurance (Occurrence Form) at least as broad as ISO Form CG 00 01 12 04, or DISTRICT approved equivalent, with a full defense and indemnity, which shall include, and be subject to, the following:
 - 1. A minimum combined single limit of liability of \$2,000,000 or the limits required by law, whichever is greater for each occurrence for bodily injury and property damage;
 - 2. A minimum limit of liability of \$1,000,000 each person for personal and advertising injury liability;
 - 3. A minimum limit of liability of \$1,000,000 each occurrence for products/completed operations liability. The products/completed operations liability shall be maintained in full force and effect for not less than 10 years following completion of any of the CONTRACTOR's work;

4. A general aggregate limit of not less than \$2,000,000, which shall be provided on a per project basis by means of ISO Form CG 25 03 11 85 or DISTRICT approved equivalent;
 5. XCU coverage for claims arising from explosion, collapse and underground damage;
 6. Contractor Pollution Liability Insurance coverage by the CONTRACTOR for all Work with a minimum limit of liability of not less than \$2,000,000 per occurrence, and \$10,000,000 policy aggregate;
 7. Contractual liability coverage for all oral and written contracts including the indemnity provisions contained herein;
 8. Deductibles shall not exceed \$25,000 per occurrence and shall be the sole responsibility of the CONTRACTOR;
 9. Cross Liability, Separation of Insureds endorsement, or coverage for Severability of Interest shall be included;
 10. Claims made policies are not acceptable;
 11. Coverage for Work performed on or within 50 feet of a railroad, by deletion of any limitation or exclusion of coverage on or within 50 feet of a railroad or by a Railroad Protective Liability policy which complies with this Section; and
 12. An endorsement that names the DISTRICT and its directors, officers, employees, agents and consultants as additional insureds. Such endorsement shall be made upon an ISO Endorsement CG 20 10 11 85 or approved equivalent (CG 20 10 04 13 is not equivalent or acceptable), Additional Insured - DISTRICT, Lessees or CONTRACTOR (Form B) and shall state "insurance is primary and all other insurance shall be noncontributory" and shall waive all rights of subrogation against the additional insureds. Any insurance, or self-insurance, maintained by the DISTRICT, its directors, officers, employees, and authorized volunteers shall be in excess of the CONTRACTOR's insurance and shall not contribute with it.
- C. Automobile Liability Insurance (Business Auto Coverage, Form CA 00 01) covering use of all owned, non-owned and hired automobiles (Symbol 1) with a minimum combined single limit of liability for bodily injury and property damage of at least \$1,000,000 per occurrence, and shall include, and be subject to, the following:
1. An endorsement that names the DISTRICT and its directors, officers, employees, agents and consultants as additional insureds, states such "insurance is primary and all other insurance shall be noncontributory", and waives all rights of subrogation against the additional insureds. Any insurance, or self-insurance, maintained by the DISTRICT, its directors, officers, employees, and authorized volunteers shall be in excess of the CONTRACTOR's insurance and shall not contribute with it.;
 2. (2) Cross Liability, Separation of Insureds endorsement, or coverage for Severability of Interest;

D. Not Used.

E. Certificates of Insurance and Endorsements

1. Prior to performing any Work, the CONTRACTOR and its subcontractors shall file with the DISTRICT, Certificates of Insurance in a form satisfactory to the DISTRICT (ACCORD form) along with a copy of all endorsements as required in this Section. All certificates and endorsements are to be received and approved by the DISTRICT before work commences. However, failure to obtain the required documents prior to the Work beginning shall not waive the CONTRACTOR's obligation to provide them. The DISTRICT reserves the right to require complete, certified copies of all required insurance policies, including policy declaration pages and endorsement pages, required by these specifications, at any time. Failure to continually satisfy the insurance requirements of the Agreement is a material breach of contract.
2. The certificates shall name each additional insured required by this Agreement, shall state "insurance is primary and all other insurance shall be noncontributory", shall waive all rights of subrogation against the additional insureds; and shall also contain a provision that the DISTRICT shall be notified in writing 30 days before the policies may be canceled or allowed to expire or any reduction in coverage. An additional certificate shall be submitted with the final Application for Payment showing required continuation of coverage beyond the Final and Payment. If CONTRACTOR maintains broader coverage and or/higher limits than the minimums required in the Contract Documents, the DISTRICT requires and shall be entitled to the broader coverage and/or higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum of insurance and coverage shall be available to the DISTRICT.

8. PERFORMANCE AND PAYMENT BONDS

- A. The CONTRACTOR shall furnish Performance and Payment Bonds, each in an amount equal to the Contract Price as security for the faithful performance and payment of the CONTRACTOR's obligations under the Contract Documents. The Payment Bond shall remain in full force and effect throughout the entire performance of the Work, and within the timelines established under California law to allow a Claimant to assert a claim against the Payment Bond. The Performance Bond shall remain in full force and effect for a period until final completion and final acceptance of all work, or until the expiration of all Warranties as required by the Contract Documents, whichever period may be later. All Bonds shall be in the forms prescribed by law and by the Contract Documents and be executed by Sureties named in the current list of "Certified Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds or Certified Reinsurer Companies Holding Certificates Of Authority As Acceptable Reinsuring Companies" published in Circular 570 (most recent amendment) by the Audit Staff Bureau of Accounts, U.S. Treasury Department(www.fms.treas.gov/c570/index.html) and is admitted to issue bonds in the states in which the Project is located and all Work is performed. If the Surety is declared bankrupt or becomes insolvent or its right to do business is terminated by the state where the Work is located or if it ceases to meet the foregoing listing requirement, the CONTRACTOR shall provide another Bond acceptable to the

DISTRICT meeting the stated requirements. All Bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

- B. Sureties shall specifically waive all rights of notice of and consent to any and all changes, extensions of time, or modifications, deletions, alterations or additions to the terms of the Contract. The CONTRACTOR shall be solely responsible for notifying Sureties of all events that may affect them, and unless the Contract Documents provide otherwise, the DISTRICT bears no obligation to provide any such notification to Surety.

9. WARRANTY

- A. CONTRACTOR warrants that all labor, materials and equipment furnished under the Contract Documents shall be warranted one year. The CONTRACTOR warrants that all materials and equipment is new unless otherwise specified in the Contract Documents; and that all Work conforms to the Contract Document requirements and is free of any defect whether performed by the CONTRACTOR or any subcontractor or supplier.
 - 1. Unless otherwise stated in the Contract Documents, all warranty periods shall begin upon the filing of the Notice of Completion.
 - 2. The CONTRACTOR shall remedy and correct, at its own expense, any damage to real or personal property caused by its work, or that of any subcontractor or supplier.
 - 3. The CONTRACTOR shall furnish the DISTRICT with all warranty documents required pursuant to the Contract Documents as directed by the DISTRICT, and prior to Substantial Completion of the Project.
 - 4. The DISTRICT shall notify the CONTRACTOR, in writing, within a reasonable time after the discovery of any failure, defect, or damage. CONTRACTOR shall within seven (7) calendar days after being notified commence and perform with due diligence all necessary Work to complete or correct the Work at issue. If the CONTRACTOR fails to promptly remedy any defect, or damage, the DISTRICT may, in its sole discretion, exercise its right to replace, repair, or otherwise remedy the defect, or damage at the CONTRACTOR's expense. However, in the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the CONTRACTOR not in accordance with the Contract Documents, the DISTRICT may undertake and the CONTRACTOR and his surety shall be liable to the DISTRICT for the cost thereof expense, and without prior notice, all actions necessary to correct such condition.
 - 5. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for Work performed and Materials furnished under the Contract Documents, the CONTRACTOR shall:
 - a. Obtain for the benefit of the DISTRICT all warranties that would be given in normal commercial practice and/or that are required pursuant to the Contract Documents;

- b. Require all warranties to be executed, in writing, for the benefit of the DISTRICT; and
 - c. Enforce all warranties for the benefit of the DISTRICT, unless otherwise directed in writing by DISTRICT.
6. The warranty provisions under this Agreement shall in no way limit the DISTRICT's rights under the Contract Documents or otherwise under California law, including without limitation, with respect to patent or latent defects, gross negligence, or fraud. The DISTRICT specifically reserves all rights related to defective work, including but not limited to the defect claims pursuant to California Code of Civil Procedure Sections 337.1 or 337.15.
7. **Storage of Materials, Products, and Equipment.** CONTRACTOR shall provide proper storage facilities and exercise such measures, as may be reasonably required by the DISTRICT upon review of CONTRACTOR's storage measures, to ensure the preservation of the specified quality and fitness of materials, products and equipment to be used in the Work. Stored materials, products and equipment shall be located so as to provide reasonable access for observation by the DISTRICT. In case of suspension of the Work, CONTRACTOR shall store and protect materials and equipment as necessary to maintain the quality, integrity, and availability when performance of the Work is resumed. See Section 001600 for additional details.

10. CHANGES IN THE WORK

- A. **Changes.** No modification, amendment, deviation, or change concerning the Contract Documents will be permitted by the CONTRACTOR without prior written consent of the DISTRICT. However, the DISTRICT, without invalidating the Agreement and with or without notification to the CONTRACTOR's sureties, may order changes in the Work or make changes by altering, adding to, or deducting from the Work, or changes to the Contract Documents to provide for additions, deletions, and revisions or to modify terms and conditions, including changes to the Work, the Contract Price, and/or the Contract Time. Modifications, amendments, deviations, or changes to the Contract Documents may only be authorized by a written Change Order or Work Directive Change.
- B. The CONTRACTOR expressly agrees that it shall not consider any order, instruction, Clarification, Response to a Request for Information or any other communication either written or oral given intentionally or unintentionally by the DISTRICT or any other person as authorization or direction to do work that would cause a change in Contract Time or Contract Price unless it is a Change Order or Work Directive Change signed by the DISTRICT.
- C. **Requests for Quotation.** If a change involving Contract Price or Contract Time is being considered, the DISTRICT will issue a Request for Quotation describing the proposed change. The CONTRACTOR shall submit a quotation within ten (10) days of receipt of a Request for Quotation, or sooner if requested by the DISTRICT so as not to delay or interfere with the progress of the Work, and in accordance with the requirements for determining the cost of changes described in this Article.

- D. **Change Orders.** If the DISTRICT and the CONTRACTOR agree on the change in Contract Price and Contract Time for a proposed change, a Change Order will be issued and signed by the CONTRACTOR and the DISTRICT. An executed Change Order shall be conclusive and constitute a final settlement of the change in Contract Time and Contract Price for the work covered by the Change Order, including, without limitation, the effect of the change on all other portions of the Work completed or not and shall include compensation for all related claims for disruption, impact, delay or extended overhead, if any, that may result from the change. Unless expressly reserved by the CONTRACTOR and agreed to by the DISTRICT, an executed Change Order shall also constitute a waiver by the CONTRACTOR (and its Subcontractors and suppliers, of every tier) of any Claims or potential Claims arising from or concerning all matters relating to the change in the Work which is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change, any adjustments to the Contract Price, and any and all adjustments to the Contract Time. The CONTRACTOR acknowledges that explicitly included in every Change Order in accordance with this Article is a waiver of Section 1542 of the California Civil Code (as well as under any other state or federal statute or common law principle of similar effect) which provides as follows: "GENERAL RELEASE; EXTENT A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release and that, if known by him or her, must have materially affected his or her settlement with the debtor or released party."
- E. Any change or modification in the Work shall be performed under applicable provisions of the Contract Documents, and the CONTRACTOR shall proceed promptly, unless otherwise provided in the Change Order or Work Directive Change.
- F. **Eliminated Items.** The DISTRICT reserves the right to eliminate any item of Work prior to the award of the Agreement without incurring any obligation to pay therefor. Should any item of the Work be eliminated in its entirety following the award of the Agreement and in the absence of an executed Change Order covering such elimination, payment will be made to the CONTRACTOR for reasonable costs actually incurred, and which are validated by the DISTRICT as being incurred, in connection with such eliminated item of Work but only to the extent that such reasonable costs were incurred prior to the date of notification in writing by the DISTRICT of such elimination.
- G. In the event that a change or modification in the Work results in a reduction of the amount of labor and material to be supplied by the CONTRACTOR, the DISTRICT shall be given a credit equal to the actual value of such labor and materials plus a reasonable amount for the use of tools, materials and reasonable overhead and profit as set forth below; or, in the event that a modification results in an increase in the amount of labor and materials to be supplied by the CONTRACTOR, the DISTRICT shall pay the CONTRACTOR the actual value of such labor materials and equipment plus reasonable overhead and profit as set forth below. Unless otherwise agreed to by the DISTRICT and the CONTRACTOR, or as may otherwise be directed by the DISTRICT, all costs shall be included as unit prices acceptable to the DISTRICT and the CONTRACTOR, lump sum prepared by the CONTRACTOR and found acceptable by the DISTRICT, or by cost accounting pursuant to a Work Directive Change in accordance with this Article.

- H. In the event that the DISTRICT and the CONTRACTOR are unable to agree upon an increase or decrease to the Contract Price and/or modification to the Contract Time pursuant to any change or modification in the Work, the DISTRICT may, in addition to all other rights and remedies it has at law and pursuant to the Contract, take the following actions: (i) issue a written order to the CONTRACTOR to promptly proceed with the Work as directed by the DISTRICT pursuant to a Work Directive Change including, without limitation, on a cost accounting basis (e.g., force account) as set in this Agreement. Any claim by the CONTRACTOR for an increase in the Contract Price or an extension of the Contract Time shall be made in writing and in accordance with the provisions of this Agreement; or (ii) partially terminate the Contract for the items in question, and any such partial termination shall not be interpreted as a breach of contract and shall not give rise to any Claim on behalf of the CONTRACTOR for an adjustment in Contract Price, Contract Time, or both; or (iii) the DISTRICT may proceed to have the items in question performed by its own forces or by others, in its sole discretion.
- I. **Work Directive Change.** To the extent the DISTRICT elects not to issue a Change Order for the performance of Work that the CONTRACTOR contends is changed or modified Work, or if the DISTRICT and the CONTRACTOR have not agreed on the change in Contract Price and/or Contract Time, if any, required for a proposed change, or if time constraints do not permit preparation of an appropriate quotation, the DISTRICT may, without invalidating the Agreement, order changes or modifications to the Work and direct the CONTRACTOR to proceed accordingly by issuing a Work Directive Change. The CONTRACTOR shall, promptly upon receipt of a Work Directive Change, perform the identified Work as directed, including pursuant to the force account procedures under this Agreement, in strict compliance with the Work Directive Change and the Contract Documents, as expeditiously and timely as possible, and shall submit a complete and specific Claim for any increase in Contract Price or adjustment of Contract Time, or both, within ten (10) calendar days after such Work is performed.
- J. A Work Directive Change shall be used in the absence of total agreement on the terms of a Change Order, and shall be signed by the DISTRICT. If the Work Directive Change provides for an adjustment to the Contract Price, the adjustment shall be based on one of the following methods at the sole discretion of the DISTRICT:
1. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
 2. Unit prices stated in the Contract Documents or subsequently agreed upon;
 3. Costs pursuant to the force account basis as set forth in this Agreement; or
 4. Costs to be determined in a manner agreed upon by the DISTRICT and the CONTRACTOR and a mutually acceptable fixed or percentage fee, or as otherwise directed by the DISTRICT.
- K. The amount of credit to be given to the DISTRICT for a deletion or change pursuant to a Work Directive Change that results in a net decrease in the Contract Price shall be based on actual net cost as confirmed by the DISTRICT and the CONTRACTOR's

overhead and profit on such costs. When both additions and credits covering related work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

- L. Pending final determination of the total cost of a Work Directive Change, the CONTRACTOR may request payment for the Work completed under the Work Directive Change through an appropriate Application(s) for Payment. The DISTRICT will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the recommended amount that the DISTRICT determines, in their professional judgment, to be reasonably justified, if any.
- M. When the DISTRICT and the CONTRACTOR agree concerning the adjustments in the Contract Price and/or Contract Time, or both, the Work Directive Change shall be converted into a Change Order as promptly as reasonably possible. Change Orders may be issued for all or any part of a Work Directive Change. Failure of the CONTRACTOR to notify the DISTRICT in writing of any disagreement with any proposed adjustment to the Contract Price and/or Contract Time, or both, as applicable, or method for determining them as set forth in a Work Directive Change, within seven (7) days after the date of receipt by the CONTRACTOR of such Work Directive Change shall be deemed to be an agreement by the CONTRACTOR to the proposed adjustment to the Contract Price and/or Contract Time, or both, as applicable, or method for determining them as set forth in such Work Directive Change, and shall constitute a waiver by the CONTRACTOR of any Claims related thereto.
- N. **Information, Interpretations and Minor Changes.** The DISTRICT has the authority to order minor changes in the Work, including interpretations which are consistent with the intent of the Contract Documents. If the CONTRACTOR considers that any minor changes so ordered causes a change in Contract Price or Contract Time, or both, the CONTRACTOR shall notify the DISTRICT in writing within ten (10) calendar days of receipt of the order.
- O. If, after reviewing the CONTRACTOR's objection or response to a minor change, the DISTRICT determines the Work is required by the Contract Documents and does not involve a change in Contract Price or Contract Time, the DISTRICT may direct the CONTRACTOR, in writing, to proceed with the work. If so directed, the CONTRACTOR shall promptly proceed with the work, and should the CONTRACTOR believe it is entitled to see a change in Contract Price or Contract Time, or both, the CONTRACTOR may assert a Claim in accordance with this Agreement, and shall document all costs in accordance with this Article.
- P. **Determining Cost of Changes; Force Account.** The CONTRACTOR's quotations of cost on proposed changes and cost reported for work performed on a cost accounting basis (e.g., force account) shall be determined as the sum of the following:
 - 1. Costs of labor including foremen engaged on the work but not of the Superintendent, field project manager, and other supervisory or support personnel except as provided in Article 11.P.5. Labor costs shall include the cost of social security, old age and unemployment insurance, fringe benefits required by labor agreements and workers' or workmen's compensation insurance;

2. Costs of materials, supplies and equipment, including cost of transportation, incorporated in the Work;
3. Rental costs for power tools and special or heavy equipment, except small tools and minor items of equipment, the CONTRACTOR will be paid in accordance with the current edition of "Labor Surcharge and Equipment Rental Rates" published by the State of California, Department of Transportation, Caltrans. No separate payment will be made for the use of small tools and minor items of equipment which cost shall be considered included in the overhead allowance. As used herein, small tools and minor items of equipment shall be individual tools or items of equipment having each a replacement value of \$200 or less;
4. Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the change;
5. The increased or decreased cost of the CONTRACTOR's supervision and field office personnel but only if the change affects the "critical path" of construction activities and requires a change in Contract Time;
6. The reasonable cost of any tier of Subcontractors' work computed as required for the CONTRACTOR's work. The mark-up charged by all Subcontractors for overhead and profit shall be the lesser of: i) subject to negotiation, ii) as included in the original Bid for the Work, or iii) an amount not to exceed a cumulative total of 15% of the direct costs of all Work performed by Subcontractor, or by Subcontractor and its sub-subcontractors where multiple tiers of Subcontractors are involved in the performance of the Work, and
7. For the reasonable Work performed by the CONTRACTOR, the mark-up for overhead, profit and all other costs shall be the lesser of: i) subject to negotiation, ii) as included in the original bid for the Work and contained in escrowed bid documents, or iii) an amount not to exceed: (A) For work self-performed by the CONTRACTOR, a total amount of 15% of the direct costs of the changed work performed; or (B) For work performed by both the CONTRACTOR and its Subcontractors, of all tiers (where the CONTRACTOR and its Subcontractors, of all tiers, participate in the performance of the changed work), a total amount of 20% of the direct costs of the changed work performed.

Q. Limitations on Markup for Changes. Where the CONTRACTOR self-performs a change in the Work, the maximum total amount of adjustment to the Contract Price for markup for overhead, profit, and all other costs shall not exceed fifteen percent (15%) of the direct costs of the changed work performed by the CONTRACTOR. Where the CONTRACTOR and its Subcontractors, of all tiers, participate in the performance of a change in the Work, the maximum total amount of adjustment to the Contract Price for markup for overhead, profit, and all other costs shall not exceed twenty percent (20%) of the direct costs of the changed work performed by the CONTRACTOR and its Subcontractors, of all tiers. Work shall be done making the most effective use of labor; materials shall be purchased at the lowest available price and all discounts shall be passed on to the DISTRICT; equipment shall be rented at the most favorable rate available for the term of use required.

- R. When both additions and deletions are related and pertain to the same Work item and are included in the same Change Order or Work Directive Change, the markup for overhead and profit shall be computed on the net increase, if any.
- S. The CONTRACTOR shall keep the DISTRICT informed as to when and where work is being performed on a cost accounting basis and shall submit complete auditable records of the cost of such work including daily time sheets signed daily by the DISTRICT.
- T. **Contractor Maintenance of Daily Records for Changes.** In the event that the CONTRACTOR is directed to perform any changes to the Work, or should the CONTRACTOR encounter conditions which the CONTRACTOR believes would obligate the DISTRICT to adjust the Contract Price and/or the Contract Time, the CONTRACTOR shall maintain detailed records of the cost of such changes on a daily basis and a summary in a daily report supplemented by back-up records. Such records shall include without limitation hourly records for labor and construction equipment, itemized records of materials, including delivery tickets, and equipment used each day in connection with the performance of any change to the Work. In the event that more than one change to the Work is performed by the CONTRACTOR in a calendar day, the CONTRACTOR shall maintain separate records of labor, construction equipment, materials, and equipment for each such change. In the event that any Subcontractor of any tier shall provide or perform any portion of any change to the Work, the CONTRACTOR shall require that each such Subcontractor maintain records in accordance with this Article. Each daily record maintained hereunder shall be signed by the CONTRACTOR; such signature shall be deemed the CONTRACTOR's representation and warranty that all information contained therein is true, accurate, complete, and relates only to the change referenced therein. All records maintained by Subcontractors of any tier, relating to the costs of a change in the Work shall be signed by such Subcontractor's authorized Project Manager or Superintendent as a representation and warranty that all information contained therein is true, accurate, complete, and relates only to the change referenced therein.
- U. **Submission of Daily Records.** All such records shall be delivered to the DISTRICT not later than on the day the Work is performed (same day) for independent verification. The DISTRICT shall attempt to review and reconcile costs of changes on a daily basis. The DISTRICT's signature on the report shall indicate agreement with the information reflected therein, not that the CONTRACTOR is entitled to payment of the costs in the report. If the DISTRICT disagrees with the response, the DISTRICT shall note the areas of disagreement on the report. In the event that the CONTRACTOR shall fail or refuse, for any reason, to maintain or make available for inspection, review and/or reproduction such records, adjustments to the Contract Price or Contract Time, if any, on account of any change to the Work may be deemed waived for that day. The CONTRACTOR's obligation to maintain back-up records hereunder is a material inducement to and in addition to, and not in lieu of, any other CONTRACTOR obligation under the Contract Documents with respect to changes to the Work.
1. Labor. The daily report shall show the names, trade, labor, classifications, and hours worked, for the workers.
 2. Material. The daily report shall describe and list quantities of materials used, attaching delivery tickets.

3. Equipment. The daily report shall show type of operation, including loading and transportation, if applicable.
 4. Other Services and Expenditures. Other services and expenditures shall be described in such detail in the daily report as the DISTRICT may require.
 5. Cost. The report shall provide dollar values for each category of cost.
- V. Any work or changed work for which the CONTRACTOR may wish to make a Claim shall strictly comply with, and be done in accordance with this Agreement, including, without limitation, the cost accounting (e.g., force account) requirements set forth under this Agreement.
- W. Change in Contract Time Due to Changes in the Work. If the Work required by a Change Order results in an extension of, or adversely affects, the Critical Path of construction tasks under the existing construction schedule and is the sole, unavoidable cause for an increase in the length of time required to complete the Work, the Contract Time will be adjusted accordingly subject to the CONTRACTOR's strict compliance with all requirements of the Contract Documents, including, without limitation Section 00800 - Special Provisions.

11. CLAIMS AND DISPUTE RESOLUTION PROCEDURES

- A. **Notice of Potential Claim.** The CONTRACTOR is not entitled to additional compensation for any cause, including a disagreement, protest, or change, an act or failure to act by the DISTRICT, or the happening of an event, thing or occurrence, or an adjustment of Contract Price or Contract Time, unless the CONTRACTOR has given the DISTRICT written Notice of Potential Claim ("NOPC") as required under this Article.
1. The NOPC must clearly describe the nature, circumstances, and basis of the potential claim, and must explain the reasons that the CONTRACTOR believes additional compensation and/or time will or may be due, the nature of the costs and/or time involved, the amount of the potential claim, a request for equitable adjustment, and written and verifiable documentation and support.
 2. Except as otherwise required in the Contract Documents, the CONTRACTOR must promptly provide an NOPC to the DISTRICT upon discovery of concealed or unknown conditions or a disagreement, protest, situation, event, or occurrence that may result in a Claim. This notice must be submitted no more than 7 calendar days after the discovery or occurrence of an event that may be the basis for a Claim for an adjustment of the Contract Price or an extension of Contract Time, or both, or within any time limits specified elsewhere in the Contract Documents, whichever is shorter; failure to do so waives the CONTRACTOR's right to assert the Claim. Nothing set forth in this Section shall reduce, limit or waive any requirements set forth elsewhere in the Contract Documents, or by law, including without limitation as to the time and manner of any notice.

3. If costs or time cannot be reasonably determined at the time the NOPC is provided, the NOPC must be amended to include quantified cost and time impacts within 30 days after work has ceased on the event that prompted the NOPC; failure to do so waives the Claim in its entirety. For NOPC events that extend more than 30 days, the CONTRACTOR must provide a monthly accounting of ongoing costs and time impacts by the 5th day of the succeeding month; failure to do so waives the Claim.
- B. **Duty to Mitigate Damages.** The CONTRACTOR is required to undertake all reasonable and practical efforts to mitigate the damaging effects of a potential current or future Claim it perceives as a result of an act or failure to act on the part of the DISTRICT, or as a result of an event, thing or occurrence. Written notice by the CONTRACTOR of a potential Claim does not excuse the CONTRACTOR from pursuing the mitigation of a Claim in good faith and with due diligence. Where possible, or if directed by the DISTRICT, the CONTRACTOR must be prepared to discuss various methods of mitigation with the DISTRICT prior to actual mitigation. The obligation to minimize foreseeable damages requires that the CONTRACTOR use reasonable care and diligence to prevent an unwarranted incurrence of damages from a delay caused by the other party or an unforeseen event. In evaluating a delay, if, in the opinion of the DISTRICT, the delay could have been avoided by due care of the CONTRACTOR, the CONTRACTOR is responsible for the additional costs attributed to the failure to mitigate.
 - C. The CONTRACTOR's Surety or Sureties shall be bound by any award or judgment rendered in any proceeding arising from the Project or undertaken in accordance with the Contract Documents. Further, the CONTRACTOR's Surety or Sureties shall be bound by and subject to the CONTRACTOR's Surety or Sureties shall, at the request of the DISTRICT (or the CONTRACTOR), participate in any dispute resolution proceedings, including mediation or litigation, that occur pursuant to the Contract Documents.
 - D. The DISTRICT and the CONTRACTOR intend that any disputes or differences between the DISTRICT and the CONTRACTOR arising under the Agreement or concerning the Contract Documents be brought to the attention of the DISTRICT at the earliest possible time in order that such matters may be addressed and/or settled, if possible, or other appropriate action promptly taken. The DISTRICT and the CONTRACTOR agree to initially strive to resolve all disputes amicably and in an informal manner as provided for in the Contract Documents. If the resolution of any dispute involves a change in the Work, increase or decrease in the Contract Price, or adjustment in the Contract Time, then the informal dispute resolution shall be documented and confirmed by a Change Order pursuant to the Contract Documents. Informal discussions or negotiations with the DISTRICT or its representatives concerning informal resolution of a dispute shall not toll or suspend the times associated with pursuing a Claim provided herein, unless so provided by the DISTRICT in writing.
 - E. The CONTRACTOR shall not be entitled to an increase in Contract Price, or adjustment of Contract Time, or both, for claimed extra work (or otherwise on account of any claim, cause, act, failure to act, or happening of any event or occurrence) unless the DISTRICT has issued a Change Order pursuant to the Contract Documents, or a Claim has been timely filed and approved pursuant to the Contract Documents.

Documents. If the CONTRACTOR fails to timely file a written Claim in accordance with the Contract Documents, then the CONTRACTOR shall be deemed to have waived any right or remedy to thereafter pursue the Claim against the DISTRICT in any administrative, arbitration or litigation proceeding.

F. Claims. "Claim" or "Claims" means a separate written demand by the CONTRACTOR for one or more of the following:

1. An extension of Contract Time, including, without limitation, for relief from damages or penalties for delay assessed by the DISTRICT under the Contract for the Project;
2. Payment by the DISTRICT of money or damages arising from work done by, or on behalf of, the CONTRACTOR which shall result in an increase to the Contract Price, and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled; and/or
3. Payment of any amount that is disputed by the DISTRICT.

G. **Requirements for Filing of Claim;** Contents; Filing Deadline. The CONTRACTOR may file a Claim with the DISTRICT. A Claim must (a) be in writing; (b) be labeled or clearly indicated as a Claim under the Agreement; (c) set forth in detail the reasons why the CONTRACTOR believes an adjustment to the Contract Price and/or Contract Time is or may be due, the nature of the costs and time issues involved, and, insofar as possible, the total amount of the Claim; (d) include (or reference earlier provided) documents that support and substantiate the Claim, including, without limitation complete documented costs of doing the Work for which it is making a Claim submitted in accordance with the requirements of the Contract Documents; and (e) include the following certification, properly completed and executed by CONTRACTOR or any officer of CONTRACTOR:

I, _____, BEING THE _____
(must be a project manager or officer) OF _____ (CONTRACTOR),
DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA, AND I DO PERSONALLY CERTIFY AND ATTEST THAT: I HAVE THOROUGHLY REVIEWED THE ATTACHED CLAIM FOR ADDITIONAL COMPENSATION AND/OR EXTENSION OF TIME, AND KNOW ITS CONTENTS, AND SAID CLAIM IS TRUTHFUL AND ACCURATE; THAT THE AMOUNT AND/OR CONTRACT TIME EXTENSION REQUESTED ACCURATELY REFLECTS THE CONTRACT ADJUSTMENT FOR WHICH THE DISTRICT IS LIABLE; AND FURTHER, THAT I AM FAMILIAR WITH CALIFORNIA PENAL CODE SECTION 72 AND CALIFORNIA GOVERNMENT CODE SECTION 12650, ET SEQ., PERTAINING TO FALSE CLAIMS, AND FURTHER KNOW AND UNDERSTAND THAT SUBMISSION OR CERTIFICATION OF A FALSE CLAIM MAY LEAD TO FINES, IMPRISONMENT AND/OR OTHER SEVERE LEGAL CONSEQUENCES.

H. A Claim must be submitted to the DISTRICT within the following Claim filing deadlines: (a) if a deadline is set forth in the Contract Documents for filing of the particular Claim, then the Claim must be filed by the specified time; (b) if the Claim relates to extra, additional or unforeseen work for which the CONTRACTOR intends to demand an adjustment to the Contract Price or Contract Time, or both, written notice shall be

given to the DISTRICT at least five (5) days prior to the time that the CONTRACTOR is to commence performance of the Work giving rise to the potential Claim, and the CONTRACTOR shall not proceed with that work until so directed by the DISTRICT; and (c) for all other Claims not included within (a) or (b), the Claim must be filed on or before ten (10) days after the date of the occurrence, event or circumstance giving rise to the Claim. In no event shall a Claim be filed later than the date of Final Payment. The failure of the CONTRACTOR to timely file its Claim shall result in the waiver of the Claim in its entirety.

- I. **Claims Subject to Public Contract Code Section 9204; Procedures.** This Section applies solely to the handling and resolution of a Claim(s) sent to the DISTRICT by registered mail or certified mail with return receipt requested in accordance with Public Contract Code section 9204(c)(1).
1. With respect to any Claim(s) sent to the DISTRICT in accordance with this Agreement, the provisions of Public Contract Code section 9204 shall apply
 2. In the event mediation, if any, is unsuccessful pursuant to Public Contract Code section 9204, and all or parts of the Claim(s) remain in dispute, then the CONTRACTOR shall thereafter comply with the Claim procedures as set forth, in this Agreement, as applicable.
- J. **Claims Equal to or Less than \$375,000; Procedures.** This applies solely to the handling and resolution of a Contract Claim(s) that is/are in an amount equal to or less than Three Hundred Seventy-Five Thousand Dollars (\$375,000).
1. With respect to any Claim(s) subject to this section, the provisions of Public Contract Code Section 20104, et seq. shall apply.
 2. Agreement to Opt-Out. Notwithstanding anything to the contrary in the Contract Documents, the DISTRICT and the CONTRACTOR may mutually agree at any time, in writing, that any Claim(s) to which the obligations set forth in this Section apply (i.e., unresolved Claims in an amount equal to or less than \$375,000) shall be subject to the dispute resolution requirements as set forth below applicable to the resolution and handling of claims in an amount in excess of \$375,000.
- K. **Claims Exceeding \$375,000; Procedure.** This applies solely to the handling and resolution of a Claim(s) that is/are in an amount exceeding Three Hundred Seventy-Five Thousand Dollars (\$375,000). With respect to any Claim(s) subject to this Part, the following shall apply:
1. The DISTRICT shall review facts pertinent to the Claim and request any additional information from the CONTRACTOR deemed necessary for a decision, if any. The CONTRACTOR shall promptly respond to any such request and provide any additional information as requested by the DISTRICT. The DISTRICT shall render a written decision on the Claim within sixty (60) days of receipt of the Claim and any additional information, unless the DISTRICT advises the CONTRACTOR in writing that additional time is required to evaluate the Claim, which shall constitute the Final Claim Determination.

2. If the CONTRACTOR disputes the Final Claim Determination of the DISTRICT, or if the DISTRICT fails to respond within the time prescribed, the CONTRACTOR may so notify the DISTRICT, in writing, either within fifteen (15) days of receipt of the written decision or the DISTRICT's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the DISTRICT shall schedule a meet and confer conference within thirty (30) days for the purpose of discussing settlement of the Claim.
3. Submission of a Claim, in conformance with all the requirements of the Contract Documents, and rejection of all or part of said Claim by the DISTRICT, is a condition precedent to any further action upon the Claim by the CONTRACTOR.
4. **Mediation.** The DISTRICT and the CONTRACTOR (and the CONTRACTOR's Surety or Sureties, or any Subcontractor, if requested to participate by the DISTRICT) agree to engage in good faith efforts to seek to resolve any outstanding Claims submitted pursuant to this Article by mediation prior to proceeding with, and as a condition precedent to, further dispute proceedings.
 - a. **Initiation of Mediation.** Within ten (10) calendar days after the DISTRICT issues its Final Claim Determination pursuant to this Agreement, or the conclusion of any meet and confer conference pursuant to this Agreement, either party may initiate mediation of a Claim or dispute by notifying the other party, in writing, of its intent to mediate any Claims denied or rejected by the DISTRICT or otherwise in dispute. The CONTRACTOR hereby expressly waives all Claims not timely submitted to mediation.
 - b. **Request for Mediation.** A request for mediation must be in writing and set forth a brief statement that identifies the Claim, the asserted damages, the names, addresses, and contact information of the parties, and identify their authorized representative, if any, that will participate in the mediation.
 - c. **Selection of Mediator.** Upon receipt of a request for mediation, within fourteen (14) calendar days, the parties will meet and confer to select an appropriate mediator agreeable to all parties. If the parties cannot agree on a mediator, they hereby agree to accept a mediator to be appointed by a recognized alternative dispute resolution organization, such as the American Arbitration Association or JAMS. The parties agree that any neutral selected or appointed to preside over the mediation shall be an attorney admitted to practice law in the State of California or a retired judge, and he or she shall possess at least 10 years' experience practicing law in the substantive areas of public contracting, public construction contracts and construction litigation.
 - d. **Time and Place of Mediation.** The mediator, using advice and input from the parties, shall set the time of each mediation session, as well as the mediation protocol (i.e., submission of briefs, statement of damages, etc.). The mediation will be held at any convenient location agreeable to the mediator and the parties, as the mediator determines. All reasonable efforts will be made by the parties and the mediator to schedule the first session within thirty (30) calendar days after selection of the mediator.

- e. **Expenses.** All fees paid to the mediator, including any required traveling and other expenses of the mediator, will be shared equally among the parties to the mediation.
- f. **Termination of Mediation.** The mediation may be terminated: (a) by the execution of a settlement agreement by the parties; (b) by a written declaration of the mediator to the effect that further efforts at mediation are no longer worthwhile; or (c) by a writing on behalf of a party or parties to the effect that the mediation proceedings are terminated. (g) **Privileges and Protections:** All meetings, communications and correspondence relative to the mediation procedures set forth in this Section shall be subject to any applicable mediation or settlement related privilege afforded under California law, including, without limitation, California Evidence Code Sections 1115, et seq., 1152 and 1154.
- g. **Presentation of Statutory Claims; Litigation.** Nothing in this Part or the Contract Documents is intended nor shall be construed to change the time periods for filing tort claims or other actions specified by Chapter 1 (commencing with section 900) and Chapter 2 (commencing with section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code, nor otherwise effect the requirements of any other provisions of California law applicable to the presentation of Claims and prosecution of disputes by the CONTRACTOR. The CONTRACTOR shall be responsible to fully and timely satisfy all such requirements as may be applicable to any Claim presented by the CONTRACTOR in accordance with any applicable laws and regulations. Any litigation arising out of the Contract Documents shall be brought in the Nevada County Superior Court, and the CONTRACTOR, and its Surety(ies), expressly waive the removal provisions of California Code of Civil Procedure Section 394.
- L. **Work Continues During Disputes.** In the event of any dispute between the DISTRICT and the CONTRACTOR, or during the pendency of any Claim(s) or associated proceedings under this Article or the Contract Documents, the CONTRACTOR shall not stop, or delay performance of, the Work, but shall prosecute the Work diligently to completion in the manner directed by the DISTRICT, unless otherwise directed in writing by the DISTRICT.
- M. **Application.** The procedures and remedies set forth in this Article shall not apply to any claim by the DISTRICT against the CONTRACTOR or its Surety or Sureties, nor any right or obligation which the DISTRICT seeks to enforce against the CONTRACTOR (unless the DISTRICT, in its sole discretion, opts to proceed hereunder).

12. CONTRACT TIME AND DELAYS

A. Definitions of Terms:

1. "Excusable Delay" is any delay to the completion of the Project beyond the expiration of the Contract Time caused by conditions beyond the control and without any fault or negligence of the CONTRACTOR (or its Subcontractors or suppliers), such as strikes, embargoes, fire, unavoidable casualties, unusual

delays in transportation, national emergency, and Unusual Weather. The financial inability of the CONTRACTOR or any subcontractor or supplier, and default of any subcontractor or supplier, without limitation, shall not be deemed conditions beyond the CONTRACTOR's control. The CONTRACTOR may make a Claim under this Agreement for an extension of Contract Time due to an Excusable Delay if it can show that the Excusable Delay is the sole and unavoidable cause increasing the Contract Time actually needed to complete the Work. The CONTRACTOR shall not be entitled to an increase in Contract Price due to an Excusable Delay.

2. "Compensable Delay" is any delay to the completion of the Project beyond the expiration of the Contract Time for which the DISTRICT is solely responsible due to its conduct or inaction (and not including delays arising from Excusable Delay) and which delay is unreasonable under the circumstances involved, and not within the contemplation of the parties, but shall not include any delay to the performance of the Work to the extent that the CONTRACTOR's performance is, was or would have been suspended, delayed or interrupted by another cause for which the CONTRACTOR (or its Subcontractors or suppliers) is/are solely or partially responsible (i.e., concurrent CONTRACTOR-caused delays). Subject to strict compliance with the terms and requirements of the Contract Documents, a Compensable Delay may entitle the CONTRACTOR to an extension of the Contract Time and/or an adjustment of the Contract Price. Except as provided for under the Contract Documents, and subject to Public Contract Code section 7102, the CONTRACTOR shall have no claim for damage or compensation for any delay, interruption, hindrance, or disruption. In the case of a delay which was caused in part by the CONTRACTOR and in part by the DISTRICT (Concurrent Delay), the CONTRACTOR shall only be entitled to an extension of the Contract Time and the CONTRACTOR shall not be liable for Liquidated Damages during the period of Concurrent Delay, but the CONTRACTOR shall not be entitled to any adjustment to the Contract Price whatsoever during the period of Concurrent Delay.
3. "Unusual Weather" is defined as the number of Wet Days exceeding the most recent published mean number of Wet Days for the construction period (e.g., for the same month) at the weather observing station closest to the project site as reported in "Comparative Climatic Data" published by the National Oceanic and Atmospheric Administration, Ashville, NC 28801. "Wet Days" are defined as days that have at least 0.01 inch of rainfall.

- B. **Computation of Time.** Any period of time referred to in the Contract Documents measured in days shall mean consecutive calendar days and shall exclude the first and include the last day. If the last day falls on a Saturday, Sunday or legal holiday, it shall be omitted from the calculation.
- C. **Contract Time.** Time limits stated in the Agreement are the essence of the Contract. The CONTRACTOR confirms that the Contract Time is a reasonable period for performing the Work and includes enough float time to allow for normal unfavorable weather and other reasonably anticipated delays.
- D. **Damages for Late Completion.** The CONTRACTOR shall complete all Work (inclusive of all interim milestones as defined in the Contract Documents), in strict

accordance with the Contract Documents, and within the allocated Contract Time, subject to approved extension(s) of the Contract Time that may be granted by the DISTRICT, if any, during the course of the Project. In the event of a failure on part of the CONTRACTOR to achieve Final Completion within the allocated Contract Time, the CONTRACTOR shall pay to the DISTRICT Liquidated Damages in accordance with the Contract Documents. The DISTRICT reserves the right, in its sole discretion, to make a detailed written determination of the losses and damages incurred arising from the failure of the CONTRACTOR to achieve Final completion within the Contract Time, including any approved extensions, and to receive such full recompense from the CONTRACTOR.

- E. **Commencing Work.** The CONTRACTOR shall not commence work (1) prior to the date in the Notice to Proceed; (2) prior to giving the DISTRICT five (5) days written notice; and (3) prior to the effective date of insurance coverage required under this Agreement, evidence of which shall be submitted to the DISTRICT prior to commencement of the Work.
- F. **Delays.** Time is of the essence in the performance of this Agreement. The CONTRACTOR must complete the entire Work of the Project, and all designated portions thereof, within the Contract Time(s), subject to any authorized extension(s) thereof, pursuant to the Contract Documents. Failure of the CONTRACTOR to include an element of the Work required for performance of the Agreement in the current, updated construction schedule (or any earlier version of the construction schedule), or any inaccuracy in the construction schedule, does not relieve the CONTRACTOR from responsibility for accomplishing the Work within the Contract Times designated in the Contract Documents. The CONTRACTOR must provide an adequate workforce, materials of proper quality, and equipment to properly execute the Work and to ensure completion of each part of the Work in accordance with the Contract Documents and the construction schedule.
- G. **Acceleration to Meet Construction Schedule.** The contractor shall proceed expeditiously with adequate forces and shall achieve Final Completion within the Contract Time. If the CONTRACTOR's performance falls behind schedule, the CONTRACTOR shall accelerate the Work, or a portion of the Work, as required to get back on schedule at no additional cost to the DISTRICT. Accelerated work shall include air or express delivery of materials and equipment, increasing the number of workers, working overtime, working Saturdays, Sundays, and holidays (subject to the advance approval of the DISTRICT), and working additional shifts. The CONTRACTOR shall pay the DISTRICT for any extra cost of inspection made necessary by accelerated work required under this provision.
 - 1. The DISTRICT reserves the right to direct the CONTRACTOR to accelerate performance of the Work, or any portion of the Work, or to work overtime when it is determined to be in the best interest of the DISTRICT or the Project. No action or direction of the DISTRICT other than an express written direction by the DISTRICT to accelerate performance of the Work or to work overtime shall be construed by the CONTRACTOR to be direction to accelerate the Work or to work overtime.
- H. The DISTRICT will consider extensions to the Contract Times for the following reasons only if they are adequately demonstrated by the CONTRACTOR to affect the critical

path of the construction schedule, as may be adjusted in accordance with the Contract Documents:

1. Delays in the progress of the Work due to Excusable Delay;
 2. Delays in the progress of the Work due to a Compensable Delay or an act of neglect by the DISTRICT, but only for the amount of delay time that occurs after the CONTRACTOR has notified the DISTRICT in writing and the DISTRICT has had a reasonable time to respond to the notification; or
 3. An Approved Change Order that extends the Contract Time.
- I. Whenever the CONTRACTOR foresees any delay in the prosecution of the Work, the CONTRACTOR must notify the DISTRICT in writing of any potential delay or impact, including any anticipated impact on the Contract Price and/or Contract Time, or both. Within seven (7) calendar days from the beginning of any critical path delay to the construction schedule, or the occurrence(s) giving rise to the delay, whichever occurs earlier, the CONTRACTOR must provide written notice of the delay event to the DISTRICT. Said written notice shall include a description of the event or occurrence giving rise to the delay, the estimated duration of the delay, and the impact of the event or occurrence upon the critical path and Final Completion. The CONTRACTOR expressly waives any claim for delay or adjustment to the Contract Time and/or Contract Price if the CONTRACTOR fails to provide such written notice to the DISTRICT.
- J. Within thirty (30) calendar days after the initial written notice of the CONTRACTOR, the CONTRACTOR shall submit all supporting information to the DISTRICT to validate the claimed impact of the delay on the Contract Time, including a Time Impact Analysis ("TIA") in accordance with the requirements and provision set forth in Section 1310 – Construction Progress Schedule. If requested by the DISTRICT, the CONTRACTOR shall promptly, and no later than seven (7) calendar days after the DISTRICT's request, provide updated or further supporting information, including an updated or revised TIA, with respect to the claimed delay or impact. The CONTRACTOR expressly waives any Claim for delay or adjustment to the Contract Time and/or Contract Price if the CONTRACTOR fails to promptly and timely provide all supporting information, including the TIA and any additional/supplemental supporting information as may reasonably be requested by the DISTRICT.
- K. The DISTRICT will ascertain the facts and the extent of the delay and adjust the Contract Times for completing the Work (and/or adjust the Contract Price) if, in the DISTRICT's sole discretion and judgment, the facts justify such an adjustment pursuant to the Contract Documents. The DISTRICT's written determination in this regard shall be considered final and conclusive. In the event CONTRACTOR disputes the DISTRICT's written determination, CONTRACTOR's sole and exclusive remedy shall be to pursue a Claim in strict accordance with the requirements of this Agreement.
- L. The DISTRICT shall not consider any request for an adjustment to the Contract Time and/or Contract Price unless the CONTRACTOR satisfies the requirements set forth in the Contract Documents for providing prompt and timely written notice of the potential delay and submission of supporting information (including the TIA, and any further or

additional supporting information as may be reasonably requested by the DISTRICT) establishing the impact of the delay on the critical path of the construction schedule. No adjustment of the Contract Time and/or Contract Price will be considered, or granted, as a consequence of any claimed delay event in the absence of the CONTRACTOR's strict compliance with the requirements of the Contract Documents.

- M. The DISTRICT shall not be responsible to the CONTRACTOR for any constructive acceleration due to the CONTRACTOR's failure to comply with the submission and justification requirements of the Contract Documents for Contract Time and/or Contract Price adjustment requests. The CONTRACTOR's failure to perform in accordance with the construction schedule shall not be excused because the CONTRACTOR has submitted a request for adjustment of the Contract Time, unless and until the DISTRICT approves such request.
- N. Unless the DISTRICT and the CONTRACTOR agree otherwise pursuant to a Change Order, in the event that the DISTRICT adjusts the Contract Time pursuant to a Compensable Delay, any request by the CONTRACTOR for delay costs (inclusive of all direct and indirect costs, expenses and overhead costs), if applicable, shall be limited solely to those costs identified in this Agreement. The CONTRACTOR shall neither claim nor recover any overhead costs in addition to those expressly allowed in this Agreement, nor shall the CONTRACTOR be entitled to claim or recover any "home office" expenses, "extended site overhead," or any other overhead cost on the basis of any "home office" damages formula, "Eichleay" formula, "Total Cost" recovery formula or any other such formula or calculation.
- O. Adjustments in Contract Time associated with changes or modifications ordered through a Change Order by the DISTRICT are subject to the requirements under this Agreement. An executed Change Order covering changes or modifications ordered by the DISTRICT under this Agreement, or the resolution of Claims made under the Agreement, shall be the final and conclusive resolution of any adjustment to the Contract Time and/or Contract Price for the Work or Claim covered by the Change Order.
- P. **No Early Completion Delay Damages.** While the CONTRACTOR may schedule completion of all the Work, or portions thereof, earlier than the Contract Time established in the Agreement, the DISTRICT is exempt from liability for and the CONTRACTOR shall not be entitled to an adjustment of the Contract Price or to any additional costs, damages, or compensation whatsoever, for use of float or for the CONTRACTOR's inability to complete the Work earlier than the Contract Time established in the Agreement, for any reason whatsoever, including but not limited to, delay caused by the DISTRICT, or other delay event.

13. INSPECTION, DEFECTIVE WORK, WARRANTY

- A. **Defective Work.** Defective Work is Work that, among other things: (1) is unsatisfactory, rejected, faulty, deficient, non-compliant, or leaks, breaks, fails or does not conform, whether generally or strictly, to the Contract Documents; or (2) does not meet the requirements of reference standards, tests or approvals specifically referred to in the Contract Documents; or (3) has been damaged prior to final acceptance; or (4) does not meet applicable industry or trade standards; or (5) a submittal is required and Favorable Review has not been obtained.

- B. **Access to Work and Notice.** The CONTRACTOR shall provide the DISTRICT and its representatives safe access to every part of the Work at all times Work is in progress for observation, inspecting and testing. The CONTRACTOR shall give at least two (2) business days' notice of work being ready for required inspection, test or approval or of intent to cover work up.
- C. **Tests and Inspections.** Unless otherwise specified, the CONTRACTOR shall arrange and pay for tests, inspections and approvals required by Laws and Regulations, ordinances, rules, and orders of public authorities having jurisdiction, or by the Contract Documents. All such tests, inspections and approvals shall be performed by an independent testing laboratory or inspection agency acceptable to the DISTRICT or to the appropriate public authority. Samples to be tested and items of work to be inspected will be selected by the DISTRICT or the public authority requiring the test or inspection. Test reports, inspection reports and certificates shall be submitted directly to the DISTRICT by the performing laboratory or agency. The CONTRACTOR shall notify the DISTRICT at least two (2) business days' prior to all tests and inspections to permit observation by the DISTRICT.
- D. **Re-inspection.** If the DISTRICT determines that portion(s) of the Work require additional testing or retesting, the CONTRACTOR shall provide material to be tested, safe access to test locations, power, light and other services. The cost of retesting shall be paid for by the DISTRICT, but if the additional tests or retesting indicate that said portion of the Work is Defective, the CONTRACTOR shall pay the DISTRICT all costs associated with additional testing or retesting including the cost of the DISTRICT's additional service.
- E. **Uncovering Work.** If work is covered or concealed without giving the DISTRICT at least two (2) business days' notice to permit observation, it shall be uncovered or exposed at the CONTRACTOR's expense to permit observation if so requested.
- F. If the DISTRICT wishes to have work uncovered for observation after having been given the required notice to observe it, the CONTRACTOR shall uncover the work on a cost accounting (e.g., force account) basis in accordance with this Agreement. If the work is found to be in accordance with the Contract Documents, the DISTRICT shall pay the cost of uncovering and replacing the work. If the Work is found to be Defective, the CONTRACTOR shall pay the cost of uncovering and correcting the work and the cost of required additional Project Management and testing service.
- G. **Correction of Defective Work.** The CONTRACTOR shall promptly correct or remove and replace, to the satisfaction of the DISTRICT: (1) work rejected by the DISTRICT as being Defective, and (2) work that is Defective whether or not rejected by the DISTRICT. The CONTRACTOR shall correct Defective Work prior to installing subsequent related or connected Work. The CONTRACTOR's obligation to correct Defective Work applies to latent as well as patent defects and whether or not the work is fabricated, installed or completed and whether observed before or after Substantial Completion. The CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or replacement and removal (including but not limited to fees and charges of any consultants) made necessary thereby.

1. The fact that work and materials have been tested or inspected from time to time, and payments have been made, shall not relieve the CONTRACTOR from the responsibility of replacing and making good any defective work or materials that may be discovered before or after the date of completion of the Work by the CONTRACTOR and its approval and acceptance by the DISTRICT.
 2. Failure of the DISTRICT to object to any defects in Work or material or variances from the Drawings and Specifications during or after construction shall not be deemed a waiver by the DISTRICT of such defects or variances; nor by such failure shall the DISTRICT be deemed stopped from requiring the CONTRACTOR to correct such defects or variances.
- H. **Acceptance or Use of Defective Work.** The DISTRICT may elect to accept Defective Work in which case a deductive Change Order shall be signed by the CONTRACTOR reflecting the decreased value of the Work. If final payment has been made, the CONTRACTOR shall pay to the DISTRICT a sum reflecting the decreased value of the Work. The CONTRACTOR shall also bear all direct, indirect and consequential costs attributable to the DISTRICT's evaluation of and determination to accept such Defective Work (and which shall include, but not be limited to, fees and charges of Project Managers, architects, and other consultants).
1. The DISTRICT may use Defective Work without negating its rejection or decreasing the Warranty Period which shall commence when the work is finally corrected or replaced and accepted. When all or part of the Work is being used by the DISTRICT, the CONTRACTOR shall schedule correction or replacement of Defective Work at the DISTRICT's convenience.
- I. **Correction of Defective Work by the DISTRICT.** Should the CONTRACTOR fail or refuse, after written notice from the DISTRICT to correct Defective Work, or to remove and replace rejected Defective Work as required by the DISTRICT, or when the CONTRACTOR fails to perform the Work in strict accordance with the Contract Documents, or when the CONTRACTOR fails to comply with any other provision of the Contract Documents, the DISTRICT may, at its sole option and after two (2) days written notice to the CONTRACTOR, correct and remedy any such Defective Work. No written notice shall be required from the DISTRICT in the event that the correction and remediation of the Defective Work is required to immediately address an emergency situation, or to abate any risk to life, health or safety.
1. The DISTRICT's exercise of the rights and remedies under this Section shall be in addition to, and not in lieu of, any other rights and remedies available under the Contract Documents of applicable law.
 2. All direct, indirect and consequential costs incurred by the DISTRICT in exercising such rights and remedies will be charged against the CONTRACTOR, and a Change Order will be issued adjusting the Contract Price. Such direct, indirect and consequential costs shall include, but not be limited to, fees and charges of any consultants, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of the CONTRACTOR's defective work.

3. The CONTRACTOR shall not be allowed an extension of Contract Time because of any delay in performance of the Work attributable to the exercise by the DISTRICT of DISTRICT's rights and remedies under this Article.
- J. **Warranty and Correction Period.** When within one year after the date of the DISTRICT's acceptance of the Work or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable warranty or special guarantee required by the Contract Documents or by any specific provisions of the Contract Documents, any Work is found to be Defective Work, the CONTRACTOR shall promptly, without cost to the DISTRICT and in accordance with written instructions given by the DISTRICT, either correct such defective work, or, when it has been rejected by the DISTRICT, remove it from the site and replace it with nondefective work. Acceptance of the Work by the DISTRICT or its representatives, shall in no way release the CONTRACTOR from its responsibility to comply with the provisions of the Contract Documents, even though deviations or Defective Work may not be discovered within the aforementioned one-year period. The one-year correction period set forth herein, and any and all guarantee or correction periods, does not in any way limit or waive the DISTRICT's rights to pursue legal action for patent or latent construction defects in accordance with California Code of Civil Procedure sections 337.1 and/or 337.15. Further, nothing contained in the Contract Documents shall be construed to limit in any manner the liability of the CONTRACTOR, or its Subcontractors and suppliers, or any tier, for damages sustained as a result of latent or patent defects in equipment or materials furnished or caused by the negligence of the CONTRACTOR or its subcontractors and suppliers, of any tier. The warranty contained in this Agreement, shall not be a waiver of nor shall they reduce any guarantee or warranty offered by the suppliers of materials or equipment furnished under this Agreement nor shall they reduce any responsibilities imposed on manufacturers or suppliers of such equipment under applicable law.
- K. Where the CONTRACTOR does not promptly and strictly comply with the terms of such written instructions given by the DISTRICT, or if the CONTRACTOR fails to comply with the requirements of any warranty or guarantee required by this Agreement within two (2) days after being notified in writing, or in an emergency where delay would cause serious risk of loss or damage, the DISTRICT may have the defective work corrected or the rejected work removed and replaced in accordance with this Section.
- L. In special circumstances where a particular item of equipment is placed in continuous use and service before final acceptance of the Work by the DISTRICT, the correction period for that item may start to run from an earlier date when so provided in the Contract Documents, or if agreed to in writing by the DISTRICT.
- M. In the event it is necessary for the DISTRICT to commence litigation to enforce any obligation or liability of the CONTRACTOR pursuant to this Section, the DISTRICT shall be entitled to recover from the CONTRACTOR, in addition to all other amounts found due and owing, fees of any consultants or experts necessary to address or correct the Defective Work.

14. PAYMENT

- A. **Schedule of Values.** At least thirty (30) days prior to the first Application for Payment Date, the CONTRACTOR shall submit a Schedule of Values, in a form acceptable to the DISTRICT, allocating the Contract Price to various trades, types of work, pieces of equipment, and major tasks to assist the DISTRICT in evaluating the percentage completion for each part of the Work. The CONTRACTOR's overhead and profit shall be uniformly pro-rated over all items in the Schedule of Values. The Schedule of Values shall represent the actual cost of each segment of the work and shall not allocate higher costs, overhead or profit to work items scheduled for early completion. The total sum of the Schedule of Values shall equal the Contract Price. If the DISTRICT objects to the allocation of cost or the level of detail provided, the CONTRACTOR shall revise and resubmit the Schedule of Values. This Schedule of Values, unless objected to by the DISTRICT, shall be used only as a basis for the CONTRACTOR's Applications for Payment. This Schedule of Values shall be so arranged that the value of the Work as it progresses may be readily determined.
- B. **Application for Payment.** The period covered by each Application for Payment shall be one calendar month. Payment shall be based on work completed as of the Application for Payment Date which shall be the last day of the month unless otherwise stated in the Agreement. Within seven (7) days prior to each Application for Payment Date, the CONTRACTOR shall meet with the DISTRICT to review the line item amounts proposed by the CONTRACTOR for payment. When the amounts proposed are acceptable to the DISTRICT, the CONTRACTOR shall prepare and submit within three (3) days, an Application for Payment in a format acceptable to the DISTRICT, along with all required Conditional and Unconditional releases from the CONTRACTOR, each subcontractor, supplier and materialman whose work is included in the Application for Payment, and all other documentation (including, without limitation, certified payroll reports and information) that may be reasonably required by the DISTRICT. The CONTRACTOR shall sign and certify on the Application for Payment, subject to penalty of perjury, the following: "The undersigned CONTRACTOR certifies that to the best of the CONTRACTOR's knowledge, information and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents and that all Work for which previous payments have been received is free and clear of liens, claims, security interests or encumbrances of any kind. The CONTRACTOR further warrants that title to all Work covered by this Application for Payment will pass to the DISTRICT no later than the time of payment."
1. As a condition precedent to payment by the DISTRICT, each itemized Application for Payment shall be accompanied by a current Conditional Waiver and Release On Progress Payment, in the form specified by the applicable California Civil Code, from CONTRACTOR and each of CONTRACTOR's subcontractors, suppliers, and union trust funds for which payment is sought by the Application for Payment, and an Unconditional Waiver and Release On Progress Payment, in the form specified by the applicable California Civil Code, from CONTRACTOR and each of CONTRACTOR's subcontractors, suppliers, and any union trust fund for which payment was sought by CONTRACTOR in the immediately preceding Application for Payment and for which the DISTRICT made payment.

2. The CONTRACTOR warrants that title to all work materials and equipment covered by an Application for Payment will pass to the DISTRICT, or its assignee, either by incorporation in the construction or upon receipt of payment by the CONTRACTOR, whichever occurs first, free and clear of all liens, stop notices, claims, security interest or encumbrances hereinafter referred to in this section as "liens". CONTRACTOR represents that no work, materials or equipment covered by an Application for Payment will have been acquired by the CONTRACTOR, or by any other person performing work at the Project or furnishing materials and equipment for the Project, subject to an agreement under which an interest or an encumbrance is retained by the seller or otherwise imposed by the CONTRACTOR or such other person.
 3. **Taxes.** The CONTRACTOR shall pay all applicable sales, consumer, use, and similar taxes for the Work provided by the CONTRACTOR and such taxes shall be included in the Contract Price.
 4. **Liability for Employee Payments.** CONTRACTOR accepts full liability and responsibility for the payment of any and all contributions, deductions, or taxes for social security, unemployment insurance, old age and survivor's benefits, medical and health benefits, or for any other purpose now or hereafter imposed under any applicable law measured by the wages, salary or other remuneration paid to persons employed by or on behalf of CONTRACTOR for the Work. CONTRACTOR covenants and agrees to observe and fully comply with all applicable law, including procurement of any necessary occupational licenses, permits and inspection certificates.
- C. **Payment for Items Delivered But Not Installed.** Subject to the consent of the DISTRICT, Applications for Payment may include the percentage of value stipulated in the Agreement for major equipment and custom fabricated items that have been delivered, stored and adequately protected at the site of the Project, and CONTRACTOR acknowledges that payment of such amounts included in any Application for Payment is within the sole discretion of the DISTRICT. As express conditions precedent to payment for stored materials, CONTRACTOR shall provide all documentation required by the DISTRICT to confirm that title to such major equipment and/or custom fabricated items will pass to the DISTRICT upon payment which may include, without limitation, the following:
1. Certificates of insurance, evidence of transfer of title to the DISTRICT, and consent of surety to payment, for stored materials; and
 2. Supporting documentation that verifies all amounts requested, such as paid invoices (overhead and profit on stored materials shall not be included in any Application for Payment). Payment will not be made for material stored at the site of the Project that is not custom fabricated. Payment will not be made for items stored off site. Payment will not be made for stored or installed items that are not protected from physical, environmental or other damage.
- D. Within seven (7) days after receipt of the CONTRACTOR's Application for Payment, the DISTRICT will approve the application as submitted or will notify the CONTRACTOR of reasons for withholding a portion of the requested payment. The DISTRICT may withhold any payment in whole or in part to the extent necessary to

reasonably protect the DISTRICT, or if it is unable to verify the accuracy of an Application for Payment. If the DISTRICT is unable to verify the accuracy of an Application for Payment, the DISTRICT will notify the CONTRACTOR in writing. If the CONTRACTOR and the DISTRICT cannot agree on a revised amount, the DISTRICT will promptly process payment for those amounts for which it is able to verify. The DISTRICT may also withhold any payment, or portion thereof, to protect the DISTRICT from loss because of known, or subsequently discovered, issues which may include, without limitation, the following:

1. Defective Work not corrected or remedied;
2. Third party claims filed or reasonable evidence indicating probable filing of such claims, including claims by separate contractors;
3. Failure of the CONTRACTOR to make payments properly or timely to subcontractors or suppliers for labor, materials or equipment;
4. Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
5. Damage to property, the Work, the DISTRICT, another contractor or a third party, including liquidated damages;
6. Reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
7. Work performed for which submittals are required prior to obtaining Favorable Review of submittals;
8. Failure to carry out the Work in accordance with the Contract Documents, including, without limitation, failure to make required submittals;
9. Failure to submit a construction schedule or to update the construction schedule in accordance with the Contract Documents;
10. Failure to update Record Drawings weekly;
11. Failure to provide all insurance coverages in accordance with the Contract Documents, or to reinstate required insurance coverage that has lapsed;
12. Non-payment of money owed to the DISTRICT for the extra cost of inspection;
13. Stop payment notice(s) served upon the DISTRICT;
14. Failure to submit certified weekly payrolls
15. Failure or refusal of CONTRACTOR to comply with the requirements and obligations of the Contract Documents; and

16. Any material breach of the Contract Documents by CONTRACTOR and/or its Subcontractors or suppliers, of any tier, or any other person or entity for which CONTRACTOR bears responsibility.
- E. When the grounds for withholding any amount are removed to the satisfaction of the DISTRICT, in its sole discretion, payment shall be made by the DISTRICT for amounts withheld because of them within ten (10) Days' thereafter. Neither approval of an Application for Payment, delivery or making of a progress payment, nor partial or entire use or occupancy of the Project by the DISTRICT, shall constitute an acceptance of any Work not in accordance with the Contract Documents, nor shall it be deemed a waiver of the DISTRICT of any remedy it may have in law or equity. Should any stop payment notice be filed with the DISTRICT, the DISTRICT shall in accordance with California Civil Code Section 9358, withhold the amount claimed, plus an allowance of an additional 25% to cover its litigation costs plus interest at the rate of 10%, from progress payments until such claims have been resolved pursuant to law.
- F. **Retainage.** Absent an express finding pursuant to Public Contract Code section 7201(b) authorizing the DISTRICT to withhold a higher amount of retention (in excess of five percent (5%) of the estimated value of the work done and the labor, materials, equipment, and services provided), the DISTRICT shall retain an amount from each progress payment not to exceed five percent (5%) of the estimated value of the work done and the labor, materials, equipment, and services provided, all in accordance with Public Contract Code section 7201. This retained amount shall be retained by the DISTRICT until the time of final acceptance of the Work and released in accordance with requirements of the Contract Documents and applicable law. In lieu of the five percent (5%) retainage, the CONTRACTOR may substitute securities as provided for in Public Contract Code Section 22300 and the Contract Documents.
- G. Payments to the CONTRACTOR will be made within the time limits required under applicable law after submission to the DISTRICT of an appropriate Application for Payment, inclusive of all required documentation to substantiate the Application for Payment, and subject to the DISTRICT's regular approval and accounting procedures.
- H. CONTRACTOR, and its subcontractors, shall promptly pay any subcontractor not later than seven (7) calendar days of receipt of each progress payment in accordance with the provision in section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The CONTRACTOR shall, by an appropriate written subcontract with each Subcontractor, require each Subcontractor to make payments to their sub-subcontractors in similar manner.
- I. **Final Payment.** Thirty five (35) days after the acceptance of the Work by the DISTRICT and recordation by the DISTRICT of a Notice of Completion with the County Recorder, and upon CONTRACTOR providing to the DISTRICT all documents and information required by the Contract Documents including, without limitation, all releases, maintenance guarantees, maintenance manuals and technical specifications, and all other requirements for project completion and closeout as set forth in the Contract Documents having been fully and completely satisfied, the CONTRACTOR shall be entitled to the balance due for the completion and acceptance of the Work, provided that all claims for labor and materials have been paid, and that no Claims shall have been filed with the DISTRICT based upon acts or omissions of the CONTRACTOR and that no stop payment notices have been filed, less sums withheld

for liquidated damages, if any, or any other damages incurred by the DISTRICT, or other sums withheld pursuant to the terms of the Contract Documents or as authorized by California law.

1. Final payment will be made in accordance with the Contract Documents and California law, including, without limitation, Public Contract Code Section 7107. Pursuant to Public Contract Code Section 7107, in the event of a dispute between the DISTRICT and CONTRACTOR, the DISTRICT may withhold from the final payment an amount not to exceed 150 percent of the disputed amount. All provisions of the Contract Documents, including without limitation those establishing obligations and procedures, shall remain in full force and effect notwithstanding the making or acceptance of final payment.

J. Waiver of Claims. Subject to the terms of the Contract Documents, the acceptance of final payment shall, after the date of Substantial Completion of the Project, constitute a waiver of all Claims by the CONTRACTOR.

K. The making of final payment shall not constitute a waiver of any claims or rights by the DISTRICT.

15. TERMINATION

A. **Termination by the DISTRICT for Cause (Default).** If the CONTRACTOR refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as will ensure its completion within the time specified within the Contract Documents, including any authorized extension thereof; or abandons the Work; or fails to perform the Work, in any manner, as required by the Contract Documents and/or industry standards; or fails to retain a valid Contractor's license of the classification required for the Work; or fails to complete such work within such time as required under the Contract Documents; or seeks to assign the Contract; or, if the CONTRACTOR should be adjudged as bankrupt, or is otherwise deemed insolvent by the DISTRICT based on good cause and is unable to proceed with the Work; or if the CONTRACTOR should make a general assignment for the benefit of creditors; or if a receiver should be appointed on account of insolvency; or if the CONTRACTOR files a petition to take advantage of any debtor's act; or should any Subcontractor materially violate any of the provisions of the Contract Documents; or if the CONTRACTOR should persistently or repeatedly refuse or fail to provide the required project management, supervision, quality control, and/or supply enough properly skilled workers or proper materials to complete the Work in the time specified; or if the CONTRACTOR should fail to make prompt payment to Subcontractors or suppliers for material or labor; or if the CONTRACTOR should persistently disregard laws or instructions given by the DISTRICT; or if the CONTRACTOR otherwise substantially fails to fulfill its obligations under, or commits a material breach of, or violates, the Contract Documents or any provision or term thereof; the CONTRACTOR shall be default under the Contract Documents. In such instance, the DISTRICT may, in its sole discretion, after providing the CONTRACTOR seven (7) Days' written notice, and without prejudice to any other remedy the DISTRICT may have:

B. Provide any such labor, equipment, equipment and/or services required to perform the Work or designated portion of the Work or to correct any deficiencies or delays and deduct the cost from any money due or to become due to the CONTRACTOR, or if the

money due or to become due to the CONTRACTOR is not sufficient to cover such amount, the CONTRACTOR shall pay the difference immediately to the DISTRICT upon demand; or

- C. Terminate the Contract, in its entirety or in part, effective immediately upon the DISTRICT's delivery to the CONTRACTOR and its Surety(ies) of a notice of termination of the Contract.
- D. Upon receipt of the notice of termination of the Agreement for default, the Surety shall immediately takeover and assume the control of and perform the Work as the successor to the CONTRACTOR and shall immediately assume all rights obligations and liabilities, including Liquidated Damages, that have accrued under the Agreement. The Surety shall maintain the site of the Project and all of its safety controls. If the Surety fails to maintain the site of the Project, the DISTRICT may correct unsafe conditions and charge the Surety for costs incurred. If the Surety assumes the CONTRACTOR's terminated Work, it shall take the CONTRACTOR's place in all respects for that part and shall be paid by the DISTRICT for all work performed by it in accordance with the terms of the Contract Documents. If the Surety assumes the entire Agreement, all money due the CONTRACTOR at the time of its default, if any, shall be payable to the Surety as the work progresses, subject to the terms of the Contract Documents and any applicable bond, less all amounts due to the DISTRICT.
 - 1. Within seven (7) days of its receipt of the notice of termination of the Agreement for default, the Surety shall provide to the DISTRICT a written plan detailing the course of action it intends to take to remedy the default of the CONTRACTOR. The DISTRICT will review and notify the Surety if the plan is satisfactory.
 - 2. If the Surety fails to submit a satisfactory plan or to maintain progress on the plan as accepted by the DISTRICT, or does not otherwise comply fully and completely to the DISTRICT's satisfaction with the terms of the bond and within the time periods stated therein, the DISTRICT may, in its sole discretion, take over the Work and prosecute the same to completion by contractor by any other method it may deem advisable for the account and at the expense of the CONTRACTOR. The Surety and CONTRACTOR shall be liable to the DISTRICT for any excess cost and all other damages and costs incurred by the DISTRICT thereby or to which the DISTRICT is entitled under the Contract Documents or by law, and shall pay the DISTRICT all such amounts within thirty (30) days after the DISTRICT submits an invoice for such amounts. In such an event, the DISTRICT may without liability for so doing, take possession of and utilize such materials, tools, equipment, supplies and other property belonging to the CONTRACTOR and/or assume assignment of any and all subcontracts for Subcontractors and/or suppliers that may be necessary to complete the Work. For any portion of such Work that the DISTRICT elects to complete by furnishing its own employees, materials, tools, and equipment, the CONTRACTOR and Surety shall compensate the DISTRICT for all costs related thereto. If requested by the DISTRICT, the CONTRACTOR shall demobilize, and shall remove any part or all of the CONTRACTOR's materials, supplies, equipment, tools, and construction equipment and machinery, from the Project site within 7 Days of such request; and if the CONTRACTOR fails to do so, the DISTRICT may remove or store, and after ninety (90) days sell, any of the same at the CONTRACTOR's expense.

3. If a termination for default is asserted by the DISTRICT, and demand made upon Surety by the DISTRICT, Surety shall not tender the CONTRACTOR, or any affiliate thereof, as its completion contractor except as authorized in the bond and subject to the sole discretion of the DISTRICT.
- E. The CONTRACTOR hereby consents to assigning to the DISTRICT and/or the DISTRICT's replacement contractor all subcontracts and other agreements of any and all Subcontractors and/or suppliers that may be necessary to complete the Work in the event of a termination for default (or termination for convenience, as set forth below). The CONTRACTOR agrees to obtain, by way of a subcontract provision, the consent of each and every Subcontractor and/or supplier for such assignment prior to the commencement of each such Subcontractor's and/or supplier's conduct of the Work.
- F. In the event of such termination for default, the CONTRACTOR will not be entitled to receive any further payment until the entire Work or disputed portion of the Work is completed and accepted by the DISTRICT. Any amounts due to the CONTRACTOR will be based on unit prices or lump sum bid and the quantity of work completed at the time of termination, less damages caused by acts of the CONTRACTOR, including but not limited to, all costs to complete the Work, all costs arising from professional services and attorneys' fees, and all costs incurred to insure or bond the work performed by any completion contractor and Subcontractors utilized to complete the Work. If such costs due to the DISTRICT on behalf of the CONTRACTOR exceed the unpaid balance, the CONTRACTOR or Surety shall pay the difference to the DISTRICT promptly upon demand. On failure of the CONTRACTOR to pay, the Surety shall pay all such amounts on demand by the DISTRICT. Nothing set forth herein shall limit Surety's obligations under the subject bonds or the timing thereof, which shall arise immediately upon the CONTRACTOR's default.
- G. The CONTRACTOR and the DISTRICT agree that nothing in this Section is intended to create a right of either party to recover attorney fees as prevailing party in any lawsuit on this Contract.
- H. In addition to all of its rights and remedies stated herein and under the Contract Documents and by law, the DISTRICT may also order the CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the DISTRICT to stop the Work shall not give rise to any duty on the part of the DISTRICT to exercise this right for the benefit of the CONTRACTOR or any other person or entity.
- I. All obligations of the CONTRACTOR pursuant to the Contract Documents shall survive the termination for cause of the Agreement. The provisions of this Section are in addition to, and not in limitation of, any other rights or remedies under law or in equity available to the DISTRICT.
- J. If it is later determined that the DISTRICT's termination of the Agreement for default was wrongful, or the CONTRACTOR had an excusable reason for not performing, such as a fire, flood, or other event which was not the fault of or was beyond the control of the CONTRACTOR, the DISTRICT, after setting up a new performance schedule, may allow the CONTRACTOR to continue work, or treat the termination as a termination for convenience, and the rights and obligations of the DISTRICT and the

CONTRACTOR shall be the same as if the termination had been issued for the convenience of the DISTRICT.

- K. **Termination by the DISTRICT for Convenience.** The DISTRICT may terminate the CONTRACTOR's performance under the Agreement for convenience, either in whole or in part, at its sole discretion for any reason, or when conditions encountered during the performance of the Work make it impossible or impracticable to proceed, or when the DISTRICT is prevented from proceeding with the Agreement by act of God, by law, or by official action of a public authority, or upon a determination that such termination is in the best interest and convenience of the DISTRICT, or whenever the DISTRICT is prohibited from completing the Work for any reason.
- L. Upon receipt of a written notice of termination for convenience, the CONTRACTOR shall:
1. Stop work as specified in the written notice;
 2. Terminate all orders and subcontractors except as necessary to complete any portion of the Work that is not terminated;
 3. If directed in writing by the DISTRICT to do so, assign all right, title and interest in subcontracts and materials in progress, in which case the DISTRICT will have the right at its discretion to settle, or pay any or all claims arising out of the termination of such Subcontractors, but in no event shall recovery by any Contractor include lost profits for uncompleted portions of the Work;
 4. Deliver or otherwise make available to the DISTRICT all data, drawings, specifications, reports, estimates, summaries and such other information and material as may have been accumulated by the CONTRACTOR in performing the Work whether completed or in process;
 5. Settle outstanding liabilities and claims with the approval of the DISTRICT;
 6. Complete performance of such part of the Work as has not been terminated; and
 7. Take such other actions as may be necessary, or as may be directed by the DISTRICT for the protection and preservation of the Work and/or property related to the Work.
- M. Upon receipt of the DISTRICT's written notice of termination for convenience, the CONTRACTOR shall submit to the DISTRICT a request for final payment in accordance with the requirements of the Contract. Such request shall be submitted promptly, but no later than sixty (60) days from the effective date of the termination for convenience.
- N. The final payment to the CONTRACTOR after a written termination for convenience shall be limited to the following amounts due and owing under the Contract at time of termination: (1) Any actual costs incurred by the CONTRACTOR for restocking charges; (2) The agreed upon price of protecting the Work in any manner, if any, as directed by the DISTRICT; and (3) The Contract Price allocable to the portion of the Work properly performed or goods supplied by the CONTRACTOR as of the date of

termination, as determined in accordance with the Contract Documents, reduced by any sums previously paid to the CONTRACTOR.

1. The above payment shall be the sole and exclusive remedy to which the CONTRACTOR is entitled in the event of a termination for convenience of the Agreement; and the CONTRACTOR will not be entitled to any other compensation or damages and expressly waives same.
2. The CONTRACTOR shall not be entitled to payment for any work not performed, including, without limitation, overhead and profit on work not performed.
3. The DISTRICT shall have the right to withhold any portion or the whole of the final payment under this provision in the event there are any outstanding claims or rights asserted by the DISTRICT against the CONTRACTOR, or by any third party against the DISTRICT which arises out of the CONTRACTOR's Work.
 - a. All obligations of the CONTRACTOR pursuant to the Contract Documents shall survive the termination for convenience of the Contract.
 - b. The CONTRACTOR shall include this termination for convenience provision in all subcontracts and purchase orders of every tier, which shall be binding upon all Subcontractors and suppliers, of every tier.
 - c. **Suspension by the DISTRICT for Convenience.** The DISTRICT shall have the authority to suspend or delay the performance of the Work, in whole or in part, for such period for any reason as the DISTRICT may deem necessary. The CONTRACTOR must immediately comply with the DISTRICT's written order to suspend or delay the Work. The suspended or delayed Work can only be resumed upon written direction of the DISTRICT. A suspension or delay of Work as set forth in this Section shall not relieve the CONTRACTOR of its responsibilities as set forth elsewhere in the Contract Documents
 - d. In the event the DISTRICT orders a suspension or delay of the performance of the Work or any portion thereof for any reason the CONTRACTOR shall perform, at an agreed-upon cost with the DISTRICT, all the work necessary to (i) preserve and protect the Work and related facilities and improvements from weather and other environmental conditions during the period of suspension, (ii) repair any damage to the Work and/or related facilities and improvements occurring before, provide a safe, smooth, and unobstructed passageway through construction for use by public traffic and any other public use during the period of suspension. In the absence of an agreed-upon amount between the DISTRICT and the CONTRACTOR to perform such work, the CONTRACTOR shall proceed to perform as directed by the DISTRICT and the CONTRACTOR may seek an adjustment of the Contract Price, limited to the amount of its direct costs to perform such work, in accordance with this Agreement.
 - e. In addition to the suspension or delay of the performance of the Work, in the event the DISTRICT determines in the sole discretion of the DISTRICT that a situation exists where continuation of the Work would be illegal or

endanger the health, safety or welfare of persons or property on or affected by the Work, the DISTRICT will have the right to order the CONTRACTOR in writing to delay or suspend the Work in whole or in part for a period of time equal to the period of time while such situation exists. Such order of the DISTRICT shall not otherwise modify or invalidate in any way any of the provisions or requirements of the Contract Documents, and, notwithstanding anything to the contrary in the Contract Documents, the CONTRACTOR shall not be entitled to any damages or compensation from the DISTRICT on account of such delay or suspension.

16. RIGHT TO AUDIT

- A. **Maintenance, Inspection, and Audit of Records.** All books, account, reports, files, correspondence, data and other records relating to this Contract as described in this Article shall be maintained by the CONTRACTOR, its Subcontractors and material suppliers, and shall be subject at all reasonable times to review, inspection, and audit by the DISTRICT, and their agents, upon the request of the DISTRICT, in its sole discretion, and at all times during performance of the Work and for a period of five (5) years after Final Completion of the Work.
- B. **Accounting System.** Contactor shall exercise such controls as may be necessary for proper financial management of the Work. Such accounting and control systems shall comply with prevailing custom and practice for similar projects, be satisfactory to the DISTRICT and shall include preservation of records for a period of five (5) years after Final Completion, or for such longer period as may be required by Laws and Regulations.
- C. **Books and Records.** The CONTRACTOR shall keep, and shall require all Subcontractors and suppliers, of every tier, to keep, full and detailed books, records, information, materials and data, of every kind and character (hard copy, as well as computer readable data), that pertain to the performance of the Work or the Contract, and any matters, rights, duties or obligations relating to the Work or the Contract, including, without limitation, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, change orders, change order requests, estimates, field orders, schedules, diaries, logs, reports, shop drawings, samples, exemplars, drawings, specifications, invoices, delivery tickets, receipts, vouchers, canceled checks, memoranda; accounting records; job cost reports; job cost files (including complete documentation of negotiated settlements); back charges; general ledgers; documentation of cash and trade discounts earned; insurance rebates and dividends and other documents relating in any way to any claims, charges or time extensions asserted by the CONTRACTOR of any of the subcontractors.
- D. **Inspection and Copying.** The CONTRACTOR, its Subcontractors and suppliers shall allow the DISTRICT, and its authorized representative(s), auditors, attorneys and accountants, upon twenty-four (24) hour notice to the CONTRACTOR, full access to inspect and copy all such books and records identified in this Article at a location as designated by the DISTRICT.
- E. **Noncompliance by the CONTRACTOR.** The CONTRACTOR's compliance with any audit requested pursuant to this Article shall be a condition precedent to maintenance of any judicial or extra-judicial action arising from the Contract Documents. In addition

to and without limitation upon the DISTRICT's other rights and remedies for breach, including any other provisions for withholding as set forth in the Contract Documents, the DISTRICT shall have the right, exercised in its sole discretion, to withhold from any payment to the CONTRACTOR due under each current Application for Payment an additional sum of up to ten percent (10%) of the total amount set forth in such Application for Payment, until the CONTRACTOR and the subcontractors have complied with any outstanding and unsatisfied audit request by the DISTRICT under this Article. Upon compliance with this Article, any such monies withheld shall be released to the CONTRACTOR.

- F. **Enforcement by the DISTRICT.** The CONTRACTOR agrees that any failure by the CONTRACTOR, or any Subcontractor or supplier, to provide access to books and records as required by this Article shall be specifically enforceable by issuance of a preliminary and/or permanent mandatory injunction by a court of competent jurisdiction based on affidavits submitted to such court and without the necessity of oral testimony, to compel the CONTRACTOR, Subcontractors or suppliers to permit access, inspection, audit and/or reproduction of such records or the require delivery of such records to the DISTRICT for inspection, audit and/or reproduction. The CONTRACTOR shall expressly incorporate and make the requirements of this Agreement applicable to and binding upon all subcontracts, of any tier, and purchase orders in excess of \$25,000, at any tier. The CONTRACTOR shall also require that the audit provisions pursuant to this Agreement be included in all agreements, contracts or subcontracts in excess of \$25,000 entered into by Subcontractors and suppliers, of any tier.

17. FAILURE TO ACT NOT A WAIVER OF RIGHTS

Except as expressly provided in the Contract Documents, no action or failure to act by the DISTRICT, shall constitute a waiver of any right afforded or duty imposed under the Contract Documents. No such action or failure to act shall constitute approval of or acquiescence in failure to perform in accordance with the Contract Documents.

18. RIGHTS AND REMEDIES

Duties, obligations, rights and remedies prescribed by the Contract Documents shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed by or available under law.

19. LAWS AND REGULATIONS

The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations relating to the Project. If the CONTRACTOR observes that the Drawings and Specifications are at variance therewith, they shall promptly notify the DISTRICT in writing, and any necessary changes shall be adjusted as provided in the Agreement for changes in the work. If the CONTRACTOR performs any work contrary to such laws, ordinances, rules and regulations, and without written notice to the DISTRICT, they shall bear all costs arising therefrom and shall not be paid by the DISTRICT for performing such work.

20. CUSTOMER RELATIONS

The CONTRACTOR agrees that its personnel and equipment shall at all times present a neat appearance; all work shall be done, all contacts with customers and all complaints handled with due regard for the DISTRICT's public relations. The CONTRACTOR agrees that complaints of any nature received from the public or from public authorities shall receive immediate attention. All complaints and any action taken by CONTRACTOR with respect to such complaints shall be reported to the DISTRICT.

21. NOTICES

Any and all notices or other matters required or permitted by this Agreement or by law to be served on, given to, or delivered to either party hereto by the other party to this Agreement shall be in writing and shall be deemed duly served, given, or delivered when personally delivered to the party to whom it is addressed or in lieu of such personal service, five (5) days after deposited in the United States mail, first-class postage paid, addressed to the DISTRICT at 11570 Donner Pass Road, Truckee, California 96161, or to the CONTRACTOR at _____.

Either party, the DISTRICT or the CONTRACTOR, may change its address for the purpose of this section by giving written notice of such change to the other party in the manner provided in this section.

22. ATTORNEYS', EXPERTS' AND CONSULTANTS' FEES

In the event of any litigation concerning any controversy, claim or dispute between the parties hereto, arising out of or relating to this Agreement or the breach hereof, or the interpretation hereof, the prevailing party shall be entitled to recover from the losing party reasonable expenses, attorneys' fees, experts' fees, and consultants' fees, and costs incurred therein or in the enforcement or collection of any judgment or award rendered therein.

23. CAPTIONS

The captions and headings of the different sections of this Agreement are inserted for convenience of reference only and are not to be taken as part of this Agreement or to control or affect the meaning, construction, or effect of the same.

24. NECESSARY ACTS

Each party to this Agreement agrees to perform any further acts and execute and deliver any further documents that may be reasonably necessary to carry out the provisions of this Agreement.

25. ASSIGNMENT

Neither party may assign this Agreement, or payments due under the Agreement, without the written consent of the other party.

26. GOVERNING LAW

This Agreement shall be construed in accordance with, and governed by, the laws of the State of California.

27. FORUM

This Agreement and the Contract Documents shall be deemed to have been entered into in the County of Nevada, State of California, and governed by California law. By entering into this Agreement, the CONTRACTOR, on behalf of itself and its Surety(ies), consents and submits to the jurisdiction of Courts of the State of California, County of Nevada, over any action of law, suit in equity, and/or other proceeding that may arise out of the Contract Documents, and expressly waive the removal provisions of California Code of Civil Procedure Section 394.

28. SOLE AND ONLY AGREEMENT

This Agreement, including any exhibits attached hereto, constitutes the sole and only Agreement of the parties hereto relating to the Project and correctly sets forth the rights, duties and obligations of each to the other as of its date. Any prior agreements, promises, negotiations, or representations not expressly set forth in this Agreement are of no force and effect.

29. DISTRICT POWERS

Nothing herein contained shall be deemed to limit, restrict or modify any right, duty or obligation given, granted, or imposed upon the DISTRICT by the laws of the State of California now in effect, or hereafter adopted, nor to limit or restrict the power or authority of the DISTRICT.

30. SEVERABILITY

In the event that any part or provision of this Agreement is found to be illegal or unconstitutional by a court of competent jurisdiction, such findings shall not affect the remaining parts, portions, or provisions of this Agreement.

31. ASSIGNMENTS OF RIGHTS

The CONTRACTOR agrees to assign to the DISTRICT all rights, title, and interest in and to all causes of action it may have under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the Agreement and that such assignments shall be made and become effective at the time the DISTRICT tenders final payment to the CONTRACTOR, without further acknowledgement by the parties.

32. WORKMANSHIP

All work shall be done and completed in a thorough workmanlike manner notwithstanding any omission from these specifications or from the Drawings, and it shall be the duty of the CONTRACTOR to call the DISTRICT's attention to apparent errors or omissions and request instructions before proceeding with the work. The DISTRICT may, by appropriate

instructions, correct errors, and omissions, which instructions shall be as binding upon the CONTRACTOR as though contained in the original Contract Documents

33. CHARACTER OF WORKPERSONS

Whenever, in the opinion of the DISTRICT, any superintendent, foreman, or workman employed by the CONTRACTOR or their subcontractors is disrespectful, intemperate, disorderly, or otherwise objectionable, they shall, at the written request of the DISTRICT, be removed and not again be employed on the worksite without the written consent of the DISTRICT.

34. CONDITION OF WORKSITE AND EQUIPMENT

A. The CONTRACTOR at all times shall keep the Project site free from debris such as waste, rubbish, and excess materials and equipment. The CONTRACTOR shall use equipment that is in good working order and remove inoperable equipment. CONTRACTOR shall not store debris under, in, or about the premises. Upon completion of Work, the CONTRACTOR shall remove temporary fencing, barricades, planking and construction toilet and similar temporary facilities from site. The 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.

B. The CONTRACTOR shall fully clean up the Project site at the completion of the Work or such other time(s) as DISTRICT may reasonably request, in their sole discretion. If the CONTRACTOR fails to fully clean the Project site, at any time, to the satisfaction of the DISTRICT, the DISTRICT may do so and the cost of such clean up shall be back charged back to the CONTRACTOR.

35. CONTRACTOR'S REPRESENTATIVE AND EMERGENCIES

A. The CONTRACTOR shall, at all times during working hours, be represented in all matters pertaining to this project by one, and only one, fully competent and experienced general superintendent. Instructions and information given by the DISTRICT to the CONTRACTOR's superintendent on the work shall be considered as having been given to the CONTRACTOR. Before any work is done at the job site, the CONTRACTOR shall give written notice to the DISTRICT stating who the CONTRACTOR's superintendent will be, giving a telephone number at which they can always be reached day or evening. The DISTRICT shall be informed in writing prior to any change. A statement naming more than one representative at a time to be in charge and depending upon which is present at the time will not be acceptable.

B. Emergencies may arise during the progress of the WORK which may require special effort or require extra shifts of workers to continue the WORK beyond normal working hours. The CONTRACTOR shall be prepared in case of such emergencies from whatever cause, to do all necessary work promptly.

36. WORK INVOLVING TRENCHING OR EXCAVATION

For any work which involves digging trenches or other excavations that extend deeper than four feet below the surface, the CONTRACTOR shall promptly, and before the following

conditions are disturbed, notify the DISTRICT, in writing, of any: (1) Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; (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, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract. The DISTRICT shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do 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 shall issue a change order according the procedure described in this Agreement. In the event a dispute arises between the DISTRICT and the CONTRACTOR whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the cost of, or performance of any part of the work, the CONTRACTOR shall not be excused from any scheduled completion date provided by this Agreement, but shall proceed with all work to be performed under this Agreement. The CONTRACTOR shall retain any and all rights provided either by this contract or by law which pertain to resolution of disputes and protests between contracting parties.

37. RESPONSIBILITIES OF DISTRICT

- A. The DISTRICT shall assume the responsibility, between the parties to this Agreement, for the timely removal, relocation, or protection of existing main or trunkline utility facilities located on the site of any construction project that is a subject of this Agreement, if such utilities are not identified by the DISTRICT in the drawings and specifications. The CONTRACTOR shall be compensated for the costs of locating such utility facilities, repairing damage not due to the failure of the CONTRACTOR to exercise reasonable care, removing or relocating such utility facilities not indicated in the drawings and specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work, and the CONTRACTOR shall not be assessed liquidated damages for delay in completion of the Project, when such delay was caused by the failure of the DISTRICT or the owner of the utility to provide for removal or relocation of such utility facilities.
- B. Nothing herein shall be deemed to require the DISTRICT to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the construction project can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of the construction; provided, however, nothing herein shall relieve the DISTRICT from identifying main or trunklines in the drawings and specifications.
- C. Nothing herein shall preclude the DISTRICT from pursuing any appropriate remedy against the utility for delays which are the responsibility of the utility. Nothing herein shall be construed to relieve the utility from any obligation as required whether by law or by contract to pay the cost of removal or relocation of existing utility facilities.
- D. If the CONTRACTOR, while performing the Contract discovers utility facilities not identified by the DISTRICT in the Contract Drawings or Specifications, the CONTRACTOR shall immediately notify the DISTRICT and utility in writing.

- E. The DISTRICT, where it is the owner, shall have the sole discretion to perform repairs or relocation work or permit the CONTRACTOR to do such repairs or relocation work at a reasonable price.

38. NECESSARY TIME

The CONTRACTOR agrees to devote the time necessary to perform the services set forth in this Agreement in an efficient and effective manner. The CONTRACTOR may represent, perform services for and be employed by additional individuals or entities, in the CONTRACTOR's sole discretion, as long as the performance of these extra-contractual services does not interfere with or present a conflict with the DISTRICT's business.

39. NO ASSIGNMENT

No assignment by the CONTRACTOR of any rights under or interests in the Agreement will be binding on the DISTRICT without the advance written consent of the DISTRICT; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the CONTRACTOR from any duty or responsibility under the Contract Documents.

40. BOUND TO CONTRACT DOCUMENTS

The CONTRACTOR binds itself, and its partners, successors, sureties, assigns, and legal representatives to the DISTRICT, its partners, successors, assigns, and legal representatives, in respect to all covenants, agreements, and obligations contained in the Contract Documents.

41. UNENFORCEABLE PROVISION

Any provision or part of the Contract Documents held to be void or unenforceable under any law or regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the DISTRICT and the CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

42. RULES AND REGULATIONS

The CONTRACTOR acknowledges that the Project is or may be subject to requirements and regulations issued on behalf of various governmental and/or regulatory bodies. The CONTRACTOR agrees, on behalf of itself and its subcontractors, of any tier, to fully and promptly comply with any and all requirements and regulations issued on behalf of such entities.

43. ENTIRE AGREEMENT

This Agreement, inclusive of all Contract Documents, represents the entire agreement of the Parties concerning the subject matter hereof, and supersedes all prior negotiations,

representations, or agreements of the parties, whether written or oral, with respect to such subject matter.

44. SURVIVAL OF TERMS

Any indemnity, warranty or guarantee given by the CONTRACTOR to the DISTRICT under this Agreement shall survive the expiration or termination of the Agreement and shall be binding upon the CONTRACTOR and their subcontractors and suppliers until any action is barred according to terms in the Agreement or by the applicable statute of limitations or statute of repose. All obligations of the CONTRACTOR under this Contract shall survive the expiration or termination of this Contract.

TRUCKEE DONNER PUBLIC UTILITY DISTRICT

By: _____

Name: _____

Title: _____

(Seal)

Attest: _____

Name: _____

Title: _____

CONTRACTOR

By: _____

Name: _____

Title: _____

(Seal)

Attest: _____

Name: _____

Title: _____

END OF SECTION 00500

SECTION 00600 – PERFORMANCE BOND

This Construction Performance Bond (“Bond”), dated _____ is in the penal sum of _____, and is entered into by and between the parties listed below to ensure the faithful performance of the Construction Contract identified below. This Bond consists of this page and the Bond Terms and Conditions, Paragraphs 1 through 14, attached hereto. Any singular reference to _____ (“Contractor”), (“Surety”), the Truckee Donner Public Utility District (“DISTRICT”) or other party shall be considered plural where applicable.

CONTRACTOR:

SURETY:

Name

Name

Address

Principal Place of Business and Address

Truckee Donner Public Utility District
11570 Donner Pass Road
Truckee, California 96161

CONSTRUCTION CONTRACT:
District Pipeline Replacement – 2026

Attn: Contract Administrator

DATED _____, 20____,

in the amount of \$ _____.

IN WITNESS THEREOF, the above bounden parties have executed this instrument under their seals this _____ 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.

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)

SURETY
Company: (Corp. Seal)

Signature:

Signature:

Name and Title:

Name and Title:

Address

Address

If CONTRACTOR is a partnership, all partners must execute BOND.

PERFORMANCE BOND TERMS AND CONDITIONS

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the DISTRICT for the complete and proper performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor completely and properly performs all of its obligations under the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond.
3. The Surety's obligation under this Bond shall arise after the DISTRICT has declared a Contractor Default under the Construction Contract pursuant to the terms of the Construction Contract. Upon declaring the Contractor in default, the DISTRICT shall agree to make the undisputed Balance of the Contract Sum available to the Surety for completion of the work on the Project under the Construction Contract.
4. When the DISTRICT has satisfied the conditions of Paragraph 3, the Surety shall promptly, and in no event later than seven (7) working days after receipt of any notice of default, and at the Surety's sole expense, confirm in writing as to its election to take one of the following actions:
 - A. Arrange for the Contractor, with consent of the DISTRICT, to perform and complete the Construction Contract (but the DISTRICT may withhold consent in its sole discretion (with or without cause), in which case the Surety must immediately elect option 4B, 4C or 4D, below), and that such performance shall commence within an additional thirty (30) calendar days; or
 - B. Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors (other than the Contractor), and that such performance shall commence within an additional thirty (30) calendar days; or
 - C. As promptly as reasonably possible, obtain bids from qualified, responsible contractors (other than the Contractor) acceptable to the DISTRICT for a contract for performance and completion of the Construction Contract, and, upon determination by the DISTRICT that the contractor selected with the DISTRICT's concurrence is responsible, and subject to full compliance with all applicable laws as may be required (including, without limitation, any applicable competitive bidding and public contracting and procurement requirements pursuant to California and/or Federal laws, if applicable), arrange for a contract to be prepared for execution by the DISTRICT and the contractor selected with the DISTRICT's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract and subject to the consent of the DISTRICT; and, if the Surety's obligations defined in Paragraph 6 exceed the Balance of the Contract Sum, then the Surety shall pay to DISTRICT the amount of such excess; or
 - D. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and subject to its investigation and consultation with the DISTRICT, determine in good faith the amount for which it may then be liable to the DISTRICT under Paragraph 6 for the performance and completion of the Construction Contract and, within ten (10) additional calendar days, tender payment therefor to the DISTRICT

with full explanation of the payment's calculation. If the DISTRICT accepts the Surety's tender under this paragraph 4(D), the Surety shall remain liable for future damages, then unknown or unliquidated, and including, without limitation, additional costs incurred to complete the Construction Contract and any unsatisfied liquidated damages, resulting from the Contractor Default. If the DISTRICT disputes the amount of Surety's tender under this paragraph 4(D), the DISTRICT may exercise all remedies available to it at law to enforce the Surety's liability under paragraph 6.

5. If the Surety does not proceed as provided in Paragraph 4, then the Surety shall be deemed to be in default on this Bond ten (10) calendar days after receipt of an additional written notice from the DISTRICT to the Surety demanding that the Surety perform its obligations under this Bond. At all times the DISTRICT shall be entitled to enforce any remedy available to the DISTRICT at law or under the Construction Contract including, without limitation, and by way of example only, rights to perform work, protect work, mitigate damages, or coordinate work with other consultants or contractors.
6. The Surety's monetary obligations under this Bond are commensurate with the obligations of the Contractor under the Construction Contract. The Surety's obligations shall include, but are not limited to:
 - A. The responsibilities of the Contractor under the Construction Contract for completion of the Construction Contract and correction of defective, deficient and/or non-compliant work;
 - B. The responsibilities of the Contractor under the Construction Contract to pay liquidated damages, and for damages for which no liquidated damages are specified in the Construction Contract, actual damages, and all damages caused by non-performance or lack of proper performance of the Construction Contract, including but not limited to, all valid and proper back charges, offsets, payments, indemnities, and/or other damages;
 - C. Additional administrative, management, legal, design professional and delay costs resulting from the Contractor Default or resulting from the actions or failure to act of the Surety under Paragraph 4.
7. No right of action shall accrue on this Bond to any person or entity other than the DISTRICT or its heirs, executors, administrators, or successors.
8. The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project 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 Documents or to the Project and the provisions of Section 2819 and 2845 of the California Civil Code. Without limiting the foregoing, such changes, extensions of time and alterations or additions shall include, but are not limited to, changes or alterations to the Contract Documents (including, without limitation, an increase in the Contract Price), extensions of Contract Time, or modifications of the time, terms, or conditions of payment to the Contractor. No extension of time, change, alteration, modification, deletion, or addition to the Contract Documents, or of the work required thereunder, shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond.

9. Any proceeding, legal or equitable, under this Bond shall be instituted in the Superior Court for the County of Nevada.
10. As a part of the obligation secured under this Bond, and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees and expert costs, incurred by the DISTRICT in successfully enforcing any obligation arising under this Bond, all to be taxed as costs and included in any judgment rendered.
11. Notice to the Surety, the DISTRICT or the Contractor shall be mailed or delivered to the address(es) shown on the signature page.
12. Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted here from and provisions conforming to such statutory requirement shall be deemed incorporated herein.
13. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains, including any warranty and guarantee obligations. Nothing herein shall limit the DISTRICT's rights or the Contractor or Surety's obligations under the Contract Documents, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.1 or 337.15.
14. Definitions:
 - A. Balance of the Contract Sum: The total amount payable by the DISTRICT to the Contractor pursuant to the terms of the Construction Contract after all proper adjustments have been made under the Construction Contract, for example, deductions for progress payments made, and increases/decreases for approved modifications to the Construction Contract.
 - B. Construction Contract: The Agreement between the DISTRICT and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
 - C. Contractor Default: Material failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

NOTE TO SURETY:

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

SURETY COMPANY ATTORNEY-IN-FACT)
STATE OF CALIFORNIA)
COUNTY OF _____) ss.
)

On _____, before me, the undersigned, a Notary Public in and for the State, personally appeared _____, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

WITNESS MY HAND AND OFFICIAL SEAL:
(SEAL)

Notary Public for the State of California.

Acknowledgement by Attorney-in-Fact must be attached.
Corporate seals of Principal and Surety must be attached.

(Place Seal Above or Enclose on Separate Paper if more space is required)

END OF SECTION 00600

SECTION 00610 – PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS that the Truckee Donner Public Utility District (“District”), by its order made on _____, 2026, has awarded to

_____, hereinafter designated as the “Principal,” a contract for the construction of the public work of improvement known as the District Pipeline Replacement – 2026.

NOW, THEREFORE, we the Principal and _____

(“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, his/her or its heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, any prevailing wages due and penalties incurred pursuant to the California Labor Code or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and their subcontractors pursuant to Section 18806 of the Revenue and Taxation Code with respect to such work and labor as required by Sections 9550 et seq. of the Civil Code of California, then said Surety will pay for the same, in or to an amount not exceeding the amount set forth herein, and also will pay in case suit is brought upon this bond, such reasonable attorney's fees, as shall be fixed by the court, awarded and taxed as in the above mentioned statutes provided.

AND, 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 or the Contract Document accompanying the same shall in any wise affect its obligations on this bond, and Surety does hereby waive the provisions of California Civil Code Section 2819 concerning any such consent to change, extension of time, alteration or addition to the terms of the contract, or to the work, or to the Contract Documents, or notice of the same.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their

seals this _____ day of _____, 2026, 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.

Attestation on next page.

ATTEST:

Principal Secretary

Principal

(SEAL)

By _____ (s)

Witness as to Principal

(Address)

(Address)

(Surety)

ATTEST:

(Witness to Surety)

(Attorney-in-Fact)

(Address)

(Address)

If CONTRACTOR is a partnership, all partners must execute BOND.

END OF SECTION 00610

SECTION 00800 – SPECIAL PROVISIONS

1. DEFINITIONS AND TERMS

These definitions are supplemental to those defined elsewhere in the Contract Documents. Whenever in the Contract Documents the following terms are used, the intent and meaning shall be interpreted as follows:

- 1.1 ADDENDA - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, drawings and specifications, by additions, deletions, clarifications or corrections.
- 1.2 AGREEMENT - The written contract between the DISTRICT and the CONTRACTOR covering the WORK to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.
- 1.3 BID - The offer or Bid of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 1.4 BIDDER - Any person, firm or corporation submitting a Bid for the Work.
- 1.5 BONDS - Bid Bond, Performance Bond and Payment Bond and other instruments of security, furnished by the CONTRACTOR and its surety in accordance with the Contract Documents.
- 1.6 CALENDAR DAY - Any day shown on the calendar.
- 1.7 CHANGE ORDER - A document signed by the CONTRACTOR and the DISTRICT authorizing an addition, deletion or revision in the WORK and, if warranted, an adjustment in the Contract Price or the Contract Time, or terms and conditions of the Contract Documents, issued on or after the Effective Date of the Agreement.
- 1.8 CONTRACT DOCUMENTS - All items of the contract as defined in the Agreement.
- 1.9 CONTRACT PRICE - The total monies payable to the CONTRACTOR under the terms and conditions of the Contract Document.
- 1.10 CONTRACT TIME - The number of calendar days stated in the contract documents for the completion of the WORK
- 1.11 DISTRICT – The Truckee Donner Public Utility District, along with its authorized agents and representatives, including but not limited to managers, Project Manager, inspectors, engineers and consultants.
- 1.12 DRAWINGS – The part of the Contract Documents which show the characteristics and scope of the work to be performed and which have been prepared or approved by the DISTRICT.

- 1.13 FIELD ORDER - A written order effecting a change in the Work not involving an adjustment in the Contract Price or an extension of the Contract Time, issued by the DISTRICT to the CONTRACTOR during construction.
- 1.14 INSPECTOR - An authorized representative of the DISTRICT assigned to make any or all inspections of the work performed by the CONTRACTOR.
- 1.15 LABORATORY - A laboratory qualified to perform tests specified herein or other special laboratory designated by the DISTRICT or selected by the CONTRACTOR and approved by the DISTRICT.
- 1.16 NOTICE OF AWARD - The written notice of the acceptance of the Bid from the DISTRICT to the successful Bidder.
- 1.17 NOTICE TO PROCEED - The written notice given by the DISTRICT to the CONTRACTOR fixing the date on which the Contract Time will commence to run and on which the CONTRACTOR shall start to perform the CONTRACTOR's obligations under the Contract Documents.
- 1.18 OTHER AGENCIES - Any legal entity of the State of California, or any utility district or company (county, town, electric company, telephone company, water district, sewer district, etc.) that has any interest or control in construction or construction inspection, or are performing other work within or adjacent to the Project area.
- 1.19 SHOP DRAWINGS – All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a Subcontractor, manufacturer, supplier, or distributor, which illustrate how specific portions of the work shall be fabricated or installed.
- 1.20 SPECIFICATIONS – A part of the Contract Documents consisting of written descriptions of a technical nature of materials, equipment construction systems, standards and workmanship; also referred to as the Technical Specifications.
- 1.21 STANDARD SPECIFICATIONS - Whenever reference is made to the "Standard Specifications" such reference shall be made to those certain specifications entitled "State of California, Department of Transportation, Standard Specifications," latest edition, certain portions of which are made a part hereof by specific reference thereto.
- 1.22 Whenever the following underlined terms are used in the Standard Specifications, or in any of the Contract Documents or instruments governed by the Standard Specifications, they shall be defined as follows:

State: The DISTRICT.

Public Works Building: Office of the DISTRICT.

Department of Public Works: The DISTRICT.

Director of Public Works: The DISTRICT.

State Highway Engineer: The DISTRICT.

Engineer: The Engineer retained by the DISTRICT or authorized representative of the DISTRICT, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.

Laboratory: The established laboratory of the Materials and Research Department of the Department of Transportation of the State of California or laboratories authorized by the DISTRICT to test materials and work involved in the contract.

Reference is made to Section 1 of the Standard Specifications for other pertinent definitions.

- 1.23 SUBCONTRACTOR - An individual, firm, or corporation having a direct contract with the CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.
- 1.24 STANDARD PLANS - Whenever reference is made to the "Standard Plans" such reference shall be made to those certain plans entitled "State of California, Department of Transportation, Standard Plans," latest edition, certain portions of which are made a part hereof by specific reference thereto.
- 1.25 SUBSTANTIAL COMPLETION - That date as certified by the DISTRICT when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Contract Documents, so that the project or specified part can be utilized for the purposes for which it is intended.
- 1.26 SUPPLIER - Any person or organization who supplies materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site.
- 1.27 WORK - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work includes and is the result of performing or furnishing labor and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents
- 1.28 WORKING DAY - Any calendar day, except as noted below on which weather or ground conditions do not prevent utilization of at least fifty percent of the usual daily man hours during regular working hours.
- 1.29 WORK PACKAGE - Information consisting of, but not limited to, cover sheet and map, instruction per work location, material summary, construction sketch and pole type(s) provided as part of a Work Package.
- 1.30 WRITTEN NOTICE - Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted as described in Section 00500 - Agreement to the said party at his last given address, or delivered in person to said party or his authorized representative on the work.

2. INVESTIGATION OF SITE AND CONDITIONS

The CONTRACTOR's attention is directed to the possible existence of pole lines, power lines, pipe lines, buildings, structures, and other public or private improvements which may be within the limits of the work or adjacent thereto.

It shall be the responsibility of the CONTRACTOR to ascertain the exact location of all utility lines, surface or sub-surface installations or facilities, and no additional compensation will be paid because of any such installation or facilities encountered along the line of work, or for any delays caused by the location or replacement thereof. It shall be the responsibility of the CONTRACTOR to maintain all lines and utilities, and any other surface or sub-surface structure or installation of any nature that may be affected by the work. The CONTRACTOR is responsible for the protection of any loss of such utilities, facilities, or installations, and for any damage to any of the same, all of which such damage shall be repaired or replaced at the cost of the CONTRACTOR, and to the satisfaction of the DISTRICT of such facility or installation.

The CONTRACTOR shall be compensated for the costs of locating, repairing damage not due to failure of the CONTRACTOR to exercise reasonable care, and removing or relocating existing main or trunkline utility facilities located on the Project site that are not the subject of the Agreement, which are not indicated in the Drawings and Specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work. The CONTRACTOR shall not be assessed liquidated damages for delay in completion of the Project, when such delay was caused by the failure of the DISTRICT or the owner of the utility to provide for removal or relocation of such utility facilities. If the CONTRACTOR, while performing the Agreement, discovers utility facilities not identified by the DISTRICT in the Drawings and Specifications, he or she shall immediately notify the DISTRICT and utility in writing. Where the DISTRICT is the owner of the facility, it shall have the sole discretion to perform repairs or relocation work or permit the CONTRACTOR to do such repairs or relocation as Extra Work.

3. SCHEDULES, REPORTS, AND RECORDS

- A. The CONTRACTOR shall submit to the DISTRICT such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records, and other data where applicable as are required by the Contract Documents for the work to be performed.
- B. Prior to the first partial payment estimate the CONTRACTOR shall submit construction progress schedules showing the order in which it propose to carry on the work, including dates at which they will start the various parts of the Work, and estimated date of completion of each part. The constructions schedule shall indicate the time of starting and completion of each major structure or phase of the Project and such intermediate phases as will serve for well-defined control points. It shall also indicate the anticipated date of receipt of major items of equipment, and all items of equipment receipt and installation of which is critical to the scheduled progress of the Project.

The construction schedule. When approved, shall not be changed without written consent of the DISTRICT. The CONTRACTOR shall assume the full responsibility for performing the Work in an orderly manner under the provisions of the Agreement.

If, in the opinion of the DISTRICT, the CONTRACTOR has fallen behind the approved progress schedule, the CONTRACTOR shall take such steps as may be required by the DISTRICT, including, but not limited to, increasing the number of personnel, shifts, and/or overtime operations, days of work, and/or the amount of construction equipment until such time as the work is back on schedule. They shall also submit for approval no later than the time of submittal of the next request for partial payment, such supplementary schedule or schedules as may be deemed necessary to demonstrate the manner in which the approved rate of progress will be regained, all without additional cost to the DISTRICT.

4. SHOP DRAWINGS

- A. The CONTRACTOR shall provide shop drawings as may be necessary for the prosecution of the Work, and as required by the technical specifications. The DISTRICT shall promptly review all shop drawings. The DISTRICT's review of any shop drawing shall not release the CONTRACTOR from responsibility for deviations from the Contract Documents. The review of any shop drawings which substantially deviate from the requirements of the Contract Documents shall be evidenced by a Change Order.
- B. When submitted for the DISTRICT's review, shop drawings shall bear the CONTRACTOR's certification that they have reviewed, checked, and approved the shop drawings and that they are in conformance with the requirements of the Contract Documents.
- C. Portions of the Work requiring shop drawing or sample submittals shall not begin until the shop drawing or submission has been reviewed by the DISTRICT. A copy of each reviewed shop drawing and each reviewed sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the DISTRICT.
- D. The CONTRACTOR is referred to Section 01300 – Contractor Submittals for more detail regarding submittal requirements.

5. MATERIALS, SERVICES AND FACILITIES

- A. It is understood that, except as otherwise specifically stated in the Contract Documents, the CONTRACTOR shall provide and pay for all labor, tools, equipment, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete and deliver the Work within the specified time.
- B. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the work. Stored materials and equipment to be incorporated in the Work shall be located so as to facilitate prompt inspection.
- C. Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.

6. PATENTS

The CONTRACTOR shall pay all applicable royalties and license fees. They shall defend all suits or claims for infringement of any patent rights and save the DISTRICT harmless from loss on account thereof, except that the DISTRICT shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified.

However, if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, it shall be responsible for such loss unless he promptly gives such information to the DISTRICT.

7. MEASUREMENT AND PAYMENT

Payment will be made for work performed based on the unit price schedule on the Bid Form as determined by the DISTRICT. Full compensation for furnishing all labor, tools, equipment, and incidentals, and for doing all the work involved in complying with all of the requirements of the Contract Documents shall be considered as included in the unit prices on the Bid Form, and no additional compensation will be allowed therefor.

8. INSPECTION AND TESTING

When requested by the DISTRICT, the CONTRACTOR shall furnish a complete written statement of the origin, composition, and manufacture of any and all materials that are to be used in the Work.

All materials may be inspected, sampled and tested by the DISTRICT. The CONTRACTOR shall give sufficient advance notice of placing of order to permit tests to be performed before the materials are incorporated in the work and they shall afford such facilities as the DISTRICT may be required for collecting and making inspections. All samples shall be furnished by the CONTRACTOR without cost to the DISTRICT. The DISTRICT may waive sampling and resting if adequate information, properly certified, is available to indicate that materials comply with terms of the specifications.

The CONTRACTOR shall furnish the DISTRICT with every reasonable facility for ascertaining whether or not the work as performed is in accordance with the requirements and intent of the Contract Documents. If the DISTRICT requests it, the CONTRACTOR at any time before acceptance of the Work shall remove or uncover such portions of the finished work as may be directed. After examination, the CONTRACTOR shall restore said portions of the work to the standards required by the Contract Documents. Should the Work thus exposed or examined prove acceptable, the uncovering or removing and the replacing of the covering or making good of the parts removed, will be paid for as provided under Section 00500 - Agreement, but should the work so exposed or examined prove unacceptable the uncovering shall be at the CONTRACTOR's expense. Inspection, supervision or observation by the DISTRICT shall not be considered as direct control of the individual workmen and their work. The direct control shall be solely the responsibility of the CONTRACTOR's foreman and superintendent.

The inspection of the Work shall not relieve the CONTRACTOR of any of its obligation to fulfill the Agreement as herein provided, and unsuitable materials may be rejected

notwithstanding that such work and materials may have been previously overlooked and accepted or estimated for payment.

On all questions concerning the acceptability of materials, classifications or materials, execution of the Work, and the determination of costs, the decision of the DISTRICT shall be final and binding upon all parties.

The CONTRACTOR shall at all times maintain proper facilities and provide safe access to all parts of the Work , to the shops wherein the Work is in preparation and to all warehouses and storage yards wherein equipment and materials are stored for purposes of inspection by the DISTRICT.

Inspectors employed by the DISTRICT shall be authorized to inspect all work done and materials furnished. Such Inspection may extend to all or any part of the Work, and to the preparation, fabrication, or manufacture of the materials to be used. The Inspector is not authorized to alter or waive the provisions of the Contract Documents.

An inspector is placed on the Work to keep the DISTRICT informed as to the progress of the Work and the manner in which it is being done; also to call the CONTRACTOR's attention to any non-conformance with the Contract Documents. The Inspector will not be authorized to approve or accept any portion of the Work, to issues instructions contrary to the Contract Documents, or to act as foreman for the CONTRACTOR. The Inspector will have authority to reject defective material and to suspend any work that is being improperly performed, subject to the final decision of the DISTRICT.

The Inspector will exercise such additional authority only as may from time to time be delegated to them by the DISTRICT.

9. LIMITS OF CONTRACTOR'S OPERATIONS

The CONTRACTOR will confine its operations within the limitations of construction easements or limits as shown on the drawings. If the CONTRACTOR's operations result in damage to any privately owned facility outside the limitations of the construction easement, the CONTRACTOR shall, at its expense, repair such damage or indemnify the DISTRICT of the damaged property.

If the CONTRACTOR negotiates with property owners for use of land for construction operations outside the limits of the construction easements, it shall do so at its own risk and the DISTRICT will assume no liability for such use of private property. All agreements between the CONTRACTOR and private property owners shall be in writing and the DISTRICT will be furnished copies of such agreements.

Hauling vehicles transporting materials to and from the Project site either empty or loaded shall meet all the requirements and comply with all laws and regulations as would be required when traveling on a public street or highway for any other purpose.

It is specifically agreed between the parties executing this Agreement that it is not intended by any of the provisions of any part of the Agreement to create the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement.

10. CONTRACT TIMES, MILESTONES AND LIQUIDATED DAMAGES

The DISTRICT and the CONTRACTOR recognize that time is of the essence for the performance of the CONTRACTOR's obligations pursuant to this Agreement, and that the DISTRICT will suffer financial loss if the Work is not completed within the time specified in the Contract Documents, plus any extensions thereof. They also recognize that losses incurred by the DISTRICT for delay would be extremely difficult or impossible to calculate or ascertain. The DISTRICT and the CONTRACTOR recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by the DISTRICT if the Work is not completed on time. Accordingly, instead of requiring any such proof, the DISTRICT and the CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), the CONTRACTOR shall pay the DISTRICT the amounts as indicated below for each Day that expires after the time specified for each milestone.

The DISTRICT shall have the right to deduct the liquidated damages from any money in its hands, otherwise due, or to become due, to the CONTRACTOR, or to initiate applicable dispute resolution procedures and recover liquidated damages for nonperformance of this Agreement within the time stipulated.

When CONTRACTOR is in default for nonperformance within the stipulated Contract Times including any intermediate Milestone Dates, the DISTRICT shall notify the CONTRACTOR in writing within 3 Days after the Contract Times or intermediate Milestone Date, and deduct the liquidated damages in the amount stated in the Contract Documents from any monies due the CONTRACTOR.

The deductions of liquidated damages shall be in addition to any retainage withheld and shall be non-reimbursable.

The WORK shall be complete in accordance with the following schedule milestones:

Milestone No.	Milestone Description	Required Completion Date
1	Substantial Completion of the Project	October 15, 2026
2	Final Completion of the Project	October 30, 2026

Liquidated damages for each calendar day that each milestone is not completely met, are as follows:

Milestone No.	Milestone Description	Amount of Liquidated Damages Per Day
1	Substantial Completion of the Project	\$500
2	Final Completion of the Project	\$500

11. MILESTONE COMPLETION

For a given milestone to be considered complete, the following portions of the WORK must be performed:

Milestone No. 1:

- All water mains, laterals, valves, fittings and fire hydrants, complete and installed
- Successful completion of pipeline pressure testing and disinfection of all other pipe segments in accordance with Section 02643 – Water Pipeline Testing and Disinfection.
- Reconnection of all customers from the existing pipelines to the new pipelines
- All connections to existing pipelines
- Replacement of all damaged AC pavement

Milestone No. 2:

- Completion of all other Work required by the Contract Documents, including but not limited to, demobilization, site cleanup and restoration and submittal of as-built drawings

12. COORDINATION AND INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

The Drawings and Specifications, Contract Change Orders, and all supplementary documents are essential parts of the Contract Documents, and a requirement occurring in one is as binding as though occurring in all. They are intended to be coordinated and to describe and provide for a complete Work.

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these Contract Documents, the CONTRACTOR shall request of the DISTRICT such further explanations as may be necessary and shall conform to such explanations as part of the Contract. In the event of any doubt or question arising regarding the true meaning of these Contract Documents, reference shall be made to the DISTRICT, whose decision thereon shall be final. In the event of any discrepancy, between any drawings and the details written thereon, the details shall be taken as correct.

In the event of a conflict between the Agreement and any of the other Contract Documents, the Document highest in precedence shall control and supersede the Document which is contrary to it. The order of precedence of the Contract Documents is as follows:

First: Supplemental Agreements, the last in time being the first in precedence.

Second: The Agreement.

Third: Special Provisions.

Fourth: CONTRACTOR Bid.

Fifth: Notice to Contractors.

Sixth: Instruction to Bidders.

13. DISTRICT'S RIGHT TO PARTIAL USE

When provided for in the Contract Documents or agreed to in writing by the DISTRICT and the CONTRACTOR, the DISTRICT may notify the CONTRACTOR and begin using a portion of the Work even though it is not Substantially Complete. The CONTRACTOR and the DISTRICT shall agree on and document responsibilities for security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that portion of the Work being used by the DISTRICT. The DISTRICT and the CONTRACTOR inspect such portion of the Work and shall prepare a list of work to be completed or corrected before final acceptance. The DISTRICT's use of any portion of the Work shall not constitute final acceptance of that portion of the Work prior to Final Completion and acceptance of the Work as a whole. The DISTRICT shall allow the CONTRACTOR reasonable access to complete or correct work in areas being used by the DISTRICT. Partial beneficial occupancy shall not relieve the CONTRACTOR of its responsibility for Liquidated Damages, unless the Contract Documents expressly provide otherwise.

14. CONTRACTOR'S WORKING HOURS

The CONTRACTOR shall comply with the restrictions on working hours indicated in the Town of Truckee Encroachment Permit (7:00 AM to 7:00 PM Monday through Friday).

15. DISTRICT'S WORKING HOURS

The standard work day of the DISTRICT is the period from 7:30 AM to 4:00PM. The standard work week begins on Monday and ends on Friday, excepting legal holidays. The DISTRICT's legal holidays are defined as the following: New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Eve and Christmas Day.

Should the CONTRACTOR choose to perform work outside of these standard working hours, the CONTRACTOR shall notify the DISTRICT a minimum of two working days beforehand.

The CONTRACTOR shall schedule all inspection, testing and other activities requiring DISTRICT participation during the DISTRICT's standard working hours. If the CONTRACTOR desires to have inspection, testing or other activities requiring DISTRICT participation occur outside of those times, the CONTRACTOR shall reimburse the DISTRICT for the labor costs incurred by the DISTRICT.

In the event that DISTRICT inspectors, operations personnel, engineers or other agents of the DISTRICT are required to be at the Project site later than the standards working hours noted above, the CONTRACTOR shall reimburse the DISTRICT for the additional labor costs incurred by the DISTRICT. Such reimbursement shall occur under the following situations:

- A. Failure by the CONTRACTOR to provide adequate labor or equipment to the Project resulting in the work extending later than the standard working hours on a given day.
- B. Failure by the CONTRACTOR to properly plan and schedule the work, resulting in the work extending later than the standard hours on a given day.

- C. Failure by the CONTRACTOR to take care when excavating near known existing facilities, resulting in damage to existing facilities, the repair of which extends later than the standard working hours on a given day.
- D. The existence of a public safety hazard such as an active work zone, open trench, or similar situation that, in the opinion of the DISTRICT, required that DISTRICT personnel be present in order to protect public safety.
- E. Any other situation which, in the opinion of the DISTRICT, requires that DISTRICT personnel be present in order to ensure proper prosecution of the Work in accordance with the Contract Documents that extends later than the standard working hours on a given day.

16. LIMITATION OF DISTRICT'S RESPONSIBILITIES

The DISTRICT will not supervise, direct, control or have authority over or be responsible for the CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of the Work. The DISTRICT will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

The DISTRICT will not be responsible for the acts or omissions of the CONTRACTOR or any Subcontractor, any Supplier, or any other person or organization performing or furnishing any portion of the Work.

17. CONSTRUCTION SAFETY

- A. The CONTRACTOR shall follow construction procedures necessary to provide a safe working condition through all phases of the project. Said procedures shall conform to the Safety Orders, Division of Industrial Safety, Title 8, California Administrative Code and all other provisions required by Federal, State, County and Town law or ordinance. The CONTRACTOR shall also conform to all applicable requirements of the Federal Occupational Safety and Health Administration.
- B. The CONTRACTOR is solely responsible for outlining the safety procedures to be followed by its workmen, all subcontractors, and related trades working on its job, and effectively assuring compliance with such procedures. The CONTRACTOR shall always provide for the safety of the public both day and night where they are exposed to its construction operation.
- C. The DISTRICT, along with its representatives and agents, are not responsible for reviewing or approving the safety procedures followed by the CONTRACTOR.

END OF SECTION 00800

DIVISION 1

GENERAL REQUIREMENTS

SECTION 01010 - SUMMARY OF WORK

PART 1 -- GENERAL

1.1 GENERAL

- A. The WORK to be performed under this Contract shall consist of furnishing all plant, tools, equipment, materials, supplies, and manufactured articles and furnishing all labor, transportation, and services, including fuel, power, water, and essential communications, and performing all WORK, or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents. The WORK shall be complete, and all WORK, materials, and services not expressly indicated or called for in the Contract Documents which may be necessary for the complete, safe and proper construction of the WORK in good faith shall be provided by the CONTRACTOR as though originally so indicated, at no increase in cost to the DISTRICT

1.2 BACKGROUND

- A. The purpose of this project is to replace existing water pipelines in poor condition, along with fire hydrants, meter boxes, and service connections for the water distribution system in the Tahoe Donner Ski Bowl Condominiums.
- B. Also included in the project is about 300 feet of pipe at the fire house at 11473 Donner Pass Road to replace an old pipeline and re-establish a pipeline loop for the commercial properties along the south side of Donner Pass Road.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The WORK of this project comprises the following:
 - 1. Provide all necessary submittals and records set forth in the Contract Documents.
 - 2. Mobilize equipment to the project site. The CONTRACTOR shall store materials and equipment at the site in a manner that will not impede traffic or endanger the public. The CONTRACTOR is referred to the project Stormwater Pollution Prevention Plan (SWPPP) for more information. In some cases, due to site size restrictions, the CONTRACTOR may have to store materials elsewhere. Acquisition of any additional storage areas shall be the responsibility of the CONTRACTOR as described in Section 01550 – Site Access and Storage. In all cases, the CONTRACTOR shall be responsible for the safe storage and transport of the material to the jobsite.
 - 3. Install the water mains, fire hydrants, service connections, valves, fittings and ancillary items as shown on the Drawings. The DISTRICT will assist the CONTRACTOR in laying out the pipeline alignment.
 - 4. Service to the existing water customers must be maintained at all times, other than when a service line switch over is required, which shall not take longer than 8 hours for any individual service connection. With the approval of the DISTRICT, the CONTRACTOR will be permitted to install a temporary above-ground water main for the purpose of providing water to service connections during construction.

5. The CONTRACTOR shall be responsible to ensure that all new pipelines are thoroughly disinfected, pressure tested and flushed in a manner acceptable to the DISTRICT, prior to connecting to the existing water system. After the new mainlines, fire hydrants and services are connected to the existing system and pressurized, and all bacteriological tests indicating the non-existence of bacteria, the CONTRACTOR shall then commence switching over the existing services to the new mainlines. Once all the new mainlines and service connections are in service, the CONTRACTOR shall then proceed with the abandonment of existing mains by cutting and capping each with a concrete plug at each point of disconnection.
6. The DISTRICT has applied for the necessary permits for disposal of mainline flushing water to the existing sewer system. AT NO TIME, shall the system be flushed to atmosphere and water be allowed to run along the ground. All flushed water shall be contained and piped to a manhole as directed by the DISTRICT. The CONTRACTOR shall provide all necessary temporary holding tanks or other containment vessels to permit adequate flushing of the mainlines at adequate velocities until all measurable chlorine residual is less than or equal to 0.2 mg/L and the flushed water clear of all particulate matter. Flushing of all water mains and other appurtenances shall conform to the requirements of the applicable permits. The flushing sewer disposal rate is restricted due to the size of sewage facilities in the area. All disposal to the sanitary sewer shall be done at the maximum flow rate of 100 gallons per minute.

1.4 SUBSURFACE CONDITIONS

- A. The CONTRACTOR is hereby notified that investigations of subsurface soil conditions have not been conducted in conjunction with the preparation of these Contract Documents. The CONTRACTOR is further advised that subsurface conditions may vary throughout the project site. The DISTRICT makes no guaranty, either written or implied, that materials obtained on site are suitable for use in the WORK. The CONTRACTOR shall not be entitled to any additional compensation in the event that materials obtained on site are not suitable for use in the WORK.
- B. The CONTRACTOR is hereby notified that investigations of subsurface groundwater conditions have not been conducted in conjunction with the preparation of these Contract Documents. The CONTRACTOR is further advised that subsurface groundwater conditions may vary throughout the project site. Groundwater may be naturally occurring or may be leakage from existing water system facilities. The CONTRACTOR shall be responsible for removal and exclusion of groundwater as necessary to construct the Work in accordance with the Contract Documents. The CONTRACTOR shall not be entitled to any additional compensation in the event that groundwater is encountered.

1.5 CONTRACT METHOD

- A. The WORK hereunder will be constructed under a combination lump sum and unit price Contract. Payment for WORK shall be as described in Section 00310 – Measurement and Payment.

1.6 EXPRESSION OF CONTRACTOR RESPONSIBILITY IN THE TECHNICAL SPECIFICATIONS

- A. Whenever in the Technical Specifications, requirements are expressed with active verbs and no subjects, the words, "The CONTRACTOR shall," have been omitted as a matter

of style, and it is intended that the CONTRACTOR is the party responsible for taking the action required.

1.7 WORK SEQUENCE AND SCHEDULING CONSTRAINTS

- A. The CONTRACTOR shall schedule and perform the WORK in such a manner as to result in the least possible disruption to the public's use of roadways, driveways, and utilities. Utilities shall include water, sewerage, drainage structures, ditches and canals, gas, electric, cable television, telecommunications and telephone. The approximate locations of existing utilities are indicated on the Drawings. However, there is no guarantee as to accuracy or completeness.
- B. The CONTRACTOR shall not begin excavation activities until May 4, 2026. The CONTRACTOR may stage equipment and materials such as pipe, valves and fittings at the project site beginning on April 27, 2026. Trench backfill materials shall not be staged at the project site until the CONTRACTOR commences excavation and backfill activities.
- C. As noted in Article 1.4.B of this Section, the DISTRICT has not conducted investigations of subsurface groundwater conditions for the pipeline construction work of this Contract. Anecdotal experience from prior construction projects in these areas has shown that groundwater will likely be encountered in the late spring of 2026.
- D. Drawing P-5 covers installation of water pipeline across Donner Pass Road at 11473 Donner Pass Road. For the portion of work within the Donner Pass Road asphalt pavement section (Station 0+00 to 0+47), the CONTRACTOR shall place trench plates or asphalt (temporary or permanent) as final backfill at the end of each workday. Aggregate base will not be allowed as final backfill on a temporary basis.

1.8 CONTRACTOR USE OF PROJECT SITE

- A. The CONTRACTOR'S use of the Project Site shall be limited to its construction operations related to this Contract only.

1.9 STORAGE

- A. Storage conditions shall be in accordance with manufacturer's instructions and be acceptable to the DISTRICT for all materials and equipment not incorporated into the WORK but included in Applications for Payment. Proper environmental conditions shall be maintained by the CONTRACTOR at all storage facilities. The CONTRACTOR shall obtain any necessary off-site storage facilities and such facilities shall be accessible to the DISTRICT. The stored materials shall be insured for full value. Certificates of liability insurance coverage shall be submitted to the DISTRICT with the request for payment. All arrangements and costs for storage facilities shall be paid by the CONTRACTOR.

1.10 NOTICES TO OWNERS OF ADJACENT PROPERTIES AND UTILITIES

- A. The CONTRACTOR shall notify owners of adjacent property and utilities when prosecution of the WORK may affect them.
- B. When it is necessary to temporarily deny access by owners or tenants to their property, or when any utility service connection must be interrupted, the CONTRACTOR shall give notices sufficiently in advance to enable the affected persons to provide for their needs. Notices shall conform to any applicable local ordinance and, whether delivered orally or

in writing, shall include appropriate information concerning the interruption and instructions on how to limit any resulting inconvenience.

- C. Utilities and other concerned agencies shall be contacted at least 7 days prior to cutting or closing streets or other traffic areas or excavating near underground utilities or pole lines.
- D. The CONTRACTOR shall review with the various utility companies the construction methods, safety procedures, and WORK to be done in the vicinity of utilities. When temporary relocation of utilities is necessary, sufficient advance notice shall be given to the utility involved.

1.11 LINES AND GRADES

- A. All Work shall be done to the lines, grades, and elevations indicated in the Contract Documents.
- B. The CONTRACTOR shall employ experienced instrument personnel, competent assistants, and such instruments, tools, stakes, and other materials required to complete the survey, layout, and measurement Work.
- C. The CONTRACTOR shall remove and reconstruct WORK which is improperly located.
- D. The CONTRACTOR is referred to Section 01300 - Contractor Submittals, for record information requirements regarding lines and grades.

1.12 PROJECT MEETINGS

- A. Preconstruction Conference:
 - 1. Prior to the commencement of WORK at the Site, a preconstruction conference will be held at the offices of the DISTRICT. The Conference shall be attended by the CONTRACTOR'S Project Manager, its Superintendent, and its Subcontractors as the CONTRACTOR deems appropriate. Other attendees will be:
 - a. Representatives of DISTRICT
 - b. Governmental representatives as appropriate, including other local utilities
 - c. Others as requested by CONTRACTOR or DISTRICT
 - 2. The purpose of the conference is to designate responsible personnel, discuss Contract requirements, and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The complete agenda will be furnished to the CONTRACTOR prior to the meeting date. However, CONTRACTOR shall be prepared to discuss all of the items listed below.
 - a. CONTRACTOR'S assignments for safety and first aid, including designated competent person(s) and the CONTRACTOR'S safety representative.
 - b. Status of CONTRACTOR'S insurance and bonds.
 - c. CONTRACTOR'S construction schedule.

- d. Transmittal, review, and distribution of CONTRACTOR'S submittals.
 - e. Processing applications for payment.
 - f. Maintaining record documents.
 - g. Critical Work sequencing.
 - h. Field decisions and Change Orders.
 - i. Use of Project Site, storage areas, security and housekeeping.
 - j. Equipment deliveries and priorities.
 - k. Permits required for construction.
 - l. Utilities required for construction.
 - m. Contract authority and channels of communication.
 - n. Coordination with others.
3. The DISTRICT will preside at the preconstruction conference and will arrange for keeping and distributing the minutes to all persons in attendance.
4. The following emergency contacts for the DISTRICT are designated:

Neil Kaufman: (530) 582-3950 or (530) 448-3018
TJ Dwyer: (530) 582-3995 or (530) 448-4734

B. Progress Meetings:

- 1. The DISTRICT will schedule and hold progress meetings as deemed necessary by the DISTRICT. The CONTRACTOR, DISTRICT and all Subcontractors active on the Site shall attend each meeting. The CONTRACTOR may at its discretion request attendance by representatives of its Suppliers, manufacturers, and other Subcontractors.
- 2. The DISTRICT will preside at the meetings and will arrange for keeping and distributing the minutes. The purpose of the meetings will be to review the progress of the WORK, discuss safety, maintain coordination of efforts, discuss commercial issues, discuss changes in scheduling, and resolve other problems which may develop. During each meeting, the CONTRACTOR is required to present any issues which may impact its WORK, with a view to resolve these issues expeditiously.

1.13 PUBLIC AWARENESS

- A. The CONTRACTOR is hereby notified that the general public and project site neighbors have concerns relative to construction of the pipeline. The construction planning and scheduling must continue to address the concerns presented by the neighborhood.
- B. The following are sensitive issues related to general public and project site neighbors:

1. Safety in General is the most important Public Awareness issue. Safety in General includes the following:
 - a. Safety of children pertaining to school travel and play.
 - b. Safety of pedestrian areas around the construction area.
 - c. Safety of neighborhood vehicular traffic around the construction area.
 - d. Safety of personal property around the construction area.
 - e. Safe and effective traffic control measures
 2. Dust control.
 3. Minimizing inconvenience to the community and neighborhood. (i.e., access to businesses and residences).
 4. Control and limiting of construction traffic.
 5. Working cleanly within public rights-of-way.
 6. Staging and coordination of construction activity.
 7. Precautions to minimize noise.
 8. Maintenance and utilization of construction employee parking.
 9. Timely project completion.
 10. Working hours.
- C. The CONTRACTOR is hereby notified that the DISTRICT may hold periodic meetings with public citizens who reside in the neighborhood and community surrounding the Site. The DISTRICT will notify the CONTRACTOR of the dates of such meetings in writing at least 5 days prior to a meeting.
- D. At the request of the DISTRICT, the CONTRACTOR'S representative shall attend up to 3 such meetings. The meetings will likely be held on weekdays after conclusion of the standard work day.
- 1.14 CONSTRUCTION SAFETY
- A. The CONTRACTOR shall follow construction procedures necessary to provide a safe working condition through all phases of the project. Said procedures shall conform to the Safety Orders, Division of Industrial Safety, Title 8, California Administrative Code and all other provisions required by Federal, State, County and Town law or ordinance. The CONTRACTOR shall also conform to all applicable requirements of the Federal Occupational Safety and Health Administration.
 - B. The CONTRACTOR is solely responsible for outlining the safety procedures to be followed by its workmen, all subcontractors, and related trades working on its job, and effectively assuring compliance with such procedures. The CONTRACTOR shall always

provide for the safety of the public both day and night where they are exposed to its construction operation.

- C. The DISTRICT, its representatives, contractors, agents and field inspectors are not responsible for reviewing or approving the safety procedures followed by the CONTRACTOR.

1.15 LIMITATIONS OF WORK ON DIFFERENT PIPELINE SEGMENTS

- A. The Contract includes pipeline segments to be constructed at different locations. In order to minimize disruption to residents in the areas where work is to be performed, the CONTRACTOR shall limit its operations to no more than two different pipeline segments at any given time. Once work has commenced on a given pipeline segment the CONTRACTOR shall actively prosecute the work until it is completed and the pipeline is placed into service. The CONTRACTOR shall not move back and forth between different pipeline segments in a haphazard manner.
 - 1. The CONTRACTOR may stage pipe, fittings and similar materials in advance of work on a given pipeline segment. The CONTRACTOR shall not stage bedding or backfill materials more than two working days in advance of performing work on a given segment.
 - 2. Upon completion of all excavation and backfill work, all backfill and spoils materials shall be removed from the project location within two working days. Excess backfill materials may be moved to another project location. Excess spoils shall be disposed of in an appropriate manner.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

SECTION 01070 - ABBREVIATIONS OF INSTITUTIONS

PART 1 -- GENERAL

1.1 GENERAL

- A. Wherever in the Contract Documents references are made to the standards, specifications, or other published data of the various international, national, regional, or local organizations, such organizations may be referred to by their acronym or abbreviation only. As a guide to the reader, the following acronyms or abbreviations which may appear in the Contract Documents shall have the meanings indicated herein.

1.2 ABBREVIATIONS

AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AFBMA	Anti-Friction Bearing Manufacturer's Association, Inc.
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AI	The Asphalt Institute
AIA	American Institute of Architects
AIEE	American Institute of Electrical Engineers
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ANSI	American National Standards Institute
APA	American Plywood Association
API	American Petroleum Institute
APWA	American Public Works Association
ASABE	American Society of Agricultural and Biological Engineers
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
ASLE	American Society of Lubricating Engineers
ASME	American Society of Mechanical Engineers
ASQC	American Society for Quality Control
ASSE	American Society of Sanitary Engineers
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers Association
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturer's Association
CBM	Certified Ballast Manufacturers
CEMA	Conveyors Equipment Manufacturer's Association
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CLFMI	Chain Link Fence Manufacturer's Institute
CMA	Concrete Masonry Association
CRSI	Concrete Reinforcing Steel Institute
EIA	Electronic Industries Association
ETL	Electrical Test Laboratories
EPA	Environmental Protection Agency
FM	Factory Mutual System

FPL	Forest Products Laboratory
HI	Hydraulic Institute
IAPMO	International Association of Plumbing and Mechanical Officials
ICBO	International Conference of Building Officials
ICEA	Insulated Power Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
IES	Illuminating Engineering Society
ISA	Instrument Society of America
ISO	Insurance Services Office
ISO	International Organization for Standardization
MBMA	Metal Building Manufacturer's Association
MPTA	Mechanical Power Transmission Association
MSS	Manufacturers Standardization Society
MTI	Marine Testing Institute
NAAMM	National Association of Architectural Metal Manufacturer's
NACE	National Association of Corrosion Engineers
NBS	National Bureau of Standards
NCCLS	National Committee for Clinical Laboratory Standards
NEC	National Electrical Code
NEMA	National Electrical Manufacturer's Association
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NLGI	National Lubricating Grease Institute
NSF	National Sanitation Foundation
NWMA	National Woodwork Manufacturers Association
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PPI	Plastics Pipe Institute
RCRA	Resource Conservation and Recovery Act
RWMA	Resistance Welder Manufacturer's Association
RWQCB	Regional Water Quality Control Board
SAE	Society of Automotive Engineers
SDWA	Safe Drinking Water Act
SMA	Screen Manufacturers Association
SMACCNA	Sheet Metal and Air Conditioning Contractors National Association
SPI	Society of the Plastics Industry, Inc.
SSPC	Steel Structures Painting Council
SSPWC	Standard Specifications for Public Works Construction
SWPPP	Stormwater Pollution Prevention Plan
SWQCB	State Water Quality Control Board
UBC	Uniform Building Code
UL	Underwriters Laboratories, Inc.
WCLIB	West Coast Lumber Inspection Bureau
WCRSI	Western Concrete Reinforcing Steel Institute
WEF	Water Environment Federation
WIC	Woodwork Institute of California
WRI	Wire Reinforcement Institute, Inc.
WWPA	Western Wood Products Association

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

SECTION 01090 - REFERENCE STANDARDS

PART 1 -- GENERAL

1.1 GENERAL

- A. **Titles of Sections and Paragraphs:** Captions accompanying specification sections and paragraphs are for convenience of reference only, and do not form a part of the Specifications.
- B. **Applicable Publications:** Whenever in these Specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the Work is advertised for bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the Contract Documents shall be waived because of any provision of, or omission from, said standards or requirements.
- C. **Specialists and Assignments:** In certain instances, specification text requires (or implies) that specific WORK is to be assigned to specialists or expert entities, who must be engaged for the performance of that WORK. Such assignments shall be recognized as special requirements over which the CONTRACTOR has no choice or option. These requirements shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the WORK; also they are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of work is recognized as "expert" for the indicated construction processes or operations. Nevertheless, the final responsibility for fulfillment of the entire set of contract requirements remains with the CONTRACTOR.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- A. Without limiting the generality of other requirements of the Specifications, all WORK specified herein shall conform to or exceed the requirements of applicable codes and the applicable requirements of the following documents.
- B. References herein to "Building Code" or "Uniform Building Code" shall mean Uniform Building Code of the International Conference of Building Officials (ICBO). Similarly, references to "Mechanical Code" or "Uniform Mechanical Code," "Plumbing Code" or "Uniform Plumbing Code," "Fire Code" or "Uniform Fire Code," shall mean Uniform Mechanical Code, Uniform Plumbing Code and Uniform Fire Code of the International Conference of the Building Officials (ICBO). "Electric Code" or "National Electric Code (NEC)" shall mean the National Electric Code of the National Fire Protection Association (NFPA). The latest edition of the codes as approved by the Municipal Code and used by the local agency as of the date that the Work is advertised for bids, as adopted by the agency having jurisdiction, shall apply to the Work herein, including all addenda, modifications, amendments, or other lawful changes thereto.
- C. In case of conflict between codes, reference standards, drawings and the other Contract Documents, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the DISTRICT for clarification and direction prior to ordering or

providing any materials or furnishing labor. The CONTRACTOR shall bid for the most stringent requirements.

- D. The CONTRACTOR shall construct the Work indicated herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and specifications listed herein.
- E. **Applicable Standard Specifications:** References in the Contract Documents to the "Standard Specifications" shall mean the "Standard Specifications. State of California, Department of Transportation" latest edition at time of Bid preparation. Only those portions of the "Standard Specifications" specifically identified and referred to shall apply. Portions of the "Standard Specifications" not specifically referenced shall not be considered part of the Contract Documents.
- F. References herein to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
- G. References herein to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

1.3 REGULATIONS RELATED TO HAZARDOUS MATERIALS

- A. The CONTRACTOR is responsible that all work included in the Contract Documents, regardless if shown or not, shall comply with all EPA, OSHA, RCRA, NFPA, and any other Federal, State, and Local Regulations governing the storage and conveyance of hazardous materials, including petroleum products.
- B. Where no specific regulations exist, all chemical, hazardous, and petroleum product piping and storage in underground locations must be installed with double containment piping and tanks, or in separate concrete trenches and vaults, or with an approved lining which cannot be penetrated by the chemicals, unless waived in writing by the DISTRICT.

1.4 TOWN OF TRUCKEE STANDARDS

- A. While conducting Work within any Town of Truckee right-of-way, the CONTRACTOR shall have on-site at all times, a current copy of **Town of Truckee Public Improvement and Engineering Standards**. In the event of a conflict between the Town Standards and these Contract Documents, the DISTRICT shall be notified immediately upon its discovery. The DISTRICT shall consult with the Town and the CONTRACTOR shall be directed by the DISTRICT as to which requirement shall govern.
- B. The authority of the Town to order changes to the Work is expressly limited to issues of traffic control and public safety **ONLY** (See Section 01540 – Traffic Control). Any other changes requested by the Town, such as changes in materials, alignment or working methods shall be referred to the DISTRICT. Any changes to the Work made by the CONTRACTOR, without direction by the DISTRICT, shall be subject to removal and reinstallation at no additional cost to the DISTRICT.
- C. Copies of the **Town of Truckee Public Improvement and Engineering Standards** may be obtained directly from the Town of Truckee at 530-582-7700 or downloaded via the Internet at: <http://www.townoftruckee.com>.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

SECTION 01300 - CONTRACTOR SUBMITTALS

PART 1 -- GENERAL

1.1 GENERAL

- A. CONTRACTOR "Submittals" may be Shop Drawings, schedules, surveys, reports, samples, plans, lists, drawings, documents, findings, programs, manuals, data, or any other item or information required by the Contract Documents to be submitted or offered by the CONTRACTOR in accomplishing the Work.
- B. Wherever submittals are required hereunder, all such documents shall be furnished to the DISTRICT.
- C. The CONTRACTOR is responsible for the accuracy, completeness, and coordination of all Submittals. The CONTRACTOR shall not delegate this responsibility in whole or in part to any Subcontractor. Submittals may be prepared by the CONTRACTOR, Subcontractors or Suppliers, but the CONTRACTOR shall verify that each Submittal meets the requirements of the Contract Documents. Verify that there are no conflicts between Submittals and notify the DISTRICT in each case where a Submittal may affect the work of another contractor or the DISTRICT. The CONTRACTOR shall ensure coordination of Submittals of related crafts and Subcontractors.

1.2 PRECONSTRUCTION CONFERENCE SUBMITTALS

- A. Prior to the preconstruction conference referred to in Section 01010 - Summary of Work, submit the following items for review:
 - 1. A preliminary schedule of Shop Drawings, Samples, and proposed Substitute ("Or-Equal") Submittals listed in the Bid.
 - 2. A list of all permits and licenses the CONTRACTOR shall obtain indicating the agency required to grant the permit, the expected date of submittal for the permit, and required date for receipt of the permit.
 - 3. The names and qualifications of Designated Safety Representative And Designated Competent Persons.
 - 4. Preliminary Progress Schedule in accordance with Section 01310 - Construction Schedule.

1.3 PROGRESS REPORTS

- A. The CONTRACTOR shall furnish a progress report to DISTRICT with each Application for Payment. If the WORK falls behind schedule, submit additional progress reports at such intervals as DISTRICT may request.
- B. Each progress report shall include sufficient narrative to describe any current and anticipated delaying factors, effect on the construction schedule, and proposed corrective actions. Any WORK reported complete, but which is not readily apparent to DISTRICT, must be substantiated with satisfactory evidence.

- C. Each progress report shall include a list of the activities completed with their actual start and completion dates, a list of the activities currently in progress, and the number of Working days required to complete each.

1.4 SHOP DRAWINGS

- A. Wherever called for in the Contract Documents, or where required by the DISTRICT, furnish for review one copy of each Shop Drawing Submittal. Submittals shall be transmitted electronically in PDF format. The term "Shop Drawings" as used herein shall be understood to include detail design calculations, shop drawings, fabrication, and installation drawings, erection drawings, lists, graphs, catalog sheets, data sheets, and similar items. Whenever the CONTRACTOR is required to submit design calculations as part of a Submittal, such calculations shall bear the signature and seal of a professional engineer registered in the appropriate branch in California unless otherwise directed.
- B. All Shop Drawing Submittals shall be accompanied by a Submittal transmittal form acceptable to the DISTRICT. The form shall indicate the Contract/Project and all specification references necessary to clearly denote which Contract requirements are being satisfied by the Submittal. Any Submittal not accompanied by such a form, or where all applicable items on the form are not completed, will be returned for resubmittal.
- C. Normally, a single Shop Drawing Submittal shall be used for each technical specification section or item or class of material or equipment for which a Submittal is required. A single Submittal covering multiple sections will not be acceptable, unless the primary specification references other sections for components. Example: If a pump section references other sections for the motor, protective coating, anchor bolts, local control panel, and variable frequency drive, a single submittal would be accepted. However, a single Submittal covering vertical turbine pumps and horizontal split case pumps would not be acceptable.
- D. On the transmittal form, index the components of the Submittal and insert tabs in the Submittal to match the components. Relate the Submittal components to Specification paragraph and subparagraph, Drawing number, detail number, schedule title, or room number or building name, as applicable.
- E. Unless indicated otherwise, terminology and equipment names and numbers used in Submittals shall match the Contract Documents.
- F. Format:
 - 1. Minimum sheet size shall be 8.5 inches by 11 inches. Maximum sheet size shall be 24 inches by 36 inches. Every page in a Submittal shall be numbered in sequence. Each copy of a Submittal shall be collated and stapled or bound, as appropriate. The DISTRICT will not collate copies.
 - 2. Where product data from a manufacturer is submitted, clearly mark which model is proposed, with all pertinent data, capacities, dimensions, clearances, diagrams, controls, connections, anchorage, and supports. Sufficient level of detail shall be presented for assessment of compliance with the Contract Documents.
 - 3. Each Submittal shall be assigned a unique number. Submittals shall be numbered sequentially. The Submittal numbers shall be clearly noted on the transmittal.

Original Submittals shall be assigned a numeric Submittal number. Resubmittals shall bear an alpha-numeric system which consists of the number assigned to the original Submittal for that item followed by a letter of the alphabet to represent that it is a subsequent Submittal of the original. For example, if Submittal 25 requires a resubmittal, the first resubmittal will bear the designation "25-A" and the second resubmittal will bear the designation "25-B" and so on.

- G. Disorganized Submittals which do not meet the requirements above will be returned without review.
- H. Except as may otherwise be indicated herein, the DISTRICT will return its review comments to the CONTRACTOR, within seven calendar days following their receipt. For resubmittal of Submittals, the DISTRICT will be allowed the same review period as for the original Submittal. 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 to the CONTRACTOR to cover additional costs of the review beyond the second Submittal.
- I. If a Submittal is returned to the CONTRACTOR marked "NO EXCEPTIONS," formal revision and resubmission of said Submittal will not be required.
- J. If a Submittal is returned to the CONTRACTOR marked "MAKE CORRECTIONS NOTED," formal revision and resubmission of said Submittal will not be required.
- K. If a Submittal is returned to the CONTRACTOR marked "AMEND & RESUBMIT," revise said Submittal and resubmit. Resubmittal of portions of multi-page documents or multi-drawing documents will not be allowed. For example, if a Shop Drawing Submittal that consists of ten drawings contains only one drawing that needs to be amended and resubmitted, the Submittal as a whole is deemed as "AMEND & RESUBMIT", and all ten drawings of the Submittal would be required to be resubmitted.
- L. If a Submittal is returned to the CONTRACTOR marked "REJECTED," revise said Submittal and resubmit the required number of copies. Resubmittal of portions of multi-page documents or multi-drawing documents will not be allowed. For example, if a Shop Drawing Submittal that consists of ten drawings contains only one drawing that is rejected and needs to be resubmitted, the Submittal as a whole is deemed as "REJECTED", and all ten drawings of the Submittal would be required to be resubmitted.
- M. Any changes made on a resubmittal, other than those made or requested by the DISTRICT, shall be identified and flagged on the resubmittal.
- N. Fabrication of an item shall be commenced only after the DISTRICT has reviewed the pertinent submittals and has returned copies to the CONTRACTOR marked either "NO EXCEPTIONS" or "MAKE CORRECTIONS NOTED." Corrections indicated on Submittals shall be considered as changes necessary to meet the requirements of the Contract Documents and shall not be taken as the basis for changes to the Contract requirements.
- O. All Shop Drawing Submittals shall be carefully reviewed by an authorized representative of the CONTRACTOR, prior to submission. Each Submittal shall be dated, signed with the following: "I have verified that the equipment or material in this Submittal meets all the requirements specified or shown in the Contract Documents without exception." In the case of Shop Drawings, each sheet shall be so dated, signed, and certified. No consideration for review of any Submittals will be made for any items which have not

been so certified. All non-certified Submittals will be returned without action taken, and any delays caused thereby shall be the total responsibility of the CONTRACTOR. Submittals which the CONTRACTOR wishes to have reviewed that cannot bear this certification because they include an exception or deviation to the Contract Documents shall be submitted in accordance with Section 01600 - Products, Materials, Equipment, and Substitutions.

- P. The DISTRICT's review of Shop Drawing Submittals shall not relieve the CONTRACTOR of the entire responsibility for the correctness of details and dimensions and for compliance with the Contract Documents. The CONTRACTOR shall assume all responsibility and risk for any misfits due to any errors in Submittals. The CONTRACTOR shall be responsible for the dimensions and the design of adequate connections and details.
- Q. No changes in the Contract Times will be considered for schedule delays resulting from non-compliant Submittals.
- R. Within 30 days of the Notice to Proceed, the CONTRACTOR shall submit a complete list of anticipated Submittals which includes Specification and Drawing references.
- S. If the CONTRACTOR submits an incomplete Submittal, the Submittal may be returned without review. A complete Submittal shall contain sufficient data to demonstrate that the items contained therein comply with the Contract Documents, meet the minimum requirements for Submittals as described in the Contract Documents, and include all corrections as required from previous Submittals.

1.5 CONTRACTOR'S SCHEDULE

- A. The CONTRACTOR'S construction schedules and reports shall be prepared and submitted to the DISTRICT in accordance with the provisions of Section 01310 - Progress Schedule.

1.6 SAMPLES

- A. Whenever in the Specifications samples are required, submit not less than three samples of each item or material for acceptance, at no additional cost to the DISTRICT.
- B. Samples, as required herein, shall be submitted for acceptance a minimum of 21 days prior to ordering such material for delivery to the jobsite, and shall be submitted in an orderly sequence so that dependent materials or equipment can be assembled and reviewed without causing delays in the WORK.
- C. All samples shall be individually and indelibly labeled or tagged, indicating thereon all specified physical characteristics and Manufacturer's name for identification. Upon receiving acceptance of the DISTRICT, one set of the samples will be stamped and dated and returned to the CONTRACTOR, and two sets of samples will be retained, and one set of samples shall remain at the job site until completion of the Work.
- D. Unless indicated otherwise, all colors and textures of specified items presented in sample submittals shall be from the manufacturer's standard colors and standard materials, products, or equipment lines. If the samples represent non-standard colors, materials, products, or equipment lines and their selection will require an increase in contract time or price, clearly indicate same on the transmittal page of the submittal.

1.7 SURVEY DATA

- A. The CONTRACTOR shall make available for examination throughout the construction period all field books, notes, and other data developed by CONTRACTOR in performing the surveys required by the WORK and submit all such data to DISTRICT with documentation required for final acceptance of the WORK.

1.8 OPERATIONS AND MAINTENANCE MANUAL

- A. The preparation and submission of Operations and Maintenance Manuals is not included in the WORK or this Contract.

1.9 RECORD DRAWINGS

- A. The CONTRACTOR shall prepare Record Drawings as required in Section 01305 – Record Drawings.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

– END OF SECTION –



Submittal Certification

Contractor:	Contractor's License No.:
Project Name:	
Submittal Number:	Date:

I hereby certify that I have verified that the equipment or material in this Submittal meets all the requirements specified or shown in the Contract Documents without exception.

Name: _____

Signature: _____

Date: _____

SECTION 01305 – RECORD DRAWINGS

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall prepare and maintain Record Drawings during conduct of the WORK. The Record Drawings shall comply with the format and content requirements given herein.

1.2 CONTRACTOR SUBMITTALS

- A. The CONTRACTOR shall submit copies of Record Drawings to the DISTRICT in accordance with Section 01300 – Contractor Submittals.

PART 2 – PRODUCTS (Not Used)

PART 3 -- EXECUTION

3.1 RECORD DRAWING PROCEDURES

- A. The CONTRACTOR shall prepare and maintain one record set of Drawings at the Site. On these, the CONTRACTOR shall mark in red ink all project conditions, locations, configurations, and any other changes or deviations which may vary from the details represented on the original Contract Drawings, including buried or concealed construction and utility features which are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of all utilities that differ from the locations indicated, or which were not indicated on the Contract Drawings. Said record drawings shall be supplemented by any detailed sketches as necessary or directed to indicate fully the Work as actually constructed.
- B. These master record drawings of the CONTRACTOR'S representation of as-built conditions, including all revisions made necessary by addenda and change orders shall be maintained up-to-date during the progress of the WORK. Failure to properly maintain record drawings in an up-to-date condition will result in a reduction of payment for each month of \$5,000 until the drawings are brought up-to-date.
- C. In the case of those drawings which depict the detailed requirements for equipment to be assembled and wired in the factory, such as motor control centers and the like, the record drawings shall be updated by indicating those portions which are superseded by change order drawings or final shop drawings, and by including appropriate reference information describing the change orders by number and the shop drawings by manufacturer, drawing, and revision numbers.
- D. Record drawings shall be accessible to the DISTRICT at all times during the construction period.
- E. Final Application for Payment will not be acted upon until the record drawings have been prepared and delivered to the DISTRICT. Said up-to-date record drawings shall be in the form of a set of prints with information carefully plotted in red.

- F. Upon Substantial Completion of the WORK, and prior to Final Acceptance, the CONTRACTOR shall finalize and deliver a complete set of record drawings to the DISTRICT. This set of drawings shall consist of corrected drawings showing the reported location of the WORK. The information submitted by the CONTRACTOR and incorporated by the DISTRICT into the record drawings will be assumed to be correct, and the CONTRACTOR shall be responsible for the accuracy of such information, and for any errors or omissions which may appear on the record drawings as a result.

- END OF SECTION -

SECTION 01310 - CONSTRUCTION PROGRESS SCHEDULE

PART 1 -- GENERAL

1.1 REQUIREMENTS OVERVIEW

- A. The CONTRACTOR'S planning, scheduling and execution of the WORK shall be presented to the DISTRICT by submission of the schedule information and data indicated in this Section.
- B. In preparing all schedules, it is the responsibility of the CONTRACTOR to work with each Subcontractor and Supplier to obtain information pertinent to the planning and updating of their respective activities and schedules.

PART 2 -- PRODUCTS

2.1 GENERAL CRITERIA

- A. The Progress Schedule shall reflect the CONTRACTOR's plans for and status of the WORK.
- B. The Progress Schedule shall show the breakdown of work into activities and relationships only to the extent required to effectively manage the WORK. The Schedule shall show the division of the WORK into activities and specify the progression from the Notice To Proceed to the end of the Contract Times. The Preliminary Progress Schedule shall include appropriate time allowances and constraints for submittals, items of interface with work performed by others, and construction, start-up, and performance tests.
- C. The CONTRACTOR's Progress Schedule shall include all procurement related activities that lead to delivery of permanent materials to the Site in a timely manner. The procurement activities shall indicate significant events in the procurement process such as issuance of purchase orders and subcontracts, submittal of shop drawings, review and approval of shop drawings, release for fabrication, release for shipment, delivery dates for major materials and equipment, etc., as appropriate.
- D. The CONTRACTOR shall schedule those required duties and responsibilities of the DISTRICT within the Contract Times. The Progress Schedule shall incorporate activities and sequences based on the information given in the Contract Documents, and if not given, as indicated by the DISTRICT in writing.
- E. The Preliminary Progress Schedule shall identify the start and completion dates for work activities for which the CONTRACTOR is entitled to payment.
- F. The Progress Schedule shall be in a precedence diagram format, shall be plotted on a time-scaled calendar, and shall identify the Contract Times, milestones, the critical path(s), and all activities. Activities shall be shown on their early dates, with their total float noted beside them. Connections between activities, whether on the same sheet or on different sheets, shall identify both the predecessor and successor work.

2.2 SCHEDULE SUBMITTAL

- A. The CONTRACTOR shall produce a Preliminary Progress Schedule submittal that will be an accurate representation of the proposed means and methods for accomplishing the WORK. This schedule will show all logical relationships and constraints between activities. This schedule shall be available for discussion at the Preconstruction Conference described in Section 01010 – Summary of Work.

2.3 MONTHLY PROGRESS REPORTS

- A. The CONTRACTOR shall submit to the DISTRICT, a report indicating the monthly and cumulative cost totals for the WORK. The report shall be in format developed by the CONTRACTOR and reviewed by the DISTRICT.

PART 3 -- EXECUTION

3.1 SCHEDULE UPDATES

- A. The CONTRACTOR shall keep the Progress Schedule current and shall update it on a weekly basis. A copy of the current progress schedule shall be made available to the DISTRICT upon request.
- B. A copy of the updated Progress Schedule shall be submitted with each request for payment

- END OF SECTION -

SECTION 01400 - QUALITY ASSURANCE/QUALITY CONTROL

PART 1 -- GENERAL

1.1 SITE INVESTIGATION AND CONTROL

- A. The CONTRACTOR shall check and verify all dimensions and conditions in the field continuously during construction. The CONTRACTOR shall be solely responsible for any inaccuracies built into the Work due to the CONTRACTOR's (including Subcontractor's) failure to comply with this requirement.
- B. The CONTRACTOR shall inspect related and appurtenant WORK and report in writing to the DISTRICT any conditions which will prevent proper completion of the WORK. Failure to report such conditions shall constitute acceptance of all Site conditions, and any required removal, repair, or replacement caused by unsuitable conditions shall be performed by the CONTRACTOR solely and entirely at CONTRACTOR's expense.

1.2 INSPECTION OF THE WORK

- A. All WORK performed by the CONTRACTOR and Subcontractors shall be inspected by the CONTRACTOR's full time Quality Control inspector. Nonconforming WORK and any safety hazards in the work area shall be noted and promptly corrected. The CONTRACTOR is responsible for the WORK to be performed safely and in conformance to the Contract Documents.
- B. The WORK shall be conducted under the general observation of the DISTRICT to ensure strict compliance with the Contract Documents. Such inspection may include mill, plant, shop, or field inspection as required. The DISTRICT, and any designated representatives shall be permitted access to all parts of the WORK, including plants where materials or equipment are manufactured or fabricated.
- C. The presence of the DISTRICT, or any designated representatives shall not relieve the CONTRACTOR of the responsibility for the proper execution of the WORK in accordance with all requirements of the Contract Documents. Compliance is the responsibility of the CONTRACTOR. No act or omission on the part of the DISTRICT or any designated representatives shall be construed as relieving CONTRACTOR of this responsibility. Inspection of WORK later determined to be nonconforming shall not be cause or excuse for acceptance of the nonconforming WORK. The DISTRICT may accept nonconforming WORK when adequate compensation is offered and it is in the DISTRICT's best interest as determined by the DISTRICT.
- D. All materials and articles furnished by the CONTRACTOR or Subcontractors shall be subject to rigid documented inspection by qualified personnel, and no materials or articles shall be used in the WORK until they have been inspected and accepted by the CONTRACTOR's Quality Control representative. No WORK shall be backfilled, buried, cast in concrete, covered, or otherwise hidden until it has been inspected by the DISTRICT. Any WORK covered in the absence of inspection shall be subject to uncovering. Where uninspected WORK cannot be easily uncovered, such as in concrete cast over reinforcing steel, all such WORK shall be subject to demolition, removal, and reconstruction under proper inspection.
- E. All materials and articles furnished to the CONTRACTOR by the DISTRICT shall be subject to rigid inspection by the CONTRACTOR's Quality Control representative before

being used or placed by the CONTRACTOR. The CONTRACTOR shall inform the DISTRICT, in writing, of the results of said inspections within one working day after completion of inspection. In the event that the CONTRACTOR believes any material or articles provided by the DISTRICT to be of insufficient quality for use in the WORK, the CONTRACTOR shall immediately notify the DISTRICT.

1.3 TIME OF INSPECTION AND TESTS

- A. Samples and test specimens required under these Specifications shall be furnished and prepared for testing in ample time for the completion of the necessary tests and analyses before said articles or materials are to be used. The CONTRACTOR shall furnish and prepare all required test specimens at the CONTRACTOR's own expense. As provided in the Contract Documents, performance of the certain tests will be by the DISTRICT, and all costs therefor will be borne by the DISTRICT at no cost to the CONTRACTOR except that the costs of any test which shows unsatisfactory results shall be backcharged to the CONTRACTOR.
- B. Whenever the CONTRACTOR is ready to backfill, bury, cast in concrete, hide, or otherwise cover any WORK under this Contract, the DISTRICT shall be notified not less than 24 hours in advance to request inspection before beginning any such WORK of covering. Failure of the CONTRACTOR to notify the DISTRICT at least 24 hours in advance of any such inspections shall be reasonable cause for the DISTRICT to order a sufficient delay in the CONTRACTOR's schedule to allow time for such inspection. The costs of any remedial, or corrective work required, and all costs of such delays, including its impact on other portions of the WORK, shall be borne by the CONTRACTOR.

1.4 SAMPLING AND TESTING

- A. When not otherwise indicated, all sampling and testing shall be in accordance with the methods prescribed in the current standards of the ASTM, as applicable to the class and nature of the article or materials considered. However, the DISTRICT reserves the right to use any generally-accepted system of inspection that, in the opinion of the DISTRICT, will ensure that the quality of the workmanship is in full accord with the Contract Documents.
- B. The DISTRICT reserves the right to waive tests or quality assurance measures, but waiver of any specific testing or other quality assurance measure, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the indicated testing or other quality assurance requirements as originally specified, and whether or not such guarantee is accompanied by a performance bond to assure execution of any necessary corrective or remedial work, shall not be construed as a waiver of any technical or qualitative requirements of the Contract Documents.
- C. Notwithstanding the existence of such waiver, the DISTRICT shall reserve the right to make independent investigations and tests as specified in the following paragraph and failure of any portion of the WORK to meet any of the qualitative requirements of the Contract Documents, shall be reasonable cause for the DISTRICT to require the removal or correction and reconstruction of any such WORK.
- D. In addition to any other inspection or quality assurance provisions that may be indicated, the DISTRICT shall have the right to independently select, test, and analyze, at the expense of the DISTRICT, additional test specimens of any or all of the materials to be used. Results of such tests and analyses shall be considered along with the tests or analyses made by the CONTRACTOR to determine compliance with the applicable

specifications for the materials so tested or analyzed, provided that wherever any portion of the WORK is discovered, as a result of such independent testing or investigation by the DISTRICT, which fails to meet the requirements of the Contract Documents, all costs of such independent inspection and investigation and all costs of removal, correction, reconstruction, or repair of any such WORK shall be borne by the CONTRACTOR.

1.5 RIGHT OF REJECTION

- A. The DISTRICT shall have the right at all times and places to reject any articles or materials to be furnished hereunder which, in any respect, fail to meet the requirements of the Contract Documents, regardless of whether the defects in such articles or materials are detected at the point of manufacture or after completion of the WORK at the Site. If the DISTRICT, through an oversight or otherwise, has accepted materials or WORK which are defective or in any way contrary to the Contract Documents, such materials, no matter in what stage or condition of manufacture, delivery, or erection, may be rejected.
- B. The CONTRACTOR shall promptly remove or replace rejected articles or materials from the Site of the Work after notification of rejection.
- C. All costs of removal and replacement of rejected articles or materials shall be borne by the CONTRACTOR at no increased cost to the DISTRICT.
- D. Failure to promptly remove and replace rejected WORK shall be considered a breach of this contract and the DISTRICT may, after 7 days notice, terminate the CONTRACTOR'S right to proceed with the affected WORK and remove and replace the Work and issue a backcharge to cover the cost of the WORK.

1.6 CONTRACTOR'S QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS

- A. The CONTRACTOR shall establish and execute a Quality Assurance/Quality Control (QA/QC) program for the services which are being procured from the CONTRACTOR. The program shall provide the CONTRACTOR with adequate measures for verification and conformance to defined requirements by its personnel and lower-tier Subcontractors (including fabricators, suppliers, and sub-subcontractors). This program shall be described in a QA/QC Plan responsive to this Section.

1.7 TESTING SERVICES

- A. All tests which require the services of a laboratory to determine compliance with the Contract Documents shall be performed by an independent commercial testing firm acceptable to the DISTRICT. The testing firm's laboratory shall be staffed with experienced technicians, properly equipped and fully qualified to perform the tests in accordance with the specified standards.
- B. The CONTRACTOR's independent testing laboratory shall be accredited by the American Association of State Highway and Transportation Officials (AASHTO) for the tests they will perform and as appropriate to the construction work being performed. The CONTRACTOR's laboratory shall also be AASHTO accredited in the following
 - 1. ASTM C1077 - Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.

2. ASTM D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design/Construction.
 3. ASTM D3666 - Specifications for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials.
- C. The DISTRICT shall have the right to inspect work performed by the independent testing laboratory both at the project and at the laboratory. This shall include inspection of the independent testing laboratory's internal quality assurance records (quality assurance manual, equipment calibrations, proficiency sample performance, etc.).
- D. The CONTRACTOR shall obtain the DISTRICT'S acceptance of the testing firm before having services performed, and shall pay all costs for these testing services.
- E. Testing services provided by the DISTRICT, if any, are for the sole benefit of the DISTRICT. However, test results shall be available to the CONTRACTOR. Testing necessary to satisfy the CONTRACTOR's internal quality control procedures shall be the sole responsibility of the CONTRACTOR.
- F. **Testing Services Furnished by CONTRACTOR:** Unless otherwise indicated, the CONTRACTOR shall furnish all testing services in connection with the following materials as required for DISTRICT's review:
1. Concrete materials and mix designs.
 2. Embankment, fill, and backfill materials.
 3. All other tests and engineering data required for the DISTRICT's review of materials and equipment proposed to be used in the Work.
- G. **Testing Services furnished by the DISTRICT:**
1. Unless otherwise indicated, the DISTRICT will provide Quality Control testing services in connection with the following materials and equipment incorporated in the WORK:
 - a. Concrete strength tests.
 - b. Moisture-density and relative density tests on embankment, fill, and backfill materials.
 - c. In-place field density test on embankments, fills, and backfill.
 - d. Other materials and equipment as indicated herein.
 2. Testing, including sampling, shall be performed by the DISTRICT or the DISTRICT's testing firm's laboratory personnel, in general manner and frequency indicated in the Specifications.
 3. The testing firm's laboratory shall perform all laboratory tests within a reasonable time consistent with the specified standards and will furnish a written report of each test.

4. The CONTRACTOR shall furnish all sample materials and cooperate in the testing activities, including sampling. The CONTRACTOR shall interrupt the WORK when necessary to allow testing, including sampling to be performed. The CONTRACTOR shall have no claim for an increase in Contract Price or Contract Times due to such interruption. When testing activities, including sampling, are performed in the field by the testing firm's laboratory personnel, furnish personnel and facilities to assist in the activities.

H. **Transmittal of Test Reports:** Written reports of tests and engineering data furnished by the CONTRACTOR for the DISTRICT's review of materials and equipment proposed to be used in the WORK shall be submitted as indicated for Shop Drawings.

1. The testing firm retained by the CONTRACTOR for material testing shall furnish five copies of written report of each test. Four copies of each test report shall be transmitted to the DISTRICT within 3 days after each test is completed. Each report for each type of test shall be consecutively numbered.
2. The DISTRICT shall furnish one copy of each field and laboratory QC test performed by the DISTRICT to the CONTRACTOR.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

SECTION 01450 - PERMITS

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall obtain permits required for the execution of the WORK in accordance with the Contract Documents. Copies of these permits shall be furnished to the DISTRICT.

1.2 PERMITS OBTAINED BY THE DISTRICT

A. **Town of Truckee Encroachment Permit:**

- 1. The DISTRICT has obtained an Encroachment Permit from the Town of Truckee for WORK under this Contract that is located in Town road right-of-way. A copy of the Encroachment Permit is included at the end of this Section. The CONTRACTOR shall comply with the applicable provisions of the permit and shall bring to the attention of the DISTRICT, any applicable provision of the permit that is in conflict with the reasonable completion of the WORK. The DISTRICT shall make any decisions concerning modifications of either the specifications or the provisions of the permit, and its decision shall be final.

B. **Tahoe-Truckee Sanitation Agency Permit to Discharge to Sanitary Sewer:**

- 1. The DISTRICT previously obtained a temporary discharge permit from the Tahoe-Truckee Sanitation Agency (TTSA) to allow the discharge of water to the sanitary sewer for activities associated with water pipeline construction during the summer of 2023. A copy of this Temporary Discharge Permit is included at the end of this section. TTSA has stated that it will extend this permit to cover pipeline construction activities during the summer of 2026.
- 2. The CONTRACTOR shall comply with the applicable provisions of the permit and shall bring to the attention of the DISTRICT, any applicable provision of the permit that is in conflict with the reasonable completion of the WORK. The DISTRICT shall make any decisions concerning modifications of either the specifications or the provisions of the permit, and its decision shall be final.
- 3. The DISTRICT will pay the deposit associated with the permit.
- 4. The DISTRICT will also pay the \$5.00/1,000 gallons disposal charge. However, if the CONTRACTOR is, in the opinion of the DISTRICT, being wasteful or careless about the discharge of water, the CONTRACTOR shall reimburse the DISTRICT for the disposal fee associated with that water deemed to be excessive.

- C. **Truckee Sanitary District Permit to Discharge to Sanitary Sewer:** The DISTRICT has submitted a permit application to Truckee Sanitary District to allow the discharge of water to the sanitary sewer for activities associated with this project. A copy of the Temporary Discharge Permit will be included by addendum upon its issuance. The CONTRACTOR shall comply with the applicable provisions of this permit and shall bring to the attention of the DISTRICT, any applicable provision of this permit that is in conflict with the reasonable completion of the WORK. The DISTRICT shall make any

decisions concerning modifications of either the specifications or the provisions of the permit, and its decision shall be final.

1. Included for reference at the end of this Section is a copy of the Temporary Discharge Permit that was issued for the ***District Pipeline Replacement – 2025*** project. It is expected that the conditions of the permit for this Contract will be similar to the permit issued for the 2025 project.
2. The DISTRICT will pay the \$2.07/1,000 gallons disposal charge. However, if the CONTRACTOR is, in the opinion of the DISTRICT, being wasteful or careless about the discharge of water, the CONTRACTOR shall reimburse the DISTRICT for the disposal fee associated with that water deemed to be excessive.

1.3 PERMITS TO BE OBTAINED BY THE CONTRACTOR

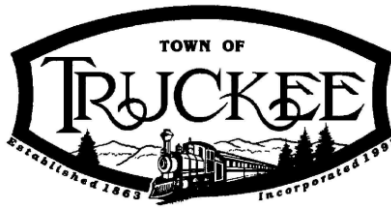
- A. The CONTRACTOR shall obtain any and all other permits required for the prosecution of the WORK.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

**TOWN OF TRUCKEE
ENCROACHMENT PERMIT**



ENCROACHMENT PERMIT

APPLICANT:

Truckee Donner Public Utility District
11570 Donner Pass Road
Truckee, CA 96161

PERMITTEE:

Neil Kaufman
Name
530-582-3950
Phone
530-448-3018 Cell
Phone

Name

Phone

PROJECT: TDPUD District Pipeline Replacement Project – 2026

DESCRIPTION OF WORK: This permit authorizes the installation of water distribution piping within the Town of Truckee right-of-way as per the approved construction plans submitted by Truckee Donner Public Utility District (TDPUD) for the District Pipeline Replacement Project – 2026. The work is proposed primarily within the Town right-of-way on Glenshire Drive.

ATTACHMENTS:

- 1. Town of Truckee Standard Drawing 54, Trench Excavation and Backfill

SPECIAL CONDITIONS:

- 1. This Encroachment Permit shall not apply to any other underground construction project within the Town of Truckee right-of-way, except those portions described in the description of work above. In any areas where these provisions conflict with the Town of Truckee Public Improvement and Engineering Standards adopted May 15, 2003, Town Ordinances relating to Encroachment Permits, California Streets and Highways Code, and usual and customary construction practices as defined by the Standard Specifications for Public Works Construction, Caltrans Standard Specifications or any other publication, the provisions of this permit shall govern.
- 2. The cost for this permit will be 2% of the total estimated cost of the portions of the project within the Town right-of-way (paving restoration costs). This amount is due with the start of construction of the project.
- 3. Construction activity shall be limited to the hours of 7:00 A.M. to 7:00 P.M. Monday through Friday for the duration of this project. Work within the Town of Truckee right-of-way outside these work hours shall not occur except with 48 hours notice and prior written approval of the Town Engineer or designee.
- 4. Construction activity shall be limited to May 1 through October 15. Extension of the construction dates may be granted with approval of the Town Engineer or designee.
- 5. **Prior to any sawcutting of asphalt pavement, applicant shall arrange a field review with representatives of the Town, applicant and permittee to verify sawcut limits.** The Town will allow minor alignment changes to avoid conflicts with other underground utilities and to facilitate a more economical installation without prior approval of the Town Engineer. Placement of utility lines shall be outside the pavement wherever feasible. Any deviations of 2' or greater from the approved project plans with regard to alignment of the utility trench shall occur only after prior written approval of the Town Engineer, or designee. The Town Engineer will not consider or approve any alignment modifications, which will violate utility setback requirements, until concurrence signatures have been obtained from all underground utilities, which would be affected by reduction in separation requirements. Failure to obtain prior approvals for alignment modifications will result in the required removal of said utility, with appropriate trench backfill, as per the conditions of this encroachment permit.

6. As-built drawings of the constructed alignment shall be maintained by the applicant during construction and a copy of the as-built project plans shall be supplied to the Town at completion of project construction.
7. This permit will authorize lane closures according to Caltrans Std. Plan T13. Road closures may be allowed with approval of a Traffic Control Plan by the Town Engineer or designee and notification of the following services: Truckee Fire Protection District, Truckee Police Department Dispatch Center, and the Truckee Tahoe Unified School District Transportation Office. A detour plan shall be submitted for any road closure requests with 48 hours notice.
8. Prior to commencing construction, the permittee shall be responsible for contacting all underground utility companies or agencies for verification of the locations of all underground utilities or structures where facilities may conflict with the proposed improvements. Call "Underground Service Alert" (USA) between 2 and 14 days prior to any excavation. The Town is not part of USA, and permittee must call the Town at 582-2900 to request marking of known storm drainage infrastructure. Unknown infrastructure, such as roadway underdrains, which are located during excavation by the permittee shall be brought to the attention of the Town to determine if any repair is required. Applicant and/or permittee is responsible for the repair and any cost of repair to such infrastructure as deemed necessary by the Town.
9. In the event of inclement weather, applicant and/or permittee shall be responsible for snow plowing and traffic safety within any active construction zone of the project. The applicant and/or permittee will also be responsible for surface water damage to storm drain infrastructure, including but not limited to culverts, drainage inlets and roadside ditches, resulting from the permitted work. This includes the cleaning of storm drain infrastructure and maintaining the integrity of trenches and backfill materials within the construction zone, until such time that permanent asphalt has been applied and trench materials removed.
10. If any part of the completed installation interferes with the use of the roads by the general public, or needs adjusting to match the grade of the roadway, or is in conflict with any future Town improvement projects, it must be relocated or removed.
11. Prior to installation of fire hydrants, applicant shall arrange a field review with representatives of the Town, applicant and permittee to determine acceptable fire hydrant locations. Slopes behind fire hydrants shall be stabilized to prevent sloughing onto the hydrants or any roadside ditches. **Fire hydrants shall be installed a minimum of 6' behind the edge of pavement or 2' behind the back of curb. Fire hydrants shall also be 50' away from the centerline of road intersections, unless otherwise approved by the Town Engineer. Other objects will be a minimum of 10' behind the edge of pavement.**
12. At a minimum and in accordance with the SWPPP, erosion control measures shall be placed prior to the start of the permitted work. The erosion control measures shall be cleaned and maintained throughout the course of the permitted work.

GENERAL CONDITIONS:

CONSTRUCTION:

1. Applicant shall notify the Town Engineer or designee two (2) weeks prior to commencing work.
2. Applicant shall notify the Town Engineer or designee upon completion of the project. Subsequent to that notification, no additional work may be done without application for an additional encroachment permit.
3. Applicant shall perform continuing maintenance to all trenches during the course of the project to insure the safe environment for the public. Trenches shall not be left open farther than 300 feet in advance of the pipe laying operation or 200 feet to the rear of the operation unless otherwise permitted by the Town Engineer or designee.
4. Trenches may be left open overnight if they are made safe by trench plating or other method approved by the Town Engineer or designee. Trench plating shall be secured. Trench materials may also be used as a barrier in conjunction with cones and lighted barricades, providing such materials are consistent and sufficient to create a true barrier and two traffic lanes are maintained.

5. Trenching spoils and other materials necessary for installation of the pipeline may be stored on-site, for a period of 14 days, if safely delineated, appropriate erosion control measures are taken, and barricades are in place to insure public safety. All materials and equipment not used or installed within 14 days after unloading shall be stored elsewhere, excluding approved locations as per item #6. Longer storage periods will be allowed with approval of the Town Engineer, or designee.
6. Any storage of equipment and materials or screening of materials on private property shall have written permission and conditions of restoration from the property owner prior to use.
7. Appropriate dust control measures shall be applied during construction.
8. The work contemplated by this permit shall in no way interfere with the designed drainage or established drainage.
9. All pipelines, laterals, and other appurtenances shall be a minimum of 30" in depth as measured from the existing grade within 18" of the edge of pavement. Valves, pressure regulators and similar structures may be set to grade with proper marking and mapping for future identification.
10. The option to use open cut or bore techniques to install service laterals or mains is expressly that of applicant.

BACKFILL AND COMPACTION:

1. Bedding material shall be to the specifications of applicant in regard to material, installation methods, and compaction.
2. Intermediate backfill shall be free of debris and organic matter and shall be free of rocks over three (3) inches in diameter. It is solely the discretion of applicant whether to use native material or imported material such as Class II aggregate base.
3. Where it becomes necessary to excavate beyond the limits of normal excavation lines in order to remove boulders or other interfering objects, the voids remaining after the removal of the boulders shall be backfilled with suitable material and densified to the same standard as the primary trench.
4. Where pavement is removed, base material shall be replaced with Class II aggregate base to the same thickness of that removed but not less than eight (8) inches thick.
5. If the trench is less than two (2) feet from the edge of pavement, aggregate base shall be replaced as shown in attached Standard Drawing 54. Aggregate base shall also be required wherever it currently exists.
6. Compaction shall be as follows:
 - Under Roadway
 - 90% relative density in upper three feet
 - 95% relative density in road base section
 - Shoulder, within two feet of edge of pavement (EP)
 - 90% relative density in upper three feet
 - 95% relative density in shoulder base section
 - Natural Ground-Shoulder beyond two (2) feet of edge of pavement (EP)
 - 90% relative density total trench
7. Compaction tests shall be taken by a licensed engineer or testing laboratory and submitted weekly to the Town Engineer or designee. Compaction shall be determined by any method that applicant desires, which will accurately and consistently determine the density and moisture content of the soil.
8. Applicant will guarantee for a period of three (3) years that any trench installed by applicant, or permittee, as a part of this permit will not subside or fail due to defects in materials or workmanship. Applicant will obtain random compaction tests at varying intervals and depths to ensure permittee's work meets the prescribed criteria and will provide such results to the Town Engineer. The Town Engineer may make random tests at his discretion. If the sample taken on the same day backfill and compaction was completed fails to meet the prescribed criteria, applicant will, at its expense, recompact the section in question. If any such trench under

pavement does fail, applicant will repair that subsistence through the following method: The failed section will be excavated and recompact to the specifications outlined in this permit. The failed section will then be base paved to 1½" below finish paving. The paved roadway shall be repaired by grinding, conforming the existing pavement two feet (2') beyond the repair and 1½" in depth. The repair shall be repaved to a smooth surface so that a 10' straight edge laid across it, from edge of cut to edge of cut, will not have more than ½" deflection. Applicant will warrantee such repairs in the same manner. The three-year guarantee clock will begin again upon completion of the repair.

PAVING:

1. At the end of each seven-day period, permittee will place asphalt in trenches that are on major arterials, intersections and crossings. It is the discretion of permittee as to the type of asphalt used; however, if permanent AC paving is used, it shall be placed as described in Sections 2 and 3, listed below.
2. Transverse excavation performed within the pavement section shall conform to the "**trench restoration**" specifications as outlined in Standard Drawing 54 with Caltrans ½" Maximum, Medium (Type A) with PG 64-28 Asphalt Binder or an approved equivalent asphalt concrete mix. Longitudinal and transverse excavation performed within the pavement section **may have** the following "**enhanced restoration**" requirements within the roadway: All trenches shall be base paved from the bottom of existing asphalt to an elevation 2" below the top of existing asphalt. The entire asphalt surface from the centerline of the street (or the centerline of the lane, as determined by the Town) to the edge of pavement on the side of the road, where the trench is located, shall be removed to a depth of 2" through cold milling or other appropriate methods. A new 2" asphalt overlay consisting of Caltrans ½" Maximum, Medium (Type A) with PG 64-28 Asphalt Binder or an approved equivalent asphalt concrete mix shall be placed and compacted to Town of Truckee specifications.
3. Prior to paving, edges of existing pavement shall be cut or ground in a straight line with tapering around areas where excavation was required outside of the normal trench line for the removal of boulders or other objects and returning to a straight line. The edges of the pavement shall receive a tack coat of SS1H bituminous binder or AR1000 paving asphalt on all surfaces to be joined. Application of binder shall be by a spray method to insure complete coverage of all surfaces.

TRAFFIC CONTROL:

1. Traffic control personnel will be required where workers or equipment temporarily block travel lanes on major roadways restricting travel to one lane for two directions.
2. Traffic control personnel will not be required:
 - a) On a closed street that has been approved by the Town Engineer, or designee, to be closed and the proper notifications have been made.
 - b) On any road where cones and/or barricades can be used to guide traffic around construction areas maintaining two-way traffic.
 - c) On any road where only workers or equipment (no trenches or spoil materials) intermittently block a travel lane, only momentarily restricting traffic, provided at least one crew member is available to control travel and cones are used to alert oncoming traffic.
 - d) On residential streets (except major roadways) for trenching and installation of a road crossing or bell hole temporarily blocking one travel lane, provided at least one crew member is available to control travel and cones are used to alert oncoming traffic.
3. Traffic shall be allowed to pass in the shortest reasonable time possible, approximately 0-3 minutes. Traffic shall never, under any circumstance, be held longer than 10 minutes.
4. Any traffic control conditions not addressed above will be subject to negotiations between the Town Engineer or designee and the designated applicant representative.

OTHER:

1. All work and material not addressed in the above provisions shall conform to applicable Town of Truckee Public Improvement and Engineering Standards.
2. Applicant shall obtain prior to entering on Town's property and maintain, at the applicant's sole cost and expense, public liability and property damage insurance and property damage insurance, each in the amount of at least two million dollars (\$2,000,000) single occurrence and five million dollars (\$5,000,000) in the aggregate, insuring Town, its officers, employees, agents, and volunteers against all liability, claims, demands, or losses arising out of or in connection with applicant's activities pursuant to this permit and/or applicant's use or construction of the permitted work, and/or use of the Town property. The insurance may terminate upon applicant's filing of Notice of Completion for the permitted work, as long as the insurance continues to cover any occurrences during and, up to and including, the date when the Notice of Completion was filed with the County. The applicant's policy shall by endorsement satisfactory to Town, name as additional insureds Town, its officers, employees, agents and volunteers, and specify that the applicant's policy is primary and Town's policy is excess and not contributing. The applicant's policy shall also specify, by endorsement, that the policy shall not be cancelled, suspended, modified, or terminated without thirty (30) days prior written notice to Town. The insurance provided by applicant shall be issued by a company licensed to transact such insurance in California and shall have an A.M. Best rating satisfactory to the Town.
3. Applicant shall, to the maximum extent allowed by law, indemnify, defend, and hold harmless Town, its officers, employees, agents, and volunteers, from any and all claims, actions, losses, damages, or liabilities stemming from or otherwise relating to this permit, the Town property, and/or the permitted work, except for such claims, actions, losses, damages or liabilities caused by the sole negligence or gross misconduct of Town.
4. Notification shall be provided to each residence along the project a minimum of 48 hours prior to initiation of construction along property frontages of said residences. Reasonable access shall be maintained to residences along the project.
5. In areas where construction activity will disturb existing landscaping or trees, no removal of said trees or landscaping shall occur without prior approval by the Town Engineer or designee. Said request shall be accompanied by a restoration plan for all trees or landscaping proposed for removal. All trees shall be replaced at a 1:1 ratio.
6. This permit shall not be effective for any other purpose than that of constructing the project stated above.

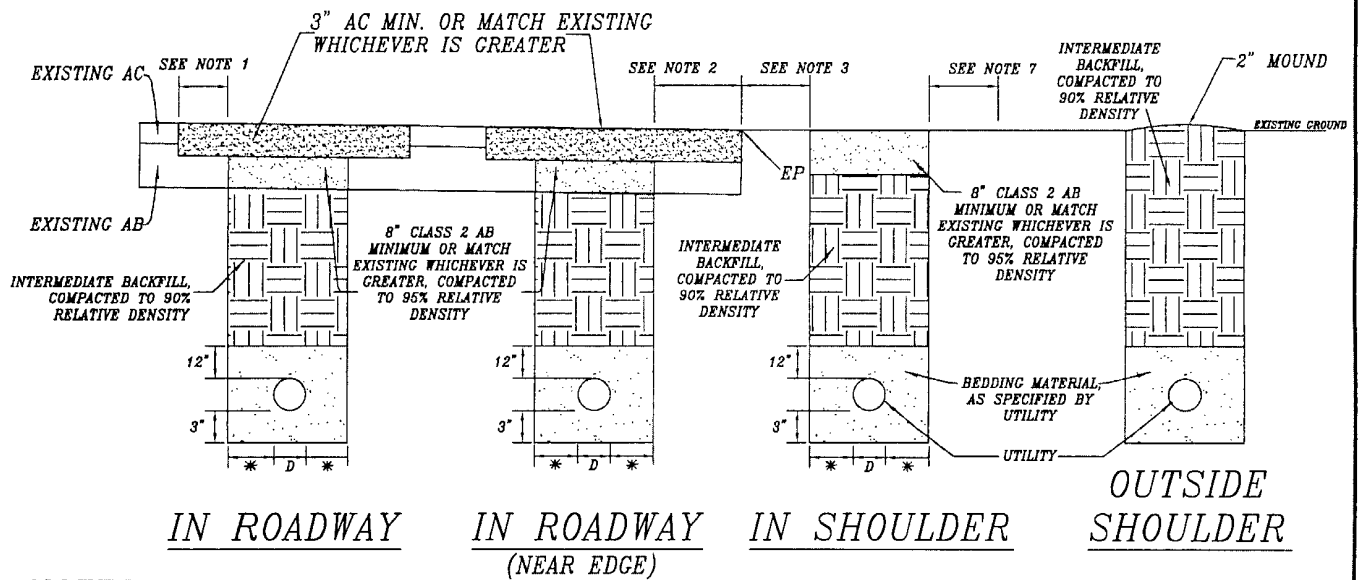
The applicant and permittee acknowledge the attachments with this permit as listed above.

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The permit is approved subject to applicant's and permittee's acceptance of Conditions of Approval. The start of any specified work shall constitute acceptance of all provisions. The permit shall become void if all contemplated work is not completed by October 15, 2026. Any voided or revoked permit shall become a violation of this agreement, which will be handled in accordance with applicable State and Town regulations.

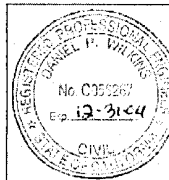
Slater Stewart, Associate Engineer

Date



NOTES:

1. SAWCUT OR GRIND PAVEMENT A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE LONGITUDINAL OR TRANSVERSE EXCAVATION.
2. REPLACE PAVEMENT ALL THE WAY TO THE EDGE OF PAVEMENT, IF THE EXCAVATION IS WITHIN 2 FEET OF THE EDGE OF PAVEMENT (EP).
3. PLACE AGGREGATE BASE AT THE TOP OF THE EXCAVATION, AS INDICATED, WHERE THE EXCAVATION IS WITHIN 2 FEET OF PAVEMENT (EP) OR IF AGGREGATE BASE PRESENTLY EXISTS ABOVE THE EXCAVATION. IF THE EXCAVATION IS AT THE BOTTOM OF A ROADSIDE DITCH, BEYOND A ROADSIDE DITCH, OR BEHIND A CURB, THE REQUIREMENT FOR AGGREGATE BASE CAN BE WAIVED.
4. TRANSVERSE EXCAVATIONS ON ROADWAYS PAVED WITHIN 2 YEARS ARE NOT ALLOWED AND MUST BE BORED. LONGITUDINAL EXCAVATIONS ON ROADWAYS PAVED WITHIN 5 YEARS OR ON BACK BONE ROADS WITH A HIGH QUALITY RIDING SURFACE REQUIRES A 2" OVERLAY WITH CONFORMS OR A 2" GRIND AND OVERLAY OF TRAVEL LANE.
5. STORM DRAIN BACKFILL TO BE STRUCTURAL BACKFILL.
6. If $D \leq 12"$: * = 6"
If $D \geq 12"$: * = 12"
7. RECONSTRUCT SHOULDER TO CATCH POINT IF TRENCH IS WITHIN 3' OF HINGE POINT.



TOWN OF TRUCKEE
ENGINEERING DEPARTMENT
TRENCH EXCAVATION
AND BACKFILL

LOCAL ROAD SYSTEM STANDARDS

NOT TO SCALE	APPROVED BY: <i>Daniel P. Vinkler</i> TOWN ENGINEER	STANDARD DRAWING SD#54
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MAY, 2003

NOTES:

1. MINIMUM COVERAGE *FROM TOP OF PIPE TO FINISH GRADE SHALL BE AS FOLLOWS:



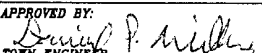
CULVERTS 18 IN.
 STORM DRAINS 18 IN.
 ALL OTHER UTILITIES 30 IN.

* OR AS OTHERWISE APPROVED

2. IN WET OR ROCKY MATERIAL THE DEPTH OF TRENCH BEDDING SHALL BE INCREASED TO THE LARGER OF EITHER 6 IN. OR 1/4 DIA.
3. FOR CULVERTS/STORM DRAINS THE MINIMUM DISTANCE BETWEEN THE SIDE OF THE TRENCH AND THE SIDE OF THE PIPE SHALL BE 12 IN.
4. COMPACTION AROUND ALL CORRUGATED CULVERTS/STORM DRAINS AND ALL CULVERTS/STORM DRAINS INSTALLED WITHIN FILL SHALL BE 95% RELATIVE COMPACTION UP TO A MINIMUM OF 12 IN. ABOVE THE TOP OF PIPE.
5. IN AREAS WITH MINIMUM COVER, INTERMEDIATE BACKFILL SHALL BE CLASS 2 AGGREGATE BASE.
6. IN AREAS OF NATURAL VEGETATION OR LANDSCAPING, REMOVE TOP 12 IN. OF MATERIAL, STOCKPILE & REPLACE IN A MOUND

7. ALL LANDSCAPING CONDUITS WITHIN THE ROADWAY PRISM AND/OR TRAFFIC AREAS MUST HAVE MINIMUM OF 30 INCHES COVER. MINIMUM COVER WITHIN TOWN R/W BUT OUTSIDE THE ROADWAY AND TRAFFIC AREAS SHALL BE AS FOLLOWS:

LOW VOLTAGE ELECTRICAL CONDUITS 24 IN. MIN.
 PRESSURIZED WATERLINES 24 IN. MIN.
 NONPRESSURIZED (DISCHARGED) LATERALS 12 IN. MIN.

		TOWN OF TRUCKEE ENGINEERING DEPARTMENT TRENCH EXCAVATION AND BACKFILL	
		LOCAL ROAD SYSTEM STANDARDS	
NOT TO SCALE MAY, 2003	APPROVED BY:  TOWN ENGINEER	STANDARD DRAWING SD#54-1	

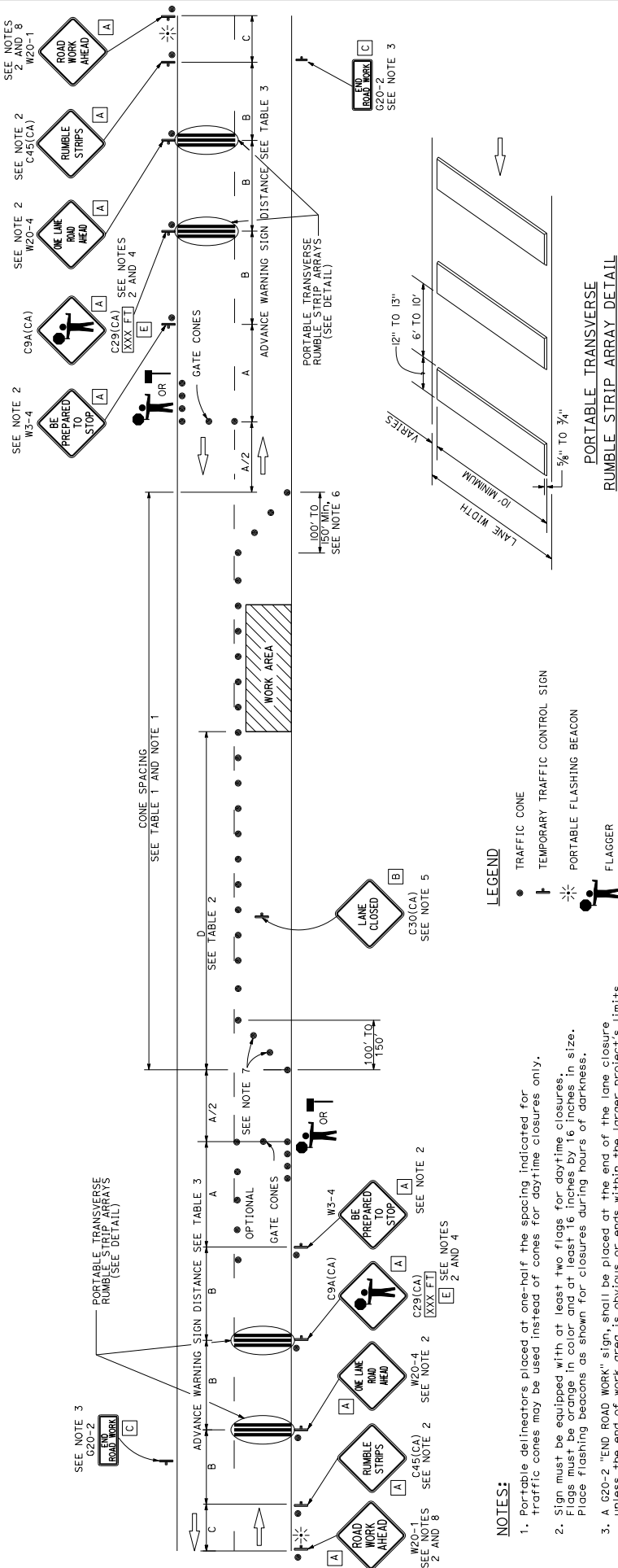
DI+1	COUNTY	ROUTE	PRIEST MILEAGE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER Charles P. Sanchez	DATE MAY 1, 2023
PROJECT NO. 2023000000	DRAWING NO. C43029
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THESE PLANS SHEETS.	

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 20" x 7"

NOTES:
 See Standard Plan T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Provide at least one person to continuously maintain traffic control devices for lane closures.



- LEGEND**
- TRAFFIC CONE
 - ⊥ TEMPORARY TRAFFIC CONTROL SIGN
 - ⊛ PORTABLE FLASHING BEACON
 - ⊠ FLAGGER
 - ⊡ AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

- NOTES:**
- Portable delineators placed at one-half the spacing indicated for. Traffic cones may be used instead of cones for daytime closures only.
 - Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches by 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
 - A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
 - An optional C29(CA) sign may be placed below the C9A(CA) sign.
 - Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area. They are optional if the work area is visible from the flagger station.
 - Length may be reduced by the Engineer to address site conditions.
 - Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
 - If C45(CA) is not used, measure distance C from W20-4.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
 WITH REVERSIBLE CONTROL ON
 TWO LANE CONVENTIONAL HIGHWAYS**

NO SCALE

T13

**TAHOE-TRUCKEE SANITATION AGENCY
SANITARY SEWER
DISCHARGE PERMIT**

**APPLICATION FOR TEMPORARY DISCHARGE PERMIT INTO TAHOE-TRUCKEE
SANITATION AGENCY SEWER SYSTEM**

I apply for permission to temporarily discharge wastewater into the Tahoe-Truckee Sanitation Agency for the discharge described below:

NAME OF

PROJECT/DISCHARGE: District Pipeline Replacement - 2023

NAME, ADDRESS, PHONE # AND E-MAIL OF DISCHARGER:

Permit No.: 368

Truckee Donner Public Utility District

11570 Donner Pass Road

Truckee, CA 96161

BILLING ADDRESS:

Same as above

POINT OF DISCHARGE: Various manholes in Glenshire and Tahoe Donner

TYPE OF DISCHARGE: Chlorinated water from pipe disinfection

NATURE OF PROPOSED DISCHARGE (Including pollutants,
flow rate in gallons per minute (gpm) and gallons per day (gpd)): Water containing
chlorine level of 50-100 mg/L. maximum flow rate of 100 gpm. Three
discharges are anticipated (one for each pipeline segment). Total
volume of 50,000 gallons is estimated.

COMMENCEMENT DATE OF PROPOSED DISCHARGE: June 1, 2023

DURATION OF PROPOSED DISCHARGE: Up to three hours per occurrence

METHOD OF POLLUTANT REMOVAL: None

I understand, agree and accept that if this application is approved, the described discharge will be subject to the basic terms and conditions and any special conditions set forth below.

Applicant/Discharger

Signature:



Date: 12/14/2022

Print name: Neil Kaufman


Print title: Water System Engineer

XXXXXXXXXXXXXXXXXXXX

TEMPORARY DISCHARGE PERMIT

The application for temporary discharge permit is approved, subject to payment of service charges and deposit and compliance with the basic terms and conditions and special conditions (if any) set forth below.

By:



General Manager
Tahoe-Truckee Sanitation Agency

Date: 01-17-2023

BASIC PERMIT TERMS AND CONDITIONS

1. This temporary discharge permit is issued to the applicant/discharger named above for the project/discharge described above pursuant to section 3.8 of Tahoe-Truckee Sanitation Agency ("Agency") Ordinance No. 1-2015. Discharger shall have a copy of this Permit at the Project/Discharge site at all times when discharging into the sewer system that flows to the Agency treatment plant. The sewer system that flows to the Agency is referred to herein as the Agency's sewer system. Discharger shall be subject to Agency ordinances pertaining to the use of the Agency's sewer system. Discharger shall be responsible for all costs to repair any damage caused to Agency's facilities or processes by the discharge into the Agency's sewer system.
2. Discharger shall not discharge anything into the Agency's sewer system other than the pre-treated water addressed in this Temporary Permit without the Agency's prior approval.
3. No discharge shall violate ordinances or resolutions adopted by the Agency, the terms of the Agency's Waste Discharge Requirements (WDR), or any pretreatment standards or requirements, or other applicable laws. Discharger must comply with applicable Agency ordinances, including, but not limited to, monitoring, reporting, testing and analysis during the term of the Temporary Permit.

4. Discharger shall obtain a permit from the appropriate sewer collection district, unless the discharger is the sewer collection district, before any discharge into the Agency's sewer system and provide a copy thereof to the Agency before such discharge.
5. Unless waived in writing by the Agency General Manager, prior to commencing a discharge, and at least once during the period in which the discharge is occurring, Discharge shall analyze and/or test the wastewater to determine if the discharge is in compliance with Agency ordinances or resolutions adopted by the Agency, the terms of the Agency's WDR, or pretreatment standards or requirements or other applicable laws. All pollutant analyses, including sampling techniques, shall be performed in accordance with Agency ordinances, and with the techniques prescribed in 40 Code of Federal Regulations Part 136. The Agency may require additional sampling or analysis. The Agency also may require additional pretreatment prior to any discharge into the Agency's sewer system. Any sampling required by the Agency to be performed by Discharger shall be performed at Discharger's sole cost and expense. The Agency may, at its discretion, perform the required additional sampling and analysis and bill the costs and expenses of such sampling and analysis to Discharger.
6. Discharger shall make available a product sample site for random sampling by the Agency. The Agency may require Discharger to reimburse the Agency for any inspection costs, pursuant to Agency ordinances.
7. Discharger shall not exceed the maximum instantaneous flow rate and any other restriction as required by the sewer collection district that has jurisdiction at the point of discharge. The Agency reserves the right to restrict or prohibit a discharge following the issuance of a Temporary Permit to avoid or mitigate problems concerning the operation or maintenance of the Agency's sewer system, facilities, or processes that arise following the issuance of said Temporary Permit.
8. Discharger shall terminate the discharge on conclusion of the discharge duration per the permit. In the event that Discharger desires to continue a discharge beyond this date, then Discharger shall obtain a new permit from the Agency for such additional discharge.
9. In the event that Discharger violates any Temporary Permit requirement, the Agency may require that Discharger cease all discharges, and may take any additional action authorized by Agency ordinance or law, including but not limited to revoking the Temporary Permit and imposing administrative fines.
10. Discharger shall pay a service charge to the Agency at the rate of \$5.00/per thousand gallons of discharged wastewater as calculated on the basis of totalized flow meter readings over the duration of the discharge or by accurately calculating tank and pipe volumes as described in Condition No. 11 below. If the anticipated volume of discharged water exceeds 200,000 gallons, a \$1,000 deposit is required upon application. Otherwise, a \$100 deposit is required upon application. The service charges incurred will be debited against the deposit. If no discharge occurs or if the discharge is less than 20,000 gallons, \$100 or the balance less than \$100, respectively, is non-refundable. If the Discharger paid a \$1,000 deposit and the service

charges incurred are less than \$1,000, the difference will be refunded to the Discharger. If the service charge amount due is more than the deposit, the Agency will bill Discharger for the difference. All payments shall be due within 30 days after the date of an Agency invoice. Penalties on any delinquent amounts and the Agency's remedies for collecting and enforcing such payments shall be those set forth in Agency ordinances.

11. Within 30 days after expiration of the Temporary Permit and cessation of discharges, Discharger shall provide the Agency with the volume, in gallons, of wastewater discharged into the Agency sewer system and such other information required by the Agency. All flows discharged to the Agency's sewer system must be accurately measured using flow meters. Tank and pipe volume calculations may be substituted for metering under some conditions provided an accurate measurement can be made. Discharger shall provide all reports, as requested by the Agency, to demonstrate compliance with the Temporary Permit and Agency ordinances.

12. Insurance Requirements:

- a. Discharger shall procure and maintain for the duration of the Temporary Permit the following insurance against claims for injuries to persons or damages to property that may arise from or in connection with the discharge by Discharger, its agents, representatives, employees or subcontractors under this permit.
- b. Coverage shall be at least as broad as: Commercial general liability coverage (Insurance Services Office occurrence form CG 0001), including liability coverage for premises and operations, explosion and collapse hazard, underground hazard, products/completed operations hazard, contractual liability, use of independent contractors, and broad form property damage with completed operations.
- c. General liability coverage limits shall not be less than: \$2,000,000 per occurrence for general liability, 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.
- d. Any deductibles or self-insured retentions must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Agency, its officers, officials, employees and volunteers; or Discharger shall procure a bond or other security guaranteeing payment of losses and related investigations, claim administration and defense fees, costs and expenses.
- e. The general liability policy must contain, or be endorsed to contain, the following provisions:
 - i. The Agency, its officers, officials, employees, agents and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of Discharger, products and completed operations of Discharger; or premises owned, occupied or used by Discharger. The coverage shall contain no special limitations on the scope of protection afforded to the

Agency, its officers, officials, employees, agents or volunteers. The additional insured coverage or endorsement shall comply with California Insurance Code section 11580.04.

- ii. For any claims related to the discharge, Discharger's insurance coverage shall be primary insurance as respects the Agency, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the Agency, its officers, officials, employees, agents or volunteers shall be excess of Discharger's insurance and shall not contribute with it.
- iii. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the Agency, its officers, officials, employees, agents or volunteers.
- iv. Discharger's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- v. Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after 30 days' prior written notice by U.S. mail has been given to the Agency, or after 10 days' written notice in the case of cancellation for non-payment of premium.
- f. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-VII or equivalent and that are admitted to do business and in good standing in California, unless otherwise approved by the Agency.
- g. Verification of Coverage. Before commencing the discharge, Discharger shall provide to the Agency the following proof of insurance: (a) certificate(s) of insurance on ACORD Form 25-S (or insurer's equivalent) evidencing the required insurance coverages; and (b) endorsement(s) on ISO Form CG 20 10 (or insurer's equivalent), signed by a person authorized to bind coverage on behalf of the insurer(s) and certifying the additional insured coverages, or equivalent additional insured blanket endorsement. The Agency reserves the right to require complete copies of all required insurance policies and/or endorsements affecting required insurance coverage at any time.
- h. Subcontractors. Discharger shall include all actions and activities of its subcontractors as insureds under its policies, or shall require each subcontractor to provide insurance coverage consistent with the foregoing and to furnish separate endorsements or certificates to the Agency. All coverages for subcontractors shall be subject to all of the requirements stated in this Condition 12.
- i. Obligation to Maintain Coverage. Discharger shall maintain all required insurance coverages for the entire discharge period. If any of the required coverages expire during the discharge period, Discharger shall obtain renewal or replacement coverages and deliver certificates for the renewed or replacement coverages and any required endorsements to the Agency at least 10 days before the expiration date of the existing coverage.
- j. The requirements as to the types, limits, and the Agency's approval of insurance coverage to be maintained by Discharger are not intended to and shall not in any

manner limit or qualify the liabilities and obligations assumed by Discharger under this Temporary Permit.

- k. In addition to any other remedy the Agency may have, if Discharger or any of the subcontractors fails to maintain the insurance coverage as required in this Condition 12, the Agency may obtain such insurance coverage as is not being maintained, in form and amount substantially the same as required herein, and the Agency may deduct the cost of such insurance from any deposit held by the Agency. If the deposit is insufficient, then Agency will bill the Discharger for the cost and the Discharger will pay the bill within 30 days of its receipt.

13. Indemnity and Defense Obligation:

- a. To the fullest extent permitted by law, Discharger shall protect, defend, indemnify and hold harmless the Agency and its officers, directors, agents, employees, volunteers, representatives, boards, and consultants from and against all penalties and fines imposed by law and all loss, claim, cause of action, demand, suit, judgment, cost, damage, expense, and liability (including but not limited to court or arbitration costs and reasonable attorneys' and expert witness fees) resulting from injury to or death of persons, including without limitation employees of the Agency, or damage to or loss of property, caused by, arising out of or in any way connected with Discharger's or its subcontractors' performance, operations or activities under this Temporary Permit, except to the extent the sole negligence or willful misconduct of an indemnified party proximately causes the loss, claim, demand, cost, suit, judgment, penalty, fine, cause of action, damage, expense, or liability.
- b. Neither termination of this Temporary Permit nor completion of the acts to be performed under this Temporary Permit shall release Discharger from its obligations to indemnify and defend the Agency and its respective officers, directors, agents, employees, volunteers, representatives, and consultants, so long as the event upon which the claim is predicated shall have occurred prior to the effective date of any such termination or completion and arose out of or was in any way connected with performance of operations under this the Temporary Permit by Discharger, its employees, agents, suppliers or subcontractors, or the employee, agent or subcontractor of any one of them.
- c. In any and all claims against the Agency and its officers, directors, employees and agents by any employee of Discharger, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under this Condition 13 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Discharger, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable under workers' compensation statutes, disability benefit statutes or other employee benefit statutes.
- d. Submission of insurance certificates or submission of other proof of compliance with the insurance requirements in this Temporary Permit does not relieve Discharger from liability under this indemnification and hold harmless clause. The obligations of this

indemnity section shall apply whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.

SPECIAL PERMIT CONDITIONS (if any)

1. No discharges will be allowed during the week of July 4th.
2. Agency will need 48 hours' notice before any discharges take place.
3. _____



WELLINGTON WAY

CANTERBURY LANE

COURTENAY LANE

OXFORD CIRCLE



District Pipeline Replacement - 2023
Contract A

**TRUCKEE SANITARY DISTRICT
SANITARY SEWER
DISCHARGE PERMIT**

**PERMIT FOR TEMPORARY DISCHARGE INTO TRUCKEE
SANITARY DISTRICT SEWER SYSTEM**

Permit No.:

Name of Project: District Pipeline Replacement - 2025

Name and Address of Discharger: Truckee Donner Public Utility District
11570 Donner Pass Road
Truckee, CA 96161

Billing Address: Same as above

Property Owner (if applicable): NA

Point of Discharge (attach map): Various manholes in Sierra Meadows and Tahoe
Donner

Type of Discharge: Chlorinated water from pipeline disinfection

General Nature of Discharge: Chlorinated water from pipeline disinfection

Start and End Date of Proposed Discharge: May 15, 2025 / October 15, 2025

Maximum Flow Rate of Proposed Discharge (gpm): 100 gpm

Duration of Proposed Discharge: Up to three hours per occurrence

Estimated Total Flow (in gallons): 80,000 gallons

Method of Measurement (choose one):

- Calculated by either multiplying the number of hours of discharge times the rate of flow
 By reading an installed flow meter

Permit Terms and Conditions:

1. The Truckee Sanitary District (District) must be provided with an approved T-TSA permit prior to any discharge. This permit can be obtained after the District permit is issued.
2. No person shall discharge, or cause to be discharged, any industrial waste into the District sanitary sewer system without having obtained an Industrial Waste Permit from T-TSA. Such permit is required in addition to this and any other permits that may be required by the District Code, Town Code, County Code, State Statute or other Ordinance, rule or regulation applicable to the industrial discharge.

3. Discharge days are Tuesday, Wednesday and Thursday during business hours. No holiday or weekend discharges are allowed, or discharges during inclement weather.
4. Maximum amount of discharge is not to exceed 100 gallons per minute.
5. The District must be contacted at least 24 hours before the start of discharge. An inspector shall be scheduled to insure that the proper connection is made to the District sewer system.
6. An unauthorized person shall not open or enter for any purpose whatsoever, any District sanitary sewer facility. This specifically includes all manholes and vaults used as access points by District personnel. Individuals may schedule a District employee to assist them if there is a need to have a facility opened.
7. It shall be unlawful for any person to do any of the following:
 - (a) To deposit or discharge, or cause or permit to be deposited or discharged, into any public sewer or District sewer main pipeline any water or wastewater or liquid waste of any kind containing chemicals, greases, oils, tars, or other matters in solution or suspension, which may clog or obstruct the sewer, or which may in any way damage or interfere with or prevent the effective use, operation, maintenance or repair of the sewer, or which may necessitate or require frequent repair, maintenance or flushing of such sewer to render it operable.
 - (b) To discharge any gasoline, benzene, oil or other flammable or explosive liquid or substance into any public sewer.
 - (c) To discharge, or cause or permit to be discharged, any toxic or other pollutants in amounts or concentrations that endanger public safety. All toxic and chemical waste substances shall be retained on site by the permittee until they have been pre-treated sufficiently to meet the discharge standards specified in the applicable Permit for the premise. The discharge of any toxic chemical substance into sanitary sewer facilities will result in the declaration of a violation and the prosecution thereof in accordance with the District Code.
 - (d) To discharge an effluent of a temperature exceeding 140 degrees Fahrenheit.
 - (e) To discharge any acids or alkalies into the public sewer without controlling the pH to the extent the District finds adequate.
8. An unauthorized person shall not remove or cause to be removed, or damage or cause to be damaged, any portion of any public sewer, District sanitary sewer facility, or any appurtenances thereto.
9. Within thirty (30) days after completion of the discharge, the Discharger shall report to the District the volume, in gallons, discharged into the District sewer system.

10. The Discharger shall pay the District \$2.07/per thousand gallons calculated on the basis of either (1) multiplying the number of hours of discharge times the rate of flow (gpm) or (2) by reading an installed flow meter, if applicable. All payments shall be due within 30 days after the date of a District invoice.
11. If Discharger violates any term or condition of this Permit, the District may require that the discharge cease immediately until the violation is corrected, or, depending on the circumstances, cancel the Permit.

ACCEPTED: *[Signature]* DATE: 11/4/24
Signature of Discharger

APPROVED: *[Signature]* DATE: 11/4/24
TSD Representative

For District Use Only	
UTSA Permit #	_____
Account Total Flow	_____
Amount Charged	_____
Permit Final Date	_____



General Manager
 Brian C. Wright

Executive Leadership Team
 Chad J. Reed
Water Utility Director

Jared Carpenter
Electric Utility Director

Scott Crow
IT Director/CIO

Steven Poncelet
PIO & Strategic Affairs Director

Michael Salmon
Chief Financial Officer

Jilllan Steward
Director of Human Resources and Risk Management

Board of Directors
 Joseph Aguera
 Jeff Bender
 Christa Finn
 Klm Harris
 Tony Lallotis

November 4, 2024

Ms. Sarah Bergeron
 District Engineer
 Truckee Sanitary District
 12304 Joerger Drive
 Truckee, California 96161

Dear Ms. Bergeron:


The Truckee Donner Public Utility District (District) intends to begin construction of the District Pipeline Replacement – 2025 project in May 2025. This project involves construction of about 4,500 feet of main line pipe at three locations in the Sierra Meadows area - Red Fir Road, Star Pine Road and Sugar Pine Road.

Current Lahontan RWQCB regulations indicate that chlorinated water cannot be discharged directly to the ground surface. Therefore, the District would like to discharge water to the sanitary sewer system. The anticipated source of water is flushing of newly constructed pipelines during the pressure testing and disinfection procedure.

The District proposes to limit the contractor to a maximum instantaneous discharge of 100 gpm. Discharges would be limited to 7:00 AM to 5:00 PM on Tuesday, Wednesday and Thursday, in accordance with past permits. At this time, the District has not placed any limits on the contractor in regards to which manhole to discharge to. Please let me know if there are any further restrictions that should be imposed on discharges.

The District also expects that Hansen Brothers Enterprises will complete the pipeline replacement work on Northwoods Boulevard that was started in June 2024 and has been suspended for the winter of 2024-25.

With this letter, and the attached permit application the District hereby requests a temporary discharge permit to cover the work described above. If you have any questions, or require further information, please contact me at 530-582-3950.

Sincerely,

 Neil Kaufman, P.E.
 Water System Engineer



SECTION 01505 - MOBILIZATION

PART 1 -- GENERAL

1.1 GENERAL

- A. Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items at the project site.
- B. The CONTRACTOR shall maintain on the project site a suitable office or other protected area in which shall be kept copies of Contract Documents, project progress records, etc., which shall be accessible to the DISTRICT during normal working hours.

1.2 CONSTRUCTION UTILITIES

- A. Water will be furnished free of charge to the CONTRACTOR, in reasonable quantities, for the CONTRACTOR'S use during the WORK. The DISTRICT shall make water available at the following locations:
 - 1. The DISTRICT will allow the CONTRACTOR to draw water from existing fire hydrants near the areas of Work. The exact hydrants to be used shall be determined at the pre-construction conference. The CONTRACTOR shall be responsible for conveying water from one of these fire hydrants to the Project Site.
 - 2. Water shall be taken from fire hydrants into water trucks, holding tanks or similar vessels for later use by construction activities. The CONTRACTOR shall not draw water directly from fire hydrants for use in construction activities.
- B. Electricity is not currently available at any of the areas of Work. The CONTRACTOR may, at the CONTRACTOR'S expense, apply for and construct temporary construction electrical service.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

SECTION 01520 - SECURITY

PART 1 -- GENERAL

1.1 SECURITY PROGRAM

- A. The CONTRACTOR shall protect the WORK from theft, vandalism, and unauthorized entry.
- B. The CONTRACTOR shall restrict entry of persons and vehicles into Site.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

SECTION 01530 - PROTECTION OF EXISTING FACILITIES

PART 1 -- GENERAL

1.1 GENERAL

- A. The CONTRACTOR shall protect all existing utilities and improvements not designated for removal and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than they were prior to such damage or temporary relocation, in accordance with the Contract Documents.
- B. Material shown on the plans or designated in these Specifications that is to be salvaged or used in reconstruction work, and which has been damaged or destroyed as a result of the CONTRACTOR'S operations, shall be repaired or replaced by the CONTRACTOR at no additional cost to the DISTRICT.
- C. The CONTRACTOR shall verify the exact locations and depths of all utilities indicated and make exploratory excavations of all utilities that may interfere with the WORK. All such exploratory excavations shall be performed as soon as practicable after award of the contract and, in any event, a sufficient time in advance of construction to avoid possible delays to the CONTRACTOR's work.
- D. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment and grade of the utility.
- E. The CONTRACTOR shall call the Underground Service Alert (USA) 48 hours prior to commencing any digging for location of underground utility lines and cable locations. The number is (800) 642-2444.

1.2 RIGHTS-OF-WAY

- A. The CONTRACTOR shall not perform any work that would affect any oil, gas, sewer, or water pipeline; any telephone, telegraph, or electric transmission line; any fence; or any other structure, nor enter upon the rights-of-way involved until notified that the DISTRICT has secured authority therefor from the proper party. After authority has been obtained, the CONTRACTOR shall give said party due notice of its intention to begin work, if required by said party, and remove, shore, support or otherwise protect such pipeline, transmission line, ditch, fence, or structure or replace the same. When two or more contracts are being executed at one time on the same or adjacent land in such manner that work on one contract may interfere with that on another, the DISTRICT shall determine the sequence and order of the WORK. When the territory of one contract is the necessary or convenient means of access for the execution of another contract, such privilege of access or any other reasonable privilege may be granted by the DISTRICT to the contractor so desiring, to the extent, amount, in the manner, and at the times permitted. No such decision as to the method or time of conducting the WORK or the use of territory shall be made the basis of any claim for delay or damage.

1.3 PROTECTION OF STREET OR ROADWAY MARKERS

- A. The CONTRACTOR shall not destroy, remove, or otherwise disturb any existing survey markers or other existing street or roadway markers without proper authorization. No pavement breaking or excavation shall be started until all survey or other permanent marker points that will be disturbed by the construction operations have been properly

referenced. All survey markers or points disturbed by the CONTRACTOR shall be accurately replaced after all street or roadway resurfacing has been completed.

1.4 RESTORATION OF PAVEMENT

- A. **General:** All paved areas including asphaltic concrete beams cut or damaged during construction shall be replaced with similar materials and of equal thickness to match the existing adjacent undisturbed areas, except where specific resurfacing requirements have been called for in the Contract Documents or in the requirements of the agency issuing a permit. All temporary and permanent pavement shall conform to the requirements of the affected jurisdictional agency. All pavements which are subject to partial removal shall be neatly saw cut in straight lines.
- B. **Temporary Resurfacing:** Wherever required by the public authorities having jurisdiction, the CONTRACTOR shall place temporary surfacing promptly after backfilling and shall maintain such surfacing for the period of time fixed by said authorities before proceeding with the final restoration of improvements.
- C. **Permanent Resurfacing:** In order to obtain a satisfactory junction with adjacent surfaces, the CONTRACTOR shall saw cut back and trim the edge so as to provide a clean, sound, vertical joint before permanent replacement of an excavated or damaged portion of pavement. Damaged edges of pavement along excavations and elsewhere shall be trimmed back by saw cutting in straight lines. All pavement restoration and other facilities restoration shall be constructed to finish grades compatible with adjacent undisturbed pavement.
- D. **Restoration of Sidewalks or Private Driveways:** Wherever sidewalks or private roads have been removed for purposes of construction, the CONTRACTOR shall place suitable temporary sidewalks or roadways promptly after backfilling and maintain them in satisfactory condition for the period of time fixed by the authorities having jurisdiction over the affected portions before proceeding with the final restoration or, if no such period of times is so fixed, maintain said temporary sidewalks or roadways until the final restoration thereof has been made.

1.5 EXISTING UTILITIES AND IMPROVEMENTS

- A. **General:**
 - 1. The CONTRACTOR shall protect, shore, brace, support, and maintain all underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by its construction operations. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, shall be restored to their original condition, whether within or outside the easement. All replacements shall be made with new materials.
 - 2. It shall be the CONTRACTOR's responsibility to ascertain the actual location of all existing utilities and other improvements that will be encountered in its construction operations, and to see that such utilities or other improvements are adequately protected from damage due to such operations. The CONTRACTOR shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary.

- B. **Right of Access:** The right is reserved to the DISTRICT and to the owners of public utilities and franchises to enter at any time upon any public street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the WORK of these Contract Documents.
- C. **Underground Utilities Indicated:** Existing utility lines that are indicated or the locations of which are made known to the CONTRACTOR prior to excavation and that are to be retained, and all utility lines that are constructed during this project shall be protected from damage during excavation and backfilling and, if damaged, shall be immediately repaired or replaced by the CONTRACTOR.
- D. **Underground Utilities Not Indicated:** The CONTRACTOR is hereby notified of the possible existence of underground facilities not known to the DISTRICT or in a location different from that designated on the plans. If the CONTRACTOR encounters or has evidence of existence of an underground utility not shown on the plans or marked on the ground, the CONTRACTOR shall:
1. Ascertain the exact location of said underground utility.
 2. Immediately notify the DISTRICT and follow up with written notification to the DISTRICT.
 3. Proceed with work in another work area, if possible, until the DISTRICT directs a course of action. Where it is determined by the DISTRICT that the rearrangement or repair of an underground utility, the existence of which is not shown on the plans, is essential in order to accommodate the improvements being constructed, the DISTRICT will provide for the rearrangement or repair of such facility by other forces or such rearrangement or repair shall be performed by the CONTRACTOR and will be paid for as extra work. An extension of time may be granted for delays in connection with this work described herein and for extra work performed by the CONTRACTOR
- E. The CONTRACTOR shall cooperate with the DISTRICT to investigate possible damage of existing underground utilities suspected as a result of the CONTRACTOR's operations. The CONTRACTOR shall take such measures as necessary to physically prove to the satisfaction of the DISTRICT that the existing utilities are unharmed or adequately repaired at such locations where the DISTRICT has reasonable suspicion that damage has occurred. If said utilities are found to be undamaged by the CONTRACTOR's operations, the cost of only the uncovering and backfill ordered by the DISTRICT shall, by appropriate change order, be paid by the DISTRICT:
- F. Damages:
1. All costs of locating and/or repairing damage not due to failure of the CONTRACTOR to exercise reasonable care, and removing or relocating such utility facilities not indicated in the Contract Documents with reasonable accuracy, and for equipment on the project which was actually working on that portion of the WORK which was interrupted or idled by removal or relocation of such utility facilities, and which was necessarily idled during such Work will be paid for as Extra Work in accordance with the provisions of the Contract Documents.
 2. The CONTRACTOR shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, which may be caused by

transporting equipment, materials, or personnel to or from the Work or any part or Site thereof, whether by him or his Subcontractors. The CONTRACTOR shall make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, the damaged property concerning its repair or replacement or payment of costs incurred in connection with the damage.

- G. **Approval of Repairs:** All repairs to a damaged utility or improvement are subject to inspection and approval by an authorized representative of the utility or improvement or the DISTRICT, before being concealed by backfill or other work.
- H. **Fire Hydrants:** All fire hydrants and water control valves shall be kept free from obstruction and available for use at all times.
- I. **Maintenance of Service:** All oil and gasoline pipelines, power, and telephone or the communication cable ducts, gas and water mains, irrigation lines, sewer lines, storm drain lines, poles, and overhead power and communication wires and cables encountered during the WORK shall remain continuously in service, unless other arrangements satisfactory to the DISTRICT are made with the owner of said pipelines, duct, main, irrigation line, sewer, storm drain, pole, or wire or cable. The CONTRACTOR shall be responsible for and shall repair all damage due to its operations, and the provisions of this section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.
- J. Should the CONTRACTOR desire to have any rearrangement made in any utility, for its convenience in order to make easier its construction operations, which arrangement is in addition to, or different from the rearrangement indicated in the Drawings, the CONTRACTOR shall make whatever preparations are necessary with the owner of the utility for such arrangement and bear all expenses in connection therewith.
- K. During construction, the CONTRACTOR may find it necessary to remove, obstruct or modify such existing facilities as fences, culverts, sidewalks, and small structures. It shall be the CONTRACTOR'S responsibility to obtain permission of the owner of such facility, and subsequently return it to the condition in which it was found or better.
- L. The CONTRACTOR shall not, at any time, operate any existing valves, hydrants, blow-offs or other components within the DISTRICT's potable water system without written authorization from the DISTRICT. In the event of an emergency, the CONTRACTOR shall contact the DISTRICT to have DISTRICT employee's respond to the emergency condition. This requirement shall not prevent the CONTRACTOR from properly testing and ensuring that facilities installed under this Contract are properly functioning.
- M. **Existing Sanitary Sewer Laterals:** The CONTRACTOR is hereby notified that both gravity and pumped sanitary sewer laterals will be encountered along the route of the pipeline. Any damage to existing laterals shall be repaired to the satisfaction of the DISTRICT and the Truckee Sanitary District (TSD).
 - 1. Repairs to sewer laterals shall utilize the same pipe material as the existing lateral. Clay pipe gravity sewer laterals may be repaired with PVC pipe.
 - 2. The CONTRACTOR shall provide all necessary materials to accomplish a proper repair. For pumped laterals, couplings and pipe shall have pressure rating of at least 150 psi.

3. Upon completion of the repair, the sewer lateral shall be tested according to the latest revision of Article 10.03 – Testing Procedures for Existing Sanitary Sewer Facilities of the Truckee Sanitary District’s District Code. The CONTRACTOR should note that the TSD requirements may require coordination with property owners to gain access to locations where pumps, test ports or cleanouts are located.

1.6 UNFAVORABLE CONSTRUCTION CONDITIONS

- A. During unfavorable weather, wet ground, or other unsuitable construction conditions, the CONTRACTOR shall confine operations to WORK that will not be affected adversely by such conditions. No portion of the WORK shall be constructed under conditions which would affect adversely the quality or efficiency thereof, unless special means or precautions are taken by CONTRACTOR to perform the WORK in a proper and satisfactory manner.

1.7 DAMAGE TO EXISTING PROPERTY

- A. The CONTRACTOR will be held responsible for any damage to existing structures, WORK, materials, or equipment because of his operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, the DISTRICT.
- B. The CONTRACTOR shall protect all existing structures and property from damage and shall provide bracing, shoring, or other Work necessary for such protection.
- C. The CONTRACTOR shall be responsible for all damage to streets, roads, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property, which may be caused by transporting equipment, materials, or personnel to or from the Work. Make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.

1.8 NOTIFICATION BY THE CONTRACTOR

- A. Prior to any excavation in the vicinity of any existing underground facilities, including all water, sewer, storm drain, gas, petroleum products, or other pipelines; all buried electric power, communications, or television cables; all traffic signal and street lighting facilities; and all roadway and state highway rights-of-way, the CONTRACTOR shall notify the owners or agencies responsible for such facilities not less than 3 days nor more than 7 days prior to excavation so that a representative of said owner or agencies can be present during such Work if they so desire.
- B. When it is necessary to temporarily deny access to property, or when any utility service connection must be interrupted, the CONTRACTOR shall give notices sufficiently in advance to enable the affected persons to provide for their needs. Notices shall conform to any applicable local ordinance and, whether delivered orally or in writing, shall include appropriate information concerning the interruption and instructions on how to limit inconvenience caused thereby.
- C. The CONTRACTOR shall post a notice to the public in the local weekly newspaper advising the public of the project boundaries including a scale map showing the project area and suggested detour routes, the project time limits, the CONTRACTOR’s name, and the need to be alert for construction signs and traffic control. The notice,

dimensioned 3-inches x 5-inches minimum, shall appear in the two weekly issues prior to the start of the WORK.

- D. The CONTRACTOR shall contact, cooperate with, and provide written notice (including the CONTRACTOR's phone number) at least 7 days prior to beginning WORK on each street. The written notice shall include the approximate schedule and explanation of WORK and shall be given to each homeowner, business, all emergency agencies, schools, and residents which will be affected by the project; particularly in reference to temporary interruptions to vehicular access. At least 24 hours prior to initiation of WORK, a second notice shall confirm the scope of scheduled WORK. A copy of the notifications shall be submitted to the DISTRICT, for approval, prior to the start of construction. Verbal door-to-door communication shall be made prior to construction to remind all affected parties of the construction to take place. In addition, CONTRACTOR is responsible to answer and resolve any conflicts that may arise between a homeowner or business owner and himself during the construction process. CONTRACTOR shall be responsible to maintain adequate dust control measures and to protect the private property along the roadway construction.
 - E. The CONTRACTOR shall maintain a written record of all notices, along with names, addresses and dates of distribution. Copies of the record shall be provided to the DISTRICT at the time notices are distributed.
 - F. The CONTRACTOR shall minimize interaction with the public and media. The CONTRACTOR shall refer questions and comments from the public or media to the DISTRICT's representative (Mr. Neil Kaufman, 530-582-3950). This requirement shall not nullify CONTRACTOR's responsibility to notify impacted residents or businesses.
- 1.9 REQUIRED PROTECTION FOR OPEN EXCAVATIONS DURING NON-WORKING HOURS
- A. Within Town of Truckee rights-of-way, required protection for open excavations during non-working hours shall comply with the encroachment permit requirements of the Town of Truckee.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

SECTION 01540 – TRAFFIC CONTROL

PART 1 -- GENERAL

1.1 GENERAL

- A. For the protection of traffic in public or private streets and ways, the CONTRACTOR shall provide, place, and maintain all necessary barricades, traffic cones, warning signs, lights, and other safety devices in accordance with the requirements of the latest revision of the California Manual on Uniform Traffic Control Devices, published by the California Department of Transportation.
- B. The CONTRACTOR shall take all necessary precautions for the protection of the Work and the safety of the public. Barricades and obstructions shall be illuminated at night, and all lights shall be kept burning from sunset until sunrise. The CONTRACTOR shall station such guards or flagmen and shall conform to such special safety regulations relating to traffic control as may be required by the public authorities within their respective jurisdictions. Signs, signals, and barricades shall conform to the requirements of Cal-OSHA and Subpart G, Part 1926, of the OSHA Safety and Health Standards for Construction.
- C. Prior to commencing construction, the CONTRACTOR shall submit a traffic control plan to the Town of Truckee, Nevada County, or Placer County, as appropriate. Construction within public right-of-ways shall not commence without the required approvals. The governing agency shall be allowed access to observe these traffic control plans in use and to make any changes as field conditions warrant. Any changes shall supersede these plans and be done solely at the CONTRACTOR's expense.
- D. The CONTRACTOR shall maintain existing "STOP" signs, street signs and guide signs at all times. If necessary, signs shall be set in temporary locations to ensure visibility by motorists and pedestrians.
- E. The CONTRACTOR shall remove traffic control devices when no longer needed, repair all damage caused by installation of the devices, and shall remove post settings and backfill the resulting holes to match grade.

1.2 WARNING SIGNS

- A. Prior to construction within the public right-of-way, the contractor shall install W20-1 signs in accordance with Part 5 of the California Manual on Uniform Traffic Control Devices. The signs shall be professionally made with a minimum size of 36 inches. The signs shall be replaced or repaired if damaged or stolen. The placement, type and location of all traffic control devices shall be subject to review and approval by the appropriate governing agency.

1.3 TRAFFIC CONTROL REQUIREMENTS

- A. CONTRACTOR shall maintain at least one 12-foot travel lane on all improved streets during construction.
 - 1. The CONTRACTOR is required to maintain pedestrian access (sidewalks) to all residences in the construction zone; providing alternate pedestrian routes when necessary; maintain vehicle access for emergency vehicles, fire trucks,

ambulances, and police vehicles; provide barricades, and flagmen as necessary while working all areas; and in particular, at intersections on the project; complete roadway delineation within five days of pavement completion. Ditch openings which isolate businesses, schools, and other areas shall be provided with an approved bridge system capable of withstanding traffic loads to these areas. No road or business driveway may be closed without the approval of DISTRICT unless the CONTRACTOR has received written authorization from the party affected.

2. Prior to the date set for the preconstruction conference, the CONTRACTOR shall submit a Traffic Control Plan to the appropriate governing agencies. The plan shall address traffic control during each portion of the WORK. Construction activities within public rights-of-way shall not commence until the Traffic Control Plan has been approved.
 3. The profile grades of all temporary driveway access, both commercial and residential, shall be such that a compact vehicle will not “bottom-out” at a speed of five miles per hour.
- B. Pedestrian traffic and access must be maintained at all times. When the CONTRACTOR’s construction operations encroach upon a sidewalk, walkway, or crosswalk area, the CONTRACTOR shall take special precautions to protect the pedestrian’s safety, including provisions to separate pedestrian traffic from the Work area and vehicular traffic. When pedestrian traffic is routed onto the roadway, at other than at existing crosswalk locations, the CONTRACTOR shall use portable precast concrete barrier rails to separate the pedestrian traffic from the Work area and vehicular traffic.
1. The CONTRACTOR shall conduct its activities to accommodate mail delivery, refuse collection, school busing, and all other regularly scheduled services within the project area.
 2. The CONTRACTOR shall be responsible for the public’s safety in relation to the job. If any situation is found or deemed to be unsafe, the CONTRACTOR shall take appropriate measures to improve the situation and make it safe.
 3. The CONTRACTOR shall not shut off the utility supply to any residence, or hydrant, nor in any way prevent access to a fire hydrant prior to securing permission to do so from the proper authorities.
- C. **Traffic Signal Interruption:** When the scheduled Work requires altering, in any way, the number or alignment of the travel lanes entering a signalized intersection, the CONTRACTOR shall, no less than 24 hours in advance of implementing the changes, notify the governing agency.
- 1.4 FLAGMEN
- A. When required for public safety, the CONTRACTOR shall provide and station competent flagmen whose sole purpose shall be to direct the movement of public traffic either through or around the Work.
 - B. Proper advance warning signs shall be in place when flagmen are working and removed when Work requiring flagmen is completed.

- C. Flagmen must be used to assist trucks for safe ingress and egress whenever truck movements may interfere with safe passage through the Work zone. The flagmen's first priority shall be to maintain the safe and efficient movement of the public traffic. Flagmen shall not be used to direct public and/or construction traffic into and through the signalized or stop sign controlled intersections nor shall they cover or alter any regulatory devices.

1.5 TRAFFIC CONTROL DEVICES

- A. All traffic control devices that are not in use or will not be used for a period greater than 24 hours shall be removed by the CONTRACTOR from the public right-of-way. All traffic control devices that are determined by the DISTRICT to be unnecessary, confusing, or causing an unsafe condition, shall be removed by the CONTRACTOR from the public right-of-way immediately upon written notification by the DISTRICT. The CONTRACTOR shall not use the sidewalk area to store unused barricades unless the sidewalk is closed and an approved barricade plan is provided for rerouting the pedestrians.
- B. The CONTRACTOR shall maintain all barricades and other traffic control devices in clean and effective condition. The CONTRACTOR shall replace poorly maintained devices immediately upon notification by the DISTRICT.
- C. The CONTRACTOR shall immediately reinstall any traffic signs removed during the course of construction. Any signs that are lost or damaged shall be replaced or repaired at no additional cost to the DISTRICT.
- D. The CONTRACTOR shall remove all road markings, pavement markers, and other delineation that conflicts with the safe flow of traffic and the CONTRACTOR'S approved traffic control plans. All such items shall be restored prior to Final Completion of the project.
- E. The CONTRACTOR shall provide temporary traffic striping, if existing delineation is destroyed during trenching or other Work. Painted markings or striping tape may be used. Temporary striping must be approved for material and layout by the appropriate governing agency. All temporary painted markings shall be removed by sandblasting prior to Final Completion of the project.

1.6 AUTHORITY OF THE TOWN OF TRUCKEE

- A. When performing Work within Town of Truckee right-of-ways, the CONTRACTOR shall comply with the approved traffic control plan. The Town shall be allowed access to any project location within Town of Truckee right-of-ways. The Town shall have the authority to order changes to the approved traffic control plan as field conditions warrant. Such changes may include, but are not limited to placement of additional warning signs, cones and delineators; relocation of warning signs, cones delineators; or requiring additional flagmen. The CONTRACTOR shall comply with changes ordered by the Town at no additional cost to the DISTRICT.
- B. The authority of the Town to order changes to the Work is expressly limited to issues of traffic control and public safety **ONLY**. Any other changes requested by the Town, such as changes in materials, alignment or working methods shall be referred to the DISTRICT. Any changes to the Work made by the CONTRACTOR, without direction by the DISTRICT, shall be subject to removal and reinstallation at no additional cost to the DISTRICT.

1.7 STANDARD TRAFFIC CONTROL PLANS

- A. Included at the end of this Section, for reference are copies of standard traffic control plans prepared by the California Department of Transportation. The CONTRACTOR may use these plans for reference when preparing its traffic control plan to the appropriate governing agency.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

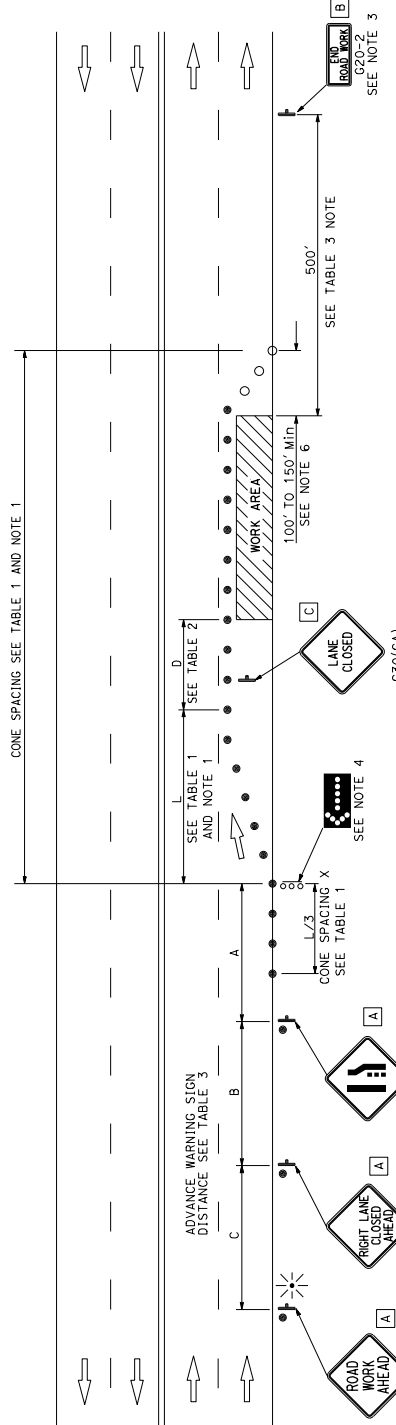
- END OF SECTION -

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL NO. SHEETS

REGISTERED CIVIL ENGINEER
 August 1, 2022
 LICENSE EXPIRES: 7/31/24
 No. 44909
 STATE OF CALIFORNIA
 PROFESSIONAL ENGINEER

AUGUST 1, 2022
 LICENSE EXPIRES: 7/31/24
 No. 44909
 STATE OF CALIFORNIA
 PROFESSIONAL ENGINEER

THE CIVIL ENGINEER AND ALL ASSISTANTS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.



NOTES:

See Standard Plan T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment, or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL LANE CLOSURE

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 36" x 18"
- C 30" x 30"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- † TEMPORARY TRAFFIC CONTROL SIGN
- ☒ FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- ☼ PORTABLE FLASHING BEACON

NOTES:

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
- Each advance warning sign shall be equipped with at least two flags on any closure. Each flag shall be at least 16" x 16" in size and shall be fluorescent orange-red in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.

- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
- Length may be reduced by the Engineer to address site conditions.
- Median lane closures shall conform to the details shown except that G20(CA) and W4-2L signs shall be used.
- For approach speeds over 50 MPH, use the "Traffic Control System for Lane Closure on Freeways and Expressways" plan for lane closure details and requirements.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 MULTILANE CONVENTIONAL
 HIGHWAYS**
 NO SCALE

T11

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
 Charles B. Sanchez
 No. CA9009
 Exp. 3-31-24
 STATE OF CALIFORNIA

AUGUST 1, 2022
 DATE OF APPROVAL
 THE ENGINEER OR ARCHITECT OR PROFESSIONAL LAND SURVEYOR OR AGENT SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION CONTAINED ON THIS PLAN SHEET.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 24" x 24"
- C 36" x 18"

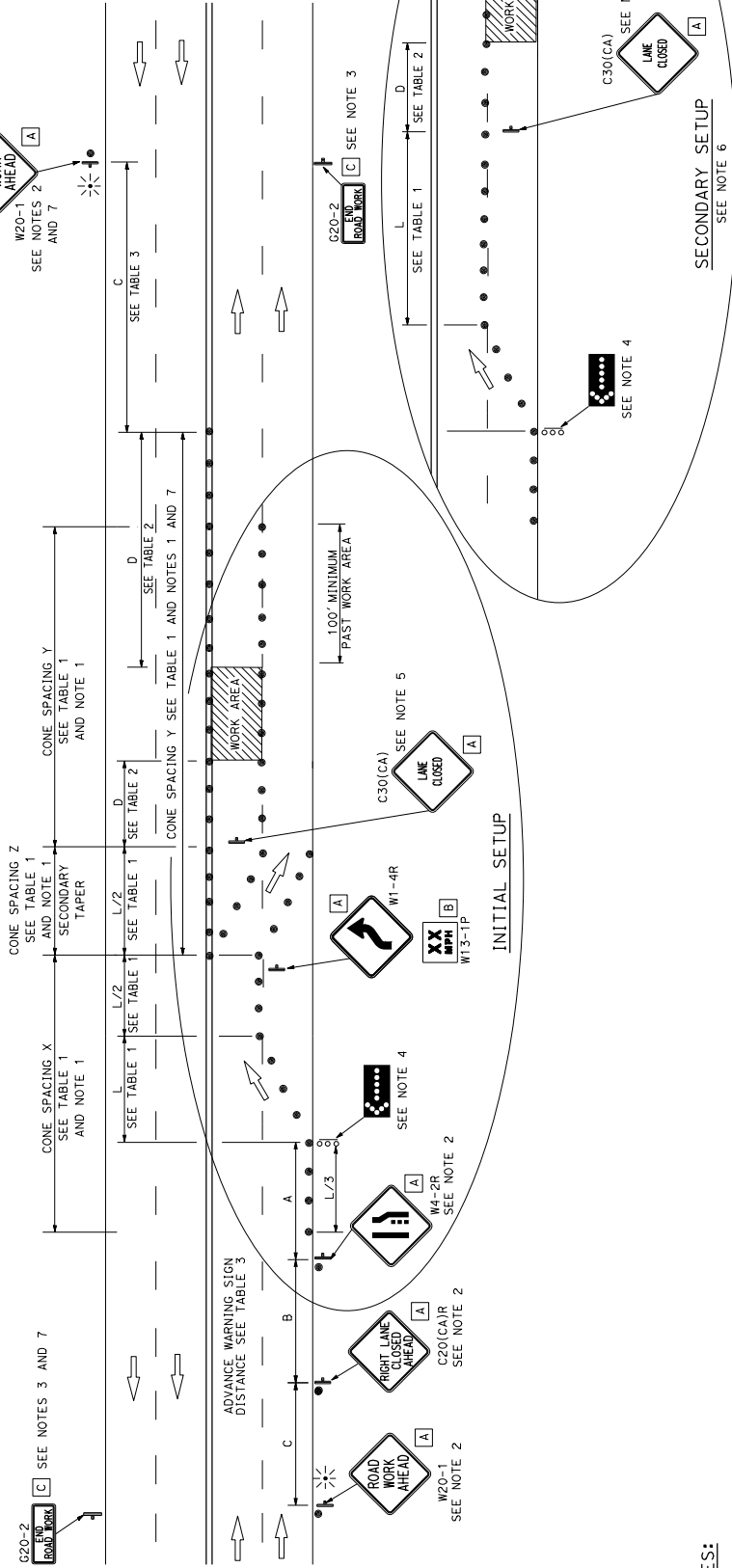
LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ⦿ FLASHING ARROW SIGN (FAS)
- ⦿ FAS SUPPORT OR TRAILER
- ⦿ PORTABLE FLASHING BEACON

NOTES:

- See Standard Plan T9 for tables.
- Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
- Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL CHANGEABLE LANE CLOSURE



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags per daytime closure. Each flag shall be at least 16" in size and shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
6. Relocate secondary taper to tangent location and relocate C30(CA) sign.
7. Sign installations and cones are not required when a median barrier is in place.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR CHANGEABLE LANE CLOSURE
ON MULTILANE CONVENTIONAL
HIGHWAYS AND EXPRESSWAYS**

NO SCALE

T11A

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
Charles D. Sanchez
 No. C49029
 Exp. 3-31-24
 STATE OF CALIFORNIA

AUGUST 1, 2022
 LICENSE EXPIRES DATE
 THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THIS PLAN SHEET.

NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

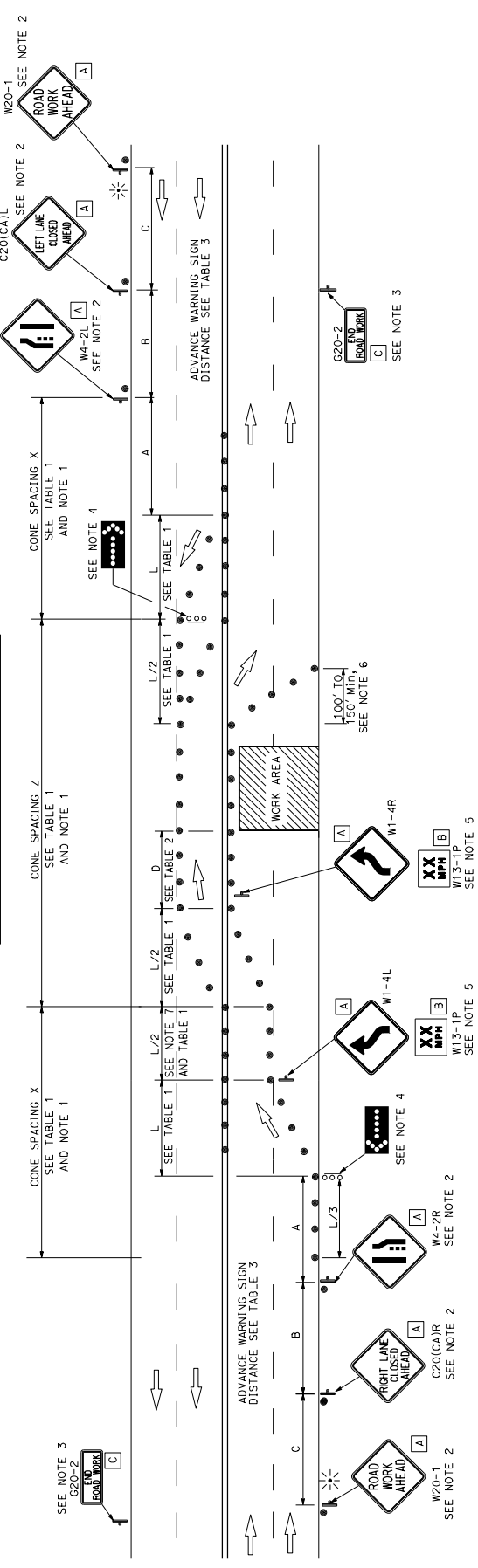
SIGN PANEL SIZE (Min)

A	48" x 48"
B	24" x 24"
C	36" x 18"

LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ⊞ FAS SUPPORT OR TRAILER
- ⊞ PORTABLE FLASHING BEACON

TYPICAL HALF ROAD CLOSURE



- NOTES:**
- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
 - Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 - A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
 - A minimum 1500' sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
 - Advisory speed will be determined by the Engineer. The W13-1P Plaque will not be required when advisory speed is more than the posted or maximum speed limit.
 - Length may be reduced by the Engineer to address site conditions.
 - The tangent (L/2) shall be used.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR HALF ROAD CLOSURE ON
 MULTILANE CONVENTIONAL
 HIGHWAYS AND EXPRESSWAYS**

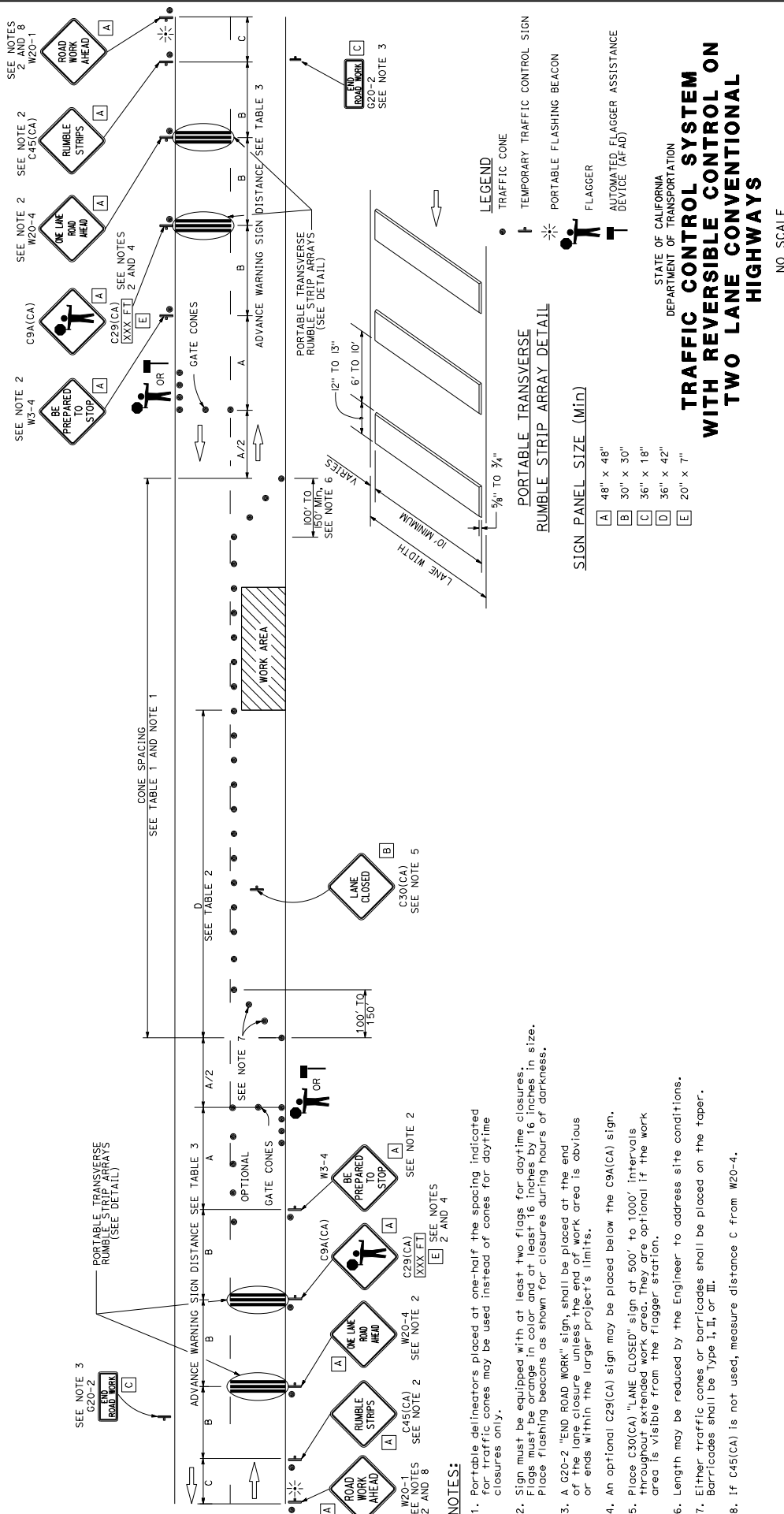
NO SCALE

T12

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
Charles D. Sanchez
 No. C45029
 Exp. 3-31-24
 STATE OF CALIFORNIA

LICENSE EXPIRES: AUGUST 1, 2022
 LICENSE RENEWAL DATE: _____
 THE ENGINEER'S RESPONSIBILITY IS TO THE OFFICERS OF THE PUBLIC SAFETY.
 THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION CONTAINED ON THIS PLAN SHEET.



NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

NOTES:

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
- Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
- A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Place C30(CA) "LANE CLOSED" sign at 500' intervals throughout extended work area. They are optional if the work area is visible from the flagger station.
- Length may be reduced by the Engineer to address site conditions.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- If C45(CA) is not used, measure distance C from W20-4.

TRAFFIC CONTROL SYSTEM WITH REVERSIBLE CONTROL ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
Charles D. Sanchez
 No. CA8009
 Exp. 3-31-24
 STATE OF CALIFORNIA
 PROFESSIONAL ENGINEER

AUGUST 1, 2022
 DATE OF ORIGINAL DATE
 THE CIVIL ENGINEER OR ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THIS PLAN SHEET.

FLAGGER AHEAD

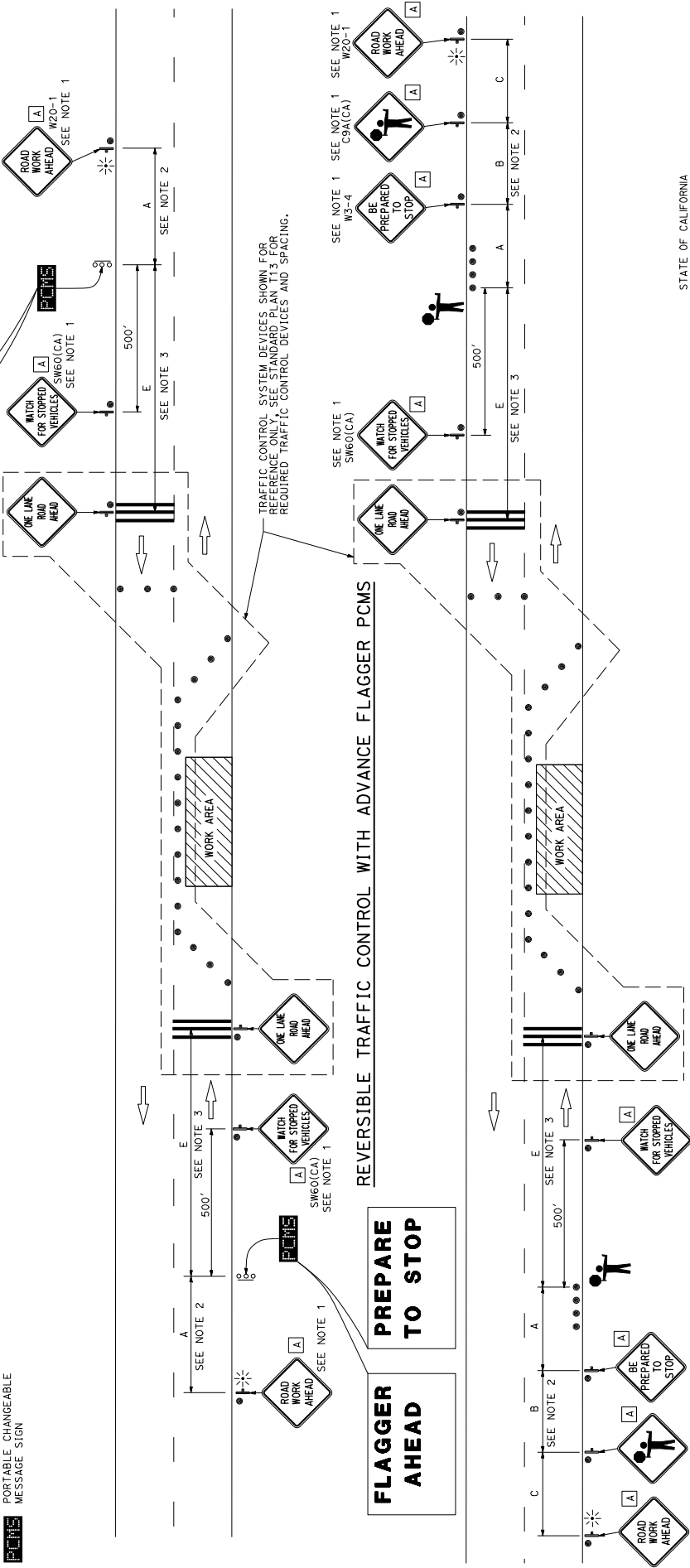
PREPARE TO STOP

SIGN PANEL SIZE (Min):

A 48" x 48"

LEGEND:

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ✦ PORTABLE FLASHING BEACON
- TRAILER
- FLAGGER
- PORTABLE CHANGEABLE MESSAGE SIGN



REVERSIBLE TRAFFIC CONTROL WITH ADVANCE FLAGGERS


STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 TWO LANE CONVENTIONAL
 HIGHWAYS**
 NO SCALE

NOTES:

1. Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches by 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
2. See Standard Plan T9, Table 3 for advanced warning sign spacing.
3. See Standard Specification 12-4.02C.

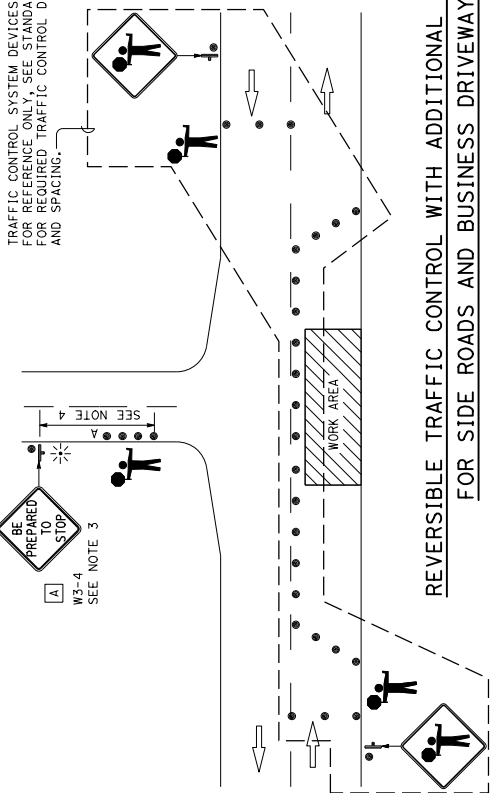
T13A

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS



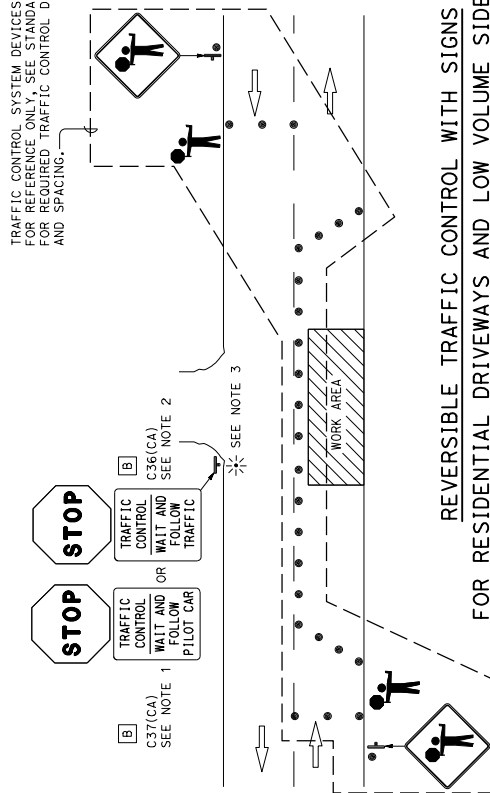
REGISTERED CIVIL ENGINEER
 August 1, 2022
 PROJECT DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE CORRECTNESS OR COMPLETENESS OF ANY SHEET OR PORTION THEREOF.

TRAFFIC CONTROL SYSTEM DEVICES SHOWN FOR REFERENCE ONLY, SEE STANDARD PLAN T13 FOR REQUIRED TRAFFIC CONTROL DEVICES AND SPACING.



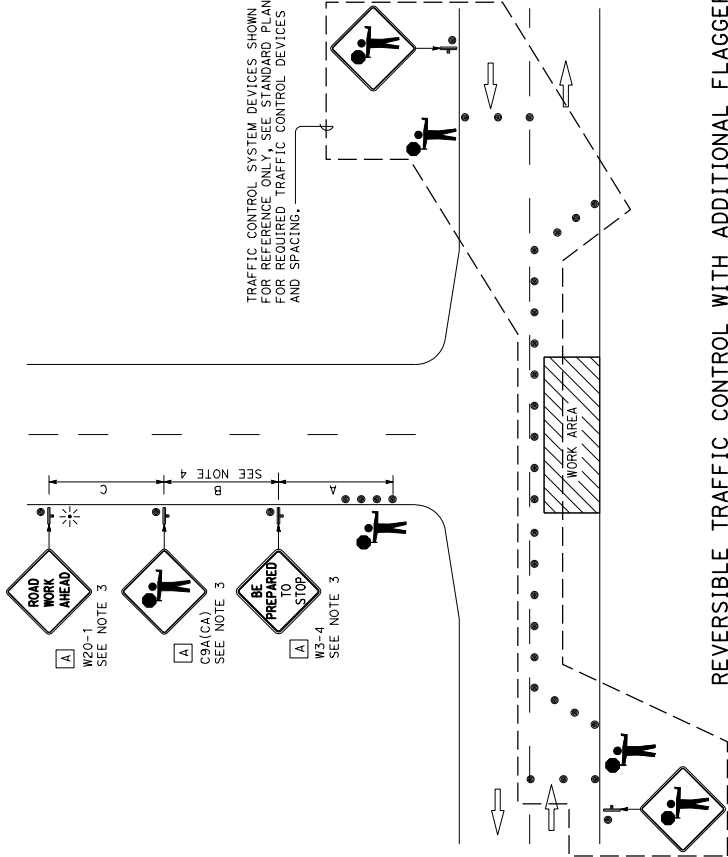
REVERSIBLE TRAFFIC CONTROL WITH ADDITIONAL FLAGGERS FOR SIDE ROADS AND BUSINESS DRIVEWAYS

TRAFFIC CONTROL SYSTEM DEVICES SHOWN FOR REFERENCE ONLY, SEE STANDARD PLAN T13 FOR REQUIRED TRAFFIC CONTROL DEVICES AND SPACING.



REVERSIBLE TRAFFIC CONTROL WITH SIGNS FOR RESIDENTIAL DRIVEWAYS AND LOW VOLUME SIDE ROADS

TRAFFIC CONTROL SYSTEM DEVICES SHOWN FOR REFERENCE ONLY, SEE STANDARD PLAN T13 FOR REQUIRED TRAFFIC CONTROL DEVICES AND SPACING.



REVERSIBLE TRAFFIC CONTROL WITH ADDITIONAL FLAGGERS AT HIGH VOLUME INTERSECTIONS

SIGN PANEL SIZE (Min)
 A 48" x 48"
 B 36" x 42"

- LEGEND:
- TRAFFIC CONE
 - † TEMPORARY TRAFFIC CONTROL SIGN
 - ⚡ PORTABLE FLASHING BEACON
 - ♣ FLAGGER

- NOTES:
- Place C37(CA) sign when pilot car is used.
 - Place C36(CA) sign when pilot car is not used.
 - Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
 - See Standard Plan T9, Table 3 for advance warning sign spacing.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL SYSTEM
TWO LANE CONVENTIONAL HIGHWAYS
 NO SCALE

T13B

SECTION 01550 - SITE ACCESS AND STORAGE

PART 1 -- GENERAL

1.1 HIGHWAY LIMITATIONS

- A. The CONTRACTOR shall make its own investigation of the condition of available public and private roads and of clearances, restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress to the site of the WORK. It shall be the CONTRACTOR's responsibility to construct and maintain any haul roads required for its construction operations.

1.2 TEMPORARY CROSSINGS

- A. **General:** Continuous, unobstructed, safe, and adequate pedestrian and vehicular access shall be provided to fire hydrants, commercial and industrial establishments, churches, schools, parking lots, service stations, motels, fire and police stations, and hospitals. Safe and adequate public transportation stops and pedestrian crossings at intervals not exceeding 300 feet shall be provided. The CONTRACTOR shall cooperate with parties involved in the delivery of mail and removal of trash and garbage so as to maintain existing schedules for such services. Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access for reasonable periods of time.
- B. **Temporary Bridges:** Wherever necessary, the CONTRACTOR shall provide suitable temporary bridges or steel plates over unfilled excavations, except in such cases as the CONTRACTOR shall secure the written consent of the responsible individuals or authorities to omit such temporary bridges or steel plates, which written consent shall be delivered to the DISTRICT prior to excavation. All such bridges or steel plates shall be maintained in service until access is provided across the backfilled excavation. Temporary bridges or steel plates for street and highway crossing shall conform to the requirements of the authority having jurisdiction in each case, and the CONTRACTOR shall adopt designs furnished by said authority for such bridges or steel plates, or shall submit designs to said authority for approval, as may be required.

1.3 PUBLIC ACCESS

- A. **Street Use:** Nothing herein shall be construed to entitle the CONTRACTOR to the exclusive use of any public street, alleyway, or parking area during the performance of the WORK hereunder, and it shall so conduct its operations as not to interfere unnecessarily with the authorized work of utility companies or other agencies in such streets, alleyways, or parking areas. No street shall be closed to the public without first obtaining permission of the DISTRICT and proper governmental authority. Where excavation is being performed in primary streets or highways, one lane in each direction shall be kept open to traffic at all times unless otherwise indicated. Toe boards shall be provided to retain excavated material if required by the DISTRICT or the agency having jurisdiction over the street or highway. Fire hydrants on or adjacent to the WORK shall be kept accessible to fire-fighting equipment at all times. Temporary provisions shall be made by the CONTRACTOR to assure the use of sidewalks and the proper functioning of all gutters, storm drain inlets, and other drainage facilities.

- B. **Temporary Street Closure:** If closure of any street is required during construction, the CONTRACTOR shall apply in writing to the governing agency or agencies at least 30 days in advance of the required closure.
- C. **Temporary Driveway Closure:** The CONTRACTOR shall notify the owner or occupant (if not owner-occupied) of the closure of the driveways to be closed more than one eight-hour work day at least 3 working days prior to the closure. The CONTRACTOR shall minimize the inconvenience and minimize the time period that the driveways will be closed. The CONTRACTOR shall fully explain to the owner/occupant how long the work will take and when closure is to start.

1.4 NOTIFICATION OF LOCAL AGENCIES AND UTILITIES

- A. The CONTRACTOR shall notify the Town of Truckee, Placer County, the California Department of Transportation, the Truckee Fire Protection District, Tahoe-Truckee Unified School District, Tahoe Truckee Sierra Disposal Company, Nevada County Sheriff Department and California Highway Patrol of its construction operations at least two days prior to commencing work. The CONTRACTOR shall cooperate with local authorities relative to traffic movement in the construction area.

1.5 CONTRACTOR'S WORK AND STORAGE AREA

- A. The DISTRICT has not secured a dedicated staging area for use by the CONTRACTOR. The CONTRACTOR shall limit the screening and overnight storage of soil materials to the locations within the immediate areas of work. Storage of other materials such as pipe, valves and fittings shall also be limited to locations within the immediate areas or work.
- B. Should the existing work area prove insufficient, the CONTRACTOR shall make its own arrangements for any additional off-site storage or shop areas necessary for the proper execution of the WORK. The CONTRACTOR shall take precautions to protect stored materials. Construction materials shall not be stored in such a manner as to be a hazard to traffic or to the public in general.

1.6 PARKING

- A. The CONTRACTOR shall direct its employees to park in such a manner that complies with the requirements of the local governing agency.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

SECTION 01560 - TEMPORARY ENVIRONMENTAL CONTROLS

PART 1 -- GENERAL

1.1 EXPLOSIVES AND BLASTING

- A. The use of explosives on the WORK shall be permitted only upon expressed written consent of the DISTRICT.
- B. Blasting operations shall conform to all federal, state, and local ordinances, regulations and requirements. Blasting shall only be done by appropriately certified personnel. All blasting materials shall be secured so as to prevent loss by theft or vandalism. The use of explosives shall be controlled by consideration of safety of the public.
- C. Blasting Procedures:
 - 1. General
 - a. Blasting and storage and handling of explosives shall be in accordance with the Construction Safety Orders of the Division of Industrial Safety of the California Department of Industrial Relations, and other authorities which have jurisdiction.
 - b. The CONTRACTOR shall pay the cost of obtaining any required blasting permits.
 - c. Blasting shall be done only by skilled operators under the direction of a licensed foreman.
 - d. The CONTRACTOR shall identify all property, structures, and persons which may be affected by blasting and shall take all safety precautions and protective measures to prevent damage or injury to same. All personal injury or damage to persons or property of any nature, whether in the WORK or appurtenant to it, shall be the responsibility of the CONTRACTOR.
 - e. The CONTRACTOR agrees by submission of a bid to indemnify and hold the DISTRICT, its officers, agents, and employees harmless from any and all liability claims, costs, expenses including expenses of investigation and defending against same in regard thereto.
 - f. Blasting shall only be permitted between 7:00 AM and 6:00 PM, Monday through Friday, unless otherwise approved by the DISTRICT and regulatory agencies having jurisdiction. Blasting will not be permitted on weekends or legal holidays.
 - 2. Pre-Blasting:
 - a. Inspections of all structures within 300-feet of the blast site shall be made no more than 2 weeks prior to commencement of blasting. Such inspections shall be videotaped to provide documentation of any visible or reasonable recognizable pre-existing defects or damages in structures.
 - b. Complete inspection reports listing findings with videotapes shall be submitted

to the DISTRICT before blasting commences.

- c. The CONTRACTOR shall provide notice to all residences, businesses, and utility owners which may be affected by blasting. Such notices shall be provided at the start of the project and shall be repeated weekly until completion of all excavation work.

3. Blasting

- a. Fly rock from blasting shall be contained within the project site and shall not represent a hazard to persons, vehicles, existing improvements, or vegetation.
- b. The blasting site shall be cleaned of all debris at the end of each day.
- c. No blasting shall be done within 100-feet of concrete which has been placed less than 7 days, except by permission of the DISTRICT.

4. Post-Blasting

- a. The CONTRACTOR shall investigate each complaint of property damage and a written report shall be furnished to the DISTRICT within 30 days of receipt of the complaint.

1.2 DUST ABATEMENT

- A. The CONTRACTOR shall furnish all labor, equipment, and means required and carry out effective dust control measures wherever and as often as necessary to prevent CONTRACTOR's operation from producing dust in amounts damaging to property, cultivated vegetation, or domestic animals, or causing a nuisance to persons living in or occupying buildings in the vicinity. The CONTRACTOR shall be responsible for any damage resulting from any dust originating from its operations. The dust abatement measures shall be continued until the CONTRACTOR is relieved of further responsibility by the DISTRICT.
- B. The CONTRACTOR shall water active construction sites and unpaved roads as necessary to control dust.
- C. If the CONTRACTOR cannot maintain effective dust control under windy conditions, the CONTRACTOR shall temporarily suspend all excavating and grading operations.
- D. If watering of unpaved roads is not sufficient to control dust, the CONTRACTOR shall reduce vehicle speeds to 15 mph or less on unpaved roads.
- E. The CONTRACTOR shall comply with all requirements of Rule 226 as adopted by the Northern Sierra Air Quality Management District. A copy of this rule is included at the end of this section.

1.3 RUBBISH CONTROL

- A. The CONTRACTOR shall prepare a trash abatement program and submit to DISTRICT for review and approval. The program shall include placing all litter, trash, and garbage in scavenger-proof, resealable containers. Trash includes, but is not limited to, cigarettes, cigars, gum wrappers, tissue, cans, paper, and bags. During the progress of the WORK, the CONTRACTOR shall keep the Site of the Work and other areas used by

the CONTRACTOR in a neat and clean condition, and free from any accumulation of rubbish. The CONTRACTOR shall dispose of all rubbish and waste materials of any nature occurring at the Site, and establish regular intervals of collection and disposal of such materials and waste. The CONTRACTOR shall keep haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Disposal of all rubbish and surplus materials shall be off the Site of construction in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and to the particular requirements of Part 1926 of the OSHA Safety and Health Standards for Construction.

- B. The CONTRACTOR shall clean up and properly dispose of any oil, fuel, and other equipment leaks at the time of occurrence. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks and spills. The CONTRACTOR shall notify the DISTRICT of any spills or leaks at the time of occurrence.

1.4 SANITATION

- A. **Toilet Facilities:** Fixed or portable chemical toilets shall be provided wherever needed for the use of employees. Toilets at construction job sites shall conform to the requirements of Part 1926 of the OSHA Standards for Construction.
- B. **Sanitary and Other Organic Wastes:** The CONTRACTOR shall establish a regular collection of all sanitary and organic wastes. All wastes and refuse from sanitary facilities provided by the CONTRACTOR or organic material wastes from any other source related to the CONTRACTOR's operations shall be disposed of away from the Site in a manner satisfactory to the DISTRICT and in accordance with all laws and regulations pertaining thereto.

1.5 CHEMICALS

- A. All chemicals used during project construction or furnished for project operation, whether soil sterilant, pesticide, disinfectant, polymer, reactant or of other classification, shall show approval of either the U.S. Environmental Protection Agency or the U.S. Department of Agriculture. Use of all such chemicals and disposal of residues shall be in strict accordance with the printed instructions of the manufacturer.
- B. Herbicides, pesticides, and SDWA regulated compounds shall not be used unless prior approval is obtained. If CONTRACTOR decides that herbicides are needed, the CONTRACTOR shall obtain written approval to use the herbicide from the proper regulatory agencies. Copies of the documents approving such usage shall be submitted to the DISTRICT a minimum of three working days prior to their application.

1.6 FIRE PREVENTION

- A. **Fire Reporting:** There shall be readily available telephone service to the Site of the WORK. Appropriate telephone numbers shall be conspicuously posted near each telephone. Instructions shall be issued to notify the proper authorities immediately in case of fire.
- B. Access for Fire Fighting
 - 1. Every building adjacent to the WORK shall be accessible to fire department apparatus by way of access roadways.

2. Access roadways shall not be obstructed in any manner, including parking vehicles. "No Parking" signs or other appropriate notice, or both, prohibiting obstruction may be required.
3. Access for use of heavy fire fighting equipment shall be provided to the immediate job site at the start of the Contract and maintained until completion.

C. General Fire Prevention Provisions:

1. **Smoking:** Smoking shall be prohibited at all time in the underground excavations and at or in the vicinity of hazardous operations or combustible/flammable materials. "No Smoking" signs shall be posted in these areas.
2. **Refueling:** Special care shall be taken to prevent fires when refueling equipment.
3. **Oil Filters, Cartridges, and Oily Rags:** Used and discarded oil filters, cartridges, and oil rags or waste shall be removed from the Site and disposed of properly.
4. **Storage of Flammables:** Glass jugs or bottles shall not be used as storage containers for flammable materials. Gasoline, oil, grease, and other highly flammable materials shall be stored either in a separate building, or at a site where all debris is cleared within a radius of 25 feet. Storage buildings or sites shall be a minimum distance of 50 feet from other structures. Storage buildings shall be adequately posted with highly visible signs to warn of the flammables and to prohibit smoking in or around the buildings.

1.7 CULTURAL RESOURCES

- A. The DISTRICT has developed a flexible on-site/on-call agreement with a qualified archaeologist that will be empowered to redirect construction activities away from any cultural resources discovery. In the event that subsurface archaeological features or materials are exposed during any phase of project activities, all work in the immediate vicinity of the find shall halt until the qualified archaeologist has assessed the site and the significance of the resource has been evaluated. The District will coordinate any findings with the appropriate state, federal, and tribal entities according to standard reporting procedures. Any mitigation measures that may be deemed necessary shall be implemented by a qualified archaeologist representing the DISTRICT prior to the resumption of construction activities.
- B. The CONTRACTOR's attention is directed to the National Historic Preservation Act of 1966 (16 U.S.C. 470) and 36 CFR 800 which provide for the preservation of potential historical architectural, archaeological, or cultural resources (hereinafter called "cultural resources").
- C. The CONTRACTOR shall conform to the applicable requirements of the National Historic Preservation Act of 1966 as it relates to the preservation of cultural resources.
- D. In the event potential cultural resources are discovered during subsurface excavations at the Site of construction, the following procedures shall be instituted:
 1. The DISTRICT shall issue a Field Order directing the CONTRACTOR to cease all construction operations at the location of such potential cultural resources find. The area shall be marked by the CONTRACTOR in an appropriate manner to ensure

that all construction equipment, activities, and personnel remain clear of the area until further notice.

2. The DISTRICT shall retain a qualified archaeologist to evaluate the find, and determine if any additional mitigation is required. The DISTRICT shall implement any required study or removal. The DISTRICT shall notify the CONTRACTOR when the mitigation is complete and construction in the affected area can resume.

- E. If human remains are exposed by project-related activity, the DISTRICT and the CONTRACTOR shall comply with California Health and Safety Code Section 7050.5, which states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code Section 5097.98. The DISTRICT and CONTRACTOR shall provide the opportunity for (a) Native American monitor(s) to participate in the identification, evaluation, and mitigation of effects upon, any Native American human remains or cultural resources inadvertently exposed during the proposed undertaking. Continued consultation with personnel designated by the Washoe Tribe of Nevada and California would be acceptable. Should the tribal representatives agree to consult on any such discoveries, the costs incurred shall be the responsibility of the DISTRICT.

1.8 AIR QUALITY

- A. The CONTRACTOR shall maintain all vehicles and equipment in proper tune.
- B. The CONTRACTOR shall use Best Available Control Technology on construction equipment, including a timing retardation.
- C. The CONTRACTOR shall use natural-gas powered construction equipment where possible.
- D. The CONTRACTOR shall encourage employee car-pooling.
- E. The CONTRACTOR shall comply with all air pollution control rules, regulations, ordinances and statutes that apply to the work area. The Northern Sierra Air Quality Management District can be contacted at telephone 530-274-9360.

1.9 NOISE

- A. The CONTRACTOR shall comply with the hours of WORK as allowed by the local jurisdiction.
- B. The CONTRACTOR shall comply with all sound control and noise level rules, regulations and ordinances. The CONTRACTOR shall comply with the Town of Truckee Title 18, Development Code, Chapter 18.44.
- C. All construction equipment shall be equipped with manufacturer's standard noise control devices (i.e., mufflers, acoustical lagging, and/or engineer enclosures). The CONTRACTOR shall take special care not to throttle the engine excessively and shall keep engine speed as low as possible. The CONTRACTOR shall not leave equipment running or idling needlessly, especially when near noise-sensitive land uses. Noise-sensitive land uses include, but are not limited to, residences, schools, hospitals, libraries, retirement and elderly care centers, religious and worship facilities, courts of law, certain noise-sensitive professional offices, and quiet recreational areas such as campgrounds and hiking trails.

- D. The CONTRACTOR shall use newer equipment whenever possible. The CONTRACTOR shall inspect all construction equipment at periodic intervals to ensure proper maintenance and the presence of noise control devices (i.e., mufflers and shrouding, etc.).
- E. The CONTRACTOR shall locate stationary noisy equipment away from construction boundaries that are near noise-sensitive land uses.
- F. If dewatering pumps and generators are required to be operated between the hours of 6 p.m. and 7 a.m. within 600 feet of a noise-sensitive land use, they shall be treated with acoustical noise control measures (e.g., mufflers, shrouding, and/or enclosures) to comply with the appropriate requirements of the local jurisdiction.
- G. If requested by the DISTRICT, the CONTRACTOR shall install temporary noise barriers for construction activities, including staging areas that occur closer than 100 feet from noise-sensitive land uses. Noise barriers can be made of plywood, heavy vinyl curtain material, natural or temporary earth berms, or stockpiles of construction material.

1.10 DISPOSAL OF WATER FROM DEWATERING, FLUSHING AND DISINFECTION

- A. The CONTRACTOR shall not, at any time, discharge water from construction activities directly to the environment.
- B. Water used for flushing and disinfecting of new water mains shall be disposed of either into the sanitary sewer or into tanker trucks. All discharges to the sanitary sewer system shall comply with the permits issued by the Truckee Sanitary District and the Tahoe-Truckee Sanitation Agency (TTSA). The CONTRACTOR shall contact the Truckee Sanitary District at 530-587-3804, prior to initiating any discharges to the sanitary sewer system. Water shall be discharged to the sanitary sewer system on Tuesday, Wednesday or Thursday only.
 - 1. The CONTRACTOR may discharge up to 100 gpm directly into the sanitary sewer system.
 - 2. Water discharged into tanker trucks shall be hauled directly to the TTSA treatment plant for disposal.
- C. If groundwater is encountered during construction, the CONTRACTOR shall pipe the water from its dewatering pumps directly into tanker trucks. Water from trench dewatering shall not be discharged to the sanitary sewer.

1.11 SPILL CONTAINMENT

- A. The CONTRACTOR shall exercise every reasonable precaution to protect streams, lakes, reservoirs, bays and the public water supply from pollution with fuels, oils, bitumens, calcium chloride, and other harmful materials.
- B. The CONTRACTOR shall have on-site, at all times, materials and equipment to contain any spill of gasoline, diesel fuel or other hazardous substances. Any such spills shall be prevented from reaching any surface water bodies. Furthermore, in the event of a spill, the appropriate public agencies shall be contacted to ensure proper clean-up and documentation of the spill incident

1.12 EROSION CONTROL

- A. The CONTRACTOR shall conduct and schedule his operations so as to avoid muddying and silting any waterways or drainage ditches. Care shall be exercised to preserve roadside vegetation beyond the limits of construction.
- B. The CONTRACTOR shall implement erosion control measures to prevent the erosion and transport of sediment from the Project site. Silt fencing, straw bales, straw waddles and other similar measures shall be placed as required to accomplish this objective. The CONTRACTOR shall inspect and maintain all erosion control measures throughout the duration of the Work on a daily basis.
- C. Excavated materials and imported material stockpiles shall not be placed directly on top of existing vegetation. Materials may be placed on paved areas, on sheets of fiber reinforced plastic, or may be placed directly into trucks for removal from the site for proper disposal. To the maximum extent possible stockpiles shall be on the uphill side of trenches and excavations.
- D. Established drainage ditches disturbed by the CONTRACTOR'S operations shall be graded to their original dimensions and slopes. The CONTRACTOR shall then install a three-dimensional woven geotextile specifically designed for erosion control in vegetated drainage ditches. The geotextile shall cover the sloped sides and bottom of the ditch disturbed by trench excavation. Installation of the geotextile shall be according to the manufacturer's instructions. Drainage ditches shall then be seeded in accordance with Section 02900 – Site Revegetation.
- E. A Stormwater Pollution Prevention Plan (SWPPP) has been prepared for this project. The SWPPP is a separate document and is available for review at the District's Office at 11570 Donner Pass Road. A copy of the SWPPP will be provided to the CONTRACTOR at no charge. Given at the end of this Section are certification forms that shall be completed by the CONTRACTOR and all of its subcontractors prior to commencing work on the project. No subcontractor shall be allowed onto the project site without completing the attached certification.
 1. The CONTRACTOR shall be responsible to implement all appropriate provisions of the SWPPP.
 2. In the event of a discharge, the CONTRACTOR shall immediately notify the DISTRICT. Even if such a discharge occurs after normal working hours.
 3. The CONTRACTOR is referred to the DISTRICT'S **Best Management Practice and Erosion Control Manual**. A copy of this document may be obtained from the DISTRICT at no charge.
 4. The CONTRACTOR is also referred to the **Caltrans Construction Site Best Management Practices (BMP) Manual** for additional information regarding the implementation of erosion control measures beyond what is given in the SWPPP and DISTRICT BMP Manual. This Caltrans document can be found at <http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>. Additional information is also given in **Volume II: Handbook of Best Management Practices** of the **Water Quality Management Plan for the Lake Tahoe Region** which can be obtained from the Tahoe Regional Planning Agency.

F. **Site Inspection Prior to Commencing Work:** Prior to commencing work on a given pipeline segment, the CONTRACTOR and the DISTRICT shall jointly conduct a site inspection. The purpose of this site inspection shall be to review implementation of the SWPPP and identify any adjustments to the SWPPP that may be necessary.

G. **Compliance with SWPPP:**

1. The DISTRICT shall conduct daily inspections of the project work site to verify that the CONTRACTOR is complying with the SWPPP. All areas of non-compliance shall be identified and brought to the CONTRACTOR's attention. The CONTRACTOR shall correct areas of non-compliance as soon as practical, and not later than the end of the work day on the same calendar day. During the following day's daily inspection, the DISTRICT shall verify that all areas of non-compliance identified the day before have been corrected. In the event that previously identified issues have not been corrected, the DISTRICT shall take the following steps:
 - a. For the first event of non-compliance, the DISTRICT shall present the CONTRACTOR with a **Notice of Non-Compliance with the SWPPP**. A sample Notice is attached. The DISTRICT shall then order the CONTRACTOR to stop work immediately and correct the areas of non-compliance.
 - b. For the second event of non-compliance, the DISTRICT shall present the CONTRACTOR with a **Notice of Non-Compliance with the SWPPP**. The DISTRICT shall then order the CONTRACTOR to stop work immediately and correct the areas of non-compliance. In addition, the DISTRICT may order that the CONTRACTOR's personnel attend a second training seminar to receive additional education regarding BMP implementation and compliance with the SWPPP. The CONTRACTOR shall not be due any additional compensation for performing this work and the CONTRACTOR shall not be due any additional compensation for lost production, overtime charges or any other claim that results from the CONTRACTOR'S failure to comply with the SWPPP.
 - c. For the third event (and any subsequent events) of non-compliance, the DISTRICT shall present the CONTRACTOR with a **Notice of Non-Compliance with the SWPPP**. The DISTRICT shall then order the CONTRACTOR to stop work immediately and correct the areas of non-compliance. The CONTRACTOR shall not be due any additional compensation for performing this work and the CONTRACTOR shall not be due any additional compensation for lost production, overtime charges or any other claim that results from the CONTRACTOR'S failure to comply with the SWPPP. In addition, the DISTRICT shall deduct as liquidated damages an amount from the monies owed to the CONTRACTOR given in the following schedule:

Event	Amount
First	\$0
Second	\$0
Third	\$500
Fourth	\$1,000
Fifth	\$1,500
Sixth (and subsequent)	\$2,000

2. The DISTRICT shall also perform site inspections after working hours and on weekends to ensure that the project site is properly secured during those time periods when the CONTRACTOR's personnel are not present. In the event that the DISTRICT identifies areas of non-compliance during such inspections, the CONTRACTOR shall immediately modify its practices regarding site stabilization to comply with the SWPPP. The DISTRICT shall take the following steps regarding issues identified during non-working hours:
 - a. The DISTRICT may take corrective action to stabilize the project site and ensure compliance with the SWPPP. In such a case, the CONTRACTOR shall be responsible to reimburse the DISTRICT for the cost of all labor, equipment and materials utilized to perform such corrective actions.
 - b. For the first event of non-compliance, the DISTRICT shall present the CONTRACTOR with a **Notice of Non-Compliance with the SWPPP**. A sample Notice is attached. The DISTRICT shall then order the CONTRACTOR to stop work immediately and correct the areas of non-compliance.
 - c. For the second event of non-compliance, the DISTRICT shall present the CONTRACTOR with a **Notice of Non-Compliance with the SWPPP**. The DISTRICT may order that the CONTRACTOR's personnel attend a second training seminar to receive additional education regarding BMP implementation and compliance with the SWPPP. The CONTRACTOR shall not be due any additional compensation for performing this work and the CONTRACTOR shall not be due any additional compensation for lost production, overtime charges or any other claim that results from the CONTRACTOR'S failure to comply with the SWPPP.
 - d. For the third event (and any subsequent events) of non-compliance, the DISTRICT shall present the CONTRACTOR with a **Notice of Non-Compliance with the SWPPP**. The DISTRICT shall deduct as liquidated damages an amount from the monies owed to the CONTRACTOR given in the following schedule:

Event	Amount
First	\$0
Second	\$0
Third	\$500
Fourth	\$1,000
Fifth	\$1,500
Sixth (and subsequent)	\$2,000

3. Events of non-compliance with the SWPPP shall be considered cumulative for the purposes of determining monetary penalties. As an example, the CONTRACTOR receives a **Notice of Non-Compliance** for improper installation of silt fencing on day 10 of the project, then receives a **Notice of Non-Compliance** for inadequate sweeping and site cleanup on day 13 of the project, and then receives a **Notice of Non-Compliance** for improperly securing spoils piles over a weekend on day 22 of the project. The third **Notice of Non-Compliance** would result in a deduction

of \$500 from the monies owed to the CONTRACTOR, even though each **Notice of Non-Compliance** resulted from a different type of activity.

4. The DISTRICT shall have sole discretion to determine whether the actions (or non-actions) of the CONTRACTOR result in a violation of the SWPPP.
 5. Events of non-compliance with the SWPPP shall be considered violations of the Agreement. The issuance of six (or more) **Notices of Non-Compliance** shall be considered non-performance and an event of default of the Contract, and shall be sufficient grounds for the DISTRICT to terminate the Contract.
- H. **Citations or Notices:** In the event that any Citations or Notices of Violation are issued for actions by the CONTRACTOR under this Contract, they shall be considered a Notice of Non-Compliance for the purposes of determining liquidated damages as described above.
- I. **Fines and/or Penalties:** In the event that fines or penalties are levied on the DISTRICT for actions by the CONTRACTOR under this Contract, the DISTRICT shall deduct the amount of the fine or penalty from the monies due to the CONTRACTOR.
- J. **Applicability of Liquidated Damages:** By signing the Agreement in Section 00500, the CONTRACTOR recognizes that it is in the DISTRICT'S interest to construct the project in a neat and workmanlike manner and that compliance with the SWPPP is necessary for the DISTRICT to comply with Federal and State regulations. The CONTRACTOR also acknowledges that the DISTRICT will suffer a loss of public standing with its customers, the Lahontan RWQCB, the California SWQCB, other local agencies and the general public if the project work site is not properly maintained. The CONTRACTOR further acknowledges that such losses incurred by the DISTRICT would be extremely difficult or impossible to calculate or ascertain. The DISTRICT and the CONTRACTOR recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by the DISTRICT. Accordingly, instead of requiring any such proof, the CONTRACTOR agrees that as liquidated damages (but not as a penalty), the CONTRACTOR shall pay the DISTRICT the amounts as indicated in this Section for incidents of non-compliance with the SWPPP. The DISTRICT shall have the right to deduct the liquidated damages from any money in its hands, otherwise due, or to become due, to the CONTRACTOR, or to initiate applicable dispute resolution procedures and recover damages for non-performance of this Contract.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

RULE 226 - DUST CONTROL

PART 1.0 GENERAL

1.1 Purpose:

The purpose of this rule is to reduce and control fugitive dust emissions to the atmosphere.

1.2 Applicability:

This rule shall apply to any person engaged in:

- a. Dismantling or demolition of buildings
- b. Public or Private Construction
- c. Mining
- d. Processing of solid bulk materials (i.e., sand, gravel, rock, dirt, sawdust, ash, etc.)
- e. Operation of machines or equipment
- f. Operation and use of unpaved parking facilities
- g. Operation and use of livestock and/or horse arenas
- h. Operation of feed lots
- i. Operation and use of raceways for animals or motor vehicles.

1.3 Exemptions:

The requirements set forth in Part 3.0 - Standards do not apply to commercial agricultural operations.

PART 2.0 DEFINITIONS

Bulk Materials: Any unpackaged material which emits dust when stored or handled (i.e., dirt, sand, gravel, sawdust, ash, rock, etc.).

Chemical Soil Stabilization/Suppression: A means of dust control implemented by any person to mitigate PM 10 emissions by applying petroleum resins, asphaltic emulsions, acrylics, adhesives, or any other approved materials.

Construction Site: A site on which construction, demolition, or related activities occur, including, but not limited to, land clearing, excavation related to construction, land leveling, grading, cut and fill grading, and the erection or demolition of a structure. As used in this Rule, a construction site may encompass several contiguous parcels, or may encompass only a portion of one parcel, depending on the relationship of the property boundaries to the actual construction activities.

Disturbed Area: An area in which soils have been disturbed by grading, land leveling, scraping, cut and fill activities, excavation, brush and timber clearing, grubbing, and soils on which vehicle operation has occurred.

Dust Suppressants: Water, hygroscopic materials, chemical stabilization palliatives and suppression materials, and other approved substances.

Fugitive Dust: The particulate matter entrained in the ambient air which is caused from man-made and natural activities which is emitted into the air without first passing through a stack or duct designed to control flow, including, but not limited to, emissions caused by movement of soil, vehicles, equipment, and wind blown dust. This excluded particulate matter emitted directly in the exhaust of motor vehicles, from other fuel combustion

RULE 226 - DUST CONTROL

devices, portable brazing, soldering, or welding equipment, and from pile drivers.

Hygroscopic Materials: Any material that is readily capable of absorbing moisture from the air.

Land Preparation: Any preparation of land for anthropogenic (human) purposes, including brush or timber clearing, grubbing, scraping, ground excavation, land leveling, or grading.

Operation: Any activity, process, or project described in the applicability sections of the Rules of this Regulation.

Owner/Operator: Includes, but is not limited to, any person who leases, supervises, or operates equipment, in addition to the normal meaning of owner or operator.

Palliative: Any dust control agent used to lessen or reduce dust emissions.

Particulate Matter: Any material emitted or entrained into the air as liquid or solid particulates, with the exception of uncombined water. For PM-10, refer to Definition).

Paved Roads: An improved street, highway, alley, public way, or easement that is covered by concrete, asphaltic concrete, asphalt, or other materials which provide a permanent stable surface.

Person: Any individual, public and private corporation, government agency, partnership, association, firm, trust, estate, or any other legal entity which is recognized by law as the subject of rights and duties.

PM-10: Particulate matter with an aerodynamic diameter smaller than or equal to a nominal ten (10) microns as measured by the applicable State and Federal reference test methods.

Reasonably Available Control Measures: Techniques used to limit the emission and/or airborne transport of fugitive dust from a site including: application of water, chemical stabilizers/suppressants, soil stabilizers, or other liquids, covering, paving, enclosing, shrouding, compacting, planting, cleaning, or such other measures the Air Pollution Control Officer may approve to accomplish satisfactory results for temporary and/or extended suppression of PM-10 emissions.

Road: Any paved or unpaved, public or private street, highway, freeway, alley way, access drive, access easement, haul road, or driveway.

Site: Real property or land used or set aside for any specific use.

Unpaved Roads: An open way that is not covered by one of the materials described in the paved road definition.

Vehicle: Any device by which any person or property may be propelled, moved, or drawn, excepting aircraft or watercraft or devices moved exclusively by human or animal power or used exclusively upon rails or tracks.

Visible Dust Emission: Visible dust of such opacity as to obscure an observer's view to a degree equal to or greater than an opacity of 20%, for a

RULE 226 - DUST CONTROL

period or periods aggregating more than three (3) minutes in any one (1) hour.

PART 3.0 STANDARDS

3.1 General Requirements:

Any person shall take all reasonable precautions to prevent dust emissions. Reasonable precautions may include, but are not limited to, cessation of operations, cleanup, sweeping, sprinkling, compacting, enclosure, chemical or asphalt sealing, and use of wind screens or snow fences.

- A. No person may disturb the topsoil or remove ground cover on any real property and thereafter allow the property to remain unoccupied, unused, vacant or undeveloped unless reasonable precautions are taken to prevent generation of dust. A dust control plan must be submitted to and approved by the Air Pollution Control Officer before topsoil is disturbed on any project where more than one (1) acre of natural surface area is to be altered or where the natural ground cover is removed. In the dust control plan, the Air Pollution Control Officer may require use of palliatives, reseeding, or other means to minimize windblown dust.
- B. For any proposed development, division of land, special use permit application of zone change, the Air Pollution Control Officer may require the applicant to submit soils data and any other pertinent data for the area in which the development is proposed.
- C. If a determination is made that the disturbance (per 3.1.A.) or development (per 3.1.B.) of the site may cause the generation of dust, the Air Pollution Control Officer may require:
 1. Phased clearing of the land
 2. The use of palliatives
 3. The use of water
 4. The use of snow fencing
 5. The use of wind screen
 6. Reseeding
 7. Controls of single lot development approved as a part of a land subdivision subject to these regulations.

After commencement of development, if the approved elements of the dust control plan prove ineffective, the Air Pollution Control Officer may require additional control measures to be instituted. Phasing will not be required as a control strategy after a project is under construction.

In the case of subdivisions, condominiums and planned unit developments, a dust control plan must be submitted as part of the final map approval process.

RULE 226 - DUST CONTROL

If a development requires a special use permit, the Air Pollution Control Officer may require the dust control plan to be submitted and become a condition of the special use permit process.

- D. No person shall cause or allow the handling or storage of any materials on a manner which results, or may result in the generation of dust.
- E. Any vehicle operating on a paved roadway with a load of any bulk material susceptible to being dropped, spilled, leaked, or other wise escaping therefrom and being entrained in the air, must take one of the following control measures:
 - 1. Six (6) inches of freeboard is maintained within the bed of the vehicle. For the purposes of this regulation, "freeboard" means the vertical distance from the highest portion of the edge of the load to the lowest part of the rim of the truck bed.
 - 2. Materials contain enough moisture to control dust emissions from the point of origin to their final destination. Whenever possible, the use of dust suppressants must be applied in conjunction with the water.
 - 3. In the event that measures 1 or 2 are ineffective in preventing materials from escaping, tarps or other cargo covers shall be employed.

This section does not prohibit a public maintenance vehicle from depositing sand on a paved roadway to enhance traction, or sprinkling water or other substances to clean or maintain a highway.

- F. Paved entry aprons or other effective cleaning techniques (e.g., wheel washers), may be required by the Air Pollution Control Officer to prevent tracking onto paved roadways. Paved entry aprons may include road section or coarse aggregate or steel grate to "knock off" dirt which accumulates on the vehicle and/or vehicle wheels.

Any material which is tracked onto a paved roadway must be removed (swept or washed) as quickly and as safely as possible. Exceptions to this provision may be made by the Air Pollution Control Officer for the construction, maintenance, and/or repair of paved roadways and for the application of de-icing and traction materials for wintertime driving safety.

PART 4.0 ADMINISTRATIVE REQUIREMENTS

4.1 Correction of Condition:

If the Air Pollution Control Officer documents that a person is in non-compliance with any of the provisions contained in Subsection 3.1, he will notify the person of that fact and specify a period of time in which the person must achieve compliance. Failure to comply within 24 hours or as the time determined by the Air Pollution Control Officer constitutes grounds for a Notice of Violation (NOV) citation per the District Enforcement Policy.

RULE 226 - DUST CONTROL

4.2 Remedial Action:

The Air Pollution Control Officer, after proper notice, may enter upon any real property where dust is being generated and take such remedial and corrective action as he deems necessary.

4.3 Costs:

Any costs incurred in connection with any remedial or corrective action taken by the Air Pollution Control Officer, pursuant to this section, shall be assessed against the owner of the property involved. Failure to pay the full amount of such incurred costs shall result in a lien against the property. The lien shall remain in effect until all costs have been fully paid, which may include, but are not limited to, cost of collection and reasonable attorney fees.

Adopted 5/11/94



**CONTRACTOR/SUBCONTRACTOR
STORM WATER POLLUTION PREVENTION PLAN
CERTIFICATION FORM**

Project Name: _____

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

I have reviewed the project Storm Water Pollution Prevention Plan. I understand all of the conditions and requirements therein and I agree to construct this project in accordance with those requirements.

Authorized Representative for Contractor/Subcontractor:

(Please Print Name)

Title

(Signature)

Date



LIST OF SUBCONTRACTORS

The general contractor awarded the construction contract shall complete the following list. The general contractor and all subcontractors shall complete the corresponding certification form.

Subcontractor	Contact Person and Phone #	Scope of Work	SWPPP Reviewed Y/N
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			
9)			
10)			



*Notice of Non-Compliance
with Project SWPPP*

The District has determined that the activities described below constitute a violation of the Stormwater Pollution Prevention Plan (SWPPP) for the subject project. The Contractor shall take immediate steps to correct the problem and bring the project into compliance with the SWPPP.

Project: _____

Contractor: _____

Location of Violation: _____

Date of Violation: _____ Date of Notice: _____

Description of Violation - Attach Photographs Documenting Violation and Note Applicable BMPs:

Actions to be Taken by the CONTRACTOR

Written By: _____
For the DISTRICT Title

Acknowledged By: _____
For the CONTRACTOR Title

SECTION 01600 - PRODUCTS, MATERIALS, EQUIPMENT AND SUBSTITUTIONS

PART 1 -- GENERAL

1.1 DEFINITIONS

- A. The word "Products," as used herein, is defined to include purchased items for incorporation into the Work, regardless of whether specifically purchased for the Project or taken from CONTRACTOR's stock of previously purchased Products.
- B. The word "Materials," is defined as Products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form units of Work.
- C. The word "Equipment" is defined as Products with operational parts, regardless of whether motorized or manually operated, and particularly including Products with service connections (wiring, piping, and other like items).
- D. Definitions given in this section are not intended to negate the meaning of other terms used in the Contract Documents, including "specialties," "systems," "structure," "finishes," "accessories," "furnishings," special construction," and similar terms, which are self-explanatory and have recognized meanings in the construction industry.
- E. Neither "Products" nor "Materials" nor "Equipment" includes machinery and equipment used for preparation, fabrication, conveying and erection of the WORK.

1.2 QUALITY ASSURANCE

- A. **Source Limitations:** To the greatest extent possible for each unit of Work, the CONTRACTOR shall provide Products, Materials, and Equipment of a singular generic kind from a single source.
- B. **Compatibility of Options:** Where more than one choice is available as options for CONTRACTOR's selection of a Product, Material, or Equipment, select an option which is compatible with other Products, Materials, or Equipment. Compatibility is a basic general requirement of Product, Material and Equipment selections.

1.3 PRODUCT DELIVERY AND STORAGE

- A. The CONTRACTOR shall deliver and store the WORK in accordance with manufacturer's written recommendations and by methods and means that will prevent damage, deterioration, and loss including theft. Delivery schedules shall be controlled to minimize long-term storage of Products at Site and overcrowding of construction spaces. In particular, ensure coordination to ensure minimum holding or storage times for flammable, hazardous, easily damaged, or sensitive Materials to deterioration, theft, and other sources of loss.

1.4 TRANSPORTATION AND HANDLING

- A. Products shall be transported by methods to avoid damage and shall be delivered in undamaged condition in manufacturer's unopened containers and packaging.

- B. The CONTRACTOR shall furnish Equipment and personnel to handle Products, Materials, and Equipment, including those provided by DISTRICT, by methods to prevent soiling and damage.
- C. The CONTRACTOR shall provide any additional protection necessary during handling to prevent marring and otherwise damaging Products, packaging, and surrounding surfaces.

1.5 STORAGE AND PROTECTION

- A. Products shall be stored in accordance with manufacturer's written instructions and with seals and labels intact and legible. Sensitive Products shall be stored in weather-tight climate controlled enclosures and temperature and humidity ranges shall be maintained within tolerances required by manufacturer's recommendations.
- B. For exterior storage of fabricated Products, Products shall be placed on sloped supports above ground. Products subject to deterioration shall be covered with impervious sheet covering and ventilation shall be provided to avoid condensation.
- C. Loose granular materials shall be stored on solid flat surfaces in a well-drained area and shall be prevented from mixing with foreign matter.
- D. Storage shall be arranged to provide access for inspection. Periodically inspect to assure Products are undamaged and are maintained under required conditions.
- E. Storage shall be arranged in a manner to provide access for maintenance of stored items and for inspection.

1.6 MAINTENANCE OF STORAGE

- A. Stored Products shall be periodically inspected on a scheduled basis. Maintain a log of inspections and make the log available on request.
- B. The CONTRACTOR shall comply with manufacturer's Product storage requirements and recommendations.
- C. The CONTRACTOR shall maintain manufacturer-required environmental conditions continually.
- D. The CONTRACTOR shall ensure that surfaces of Products exposed to the elements are not adversely affected and that weathering of finishes does not occur.
- E. For mechanical and electrical Equipment, the CONTRACTOR shall provide a copy of the manufacturer's service instructions with each item and the exterior of the package shall contain notice that instructions are included.

1.7 PROPOSED SUBSTITUTIONS OR "OR-EQUAL" ITEM

- A. Whenever materials or equipment are indicated in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, and quality required. If the name is followed by the words "or equal" indicating that a substitution is permitted, materials or equipment of other suppliers may be accepted if sufficient information is submitted to allow the

DISTRICT to determine that the material or equipment proposed is equivalent or equal to that named, subject to the following requirements:

1. The burden of proof as to the type, function, and quality of any such substitution product, material or equipment shall be upon the CONTRACTOR.
 2. The DISTRICT will be the sole judge as to the type, function, and quality of any such substitution and the DISTRICT's decision shall be final.
 3. The DISTRICT may require the CONTRACTOR to furnish additional data about the proposed substitution.
 4. The DISTRICT may require the CONTRACTOR to furnish a special performance warranty or other surety with respect to any substitution.
 5. Acceptance by the DISTRICT of a substitution item shall not relieve the CONTRACTOR of the responsibility for full compliance with the Contract Documents and for adequacy of the substitution.
 6. The CONTRACTOR shall be responsible for resultant changes including design and construction changes resulting from the changes which the accepted substitution requires in the CONTRACTOR's WORK, the WORK of its Subcontractors and of other contractors.
- B. If the name of a proprietary item or the name of a particular Supplier is not followed by the words "or equal", substitutions are not allowed and the specified product shall be furnished by the CONTRACTOR with the following exceptions:
1. In the event that a named Supplier is no longer doing business under the name indicated, the specified product from the legal successors to the named Supplier shall be furnished.
 2. In the event that a named product is no longer available from the named Supplier due to acquisition or sale of the given product line, but the product is available from another Supplier, the CONTRACTOR shall provide the named product. In such cases, the CONTRACTOR shall submit a Substitution Request Form and shall include certification from the Supplier that product being supplied is materially and functionally identical to the product named in the Contract Documents.
 3. In the event that a named product is no longer available from the named Supplier or any other Supplier, the CONTRACTOR shall notify the DISTRICT in writing and the DISTRICT shall identify suitable substitute products. The CONTRACTOR shall provide one of the suitable substitute products.
- C. The procedure for review of proposed substitutions by the DISTRICT will include the following:
1. If the CONTRACTOR wishes to provide a substitution item, make written application to the DISTRICT on the "Substitution Request Form."
 2. Unless otherwise provided by law or authorized in writing by the DISTRICT the "Substitution Request Form(s)" shall be submitted within the 35-day period after Notice to Proceed.

3. Wherever a proposed substitution item has not been submitted within said 35-day period, or wherever the submission of a proposed substitution material or equipment has been judged to be unacceptable by the DISTRICT, the CONTRACTOR shall provide the material or equipment indicated in the Contract Documents.
 4. The CONTRACTOR shall certify that the proposed substitution will perform adequately the functions and achieve the results called for by the general design, and be similar and of equal substance to that indicated, and be suited to the same use as that indicated.
 5. The DISTRICT will evaluate each proposed substitution within a reasonable period of time.
 6. As applicable, no shop drawing submittals shall be made for a substitution item nor shall any substitution item be ordered, installed, or utilized without the DISTRICT'S prior written acceptance of the CONTRACTOR'S "Substitution Request Form."
 7. The DISTRICT will record the time required by the DISTRICT in evaluating substitutions and in making changes by the CONTRACTOR in the Contract Documents occasioned thereby.
- D. The CONTRACTOR'S application using the "Substitution Request Forms" shall contain the following statements and information which will be considered by the DISTRICT in evaluating the proposed substitution:
1. The evaluation and acceptance of the proposed substitution shall not prejudice the CONTRACTOR'S achievement of substantial completion on time.
 2. Whether or not acceptance of the substitution for use in the WORK will require a change in any of the Contract Documents to adapt the design to the proposed substitution.
 3. Whether or not incorporation or use of the substitution in connection with the WORK is subject to payment of any license fee or royalty.
 4. Information in the substitution request shall be organized in the format required for submittals as described in Section 01300-Contractor Submittals. Non-compliant substitution requests will not be reviewed.
 5. All variations of the proposed substitution from the items originally indicated shall be identified.
 6. Available maintenance, repair, and replacement service shall be indicated. The manufacturer shall have a local service agency (within 120 miles of the Site) which maintains properly trained personnel and adequate spare parts and is able to respond and complete repairs within 24 hours.
 7. Itemized estimate of all costs that will result directly or indirectly from acceptance of such substitution, including cost of redesign and claims of other contractors affected by the resulting change.

- E. Without any increase in cost to the DISTRICT, the CONTRACTOR shall be responsible for and pay all costs in connection with proposed substitutions and of inspections and testing of equipment or materials submitted for review prior to the CONTRACTOR's purchase thereof for incorporation in the WORK, whether or not the DISTRICT accepts the proposed substitution or proposed equipment or material. The CONTRACTOR shall reimburse the DISTRICT for the charges of the DISTRICT, and other authorized representatives for evaluating each proposed substitution and costs for any additional inspection caused by the substitution.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -



Substitution Request Form

Project: _____ Date: _____

Specified Item:

Section	Page	Paragraph	Description
Proposed Substitution: _____			

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request. Applicable portions of the data are clearly identified.

The undersigned states that the following paragraphs, unless modified on attachments, are correct:

1. The proposed substitution does not affect dimensions shown on Drawings and will not require a change in any of the Contract Documents.
2. The undersigned will pay for changes to the design, including engineering design, detailing, and construction costs caused by the request substitution which is estimated to be \$_____.
3. The proposed substitution will have no adverse affect on Subcontractors, other contractors, the construction schedule (specifically the date of substantial completion), or specified warranty requirements.
4. Maintenance and service parts will be locally available for the proposed substitution.
5. The incorporation or use of the substitute in connection with the Work is not subject to payment of any license fee or royalty.

The undersigned further states that the function, appearance, and quality of the Proposed Substitution are equivalent or superior to the Specified item.

Submitted by **CONTRACTOR:**

Reviewed by **DISTRICT:**

Signature: _____	<input type="checkbox"/> Accepted	<input type="checkbox"/> Accepted as Noted
Title: _____	<input type="checkbox"/> Not Accepted	<input type="checkbox"/> Received too Late
Firm: _____	By: _____	Title: _____
Date: _____	Date: _____	

Attachments: _____

SECTION 01700 - PROJECT CLOSEOUT

PART 1 -- GENERAL

1.1 FINAL CLEANUP

- A. The CONTRACTOR shall promptly remove from the vicinity of the completed work, all rubbish, unused materials, concrete forms, construction equipment, and temporary structures and facilities used during construction. Final Acceptance of the Work by the DISTRICT will be withheld until the CONTRACTOR has satisfactorily complied with the requirements for final cleanup of the project site and the requirements below.

1.2 COMPLETION PROCEDURES

- A. When the CONTRACTOR believes Substantial Completion has been achieved, request in writing to the DISTRICT that Substantial Completion be recognized as having been achieved and request that the DISTRICT issue a Certificate of Substantial Completion. Prior to making such a request, the CONTRACTOR must have:
 - 1. Completed all WORK necessary for the safe, proper, and complete use or operation of the Project.
 - 2. Prepared a CONTRACTOR-generated punch list for submission with the request for issuance of a Certificate of Substantial Completion.
 - 3. Submitted and received acceptance of accurate record drawings for all WORK completed to date.
 - 4. Submitted and received acceptance of all specified warranties, bonds and guarantees.
- B. Upon receipt of the request from the CONTRACTOR, the DISTRICT will review the request, the WORK and the above requirements to determine whether the CONTRACTOR has achieved Substantial Completion. If this review fails to support Substantial Completion, the DISTRICT will notify the CONTRACTOR in writing, citing the reasons for rejection. If the DISTRICT determines the CONTRACTOR has reached Substantial Completion, the following procedures will be followed:
 - 1. The DISTRICT will review the WORK and the CONTRACTOR'S punch list to ensure that all deficiencies are noted on a final punch list.
 - 2. The DISTRICT will schedule and conduct a walk-through of the Project with the CONTRACTOR for the purpose of formally reviewing the WORK, the final punch list, and the readiness of the WORK for use. Any additional items noted during the walk-through will be added to the punch-list.
 - 3. Upon completion of the walk-through, provided that the walk-through has verified that the WORK is in fact ready for use for its intended purpose, the Project will be considered Substantially Complete. The DISTRICT will issue a letter certifying the date of Substantial Completion to the CONTRACTOR.
- C. Final Completion will be deemed to have occurred when all WORK is completed including the following:

1. All final punch list items have been corrected, signed off by the CONTRACTOR and the DISTRICT during a final walk-through.
2. All updates to the record drawings have been made.
3. Demobilization and site clean-up are complete.
4. All facilities and/or equipment have been properly demonstrated to be functioning as required.
5. The CONTRACTOR has furnished to the DISTRICT, releases from all parties who are entitled to claims against the subject project, property, or improvement pursuant to the provisions of law.
6. All Final Submittals shall be made as noted herein.

1.3 CLOSEOUT PROCEDURE

- A. The DISTRICT and the CONTRACTOR shall meet and resolve all outstanding issues including:
 1. Claims and adjustments for time or costs.
 2. Procedures for handling warranty issues.
- B. A Final Change Order shall be processed, if required. Final payment and close out procedures shall comply with all requirements of the Contract Documents.

1.4 FINAL SUBMITTALS

- A. Prior to requesting final payment, the CONTRACTOR shall obtain and submit the following items to the DISTRICT:
 1. Written warranties and guarantees, where required.
 2. Completed record drawings.
 3. Certificates of inspection and acceptance by local governing agencies having jurisdiction.
 4. Release of liens or release of claims forms submitted by all Subcontractors and Suppliers.

1.5 MAINTENANCE AND WARRANTY

- A. Comply with the maintenance and warranty requirements contained in the Contract Documents.
- B. Replacement of earth fill or backfill, where it has settled below the required finish elevations, shall be considered as a part of such required repair work, and any repair or resurfacing which becomes necessary by reason of such settlement shall likewise be considered as a part of such required repair work unless the CONTRACTOR shall have obtained a statement in writing from the affected private authority or public agency releasing the DISTRICT from further responsibility in connection with such repair or resurfacing.

- C. Make all warranty repairs and replacements promptly upon receipt of written order from the DISTRICT. If the CONTRACTOR fails to make such repairs or replacements promptly, the DISTRICT reserves the right to do the WORK and the CONTRACTOR and his surety shall be liable to the DISTRICT for the cost thereof.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

- END OF SECTION -

DIVISION 2

SITework

SECTION 02100 - SITE PREPARATION

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The WORK of this Section includes measures required during the CONTRACTOR's initial move onto the Site to protect existing fences, houses and associated improvements, streets, and utilities downslope of construction areas from damage due to boulders, trees or other objects dislodged during the construction process.

1.2 SITE INSPECTION

- A. Prior to moving onto the Site, the CONTRACTOR shall inspect the Site conditions and review maps of the pipeline routes, and documents delineating the DISTRICT's property and right-of-way lines.

PART 2 – PRODUCTS (Not Used)

PART 3 -- EXECUTION

3.1 SITE ACCESS

- A. The CONTRACTOR shall develop any necessary access to the Site, including access barriers to prohibit entry of unauthorized persons.
- B. **Utility Interference:** Where existing utilities interfere with the WORK, the CONTRACTOR shall notify the utility owner and the DISTRICT before proceeding.

3.2 SITE CONDITIONS

- A. The CONTRACTOR shall promptly notify the DISTRICT if any of the following conditions are encountered:
 - 1. Material that the CONTRACTOR believes may be hazardous waste as defined in Section 25117 of the California Health and Safety Code or 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.
 - 3. Unknown physical conditions at the site of any unusual nature, materially different from those normally encountered and generally recognized as inherent in the work of the character provided for in the Contract Documents.
- B. The DISTRICT shall promptly investigate, and determine whether the conditions do materially differ, do involve hazardous waste and impact the CONTRACTOR's cost and time required to complete the WORK required by the Contract Documents. If it is determined that an increase or decrease in the CONTRACTOR's cost or time required is

justified, the DISTRICT will issue a change order in accordance with the procedures described in the Contract Documents.

- C. In the event that a dispute arises between the DISTRICT and the CONTRACTOR, as to whether the conditions do materially differ, do involve hazardous waste, or do impact CONTRACTOR's cost and time required to complete the WORK, the CONTRACTOR shall not be excused from any scheduled milestone or completion date provided by the Contract Documents, but shall proceed with all WORK required by the Contract Documents. The CONTRACTOR shall retain any and all rights provided either by contract or by law that pertain to the resolution of disputes and protests between contracting parties.

3.3 EROSION CONTROL

- A. Prior to commencing any excavation activities, the CONTRACTOR shall implement erosion control measures to prevent the erosion and transport of sediment from the Project site. The CONTRACTOR is referred to Section 01560 – Temporary Environmental Controls for more information regarding erosion control.

3.4 CLEARING, GRUBBING, AND STRIPPING

- A. Construction areas shall be cleared of grass and weeds to at least a depth of six inches and cleared of structures, pavement, sidewalks, concrete or masonry debris, trees, logs, upturned stumps, loose boulders, and any other objectionable material of any kind which would interfere with the performance or completion of the WORK, create a hazard to safety, or impair the subsequent usefulness of the WORK, or obstruct its operation. Loose boulders within 10 feet of the top of cut lines shall be relocated and incorporated in landscaping or removed from the Site.
- B. Topsoil shall be stripped to a depth of 8 inches and stockpiled in a manner that will not interfere with construction. Stockpiled topsoil shall be used as final backfill in areas not to be paved. Shrubs, bushes and minor vegetation shall be ground or chipped to a mulching consistency and mixed with the stripped soils. Trees and stumps shall be removed from the site and disposed of in an appropriate manner. Stockpiled topsoil shall be stabilized by tackifiers or protected with tarpaulins to prevent stockpiles from creating a dust hazard or eroding during rain events.
- C. Within the limits of clearing, the areas below the natural ground surface shall be grubbed to a depth necessary to remove all stumps, roots, buried logs, and all other objectionable material. All objectionable material from the clearing and grubbing process shall be removed from the Site and wasted in approved safe locations.
- D. Only trees, plants and shrubs that are designated for removal shall be removed. The removal of any other trees, shrubs, fences, or other improvements, either inside or outside of rights-of-way, if necessary for the CONTRACTOR's choice of means and methods, shall be arranged with the owner of the property, and shall be removed and replaced, at no additional cost to the DISTRICT.
- E. Trees, plants and shrubs that are not to be removed shall be protected from injury and damage. Any such trees, plants or shrubs that are removed or damaged due to the negligence of the CONTRACTOR, shall be replaced by the CONTRACTOR at no additional cost to the DISTRICT. Such replacement shall be to the satisfaction of the DISTRICT and the owner of said trees, plants or shrubs.

- F. Burning of waste debris shall conform to all applicable local regulations. Prior to any intended burning, the CONTRACTOR shall furnish to the DISTRICT, a copy of the CONTRACTOR's burning permit as issued by the local agency having jurisdiction.
- G. Any materials wrongfully removed from the Site shall be paid for by the CONTRACTOR. The cost of any such items removed shall be agreed upon by the owner and the CONTRACTOR. However, if such an agreement is not reached, the DISTRICT shall determine the value of the items and that amount shall be withheld from the next progress payment due.

- END OF SECTION -

SECTION 02200 – EARTHWORK

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall perform all earthwork indicated and required for construction of the WORK, complete and in place, in accordance with the Contract Documents.
- B. The CONTRACTOR's attention is directed to the provisions for "Shoring and Bracing Drawings" in Section 6705 of the California Labor Code. The CONTRACTOR, prior to beginning any trench or structure excavation requiring shoring, shall develop a detailed plan showing design of all shoring, bracing, sloping of the sides of excavation, or other provisions for worker protection against the hazard of caving ground during the excavation of such trenches or structure excavation. 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.

1.2 NOTIFICATIONS TO THE CONTRACTOR

- A. The CONTRACTOR is hereby notified that investigations of subsurface soil conditions have not been conducted in conjunction with the preparation of these Contract Documents. The CONTRACTOR is further advised that subsurface conditions may vary throughout the project site. The DISTRICT makes no guaranty, either written or implied, that materials obtained on site are suitable for use in the WORK. The CONTRACTOR shall not be entitled to any additional compensation in the event that materials obtained on site are not suitable for use in the WORK.
- B. The CONTRACTOR is hereby notified that investigations of subsurface groundwater conditions have not been conducted in conjunction with the preparation of these Contract Documents. The CONTRACTOR is further advised that subsurface groundwater conditions may vary throughout the project site. Groundwater may be naturally occurring or may be leakage from existing water system facilities. The CONTRACTOR shall be responsible for removal and exclusion of groundwater as necessary to construct the Work in accordance with the Contract Documents. The CONTRACTOR shall not be entitled to any additional compensation in the event that groundwater is encountered.

1.3 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

ASTM C150	Portland Cement
ASTM C618	Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete
ASTM D422	Standard Test Method for Particle-Size Analysis of Soils
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Test Method for Laboratory Compaction Characteristics of Soils Using Modified Effort (56,000 ft - lbf/ft ³) (2,700 kN-m/m ³)

ASTM D1633	Standard Test Method for Compressive Strength of Molded Soil-Cement Cylinders
ASTM D2419	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2487	Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D 2901	Standard Test Method for Cement Content of Freshly Mixed Soil Cement
ASTM D2922	Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
ASTM D4253	Standard Test Method for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D4254	Standard Test Method for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density
California Test 643	Method for Estimating the Service Life of Steel Culverts

PART 2 -- PRODUCTS

2.1 SUITABLE FILL AND BACKFILL MATERIAL REQUIREMENTS

- A. **General:** Fill, backfill, and embankment materials shall be suitable selected or processed clean, fine earth, rock, or sand, free from grass, roots, brush, or other vegetation.
- B. **Suitable Materials:** Materials defined below are suitable materials and may be used in fills, backfilling, and embankment construction subject to the indicated limitations.
- C. Suitable materials may be obtained from on-site excavations, may be processed on-site materials, or may be imported. If imported materials are required by this Section or to meet the quantity requirements of the WORK, the CONTRACTOR shall provide the imported materials at no additional expense to the DISTRICT. The DISTRICT makes no guaranty, either written or implied, that materials obtained on site are suitable for use in the WORK.
- D. The following types of suitable materials are defined:
 - 1. Type A (three-inch minus granular backfill): Crushed rock or gravel, and sand with the gradation requirements below. Volcanic cinders meeting these requirements may be used. Processed native material may be used, provided that it meets all other requirements of this Section.

<u>Sieve Size</u>	<u>Percentage Passing</u>
3-inch	100
No. 4	35 - 100
No. 40	20 - 100
No. 200	0 - 25

2. Type B (three-quarter inch minus granular backfill): Crushed rock or gravel, and sand with the gradation requirements below. The material shall have a minimum sand equivalent value of 20. Volcanic cinders meeting these requirements may be used.

<u>Sieve Size</u>	<u>Percentage Passing</u>
3/4-inch	100
No. 4	35 - 100
No. 200	0 - 15

3. Type C (sand backfill): Clean well graded sand meeting the gradation requirements below. Material shall have a sand equivalent value not less than 30.

<u>Sieve Size</u>	<u>Percentage Passing</u>
3/8-inch	100
No. 4	50 - 90
No. 200	0 - 20

4. Type D (six-inch minus granular backfill): Clean well graded stone, gravel and sand meeting the gradation requirements below. Processed native material may be used, provided that it meets all other requirements of this Section.

<u>Sieve Size</u>	<u>Percentage Passing</u>
6-inch	100
3-inch	80 - 100
No. 4	35 - 100

5. Type E (pea gravel backfill): Crushed rock or gravel with 100 percent passing a 1/2-inch sieve and not more than 10 percent passing a Number 4 sieve.

6. Type F (coarse drain rock): Crushed rock or gravel meeting the following gradation requirements:

<u>Sieve Size</u>	<u>Percentage Passing</u>
2-inch	100
1-1/2-inch	90 - 100
1-inch	20 - 55
3/4-inch	0 - 15

7. Type G (aggregate base): Aggregate base shall conform to the requirements given in Section 02460 – A.C. Pavement & Base.

8. Type H (graded drain rock): Drain rock shall be crushed rock, gravel or sand, durable and free from slaking or decomposition under the action of alternate wetting or drying. The drain rock shall have a sand equivalent value not less than 75. The material shall be uniformly graded and shall meet the following gradation requirements:

<u>Sieve Size</u>	<u>Percentage Passing</u>
3/4-inch	100
1/2-inch	95 – 100
3/8-inch	70 – 100
No. 4	0 - 55
No. 8	0 - 10
No. 200	0 - 3

9. Type I: Not Used
10. Type J (Soil Cement): Material which consists of any mixture of Types B, C, G, and H materials which has been cement-treated so that the cement content of the material is not less than 5 percent by weight when tested in accordance with ASTM D2901. The ultimate compressive strength at 28 days shall be not less than 400 psi when tested in accordance with ASTM D 1633.
11. Type K (topsoil): Stockpiled topsoil material which has been obtained at the site by removing soil to a depth not exceeding 2 feet. Removal of the topsoil shall be done after the area has been stripped of vegetation and debris.
12. Type L (slurry cement backfill): Slurry cement backfill shall conform to the requirements of Section 19-3.02E of the Standard Specifications
13. Type M (aggregate subbase): Not Used
14. Type N Material (Modified 6-inch minus backfill): Type N Material shall meet the general gradation requirements for Type D Material. However, intermittent rocks and boulders up to 12-inches (largest dimension) may be included.

2.2 UNSUITABLE MATERIAL

- A. Unsuitable materials include the materials listed below.
 1. Soils which, when classified under ASTM D 2487, fall in the classifications of PT, OH, CH, MH, or OL.
 2. Soils which cannot be compacted sufficiently to achieve the density specified for the intended use.
 3. Materials that contain hazardous or designated waste materials including petroleum hydrocarbons, pesticides, heavy metals, and any material which may be classified as hazardous or toxic according to applicable regulations.
 4. Soils that contain greater concentrations of chloride or sulfate ions, or have a soil resistivity or pH less than the existing on-site soils.
 5. Topsoil, except as allowed below.

2.3 USE OF FILL, BACKFILL, AND EMBANKMENT MATERIAL TYPES

- A. The CONTRACTOR shall use the types of materials as designated herein for all required fill, backfill, and embankment construction hereunder.

- B. Where these Specifications conflict with the requirements of any local agency having jurisdiction or with the requirements of a pipe material manufacturer, the DISTRICT shall be immediately notified. In case of conflict between types of pipe embedment backfills, the CONTRACTOR shall use the backfill material that provides a greater degree of structural support to the pipe, as determined by the DISTRICT. In case of conflict between types of trench or final backfill types, the CONTRACTOR shall use the backfill material that provides the greater in-place density after compaction.
- C. Fill and backfill types shall be used in accordance with the following provisions:
1. Embankment fills shall be constructed of Type A, D or G material as defined herein.
 2. Pipe zone backfill, as defined in Article 3.12 of this Section, shall be Type B or Type C material.
 3. Trench zone backfill, as defined in Article 3.12 of this Section, shall be as follows:
 - a. Trench zone backfill in areas to be paved shall be Type A or Type L material.
 - b. Trench zone backfill in areas not to be paved shall be Type D or Type L material.
 4. Final backfill material for pipelines under paved areas, as defined in Article 3.12 of this Section, shall be Type G backfill material.
 5. **Final Backfill Under Areas Not to be Paved:**
 - a. Final backfill under areas not to be paved shall be the same material as that used for trench zone backfill. The top six inches of final backfill shall consist of topsoil that was stripped and stockpiled as indicated in Section 02100 – Site Preparation. Topsoil shall be compacted to a density of 85 percent. Topsoil shall not be placed until all other construction activities are completed. The movement of vehicles across an area will not be permitted after topsoil has been placed.
 - b. After placement of topsoil, a seed/fertilizer mixture shall be placed in accordance with Section 02900 – Site Revegetation.
 - c. After placement of the seed/fertilizer mixture, a layer of pine needles shall be placed uniformly over the topsoil at a rate of 0.1 pounds per square foot. Pine needles shall be imported to the project site and shall not be gathered from the immediate surrounding area. The CONTRACTOR may gather pine needles on the project site directly along pipeline route and store them for later use. All such gathering shall take place prior to stripping of the topsoil.
 6. Trench zone backfill and final backfill for pipelines under structures shall be the same material as used in the pipe zone, except where concrete encasement is required by the Contract Documents.
 7. Aggregate base materials under pavements shall be Type G material constructed to the thicknesses indicated.
 8. Backfill around structures shall be Types A through Type H materials, or any mixture thereof.

9. Backfill used to replace pipeline trench over-excavation shall be the same material as used for the pipe zone backfill if the trench conditions are not wet. If trench conditions are wet, a layer of Type F material with a layer of filter fabric to prevent migration of fines shall be used. Filter fabric shall comply with the requirements given for Underdrains in Section 88-1.03 of the Standard Specifications.

2.4 MATERIALS TESTING

- A. All soils testing of samples submitted by the CONTRACTOR shall be done by a testing laboratory of the DISTRICT'S choice and at the DISTRICT'S expense. At its discretion, the DISTRICT may request that the CONTRACTOR supply samples for testing of any material used in the work.
- B. Particle size analysis of soils and aggregates shall be performed using ASTM D422.
- C. Determination of sand equivalent value shall be performed using ASTM D2419.
- D. **Unified Soil Classification System:** References in this Section to soil classification types and standards shall have the meanings and definitions indicated in ASTM D2487. The CONTRACTOR shall be bound by all applicable provisions of said ASTM D2487 in the interpretation of soil classifications.
- E. The testing for chloride, sulfate, resistivity, and pH shall be done in accordance with California Test Method 643 of the California Department of Transportation.

PART 3 -- EXECUTION

3.1 EXCAVATION - GENERAL

- A. **General:** Except when specifically provided to the contrary, excavation shall include the removal of all materials (including rock) of whatever nature encountered, including all obstructions of any nature that would interfere with the proper execution and completion of the WORK. The removal of said materials shall conform to the lines and grades indicated or ordered. Unless otherwise indicated, the entire construction site shall be stripped of all vegetation and debris, and such material shall be removed from the site prior to performing any excavation or placing any fill. The CONTRACTOR shall furnish, place, and maintain all supports and shoring that may be required for the sides of the excavations. Excavations shall be sloped or otherwise supported in a safe manner in accordance with applicable State safety requirements and the requirements of OSHA Safety and Health Standards for Construction (29CFR1926).
- B. **Removal and Exclusion of Water:** The CONTRACTOR shall remove and exclude water, including stormwater, groundwater, irrigation water, water from leaking pipes, and wastewater, from all excavations. Dewatering wells, well points, sump pumps, or other means shall be used to remove water and continuously maintain groundwater at a level at least two feet below the bottom of excavations. Water shall be removed and excluded until backfilling is complete and all field soils testing has been completed.
- C. If a moveable trench shield is used during excavation, pipe installation, and backfill operations, the shield shall be moved by lifting the shield free of the trench bottom or backfill and then moving the shield horizontally without binding against the trench sidewalls. The CONTRACTOR shall not drag trench shields along the trench causing

damage or displacement to the trench sidewalls, the pipe, or the bedding and backfill. If the trench walls cave in or slough, the trench shall be excavated as an open excavation with sloped sidewalls, or trench shoring shall be used.

3.2 STRUCTURE, ROADWAY, AND EMBANKMENT EXCAVATION

- A. **Excavation of Currently Unpaved Areas to be Paved:** Excavation under currently unpaved areas to be paved shall extend to the bottom of the aggregate base or subbase, if such base is called for; otherwise it shall extend to the paving thickness. After the required excavation has been completed, the top 12 inches of exposed surface shall be scarified, brought to optimum moisture content, and rolled with heavy compaction equipment to obtain 95 percent of maximum density. The finished subgrade shall be even, self-draining, and in conformance with the slope of the finished pavement. Areas that could accumulate standing water shall be regraded to provide a self-draining subgrade.
- B. **Notification of DISTRICT:** The CONTRACTOR shall notify the DISTRICT at least 3 days in advance of completion of any structure excavation and shall allow the DISTRICT a review period of at least one day before the exposed foundation is scarified and compacted or is covered with backfill or with any construction materials.

3.3 PIPELINE AND UTILITY TRENCH EXCAVATION

- A. **Exploratory Excavation:**
 - 1. The CONTRACTOR shall excavate and expose buried points of connection to existing utilities where indicated on the Drawings. Excavation shall be performed prior to preparation of Shop Drawings for connections and before fabrication of pipe, and the data obtained shall be used in preparing Shop Drawings.
 - 2. Data, including dates, locations excavated, and sketches, shall be submitted to the DISTRICT within one week of excavation.
 - 3. Damage to utilities from excavation activities shall be repaired by the CONTRACTOR at no additional cost to the DISTRICT.
- B. **General:**
 - 1. Unless otherwise indicated or ordered, excavation for pipelines and utilities shall be open-cut trenches with widths as indicated. Trench width shall be adequate to allow the pipe to be aligned in the center of trench, including pipes installed on curves. In no case shall the distance from the edge of the trench to the edge of the pipe be less than 12-inches.
 - 2. Damage to utilities from excavation activities shall be repaired by the CONTRACTOR at no additional cost to the DISTRICT.
- C. **Trench Bottom:** The bottom of the trench shall be excavated uniformly to the grade of the bottom of the pipe bedding. Excavations for pipe bells, couplings and welding shall be made as required. The use of mounds of material to support the pipe shall not be permitted.

- D. **Open Trench:** The maximum amount of open trench permitted in any one location shall be 500 feet, or the length necessary to accommodate the amount of pipe installed in a single day, whichever is greater. All trenches shall be fully backfilled at the end of each day or, in lieu thereof, shall be covered by heavy steel plates adequately braced and capable of supporting vehicular traffic in those locations where it is impractical to backfill at the end of each day. The above requirements for backfilling or use of steel plate will be waived in cases where the trench is located further than 100 feet from any traveled roadway or occupied structure. In such cases, however, barricades and warning lights meeting safety requirements shall be provided and maintained. Additional requirements regarding the protection of open excavations described in Section 01530 – Protection of Existing Facilities.
- E. **Trench Over-Excavation:** Where trenches are indicated to be over-excavated, excavation shall be to the depth indicated, and backfill shall be installed to the grade of the bottom of the pipe bedding.
- F. **Over-Excavation:** When ordered by the DISTRICT, whether indicated on the Drawings or not, trenches shall be over-excavated beyond the depth and/or width shown. Such over-excavation shall be to the dimensions ordered. The trench shall then be backfilled to the grade of the bottom of the pipe bedding. Over-excavation less than 6 inches below the limits on the Drawings shall be done at no increase in cost to the DISTRICT. When the over-excavation ordered by the DISTRICT is 6 inches or greater below the limits shown, or wider, additional payment will be made to the CONTRACTOR. Said additional payment will be made under separate unit price bid items for over-excavation if such bid items have been established; otherwise payment will be made in accordance with a negotiated price.
- G. Where pipelines are to be installed in embankments, fills, or structure backfills, the fill shall be constructed to a level at least one foot above the top of the pipe before the trench is excavated.

3.4 OVER-EXCAVATION NOT ORDERED OR INDICATED

- A. Any over-excavation carried below the grade ordered or indicated, shall be backfilled to the required grade with the indicated material and compaction. Such work shall be performed by the CONTRACTOR at no additional cost to the DISTRICT.

3.5 EXCAVATION IN LAWN AREAS

- A. Where excavation occurs in lawn areas, the sod shall be carefully removed, dampened, and stockpiled to preserve it for replacement. Excavated material may be placed on the lawn; provided, that a drop cloth or other suitable method is employed to protect the lawn from damage. The lawn shall not remain covered for more than 72 hours. Immediately after completion of backfilling and testing of the pipeline, the sod shall be replaced and lightly rolled in a manner so as to restore the lawn as near as possible to its original condition. CONTRACTOR shall provide new sod if stockpiled sod has not been replaced within 72 hours.

3.6 EXCAVATION IN VICINITY OF TREES

- A. Except where trees are indicated to be removed, trees shall be protected from injury during construction operations. No tree roots over 2 inches in diameter shall be cut without express permission of the DISTRICT. Trees shall be supported during excavation by any means previously reviewed by the DISTRICT.

3.7 ROCK EXCAVATION

- A. The CONTRACTOR is hereby notified that bedrock and boulders in excess of three feet (maximum dimension) may be encountered.
- B. **Explosives and Blasting:** Blasting will be permitted only upon written authorization from the DISTRICT.
- C. **Rock Excavation:**
 - 1. For all Work requiring trenches 3 feet in width or less, rock excavation shall be defined as removal of solid material which by actual demonstration cannot, in the DISTRICT'S opinion, be reasonably loosened or ripped by a hydraulic excavator or backhoe loader with a minimum 110 flywheel horsepower and that must be systematically drilled and blasted or broken with power-operated hammers or other such equipment.
 - 2. For all Work requiring trenches greater than 3 feet in width, rock excavation shall be defined as removal of solid material which by actual demonstration cannot, in the DISTRICT's opinion, be reasonably loosened or ripped by a hydraulic excavator or backhoe loader with a minimum 110 flywheel horsepower and that must be systematically drilled and blasted or broken with power-operated hammers or other such equipment.
 - 3. When performing rock excavation as defined above, the CONTRACTOR may utilize blasting, power-operated hammers or other such equipment as necessary to accomplish the Work. The decision as to which means and methods shall be the responsibility of the CONTRACTOR.
 - 4. Payment for performing rock excavation shall be as described in Section 00310 – Measurement and Payment. The CONTRACTOR shall keep a daily record of the amount of time expended performing rock excavation. This daily record shall be verified by the DISTRICT (or its representatives). The DISTRICT shall have final authority and discretion as to determination of the number of hours actually expended performing rock excavation.
 - 5. Removal of boulders larger than 4 feet at their narrowest dimension shall be considered "rock excavation," if drilling and blasting, breaking them apart with a power-operated hammer or similar means is both necessary and actually utilized for their removal.

3.8 DISPOSAL OF EXCESS EXCAVATED MATERIAL

- A. The CONTRACTOR shall remove and dispose of all excess excavated material at a site selected by the CONTRACTOR and approved by the DISTRICT.
- B. The CONTRACTOR shall obtain all required permits, landowner, and agency approvals for disposal of excess excavated material and shall pay all costs associated with the removal and disposal.

3.9 BACKFILL - GENERAL

- A. Backfill shall not be dropped directly upon any structure or pipe. Backfill shall not be placed around or upon any structure until the concrete has attained sufficient strength to

withstand the loads imposed. Backfill around water retaining structures shall not be placed until the structures have been tested, and the structures shall be full of water while backfill is being placed.

- B. Except for drain rock materials being placed in over-excavated areas or trenches, backfill shall be placed after all water is removed from the excavation.
- C. Immediately prior to placement of backfill materials, the bottoms and sidewalls of trenches and structure excavations shall have all loose sloughing, or caving soil and rock materials removed. Trench sidewalls shall consist of excavated surfaces that are in a relatively undisturbed condition before placement of backfill materials.

3.10 PLACING AND SPREADING OF BACKFILL MATERIALS

- A. Backfill materials shall be placed and spread evenly in layers not to exceed 8-inches in thickness
- B. During spreading, each layer shall be thoroughly mixed as necessary to promote uniformity of material in each layer. Pipe zone backfill materials shall be manually spread around the pipe so that when compacted the pipe zone backfill will provide uniform bearing and side support. Backfill material shall be placed into the void space in the haunches of the pipe by the use of hand tools such shovels and spades. The CONTRACTOR shall not rely upon the compactive effort of machinery to move the material into the void space.
- C. Backfill material shall have a moisture content of optimum plus or minus 4 percent at the time of compaction. Where the backfill material moisture content is below the optimum moisture content, water shall be added before or during spreading until the proper moisture content is achieved. Where the backfill material moisture content is too high to permit the specified degree of compaction the material shall be dried until the moisture content is satisfactory.

3.11 COMPACTION OF FILL, BACKFILL, AND EMBANKMENT MATERIALS

- A. Compaction by flooding, ponding, or jetting shall not be allowed.
- B. Equipment weighing more than 10,000 pounds shall not be used closer to walls than a horizontal distance equal to the depth of the fill at that time. Hand operated power compaction equipment shall be used where use of heavier equipment is impractical or restricted due to weight limitations.
- C. Backfill around and over pipelines that is mechanically compacted shall be compacted using light, hand operated equipment. After completion of at least two feet of compacted backfill over the top of pipeline, compaction equipment weighing no more than 8,000 pounds may be used to complete the trench backfill.
- D. **Compaction Requirements:** The following compaction test requirements shall be in accordance with ASTM D1557 for Type A, B, C, G, H and K materials and in accordance with ASTM D4253 and D4254 for Type D, E, F, J and N materials.

<u>Location or Use of Fill</u>	<u>Percentage of Maximum Density</u>
Pipe zone backfill	90
Trench zone backfill, beneath paved areas or structures	95
Trench zone backfill, not beneath paved areas or structures	90
Final backfill, beneath paved areas or structures	95
Final backfill, not beneath paved areas or structures	90
Embankments and fills beneath paved areas or structures	95
Embankments and fills, not beneath paved areas or structures	90
Topsoil (Type K material)	80
Aggregate base (Type G material)	95

3.12 PIPE AND UTILITY TRENCH BACKFILL

- A. **Pipe Zone Backfill:** The pipe zone is defined as that portion of the vertical trench cross-section lying between a plane 6-inches below the bottom surface of the pipe and a plane at a point 12-inches above the top surface of the pipe. The pipe zone shall be backfilled with the indicated backfill material. The CONTRACTOR shall exercise care to prevent damage to the pipeline coating, cathodic bonds, and the pipe itself during the installation and backfill operations.
- B. **Trench Zone Backfill:** After the pipe zone backfill has been placed, backfilling of the trench zone may proceed. The trench zone is defined as that portion of the vertical trench cross-section lying as indicated between a plane 12-inches above the top surface of the pipe and a plane at a point 18 inches below the finished surface grade, or if the trench is under pavement, 18 inches below the roadway subgrade.
- C. **Marking Tape Installation:** Marking tape shall be installed as indicated in the Drawings.
- D. **Final Backfill:** Final backfill is all backfill in the trench cross-sectional area within 18 inches of finished grade, or if the trench is under pavement, all backfill within 18 inches of the roadway subgrade.

3.13 FILL AND EMBANKMENT CONSTRUCTION

- A. The area where a fill or embankment is to be constructed shall be cleared of all vegetation, roots and foreign material. Following this, the surface shall be moistened, scarified to a depth of 6 inches, and rolled or otherwise mechanically compacted. Embankment and fill material shall be placed and spread evenly in approximately horizontal layers. Each layer shall be moistened or aerated, as necessary. Unless otherwise approved by the DISTRICT, each layer shall not exceed 6 inches of compacted thickness. The embankment, fill, and the scarified layer of underlying ground shall be compacted to 95 percent of maximum density under structures and paved areas, and 90 percent of maximum density elsewhere.

- B. When an embankment or fill is to be made and compacted against hillsides or fill slopes steeper than 4:1, the slopes of hillsides or fills shall be horizontally benched to key the embankment or fill to the underlying ground. A minimum of 12 inches normal to the slope of the hillside or fill shall be removed and re-compacted as the embankment or fill is brought up in layers. Material thus cut shall be re-compacted along with the new material at no additional cost to the DISTRICT. Hillside or fill slopes 4:1 or flatter shall be prepared in accordance with Paragraph A, above.
- C. Where embankment or structure fills are constructed over pipelines, the first 4 feet of fill over the pipe shall be constructed using light placement and compaction equipment that does not damage the pipe. Heavy construction equipment shall maintain a minimum distance from the edge of the trench equal to the depth of the trench until at least 4 feet of fill over the pipe has been completed.

3.14 FIELD TESTING

- A. **General:** All field soils testing shall be done by a testing laboratory of the DISTRICT's choice at the DISTRICT's expense except as indicated below.
- B. Where soil material is required to be compacted to a percentage of maximum density, the maximum density at optimum moisture content will be determined in accordance with Method C of ASTM D1557. Where cohesionless, free draining soil material is required to be compacted to a percentage of relative density, the calculation of relative density will be determined in accordance with ASTM D4253 and D4254. Field density in-place tests shall be performed in accordance with ASTM D1556, ASTM D2922, or by such other means acceptable to the DISTRICT.
- C. In cases where the test of the fill or backfill shows non-compliance with the required density, the CONTRACTOR shall accomplish such remedy as may be required to insure compliance. Subsequent testing to show compliance shall be by a testing laboratory selected by the DISTRICT and shall be at no additional cost to the DISTRICT.
- D. The CONTRACTOR shall provide test trenches and excavations including excavation, trench support, and groundwater removal for the DISTRICT'S field soils testing operations. The trenches and excavations shall be provided at the locations and to the depths required by the DISTRICT. All WORK for test trenches and excavations shall be provided at no additional cost to the DISTRICT.

3.15 INSTALLATION AND/OR REHABILITATION OF PIPE BY TRENCHLESS METHODS

- A. The Contract Documents as written are based upon of the use of open cut construction methods. If the CONTRACTOR desires to use trenchless construction methods to either install new mains or services or rehabilitate existing mains or services, the CONTRACTOR shall submit a plan to the DISTRICT describing how the following issues will be addressed:
 - 1. Equipment and tools to be used
 - 2. Pipe material to be used
 - 3. Protection of existing utilities from damage
 - 4. The possible presence of large boulders or rock outcroppings that would fall under the rock excavation clause given in Article 3.7 of this Section.
 - 5. Prevention of frac-outs and the contingency plans in the event of an accidental release of drilling fluids

6. Connections of laterals to the new mains
 7. Connections to existing mains
 8. Pre-rehabilitation cleaning of existing pipelines, including wastewater control and disposal
- B. The DISTRICT shall review the proposed plan and order changes, revisions and/or resubmittal as the DISTRICT deems appropriate. In the event that the DISTRICT and the CONTRACTOR cannot arrive at a plan and methodology acceptable to both parties, the CONTRACTOR shall proceed with installation of the pipelines using the open cut construction methods described in the Contract Documents.

- END OF SECTION -

SECTION 02460 - A.C. PAVEMENT AND BASE

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall provide asphalt concrete pavement and base, complete and in place, in accordance with the Contract Documents.
- B. Asphalt concrete pavement shall be plant-mixed asphalt concrete and shall conform to the requirements of this Section.
- C. For Work within the Town of Truckee, "trench restoration" shall be defined to include placement of pavement to replace that pavement removed to accommodate installation of the pipeline. It shall also include those areas of pavement directly adjacent to the pipeline trench that must be removed due to damage or to comply with the one-foot "T" cut as defined in the Town of Truckee Encroachment Permit and indicated in Detail 1 on Drawing D-1.
- D. For Work within the Town of Truckee, "lane restoration" shall be defined to include the milling of a two-inch layer of existing or newly placed AC, and the placement of new 2-inch thick layer of AC, as defined in the Town of Truckee Encroachment Permit. Lane restoration shall only be performed after completion of trench restoration.

1.2 CONTRACTOR SUBMITTALS

- A. The CONTRACTOR shall furnish submittals in accordance with Section 01300 – Contractor Submittals.
- B. The CONTRACTOR shall submit materials testing reports and other pertinent information certifying that the AC pavement conforms to the requirements of the Contract Documents.
- C. **Suitability Tests of Proposed Materials:** Tests for conformance with the Specifications shall be performed prior to start of the WORK. Results of all tests shall be submitted to the DISTRICT for approval. Materials to be tested shall include aggregate base, coarse and fine aggregate for paving mixtures, mineral filler, and asphalt cement.

PART 2 -- PRODUCTS

2.1 AGGREGATE BASE

- A. Aggregate base shall conform to the requirements given for Class 2 aggregate base in Section 26 of the Standard Specifications.

2.2 TACK COAT

- A. Tack coat shall be bituminous binder (SS-1H) or AR-1000 paving asphalt.

2.3 PLANT MIXED ASPHALT

- A. Asphalt concrete shall be Caltrans ½" Maximum, Medium (Type B) with PG 64-28 Asphalt Binder or an approved equal.

2.4 PAVEMENT MARKING PAINT

- A. Pavement marking paint shall be a product specifically formulated for use on asphalt concrete pavement and shall have a proven record of performance and durability.

2.5 ASPHALT EMULSION PAINT BINDER

- A. Asphalt emulsion paint binder shall be Grade SS-1, as specified in Section 94 of the Standard Specifications.

2.6 ASPHALT CONCRETE DIKE

- A. In areas where small portions (up to 10 linear feet) of existing AC dike are removed to accommodate crossing, the dike shall be restored to the original dimensions.
- B. In areas where large portions of existing AC dike are removed, dimensions and mix design of new AC dike shall conform to the requirements for Type A "High Dike" as indicated in Standard Plan A87 of the Caltrans Standards Plans.

PART 3 -- EXECUTION

3.1 SUBGRADE PREPARATION

- A. The subgrade shall be prepared in accordance with Section 02200 - Earthwork as applicable to roadways and embankments. The surface of the subgrade after compaction shall be hard, uniform, smooth and true to grade and cross-section. Subgrade for pavement shall not vary more than 0.02-foot from the indicated grade and cross section. Subgrade for base material shall not vary more than 0.04-foot from the indicated grade and cross section.

3.2 AGGREGATE BASE

- A. Aggregate base shall be provided where indicated to the thickness indicated. Placement of aggregate base shall conform to the requirements of Section 26 of the Standard Specifications.

3.3 SAWCUTTING FOR FINAL PAVEMENT RESTORATION

- A. Prior to placement of the permanent AC pavement, the existing pavement shall be sawcut or milled to provide a clean, straight edge free of damaged AC. The line to be sawcut shall be determined by the DISTRICT in cooperation with the Town of Truckee, Nevada County or Placer County as appropriate. The CONTRACTOR shall provide adequate notice to allow the DISTRICT to determine the area to be repaved.

3.4 TACK COAT

- A. A tack coat shall be applied to existing paved surfaces where new asphalt concrete is to be placed on existing pavement. It shall also be applied to the contact surfaces of all cold pavement joints, curbs, gutters, manholes and the like immediately before the adjoining asphalt pavement is placed. Care shall be taken to prevent the application of tack coat material to surfaces that will not be in contact with the new asphalt concrete pavement. Tack coat asphalt shall be spray-applied at the rate of approximately 0.05 gal/sq yd.

3.5 ASPHALT CONCRETE

- A. Asphalt concrete shall not be placed when the atmospheric temperature is below 10° C or during unsuitable weather.
- B. The asphalt concrete shall be evenly spread upon the base to such a depth that, after rolling, it will be of the required cross section and grade of the course being constructed.
- C. Spreading, once commenced, shall be continued without interruption.

3.6 PAVEMENT MARKING

- A. Pavement marking paint shall be applied where indicated only when the pavement surface is dry and clean, and when the air temperature is above 10° C. All equipment used in the application of pavement marking shall produce stripes and markings of uniform quality with clean and well-defined edges that conform to the details and dimensions indicated. Drips, overspray, improper markings, and paint material tracked by traffic shall be immediately removed from the pavement surface by methods previously reviewed by the DISTRICT.

3.7 SAWCUTTING PRIOR TO COMMENCING CONSTRUCTION

- A. Prior to removing any existing asphalt, the DISTRICT, the CONTRACTOR and the agency or party that owns the pavement to be disturbed shall meet on-site to discuss the amount of pavement to be removed. After the proposed pavement removal has been approved, the CONTRACTOR may commence sawcutting of the pavement to accommodate construction. This meeting shall occur after the existing utilities have been marked through the USA process and telephone calls to the Town of Truckee and Caltrans.

3.8 PAVEMENT RESTORATION

- A. Trench restoration shall be performed at all areas where pavement has been removed to accommodate pipeline installation.
- B. Lane restoration is not required.

- END OF SECTION -

SECTION 02565 - DUCTILE IRON PIPE

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall provide ductile iron pipe, fittings, specials and all appurtenant work, complete in place, in accordance with the Contract Documents.
- B. **Use of Ductile Iron and PVC Pipe:**
 - 1. Throughout the Contract Drawings, where new pipeline installations are indicated as "New Water Pipe," the CONTRACTOR may utilize either ductile iron pipe conforming to the requirements of this Section, or PVC pipe conforming to the requirements of Section 02597 – PVC Pressure Pipe.
 - 2. In some cases, pipe material is specified as ductile iron or PVC only. In those installations, the specific pipe material indicated shall be used and substitutions shall not be allowed.
 - 3. In some cases, alternate alignments are indicated for ductile iron and PVC pipe as a result of differences in the pipe materials. In those installations, the specific pipe material indicated for a given alignment shall be used for that alignment.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

ASTM A307	Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength
ASTM A536	Ductile Iron Castings
ASTM C150	Portland Cement
AWWA C104	Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water
AWWA C110	Ductile-Iron and Gray-Iron Fittings, 3-in. Through 48-in., for Water
AWWA C111	Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
AWWA C115	Flanged Ductile-Iron Pipe with Ductile Iron or Gray-Iron Threaded Flanges
AWWA C150	Thickness Design of Ductile-Iron Pipe
AWWA C151	Ductile-Iron Pipe, Centrifugally Cast, for Water
AWWA C153	Ductile-Iron Compact Fittings for Water Service
AWWA C219	Bolted, Sleeve-Type Couplings for Plain-End Pipe
AWWA C550	Protective Epoxy Interior Coatings for Valves and Hydrants
AWWA C600	Installation of Ductile Iron Water Mains and Their Appurtenances

1.3 CONTRACTOR SUBMITTALS

- A. The CONTRACTOR shall furnish submittals in accordance with Section 01300 – Contractor Submittals.

- B. The CONTRACTOR shall submit the following information:
 - 1. Catalog cuts of pipe, fittings and specials indicating the size, manufacturer, end joints, lining and coating and pressure rating.
 - 2. Catalog cuts of pipeline marking tape indicating the size, color, manufacturer and material.

PART 2 -- PRODUCTS

2.1 GENERAL

- A. Mortar-lined ductile iron pipe shall conform to AWWA C104 and C151. Pipe shall be pressure class 350, with a diameter as shown in the Drawings. Pipe shall be furnished complete with all necessary rubber gaskets, specials and fittings as required under the Contract Documents.
- B. Pipe materials shall conform to the requirements of AWWA C151.
- C. **Handling and Storage:** The pipe shall be handled by devices acceptable to the DISTRICT, designed and constructed to prevent damage to the pipe coating/exterior. The use of equipment which might injure the pipe coating/exterior will not be permitted. Stockpiled pipe shall be suitably supported and shall be secured to prevent accidental rolling. All other pipe handling equipment and methods shall be acceptable to the DISTRICT.
- D. **Laying Lengths:** Maximum pipe laying lengths shall be 20 feet with shorter lengths provided as required by the Drawings.
- E. **Closures and Correction Pieces:** Closures and correction pieces shall be provided as required so that closures may be made due to different headings in the pipe laying operation and so that correction may be made to adjust the pipe laying to conform to pipe stationing shown on the Drawings. The locations of correction pieces and closure assemblies shall be acceptable to the DISTRICT.

2.2 FITTINGS AND SPECIALS

- A. Fittings for ductile iron pipe shall conform to the requirements of AWWA C153 or AWWA C110. Fittings shall have a minimum pressure rating of 250 psi. Flanged cast iron fittings with a pressure rating of 150 psi shall not be used. Fittings shall be either cement-mortar lined and asphalt coated as described in this specification, or epoxy lined and coated in accordance with AWWA C550.
- B. The pressure rating of fittings shall be stamped or cast directly on the exterior of the fitting by the manufacturer. Any fittings where the pressure rating has not been so indicated shall be rejected by the DISTRICT and removed from the site.
- C. Restrained joints at fittings and specials shall be as described in Article 2.3 of this Specification.

- D. Sleeve couplings shall conform to the requirements of AWWA C219. Sleeve and end rings shall conform to ASTM A536 and shall be epoxy lined and coated in accordance with AWWA C550. Gaskets shall conform to AWWA C219. Sleeve couplings shall have a pressure rating of no less than 250 psi and shall be clearly marked with the rated pressure. The following products are acceptable for sleeve couplings sized 2-inch to 12-inch:
1. Romac Industries, Inc., Style 501
 2. Smith-Blair, Product 441
 3. Ford Meter Box Company, Inc., Style FC1
 4. or approved equal.
- E. Flanged coupling adapters shall conform to the requirements of AWWA C219. Flanged body and end rings shall conform to ASTM A536 and shall be epoxy lined and coated in accordance with AWWA C550. Gaskets shall conform to AWWA C219. CONTRACTOR shall be responsible for matching bolt patterns of flanged coupling adapter with connecting pipe or appurtenances. Flanged coupling adapters shall have a pressure rating of no less than 200 psi and shall be clearly marked with the rated pressure. The following products are acceptable for flanged coupling adapters sized 3-inch to 12-inch:
1. Romac Industries, Inc., Style "FCA501"
 2. Dresser, Style 227
 3. Smith-Blair, Product 912
 4. or approved equal
- F. Specials shall be as indicated in the Drawings.
- G. **Nuts and Bolts:**
1. Nuts and bolts for flanges and T-bolts for mechanical joint fittings shall be ASTM A307, Grade A or B carbon steel. Nuts and bolts shall be factory hot-dip galvanized, zinc-plated, epoxy-coated or fluoropolymer-coated. Bare carbon steel shall not be allowed. Threads on galvanized bolts and nuts shall be formed with suitable taps and dies such that they retain their normal clearance after hot-dip galvanizing. The nuts shall be capable of developing the full strength of the bolts. Threads shall be Coarse Thread Series conforming to the requirements of the American Standard for Screw Threads.
 2. For items that are packaged from the factory with bare carbon steel nuts and bolts, the factory provided items shall be replaced with nuts and bolts of equal or better strength that conform to the coating requirements of this Section. The application of coatings or paints in the field by brush or spray shall not be adequate to satisfy the requirements of this Section.
 3. Uncoated nuts and bolts made of high-strength low-alloy steel conforming to the requirements of ASTM A242 or ASTM A588 shall be allowed provided that there is a grade marking applied to the item at the factory. In order to be acceptable, the

DISTRICT must be able to confirm the type of steel by a simple visual inspection of an assembled joint. The application of a manufacturer's insignia alone shall not be acceptable.

- a. Romac has submitted documentation to the DISTRICT confirming that uncoated bolting materials supplied with Romac products conform to the requirements of ASTM A242 or ASTM A588. Uncoated bolting materials included inside factory sealed packages from Romac shall be acceptable even though they do not include a grade marking.
 - b. The acceptance of uncoated and unmarked bolting materials shall apply to bolting materials supplied by Romac only. Uncoated bolting materials supplied with products by other manufacturers shall be subject to the full requirements of this Section.
4. The requirements for nuts and bolts given in this Article shall also apply to threaded rods, carriage bolts, studs and any similar items used to construct water system piping in a buried application.
 5. In the event that the CONTRACTOR proposes to supply fastener materials that do not comply with the above requirements, the CONTRACTOR shall note this non-conformance in the Shop Drawing submittal. The DISTRICT shall consider such submittals on a case-by-case basis.

2.3 JOINTS

- A. **Joint Design:** Ductile iron pipe and fittings shall be furnished with mechanical joints, push-on joints, flanged joints, and restrained joints, as required.
 1. Mechanical joints and push-on joints shall conform to AWWA C111.
 2. Flanged joints shall conform to AWWA C115.
 3. Restrained joints shall be made up using one of the following:
 - a. "Field-Lok" gaskets by U.S. Pipe
 - b. "Gripper" gaskets by Gripper Gasket Company
 - c. Wedge-type retainer glands - EBAA "Megalug", EBAA "Megaflange", Sigma "One-Lok", or Stargrip Series 3000
 - d. "One-Bolt" fittings by One Bolt Incorporated
 - e. "GripRing" Pipe Restraints by Romac Industries.
 - f. Foster Adaptors by Infact Corporation
 - g. Restraint harnesses - EBAA Series 1100 HD or EBAA Series 1700
 - h. MJ Field Lok Restraints by US Pipe

B. **Joint Restraint:** Joints at all fittings and valves shall be restrained. Wherever possible, the CONTRACTOR shall install full lengths of pipe (18 feet long minimum) on either side of fittings and valves. Straight runs of pipe on either side of a fitting shall be restrained by one of two methods.

- 1) The CONTRACTOR may pour concrete thrust blocks as indicated in the Contract Documents.
- 2) The CONTRACTOR may restrain in-line pipe joints by the use of methods indicated in this Section.
 - a. For an elbow, the table below gives the length of pipe in feet on each side of the elbow that the pipe joints must be restrained.

Elbow	Pipe Diameter								
	4"	6"	8"	10"	12"	14"	16"	20"	24"
11.25°	2	3	4	4	5	6	7	9	10
22.5°	4	6	7	9	11	13	14	17	20
45°	9	12	16	19	22	27	30	36	42
90°	22	29	38	46	53	64	72	86	100

- b. For a tee, the table below gives the length of pipe in feet on the branch run that the pipe joints must be restrained. The pipe along the through run may be unrestrained, provided that another nearby fitting does not require restrained pipe as indicated in the Contract Documents.

Fitting	Required Length of Restrained Pipe for Branch Run
8" x 8" x 4" Tee	5 feet
8" x 8" x 6" Tee	35 feet
8" x 8" x 8" Tee	59 feet
10" x 10" x 4" Tee	0 feet
10" x 10" x 6" Tee	28 feet
10" x 10" x 8" Tee	54 feet
10" x 10" x 10" Tee	76 feet
12" x 12" x 4" Tee	0 feet
12" x 12" x 6" Tee	21 feet
12" x 12" x 8" Tee	49 feet
12" x 12" x 10" Tee	72 feet
12" x 12" x 12" Tee	92 feet
14" x 14" x 4" Tee	0 feet
14" x 14" x 6" Tee	12 feet
14" x 14" x 8" Tee	33 feet
14" x 14" x 10" Tee	51 feet
14" x 14" x 12" Tee	66 feet
14" x 14" x 14" Tee	81 feet
16" x 16" x 4" Tee	0 feet
16" x 16" x 6" Tee	7 feet
16" x 16" x 8" Tee	30 feet
16" x 16" x 10" Tee	47 feet
16" x 16" x 12" Tee	64 feet
16" x 16" x 14" Tee	79 feet

16" x 16" x 16" Tee	93 feet
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- c. For a dead end pipe run with either an end cap or plug, the table below gives the length of pipe in feet from the end cap or plug that the pipe joints must be restrained.

	Pipe Diameter								
Dead End	4"	6"	8"	10"	12"	14"	16"	20"	24"
End Cap	42	61	79	96	112	128	144	172	201
Plug	42	61	79	96	112	128	144	172	201

- C. For bell-and-spigot ends with rubber gaskets, the clearance between the bells and spigots shall be such that when combined with the gasket groove configuration and the gasket itself, will provide watertight joints under all operating conditions when properly installed.
- D. **Flange Gaskets:** Gaskets for flanged joints shall be full-faced, 1/8-inch thick synthetic rubber conforming with AWWA C115. Gaskets shall be either full face or ring gaskets with integral ribs. Flat ring gaskets shall not be acceptable. Gaskets shall be rated for long-term exterior above-grade installation by the manufacturer.

2.4 CEMENT-MORTAR LINING

- A. **Cement-Mortar Lining for Shop Application:** Interior surfaces of all ductile iron pipe, fittings, and specials shall be cleaned and lined in the shop with cement-mortar lining applied centrifugally in conformity with AWWA C104. During the lining operation and thereafter, the pipe shall be maintained in a round condition by suitable bracing or strutting. Every precaution shall be taken to prevent damage to the lining. If lining is damaged or found faulty at delivery site, the damaged or unsatisfactory portions shall be replaced with lining conforming to these Specifications.
- B. **Cement:** Cement for mortar lining shall be Type V conforming to the requirements of AWWA C104. Cement shall not originate from kilns that burn metal-rich hazardous waste fuel, nor shall fly ash or pozzolan be used as a cement replacement.
- C. The minimum lining thickness shall be as follows:

<u>Nominal Pipe Diameter (in)</u>	<u>Minimum Lining Thickness (in)</u>
3-12	1/8
14-24	3/16

- D. **Protection of Pipe Lining/Interior:** All shop-applied cement mortar lining shall be given a seal coat of asphaltic material in conformance with AWWA C104.

2.5 EXTERIOR COATING

- A. **Exterior Coating of Buried Piping:** The exterior coating shall be an asphaltic coating approximately 1 mil thick.

2.6 PIPELINE MARKING TAPE

- A. Pipeline marking tape shall have a minimum thickness of 5 mils, and shall be impervious to alkalis, acids, chemicals and solvents. Tape shall have a 50-gauge solid aluminum foil

core laminated between two layers of inert plastic film. Tape shall have a minimum width of three inches and a minimum tensile strength of 100 pounds per 3-inch wide strip.

- B. Pipeline marking tape shall be colored blue and shall bear a continuously printed message in permanent black letters. Lettering shall be 1-inch tall and shall read "CAUTION – WATER LINE BURIED BELOW".

2.7 PIPELINE LOCATOR WIRE

- A. Pipeline locator wire shall be No. 10 AWG solid copper wire with THWN insulation. Splice connectors shall be rated for wet location/direct burial installation. All splices shall be covered with heat-activated shrink-wrap tubing or heavy mastic tape to create a watertight connection.

2.8 THRUST AND ANCHOR BLOCKS

- A. Thrust and anchor blocks shall be constructed of portland cement concrete as specified in Section 90 of the Standard Specifications. The minimum 28-day compressive strength shall be 2,000 psi (14 MPa). Maximum aggregate size shall be 1-1/2 inch (37.5 mm) and maximum slump shall be 4 inches (10 mm). Air entrainment is not required.

PART 3 -- EXECUTION

3.1 INSTALLATION OF PIPE

- A. **Handling and Storage:** All pipe, fittings and specials shall be carefully handled and protected against damage, impact shocks, and free fall. All pipe handling equipment shall be acceptable to the DISTRICT. Pipe shall not be placed directly on rough ground but shall be supported in a manner that will protect the pipe against injury whenever stored at the trench site or elsewhere. No pipe shall be installed where the lining or coating shows defects that may be harmful as determined by the DISTRICT. Such damaged lining or coating shall be repaired, or a new undamaged pipe shall be furnished and installed.
- B. All pipe damaged prior to Substantial Completion shall be repaired or replaced by the CONTRACTOR. Methods of repair shall be subject to approval by the DISTRICT.
- C. The CONTRACTOR shall inspect each pipe and fitting prior to installation to insure that there are no damaged portions of the pipe.
- D. Before placement of pipe in the trench, each pipe or fitting shall be thoroughly cleaned of any foreign substance, which may have collected thereon and shall be kept clean at all times thereafter. For this purpose, the openings of all pipes and fittings in the trench shall be closed during any interruption to the WORK.
- E. **Pipe Laying:** The pipe shall be installed in accordance with AWWA C600. Pipe shall be laid directly on the bedding material. Blocking shall not be permitted, and the bedding shall be such that it forms a continuous, solid bearing for the full length of the pipe. Excavations shall be made as needed to facilitate removal of handling devices after the pipe is laid. Bell holes shall be formed at the ends of the pipe to prevent point loading at the bells or couplings. Excavation shall be made as needed outside the normal trench section at field joints to permit adequate access to the joints for field connection operations and for application of coating on field joints.

- F. Where necessary to raise or lower the pipe due to unforeseen obstructions or other causes, the DISTRICT may change the alignment and/or the grades. Such changes shall be made by the deflection of joints or by the use of additional fittings. However, in no case shall the deflection in the joint exceed the maximum deflection recommended by the pipe manufacturer.
- G. Except for short runs that may be permitted by the DISTRICT, pipes shall be laid uphill on grades exceeding 10 percent. Pipe that is laid on a downhill grade shall be blocked and held in place until sufficient support is furnished by the following pipe to prevent movement. All bends shall be properly installed as shown.
- H. **Cold Weather Protection:** No pipe shall be installed upon a foundation into which frost has penetrated or at any time that there is a danger of the formation of ice or penetration of frost at the bottom of the excavation. No pipe shall be laid unless it can be established that the trench will be backfilled before the formation of ice and frost occurs.
- I. **Pipe and Specials Protection:**
 - a. Before placement of pipe in the trench, each pipe or fitting shall be thoroughly cleaned of any foreign substance, which may have collected thereon and shall be kept clean at all times thereafter. The openings of all pipe and specials shall be protected with suitable bulkheads to prevent unauthorized access by persons, animals, water or any undesirable substance.
 - b. The CONTRACTOR shall utilize plugs, caps or similar devices manufactured specifically for the purpose of sealing pipe ends. The use of plywood, traffic cones or other items not specifically intended for this use shall not be allowed. These protective devices shall be installed during any interruption to the WORK.
 - c. In the event that water, soil or other deleterious material enters the pipe, the CONTRACTOR shall take immediate steps to remove it. Such steps shall include sweeping, vacuuming, flushing, pigging or any other method necessary to clean the interior of the pipe to the satisfaction of the DISTRICT.
 - d. Trenches shall be kept free of water until joints have been properly made. The CONTRACTOR shall take all necessary precautions to prevent flotation of the pipe. Any pipe and fittings displaced by flotation shall be removed and reinstalled.

3.2 TRENCHING AND BACKFILL

- A. Trench excavation and backfill shall conform to the requirements of Section 02200 - Earthwork.

3.3 CONNECTIONS TO EXISTING WATERLINES

- A. Where the new Work is to be connected to existing pipelines, the CONTRACTOR shall make its arrangements with the DISTRICT a minimum of 4 working days in advance of the connections, to allow adequate time for dewatering of the existing line, if necessary, and shall expedite the work to minimize any water outages. Connections to existing pipelines that require an outage shall be scheduled on Tuesday, Wednesday or Thursday only.

- B. If, in the opinion of the DISTRICT, the CONTRACTOR is not adequately prepared, does not have adequate manpower and equipment, or likely cannot complete the scheduled connection within the planned time, the DISTRICT may postpone the scheduled connection until a later date when the CONTRACTOR can be properly prepared. The CONTRACTOR shall not be entitled to any additional compensation if the Work cannot be performed due to the failure of the CONTRACTOR to adequately plan and staff the Work.

3.4 ANODE INSTALLATION

- A. Anodes shall be installed on existing steel pipeline to remain in service, 4-inch in diameter and larger, at all locations where the coating of the steel pipeline has been cut, damaged, or removed during construction.
 - 1. The CONTRACTOR shall perform all excavation and backfill work.
 - 2. The DISTRICT shall furnish and install the anodes.
 - 3. The CONTRACTOR shall contact the DISTRICT a minimum of 5 working days in advance, when feasible, to schedule the installation of the anode.

3.5 ASSEMBLY OF JOINTS WITH MECHANICAL DEVICES

- A. All joints with mechanical devices (EBAA Mega-lugs, Sigma One-Loks, Romac Grip-Rings, etc.) shall be assembled in accordance with the manufacturer's recommendations using equipment and tools as recommended by the manufacturer.
- B. The DISTRICT has no objection to the use of impact sockets (either pneumatic or electric), provided that they are acceptable to the manufacturer. In the event that the CONTRACTOR utilizes impact sockets to assemble joints, the CONTRACTOR shall have on-site, an adjustable torque-indicating wrench to verify that the torque settings of the impact socket are correct. Impact sockets **SHALL NOT** be used to tighten the torque-limiting twist-off nuts that secure the wedges on wedge-type retainer glands (EBAA Mega-lugs, Sigma One-Loks, etc.).

3.6 THRUST BLOCKS

- A. Prior to placing thrust blocks, the CONTRACTOR shall wrap all bolts near the thrust block with protective plastic sheeting to prevent the bolts from being embedded within the concrete.

3.7 INSTALLATION OF MARKING TAPE AND LOCATOR WIRE

- A. Marking tape shall be installed as indicated on the Drawings.
- B. Locator wire shall be laid along the top of the pipe and held in place with nylon wire ties spaced not more than 5 feet apart. Additional nylon ties shall be located on each side of splices and where locator wire from side pipes joins the main pipe.
- C. Locator wire shall be terminated in valve and service boxes as indicated on the Drawings.

3.8 FIELD TESTING AND DISINFECTION

- A. Field testing and disinfection and water mains shall conform to the requirements of Section 02643 - Water Pipeline Testing and Disinfection.

3.9 ABANDONMENT OF EXISTING PIPELINES

- A. The existing pipelines to be replaced under this Contract shall be abandoned by the CONTRACTOR. At the ends of pipelines to be abandoned, the existing pipeline shall be cut as necessary to accommodate installation of the new pipeline. The end of the pipeline to be abandoned shall then be plugged with lean concrete. The plug shall completely cover the end of the pipe and shall prevent the erosion of soil into the empty pipe cavity. Ready-mix concrete purchased in bags may be used.

– END OF SECTION –

SECTION 02597 - PVC PRESSURE PIPE

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall furnish polyvinyl chloride (PVC) pressure pipe, complete in place, in accordance with the Contract Documents.
- B. Use of Ductile Iron and PVC Pipe:**
1. Throughout the Contract Drawings, where new pipeline installations are indicated as "New Water Pipe," the CONTRACTOR may utilize either ductile iron pipe conforming to the requirements of Section 02565 – Ductile Iron Pipe, or PVC pipe conforming to the requirements of this Section 02597.
 2. In some cases, pipe material is specified as ductile iron or PVC only. In those installations, the specific pipe material indicated shall be used and substitutions shall not be allowed.
 3. In some cases, alternate alignments are indicated for ductile iron and PVC pipe as a result of differences in the pipe materials. In those installations, the specific pipe material indicated for a given alignment shall be used for that alignment.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

ASTM D2000	Classification System for Rubber Products in Automotive Applications
ASTM D2584	Test Method for Ignition Loss of Cured Reinforced Resins
ASTM F477	Elastomeric Seals (Gaskets) for Joining Plastic Pipe
AWWA C104	Cement-Mortar Lining for Ductile-Iron Pipe & Fittings for Water Pipe
AWWA C110	Ductile-Iron and Gray-Iron Fittings 3" Through 48" for Water
AWWA C219	Bolted, Sleeve-type Couplings for Plain End Pipe
AWWA C605	Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water
AWWA C900	Polyvinyl Chloride (PVC) Pressure Pipe, and Fabricated Fittings, 4-inch Through 12-inch for Water Distribution
AWWA M23	PVC Pipe – Design and Installation
UniBell B-13	Recommended Standard Performance Specification for Joint Restraint Devices for Use with Polyvinyl Chloride (PVC) Pipe

1.3 CONTRACTOR SUBMITTALS

- A. The CONTRACTOR shall furnish submittals in accordance with Section 01300 – Contractor Submittals.
- B. The CONTRACTOR shall submit the following information:
 - 1. Catalog cuts of pipe, fittings and specials indicating the size, manufacturer, end joints, lining and coating and pressure rating.
 - 2. Catalog cuts of pipeline marking tape indicating the size, color, manufacturer and material.

PART 2 -- PRODUCTS

2.1 GENERAL

- A. PVC pressure pipe shall conform to the applicable requirements of AWWA C900 subject to additional requirements herein.
- B. Pipe shall be of the nominal diameter indicated in the Drawings, with a DR-14 (305 psi) rating. Pipe shall be furnished complete with rubber gaskets and all other specials and fittings as required in the Contract Documents.
- C. **Handling and Storage:** The pipe shall be handled by devices acceptable to the DISTRICT, designed and constructed to prevent damage to the pipe. The use of equipment which might injure the pipe will not be permitted. Stockpiled pipe shall be suitably supported and shall be secured to prevent accidental rolling. All other pipe handling equipment and methods shall be acceptable to the DISTRICT.
- D. **Laying Lengths:** Maximum pipe laying lengths shall be 20 feet with shorter lengths provided as required by the Drawings.
- E. **Closures and Correction Pieces:** Closures and correction pieces shall be provided as required so that closures may be made due to different headings in the pipe laying operation and so that correction may be made to adjust the pipe laying to conform to pipe stationing shown on the Drawings. The locations of correction pieces and closure assemblies shall be acceptable to the DISTRICT.

2.2 FITTINGS AND SPECIALS

- A. Fittings for PVC pipe shall be ductile iron and shall conform to the requirements of Section 02565 – Ductile Iron Pipe.
- B. Specials shall be as indicated in Section 02565 – Ductile Iron Pipe and as indicated on the Drawings.

2.3 JOINTS

- A. **Joints:** Joints for buried PVC pipe shall be an integral bell and spigot manufactured on the pipe.

- B. Joints at all fittings and valves shall be restrained. In addition, all joints located closer than 16 feet to a fitting or valve shall be restrained. Wherever possible, the CONTRACTOR shall install full lengths of pipe (18 feet long minimum) on either side of fittings and valves
- C. **Restrained Joints:** Where required, restrained joints shall be made up with either thrust blocks or mechanical devices. Mechanical devices shall comply with the requirements of UniBell B-13. Mechanical devices for joint restraint shall be one of the following:
 - 1. Wedge-type retainer glands – “EBAA Megalug”, EBAA “Megaflange”, Sigma “One-Lok” or Stargrip Series 4000.
 - 2. “One-Bolt” fittings by One Bolt Incorporated
 - 3. “GripRing” pipe restraints by Romac
 - 4. Restraint harnesses - EBAA Iron Series 1500, Romac Series 600, Sigma “PV-Lok” or Star Series 1100C.
 - 5. MJ Field Lok Restraints by US Pipe
- D. **Joint Restraint:** Joints at all fittings and valves shall be restrained. Wherever possible, the CONTRACTOR shall install full lengths of pipe (18 feet long minimum) on either side of fittings and valves. Straight runs of pipe on either side of a fitting shall be restrained by one of two methods.
 - 1. The CONTRACTOR may pour concrete thrust blocks as indicated in the Drawings.
 - 2. The CONTRACTOR may restrain in-line pipe joints by the use of methods indicated in this Section.
 - a. For an elbow, the length of pipe in feet on each side of the elbow that the pipe joints must be restrained is given in Section 02565, Article 2.3.B.2.a.
 - b. For a tee, the length of pipe in feet on the branch run that the pipe joints must be restrained is given in Section 02565, Article 2.3.B.2.b. The pipe along the through run may be unrestrained, provided that another nearby fitting does not require restrained pipe.
 - c. For a dead end pipe run with either an end cap or plug, the table below gives the length of pipe in feet from the end cap or plug that the pipe joints must be restrained is given in Section 02565, Article 2.3.B.2.c.
- E. For bell-and-spigot ends with rubber gaskets, the clearance between the bells and spigots shall be such that when combined with the gasket groove configuration and the gasket itself, will provide watertight joints under all operating conditions when properly installed.
- F. **Joint Deflection and Longitudinal Bending:** While installing PVC pipe, the CONTRACTOR may achieve minor offsets through the use of longitudinal bending. PVC pipe joints shall not be deflected to achieve offsets. The table below gives parameters for allowable bending of PVC pipe.

Pipe Size	Minimum Radius of Curvature, feet	Maximum Offset for a Single Piece of Pipe, inches
4-inch	100	24
6-inch	144	17
8-inch	188	13
10-inch	232	10
12-inch	275	9

2.4 PIPELINE MARKING TAPE

- A. Pipeline marking tape shall conform to the requirements of Section 02565 – Ductile Iron Pipe.

2.5 PIPELINE LOCATOR WIRE

- A. Pipeline locator wire shall conform to the requirements of Section 02565 – Ductile Iron Pipe.

2.6 THRUST AND ANCHOR BLOCKS

- A. Thrust and anchor blocks shall conform to the requirements of Section 02565 – Ductile Iron Pipe.

PART 3 -- EXECUTION

3.1 GENERAL

- A. Laying, jointing, testing for defects and for leakage shall be performed in the presence of the DISTRICT, and shall be subject to approval before acceptance. Material found to have defects will be rejected and the CONTRACTOR shall promptly remove such defective materials from the Site.
- B. Installation shall conform to the requirements of AWWA M23, AWWA C605, instructions furnished by the pipe manufacturer, and to the supplementary requirements herein. Wherever the provisions of this Section and the aforementioned requirements are in conflict, the more stringent provision shall apply.

3.2 HANDLING AND STORAGE

- A. **Handling:** Pipe, fittings and accessories shall be carefully inspected before and after installation and those found defective shall be rejected. Pipe and fittings shall be free from fins and burrs. Before being placed in position, pipe, fittings, and accessories shall be cleaned, and shall be maintained in a clean condition. Proper facilities shall be provided for lowering sections of pipe and appurtenances into trenches. Under no circumstances shall pipe, fittings or any other material be dropped or dumped into trenches.
- B. **Storage:** Pipe shall be stored, if possible, at the Site in unit packages provided by the manufacturer. Caution shall be exercised to avoid compression damage or deformation to bell ends of the pipe. Pipe shall be stored in such a way as to prevent sagging or bending and be protected from exposure to direct sunlight by covering with an opaque material while permitting adequate air circulation above and around the pipe. Gaskets shall be stored in a cool, dark place out of the direct rays of the sun, preferably in original cartons.

3.3 TRENCHING AND BACKFILL

- A. Trench excavation and backfill shall conform to the requirements of Section 02200 - Earthwork.

3.4 INSTALLATION

- A. Bell-and-spigot pipe shall be laid with the bell end pointing in the direction of laying. On slopes of 10 percent or greater, laying shall begin at the bottom of the slope and proceed upward. Pipe trenches shall be graded in straight lines, taking care to avoid the formation of any dips or low points.
- B. Pipe shall not be laid when the conditions of trench or weather are unsuitable. Whenever pipe laying is discontinued, or at the end of each days work, open ends of pipe shall be closed temporarily with wood blocks or bulkheads. Blocks or bulkheads shall not be removed unless the trench is dry.
- C. The pipeline vertical alignment shall maintain a minimum depth to the top of pipe as noted in the Drawings. The pipeline depth shall be increased as necessary to provide a minimum of 12-inches vertical clearance between the top of the pipe and any underground structure or utility. The depth shall also be increased as directed by the DISTRICT to allow the pipe to be installed without grade changes, to eliminate fittings, air release valves or blow-offs. Pipelines beneath other utilities shall be located so that the other utility is located as close as possible to the mid-point between pipe joints.
- D. Pipe shall be supported at its proper elevation and grade, care being taken to secure firm and uniform support. Wood support blocking will not be permitted. The full length of each section of pipe and fittings shall rest solidly on the pipe bed, with recessed excavation to accommodate bells, joints, and couplings. Anchors and supports shall be provided where indicated and where necessary for fastening work into place. Fittings shall be independently supported.
- E. Joints shall be installed according to manufacturer's recommendations. The maximum combined deflection at any joint shall be in accordance with the manufacturer's recommendations and these specifications, whichever is more restrictive. Pipe lengths shall be selected so that the pipe can be installed through horizontal or vertical curves, or any combination thereof, without exceeding the maximum allowable joint deflection.
- F. **Pipe and Specials Protection:**
 - a. Before placement of pipe in the trench, each pipe or fitting shall be thoroughly cleaned of any foreign substance, which may have collected thereon and shall be kept clean at all times thereafter. The openings of all pipe and specials shall be protected with suitable bulkheads to prevent unauthorized access by persons, animals, water or any undesirable substance.
 - b. The CONTRACTOR shall utilize plugs, caps or similar devices manufactured specifically for the purpose of sealing pipe ends. The use of plywood, traffic cones or other items not specifically intended for this use shall not be allowed. These protective devices shall be installed during any interruption to the WORK.

- c. In the event that water, soil or other deleterious material enters the pipe, the CONTRACTOR shall take immediate steps to remove it. Such steps shall include sweeping, vacuuming, flushing, pigging or any other method necessary to clean the interior of the pipe to the satisfaction of the DISTRICT.
 - d. Trenches shall be kept free of water until joints have been properly made. The CONTRACTOR shall take all necessary precautions to prevent flotation of the pipe. Any pipe and fittings displaced by flotation shall be removed and reinstalled.
- G. Pipe shall be cut by means of saws, power driven abrasive wheels, or pipe cutters, which will produce a square cut. No wedge-type roller cutters will be permitted. After cutting, the end of the pipe shall be beveled using a beveling tool, portable type sander, or abrasive disc.
- H. All pipe and fittings shall be properly restrained against horizontal and vertical movement due to internal pressure. Thrust blocks and anchor blocks shall be as indicated on the Drawings. No loads shall be imposed on thrust blocks or anchor blocks until the concrete has reached a minimum compressive strength of 2,000 psi.

3.5 CONNECTIONS TO EXISTING WATERLINES

- A. Where the new Work is to be connected to existing pipelines, the CONTRACTOR shall make its arrangements with the DISTRICT a minimum of 4 working days in advance of the connections, to allow adequate time for dewatering of the existing line, if necessary, and shall expedite the work to minimize any water outages. Connections to existing pipelines that require an outage shall be scheduled on Tuesday, Wednesday or Thursday only.
- B. If, in the opinion of the DISTRICT, the CONTRACTOR is not adequately prepared, does not have adequate manpower and equipment, or likely cannot complete the scheduled connection within the planned time, the DISTRICT may postpone the scheduled connection until a later date when the CONTRACTOR can be properly prepared. The CONTRACTOR shall not be entitled to any additional compensation if the Work cannot be performed due to the failure of the CONTRACTOR to adequately plan and staff the Work.

3.6 ANODE INSTALLATION

- A. Anodes shall be installed on existing steel pipeline to remain in service, 4-inch in diameter and larger, at all locations where the coating of the steel pipeline has been cut, damaged, or removed during construction.
 - 1. The CONTRACTOR shall perform all excavation and backfill work.
 - 2. The DISTRICT shall furnish and install the anodes.
 - 3. The CONTRACTOR shall contact the DISTRICT a minimum of 5 working days in advance, when feasible, to schedule the installation of the anode.

3.7 ASSEMBLY OF JOINTS WITH MECHANICAL DEVICES

- A. All joints with mechanical devices (EBAA Mega-lugs, Sigma One-Loks, Romac Grip-Rings, etc.) shall be assembled in accordance with the manufacturer's recommendations using equipment and tools as recommended by the manufacturer.

- B. The DISTRICT has no objection to the use of impact sockets (either pneumatic or electric) provided that they are acceptable to the manufacturer. In the event that the CONTRACTOR utilizes impact sockets to assemble joints, the CONTRACTOR shall have on-site, an adjustable torque-indicating wrench to verify that the torque settings of the impact socket are correct. Impact sockets **SHALL NOT** be used to tighten the torque-limiting twist-off nuts that secure the wedges on wedge-type retainer glands (EBAA Mega-lugs or similar items).

3.8 INSTALLATION OF MARKING TAPE AND LOCATOR WIRE

- A. Marking tape shall be installed as indicated on the Drawings.
- B. Locator wire shall be laid along the top of the pipe and held in place with nylon wire ties spaced not more than 5 feet apart. Additional nylon ties shall be located on each side of splices and where locator wire from side pipes joins the main pipe.
- C. Locator wire shall be terminated in valve and service boxes as indicated on the Drawings.

3.9 THRUST BLOCKS

- A. Prior to placing thrust blocks, the CONTRACTOR shall wrap all bolts near the thrust block with protective plastic sheeting to prevent the bolts from being embedded within the concrete.

3.10 FIELD TESTING AND DISINFECTION

- A. Field testing and disinfection and water mains shall conform to the requirements of Section 02643 - Water Pipeline Testing and Disinfection

3.11 ABANDONMENT OF EXISTING PIPELINES

- A. The existing pipelines to be replaced under this contract shall be abandoned by the CONTRACTOR. At the ends of pipelines to be abandoned, the existing pipeline shall be cut as necessary to accommodate installation of the new pipeline. The end of the pipeline to be abandoned shall then be plugged with lean concrete. The plug shall completely cover the end of the pipe and shall prevent the erosion of soil into the empty pipe cavity. Ready-mix concrete purchased in bags may be used.

- END OF SECTION -

SECTION 02640 – LARGE WATER SERVICE CONNECTIONS

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall provide water service connections for meters 1.5-inch and larger in accordance with the Development Agreement.
- B. Installations utilizing meters 1-inch and smaller shall comply with the requirements of Section 02641 – Water Service Connections.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

ASTM A536	Ductile Iron Castings
ASTM D1785	Polyvinyl Chloride (PVC) Plastic Pipe, Schedules 40, 80, and 120
AWWA C700	Cold Water Meters – Displacement Type, Bronze Main Case
AWWA C800	Underground Service Line Valves and Fittings
Section 116875	California Health and Safety Code (Lead Free Brass)

PART 2 -- PRODUCTS

2.1 SERVICE SADDLES

- A. Service saddles shall comply with Section 02641 – Water Service Connections.

2.2 POLYETHYLENE TUBING

- A. Polyethylene tubing shall comply with Section 02641 – Water Service Connections.

2.3 DUCTILE IRON PIPE

- A. Ductile iron pipe shall comply with Section 02565 – Ductile Iron Pipe.

2.4 THREADED FITTINGS

- A. Threaded fittings shall comply with Section 02641 – Water Service Connections.

2.5 CURB BALL VALVES

- A. Curb ball valves shall comply with Section 02641 – Water Service Connections.

2.6 CORPORATION BALL VALVES

- A. Corporation ball valves shall comply with Section 02641 – Water Service Connections.

2.7 COUPLINGS

- A. Couplings shall comply with Section 02641 – Water Service Connections.

2.8 RESTRAINED FLANGED COUPLING ADAPTERS

- A. Restrained flanged coupling adapters shall be wedge type retainer glands as indicated in Section 02565 – Ductile Iron Pipe.

2.9 PIPE SUPPORTS

- A. Pipe supports shall be Standon Model S96 or approved equal, with the cradle sized appropriately for the pipe flange diameter.

2.10 METER INSTALLATIONS WITH 1.5-INCH OR 2-INCH METERS

- A. For single installations with 1.5-inch or 2-inch meters, boxes shall be precast concrete. All lids shall be permanently marked with the term “WATER” or “WATER METER.” In paved areas, areas subject to vehicular loading, or where deemed necessary by the DISTRICT, boxes rated for H-20 loading shall be provided H-20 rated boxes shall have metal lids with bolting mechanisms to secure the lid and shall be furnished with bolts to secure the lid. Meter boxes shall be:

Location	Box	Extension	Lid
Non-Traffic Areas	Christy N48T Box	Christy B48x10	DFW B48C-4-LID
Traffic Rated Areas	Christy B3048 Box	Christy B3048x12	JTS JS3048-1015
Traffic Rated Areas	Jensen HT3048-12 Box	Jensen HT3048X12	JTS JS3048-1015

Approved equals shall be accepted

- B. Meters idlers shall conform to AWWA C800. Meter idlers shall be of an alloy conforming to AWWA C800 and shall be “lead-free” in accordance with Section 116875 of the California Health and Safety Code. Meter idlers shall be:

Size	Meter Idler
1.5-inch	Ford Model IDLER-6-NL
2-inch	Ford Model IDLER-7-NL

Approved equals shall be accepted

- C. Meters flanges shall conform to AWWA C800. Meter flanges shall be of an alloy conforming to AWWA C800 and shall be “lead-free” in accordance with Section 116875 of the California Health and Safety Code. Meter flanges shall be designed for working pressures of 150 psi. Meter flanges shall be furnished with all necessary nuts, bolts and gaskets to accomplish a complete and functional installation. Meter flanges shall be:

Size	Meter Flange
1.5-inch	Ford Model CF31-66-NL
2-inch	Ford Model CF31-77-NL

Approved equals shall be accepted

- D. Flexible meter couplings shall conform to AWWA C800. Couplings shall be of ductile iron conforming to ASTM A536. Couplings shall be designed for working pressures of 175 psi. Couplings shall be furnished with all necessary nuts, bolts and gaskets to accomplish a complete and functional installation. Flexible meter couplings shall be:

Size	Flexible Meter Couplings
1.5-inch	Smith-Blair Model 926-000190-000
2-inch	Smith-Blair Model 926-000250-000

Approved equals shall be accepted

2.11 METERS

- A. Meters shall be furnished and installed by the DISTRICT. The DISTRICT will install meters based on the availability of DISTRICT personnel. The CONTRACTOR shall be responsible for performing all other work required by this specification section.

2.12 PIPELINE LOCATOR WIRE

- A. Pipeline locator wire shall conform to the requirements given in Section 02565 – Ductile Iron Pipe.

2.13 PIPELINE MARKING TAPE

- A. Pipeline marking tape shall conform to the requirements given in Section 02565 – Ductile Iron Pipe.

2.14 INSULATING BLANKETS FOR PRECAST CONCRETE METER BOXES

- A. Precast concrete meter boxes shall be furnished with insulation blankets to protect meters and piping from freezing. Insulating blankets shall have a minimum insulation thickness of 3/8" surrounded by layers of waterproof material. Insulating blankets shall have a minimum R value of 2.8 when tested in accordance with ASTM C518. Insulating blankets shall have minimum dimensions of 6' x 10' and shall be folded as necessary to fit within the concrete meter box. Field cutting of larger blankets to the minimum size shall be allowed, provided that field cut ends are sealed with waterproof adhesive tape. Insulating blankets shall be Model No. NRB6L by Midwest Canvas Corporation, or approved equal.
- B. Single layer insulating blankets constructed of polyethylene shall not be allowed.

PART 3 -- INSTALLATION

3.1 GENERAL

- A. Excavation and backfill shall conform to the requirements of Section 02200 – Earthwork.
- B. Water service piping shall be tested in accordance with Section 02643 – Water Pipeline Testing and Disinfection.

3.2 SERVICE TAPS

- A. Direct tapping of water mains shall not be permitted. Double-strap service saddles shall be used for all service connections. Service saddles shall have a bearing area of sufficient width along the axis of the pipe, so that the pipe will not be distorted when the saddle is made tight. An internal shell cutter shall be used to drill through the corporation stop to minimize shavings, retain the coupon, and reduce stress. Single fluted shell cutters or twist drills shall not be used. Cutting lubricant shall be used on the cutting and tapping edges of the tool.

3.3 HOT TAPS

- A. All hot tapping of existing mains shall be performed by the DISTRICT, as indicated in Section 02642 – Hot Tap Connections.

3.4 SERVICE LATERALS

- A. Where polyethylene tubing is used for a service lateral, the tubing shall be a continuous piece from the main to the meter box. The CONTRACTOR shall not use couplings to splice together smaller pieces of tubing as a lateral installation.

3.5 INSTALLATION OF SERVICE LATERALS BY TRENCHLESS METHODS

- A. Instead of open trenching, the CONTRACTOR may use moles, thumpers, directional drills, pipe extraction or other trenchless construction methods to install service laterals up to 2-inch in diameter. In such cases, the CONTRACTOR shall install a sleeve pipe using the trenchless methods and then pull the service lateral inside the sleeve. Sleeves shall be of a diameter and wall thickness adequate to allow pulling of the service lateral without resistance.
- B. Prior to performing any trenchless construction, the CONTRACTOR shall submit to the DISTRICT information regarding the proposed equipment and methods to be employed. Such methods and equipment shall be subject to review and approval by the DISTRICT. The DISTRICT may also require that the CONTRACTOR perform a trial installation in order to confirm the viability of the proposed methods and equipment.
- C. Any changes to the approved methodology shall be approved by the DISTRICT. In the event that the CONTRACTOR deviates from the approved methodology in a manner unacceptable to the DISTRICT, the DISTRICT will require the CONTRACTOR to discontinue the Work until a mutually agreeable procedure can be identified.
- D. In the event that the DISTRICT approves a given methodology and the CONTRACTOR later chooses to install service laterals by a different method, or by open cut construction, the CONTRACTOR shall not be due any additional compensation.

3.6 ARRANGEMENT AND LABELING OF METER INSTALLATIONS

- A. For multiple meter installations (two or more) with precast concrete boxes, the DISTRICT shall furnish to the CONTRACTOR a 3-1/2" x 2" laminated card indicating the street address of each customer served. The CONTRACTOR shall be responsible to attach the laminated card to the appropriate meter (or meter idler) using either zip-ties or rebar tie wire. The meters shall be arranged in sequential order corresponding to the arrangement of the units served by the meters. The order shall be either right-to-left or left-to-right and shall correspond to the address sequence of the given street. Irrigation meters shall be located at one end of the meter manifold. The CONTRACTOR shall take care when installing on-site piping to ensure that customer laterals are connected to the proper units. The CONTRACTOR shall not randomly connect the customer laterals to the meter manifold.

3.7 REMOVAL OF EXISTING METER BOXES AND HARDWARE

- A. The CONTRACTOR shall excavate, remove and dispose of the existing concrete meter boxes.

- B. The CONTRACTOR shall remove and dispose of all existing galvanized fittings and hardware from the meter box.

3.8 CONNECTION OF CUSTOMER SERVICE LATERALS

- A. The CONTRACTOR shall be responsible to install PE tubing and couplings as necessary to connect the downstream side of the new meter box hardware to the existing customer service laterals. The size of the PE tubing shall be at least as large as the existing customer service lateral and shall be a minimum of 1-inch in diameter. The CONTRACTOR shall furnish and install an appropriate coupling to transition to the existing service. Such existing services are most likely copper or galvanized iron.

3.9 METER BOX LOCATING RODS

- A. In order to facilitate location of meter boxes during the Winter, the CONTRACTOR shall fasten a 12-inch long piece of #4 steel reinforcing bar to the bottom of the composite meter box lid. The CONTRACTOR shall drill two 1/4" holes into ribs on the bottom of the lid and then attach the steel bar using zip-ties

– END OF SECTION –

SECTION 02641 – WATER SERVICE CONNECTIONS

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall provide water service connections for meters 1-inch and smaller in accordance with the Contract Documents.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

ANSI B1.20	National Pipe Tapered (NPT) standard for Tapered Threads
ANSI B16.15	Cast Bronze Threaded Fittings
ASTM A536	Ductile Iron Castings
AWWA C800	Underground Service Line Valves and Fittings
AWWA C901	Polyethylene (PE) Pressure Pipe and Tubing, 1/2" In. (13 mm) through 3 In. (76 mm) for Water Service
Section 116875	California Health and Safety Code (Lead Free Brass)

PART 2 -- PRODUCTS

2.1 SERVICE SADDLES FOR PVC AND DUCTILE IRON PIPE

- A. Service saddles for PVC and ductile iron pipe shall have ductile iron bodies conforming to ASTM A536 suitable for a working pressure of 300 psi. Saddles shall be double-strap and straps shall have a minimum width of 1.5 inches. All hardware, including straps, studs, nuts and washers shall be Type 304 stainless steel. Saddles shall be **Smith-Blair Model 317, Romac Model 202N**, or approved equal.
- B. For PVC pipe, saddles shall be sized such that the upper end of the OD range is equal to the outside diameter of the pipe. Acceptable part numbers are:

Pipe Size	1.5" Outlet Saddle	2" Outlet Saddle
4" PVC	Romac 202N - 4.80 x 1.5" IP or Smith Blair 317-048012-000	Romac 202N - 4.80 x 2" IP or Smith Blair 317-048014-000
6" PVC	Romac 202N – 6.90 x 1.5" IP or Smith Blair 317-069012-000	Romac 202N – 6.90 x 2" IP or Smith Blair 317-069014-000
8" PVC	Romac 202N – 9.05 x 1.5" IP or Smith Blair 317-090512-000	Romac 202N – 9.05 x 2" IP or Smith Blair 317-090514-000
10" PVC	Romac 202N – 11.10 x 1.5" IP or Smith Blair 317-111012-000	Romac 202N – 11.10 x 2" IP or Smith Blair 317-111014-000
12" PVC	Romac 202N – 13.20 x 1.5" IP or Smith Blair 317-132012-000	Romac 202N – 13.20 x 2" IP or Smith Blair 317-132014-000

2.2 POLYETHYLENE TUBING

- A. Polyethylene tubing for water service lines shall meet the requirements of AWWA C901 and be made from compounds having standard code designation PE 3408.
- B. The tubing shall be copper tube size (CTS) OD base with dimensions conforming to Table 7 of AWWA C901, Pressure Class 200 (DR9). PE tubing shall be by Advanced Drainage Systems, JM Eagle, Interstate Plastic, Performance Pipe, Wesflex Pipe Manufacturing or approved equal.
- C. Fittings for polyethylene tubing shall be brass compression type fittings and shall be as shown on the Drawings. Stainless steel insert stiffeners shall be used at all compression joints. Insert stiffeners shall be flared at one end and beveled at approximately 45° at the other end. Stiffeners shall be supplied by the fitting manufacturer.

2.3 THREADED FITTINGS AND NIPPLES

- A. Threaded fittings and nipples shall be in accordance with ANSI B16.15. The body shall be of an alloy conforming to AWWA C800 and shall be “lead-free” in accordance with Section 116875 of the California Health and Safety Code. Fittings shall be designed for working pressures of 250 psi. Threads shall be NPT in compliance with ANSI B1.20. Threaded joints shall be made up with teflon tape.

2.4 CURB BALL VALVES

- A. Curb ball valves shall conform to AWWA C800. The valve body shall be of an alloy conforming to AWWA C800 and shall be “lead-free” in accordance with Section 116875 of the California Health and Safety Code. Curb ball valves shall be designed for working pressures of 250 psi.
- B. Female iron pipe x female iron pipe thread curb ball valves shall be:

Size	Curb Ball Valves
¾-inch	AY McDonald 76101W (¾") Ford B11-333-W-NL Mueller B-20200-3-N (¾")
1-inch	AY McDonald 76101W (1") Ford B11-444-W-NL Mueller B-20200-3-N (1")
2-inch	AY McDonald 76101W (2") Ford Model B11-777-W-NL Mueller B-20200-3-N (2")

No equals or substitutes will be accepted

2.5 CORPORATION BALL VALVES

- A. Corporation ball valves shall conform to AWWA C800. The valve body shall be of an alloy conforming to AWWA C800 and shall be “lead-free” in accordance with Section 116875 of the California Health and Safety Code. Corporation ball valves shall be designed for working pressures of 250 psi. End connections shall be male iron pipe thread by compression. Stiffener inserts shall be used on the end of the polyethylene pipe at the compression end. Corporation ball valves and stiffener inserts shall be:

Size	Corporation Ball Valves	Stiffener Insert
1-inch	AY McDonald 74704BQ (1") Ford FB-1100-4-Q-NL Mueller B-25028-N (1")	AY McDonald 6133T (1") Ford Insert-52 Mueller Liner 528705
1.5-inch	AY McDonald 74704BQ (1.5") Ford FB-1100-6-Q-NL Mueller B-25028-N (1.5")	AY McDonald 6133T (1.5") Ford Insert-54-Q Mueller Liner 528706
2-inch	AY McDonald 74704BQ (2") Ford FB-1100-7-Q-NL Mueller B-25028-N (2")	AY McDonald 6133T (2") Ford Insert-55-Q Mueller Liner 528707

No equals or substitutes will be accepted

2.6 COUPLINGS

- A. Couplings shall conform to AWWA C800. The coupling body shall be of an alloy conforming to AWWA C800 and shall be "lead-free" in accordance with Section 116875 of the California Health and Safety Code. Couplings shall be designed for working pressures of 250 psi. Stiffener inserts shall be used on the end of the polyethylene pipe at the compression end.
- B. Male iron pipe x compression couplings and stiffener inserts shall be:

Size	MIP Coupling	Stiffener Insert
1-inch	AY McDonald 74753Q (1") Ford C84-44-Q-NL Mueller H-15428-N (1")	AY McDonald 6133T (1") Ford Insert-52 Mueller Liner 528705
1.5-inch	AY McDonald 74753Q (1.5") Ford C84-66-Q-NL Mueller H-15428-N (1.5")	AY McDonald 6133T (1.5") Ford Insert-54-Q Mueller Liner 528706
2-inch	AY McDonald 74753Q (2") Ford C84-77-Q-NL Mueller H-15428-N (2")	AY McDonald 6133T (2") Ford Insert-55-Q Mueller Liner 528707

No equals or substitutes will be accepted

- C. Female iron pipe x compression couplings and stiffener inserts shall be:

Size	FIP Coupling	Stiffener Insert
1-inch	AY McDonald 74754Q (1") Ford C14-44-Q-NL Mueller H-15451-N (1")	AY McDonald 6133T (1") Ford Insert-52 Mueller Liner 528705
1.5-inch	AY McDonald 74754Q (1.5") Ford C14-66-Q-NL Mueller H-15451-N (1.5")	AY McDonald 6133T (1.5") Ford Insert-54-Q Mueller Liner 528706
2-inch	AY McDonald 74754Q (2") Ford C14-77-Q-NL Mueller H-15451-N (2")	AY McDonald 6133T (2") Ford Insert-55-Q Mueller Liner 528707

No equals or substitutes will be accepted

2.7 DOUBLE METER INSTALLATIONS WITH METERS ¾-INCH AND SMALLER

- A. **Precast Concrete Boxes:** For double meter installations with meters ¾-inch and smaller, boxes shall be precast concrete boxes with lids that are permanently marked with the term “WATER” or “WATER METER.” In paved areas, areas subject to vehicular loading, or where deemed necessary by the DISTRICT, boxes rated for H-20 loading shall be provided. H-20 rated boxes shall have metal lids with bolting mechanisms to secure the lid and shall be furnished with bolts to secure the lid. Meters shall be equipped with meter yokes as indicated in the Drawings. Meter boxes for double meter installations shall be:

Location	Box	Extension	Lid
Non-Traffic Areas	Christy N40 Box	Christy B40x10	DFW B40C-4-LID
Traffic Rated Areas	Christy B2436 Box	Christy B2436x12	JTS JS2436-1015A
Traffic Rated Areas	Jensen HT2436-12 Box	Jensen HT2436X12	JTS JS2436-1015A

Approved equals shall be accepted

Meter yoke components shall be:

Item	Part Number
Meter yoke	AY McDonald 14-2 (5/8" x 3/4") Ford Y502 Mueller H-5020
Meter yoke expansion connection	AY McDonald 714-2ESG Ford EC-23-NL Mueller H-14234-N (3/4")
Straight yoke valve	AY McDonald 76101WY (3/4" x 3/4" x 02) Ford B91-323W-NL Mueller B-24360-N (5/8" x 3/4" x 3/4")

Approved equals shall be accepted

2.8 MULTIPLE METER INSTALLATIONS WITH METERS ¾-INCH AND SMALLER

- A. For installations with three or more ¾-inch or smaller meters, boxes shall be precast concrete with lids that are permanently marked with the term “WATER” or “WATER METER.” In paved areas, areas subject to vehicular loading, or where deemed necessary by the DISTRICT, boxes rated for H-20 loading shall be provided. H-20 rated boxes shall have metal lids with bolting mechanisms to secure the lid and shall be furnished with bolts to secure the lid. Meters shall be equipped with meter yokes as indicated in the Drawings. Meter boxes for three or four meter installations shall be:

Location	Box	Extension	Lid
Non-Traffic Areas	Christy N48T Box	Christy B48x10	DFW B48C-4-LID
Traffic Rated Areas	Christy B3048 Box	Christy B3048x12	JTS JS3048-1015
Traffic Rated Areas	Jensen HT3048-12 Box	Jensen HT3048X12	JTS JS3048-1015

Approved equals shall be accepted

Meter yoke components shall be:

Item	Part Number
Meter yoke	AY McDonald 14-2 (5/8" x 3/4") Ford Y502 Mueller H-5020
Meter yoke expansion connection	AY McDonald 714-2ESG Ford EC-23-NL Mueller H-14234-N (3/4")
Straight yoke valve	AY McDonald 76101WY (3/4" x 3/4" x 02) Ford B91-323W-NL Mueller B-24360-N (5/8" x 3/4" x 3/4")

Approved equals shall be accepted

2.9 METERS

- A. For services that have existing meters, the CONTRACTOR shall transfer the existing meter from the existing meter boxes to the newly installed meter boxes. The CONTRACTOR shall note the serial number of the meter serving a given address and shall ensure that the meter is reinstalled in the proper location to serve that same address.
- B. The DISTRICT shall provide the CONTRACTOR with meter idlers to be installed where a meter does not currently exist. The CONTRACTOR shall be responsible for performing all other work required by this specification section.
- C. Reconnection of existing customers using idlers shall be sufficient for the CONTRACTOR to achieve final completion of the project.

2.10 PIPELINE LOCATOR WIRE

- A. Pipeline locator wire shall conform to the requirements given in Section 02565 – Ductile Iron Pipe.

2.11 PIPELINE MARKING TAPE

- A. Pipeline marking tape shall conform to the requirements given in Section 02565 – Ductile Iron Pipe.

2.12 INSULATING BLANKETS FOR PRECAST CONCRETE METER BOXES

- A. Precast concrete meter boxes shall be furnished with insulation blankets to protect meters and piping from freezing. Insulating blankets shall have a minimum insulation thickness of 3/8" surrounded by layers of waterproof material. Insulating blankets shall have a minimum R value of 2.8 when tested in accordance with ASTM C518. Insulating blankets shall have minimum dimensions of 6' x 10' and shall be folded as necessary to fit within the concrete meter box. Field cutting of larger blankets to the minimum size shall be allowed, provided that field cut ends are sealed with waterproof adhesive tape. Insulating blankets shall be Model No. NRB6L by Midwest Canvas Corporation, or approved equal.
- B. Single layer insulating blankets constructed of polyethylene shall not be allowed.

PART 3 -- INSTALLATION

3.1 GENERAL

- A. Excavation and backfill shall conform to the requirements of Section 02200 – Earthwork.
- B. Water service piping shall be tested in accordance with Section 02643 – Water Pipeline Testing and Disinfection.

3.2 SERVICE TAPS

- A. Direct tapping of water mains shall not be permitted. Double-strap service saddles shall be used for all service connections. Service saddles shall have a bearing area of sufficient width along the axis of the pipe, so that the pipe will not be distorted when the saddle is made tight. An internal shell cutter shall be used to drill through the corporation stop to minimize shavings, retain the coupon, and reduce stress. Single fluted shell cutters or twist drills shall not be used. Cutting lubricant shall be used on the cutting and tapping edges of the tool.

3.3 HOT TAPS

- A. All hot tapping of existing mains shall be performed by the DISTRICT, as indicated in Section 02642 – Hot Tap Connections.

3.4 SERVICE LATERALS

- A. All service laterals shall be a continuous piece of polyethylene tubing from the main to the meter box. The CONTRACTOR shall not use couplings to splice together smaller pieces of tubing as a lateral installation.

3.5 INSTALLATION OF SERVICE LATERALS BY TRENCHLESS METHODS

- A. Instead of open trenching, the CONTRACTOR may use moles, thumpers, directional drills, pipe extraction or other trenchless construction methods to install service laterals up to 2-inch in diameter. In such cases, the CONTRACTOR shall install a sleeve pipe using the trenchless methods and then pull the service lateral inside the sleeve. Sleeves shall be of a diameter and wall thickness adequate to allow pulling of the service lateral without resistance.
- B. Prior to performing any trenchless construction, the CONTRACTOR shall submit to the DISTRICT information regarding the proposed equipment and methods to be employed. Such methods and equipment shall be subject to review and approval by the DISTRICT. The DISTRICT may also require that the CONTRACTOR perform a trial installation in order to confirm the viability of the proposed methods and equipment.
- C. Any changes to the approved methodology shall be approved by the DISTRICT. In the event that the CONTRACTOR deviates from the approved methodology in a manner unacceptable to the DISTRICT, the DISTRICT will require the CONTRACTOR to discontinue the Work until a mutually agreeable procedure can be identified.
- D. In the event that the DISTRICT approves a given methodology and the CONTRACTOR later chooses to install service laterals by a different method, or by open cut construction, the CONTRACTOR shall not be due any additional compensation.

3.6 ARRANGEMENT AND LABELING OF METER INSTALLATIONS

- A. For multiple meter installations (two or more) with precast concrete boxes, the DISTRICT shall furnish to the CONTRACTOR a 3-1/2" x 2" laminated card indicating the street address of each customer served. The CONTRACTOR shall be responsible to attach the laminated card to the appropriate meter (or meter idler) using either zip-ties or rebar tie wire. The meters shall be arranged in sequential order corresponding to the arrangement of the units served by the meters. The order shall be either right-to-left or left-to-right and shall correspond to the address sequence of the given street. Irrigation meters shall be located at one end of the meter manifold. The CONTRACTOR shall take care when installing on-site piping to ensure that customer laterals are connected to the proper units. The CONTRACTOR shall not randomly connect the customer laterals to the meter manifold.

3.7 REMOVAL OF EXISTING METER BOXES AND HARDWARE

- A. The CONTRACTOR shall excavate, remove and dispose of the existing concrete meter boxes.
- B. The CONTRACTOR shall remove and dispose of all existing galvanized fittings and hardware from the meter box.

3.8 CONNECTION OF CUSTOMER SERVICE LATERALS

- A. The CONTRACTOR shall be responsible to install PE tubing and couplings as necessary to connect the downstream side of the new meter box hardware to the existing customer service laterals. The size of the PE tubing shall be at least as large as the existing customer service lateral and shall be a minimum of 1-inch in diameter. The CONTRACTOR shall furnish and install an appropriate coupling to transition to the existing service. Such existing services are most likely copper or galvanized iron.

3.9 METER BOX LOCATING RODS

- A. In order to facilitate location of meter boxes during the Winter, the CONTRACTOR shall fasten a 12-inch long piece of #4 steel reinforcing bar to the bottom of the composite meter box lid. The CONTRACTOR shall drill two 1/4" holes into ribs on the bottom of the lid and then attach the steel bar using zip-ties

– END OF SECTION –

SECTION 02642 – HOT TAP CONNECTIONS

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall perform excavations and provide all materials necessary for hot tap connections. The DISTRICT shall perform all hot tapping of mains.
- B. Hot taps for laterals 4-inch in diameter and larger shall utilize tapping sleeves as described in Article 2.1.
- C. Hot taps for laterals 2-inch in diameter and smaller shall utilize service saddles as described in Article 2.2.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

AWWA C115 Flanged Ductile-Iron Pipe with Ductile Iron or Gray-Iron Threaded Flanges

PART 2 – PRODUCTS

2.1 TAPPING SLEEVES

- A. **General:** Tapping sleeves shall be full circumferential sleeves with full circumferential gaskets suitable for a working pressure up to 200 psi. The neck shall be stainless steel welded to the body. The neck shall have a 3/4-inch test plug with NPT threads.
- B. **Body:** Tapping sleeve bodies shall be Type 304 stainless steel.
- C. **Gaskets:** Gaskets shall be virgin rubber suitable for contact with potable water.
- D. **Flanges:** Flanges shall be either Type 304 stainless steel or ductile iron. Ductile iron flanges shall be coated with fusion-bonded epoxy. Carbon steel flanges shall not be allowed.
- E. **Flange Gaskets:** Gaskets for flanged joints shall be full-faced, 1/8-inch thick synthetic rubber conforming with AWWA C115. Where provided by the manufacturer, the CONTRACTOR shall utilize the provided gasket.
- F. **Bolts and Nuts:** Bolts and nuts on tapping sleeves shall be Type 304 stainless steel. Threads on stainless steel bolts shall be coated with teflon or similar compounds to prevent galling. The nuts shall be capable of developing the full strength of the bolts. Threads shall be Coarse Thread Series conforming to the requirements of the American Standard for Screw Threads. All bolts and nuts shall have hexagon heads.
- G. **Manufacturers:** Tapping sleeves shall be Smith-Blair Models 662 or 663; Romac Model SST; or Mueller Model H-304. No equals or substitutes will be accepted.

2.2 SERVICE SADDLES

- A. Service saddles shall comply with the requirements of Section 02641 – Water Service Connections.

2.3 GATE VALVES

- A. Gate valves shall conform to the requirements of Section 15206 – Gate Valves.

2.4 CORPORATION STOPS

- A. Corporation stops shall comply with the requirements of Section 02641 – Water Service Connections.

2.5 THRUST AND ANCHOR BLOCKS

- A. Thrust and anchor blocks shall be constructed of portland cement concrete as specified in Section 90 of the Standard Specifications. The minimum 28-day compressive strength shall be 2,000 psi (14 MPa). Maximum aggregate size shall be 1-1/2 inch (37.5 mm) and maximum slump shall be 4 inches (10 mm). Air entrainment is not required.

PART 3 -- INSTALLATION

3.1 HOT TAP PROCEDURES

- A. The CONTRACTOR shall perform all excavation and backfill work.
- B. The CONTRACTOR shall furnish and install the tapping sleeve and gate valve on the main to be tapped.
- C. The CONTRACTOR shall contact the DISTRICT a minimum of 5 working days in advance to schedule the hot tap. The tapping sleeve and gate valve shall be installed a minimum of one day prior to the scheduled hot tap to allow DISTRICT personnel to inspect the installation in advance.
- D. Hot tapping of the main shall be performed by the DISTRICT.

- END OF SECTION -

SECTION 02643 - WATER PIPELINE TESTING AND DISINFECTION

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall perform flushing, hydrostatic testing and disinfection of all pipelines and appurtenant piping, complete, in accordance with the Contract Documents.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

AWWA B300 Hypochlorites

AWWA C651 Disinfecting Water Mains

1.3 CONTRACTOR SUBMITTALS

- A. The CONTRACTOR shall furnish submittals in accordance with Section 01300 – Contractor Submittals.
- B. The CONTRACTOR shall submit a proposed **Testing and Disinfection Plan** describing the proposed methods and schedule for water conveyance, cleaning, pressure testing, disinfection, and water disposal in writing for approval a minimum of five working days before testing is to start. The plan shall ensure that all environmental and permit restrictions regarding the disposal of water used for testing are addressed.

PART 2 -- PRODUCTS

2.1 MATERIALS REQUIREMENTS

- A. All test equipment, chemicals for chlorination, temporary valves, bulkheads, or other water control equipment and materials shall be selected and furnished by the CONTRACTOR subject to the DISTRICT's review.
- B. Chlorine for disinfection may be in the form of sodium hypochlorite solution, or calcium hypochlorite granules or tablets.
- C. Sodium hypochlorite and calcium hypochlorite shall be in accordance with the requirements of AWWA B300.

PART 3 -- EXECUTION

3.1 GENERAL

- A. Water for testing and disinfecting water pipelines will be furnished by the DISTRICT at the fire hydrant described in Section 01505 - Mobilization. The CONTRACTOR shall make all necessary provisions for conveying the water from this location to the points of use.
- B. Disinfection shall be accomplished by chlorination. All chlorinating and testing operations shall be performed in the presence of the DISTRICT. Chlorination shall take place using

either the Tablet Method or the Continuous Feed Method as outlined in AWWA C651. The Slug Method shall not be used.

- C. Disinfection operations shall be scheduled by the CONTRACTOR as late as possible during the Contract Time period so as to assure the maximum degree of sterility of the facilities at the time the WORK is accepted by the DISTRICT.

3.2 PRESSURE TESTING, FLUSHING AND DISINFECTION PROCEDURE – CONTINUOUS FEED METHOD

- A. The following procedure shall be used for pressure testing and disinfection using the Continuous Feed Method:

1. The CONTRACTOR shall submit and obtain approval of the written **Testing and Disinfection Plan** described above.
2. Perform and complete hydrostatic testing of the pipeline as described in Article 3.4
3. After successful completion of the hydrostatic pressure test, connect the new pipeline to the DISTRICT existing system using methods to be determined at one location. There must be an isolation valve at the point of interconnection.
4. Flush the new pipelines at a velocity of at least 5 fps to remove any foreign matter or debris that may have accumulated during construction.
5. Introduce a hypochlorite solution into the pipeline as described in Article 3.5.
6. Measure and record the chlorine residual.
7. Allow a minimum 24-hour period to ensure adequate retention of the highly chlorinated water within the pipeline. Measure the chlorine residual at the end of the 24 hours. If the chlorine residual is greater than, or equal to, 40 percent of the value recorded in Step 6, pipeline flushing may commence. If the chlorine residual is less than 40 percent of the value recorded in Step 6, introduce additional chlorine to raise the pipeline to a concentration of 25 mg/L and begin a new 24-hour retention period.
8. Flush the highly chlorinated water from the pipeline to an approved disposal location. Flushing shall continue until the chlorine residual present in the pipeline is equal to that present in the DISTRICT's system under normal operations. Measure and record the chlorine residual
9. Wait 24 hours. Take a chlorine residual sample and compare to the previous sample taken 24-hours prior. If the chlorine residual has not dropped significantly, the DISTRICT will take a water sample for bacteriological testing. Such samples may be taken from 8:00 AM to 2:00 PM on Monday through Thursday only. The sample will be delivered by the DISTRICT to the local testing laboratory. If the chlorine level has dropped significantly, the CONTRACTOR shall repeat Steps 8 & 9 until there is not a significant drop in the chlorine level.
10. Perform any remaining connections to the existing system.

3.3 PRESSURE TESTING, FLUSHING AND DISINFECTION PROCEDURE – TABLET METHOD

A. The following procedure shall be used for pressure testing and disinfection using the Tablet Method:

1. The CONTRACTOR shall submit and obtain approval of the written **Testing and Disinfection Plan** described.
2. Perform and complete hydrostatic testing of the pipeline as described in Article 3.4
3. After successful completion of the hydrostatic pressure test, measure and record the chlorine residual. If the chlorine residual is greater than 25 mg/L, the 24-hour retention period may commence. If the chlorine residual is less than 25 mg/L, the CONTRACTOR shall introduce additional chlorine in the form of hypochlorite solution to raise the chlorine residual above 25 mg/L.
4. Allow a minimum 24-hour period to ensure adequate retention of the highly chlorinated water within the pipeline. Measure the chlorine residual at the end of the 24 hours. If the chlorine residual is greater than, or equal to, 40 percent of the value recorded in Step 3, pipeline flushing may commence. If the chlorine residual is less than 40 percent of the value recorded in Step 3, introduce additional chlorine to raise the pipeline to a concentration of 25 mg/L and begin a new 24-hour retention period..
5. Flush the highly chlorinated water from the pipeline to an approved disposal location. Flushing shall continue until the chlorine residual present in the pipeline is equal to that present in the DISTRICT's system under normal operations. Measure and record the chlorine residual
6. Wait 24 hours. Take a chlorine residual sample and compare to the previous sample taken 24-hours prior. If the chlorine residual has not dropped significantly, the DISTRICT will take a water sample for bacteriological testing. Such samples may be taken from 8:00 AM to 2:00 PM on Monday through Thursday only. The sample will be delivered by the DISTRICT to the local testing laboratory. If the chlorine level has dropped significantly, the CONTRACTOR shall repeat Steps 5 & 6 until there is not a significant drop in the chlorine level.
7. Connect the new pipeline to the existing system at one location.
8. Flush the new pipelines at a velocity of at least 5 fps to remove any foreign matter or debris that may have accumulated during construction.
9. Perform any remaining connections to the existing system.

3.4 HYDROSTATIC TESTING OF PIPELINES

A. The CONTRACTOR shall test the entire pipeline as a single unit. The test shall be made by placing temporary bulkheads or blind flanges in the pipe and filling the line slowly with water. The CONTRACTOR shall be responsible for ascertaining that all test bulkheads or blind flanges are suitably restrained to resist the thrust of the test pressure without damage to, or movement of, the adjacent pipe. The CONTRACTOR shall provide sufficient temporary air tappings in the pipelines to allow for evacuation of all entrapped air

in each pipe segment to be tested. After completion of the tests, such taps shall be permanently plugged. Care shall be taken to see that all air vents are open during filling.

- B. The pipeline shall be filled at a rate that will not cause any surges or exceed the rate at which the air can be released through the air valves at a reasonable velocity and all the air within the pipeline shall be properly purged. During this period, bulkheads, valves, and connections shall be examined for leaks. If leaks are found, corrective measures satisfactory to the DISTRICT shall be taken.
- C. The hydrostatic test shall consist of holding the test pressure on the pipeline for a minimum period of 2 hours. The test pressure shall be as determined by the DISTRICT and shall be a minimum of 200 psi, measured at the highest point of the pipeline section being tested. All visible leaks shall be repaired in a manner acceptable to the DISTRICT.
- D. The maximum allowable leakage for distribution and transmission pipelines shall be according to the following formula:

$$L = \frac{SD\sqrt{P}}{133,200}$$

where:

L = Allowable leakage (gallons per hour)

S = length (feet), the lesser of the actual length being tested or the maximum length for determining leakage. Maximum length for determining leakage is 2000 feet.

D = nominal pipe diameter (inches)

P = test pressure (psi)

- E. Pipelines that fail to pass the prescribed leakage test will be considered defective Work, and the CONTRACTOR shall determine the cause of the leakage, shall take corrective measures necessary to repair the leaks, and shall retest the pipelines at no additional cost to the DISTRICT.
- F. In the event that it is necessary to depressurize the pipeline in order to repair a leak, any disinfection procedures performed to that point shall be considered compromised. Therefore, if the CONTRACTOR was proceeding with disinfection using the Tablet Method it will be necessary to chlorinate the pipeline after pressure testing using the continuous feed method since the highly chlorinated water would have been lost when the pipeline was depressurized.

3.5 DISINFECTING PIPELINES

- A. **Tablet Method:** Calcium hypochlorite tablets or granules shall be placed in the water main as it is being installed. The main shall then be filled with clean potable water. Calcium hypochlorite shall be placed in each section of pipe installed. The amount of calcium hypochlorite shall comply with Tables 1 and 2 of AWWA C651. The pipeline shall be filled at a rate of one foot per second or less to ensure that tablets are not washed down the pipe as it is filled. Care shall be taken to prevent the strong chlorine solution in the pipeline being disinfected from flowing back into the line supplying the water.
- B. **Continuous Feed Method:** A chlorine-water solution shall be uniformly introduced into the pipeline by means of a solution-feed chlorinating device. The chlorine solution shall

be introduced at one end of the pipeline through a tap in such a manner that as the pipeline is filled with water, the concentration in the water entering the pipe is at least 25 mg/L. Appropriate backflow devices shall be used to prevent the strong chlorine solution in the pipeline being disinfected from flowing back into the line supplying the water.

- C. **Valve Operation:** During the process of chlorinating the pipelines, all line valves and other appurtenances shall be operated while the pipeline is filled with the heavily-chlorinated water.
- D. **Disposal of Water:** Discharge and/disposal of water shall be as described in Section 01560 – Temporary Environmental Controls.

3.6 CONNECTIONS TO EXISTING SYSTEM

- A. Where connections are to be made to an existing potable water system, the interior surfaces of all pipe and fittings used in making the connections shall be swabbed or sprayed with a one percent hypochlorite solution before they are installed. Thorough flushing shall be started as soon as the connection is completed and shall be continued until discolored water is eliminated.

3.7 WATER SOURCES

- A. As noted above, the written **Testing and Disinfection Plan** shall identify the planned water sources to be used for pressure testing and disinfection procedures. The CONTRACTOR is hereby notified that the use of non-potable water trucks as water sources is strongly discouraged. The CONTRACTOR is responsible to complete the disinfection procedures to the DISTRICT'S satisfaction. Any irregularities that arise during the course of pressure testing and disinfection procedures shall provide sufficient cause for the DISTRICT to require corrective measures and/or additional testing.

3.8 TEMPORARY CAPS FOR PRESSURE TESTING AND DISINFECTION

- A. For some of the properties with the project area, the Contract Documents call for connection of a new service lateral to an existing meter box that is to remain in service. The pressure test of a given pipeline segment shall include the new services laterals and fittings to the maximum extent possible. The CONTRACTOR shall be responsible to install temporary caps or valves on the ends of the new service laterals to accommodate the pressure testing and disinfection procedure.
- B. Upon completion of the pressure testing and disinfection procedure, the CONTRACTOR may use a clamp to pinch the PE tubing to remove the temporary end cap for connection to the existing meter box to remain.
- C. If the CONTRACTOR chooses to pressure test and disinfect pipeline segments sequentially, the CONTRACTOR may reuse/transfer temporary end caps from one segment to another.
- D. The CONTRACTOR may utilize fittings such as corporation stops, comp x MIP adapters and comp x FIP adapters as temporary end caps and then later install them as a permanent component of the Work on a later pipeline segment. Fittings that are to be permanently installed shall comply with the appropriate requirements of the Contract Documents.

- END OF SECTION -

DIVISION 15
MECHANICAL

SECTION 15206 - GATE VALVES

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall provide resilient-wedge gate valves and appurtenances, complete and operable, in accordance with the Contract Documents.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

ASTM A48	Gray Iron Castings
ASTM A126	Gray Iron Castings for Valves, Flanges, and Pipe Fittings
ASTM A307	Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength
ASTM A395	Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures
ASTM A536	Ductile Iron Castings
ASTM B62	Composition Bronze or Ounce Metal Castings
ASTM B584	Copper Alloy Sand Castings for General Applications
AWWA C509	Resilient-Seated Gate Valves for Water Supply Service
AWWA C515	Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Service
AWWA C550	Protective Epoxy Interior Coatings for Valves and Hydrants
AWWA C600	Installation of Ductile Iron Water Mains and Their Appurtenances

1.3 CONTRACTOR SUBMITTALS

- A. The CONTRACTOR shall furnish submittals in accordance with Section 01300 – Contractor Submittals.
- B. The CONTRACTOR shall submit the following information:
 - 1. Valve type, size, pressure rating and actuator type.
 - 2. Assembly drawings showing part nomenclature, materials, dimensions, weights, and relationships of valve actuators.

PART 2 -- PRODUCTS

2.1 GENERAL

- A. **Construction:** Gate valves shall be of the resilient-wedge type, with an inside screw, non-rising stem conforming to either AWWA C509 or C515. The valves shall be suitable for a design working water pressure of 200 psig. The valve body, bonnet, and disc shall be of cast iron or ductile iron and the disc or body shall be rubber-coated. For valves conforming to C509, the body and bonnet wall thickness shall be equal to or greater than the minimum wall thickness as listed in Table 2 of AWWA C509. For valves conforming to C515, the body and bonnet wall thickness shall be equal to or greater than the minimum wall thickness as listed in Table 1 of AWWA C515. The stem, stem nuts, glands, and bushings shall be of bronze, with O-ring seals.
- B. **Actuators:** Gate valves shall have 2-inch square operating nuts, turning counter-clockwise to open.
- C. **Buried Valves:** Buried valves shall have concrete valve boxes as indicated in Article 2.5.A. Operating nuts shall comply with AWWA C509.

2.2 MATERIALS

- A. **General:** Materials shall be suitable for the intended application. Materials not indicated shall be high-grade standard commercial quality, free from defects and imperfections that might affect the serviceability of the product for the purpose for which it is intended. Unless otherwise indicated, valve and actuator bodies shall conform to the following requirements:
 - 1. **Cast Iron:** Close-grained gray cast iron, conforming to ASTM A48, Class 30, or to ASTM A126.
 - 2. **Ductile Iron:** Ductile conforming to ASTM A536 or to ASTM A395.
 - 3. **Bronze:** Bronze conforming to ASTM B62.

2.3 VALVE CONSTRUCTION

- A. **Bodies:** Valve bodies shall be of cast or ductile iron, with smooth interior passages. Wall thicknesses shall be uniform, in agreement with the applicable standards for each type of valve and without casting defects, pinholes, or other defects that could weaken the body. Valve ends shall be as indicated in the Drawings.
- B. **Bonnets:** Valve bonnets shall be clamped, screwed, or flanged to the body and shall be of the same material, temperature, and pressure rating as the body. The bonnets shall have provision for the stem seal with the necessary glands, packing nuts, or yokes.
- C. **Stems:** Valve stems shall be of bronze with O-ring seals.
- D. **Internal Parts:** Internal parts and valve trim shall be bronze.
- E. **Nuts and Bolts:** Nuts and bolts for flanged and mechanical joints shall conform to the requirements for nuts and bolts in Section 02565 – Ductile Iron Pipe.

2.4 PROTECTIVE COATING

- A. The exterior surfaces and the wet interior surfaces of all gate valves shall be coated with polyamide-cured epoxy. High build, polyamide epoxy resin shall have a solids content of at least 56 percent by volume, and shall be suitable for long-term immersion in potable water and municipal wastewater. The coating material shall be listed by the NSF International as in compliance with NSF Standard 61 and shall comply with AWWA C550.

2.5 VALVE BOXES

- A. Valve boxes shall be precast concrete with a cast-iron lid. Valve boxes shall be cylindrical and shall have an inside diameter of 10-3/8" inches or larger. Covers of valve boxes shall be permanently labeled as "WATER". Valve boxes shall be **Christy Model G5**, or approved equal.
- B. If grade rings are required to properly install the valve box to grade, locking grade rings shall be used. Grade rings shall be manufactured by the same company as the valve box itself.
- C. Risers shall be fabricated from a single piece of SDR-35 PVC pipe with a nominal diameter of 6-inches. Riser caps shall be Model No. 304-206 by Taylor Made Plastics. No substitutes or equals will be accepted. For all gate valves by Mueller and all other 10-inch and 12-inch gate valves, the CONTRACTOR shall install an 8" x 6" concentric reducer on the bottom of the riser.
- D. For valves where the operating nut is more than 3.5 feet below finished grade, the CONTRACTOR shall install a valve nut extension. The length of the valve nut extension and Model Number shall be based upon Table 15206-1. Valve nut extensions shall be Placer Waterworks Model PW/VS with 5.5" ring, or approved equal.

2.6 VALVE MARKING STAKES

- A. Valve marking stakes shall be shall be "Utility Marker" model by Carsonite International. Marking stakes shall be blue in color with a white decal that reads "Water Valve" affixed to one side. Marking stakes shall be product number CRM306208. The decal shall be product number 1703 WV.

2.7 MANUFACTURERS

- A. Gate valves shall be Mueller 2360 Series, Mueller 2361 Series, or American Flow Control 2500 series. No equals or substitutes will be allowed.

PART 3 -- EXECUTION

3.1 GENERAL

- A. Valves, actuating units, stem extensions, valve boxes, and accessories shall be installed in accordance with the Manufacturer's written instructions, AWWA C600 and these specifications. Valves shall be laid in sequence with adjacent pipe and fittings.

- B. Valves shall be firmly supported on a bed of compacted Type B material to avoid undue stresses on the pipe. Concrete shall not be placed around bells, flanges, couplings, nuts or bolts.

3.2 VALVE BOXES

- A. All buried valves shall be furnished with a valve box. The box and riser shall be centered over the valve operating nut and shall be perpendicular to the valve centerline. The box and riser shall be placed as to not transmit any shock or stress to the valve or adjacent pipe.
- B. Valve boxes shall be placed such that the cover is ½-inch below the finished grade in paved areas and 1-inch above finished grade in unpaved areas.
- C. For valve boxes located within unpaved areas, the CONTRACTOR shall install a valve marking stake adjacent to the valve box.

Table 15206-1. Valve Nut Extensions

Depth to Nut from Finish Grade	Length of Valve Extension	Placer Water Works Model #
42	18	PW / VE / 18" with 5.5" ring
43	18	PW / VE / 18" with 5.5" ring
44	18	PW / VE / 18" with 5.5" ring
45	18	PW / VE / 18" with 5.5" ring
46	24	PW / VE / 24" with 5.5" ring
47	24	PW / VE / 24" with 5.5" ring
48	24	PW / VE / 24" with 5.5" ring
49	24	PW / VE / 24" with 5.5" ring
50	24	PW / VE / 24" with 5.5" ring
51	24	PW / VE / 24" with 5.5" ring
52	24	PW / VE / 24" with 5.5" ring
53	24	PW / VE / 24" with 5.5" ring
54	24	PW / VE / 24" with 5.5" ring
55	24	PW / VE / 24" with 5.5" ring
56	24	PW / VE / 24" with 5.5" ring
57	24	PW / VE / 24" with 5.5" ring
58	36	PW / VE / 36" with 5.5" ring
59	36	PW / VE / 36" with 5.5" ring
60	36	PW / VE / 36" with 5.5" ring
61	36	PW / VE / 36" with 5.5" ring
62	36	PW / VE / 36" with 5.5" ring
63	36	PW / VE / 36" with 5.5" ring
64	36	PW / VE / 36" with 5.5" ring
65	36	PW / VE / 36" with 5.5" ring
66	36	PW / VE / 36" with 5.5" ring
67	36	PW / VE / 36" with 5.5" ring
68	36	PW / VE / 36" with 5.5" ring
69	48	PW / VE / 36" with 5.5" ring
70	48	PW / VE / 48" with 5.5" ring
71	48	PW / VE / 48" with 5.5" ring
72	48	PW / VE / 48" with 5.5" ring

3.3 ABANDONMENT OF EXISTING GATE VALVES

- A. The CONTRACTOR shall be responsible for abandonment of existing gate valves as described herein.
 - 1. Valves shall be abandoned in the position directed by the DISTRICT in the field.
 - 2. The existing valve box shall be removed and the valve riser shall be cut at an elevation equal to the bottom of the aggregate base for the pavement section. In locations where the isolation valve is not within the pavement section, the valve riser shall be cut six inches below existing grade.
 - 3. The valve riser shall be filled with lean concrete. Ready-mix concrete purchased in bags may be used.

- END OF SECTION -

SECTION 15232 – AIR VALVE ASSEMBLIES

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall provide air valve assemblies, complete and operable, in accordance with the Contract Documents.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

ASTM B43	Seamless Red Brass Pipe, Standard Sizes
ANSI B1.20	National Pipe Tapered (NPT) standard for Tapered Threads
ANSI B16.15	Cast Bronze Threaded Fittings
AWWA C800	Underground Service Line Valves

PART 2 -- PRODUCTS

2.1 COMBINATION AIR VALVES

- A. Combination air valves shall be capable of exhausting accumulated air in systems under pressure and releasing or re-admitting large quantities of air while a system is being filled or drained, respectively. Valves shall be of the size indicated, with flanged or screwed ends to match piping. Bodies shall be of high-strength cast iron. The float, seat, and all moving parts shall be constructed of Type 316 stainless steel. Seat washers and gaskets shall be of a material insuring water tightness with a minimum of maintenance. Valves shall be designed for a minimum working pressure of 20 psi and a maximum working pressure of 300 psi. Air valves shall be Crispin model UL-10 or Cla-Val model 361-CAV564.3.

2.2 RED BRASS PIPE

- A. Red brass pipe shall conform to the requirements of ASTM B43 and shall be “lead-free” in accordance with Section 116875 of the California Health and Safety Code. Red brass pipe shall have threaded ends for NPT fittings.
- B. Fittings for red brass pipe shall be Class 250 threaded cast bronze in accordance with ANSI B16.15 and shall be “lead-free” in accordance with Section 116875 of the California Health and Safety Code. Fittings shall be designed for working pressures of 250 psi. Threads shall be NPT in compliance with ANSI B1.20. Threaded joints shall be made up with teflon tape.

2.3 PVC PRESSURE PIPE, SOLVENT-WELDED

- B. PVC pipe shall be made from all new rigid unplasticized polyvinyl chloride and shall be Schedule 40, conforming to ASTM D1785. Elbows and tees shall be of the same material as the pipe. Joint design shall be for solvent-welded construction to the pipe manufacturer's specifications. Threaded joints shall be made with teflon tape.

2.4 STOP AND WASTE BALL VALVES

- A. Stop and waste ball valves shall conform to AWWA C800. The valve body shall be of an alloy conforming to AWWA C800 and shall be "lead-free" in accordance with Section 116875 of the California Health and Safety Code. Stop and waste ball valves shall be designed for working pressures of 175 psi. End connections shall be female iron pipe thread by female iron pipe thread. Stop and waste ball valves for air valve assemblies shall be Ford Model B11-666SW-QT67-NL. No equals or substitutes will be accepted.

2.5 CORPORATION STOP VALVES

- A. Corporation stop valves shall conform to the requirements of Section 02641 – Water Service Connections except that the end connections shall be male iron pipe thread by male iron pipe thread.

2.6 VALVE RISERS AND VALVE BOXES

- A. Valve risers and valve boxes shall conform to the requirements of Section 15206 – Gate Valves.

2.7 BOXES

- A. Boxes for use in non-traffic areas shall be precast concrete with nominal interior dimensions of 24" x 36". Boxes shall have metal lids with bolting mechanisms to secure the lid. Boxes shall be furnished with bolts to secure the lid. Boxes shall be Christy model B40 with DFW B40C-4-LID, or approved equal.
- B. In paved areas, areas subject to vehicular loading, or where deemed necessary by the DISTRICT, boxes rated for H-20 loading shall be provided. H-20 rated boxes shall be precast concrete with nominal interior dimensions of 24" x 36". Boxes shall have metal lids with bolting mechanisms to secure the lid. Boxes shall be furnished with bolts to secure the lid. Boxes shall be Christy model B2436 with B2436-62JH lid, or approved equal.
- C. All lids shall be permanently marked with the term "WATER."

2.8 SERVICE SADDLES

- A. Service saddles shall conform to the requirements of Section 02641 – Water Service Connections.

2.9 TAPPING SLEEVES

- A. Tapping sleeves shall conform to the requirements of Section 02642 – Hot Tap Connections.

2.10 PIPELINE LOCATOR WIRE

- A. Pipeline locator wire shall conform to the requirements given in Section 02565 – Ductile Iron Pipe.

PART 3 -- EXECUTION

3.1 GENERAL

- A. Excavation and backfill shall conform to the requirements of Section 02200 – Earthwork.
- B. Air valve assembly piping shall be tested in accordance with Section 02643 – Water Pipeline Testing and Disinfection.

3.2 TAPS FOR AIR VALVE ASSEMBLIES

- A. Direct tapping of water mains shall not be permitted. Double-strap service saddles or tapping sleeves shall be used for all connections, as indicated in the Drawings.
- B. Service saddles and tapping sleeves shall have a bearing area of sufficient width along the axis of the pipe, so that the pipe will not be distorted when the saddle is made tight. An internal shell cutter shall be used to drill through the corporation stop to minimize shavings, retain the coupon, and reduce stress. Single fluted shell cutters or twist drills shall not be used. Cutting lubricant shall be used on the cutting and tapping edges of the tool.

3.3 AIR VALVE INSTALLATION

- A. Air valves shall be centered within the precast concrete box. The air valve location shall be such that the air valve can be removed and reinstalled without excavating and removing the precast concrete boxes.

- END OF SECTION -

SECTION 15235 - FIRE HYDRANTS

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall furnish and install dry-barrel fire hydrants including all appurtenances and accessories, complete and operable, in accordance with the requirements of the Contract Documents.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

AWWA C502 Dry-Barrel Fire Hydrants

TT-C-494B Federal Specifications for Coating Compound, Bituminous, Solvent Type Acid Resistant

PART 2 -- PRODUCTS

2.1 FIRE HYDRANTS

- A. **Construction:** Fire hydrants shall be of the dry-barrel type according to AWWA C502. Fire hydrants shall have one 4-1/2" and two 2-1/2" national standard thread hose connections. All hose connections shall be provided with ductile iron nozzle caps with metal chains. Nozzle cap nuts shall be same shape and size as operating nuts. The stem shall have a break-away coupling. The upper standpipe shall be 28" in height. The bottom base connection shall be either 6" flanged or 6" mechanical joint. The barrel shall have a "breakable" flanged connection to connect the upper and lower standpipe sections. Both standpipe sections shall be manufactured of ductile iron. Hydrant operating threads shall be lubricated with food machinery grade grease conforming to the requirements of US 21 CFR 178.3570.
- B. **Operating Nuts:** Operating nuts shall be 1-1/2" pentagons. The operating nut shall rotate counter-clockwise to open. Operating nuts shall be equipped with weathershields.
- C. **Pressure Rating:** Fire hydrants shall be tested to 500 psig and shall be suitable for a continuous working pressure of 250 psig.

2.2 COATINGS

- A. **Exterior Coating of Upper Standpipe:** The exterior surfaces of the upper standpipe shall have a three coat paint system conforming to the requirements of AWWA C502. The paint system shall consist of one primer coat and two finish coats. Color of the finished coats shall be "Hydrant Red."
- B. **Exterior Coating of Lower Standpipe:** The exterior surfaces of the lower standpipe shall have an asphaltic coating approximately 1 mil thick.
- C. **Interior Coating:** The interior surfaces of the fire hydrant shall be coating with black asphalt paint conforming to Federal Specification TT-C-494B.

2.3 MANUFACTURERS

- A. Fire hydrants shall be Waterous Pacer Model No. WB67DDP. No equals or substitutes will be accepted.

2.4 LOCATOR WIRE AND MARKING TAPE

- A. Fire hydrant laterals shall be furnished with locator wire as indicated in Section 02565 – Ductile Iron Pipe. The locator wire shall terminate in a 2” plastic riser. The riser shall be 2” schedule 40 PVC pipe and shall be furnished with a slip x FIP adapter and a 2” threaded plug.
- B. Fire hydrant laterals shall be furnished with marking tape as indicated in Section 02565 – Ductile Iron Pipe.

2.5 BARRIER POSTS

- A. Barrier posts shall be made from pieces of 6-inch diameter steel pipe. Barrier posts shall be painted **Safety Yellow** with an exterior rated water based paint.
- B. Concrete for barrier posts shall conform to the requirements given for thrust blocks in Section 02565 – Ductile Iron Pipe.

2.6 FILTER FABRIC

- A. Filter fabric shall conform to the requirements for underdrains given in Section 88-1.03 of the Standard Specifications.

2.7 FIRE HYDRANT MARKER STAKES

- A. Fire hydrant marker stakes shall be a minimum of 54” tall and fabricated from 3/8” diameter, grade 304 stainless steel.
- B. Marker stakes shall have an offset loop. The inside diameter of the loop shall be approximately 3.5” and the loop shall be intended for installation on the 2.5” outlet of the fire hydrant. A flexible clear sleeve shall be installed on the loop portion of the stake.
- C. Marker stakes shall have color banding in the following sequence: Red-Fluorescent Yellow-Red-Fluorescent Yellow.
- D. Marker stakes shall be manufactured shall by Hy-Viz, or approved equal.

PART 3 -- EXECUTION

3.1 INSTALLATION

- A. All fire hydrants shall be installed in strict accordance with the manufacturer's published recommendations, AWWA Standards, and all applicable codes.

- B. Fire hydrant laterals shall be installed as indicated in the Drawings. All joints along the hydrant lateral shall be fully restrained using mechanical methods of joint restraint. Concrete thrust blocks shall not be placed behind fire hydrants.
- C. At the time of installation, the CONTRACTOR shall turn the operating nut to ensure that the fire hydrant foot valve is fully closed.

3.2 ABANDONMENT OF EXISTING FIRE HYDRANT ASSEMBLIES

- A. The CONTRACTOR shall be responsible for abandonment of existing fire hydrants as described herein.
 - 1. The 6-inch isolation valve on the hydrant lateral shall be closed.
 - 2. The existing valve box shall be removed and the valve riser shall be cut at an elevation equal to the bottom of the aggregate base for the pavement section. In locations where the isolation valve is not within the pavement section, the valve riser shall be cut six inches below existing grade.
 - 3. The valve riser shall be filled with lean concrete. Ready-mix concrete purchased in bags may be used.
 - 4. The hydrant shall be excavated and unbolted from the lateral at the foot valve. The hydrant shall be removed from the site and delivered to the DISTRICT. Delivery shall be coordinated with Carlos Reyes at 530-582-3917.
 - 5. Lean concrete shall be placed in the excavation to form a plug in the end of the hydrant lateral. Ready-mix concrete purchased in bags may be used.

3.3 FIRE HYDRANT LOCATION

- A. Where practicable, fire hydrants shall be installed a minimum distance of six feet behind the edge of pavement or two feet behind the asphalt cement dike, if an asphalt cement dike is present.

3.4 PROTECTION OF HYDRANTS DURING CONSTRUCTION

- A. Immediately after installation, a heavy duty 30 gallon garbage bag shall be placed over the fire hydrant as a protective cover during the construction period. The bottom of the bag shall be secured with duct tape to prevent the bag from being dislodged by heavy winds. The bag shall remain in place until the DISTRICT authorizes its removal.

- END OF SECTION -

DRAWINGS



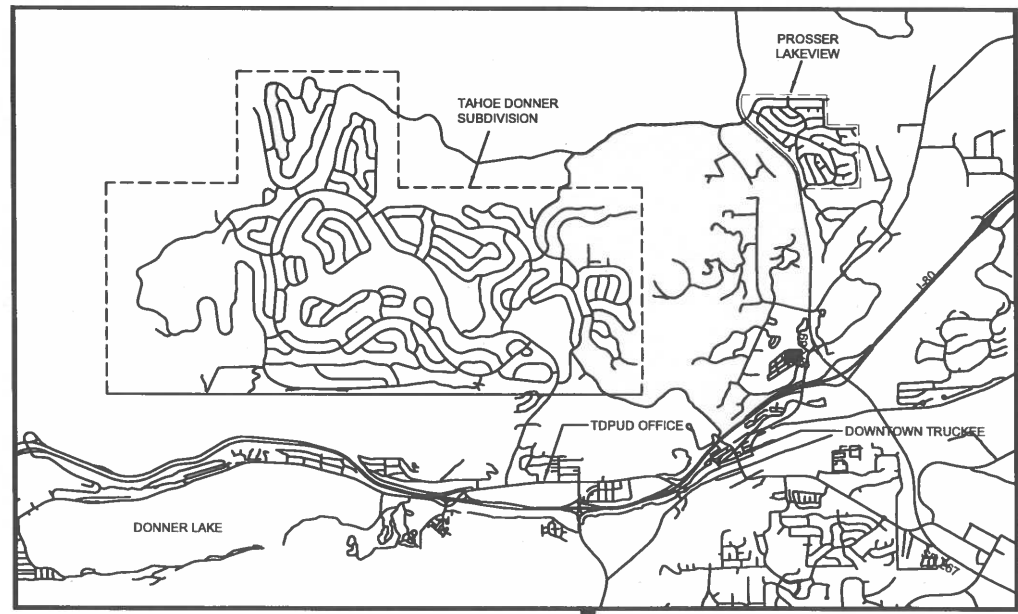
**TRUCKEE DONNER
Public Utility District**

11570 DONNER PASS ROAD, TRUCKEE, CA 96161 530-587-3896

DISTRICT PIPELINE REPLACEMENT - 2026

CONTRACT DRAWINGS

NOVEMBER 2025



LOCATION MAP

LIST OF DRAWINGS

- G-1 COVER SHEET
- G-2 ABBREVIATIONS, GENERAL NOTES, LEGEND & KEY PLAN
- P-1 TAHOE DONNER SKI BOWL CONDOMINIUMS - STREET A - PLAN AND PROFILE
- P-2 TAHOE DONNER SKI BOWL CONDOMINIUMS - STREET B - PLAN AND PROFILE
- P-3 TAHOE DONNER SKI BOWL CONDOMINIUMS - STREET D - PLAN AND PROFILE
- P-4 TAHOE DONNER SKI BOWL CONDOMINIUMS - STREET E - PLAN AND PROFILE
- P-5 DONNER PASS ROAD AT FIRE HOUSE - PLAN AND PROFILE
- D-1 DETAILS - 1
- D-2 DETAILS - 2
- D-3 DETAILS - 3

Prepared Under Direction Of:

Neil D. Kaufman
Neil D. Kaufman, Water System Engineer
Truckee Donner Public Utility District

11/10/25
Date

Approved By:

Brian Wright
Brian Wright, General Manager
Truckee Donner Public Utility District

11-10-25
Date

INSTRUCTIONS TO CONTRACTORS
48 HOUR NOTICE REQUIRED PRIOR TO COMMENCING WORK

BEFORE COMMENCING WORK WITHIN THE TOWN OF TRUCKEE RIGHT-OF-WAY, THE CONTRACTOR SHALL NOTIFY THE TOWN OF TRUCKEE ENGINEERING DIVISION AT LEAST 48 HOURS IN ADVANCE OF THE TIME OF CONSTRUCTION AT 530-582-7700

DRAWING
G-1
SHEET 1 of 10

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AT TELEPHONE (800) 642-2444 TWO DAYS PRIOR TO CONSTRUCTION. THE TOWN OF TRUCKEE AND CALTRANS DO NOT SUBSCRIBE TO THE U.S.A SERVICE. THE CONTRACTOR SHALL CONTACT THE TOWN DIRECTLY AT 530-582-7700 IN REGARDS TO TOWN OWNED FACILITIES SUCH AS STORM DRAINAGE AND TRAFFIC SIGNALS. THE CONTRACTOR SHALL CONTACT CALTRANS DIRECTLY AT 530-885-3648 IN REGARDS TO CALTRANS OWNED FACILITIES SUCH AS STORM DRAINAGE, TRAFFIC SIGNALS AND OVERHEAD LIGHTING.
2. EXISTING FACILITIES SHOWN ON THE DRAWINGS HAVE BEEN LOCATED BY FIELD MAPPING, AERIAL PHOTOGRAPHY, OR AS-BUILTS. THE LOCATIONS AND ELEVATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE TYPE, SIZE, ELEVATION AND LOCATION OF ALL EXISTING FACILITIES AFFECTING CONSTRUCTION OF THE PROJECT PRIOR TO COMMENCING CONSTRUCTION.
3. ALL SPECIFICATIONS, DRAWINGS AND DETAILS INCLUDED IN THE CONTRACT DOCUMENTS SHALL FULLY APPLY TO THE WORK, REGARDLESS OF WHETHER THEY HAVE BEEN SPECIFICALLY REFERENCED.
4. PIPELINE LOCATOR WIRE SHALL BE INSTALLED ALONG ALL PIPELINES AND LATERALS IN ACCORDANCE WITH THE SPECIFICATIONS AND DETAIL 3 ON DRAWING D-1.
5. RESTRAINED JOINTS SHALL BE MADE UP WITH MECHANICAL DEVICES OR THRUST BLOCKS. MECHANICAL DEVICES SHALL BE AS GIVEN IN THE SPECIFICATIONS. THRUST BLOCKS SHALL BE AS GIVEN IN THE SPECIFICATIONS AND DETAIL 5 ON DRAWING D-1.
6. PIPELINE EXCAVATION, BEDDING, EMBEDMENT AND BACKFILL SHALL BE AS DESCRIBED IN THE SPECIFICATIONS AND DETAIL 1 ON DRAWING D-1.
7. REQUIRED VERTICAL SEPARATION BETWEEN WATER AND SEWER PIPING SHALL BE AS INDICATED IN DETAIL 3 ON DRAWING D-2.
8. GATE VALVES SHALL BE AS DESCRIBED IN THE SPECIFICATIONS AND DETAIL 4 ON DRAWING D-1.
9. BUTTERFLY VALVES SHALL BE AS DESCRIBED IN THE SPECIFICATIONS AND DETAIL 2 ON DRAWING D-1.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE TEMPORARY EROSION AND DRAINAGE CONTROL FACILITIES DURING CONSTRUCTION OF THE PROJECT. TEMPORARY EROSION CONTROL SHALL BE DONE IN COMPLIANCE WITH THE CURRENT EDITION OF THE LAKE TAHOE BASIN WATER QUALITY MANAGEMENT PLAN, HANDBOOK OF BEST MANAGEMENT PRACTICES. THE CONTRACTOR SHALL REPAIR ANY AREAS OF EROSION PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
11. THE CONTRACTOR SHALL REMOVE ALL CLEARED VEGETATION FROM THE SITE FOR DISPOSAL AT AN APPROVED DUMP SITE OR LANDFILL.
13. THE SCALE INDICATED ON THE DRAWINGS (1" = 40' HORIZ AND 1"=10' VERT) IS BASED ON THE FULL SIZE DRAWINGS. THE CONTRACTOR SHALL ADJUST THE SCALE ACCORDINGLY FOR REDUCED SIZE DRAWINGS.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. MONUMENTS AND SURVEY MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

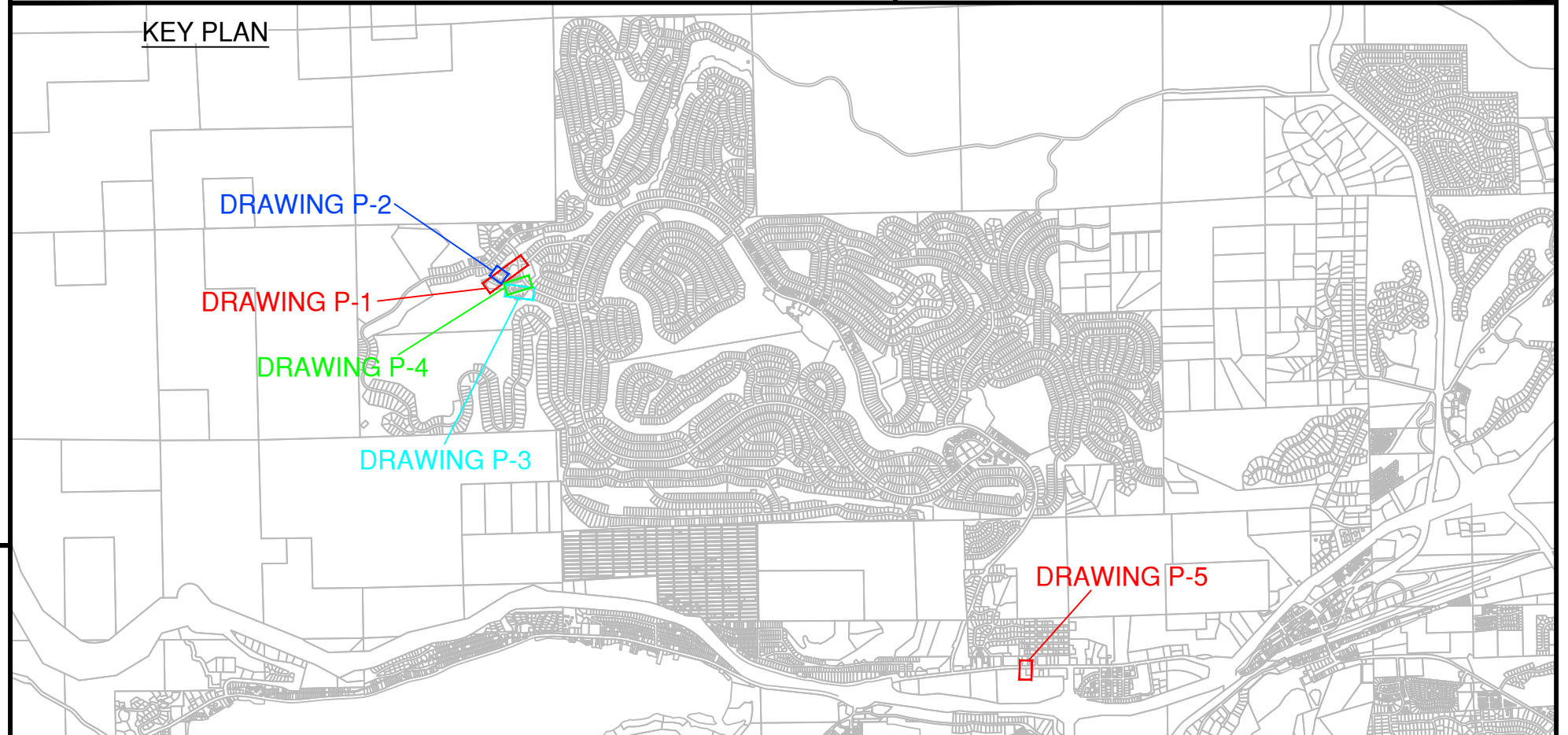
ABBREVIATIONS

AC	ASPHALT CONCRETE	LT	STREET LIGHT TOWER
ALIGN	ALIGNMENT	MJ	MECHANICAL JOINT
C	CONDUIT	P	PINE TREE
CMP	CORRUGATED METAL PIPE	PE	POLYETHYLENE
COMM	COMMUNICATIONS	PMP	PERFORATED METAL PIPE
CONC	CONCRETE	PUE	PUBLIC UTILITY EASEMENT
CP	CONCRETE PIPE	PVC	POLYVINYL CHLORIDE
CTV	CABLE TELEVISION	R/W	RIGHT-OF-WAY
DI	DROP INLET	SB	TRAFFIC SIGNAL BOX
DI	DUCTILE IRON	SD	STORM DRAIN
DWG	DRAWING	SIG	TRAFFIC SIGNAL POLE
EB	ELECTRICAL BOX	SPEC	SPECIFICATION
EP	EDGE OF PAVEMENT	SS	SANITARY SEWER
EXIST	EXISTING	SSFM	SANITARY SEWER FORCE MAIN
F	FIR TREE	STA	STATION
FCA	FLANGED COUPLING ADAPTER	STL	STEEL
FH	FIRE HYDRANT	TB	TELEPHONE BOX
FL	FLANGE OR FLANGED	TCE	TEMPORARY CONSTRUCTION EASEMENT
FL	FLOW LINE	TEL	TELEPHONE
FT	FEET	TMH	TELEPHONE MANHOLE
HDPE	HIGH DENSITY POLYETHYLENE	TYP	TYPICAL
IN	INCHES	UG	UNDERGROUND
INV	INVERT	UGE	UNDERGROUND ELECTRIC
JB	JUNCTION BOX	UGT	UNDERGROUND TELEPHONE
LP	LODGEPOLE PINE TREE	VCP	VITRIFIED CLAY PIPE
		WV	WATER VALVE

LEGEND

	AW	ABANDONED WATER PIPELINE
	CTV	EXISTING UNDERGROUND CABLE TELEVISION CONDUIT
	GAS	EXISTING NATURAL GAS PIPELINE
	IV	EXISTING IRRIGATION WATER PIPELINE
	JT	EXISTING JOINT TRENCH
	DHE	EXISTING OVERHEAD ELECTRICAL LINE
	DHT	EXISTING OVERHEAD TELEPHONE LINE
	PUE	PUBLIC UTILITY EASEMENT
	PW	EXISTING POTABLE WATER PIPELINE
	SS	EXISTING SANITARY SEWER LINE
	SSFM	EXISTING SANITARY SEWER FORCE MAIN
	SD	EXISTING STORM DRAIN LINE
	TCE	TEMPORARY CONSTRUCTION EASEMENT
	UGT	EXISTING UNDERGROUND TELEPHONE CONDUIT
	TR	EXISTING UNDERGROUND TRAFFIC SIGNAL CONDUIT
	UGE	EXISTING UNDERGROUND ELECTRICAL CONDUIT
		NEW POTABLE WATER PIPELINE
		GATE VALVE
		BUTTERFLY VALVE
	DS	DOUBLE WATER SERVICE
	DSP	DOUBLE WATER SERVICE WITH INTERNAL PRV
	DSL	DOUBLE WATER SERVICE FOR LOWER PRESSURE AREA
	DSV	DOUBLE WATER SERVICE WITH ONE LOT VACANT
	D2V	DOUBLE WATER SERVICE WITH BOTH LOTS VACANT
	SS	SINGLE WATER SERVICE
	SSP	SINGLE WATER SERVICE WITH INTERNAL PRV
		FIRE HYDRANT
		UTILITY POLE
		SEWER MANHOLE

KEY PLAN



INSTRUCTIONS TO CONTRACTORS

48 HOUR NOTICE REQUIRED PRIOR TO COMMENCING WORK

BEFORE COMMENCING WORK WITHIN THE TOWN OF TRUCKEE RIGHT-OF-WAY, THE CONTRACTOR SHALL NOTIFY THE TOWN OF TRUCKEE ENGINEERING DIVISION AT LEAST 48 HOURS IN ADVANCE OF THE TIME OF CONSTRUCTION AT 530-582-7700



Designed: NDK

Drawn: NDK

Checked: CR

Date: 11-6-2025

REVISIONS:



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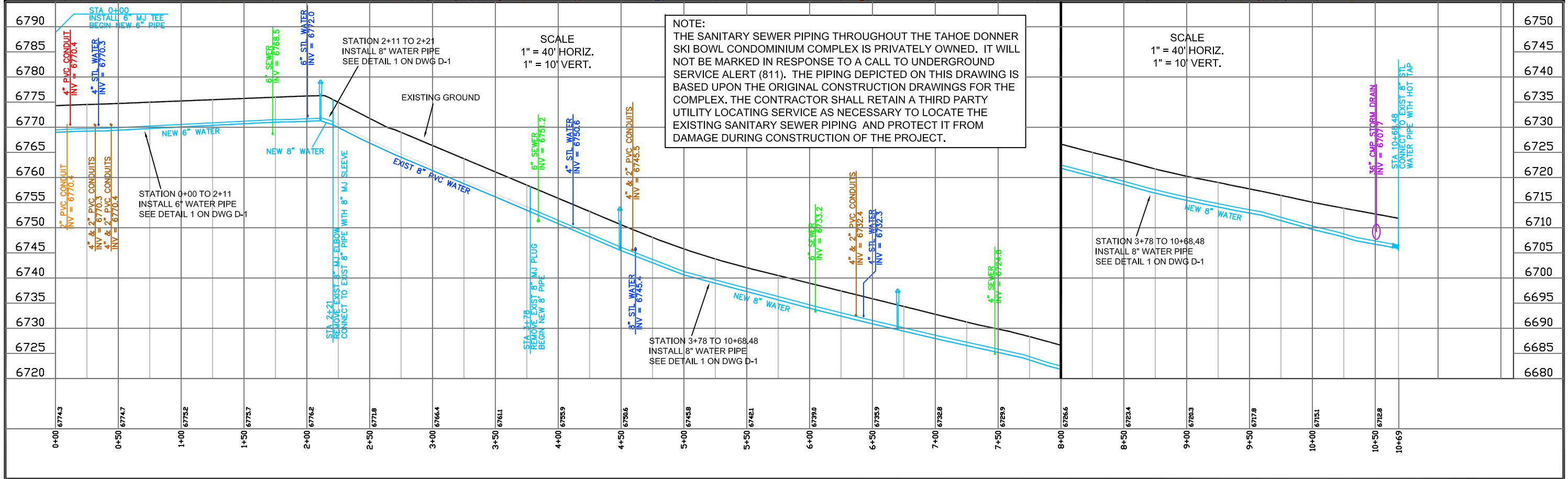
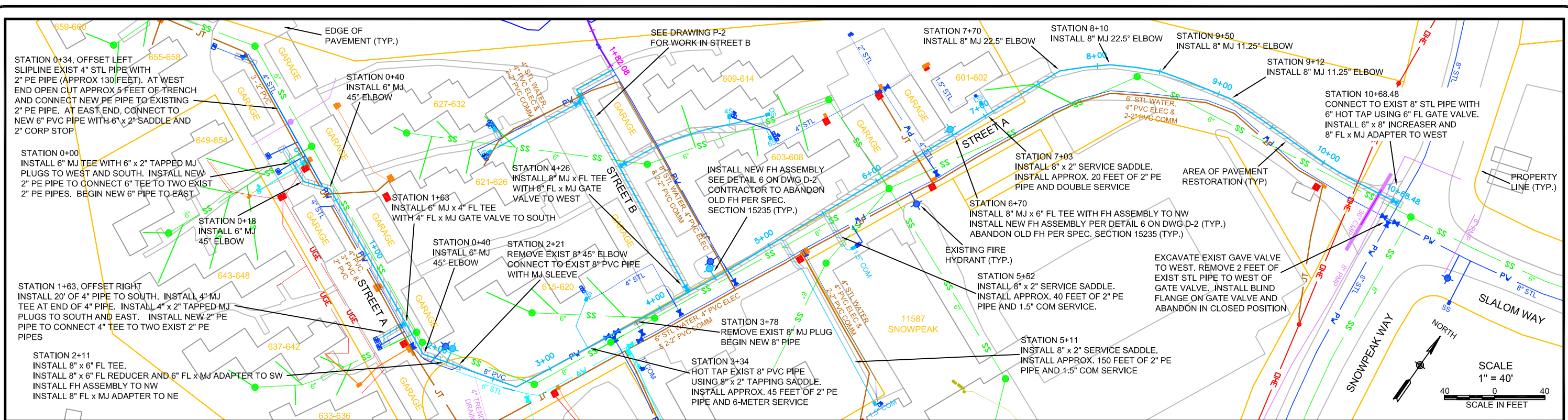
DISTRICT PIPELINE REPLACEMENT - 2026

ABBREVIATIONS, GENERAL NOTES,
LEGEND AND KEY PLAN

DRAWING

G-2

SHEET
2 of 10



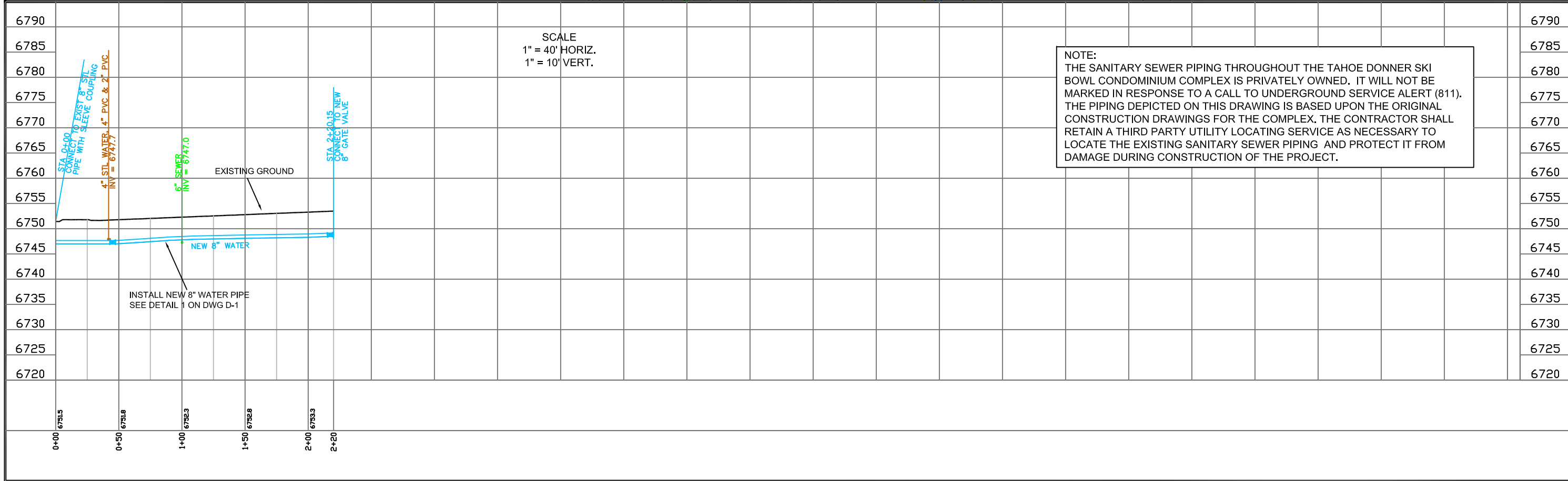
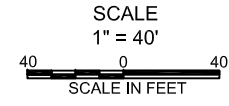
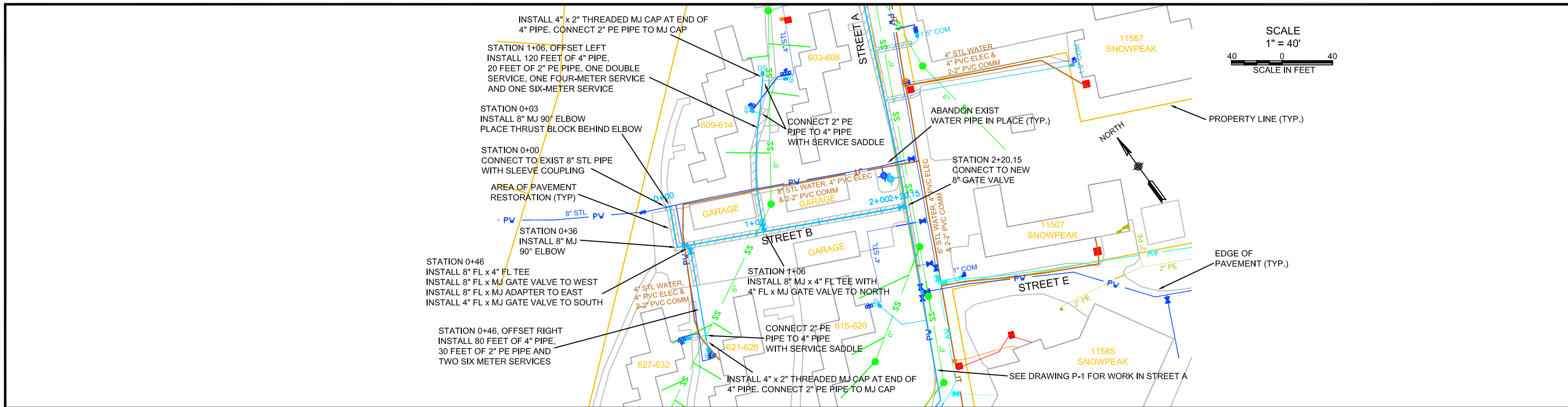
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DISTRICT PIPELINE REPLACEMENT - 2026
**TAHOE DONNER SKI BOWL
 CONDOMINIUMS - STREET A**
PLAN AND PROFILE

DRAWING
P-1
 SHEET
 3 of 10



SCALE
1" = 40' HORIZ.
1" = 10' VERT.

NOTE:
THE SANITARY SEWER PIPING THROUGHOUT THE TAHOE DONNER SKI BOWL CONDOMINIUM COMPLEX IS PRIVATELY OWNED. IT WILL NOT BE MARKED IN RESPONSE TO A CALL TO UNDERGROUND SERVICE ALERT (811). THE PIPING DEPICTED ON THIS DRAWING IS BASED UPON THE ORIGINAL CONSTRUCTION DRAWINGS FOR THE COMPLEX. THE CONTRACTOR SHALL RETAIN A THIRD PARTY UTILITY LOCATING SERVICE AS NECESSARY TO LOCATE THE EXISTING SANITARY SEWER PIPING AND PROTECT IT FROM DAMAGE DURING CONSTRUCTION OF THE PROJECT.



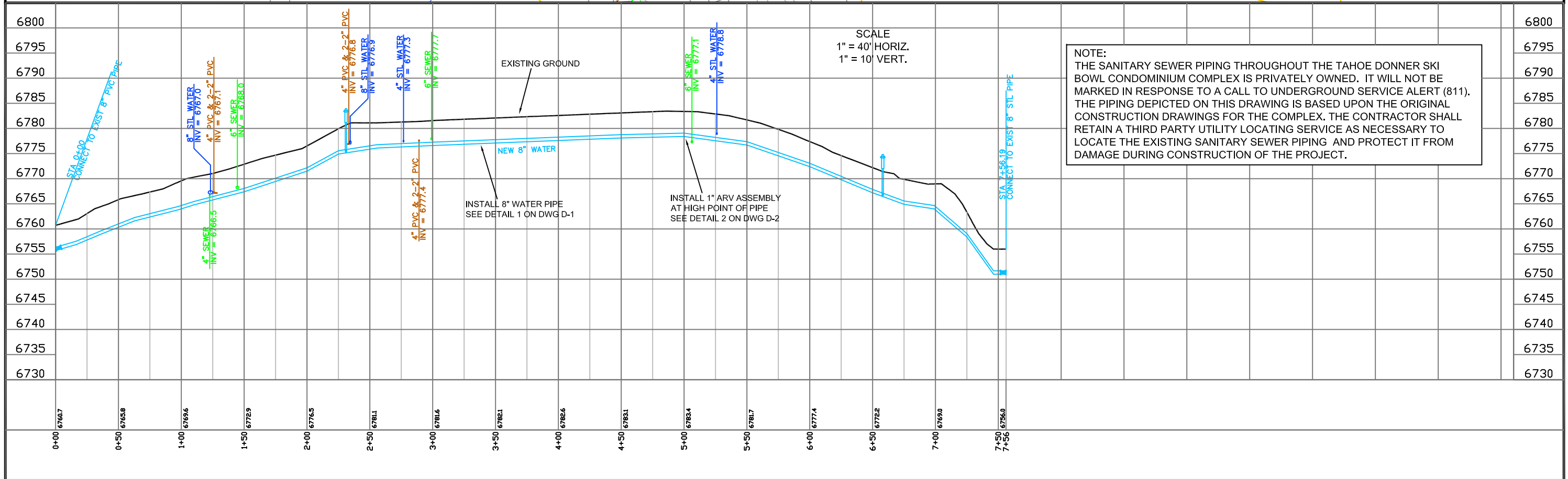
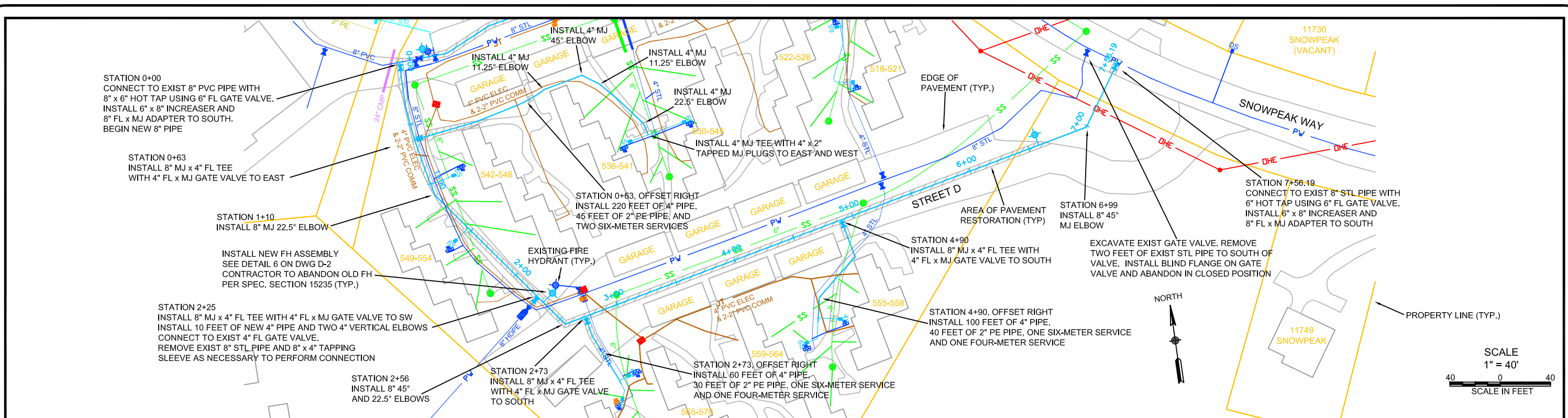
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Date: 11-13-2025

REVISIONS:



DISTRICT PIPELINE REPLACEMENT - 2026
**TAHOE DONNER SKI BOWL
CONDOMINIUMS - STREET B
PLAN AND PROFILE**

DRAWING
P-2
SHEET
4 of 10



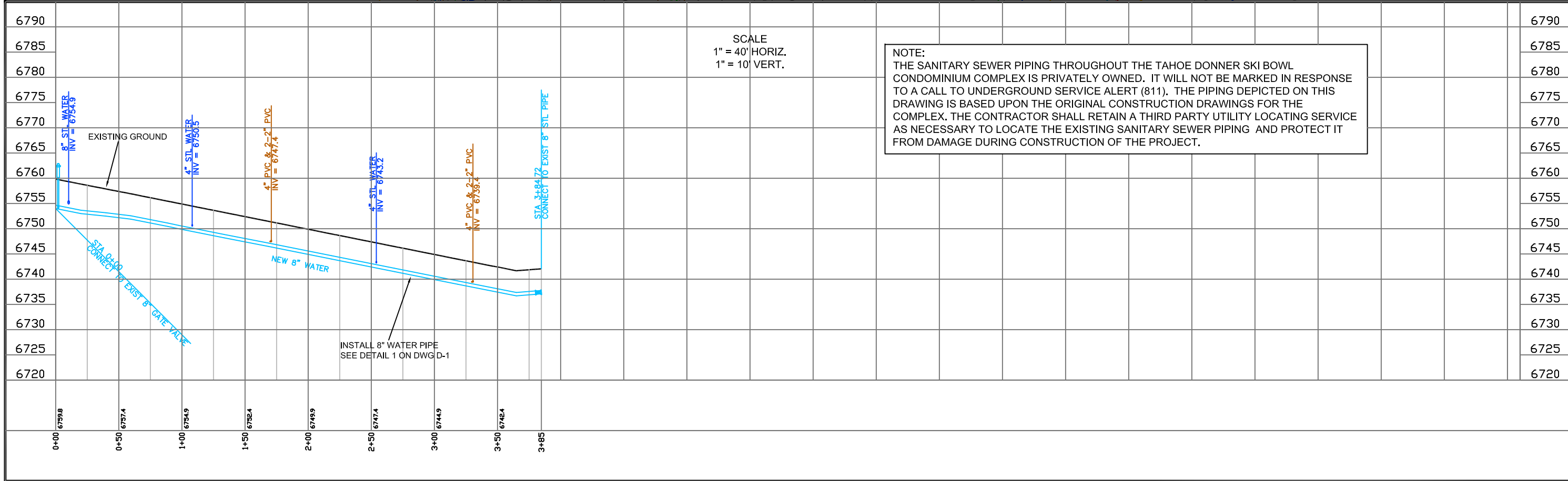
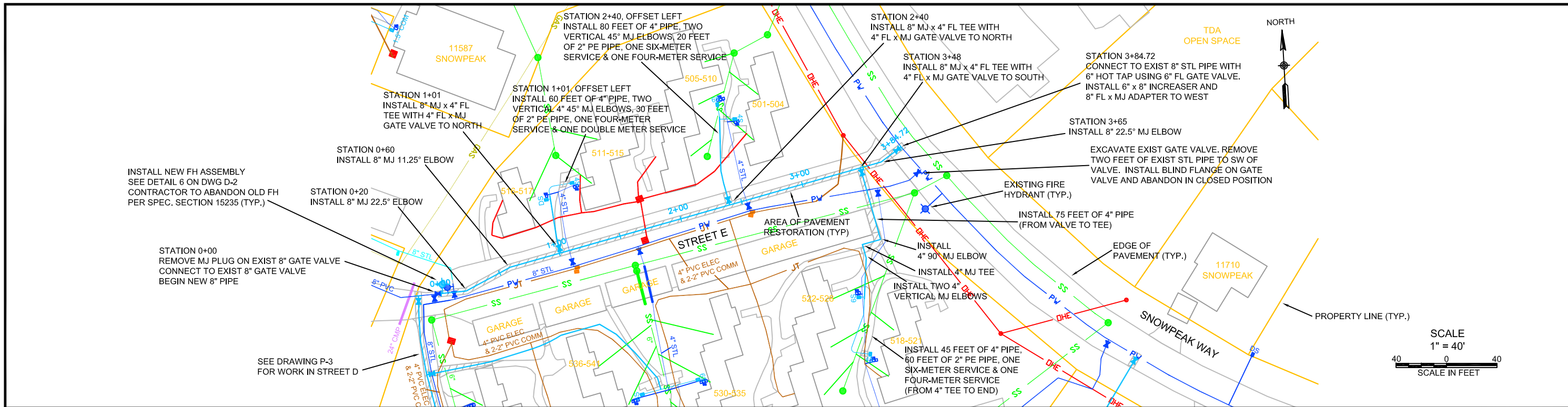
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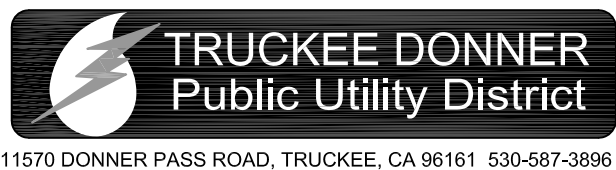
DISTRICT PIPELINE REPLACEMENT - 2026
TAHOE DONNER SKI BOWL CONDOMINIUMS - STREET D
PLAN AND PROFILE

DRAWING
P-3
 SHEET
 5 of 10



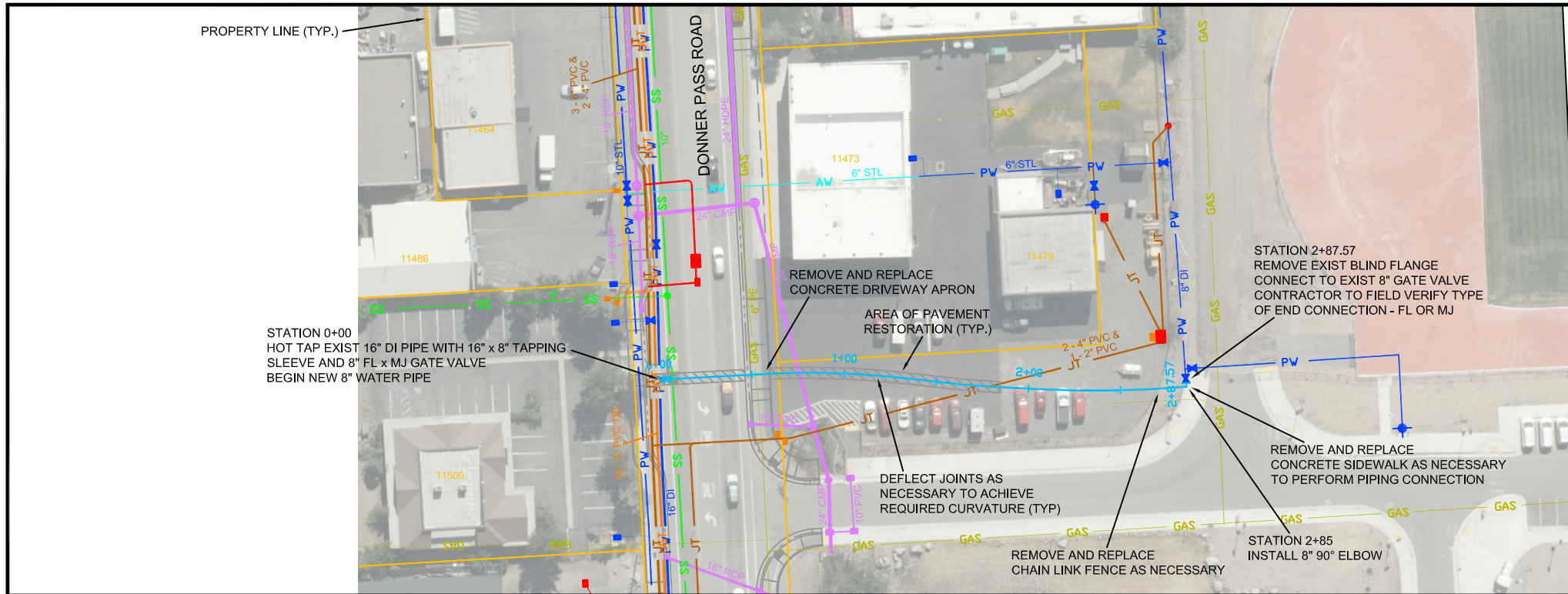
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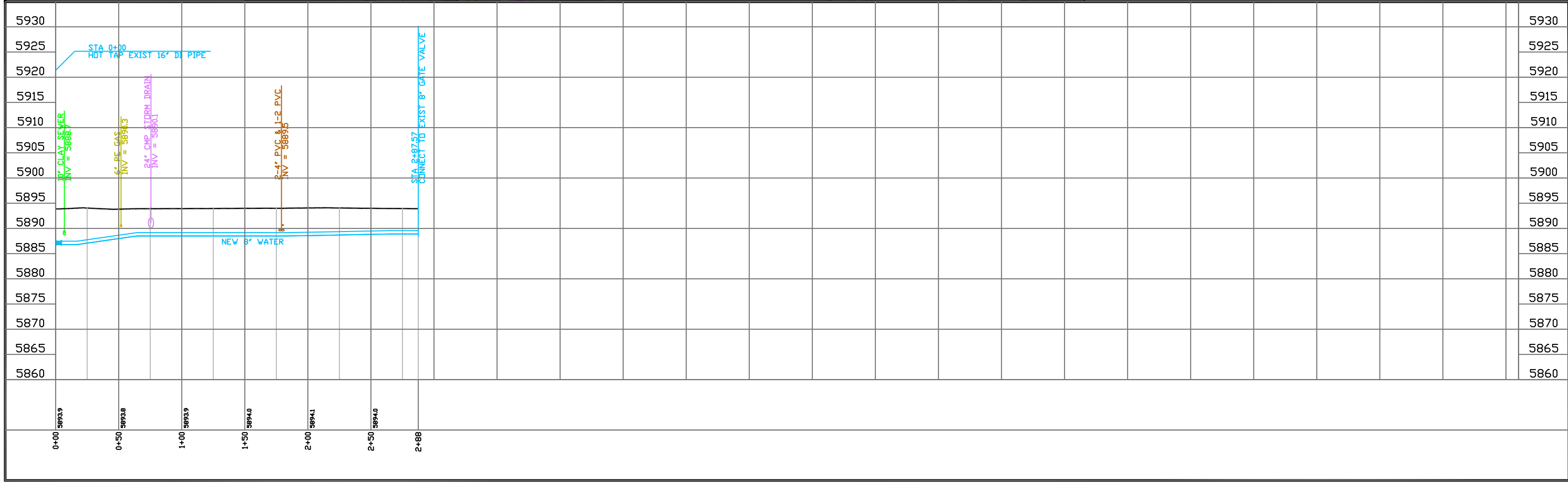


DISTRICT PIPELINE REPLACEMENT - 2026
**TAHOE DONNER SKI BOWL
 CONDOMINIUMS - STREET E
 PLAN AND PROFILE**

DRAWING
P-4
 SHEET
 6 of 10

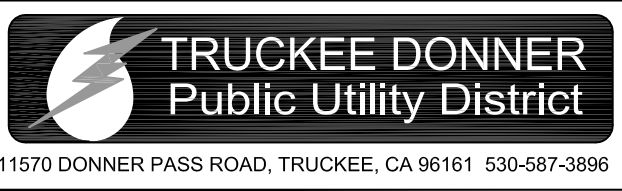


NOTE:
THE AERIAL PHOTO SHOWN IN THE BACKGROUND WAS
TAKEN BEFORE CONSTRUCTION OF THE STREETSCAPE
AND SIDEWALK IMPROVEMENTS



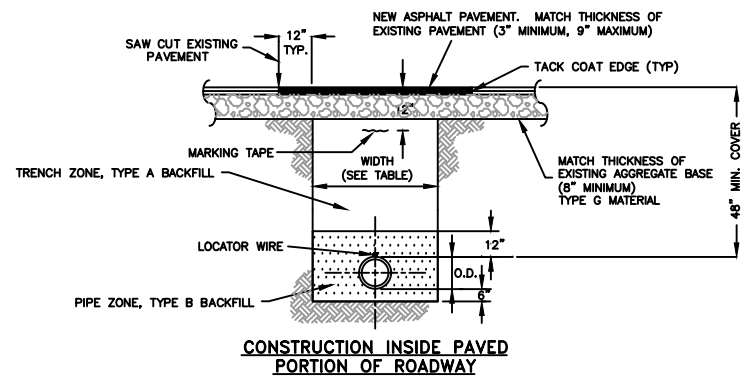
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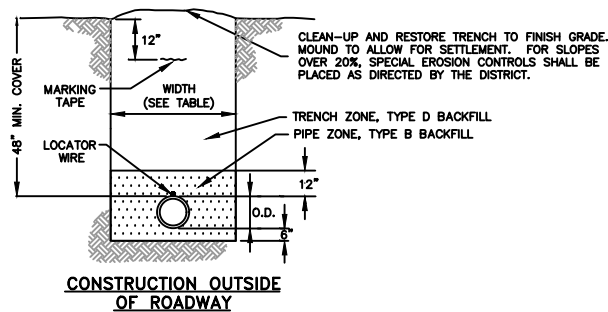


DISTRICT PIPELINE REPLACEMENT - 2026
**DONNER PASS RD AT FIRE HOUSE
 PLAN AND PROFILE**

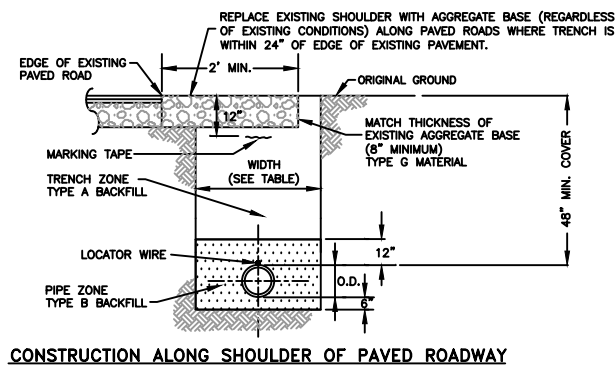
DRAWING
P-5
 SHEET
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CONSTRUCTION INSIDE PAVED PORTION OF ROADWAY



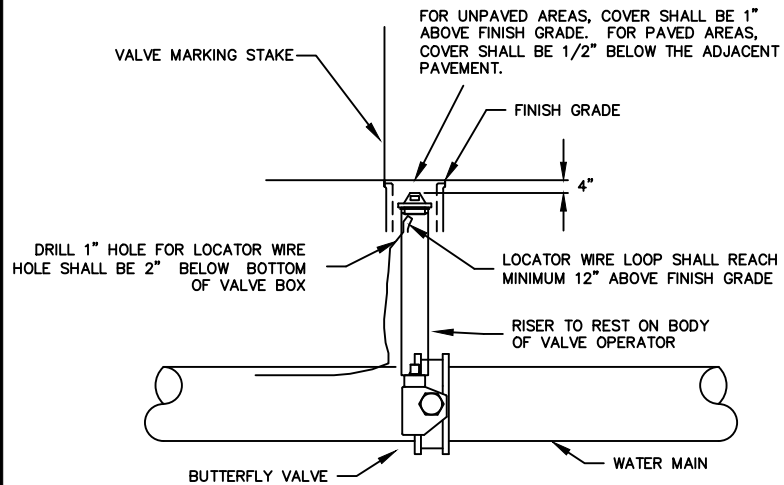
CONSTRUCTION OUTSIDE OF ROADWAY



CONSTRUCTION ALONG SHOULDER OF PAVED ROADWAY

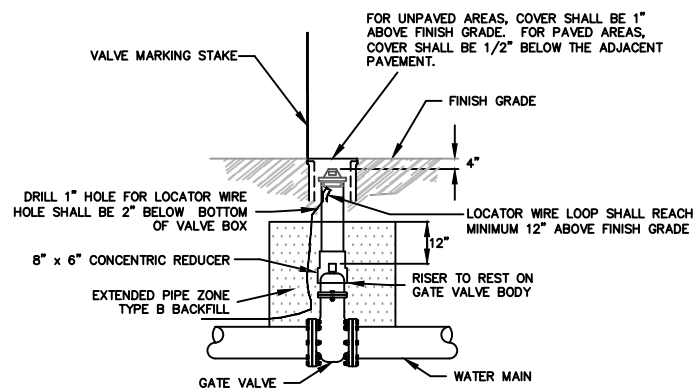
MINIMUM TRENCH WIDTH WITH PIPE CENTERED IN TRENCH	
PIPE DIAM.	WIDTH
4"	30"
6"	30"
8"	32"
10"	34"
12"	36"
14"	38"
16"	40"
18"	42"
20"	44"
24"	48"

1 SINGLE PIPE TRENCH DETAIL
NOT TO SCALE



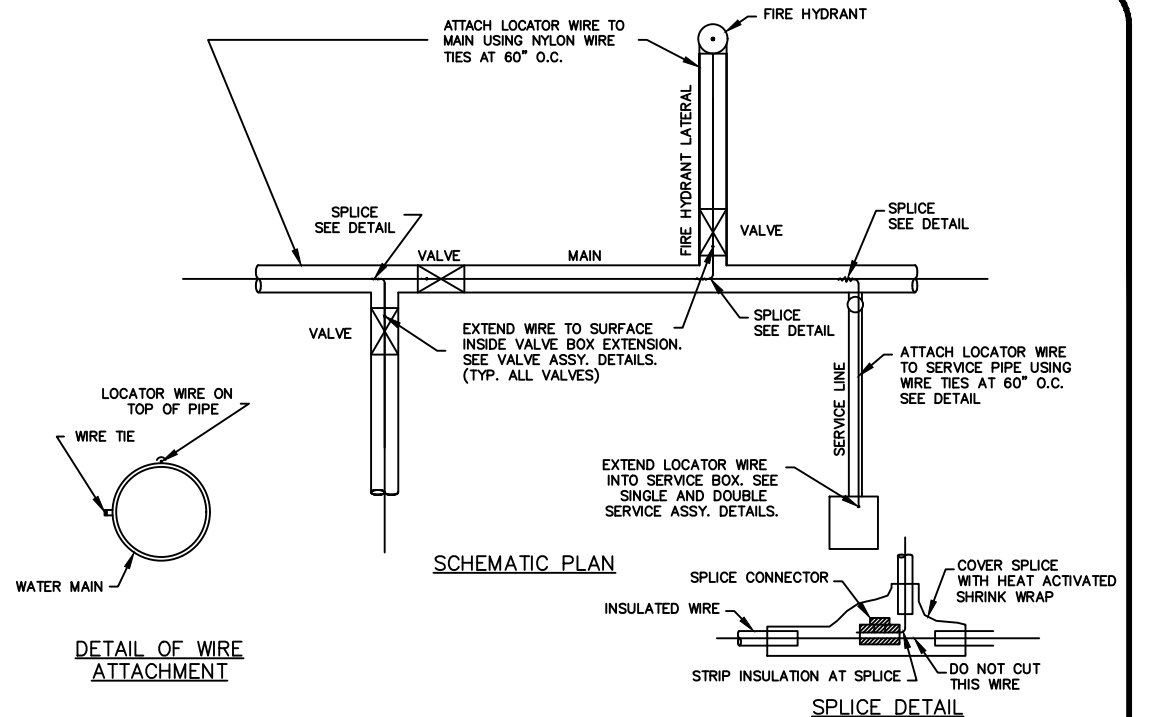
NOTE: DELETE VALVE MARKING STAKE IN ROADWAY SHOULDERS AND AREAS TO BE PAVED

2 BUTTERFLY VALVE DETAIL
NOT TO SCALE



NOTE: DELETE VALVE MARKING STAKE IN ROADWAY SHOULDERS AND AREAS TO BE PAVED

4 GATE VALVE DETAIL
NOT TO SCALE



3 LOCATOR WIRE DETAILS
NOT TO SCALE

90° BEND					45° BEND						
PIPE SIZE	4"	6"	8"	10"	12"	PIPE SIZE	4"	6"	8"	10"	12"
SQ. FEET	2	4	7	12	16	SQ. FEET	1	2	4	10	11
22-1/2° BEND 11-1/4° BEND					TEE OR DEAD END						
PIPE SIZE	4"	6"	8"	10"	12"	PIPE SIZE	4"	6"	8"	10"	12"
SQ. FEET	1	1	2	3	5	SQ. FEET	2	3	5	8	12

NOTES

1. AREAS GIVEN ARE FOR CLASS 350 PIPE AT TEST PRESSURE OF 150 P.S.I. IN SOIL WITH 2,000 P.S.F. BEARING CAPACITY.
2. BLOCKS TO BE POURED AGAINST FULL SQUARE FOOTAGE OF UNDISTURBED SOIL AS INDICATED ON TABLE.
3. ALL BOLTS AND JOINTS TO BE KEPT FREE OF CONCRETE.
4. PIPE 14" DIAMETER AND LARGER TO BE RESTRAINED THROUGH USE OF APPROVED MECHANICAL DEVICES OR "FIELD-LOK" GASKETS.
5. ALL THRUST BLOCKS MUST BE INSPECTED PRIOR TO BACKFILLING.
6. FOR ASSEMBLIES NOT SHOWN, METHODS AND MATERIALS TO BE APPROVED PRIOR TO INSTALLATION.

5 THRUST BLOCK SCHEDULE
NOT TO SCALE



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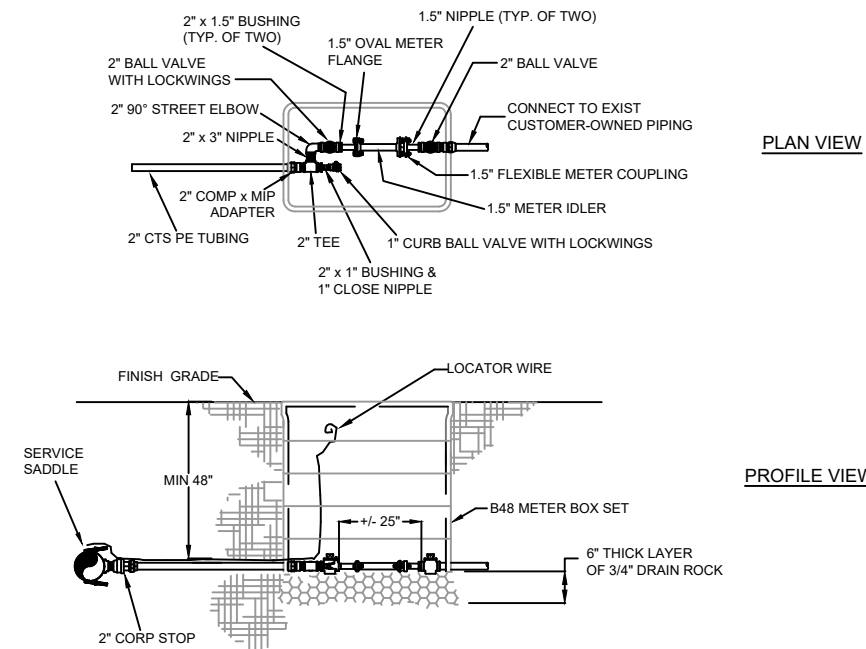


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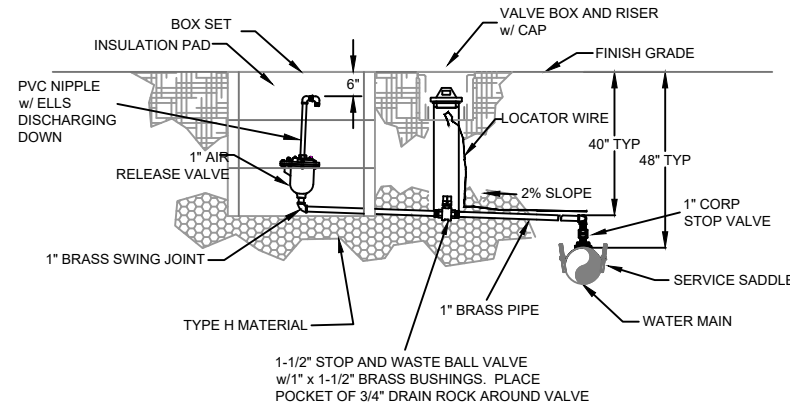
DISTRICT PIPELINE REPLACEMENT - 2026

DETAILS - 1

DRAWING
D-1
SHEET
8 of 10

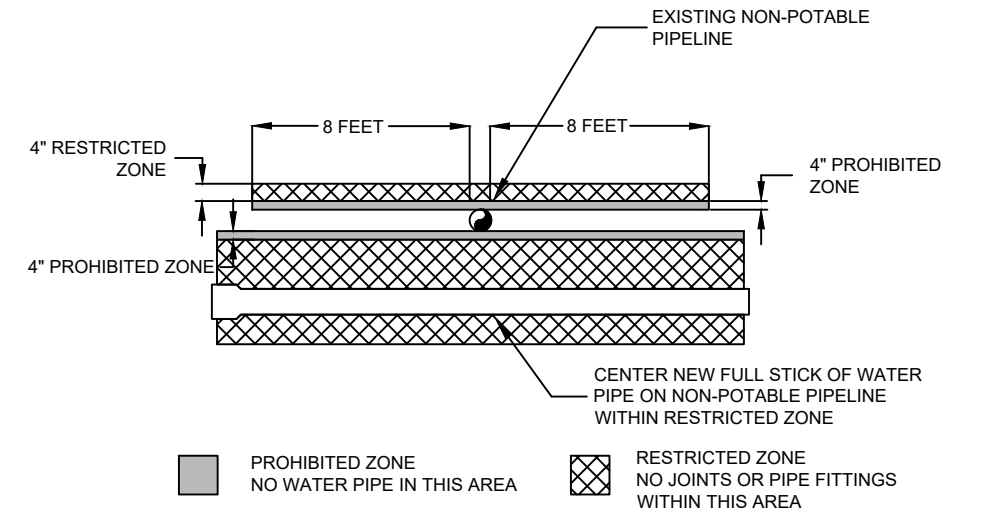


1 1.5" COMMERCIAL METER DETAIL
NOT TO SCALE

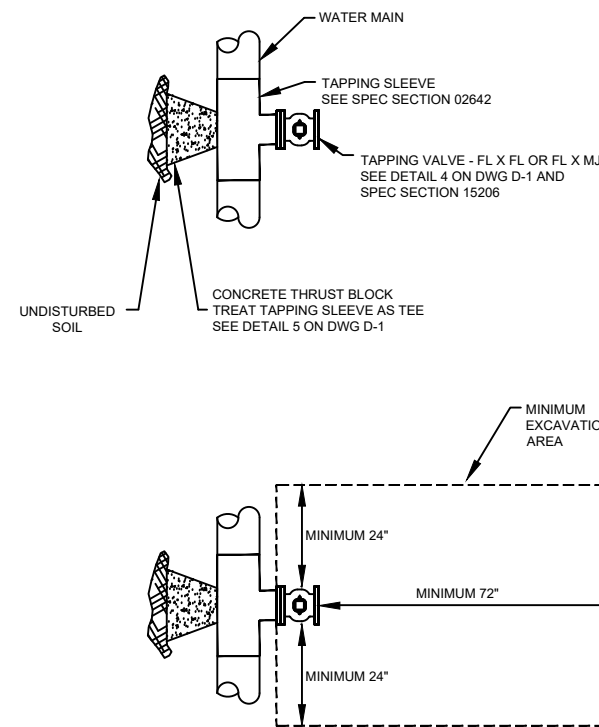


- NOTES:**
- INSTALLATIONS WITHIN PAVED AREAS OR SUBJECT TO VEHICULAR LOADING REQUIRE TRAFFIC RATED BOXES. SET TRAFFIC RATED LIDS 1/2" BELOW FINISH GRADE.
 - AIR RELEASE VALVE TO BE CENTERED WITHIN BOXES. EQUIDISTANT FROM SIDE AND END WALLS.

2 AIR VALVE DETAIL
NOT TO SCALE

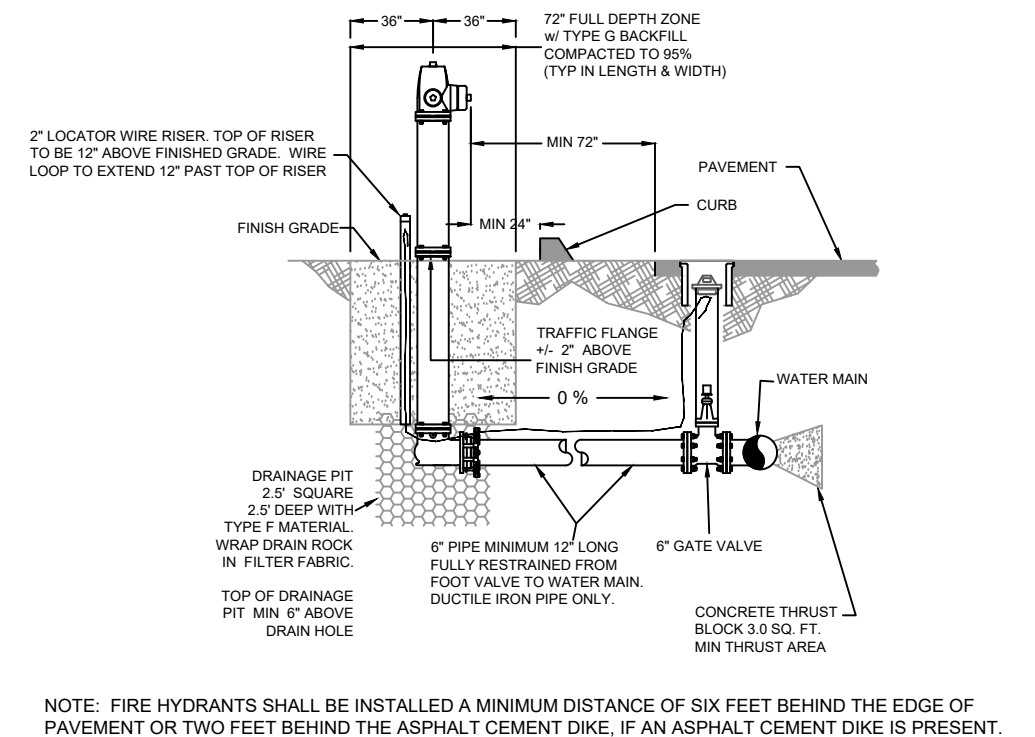


3 REQUIRED VERTICAL SEPARATION BETWEEN WATER AND NON-POTABLE PIPELINES
NOT TO SCALE



- NOTES:**
- TDPUD TO PERFORM ALL HOT TAPS.
 - SCHEDULE TAPS WITH TDPUD A MINIMUM 5 WORKING DAYS AHEAD.
 - INSTALL TAP SLEEVE AND SCHEDULE INSPECTION MINIMUM 24 HOURS BEFORE TAP.

5 HOT TAP DETAIL
NOT TO SCALE



NOTE: FIRE HYDRANTS SHALL BE INSTALLED A MINIMUM DISTANCE OF SIX FEET BEHIND THE EDGE OF PAVEMENT OR TWO FEET BEHIND THE ASPHALT CEMENT DIKE, IF AN ASPHALT CEMENT DIKE IS PRESENT.

6 FIRE HYDRANT DETAIL
NOT TO SCALE



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Date: 11-13-2025

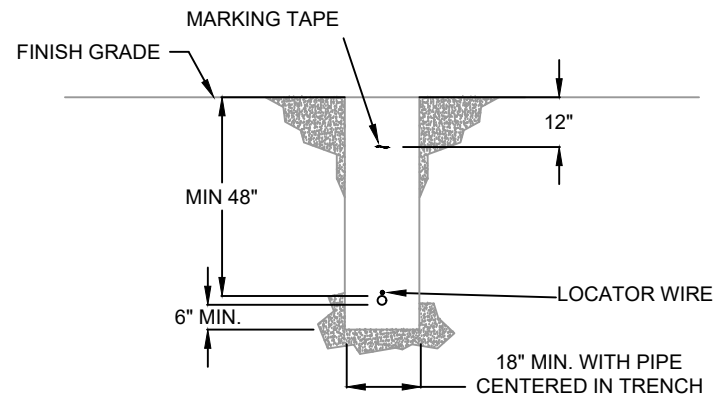
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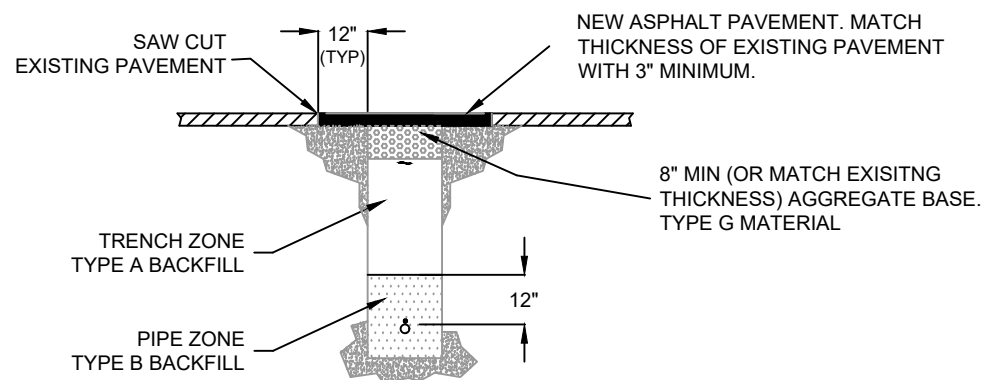
DISTRICT PIPELINE REPLACEMENT - 2026

DETAILS - 2

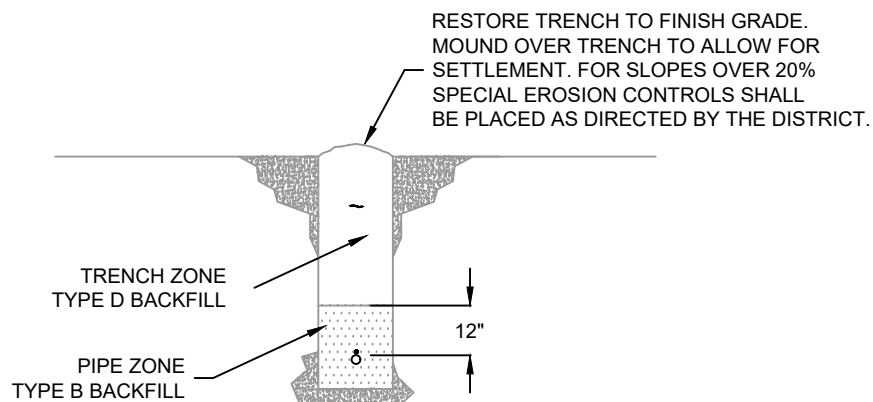
DRAWING
D-2
SHEET
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TRENCH DIMENSIONAL LAYOUT

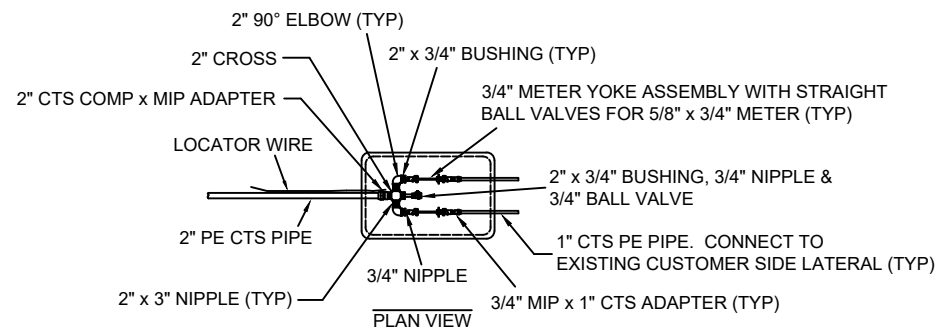


WITHIN PAVED AREAS

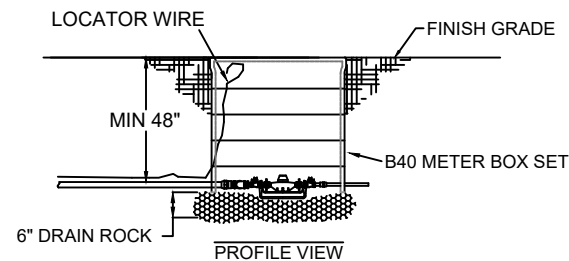


OUTSIDE PAVED ROADS

1 WATER SERVICE LATERAL TRENCH DETAIL
NOT TO SCALE

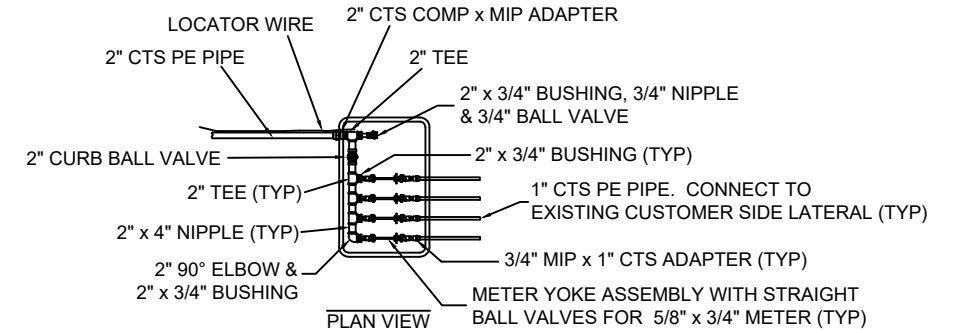


PLAN VIEW

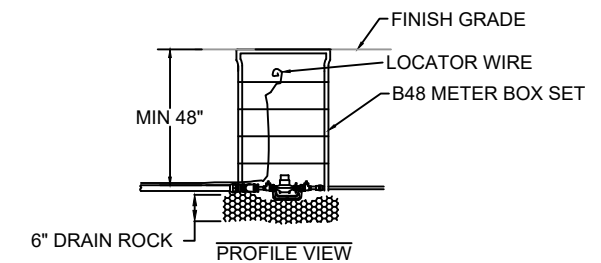


PROFILE VIEW

2 DOUBLE SERVICE DETAIL (DS)
NOT TO SCALE

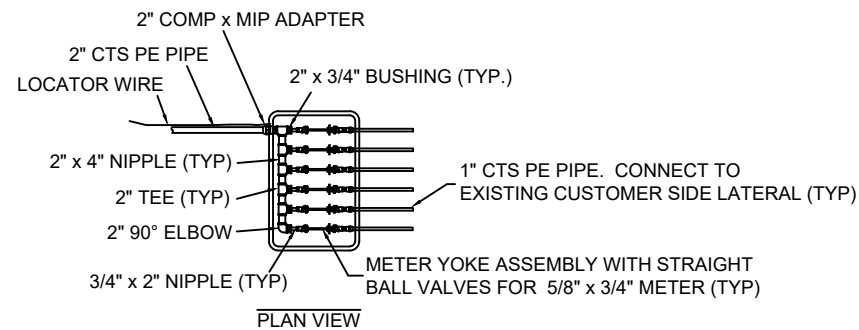


PLAN VIEW

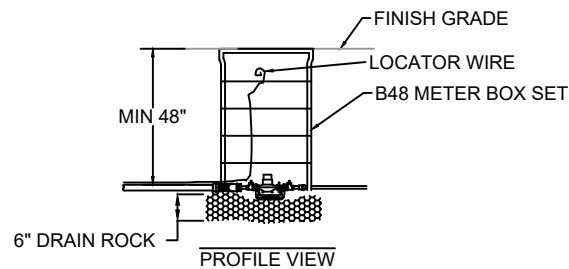


PROFILE VIEW

3 FOUR-METER SERVICE DETAIL (4S)
NOT TO SCALE

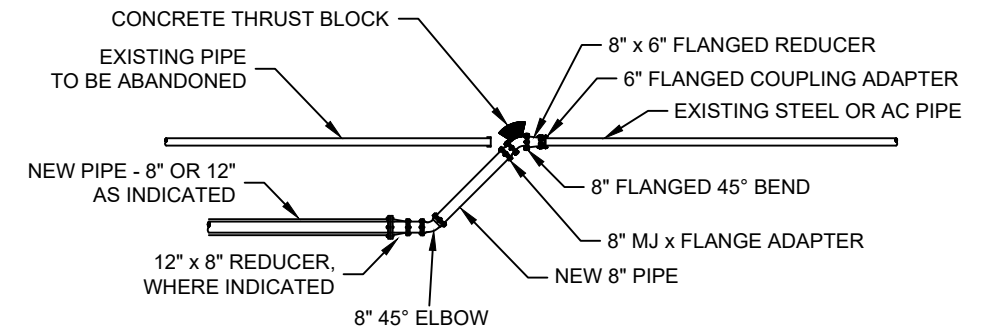


PLAN VIEW



PROFILE VIEW

4 SIX-METER SERVICE DETAIL (6S)
NOT TO SCALE



NOTES

1. DELETE 8" x 6" FLANGED REDUCER AND USE 8" FLANGED COUPLING ADAPTER IF CONNECTING TO EXISTING 8" PIPE
2. DELETE 6" FLANGED COUPLING ADAPTER IF CONNECTING TO EXISTING 6" GATE VALVE
3. COORDINATE SHUTDOWN WITH DISTRICT
4. CONTRACTOR MAY SUBSTITUTE A ROMAC 8" X 6" RC501 COUPLING AND 8" MJ 45° ELBOW FOR THE 6" FLANGED COUPLING ADAPTER, 8" X 6" FL REDUCER, 8" FL 45° ELBOW, AND 8" MJ X FL ADAPTER

5 CONNECTION TO EXISTING PIPE
NOT TO SCALE



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NO.	DESCRIPTION



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DISTRICT PIPELINE REPLACEMENT - 2026

DETAILS - 3

DRAWING

D-3

SHEET
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