CALAVERAS COUNTY WATER DISTRICT JENNY LIND WATER SYSTEM TANK A-B TRANSMISSION PIPELINE

ADDENDUM #2

Issued: Friday, January 12, 2024

**** Receipt of addenda must be acknowledged by Bidders on the BID FORM, Section 00410, Page 00410-1; failure to acknowledge receipt may cause rejection of bid. ****

<u>Bid Date:</u> The Bid Opening date/time has been changed to <u>Thursday, February 8, 2024 no later than 2:00 PM</u> at the office of the Calaveras County Water District at 120 Toma Ct., San Andreas, CA 95249.

PART A. PROJECT MANUAL / SPECIFICATIONS

- 1. Section 00410, Bid Form: See attached updated bid form. Delete older versions and replace with the attached updated version of the Bid Form.
- 2. Section 00410, Bid Item No.8, Fire Hydrants: The quantity of six (6) is incorrect. Please correct the quantity to be eight (8) hydrants.
- 3. Section 00410, Bid Item No.14, Tank 'B' Connection / Above Ground, add the following text: In specific regard to the subcontract for tank cleaning, inspection and repair of the inside coating system, the Contractor may be restricted by its Union Agreement and unable to subcontract or reach agreement with a non-union company. In such a case, the District may assume this subcontract and a change order issued to delete the subcontracted work from the contract. However, the Contractor shall retain responsibility for scheduling and coordinating the separate work efforts as originally intended and mitigate any conflicts relating to staging and activities at the site of the work.
- 4. Section 00410, Bid Item No.17, split paving work into different quantities 17A, B, C and D as shown in the updated bid form and description.
- 5. Section 15062, Ductile Iron Pipe: Amend Article 2.1, D. <u>Joints</u> to allow U.S. Pipe HDSS high pressure restraint pipe with deflection joint system for ductile iron pipe and fittings.
- 6. Appendix A / Project General Details: Add detail/requirement for temporary flushing connection with 6" reduced pressure backflow device and isolation plate. For flushing and disinfecting the new transmission main, the Contractor shall furnish and install a temporary 6" reduced pressure backflow device and isolation plate as shown in the attached detail. If an additional 14" valve is required, it shall be paid at the established unit cost.

1

PART B. DRAWINGS

1. None/no changes.

PART C. BIDDER'S QUESTIONS / REQUESTS FOR INFORMATION

<u>Item</u>	Question/Issue	Response
1	Is the intent to plug pave the trench with AC and then grind and remove 2" of the lane including the trench or the full width of the roadway?	For Hartvickson, Baldwin and Usher, the intent is to plug pave the trench with AC and then grind/remove 2" thickness for half the roadway width and/or on lane width. In a few locations, such as PRV stations, it will be necessary to grind the entire road width where both sides of the road are impacted by the trench. The paving on Wind River Ct is thinner and not enough to allow grinding prior to placing an overlay.
2	The Project Manual mentions overlaying the roadway 2", and grind and repave 2" of the roadway. Can you clarify which one is required?	The paving on Hartvickson, Baldwin and Usher the intent is to do a 2" grind prior to placing a 2" overlay. On Wind River Ct., the existing paving is too thin to allow grinding and therefore no griding will be possible prior to placing the 2" overlay.
3	The Project Manual includes seal coat. Is this for the new AC only, old AC only or the entire roadway? If paving extends the full width of the roadway, is it still required?	This is an error. No seal coat is required on the project under any conditions. Please disregard and delete this requirement.
4	Encroachment Permit, Type B, includes Microsurfacing of the roadway. Is this required since it appears CCWD is using Option 1? Is this in lieu of the seal coat?	Yes, CCWD is using Option 1, which is generally described as "grind and replace length of trench with 2" overlay over half the road width." As we're not going with Option 2, there is no need for microsurfacing. There is no intent to apply a seal coat to new or existing paving.
5	For Bid Item #21, it's not clear what the new saddles are connecting to. Are they connecting to new or existing main?	No service saddles are connected to the new transmission main. All saddles are replacing connections to the pre-existing water distribution mains. The new saddles reconnected to the same tap locations, except where dual services exist a new second tap location must be added. The existing service saddles must be potholed and located in order to remove/replace them in the same tap locations.
6	For Bid Item #21, it appears that the existing 16" main has at least four (4) saddles on it and at least one (1) is dual?	The existing 16" water is not a potable water main and there are no existing connections made to it. In most cases assume you're connecting to the existing 10" water main that is adjacent to the 16" water main.

<u>Item</u>	Question/Issue	Response
7	For Bid Item #21, it appears there is one (1) case where an existing service line in on the existing water main to be abandoned. If so, where does this service get re-connect?	There is an existing water service at approximately STA 32+55. The actual point of abandonment of the existing 8" main will have to be made prior to this service, say closer to STA 32+30, instead of going all the way up to Dunn Rd. In this case, the service would reconnect at the same, current location.
8	The quantity of new fire hydrants appears to be eight (8) instead of six (6) each?	Yes, correct quantity is eight (8) hydrants. The quantity in the bid form should be corrected from six (6) to eight (8) hydrants.
9	Is a biologist and/or tribal inspector required to be onsite for all work days or portions of the project? Or not required at all?	The Contractor is required to comply with the requirements of the environmental document and coordinate construction activities with any biologist, archeologist and/or tribal monitor checking for the mitigation, monitoring and reporting requirements listed in the IS/MND. Being that the project is mostly under pavement, I don't expect this to be occurring on all working days. In terms of the bid, the Contractor should not include costs of hiring and paying for the services of a biologist, archeologist or tribal monitor.
10	Can the thickness (average) of the existing asphalt be given for roads on the alignment?	We did not measure the paving thickness. On Hartvickson, Baldwin and Usher assume existing paving is 5" to 6" thick, which is sufficient to grind before overlaying the road. On Wind River Court and Tank B site, assume existing paving to be only 2" to 3" thick and not able to grind it.
11	Is it possible to amend the project specification to allow U.S. Pipe's HDSS restrained joint pipe product?	U.S. Pipe has notified us that they are transitioning from TR-Flex to HDSS restrained joint pipe system. CCWD will fully accept the U.S. Pipe HDSS and/or TR-Flex piping systems.
12	What are the Tank B property boundaries?	The fence at Tank B does not identify the property limits. CCWD owns the entire parcel APN 070-012-015. This includes the flat area just outside the fence to the west of Tank B. The property limits and assessor's map can be viewed on the County of Calaveras GIS website tool: https://opendata-calaveras-gis.opendata.arcgis.com/

- Size flanged outlets same as backflow device. After tap saddles with ball corp stops may be used for 2-1/2" backflows. removing temporary above ground piping then blind flange, polywrap and bury tees in trench. Double strap
- ĪΩ Swab and disinfect prior to installing temporary above ground/exposed piping and backflow device. Remove all temporary piping after completing flushing, disinfection and obtaining passing bacteriological tests.
- ω Contractor is responsible for tie-in connection less then 20-ft in length by swabbing with approved chlorine/hypochlorite solution or assuring fully
- 4 Size Reduced Pressure Backflow Device (at UL Rating of 7.5 fps) for required flow rate to achieve sweeping disinfected supply connection from active system

16	14	12	10	œ	6	4	(inches)	Diameter	Water Main
1,878	1,440	1,055	735	470	265	120	(gpm)	Sweeping Velocity	Flow for 3.0-ft/sec
2400	1500	1500	750	470	330	330	(gpm)	Max. UL Rating	Backflow
8"	6"	6"	4"	3"	2-1/2"	2-1/2"	(inches)	21.20 21.20	Backflow
8" DIP	6" DIP	6" DIP	4" DIP	3" DIP	2"/2-1/2" Threaded*	2"/2-1/2" Threaded*	מ דאקים	יייייט היייטט	Tomo Bining

* Threaded steel, brass pipe, or copper tube with companion flanges at backflow device. All lead free and certified NSF-61.

backflow device on-site. velocity 3.0-ft/sect in transmission main. Disinfected/Potable (Note 3) Supply from Active System Branch Dutlets (Note 1) New Main Line Flanged Tees with Reduced Lead Free, Test/certify Isolation Plate w/ Flange Adaptor (Romac RFCA) Colt C400 or SilverBullet 4000SS Backflow Device, Watts/Ames (Note 4) Temporary Reduced Pressure Piping Same Size As Backflow Device, Swab/Disinfect (Note 2) Temporary Above Ground Furnish/Install New Main (To Remain/Permanent) Line Size Gate Valve (Non-Potable) New Transmission Main To Be Flushed/Disinfected

GENERAL ARRANGEMENT FLUSHING TEMPORARY CONNECTION

SECTION 00410 BID FORM

TABLE OF ARTICLES

Article	- 1	_	Rid	к	PC1	n1	⊃n1
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Article 2 - Bidder's Acknowledgments

Article 3 - Bidder's Representations

Article 4 - Bidder's Certification

Article 5 - Basis of Bid

Article 6 - Time of Completion

Article 7 - Attachments to Bid

Article 8 - Defined Terms

Article 9 - Bid Submittal

Bid Schedule

Descriptions of Bid Items

ARTICLE 1- BID RECIPIENT

- 1.01 This Bid is submitted to: Calaveras County Water District at the Main Office located at 120 Toma Court, San Andreas, California 95249, no later than 2:00 PM local time, Thursday, February 8, 2024.
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2- BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3- BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

Addendum No.	Addendum Date

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

- C. Bidder is familiar with and is satisfied as to all Federal, State and local Laws and Regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in SC-4.02, and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-4.06 as containing reliable "technical data."
- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that any further examinations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of the Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- J. Bidder will submit written evidence of its authority to do business in the State or other jurisdiction where the Project is located not later than the date of its execution of the Agreement.

ARTICLE 4- BIDDER'S CERTIFICATION

- 4.01 Bidder further represents that:
 - A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;
 - B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid:
 - C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
 - D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.

- 2. "fraudulent practice" means an intentional misrepresentation of facts made to (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
- 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
- "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their
 property to influence their participation in the bidding process or affect the execution of the
 Contract.

ARTICLE 5- BASIS OF BID

- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the price(s) provided in the attached bid schedule (at the end of this section).
- 5.02 Unit Prices have been computed in accordance with Paragraph 11.03.B of the General Conditions
- 5.03 Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.
- 5.04 Bid Prices are for work that has been furnished and installed by the Contractor and is fully completed. The bid items as described and provided are for bidding and payment purposes and do not in any way limit the Contractor's responsibility to perform all work that may be reasonably inferred from the plans, specifications and other bid documents to produce the intended result.
- All specified cash allowances are included in the price(s) set forth above and have been computed in accordance with Paragraph 11.02 of the General Conditions.
- 5.06 If "additive" or "deductive" Bid Items are included in the Bid- clearly identify the method for applying the alternates and the basis for award of the contract.

ARTICLE 6- TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7- ATTACHMENTS TO THIS BID

- 7.01 The following documents are attached to and made a condition of this Bid:
 - A. Non-Collusion Affidavit (Section 00420);
 - B. Required Bid security in the form of a Bid Bond (Section 00430) or Certified Check;
 - C. List of Subcontractors (Section 00470);

ARTICLE 8- DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders (Section 00200), General Conditions (Section 00700 and Supplementary Conditions (Section 00800).

01	This Bid is submitted by:		
	Bidder's Business address:		
	Phone:	Facsimile:	
	Submitted on		
	State Contractor License No.		
	DIR Registration No.		
	Employer's Toy ID No		
	Employer's Tax ID No.		
	Employer's Tax ID No.		
Bido	der is:		
	der is: dividual		
	der is: dividual Name (typed or printed):		
	der is: dividual Name (typed or printed): By: (Individual's signature)		
Inc	der is: dividual Name (typed or printed): By: (Individual's signature)		
Inc	dividual Name (typed or printed): By: (Individual's signature) Doing business as: tnership		

A Corporation

State of Incorporation:	
•	
Type (General Business, Professional, Service, Limited Liability):	
By:	
By:	
Name (typed or printed):	
Title:	
Attest:	
(Signature of Corporate Secretary)	
Date of Qualification to do business is\	
<u>Venture</u>	
Name of Joint Venturer:	
First Joint Venturer Name:	
By:	
By:	
Name (typed or printed):	
Name (typed or printed): Title:	
Title:	
Title:Second Joint Venturer Name:	
Title:	
Title: Second Joint Venturer Name: By: (Signature of second joint venture partner – attach evidence of authority to sign)	
Title:Second Joint Venturer Name:	

BID SCHEDULE – BASE BID

ITEM	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>UNIT PRICE</u>	BID PRICE
1	Mobilization/Demobilization Encroachment Permit	LS	1		
2	Compliance and Traffic Controls	LS	1	\$.	\$
3	SWPPP/BMP's	LS	1	\$	\$
		I G		0	
4	Utility Locating	LS	1		\$.
5	Sheeting, Shoring & Bracing	LS	1		\$
6	Pressure Reducing Stations	EA	5	\$.	\$.
7	3" Air Valves	EA	13	\$.	\$.
8	Fire Hydrants	EA	8	\$.	\$.
9	14" Gate Valves	EA	17	\$.	\$.
10	12" Gate Valves	EA	9	\$.	\$.
11	14" Transmission Main	LF	13,530	\$.	\$.
10					
12	12" Transmission Main Tank 'B' Yard Piping Modifications	LF LS	6,468	\$	\$

<u>ITEM</u>	DESCRIPTION	<u>UNIT</u>	<u>QTY</u>	<u>UNIT PRICE</u>	BID PRICE
14	Tank 'B' Piping Connection (Sheet C26, Detail A)	LS	1	\$ ·	\$ ·
15	Tank 'A' Yard Piping Modifications	LS	1	\$ •	\$ ·
16	Cap and Abandon 8" Distribution Main Piping	LS	1	\$	\$ ·
17A	Trench Plug Paving	TON	2,000	\$	\$
17B	2" Grind/Cold Milling	SY	27,500	\$ <u> </u>	\$ ·
17C	2" Overlay	TON	3,200	\$	\$
17D	Pavement Painting, Marking and Lettering	LS	1	\$ ·	\$ ·
18	Slurry Fill	CY	30	\$ 	\$
19	Allowance for Rock Excavation	LS	1	\$ 50,000.00	\$ 50,000.00
20	Site Restoration, Closeout and Other Items of Work	LS	1	\$ ·	\$
	AL BID AMOUNT ALL ITEMS IERICAL)	S (1 to 2	0)	\$	

DOLLARS

TOTAL BID AMOUNT (WRITTEN)

BID SCHEDULE – ADDITIVE BID ITEM

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>UNIT PRICE</u>	BID PRICE
21	Remove and Replace Water Service Laterals	EA	210	\$	\$

DESCRIPTIONS OF BID ITEMS

Note: Bid items listed herein for bidding and payment purposes do not limit Contractor's responsibility to perform all work required under this contract, on drawings, in specifications, or reasonably inferred or interpreted to be necessary to complete the work. All bid items will have 5% retention in the progress payment held for final payment.

BID ITEM NO.1 – MOBILIZATION / DEMOBILIZATION

This item consist of preparatory work and operations, including, but not limited to those necessary for the movement of personnel, equipment, supplies, and incidentals to the site; securing bonds and insurance, establishing a field office (if applicable) and staging areas; preparing schedules and sequencing plans, submitting shop drawings; and for all other work and operations to be performed, or costs incurred, prior to beginning the Work. Contractor shall provide and maintain portable toilet(s) on-site for use by employees. Demobilization shall include, but not limited to, removal of all waste materials, debris, final cleanup of construction and staging areas, and issuance of maintenance bond. (Note: This bid item not to exceed five percent (5%) of the total Contract Sum.)

BID ITEM NO.2 – ENCROACHMENT PERMIT COMPLIANCE AND TRAFFIC CONTROLS

As necessary to complete all work within road rights-of-way, the Contractor shall provide all labor, equipment and materials and perform all work and coordination to implement and comply with encroachment permits as issued by Calaveras County and on file with County Public Works. The District has obtained the project specific encroachment permits as "Owner" and paid all fees directly invoiced by Calaveras County. The Contractor shall prepare and file all paperwork to complete Contractor's part of the encroachment permits and must comply with all requirements and conditions as listed "Contractor" under these permits. Also, refer to the Calaveras County website for information and applications relating to the permitting process. The Contractor shall prepare/submit specific traffic control plans meeting requirements and approval of the permitting agencies, and shall fully support and implement traffic control plans including all signage, flaggers, barricades, k-rail, safety devices, etc. Temporary traffic control plans shall be designed and implemented in accordance with California Manual on Uniform Traffic Control Devices (MUTCD) 2014, Revision 7. Flaggers shall be provided in all cases. The Contractor shall be fully responsible for scheduling and notifying the County of all road lane closures and other encroachments within the right of way two weeks in advance of work and report daily status both at beginning of traffic control and again when done at end of day; if lane closure is scheduled but not used, Contractor is obligated to call in to the County and cancel it for each day.

BID ITEM NO.3 – STORM WATER POLLUTION PREVENTION (SWPPP/BMP'S)

This item includes all labor, materials, equipment for installing and maintaining the project specific Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMP's) to comply with the Construction General Permit 2022-0057-DWQ/NPDES No.CAS000002. The SWPPP for this project has been prepared by Owner and included with the bid package. The Contractor will be required to registered the project through the California Storm Water Multiple Applications and Report Tracking System (SMARTS). The Contractor must fully comply with the SWPPP and must have a designated QSP on-site each day to implementing, maintaining, monitoring and reporting the plan. All work shall be according to accepted standards including the CASQA 2023 Construction BMP Handbook. All work shall conform to the SWPPP prepared for this Project and shall include the furnishing, installation and removal of silt fencing, combination fencing and temporary fencing as shown on the drawings. BMPs shall be provided for run-on control, soil stabilization, erosion control, sediment control, tracking control, wind erosion, material pollution prevention/control and waste management. Each day if trenching, excavating and/or tracking dirt onto roads/highways, all trench spoils and excess waste excavated materials shall be removed and area mechanically swept by regenerative air sweeper to thoroughly clean all pavement surfaces. Contractor's operations shall not be conducted in a method/manner that allows trench spoil or backfill materials to directly enter into any creeks, stream, drainage or roadside ditch. If impacting any existing drainages, they shall be cleaned of all trench spoil, debris and returned to free flowing, functional pre-construction condition. As work progresses along the alignment and portions of the pipeline are completed, the corresponding disturbed soil areas shall be stabilized by appropriate BMP's as soon as possible so each completed area can be closed out and removed from the SWPPP permit with the goal of limiting further monitoring and reporting in completed areas. After demobilization, Contractor's responsibility shall continue during guarantee period and placement of final stabilization until a Notice of Termination (NOT) is filed and accepted by the Regional Board.

BID ITEM NO.4 – UTILITY LOCATING

Work under this item shall consist of performing a construction survey for laying out the locations of the project construction and avoiding existing utilities and positively locating potential conflicting utilities. The Contractor shall be responsible to coordinate all utility locates, work, and construction schedule with Underground Service Alter (USA) North, and individual utility companies. Before construction begins, Contractor shall positively locate potential utility conflicts and identify any other conflicts. The Contractor shall mark all excavations and notify Underground Service Alert (USA) North at least 48-hours before digging and following all other provisions of California Government Code Sections 4216 through 4216.9 as amended by this contract. Contractor shall maintain an active USA North ticket number for the entire duration of the excavation.

BID ITEM NO.5 – SHEETING, SHORING & BRACING

In accordance with California Labor Code and Department of Industrial Relations requirements, the Contractor shall furnish and install sheeting, shoring and bracing for all excavations and trenches five (5) feet or deeper into which a person is required to descend; safety plan(s) shall meet minimum requirements of the Construction Safety Orders, Sections 1539 to 1543. For different soil types, refer to geotechnical reports in the Appendix of this Project Manual.

BID ITEM NO.6 – PRESSURE REDUCING STATIONS

This item includes pressure reducing stations PRV-1 thru PRV-5 as shown on the plans, Sheets C21 thru C25 and specified in Section 15114. This item includes all labor, equipment and materials to furnish and install each new station. All pipe and fittings shall be ductile iron and fully mechanically restrained. Backfill shall be Class 2 AB. The Contractor shall perform other items of work including providing all new upstream and downstream piping and connecting to existing downstream water main. Hydrostatic tests shall be completed before making final downstream tie-in connections to existing system. Contractor shall clean, disinfect, flush and hydrostatic test each PRV station. After testing, Contractor shall set/adjust final operating pressure settings for the 8" main, 3" bypass and relief valves for service conditions; relief valve shall be set first before making tie-in to avoid over pressurizing downstream water system. Payment shall be for each PRV station furnished and installed, disinfected, tested and placed into service by Contractor, as accepted by District, and completing associated tie-in connection to the existing system.

BID ITEM NO.7 – 3" AIR VALVES

Contractor shall provide all labor, equipment and materials for furnishing and installing 3" combination air release valves according to specifications Section 15113 and CCWD Standard Detail W05. All piping and fittings hall be ductile iron and fully mechanically restrained. Backfilled with Class 2 AB according to standard trench detail with polyethylene encasement, warning tape and tracer wire. Provide traffic rated boxes for gate and air valves. Payment shall be for each air valve assembly furnished and installed per detail, tested, disinfected, placed in service by Contractor and accepted by District

BID ITEM NO.8 – FIRE HYDRANTS

Contractor shall provide all labor, equipment and materials and install complete and in place fire hydrant assembly including new hydrant, main line tee, 6" dia. ductile iron branch line piping, 6" gate valve, valve box, tracer wire, polyethylene wrap, and other items per CCWD Standard Details W04 and W04A and Specification Section 15118. All pipe and fittings shall be ductile iron and fully mechanically restrained. Contractor shall provide all associated trenching, backfill, and compaction according to CCWD Standard Detail G05, Trench Section. Prior to placement, the final hydrant locations shall be approved by and acceptable to Caltrans in highway right-of-way, Public Works along County roads, and otherwise as directed by District. Payment shall be for each hydrant assembly furnished, installed, tested, disinfected, flushed and placed into service according to the project specifications, drawings and applicable details. (Note: Final locations of fire hydrants will be field adjusted and must be acceptable to County Public Works).

BID ITEM NO.9 – 14" GATE VALVES

This items covers 14" main line gate valves on the project at approximately stations (STA): 1+63, 1+74, 10+25, 20+25, 30+25, 40+25, 47+59, 47+63, 60+25, 70+25, 80+25, 90+25, 102+58, 102+62, 110+25, 120+25, and 130+25. The contractor shall provide all labor, equipment and materials for 14" resilient wedge AWWA iron body gate valves per specification Section 15109 as shown on project drawings and generally represented by CCWD Details W03 and W03A except 14" gate valves shall be furnished with bevel gears and installed horizontally oriented in the trench on a cast in place concrete support pedestal. All gate valves shall be backfilled with Class 2 AB according to the standard trench detail with polyethylene encasement, warning take and tracer wire. Boxes shall be traffic rated. Payment shall be for each valve furnished, installed, disinfected, tested, placed in service and accepted by the District.

BID ITEM NO.10 - 12" GATE VALVES

This item covers 12" main line gate valves on project at approximately stations (STA): 135+93.5, 135+96.5, 140+25, 150+25, 160+25, 172+58, 172+62, 180+25, and 190+25. Contractor shall provide all labor, equipment and materials for 12" resilient wedge AWWA iron body gate valves per specification Section 15109 as shown on project drawings and in accordance with CCWD Details W03 and W03A. All gate valves shall be supported by a concrete pedestal, backfilled with Class 2 AB according to the standard trench detail with polyethylene encasement, warning take and tracer wire. Boxes shall be traffic rated. Payment shall be for each valve furnished, installed, disinfected, tested, placed in service and accepted by District. (Note: For Sheet T2 include other 12" gate valves with Bid Item #13).

BID ITEM NO.11 - 14" WATER MAIN / OPEN-CUT

This bid item includes all underground piping and related work shown on Sheets C2 to C14 starting from STA 0+62 and continuing through STA 135+92. This item includes providing all labor, equipment and materials for construction of 14" diameter fully mechanically restrained ductile iron water main (pipe, fittings, flanged adaptors, restraint glands, and other accessories) 350 psi working pressure rated, by open-cut trench method according to project specifications and drawings. The work includes utility marking/potholing, trench excavation, rock excavation/ hammering, removal and disposal of waste excavated material, installation of pipe, fittings, reducers and accessories, placement/compaction of bedding, backfill, road base and temporary cut back/cold patch; providing polyethylene wrap, locator wire and caution tape; scheduling shutdowns, coordinating construction sequences; disinfection, flushing, testing and placing pipeline into service; making public notifications and other related activities as described in Contract Documents. This work occurs within the public right of way under conditions of the applicable encroachment permit issued by the County Public Works. Payment shall be made per lineal feet of 14" diameter pipe (measured at ground surface) installed, tested, disinfected, placed into service and approved/accepted by District.

BID ITEM NO.12 – 12" WATER MAIN / OPEN-CUT

This bid item includes all underground piping and related work shown on Sheets C14 to C20 from STA 135+92 to STA 200+60. This item includes providing all labor, equipment and materials for construction of 12" diameter fully mechanically restrained ductile iron water main (pipe, fittings, flanged adaptors, restraint glands, and other accessories) 350 psi rated, by open-cut trench method according to project specifications and drawings. The work includes utility marking/potholing, trench excavation, rock excavation/ hammering, removal and disposal of waste excavated material, installation of pipe, fittings, reducers and accessories, placement/compaction of bedding, backfill, road base and temporary cut back/cold patch; providing polyethylene wrap, locator wire and caution tape; scheduling shutdowns, coordinating construction sequences; disinfection, flushing, testing and placing pipeline into service; making public notifications and other related activities as described in Contract Documents. This work occurs within the public right of way under conditions of the applicable encroachment permit issued by the County Public Works. Payment shall be made per lineal feet of 12" diameter pipe (measured at ground surface) installed, tested, disinfected, placed into service and approved/accepted by District.

BID ITEM NO.13 – TANK 'B' YARD PIPING MODIFICATIONS

This item includes furnishing and installing all underground piping and related work for the Tank 'B' Yard Piping Modifications shown on the drawings, Sheet T2. This work includes all underground piping, fittings and valves, etc. after STA 200+60 and greater. This work includes: a) 12" rubber flapper check valve inside concrete vault including associated piping, fittings, valves and other ancillary items, b) all other underground piping including flanged 12" DIP riser at transition to steel to above ground tank connection, c) furnishing and installing a total of six resilient wedge 12" gate valves and one resilient wedge 8" gate valve according to Detail W03, d) connections of new 12" dia. transmission main and tie-in to existing 8" dia. water main as shown, e) demolition and removal of existing piping, fittings and valves as shown, and f) furnishing and installing 8" electromagnetic flow meter. All piping shall be mechanically restrained with concrete thrust blocks at tie-in connection to existing piping. The contractor shall provide all labor, equipment and materials for furnishing and installation of said work. The work includes all excavation and backfilling/compacting with Class 2 AB and installation according to the standard trench detail. The work includes scheduling shutdowns, coordinating work sequences; disinfection, flushing, testing and placing into service. The tank and existing water system supply must remain in service except during scheduled shutdown periods to be a maximum 8-hours. The maximum allowable shutdown period is 8-hours each event and shall not be scheduled on consecutive days nor on Fridays. Payment shall be made once item is tested, disinfected and placed into service and approved/accepted by District. (Notes: Shutdowns during July, August and September during peak summer water demands may not be allowed and scheduled at discretion of the District).

BID ITEM NO.14 - TANK 'B' CONNECTION / ABOVE GROUND

This item includes all labor, materials, tools, equipment, and testing required for connecting the 12-inch above ground steel pipe tank inlet connection as shown on Section A, Sheet C26. All work on tank shall conform to latest revisions of AWWA D110, Welded Carbon Steel Tanks for Water Storage, AWWA C200 for Steel Pipe, AWWA C206 for field welding, AWWA C207 for steel pipe flanges, and AWWA C208 for fabricated fittings. This work include furnishing and installing pipe and fittings, pipe supports and brackets, flexible couplings, preparing tank penetration, welding, coating, disinfection, and any other materials or work required to complete the connection, as shown on the project plans and described in the project specifications. Unless otherwise approved by Engineer, all steel pipe and fabricated fittings shall be a minimum 0.25" wall thickness with Class D flanges. A rubber expansion joint (Proco Style 234-L with EE-NSF/61 certified, 145-psi pressure rated or approved equal) shall be provided for seismic movement in accordance with AWWA D102, Section 13.6. In areas where above ground tank piping is attached at weldments and pipe penetration, and an additional 2-ft in each direction, the tank coating shall be grit blasted and surface prepared and coating repaired in accordance with latest revision of AWWA D102 with Outside Coating System No.5 (OCS-5). The steel tank piping shall be shop surface prepared both interior and shop applied exterior of piping primed coated and fully interior lined in accordance with latest revision of AWWA C210 with a liquid epoxy coating and lining system. All pipe interior and exterior surfaces shall be cleaned in accordance with SSPC-SP1 and then abrasive blast cleaned to SSPC-SP 10. The tank inside coating system and pipe lining system shall be NSF-61, NSF 600 and UL certified; acceptable products include Sherwin Williams Sherplate 600, Carboline Hydroplate 1100, or approved equal. Payment shall be made once item is completed, tested, disinfected and placed into service and approved/accepted by District.

Contractor shall retain a qualified tank diving/cleaning company, e.g. Aqua Tech Co. of Sacramento, CA / Phone: (916) 482-3703 or equal, as a subcontractor to clean and vacuum the entire tank interior and inspect each weld locations for coating damage. This effort shall be made immediately after cutting and welding activities on Tank B. The diving subcontractor shall be experienced and qualified to make repairs to the inside coating system. At all weld locations, the subcontractor shall prepare the surface with a wire brush or other abrasive methods and manually apply by brush or roller inside coating system (Raven AquataPoxy A-6 Thick) to minimum 20 mils DFT. The tank coating repairs shall start at the roof and work progressively downward along the wall as the water level is lowered for each repair. Any debris settling to the floor and/or floating material from surface preparation and coating activities shall be cleaned and removed from the tank interior.

Note: In specific regard to the subcontract for tank cleaning, inspection and repair of the inside coating system, the Contractor may be restricted by its Union Agreement and unable to subcontract with a non-union company. In such a case, the District may assume this subcontract and a change order deleting the subcontracted work. However, the Contractor shall retain responsibility for scheduling and coordinating separate work efforts as originally intended and mitigate any conflicts relating to staging and coordination of activities..

BID ITEM NO. 15 – TANK 'A' YARD PIPING MODIFICATIONS

This item covers all work shown on Drawing T1 – Tank 'A' Yard Piping modifications (including all new piping, before STA 0+62) includes all labor, materials, tools, equipment, and testing required to furnish and install the tie-in of the discharge piping from the Tank A Pump Station and 14-inch DIP transmission main. All new fittings shall be mechanically restrained and tie-in to existing pipe shall have secondary thrust blocking. The work includes demolition and removal of existing pipes and fittings, excavation and capping ends of existing active and inactive water mains to-be abandoned in-place, new pipe and fittings installation, new traffic rated boxes, welding, coating, disinfection, and any other materials or work required to complete the connection, as shown on the project plans and described in the project specifications. All work shall be backfilled with Class 2 AB in accordance with the Standard Trench Detail G05. The 8" gave valves shall be furnished and installed according to Section 15109 and Detail W03. Payment shall be made once completed piping has been tested, disinfected and placed into service and approved/accepted by District. Tie-in connections must be scheduled and performed in time limited shutdown periods not exceeding 8-hours. (Note: Shutdowns during period of peak summer water demands during July, August and September may not be possible at the discretion of the District.)

BID ITEM NO. 16 - CAP AND ABANDON 8" DISTRIBUTION MAIN PIPING.

This item includes all labor, materials, tools, equipment, and testing required to cap and abandon-in-place the 8-inch distribution main piping from the Tank A Pump Station to Dunn Road by excavating and capping pipe with plug at both ends of the defined abandoned pipe per the project plans and as described in the project specifications. Work includes excavation, capping, backfilling, surface restoration, and any other materials or work required to cap and abandon the pipe. At points of abandonment, where ends of system remain active and connected to system, must be excavated capped with new cap couplings (e.g. Romac EC501), wrapped in polyethylene wrap, and concrete thrust blocked, and backfilled and surface restored according to the standard trench detail. Payment shall be made once item is complete and approved/accepted by District.

BID ITEM NO.17 A, B, C & D - ASPHALTIC CONCRETE PAVING

The Contractor shall plug pave the trench and cold mill/grind areas to receive 2" thick overlay. This work shall be conducted as described in Section 02770 of the project specifications. The Contractor shall provide all labor, equipment and materials for saw-cutting, grinding, removal, disposal of existing pavement and replacement with new hot mix asphaltic concrete paving within roads, streets, driveways, and other project areas. In paved areas, work shall be as directed and approved by the County Public Works inspectors. A clean, straight saw cut shall be made along all edges between new and existing pavement and grind out transitions and overlays. All water and slurry generated during saw cutting work shall be immediately vacuumed and removed to prevent migration runoff and stop it from entering storm drains, drainages, etc. Joints and overlay areas shall be treated/primed/sprayed with a tack coat of asphalt emulsion prior to placement of hot mix asphalt. All iron shall be adjusted to level of the finished surface. Final pavement shall be placed with a paver machine and compacted to the compaction level intended by the mix design. Contractor shall repaint fog, limit, center lines, stop, and all other traffic/pavement makings. Final paving thickness shall be determined in the field by CCWD and Calaveras County; minimum thickness of AC paving shall be 2" on driveways and otherwise thickness to match existing paving thickness in public roads unless otherwise directed by CCWD. Payment shall be by unit prices in the bid schedule weight (in tons) of hot mix AC paving delivered (submit daily truck tags) and placed and meeting quality standards; finished surface shall be thoroughly compacted, smooth and free from ruts, humps, depressions or irregularities. (Note: For any load, District will deduct amount of hot mix material that is rejected, wasted/unusable and not incorporated into finished work).

Bid Item	Description
I7A – Plug Paving	This item includes placement of hot mix asphalt plug paving of the trench over the full length of the project including Hartvickson, Baldwin, Usher and Wind River Ct. Unless otherwise directed by Engineer or County the plug pave shall match the existing pavement thickness. Damaged and failed areas of paving on Wind River Court will need to be saw-cut and removed prior to plug paving.
17B – 2" Grind	This item include a 2" grind and cold milling of Hartvickson, Baldwin and Usher in conformance with the Encroachment Permit requirements. The grind area is either half the road width and/or one lane depending upon the location of the trench relative to the lane, edge of pavement and centerline. The purpose is to restore one half of the road disturbed by the open-cut trench. Additional grind out areas will occur at the PRV station sites, intersections and a few other isolated areas. Note that the paving on Wind River Ct. is too thin to grind.
17C – 2" Overlay	The 2" overlay of hot mix AC paving will be place on Hartvickson, Baldwin, and Usher to replace paving from the grind out areas above including the trench line. The existing paving on the undisturbed half of the road will not receive an overlay. On Wind River Court and Tank B site the paving is too thin to perform. After plug paving, Wind River Court is to receive a full-width 2" overlay of hot mix AC paving without any grinding/cold milling of the existing surface; also, paving transitions are to be made to match existing driveway entrances.
17D – Painting, Marking & Lettering	Contractor shall repaint: 1) on Hartvickson and Baldwin existing centerlines for length of project, 2) on Hartvickson, Baldwin and Usher existing fog line on one side of road for length of project, 3) stop limit lines and lettering at intersections (three locations), and 4) touch up any other misc. damage to lines and markings.

BID ITEM NO.18 - CEMENT/SAND SLURRY

The contractor is required to use cement/sand slurry fill, where trenches and excavations crosses under/below existing 12" size and larger utilities, e.g. storm drain culverts, water mains, etc. Also, the contractor will be required to provide slurry fill as directed by the Engineer. Cement/sand slurry fill (controlled density fill) shall be transit mix consisting of two (2) sack cement or 188 lbs/cy ASTM C-150 Type II Portland cement, 497 gal/cy clean water, 5% air and 2,900 lbs/cy fine aggregate. The slurry backfill shall be placed according to Detail 1, Sheet C26 from bottom of trench to haunches of existing utility. The fine aggregate quality and grading shall conform to State Standard Specification, Section 90 for Portland Cement Concrete. Payment shall be for each cubic yard delivered and placed at job site in locations shown on project drawings or as otherwise directed by District; provide truck tags for each delivery.

BID ITEM NO.19 - ALLOWANCE FOR ROCK EXCAVATION

This item is an allowance as defined in the General Conditions, Article 13.02 and requires execution of a Change Order as described in Article 13.02 D. Allowance for rock excavation, if encountered, shall include, but is not limited to, all labor and equipment used for excavation of solid, non-rippable rock, including but not limited to chipping, rock breaking with hydraulic or pneumatic hammers and drills; handling, stockpiling, and disposal of surplus materials; and miscellaneous work required for rock excavation. Weathered, fractured and otherwise rippable rock is included in other bid items for excavation. Determination of a non-rippable rock condition shall be made following field inspection by the project Geotechnical Engineer and then agreed by the Construction Manager, District, Engineer and Contractor before excavation of a particular pipe trench or general excavation section is started. This allowance item will be paid at Time and Materials basis (limited to one excavator with hydraulic breaker attachment, one laborer, one operator and one crew truck for the duration of breaking operations) for breaking solid/non-rippable rock encountered within the trench and/or excavations on the project. No other payments will be made as a result of solid, non-rippable rock being encountered on the project. The contractor shall assume that some rock will be encountered on the project and in other bid items shall include hydraulic hammering, rock breaking, drilling of the initial, first 30-cubic yards of solid, non-rippable rock on the project. Payment as time and materials will begin after the total cumulative amount of solid, non-rippable rock encountered in pipe trench and/or excavations exceeds 30-cubic yards. Payment will be time and materials tracked and reported on a daily form and signed off by the Contractor's and Owner's representatives.

BID ITEM NO 20 - SITE RESTORATION, PROJECT CLOSEOUT AND OTHER ITEMS OF WORK

This bid time includes all work for site restoration, cleanup and project closeout including, but not be limited to, restoration of the public right of way and road shoulders repairs/restoration any private property damaged and/or disturbed by the construction activities such as replacement of gravel, fences, mail boxes, landscaping, decorative rocks, bushes, signs, walls, pavers, driveway repairs, etc. The Contractor shall properly dispose of all construction debris, waste asphalt, excess soil and trench spoil. Also, this items includes all other contract work (required by project manual, plans, appendices, and permits) not included in the above bid items. The Owner/Engineer will prepare a punch list after a successful walkthrough. The Contractor shall correct the punch list items before final payment can be approved. Once complete, the Construction Manager can verify the completed punch list items onsite. Closeout also includes administrative items required to close out the project per the specifications including maintenance bonds, final payment request submittal of certifications, operation and maintenance manuals, warranties, as-built drawings, and other closeout deliverables per the project specifications. Payment will be equally divided among the last two monthly progress payments.

BID ITEM NO 21 – ADDITIVE BID ITEM / REPLACEMENT OF WATER SERVICE LATERALS

This is an additive bid item to establish a unit price but total amounts entered for this bid item will be excluded in determining the basis of the bid award and in determining the lowest responsive and responsible bidder. After completion and startup of the new water transmission pipeline, the contractor shall replace water service laterals along the same alignment. This scope of work will be done under separate traffic control and scheduled water system shutdowns. There are an estimated two-hundred and ten (210) water services along the alignment with the majority of services located on Hartvickson, Baldwin and Usher. The contractor shall pothole and locate the existing taps and service saddles on the main, then remove and replace water service laterals from the existing water main to the existing water meter box at the property line. Where dual water services pre-exist, the contractor shall replace those with two new individual water services. Of the existing services approximately 60% are dual services and 40% single. The existing dual services consist of a single tap at the main, a single lateral run of

service tubing with a brass tee just upstream of the meter box that splits to separate meters at each property corner. These existing dual services will be removed and replaced with individual service laterals each according to Detail W07. When replacing a dual service, the existing tap will be used for one service to replace one tap saddle and a new tap made for a second new saddle. Service laterals in a common trench shall have a minimum 12" separation from each adjacent service line and 6" separation from the trench walls. The spacing and separation between adjacent main taps must be at least 24" from each other and also from any adjacent water main bell joint and/or coupler. The single service laterals will also be removed and replaced each according to Detail W07. The public right-of-way is 80' wide on Hartvickson, 80' wide on Baldwin and 60' wide on Usher, and the service laterals extend from the water main to the private property line at the edge of the right-of-way. It shall be assumed that all water mains are located under existing pavement. The existing pavement must be cleanly saw-cut and removed above the trench. Also, it is assumed that half of the existing services are short side runs were the water main favors the same side of the road as the property being served, which results in a shorter trenching effort, a single lane closure, and lesser paving impacts. The other half are assumed to be long side runs were the water main favors the opposite side of the road relative to the property being served, which results in trenching in both traffic lanes, a longer trenching effort and greater paving impacts. The water services shall include replacement according to Detail W07 and W07C and specification Section 15095. The majority of services have active water meters that shall be used instead of idlers. Trenches shall be constructed according to Detail G05 and backfilled with Class 2 AB full depth including bedding, pipe zone and initial and final backfill to the surface. The existing water mains are assumed to be seventeen (17) services on 10" dia. asbestos concrete (AC) water main, one-hundred eighty-eight (188) services on 8" dia. AC water main, three (3) services on 8" C900 PVC main, and two (2) services on 6" AC main. Service saddles for AC pipe shall be Ford 202B brass saddle with double brass straps. The measurement and payment will be for each individual water service removed and replaced and new materials furnished and installed according to the applicable details and technical specifications. (Note: Plug paving and pavement restoration shall be paid separately at unit price established by Bid Item No.17 but the quantity will be adjusted/increased accordingly by change order for the extra quantity of hot mix asphaltic concrete).