

## **Addendum No. 2**

**Project:** Mark B. Whitaker Treatment Plant 48-inch Transmission Water Main  
**Control No:** 898  
**Issued:** To all listed plan holders  
**Date:** May 31, 2017

This addendum forms a part of the Agreement described above. The original Contract Documents and any prior addenda remain in full force and effect except as modified by the following, which shall take precedence over any contrary provisions in prior documents.

### **1. Section 00140 Information for Bidders**

- DELETE Section 00140, page 1, and REPLACE with revised Section 00140, page 1, attached. In addition, the deleted page is an obsolete version, and item 5H has been changed to 330 days for substantial completion.

### **2. Section 00330 – Bid Form**

- DELETE Section 00330 in its entirety, and REPLACE with revised Section 00330, attached. In addition, the deleted pages are of an obsolete version, and the following changes have been made:
  - Page 3 – CHANGED to Bidders must enter a bid amount for Schedule “A”, Schedule “B” and Schedule “C”. If awarded, OWNER will, at OWNER’S sole discretion, award either Schedule “A + B”, or Schedule “A + C”. Bidder to supply Bid Bond in the amount of 5% of Bidder’s highest bid price for Schedule “A + B”, or Schedule “A + C”.
  - Page 4 – CHANGED to 330 days for substantial completion

### **3. Section 00330Sup– Unit Price Schedule**

- DELETE Section 00330Sup, in its entirety, and REPLACE with revised Section 00330Sup, attached. In addition, the deleted pages are of an obsolete version, and the following changes have been made:
  - DELETED Pay Items A3000 a-c
  - CHANGED Pay Item 3020b - Sta. 21+59 - Rotate existing 30" tee and connect to existing 30" DI water mains
  - CHANGED quantity for Pay Item A6005b - Pavement Repair, Pavement Cutback
  - CHANGED descriptions for Pay Items B3000 a & b to “Zinc Coating”
  - ADDED Pay Item B3000c, and changed steel casing to 72” with Zinc Coating
  - ADDED Schedule C alternate pay items C3000a-c, with V-Bio Wrapping

### **4. Section 00514 Agreement**

- DELETE Section 00514, page 2, and REPLACE with revised Section 00514, page 2, attached. In addition, the deleted page is an obsolete version, and paragraph 2 has been changed to 330 days for substantial completion, and 360 days for final completion.

## **5. Section 00822 Insurance Requirements**

- DELETE Section 00822 in its entirety, and REPLACE with revised Section 00822, attached. In addition, the deleted pages are of an obsolete version and \$5M Pollution Liability coverage is now required in paragraph number five.

## **6. Section 01270 Measurement and Payment**

- DELETE Section 01270, pages 5-8, and REPLACE with revised Section 01270, pages 5-8, attached. In addition, the deleted pages are of an obsolete version and the following changes have been made:
  - DELETED Pay Items A3000a, c & d
  - CHANGED description for Pay Item No(s). B3000a & b - Water Lines, 48" & 30" DIP Water Line, Zinc Coating
  - ADDED description for Pay Item No. B3000c - 48" Water Line Installed inside of 72" Steel Casing, Zinc Coating
  - ADDED description for Pay Item No(s). C3000a & b - Water Lines, 48" & 30" DIP Water Line, V-Bio Wrapping
  - ADDED description for Pay Item No. C3000c - 48" Water Line Installed inside of 72" Steel Casing, V-Bio Wrapping
  - CHANGED description for Pay Item No. 3005a – added specification references 02514, 02445, & 02445A.

## **7. Section 02445 Auger Boring and Alternative Tunneling**

- ADDED KUB specification

## **8. Section 02445A Auger Boring Alternative Tunneling-Supplemental**

- ADDED project specific specification

## **9. Section 2513A Water Lines - Supplemental**

- DELETE Section 2513A, in its entirety, and REPLACE with revised Section 2513A, attached. In addition, the deleted pages are of an obsolete version and Paragraph 3.1, D has been ADDED.

## **10. Clarification items:**

- Project shall be 330 days to completion
- Thrust restraint shall include restrained joint gaskets, Mega-lugs, and thrust blocks (Section 02513, 3.5B)
- Pipe backfill shall be per Section 02321.
- Welded outlets shall be acceptable substitutions for tangent tees and ARV/AVV tees. (Section 02513A, 3.1D)
- The abandoned 54" PCCP shall be cut and removed as required for installation of 72-inch casing. Construct bulkheads at each cut end of pipe and fill with flowable fill to prevent migration of water from 54-inch water line to the bedding of the 72-inch casing.
- The pipes around the east tie-in are believe to all be restrained, therefore, no plant shutdown is anticipated for isolation of the tie-in location.
- Abandoned sanitary sewer in Riverside Drive near west tie-in was most likely not filled with flowable fill.

- Plans for the 1991 MBW Chemical Building will be made available to the Contractor awarded the work upon request.

**11. Drawings: (pdfs of drawing sheets may be found at [www.kub.org](http://www.kub.org). Click the Procurement link, then Open Bids & Surplus items, then scroll to find the above referenced project & its attachments)**

- DELETE the following Drawing Sheets, and REPLACE with the attached revised Drawing Sheets:
  - G1
  - C1
  - C4
  - D1
- ADD Drawing Sheet C5

**12. The following are questions received prior to cutoff along with their responses:**

**Q:** The plans show a 72” Auger Bore using casing pipe under Riverside Drive, but the Bid Schedule shows a 60” Auger Bore. Which diameter does the Owner want – 60” or 72”?

**A:** Section 00330Sup– Unit Price Schedule revised per item 3, above.

**Q:** Will the Owner lengthen the Auger Bore to 90 LF to avoid the existing utility conflicts, and reflect the change on the Bid Schedule?

**A:** Addressed on plans and Section 00330Sup– Unit Price Schedule.

**Q:** Will a 72” diameter tunnel liner installed via hand-mine be allowed in lieu of the Auger Bore?

**A:** Addressed in Section 00330Sup– Unit Price Schedule, 01270 Measurement and Payment and 02445 Auger Boring and Alternative Tunneling (added with this addendum).

**Q:** Does the Owner want TDOT #7 or TDOT #57 stone in the envelope around the new DIP waterline?

**A:** See Section 02321, 2.03 Pipe Zone Material.

**Q:** Is the minimum envelope of stone around the new DIP waterline 12 inches? (12” below, 12” on each side, and 12” above)

**A:** See Section 02321, 3.04E for trench width and 3.10B for pipe zone dimensions.

**Q:** Since all pipe will be restrained joint, are concrete thrust blocks still required?

**A:** See Section 02513, 3.3B.

**Q:** Will the Owner add a “Remove and Replace Unsuitable Soil” pay item?

**A:** No.

**Q:** Will the Owner allow ‘unsuitable soil’ to be wasted onsite, or will we be required to haul off to a landfill?

**A:** **KUB will determine “unsuitable soil” placement on a case by case basis. If unsuitable soils are encountered, and are determined to need to be hauled to a landfill, KUB will issue a change order for disposal of the soil.**

**Q:** Were there any bore holes or probes performed to verify the accuracy of the Electrical Resistance Survey?

**A:** **No probing or bore holes were performed. The contractor is welcome to bore or excavate test pits to determine the accuracy of the ER survey in the presence of KUB representatives. Please coordinate any such exploration with KUB.**

**Q:** Will the Owner add a “Rock Excavation” pay item?

**A:** **Rock excavation will not be added as a pay item.**

**Q:** What method does the Owner want for the abandonment of the existing utilities? Bulkheads only? Is flowable fill required anywhere?

**A:** **See Clarification Item 10 listed above, and also addressed on sheet C5.**

**Q:** What is the wall thickness for the 72” casing?

**A:** **See Specification 02445A, 2.01, B., included with this addendum.**

END

Each Bidder/Proposer shall acknowledge receipt of this addendum by affixing his signature below, by noting this addendum on his Bid/Proposal Form, and by attaching this addendum to his Bid/Proposal. **Failure to acknowledge this addendum could be cause for bid/proposal rejection.**

#### **ACKNOWLEDGMENT**

The undersigned acknowledges receipt of this addendum and the Bid submitted is in accordance with information, instructions and stipulations set forth herein.

BIDDER / PROPOSER \_\_\_\_\_

AUTHORIZED SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

**SECTION 00140**  
**INFORMATION FOR BIDDERS**

1. Separate sealed bids for the **Mark B. Whitaker Treatment Plant 48-inch Transmission Water Main, Control #898**, will be received by the Knoxville Utilities Board, an agency of the City of Knoxville, (the "OWNER") 4505 Middlebrook Pike, Knoxville, Tennessee 37921, until **2:00 p.m. local time, on Friday, June 9, 2017**, and then at said time publicly opened and read aloud.
2. **Description of work:**  
Work shall include installation of approximately 2,159 linear feet of 30-inch and 48-inch water line, valves, and appurtenances. Work includes, but is not limited to, excavation and connection to existing 30-inch water lines; installation of (2) 30-inch butterfly valves and (3) 48-inch butterfly valves; installation of (3) air release and air vacuum valve assemblies; backfill; site restoration; and other items as annotated in the bid
3. **A mandatory pre-bid meeting will be held on Friday, May 19, 2017, at 2:00PM, EST, in the Procurement Conference Room at the KUB Hoskins Operations Center, 4505 Middlebrook Pike. You must attend this meeting to be eligible to bid.** In addition, the meeting will begin promptly at 2:00PM, and once the meeting commences, no bids will be accepted by KUB from bidders arriving late to the meeting.
4. **This work is to be bid only by KUB pre-qualified contractors in the following area: 3.2 Water Utility Construction, Unlimited.** Bids will not be accepted from contractors who are not pre-qualified in the referenced category prior to the bid opening.
5. **Our proposed schedule is as follows:**
  - A. Bid documents available on May 12, 2017.
  - B. Mandatory pre-bid meeting on **Friday, May 19 2017, at 2:00PM, EST**, in the Procurement Conference Room at the KUB Hoskins Operations Center, 4505 Middlebrook Pike.
  - C. Cut off for questions at 5:00PM, May 31, 2017.
  - D. Issue addendum if required 3:30PM, on June 5, 2017.
  - E. Bid opening on **Friday, June 9, 2017, at 2:00PM, EST**, in the Procurement Conference Room at the KUB Hoskins Operations Center, 4505 Middlebrook Pike.
  - F. Award project on or before June 13, 2017.
  - G. Notice to Proceed on or before June 26, 2017.
  - H. Required Substantial Completion within **330** days from commence date on Notice to Proceed.
6. Each Bid must be submitted in a sealed envelope, addressed to:  
**Knoxville Utilities Board**



**SECTION 00330  
BID FORM**

PROJECT:

**KNOXVILLE UTILITIES BOARD  
MARK B. WHITAKER TREATMENT PLANT  
48-INCH TRANSMISSION WATER MAIN  
CONTROL NUMBER: 898**

BID TO:

OWNER: Knoxville Utilities Board  
Procurement Department  
4505 Middlebrook Pike  
Knoxville, TN 37921

BID FROM:

BIDDER: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ARTICLE 1. The undersigned bidder agrees, if this Bid is accepted, to enter into and execute in the form attached to the Bidding Documents an Agreement with OWNER (the "Agreement") to complete 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 Contract Documents.

ARTICLE 2. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation, those dealings with the disposition of Bid security. The bidder acknowledges that all work shall be performed in accordance with the Contract Documents of the OWNER. In the event of a conflict between the Contract Documents and the OWNER's Standard Specifications when incorporated by reference, the one requiring the highest level or quality of work shall control. This Bid will remain open for acceptance by the OWNER and may not be withdrawn by the bidder until 60 days after the day of Bid opening. Further, Bid prices shall remain effective for the full term of the Contract. Bidder will sign the Agreement then submit the Bonds and other documents required by the Bidding Documents within 10 days after the date of OWNER's acceptance of this Bid by a Notice of Award.



ARTICLE 3. In submitting this Bid, bidder represents, as more fully set forth in the Agreement, that:

- A. Bidder has examined and carefully studied the Bidding Documents, the Advertisement for Bids, Instructions to Bidders, and the following Addenda (receipt of which is hereby acknowledged):

Date	Number
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- B. Bidder has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as bidder deems necessary;
- C. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by the bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by bidder, and safety precautions and programs incident thereto.
- D. Bidder does not consider that any further examinations, investigations, 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.
- E. Bidder has correlated the information known to bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- F. Bidder has given OWNER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the resolution thereof by the OWNER is acceptable to the Bidder.



ARTICLE 4. Bidder further represents that 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; bidder has not directly or indirectly induced or solicited any other bidder to submit a false or sham Bid; bidder has not solicited or induced any individual or entity to refrain from bidding; and bidder has not sought by collusion to obtain for itself any advantage over any other bidder or over OWNER. By submitting a Bid, Bidder represents that no commissioner or officer of OWNER or other persons whose duty is to vote for, let out, oversee, or in any manner supervise any work on any contract for OWNER has a "direct interest" in the Bidder or in the work which is subject to this proposal, subject to the requirements of T.C.A §12-4-101, et seq and T.C.A §6-54-107, et seq.

ARTICLE 5. **Bidder to note the following:** Bidders must enter a bid amount for Schedule "A", Schedule "B" and Schedule "C". If awarded, OWNER will, at OWNER'S sole discretion, award either Schedule "A + B", or Schedule "A + C". Bidder to supply Bid Bond in the amount of 5% of Bidder's highest bid price for Schedule "A + B", or Schedule "A + C". BIDDER MUST SUBMIT BIDS FOR SCHEDULES A, B AND C, OR BID WILL BE CONSIDERED NON-RESPONSIVE. The bidder agrees to furnish all labor, equipment, materials not furnished by the OWNER, and incidentals as required for the completion of the Work all in accordance with the Bidding and Contract Documents.

Bidder hereby offers to complete the Work for **Schedule "A+B"** using bid form Unit Price Schedule for the following Contract Price:

\_\_\_\_\_ dollars  
(words)  
(\$ \_\_\_\_\_)  
(figures)

Bidder hereby offers to complete the Work for **Schedule "A+C"** using bid form Unit Price Schedule for the following Contract Price:

\_\_\_\_\_ dollars  
(words)  
(\$ \_\_\_\_\_)  
(figures)

If the Work is paid by Unit Price the amount above shall be equal to the total sum of all Unit Prices and quantities stated on the enclosed Bid Form subject to the provisions of Article 11 of the General Conditions. Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of bids and that final payment will be for actual quantities of bid items installed determined as provided in the Contract Documents. Discrepancies between multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.





The bidder must include sales and/or use taxes on all materials required for the Work. The successful bidder is solely responsible for applying to the Tennessee Department of Revenue for any applicable exemptions to sales and/or use taxes.

The bidder understands that the OWNER reserves the right to reject any or all Bids and to waive any informality in the bidding.

All the various phases of the Work enumerated in the detailed Specifications with their individual jobs and overhead, whether or not specifically mentioned, included by implication, or appurtenant thereto, are to be performed by the CONTRACTOR under one of the items listed on the Bid Form, irrespective of whether they are named in said list.

ARTICLE 6. Bidder will Substantially Complete the Work within **330** calendar days following the commence date stated in the Notice to Proceed. Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to Substantially Complete the Work within the time specified above, which shall be stated in the Agreement (Section 00514).

ARTICLE 7. Required Bid security in the form of a certified cashier's check or Bid Bond and in the amount of 5% of Bidder's highest bid price for Schedule "A + B", or Schedule "A + C" must be attached and is made a condition of this Bid.

ARTICLE 8. Communications concerning this Bid shall be addressed to the following address:

**For Technical Information Contact:**

Jeff Hooyman  
Water Systems Engineering  
Knoxville Utilities Board  
4505 Middlebrook Pike  
Knoxville, TN 37921  
Phone No. (865) 558-2441

**For Bid Procedure Contact:**

Shari Hurst  
Procurement-Contract Services  
Knoxville Utilities Board  
4505 Middlebrook Pike  
Knoxville, TN 37921  
Phone No. (865) 558-2461



**SUBMITTED ON** \_\_\_\_\_

AUTHORIZED SIGNATURE

(CORPORATE SEAL)

\_\_\_\_\_  
*(Signature of Authorized Agent)*

By \_\_\_\_\_

Title \_\_\_\_\_

Company Name \_\_\_\_\_

Type (Corporation, Partnership, LLC): \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Phone (    ) \_\_\_\_\_ FAX (    ) \_\_\_\_\_

State of Incorporation \_\_\_\_\_

Contractors License No. \_\_\_\_\_

Attest \_\_\_\_\_

Title \_\_\_\_\_

The full names and addresses of parties interested in this Bid as principals are as follows:

\_\_\_\_\_  
\_\_\_\_\_



**BID FORM  
MARK B. WHITAKER TREATMENT PLANT 48-INCH TRANSMISSION WATER  
MAIN  
Control Number: 898**

**Notes:**

- 1. Concerning measurement and payment. The items listed on the bid forms (Section 00330Sup) are considered pay items; no additional payments will be made for items not listed. It shall be the Contractor's responsibility to include all incidentals necessary to complete the work as described by these pay items and the requirements of the Contract Documents. Should a change in the Work be required it shall be processed in accordance with the provisions of the Contract Documents and specifically the General Conditions. Reference Section 01270 for specifics regarding Unit Prices.**
- 2. The OWNER does not guarantee that quantities listed on the bid form are exact. The CONTRACTOR will be paid for the units of work actually installed (quantity) times the unit price bid for the appropriate line item as listed on the Bid Form. Such quantities of work installed or performed will be as validated by the Resident Project Representative.**

END OF SECTION

**UNIT PRICE SCHEDULE**

Item No.	Description	Est. Quan.	Unit	Bid Unit Price	Extended Bid Unit Price
<b>SCHEDULE A</b>					
<b>A1000</b>	<b>Mobilization</b> (Limited to Unit Price Bid or 8.25% of Project Bid Total, Whichever is Less)	1	LS	\$	\$
<b>A1005</b>	<b>Erosion and Pollution Control</b>				
	a. Type A Silt Fence	990	LF	\$	\$
	b. Grate Inlet Protection	1	EA	\$	\$
	c. Construction Entrance	1	LS	\$	\$
<b>A3005</b>	<b>Water Main Bore</b>				
	60" Auger Bore w/ 48" DIP carrier pipe (includes manufacturer's joint restraint)	60	LF	\$	\$
<b>A3010</b>	<b>Water Valve Installation</b>				
	a. 30" Butterfly Valve, including mechanical joint restraint	2	EA	\$	\$
	b. 48" Butterfly Valve, including mechanical joint restraint	3	EA	\$	\$
<b>A3015</b>	<b>Air Valves, Blowoff Valves, &amp; Hydrants</b>				
	10" Combination Air/Vacuum Valve Assembly As Directed By KUB (Complete Installation Per KUB Drawings). Includes mechanical joint restraint.	2	EA	\$	\$
	14" Air/Vacuum Valve Assembly As Directed By KUB. Includes mechanical joint restraint.				
	b. (Complete Installation Per KUB Drawings)	1	EA	\$	\$
	c. 6" Flushing Tee Assembly	3	EA	\$	\$

**UNIT PRICE SCHEDULE**

<b>Item No.</b>	<b>Description</b>	<b>Est. Quan.</b>	<b>Unit</b>	<b>Bid Unit Price</b>	<b>Extended Bid Unit Price</b>
<b>Tie-ins to Existing Facilities</b> (complete all labor and installation for tie-ups including installation of tees, couplings, reducers, backfill, asphalt/concrete restoration, cleanup/restoration, pressure test, & tracer wire).					
<b>A3020</b>	a. Sta. 0+00 - Connection to existing 30" DI water main Sta. 21+59 - Rotate existing 30" tee and connect to existing 30" DI water mains	1	EA	\$	\$
	b. DI water mains	1	EA	\$	\$
<b>A3030 Retire Existing Water Facilities</b>					
	a. Abandon Existing Mains	1	LS	\$	\$
<b>A6005 Permanent Patching:</b>					
	a. Asphalt Pavement Repair, Base Course + Surface Course	35	LF	\$	\$
	b. Pavement Repair, Pavement Cutback (As Directed by OWNER)	35	LF	\$	\$
<b>A6010 Removal and Replacement:</b>					
	a. Asphalt Concrete Driveway	22	LF	\$	\$
	b. Concrete Curb	40	LF	\$	\$
<b>A6025</b>	<b>Seeding</b>	4,400	SY	\$	\$
<b>A6040</b>	<b>Riprap</b>	50	TN	\$	\$
<b>A6045</b>	<b>Cleanup Restoration &amp; Closeout</b>	1	LS	\$	\$
<b>SUB-TOTAL OF ALL "SCHEDULE A" UNIT PRICE ITEMS LISTED ABOVE</b>					\$

**UNIT PRICE SCHEDULE**

Item No.	Description	Est. Quan.	Unit	Bid Unit Price	Extended Bid Unit Price
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**SCHEDULE B - ADD ALTERNATE 1**

**B3000 Water Line**

a.	48" DIP Water Line, Zinc Coating	2,100	LF	\$	\$
b.	30" DIP Water Line, Zinc Coating	60	LF	\$	\$
	72" Steel Casing w/ 48" carrier - Open Cut (includes				
c.	manufacturer's joint restraint), Zinc Coating	90	LF	\$	\$

**SUB-TOTAL OF ALL "SCHEDULE B" UNIT PRICE ITEMS LISTED ABOVE** \$

**TOTAL OF ALL EXTENDED UNIT PRICE ITEMS ("SCHEDULE A" PLUS "SCHEDULE B") LISTED ABOVE (transfer to bid form, page 3)** \$

(Total, numbers)

Dollars

\_\_\_\_\_  
Total, words (transfer to bid form, page 3)

**SCHEDULE C - ADD ALTERNATE 2**

**C3000 Water Line**

a.	48" DIP Water Line, V-Bio Wrapping	2,100	LF	\$	\$
b.	30" DIP Water Line, V-Bio Wrapping	60	LF	\$	\$
	72" Steel Casing w/ 48" carrier - Open Cut (includes				
c.	manufacturer's joint restraint), V-Bio Wrapping	90	LF	\$	\$

**SUB-TOTAL OF ALL "SCHEDULE C" UNIT PRICE ITEMS LISTED ABOVE** \$

**TOTAL OF ALL EXTENDED UNIT PRICE ITEMS ("SCHEDULE A" PLUS "SCHEDULE C") LISTED ABOVE (transfer to bid form, page 3)** \$

(Total, numbers)

Dollars

\_\_\_\_\_  
Total, words (transfer to bid form, page 3)



2. Unless otherwise expressly provided in the Contract Documents, the CONTRACTOR shall begin the Work on specified commence date stated in the Notice to Proceed and will continue the same with due diligence until the Work is completed. The CONTRACTOR will Substantially Complete the Work within **330** calendar days following the commence date stated in the Notice to Proceed and will finally complete the Work and submit the final Application for Payment in accordance with Section 01770 of the Specifications within **360** calendar days following the commence date stated in the Notice to proceed.
  
3. CONTRACTOR and OWNER agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER **\$1,000.00** for each calendar day that expires after time specified in paragraph 2 of this Agreement until the Work is Substantially Complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work in its entirety, CONTRACTOR shall pay OWNER **\$500.00** for each calendar day that expires after the time specified in paragraph 2 of this Agreement for completion and readiness for final Application for Payment in accordance with Section 01770 of the Specifications. The CONTRACTOR and OWNER recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual loss suffered by the OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree to the provisions herein.
  
4. Within thirty (30) days following the completion and acceptance of the Work (unless some other time of payment is expressly provided in the Contract Documents), and as payment for the Work, the OWNER shall pay or cause to be paid to the CONTRACTOR the Contract Price of: \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_) (words)  
(figures)  
**subject to any discount or discounts expressly allowed by the terms of the Contract Documents and subject to the provisions of Article 11 of the General Conditions in the case of Unit Price Work.**
  
5. If the duration of the Work exceeds 30 days, the OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Application for Payment submitted on or about the 25<sup>th</sup> day of each month during performance of the Work. **The date on the Application For Payment (invoice) must be the 1<sup>st</sup> day of the next month. For example invoice submitted 25 May with date on invoice of 1 June.** The CONTRACTOR's Applications for Payment shall comply with the Contract Documents and shall conform to the Schedule of Values submitted to and approved by the OWNER. The OWNER shall withhold five percent (5%) retainage from the total amount of each approved Application for Payment, which retainage, in accordance with state law, will be released for payment to the CONTRACTOR within 90 days of Completion of the Work or receipt by OWNER of a certificate of Substantial Completion, whichever occurs first; unless OWNER has other claims or offsets against CONTRACTOR under the Agreement, in which event the retainage shall continue to be kept in escrow until such KUB claims or

## **SECTION 00822**

### **INSURANCE REQUIREMENTS**

- A. Before commencing the Work, the CONTRACTOR shall procure and maintain at CONTRACTOR'S own expense during the entire term of the Contract the following insurance:
1. Worker's Compensation and Employer's Liability for every worker employed in connection with the Work under the Contract and provided for in each and every statute applicable to Worker's Compensation. The Employer's Liability limit shall be as required by the CONTRACTOR's excess liability insurance carrier for the maintenance of coverage.
  2. Comprehensive or Commercial General Liability including insurance covering work under the Contract with total coverage limits as follows:  

The limits provided for Bodily Injury, Property Damage, Personal Injury arising out of Premises & Operations or Products & Completed Operations shall be \$2,000,000.00 per occurrence. Any aggregate limits will apply separately to this Work and be unimpaired at commencement of the Work. In addition, CONTRACTOR shall provide an Umbrella policy in the limit of \$3,000,000.00. The following coverage shall also be provided:

    - (a) Standard contractual liability to cover the liability assumed by the CONTRACTOR under this contract.
    - (b) Broad Form Property Damage or equivalent including completed operations.
    - (c) Explosions, collapses and underground damage coverage.
    - (d) Watercraft Liability if the use of watercraft is contemplated in the performance of the Work under the Contract.
  3. Commercial and Business Automobile Liability for all owned, non-owned, rented, borrowed or hired automobiles or mobile equipment to be used by the Contractor in the performance of the Work with total coverage limits of \$2,000,000.00 Combined Single Limit to respond to bodily injury and/or property damage.
  4. Railroad Protective Liability insurance, RPL: Not Required.
  5. Pollution Liability Insurance: CONTRACTOR shall provide Pollution Liability Insurance for the Construction and/or Construction Subagreement, with limits not less than \$5,000,000.00 per occurrence. The required limits above are minimum limits and shall not be construed to limit Contractor's liability.
  6. If crane(s) are to be used the CONTRACTOR must have proof of CONTRACTOR Installation Floater.



7. Special policy limits and coverage (if any) shall apply by attaching Schedule (A), “Schedule of Additional Insurance Requirements.”
- B. The OWNER shall be named as an Additional insured as respects to Commercial General Liability, including products and completed operations, Business Automobile Liability and Umbrella Liability and all insurance policies required hereunder with the exception of Worker’s Compensation. All policies shall be endorsed to waive subrogation against KUB. Limits of Liability contained in the Commercial General Liability, Business Automobile and Umbrella policies will be endorsed to apply on a primary and noncontributory basis. At all times the CONTRACTOR shall provide to the OWNER insurance certificates showing that all insurance policies required hereunder are in full force and effect. All insurance policies and certificates shall provide that no less than 30 days notice shall be given to OWNER before such policy can be cancelled or materially changed. Any “endeavor to” language will be deleted from the required insurance certificates.
  - C. All insurance policies herein required of the CONTRACTOR shall be written by a company approved and authorized to do business in the State of Tennessee and shall be subject to a Bests’ rating of not less than A-, vii. Unless otherwise approved by the OWNER in writing. All policies of insurance referred to herein shall be written on an occurrence basis unless otherwise agreed by KUB in writing.

END OF SECTION

including the establishment/replacement of damaged items, removal of accumulated “silt” behind the temporary structures as well as final removal once construction is complete and accepted by the OWNER. See Section 01570, Erosion Control.

1.05 BID ITEM PAYMENT

- A. Payment for unit price items covers all the labor, materials, overhead, and services necessary to furnish and install the following items.
- B. Payment for the bid items will be as follows:

**Pay Item No. 1000 Mobilization** to the job site is a lump sum pay item. One time cost to include all CONTRACTOR- incurred mobilization costs associated with this project. **Payment for Mobilization is Limited to Unit Price Bid or 8.25 % of Project Bid Total, Whichever is Less.** Demobilization is not a pay item and shall be considered a necessary part of the work and the cost of such included herein.

**Pay Item(s) No. 1005 (a through c) - Erosion and Pollution Control – Silt Fence, Grate Inlet Protection, and Construction Entrance** are per each unit price pay items. Unit price items include all material, labor, and installation complete. See Section 01570, Erosion Control. All measures shall be monitored and maintained per specifications and shall not be removed until all associated permits or approvals have been obtained.

**Pay Item No(s). B3000a & b - Water Lines, 48” & 30” DIP Water Line, Zinc Coating** are linear foot unit price pay items. Unit prices are for water lines installed according to KUB Specification 02513, and **project Specification 02513A**. The quantities of pipe for which payment will be allowed shall be expressed in linear feet for each size and type of pipe listed in the bid form in terms of the horizontal lengths of pipe installed in place as measured along the centerline, with no deductions for fittings, valves or temporary blow-offs or tracer wire. Such payment shall be full compensation for the furnishing and installing of pipe including pipe bedding, excavation, backfill, (full stone backfill if less than 3 feet from edge of pavement or if under pavement), testing, and all other work necessary for and incidental to completion of the work. Restrained joint gaskets shall be paid for per each installed when directed by OWNER. Pipe depths will be measured from the bottom of the pipe to the existing surface.  
**CONTRACTOR will furnish all water line materials required for the water line installation. SEE SPECIFICATION 02950 Zinc Coated Ductile Iron Pipe.**

**Pay Item No. B3000c - 48" Water Line Installed inside of 72" Steel Casing, Zinc Coating** is a linear foot unit price pay item. Unit price item includes open cut installation of 48-inch water main in a 72-inch casing pipe. Payment shall be

for carrier, casing pipe, fittings, casing spacers, end seals, other appurtenances required to install the main in the casing, pipe bedding, excavation, backfill, (full stone backfill if less than 3 feet from edge of pavement or if under pavement), testing, and all other work necessary for and incidental to completion of the work. **CONTRACTOR will furnish all water line materials required for the water line installation.**

**Pay Item No(s). C3000a & b - Water Lines, 48" & 30" DIP Water Line, V-Bio Wrapping** are linear foot unit price pay items. Unit prices are for water lines installed according to KUB Specification 02513, and **project Specification 02513A**. The quantities of pipe for which payment will be allowed shall be expressed in linear feet for each size and type of pipe listed in the bid form in terms of the horizontal lengths of pipe installed in place as measured along the centerline, with no deductions for fittings, valves or temporary blow-offs or tracer wire. Such payment shall be full compensation for the furnishing and installing of pipe including pipe bedding, excavation, backfill, (full stone backfill if less than 3 feet from edge of pavement or if under pavement), testing, and all other work necessary for and incidental to completion of the work. Restrained joint gaskets shall be paid for per each installed when directed by OWNER. Pipe depths will be measured from the bottom of the pipe to the existing surface. **CONTRACTOR will furnish all water line materials required for the water line installation.**

**Pay Item No. C3000c - 48" Water Line Installed inside of 72" Steel Casing, V-Bio Wrapping** is a linear foot unit price pay item. Unit price item includes open cut installation of 48-inch water main in a 72-inch casing pipe. Payment shall be for carrier, casing pipe, fittings, casing spacers, end seals, other appurtenances required to install the main in the casing, pipe bedding, excavation, backfill, (full stone backfill if less than 3 feet from edge of pavement or if under pavement), testing, and all other work necessary for and incidental to completion of the work. **CONTRACTOR will furnish all water line materials required for the water line installation.**

**Pay Item No(s). 3005a- Water Main Bore** is a linear foot unit price pay item. The quantities of pipe in place for which payment will be allowed shall be expressed in linear feet of water line in terms of the length of pipe installed in place as measured along the centerline of the alignment with no deductions for valves or fittings. Such payment shall be full compensation for the furnishing and installing of water pipe, casing pipe, casing spacers, fittings, pipe bedding, excavation, backfill per Section 02321, tracer wire, reaction blocking, surface restoration, excavating bore pits, backfill and compaction of bore pits, resurfacing of asphalt, resurfacing of lawns (seed or sod), and all other work necessary for and incidental to completion of the work. Fittings required to join new pipes are included in this line item. See Sections 02415 – Horizontal Drilling and Boring; 02445 – Auger Boring and Alternative Tunneling; and 02445A – Auger Boring

and Alternative Tunneling. **CONTRACTOR will furnish all water line materials required for the water line installation.**

**Pay Item No(s). 3010a & b - Water Valve Installation** are per each unit price pay items. Unit price bids for each shall be full compensation for these items and for all labor, materials including crushed stone bedding, valve boxes/manholes, pipe, thrust blocking, backfill, surface restoration as required, and necessary equipment required to complete the item in accordance with the Drawings and Specifications. See Section 02514 Water Lines – Valves and Section 02951 48-Inch Butterfly Valves. **The CONTRACTOR will furnish all water line materials required for the water valve installation.**

**Pay Item No(s). 3015a-c - Air Valves, & Blowoff Valves** are per each unit price pay items. Unit price bids for each shall be full compensation for these items and for all labor, materials including crushed stone bedding, valve boxes, pipe, thrust blocking, backfill, surface restoration as required, and necessary equipment required to complete the item in accordance with the Drawings and Specifications. See Section 02512 Water Lines - Air Valves, Blowoffs and Hydrants and Section 02952 Air/Vacuum and Combination Air Valve Assemblies. **The CONTRACTOR will furnish all water line materials required for the air valves, blowoff valves and hydrant installations.**

**Pay Item No. 3020a & b - Tie-ins to Existing Facilities** is a per each unit price pay item when called out specifically on the bid form and is for all water tie-ins at each designated location. The unit price amount includes all tees, fittings, sleeves, bends, and appurtenances needed for tie-ins, except for the valves that will be paid for at unit prices. Other connections shown on the drawings are considered incidental to the work and are not pay items. See Section 02515 Water Lines – Tie-Ins. **The CONTRACTOR will furnish all water line materials required for the water main tie-ins.**

**Pay Item No. 3030a - Retire Existing Water Facilities – Abandon Existing Mains** is a lump sum price pay item. Each item abandoned per Sections 02512 and 02513. Water Mains will be abandoned generally by three techniques. Existing taps with corporations will be abandoned at the corporation stop. Mechanical tees will be plugged at the tee, and leadite joints will be completely removed and replaced with solid sleeves. Payment is for all labor, materials, asphalt repair and equipment required completing the item, which shall include all items that are incidental to proper abandoning existing facilities.

**Pay item 6005a - Pavement Repair (Installed by Contractor): Permanent Patching, Base Course + Surface Course (to be installed as directed)** is a linear foot unit price pay item. Unit price item includes excavation of temporary pavement repair, excavation of stone base as needed, material (Base Grade B or B-M and Surface Course Grade D), compaction, cleanup, striping (if needed), milling (as directed), and straight line truing of existing surface as needed. See

KUB Standards Section 02321 General Excavation, Bedding and Backfill for Utilities; Section 02740 Pavement Repair; and Section 1740 Surface Restoration Special Provisions. Pay item 6005a shall be paid exclusive of Pay Item Nos. 6005b and 6005c and shall not be priced in combination with pay items 6005b or 6005c for any area(s) of work (payment for any given unit of measure shall be made for either Item Nos. 6005a, 6005b, or 6005c ). Payment for this unit price item will be made based on the length of trenches, to the limits of excavation, including manhole excavations, as specified in the bid documents OR as approved in writing by OWNER.

**Pay Item No. 6005b - Pavement Repair (Installed by Contractor): Pavement Cutback** is a linear foot unit price pay item. Unit price item includes full depth excavation of required cutback along **both** trench walls as directed by OWNER, excavation of stone base as needed, material (Base Grade B or B-M), compaction, cleanup, milling (if needed), straight line truing of existing surface, as needed, and warranty repairs during warranty period. CONTRACTOR shall be relieved of responsibility if cutbacks are topped by OWNER or other entity prior to expiration of warranty. See KUB Standards Section 02321 General Excavation, Bedding and Backfill for Utilities; Section 02740 Pavement Repair; Section 02770 Concrete for Utilities and Concrete Pavement Construction; and Section 1740 Surface Restoration Special Provisions. Payment for this unit price item shall be made only upon prior written approval of Owner and shall be made based on the length of trenches, as specified in the bid documents OR as approved in writing by OWNER and shall include cutbacks on both sides of the trench for a given trench length measurement

**Pay Item No(s). 6010a & b - Removal and Replacement** are linear foot unit price pay items. Unit price items include excavation, removal and disposal of material, replacement material to duplicate material type and specification, depth, width, and length of removed materials, cleanup, and 30 days of maintenance. Compensation will be per linear foot of repair for Owner approved areas surrounding the work. See Section 02321, Excavation, Bedding, and Backfill for Utilities, Section 02770, Concrete for Utilities and Concrete Pavement Construction, and Section 02740, Pavement Repair.

**Pay Item No. 6025 - Seeding** is a square yard unit price pay item. Unit price item includes topsoil, reseeding per property owner's preference and as directed by the Resident Project Representative to match existing condition, maintenance for 60 days or until re-established; maintenance includes water, fertilizer, and mowing. Re-establish at no additional compensation. See Section 02920, Seeding.

**Pay Item No. 6040 - Riprap** is a per ton unit price pay item. Unit price item includes geotextile, base, and riprap material, placement and cleanup. See Section 02372, Geotextiles and Section 02371, Riprap.

**Pay Item No. 6045 – Cleanup Restoration & Closeout** is a lump sum pay item. Lump sum price bid for site restoration, lawn repair, landscape repair, etc., shall be full compensation for this item and for all labor, materials, water and equipment required to complete the restoration to its original or better condition. Payments for this lump sum item will be made based on percentage of work complete for the entire project. **It is highly recommended that the CONTRACTOR photograph existing conditions at the Site prior to commencing with the Work.**

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**