Request for Bid

FLINT RIVER OUTFALL REPLACEMENT - PHASE 2

Bid Opening:

Thursday, August 24, 2017 at 10:00 a.m. (local time) 1600 Battle Creek Road, Morrow, Georgia 30260

ADDENDUM #1

Dated: August 17, 2017

Acknowledgment of receipt of this addendum **MUST BE SIGNED AND INCLUDED IN YOUR RESPONSE TO THE RFB**.

REVISIONS:

- 1. Replace pages 2-3.1 through 2-3.2 under Division 2, Section 3 "Bid Submittals" of the RFB package with revised pages **2-3.1R through 2-3.2R** provided with this Addendum. Revision includes removing item "G" as this bid does not include SLBE. Revision includes revising GEFA Forms required to exclude EPA Form 6100-2 as a submittal.
- 2. Replace existing Bid Form with Revised Bid Form provided with this Addendum on pages **2-4.1R through 2-4.7R**. Revision includes removal of Work Items 35, 36 and 45. Revision includes increase of estimated quantities for Work Items No. 28, 29, 30, 31, 34, 41 and 42. Revision includes decrease of estimated quantities for Work Items No. 33, 43 and 51.
- 3. Replace pages 4-1.6 through 4-1.9 under Division 4, Section 1 "Work Items and Measurement" of the RFB package with revised pages **4-1.6R through 4-1.9R** provided with this Addendum. Revision includes updated descriptions for Work Items No. 20 and 51. Revision includes deletion of Work Items No. 35, 36, and 45.
- 4. Replace pages 4-2.3 through 4-2.5 under Division 4, Section 2 "Material Requirements" of the RFB package with revised pages **4-2.3R through 4-2.5R** provided with this Addendum. Revision includes modification to the joint descriptions, and to the lining / coating description.
- 5. Replace existing Construction Plan Drawings with the updated set of Construction Plan Drawings provided with this Addendum by clicking HERE. Revisions are shown within a "cloud" on the following Drawing #s: C-1, P-1, P-2, P-3, P-4, P-6, P-9, P-18, P-19, ES-1, ES-2, ES-4, ES-6, ES-7, ES-8, ES-9, ES-10, ES-12, ES-13 and ES-15.

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ADDENDUM #1

QUESTIONS:

1. Is there anyone able to tell me how deep the water is at the River Crossing? We are installing (Helical Piers) across the river, that will suspend/support the pipe. Also I do not see contact information for the engineer. There are no plans that show the helical pier locations or quantities.

<u>Answer</u>: The depth of water varies at the river crossing depending upon weather conditions. Drawing # P-2 refers the river crossing to details; details of the river are shown on Drawing # P-19.

2. Within Attachment D, the Williams Developers' Handbook, notes the need to sign Williams Encroachment/Foreign Line Crossing Permit Form and Reimbursement Agreement. Will CCWA be executing these documents?

<u>Answer</u>: Yes. CCWA will execute the necessary documents to cross the gas right-of-way.

3. The Williams Developers' Handbook notes review and inspections fees will be reimbursed to Williams by the developer. Will CCWA be responsible for these fees?

<u>Answer</u>: Yes. CCWA will the pay fees associated with crossing the gas right-of-way.

4. The Williams pipeline site on the southwest side of Route 138 seem to have more active and abandoned lines marked on the ROW than indicate on the drawings. Please confirm the only lines we are crossing in the Williams transcontinental Gas Pipeline ROW are the 4 lines shown on Drawing P-1.

Answer: CCWA is only aware of the four lines shown on Drawing # P-1.

5. The Williams Developers' Handbook on page 12 notes in the Sanitary Sewer and Water Crossings paragraph that all lines will be protected with a steel casing. It also noted ductile iron or steel, PVC in a steel casing or concrete pipe will be used. It further states if ductile iron is used, it will be restrained joint pipe. Right now the drawings show FRPMP, please confirm that FRPMP is what we should base our bid.

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Answer: FRPMP will be used as shown on the drawings.

6. The Williams Developers' Handbook notes blasting must be approved within 200 feet of Williams' lines. It appears blasting will be needed between Manhole 4 and the Flint River which is not on Williams ROW. Will blasting be allowed in this area?

<u>Answer</u>: The Williams Developers' Handbook indicates that blasting within 200 feet of its pipeline facilities must receive written authorization by Williams. A blasting plan and data sheets must be submitted to Williams a minimum of ten business days prior to the proposed balsting. Specific requiremnts applicable to proposed blasting will be provided by Williams to the licensed blasting contractor.

7. In the Instructions to Bidders, Instruction 19 on page 2.1-4 noted CCWA is exempt from federal and state sales taxes. Please confirm that all permanent material will be exempt from sales tax.

<u>Answer</u>: The Contractor should pay sales tax on all materials the Contractor purchases for the project.

- 8. The Work Times noted in the specifications are 7 AM to 7 PM. However please confirm the following:
 - a. Bypass pumping will be performed on a 24/7 schedule.

Answer: Bypass pumping can be performed on a 24/7 schedule.

b. Tie-in work will be allowed to be performed early in the morning during the low flow periods of the sewer.

<u>Answer</u>: CCWA may consider changes to work times as needs arise during the construction of this project.

9. The air pressure pipe testing noted in paragraph 3.7.3.B is noted to be low air pressure tests at each joint between manholes. Will it be permissible to test the run between manholes vs. each joint?

Answer: Air pressure testing pipe tangents between manholes is permissible.

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ADDENDUM #1

10. The Specifications note two possible suppliers of the FRPMP pipe. Has the supplier been chosen?

Answer: No. CCWA has not yet selected a FRPMP supplier.

11. The laydown on site is very limited for pipe storage and the specifications notes it will be stored at a CCWA yard if space is not available. Will contractor scheduling of truckload lots of pipe from the manufacture be permitted vs. incurring the additional cost of re-handling the pipe from the CCWA yard?

<u>Answer</u>: CCWA will coordinate pipe delivery with the pipe supplier and the Contractor. CCWA intends to supply the job as requested by the Contractor.

12. The cased crossing under Valley Hill Road appears to be in the same location as the existing sewer. This will make very difficult to jack and bore the casing. Can the cased crossing be moved so it will not require the existing line to be removed?

<u>Answer</u>: CCWA will consider a re-alignment at Valley Hill Road. The awarded Contractor will be required to submit for CCWA and CCTD approval a drawing showing the proposed changes. Any additional materials beyond those shown on the existing plans will be at the expense of the Contractor. Any additional labor, demolition, other work, permitting costs and easement costs as well as any delays will be at the expense of the Contractor. See Division 4, Section 3.11; the design of the cased-crossing is by the Contractor.

13. The limits of the bypass pumping for Sequence No 4 extends to Station 123+60. This is beyond the contract limits of the project. We assume the unit pricing for the applicable items of work needed to access this location will be increased for this scope.

<u>Answer</u>: Construction Limits extend to near station 123+60 as shown on Drawing # P-11. Work Items and quantities of work to access this location are included in the contract.

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Bid Opening: Thursday, August 24, 2017 at 10:00 a.m. (local time)

1600 Battle Creek Road, Morrow, Georgia 30260

ADDENDUM #1

14. To complete the Sequence No 4, the bypass lines must cross Valley Hill Road. Please confirm it is permissible to run them under the Flint River Bridge to the east vs. excavating through Valley Hill Road.

<u>Answer</u>: Yes. Flow bypass piping may be placed under the Flint River bridge to the east.

15. The Specifications note we must allow for 60 days for Award. When should we expect the Full Notice to Proceed?

<u>Answer</u>: CCWA intends for a contract to be awarded at CCWA's October 5th, 2017 board meeting. After award, a Notice to Proceed will be provided to the contractor once all contractual conditions to start the work have been met by the Contractor.

16. The Contract Drawings note manhole stationing as well as pipe run lengths, but some of these do not match. Also some manhole stations do not match the drawing profiles. Please confirm which stationing you would believe is the most accurate.

<u>Answer</u>: CCWA believes the manhole stations shown on the plan view match the manhole stations shown on the profile view. The tangent lengths shown on the profile view have been changed to show to the hundredths of a foot as shown on the plan view.

17. Division 2 | Section 3.1.H requires the submittal of several GEFA Forms relating to DBE, including the DBE Compliance Form and EPA Forms 6100-2, 6100-3 and 6100-4 with our bid. Several of the forms including certain requirements of the DBE Compliance Form (particularly if goal is achieved), Form 6100-2 (Participation) and Form 6100-3 (Performance) would typically be required after the bid. Form 6100-4 (Anticipated DBE Utilization) would be submitted with the bid. Please confirm which GEFA forms are to be submitted with our bid.

Answer: See Revision No. 1 above.

18. Division 4 | Section 3.3.3.C notes the access road stone will hauled to a CCWA facility when removed. Please provide us with this location.

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ADDENDUM #1

<u>Answer</u>: Access road stone removed may be hauled to a CCWA property located on Freeman Road just east of the intersection of Freeman Road and Dixon Industrial Boulevard in Clayton County.

19. In order to better quantify the rock on the Flint River Outfall Replacement Phase 2 Project, we request that the "As Built Drawings", the original borings and any other information useful from original sewer installation project be made available to the contractors on this project.

<u>Answer</u>: CCWA is providing design documents Sanitary Sewer Outfall-Flint River Job # 63206-C6 (May 8, 1967) and Sanitary Sewer Outfall Job # 63206-C9 (April 30, 1968) with hand written notes from that time period for review. CCWA has no other information. To review the design documents, click **HERE**.

20. Please check quantities on pay items 30 thru 38.

<u>Answer</u>: Quantities have been checked for Pay Items 30 through 38. See revised Bid Form – Pay Item Schedule included as part of this addendum.

21. Please check quantities and units for pay items 54 thru 56.

<u>Answer</u>: Quantities have been checked for Pay Items 54 through 56. See revised Bid Form – Pay Item Schedule included as part of this addendum.

22. I'm reaching out to see if I might be able to obtain a copy of the pre-bid meeting sign in sheet from this morning's meeting for the Flint River Outfall Replacement?

Answer: The sign-in sheet is provided with this Addendum on pages 9 through 11.

23. Article 6 of the Agreement Form, Warranty on Goods Provided, states "The rights and remedies of CCWA concerning latent defects shall exist indefinitely, and shall not be affected in any way by any terms and conditions of this Agreement, including this clause". This implies that the warranty requirement for goods used in the Project never ends. Please clarify your intent.

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ADDENDUM #1

<u>Answer</u>: CCWA does not intent for the Contractor to warranty the goods beyond the two (2) years from the date of final acceptance. Additionally, this language protects CCWA from relinquishing our rights and remedies, to any and all manufacturers, for latent defects on any goods provided under this agreement where such remedies would be against the manufacturer and not the Contractor.

24. The Work includes Owner-Furnished Contractor-Installed (OFCI) materials (ie. Pipe). Please confirm that the Contractor has no warranty requirements for OFCI materials. Will the Contractor receive an equitable adjustment in contract cost and contract time if the OFCI materials are delayed in delivery?

<u>Answer</u>: The awarded Contractor will not be responsible for material warranty requirements for materials provided by CCWA. CCWA does not anticipate delaying the project. The Contractor may communicate to CCWA any questions or concerns that may arise.

25. Division 4, Specifications, Section 3: Construction Standards, Article 3.1.16, Manufacturer Services, states "The pipe manufacturer shall furnish the services of a factory representative to provide handling, installation and inspection training in accordance with the following schedule". Since the Project pipe is OFCI materials, is the Owner or the Contractor responsible for procuring these Manufacturer Services?

Answer: CCWA is providing pipe Manufacturer Services.

26. The geotechnical report lists 7 locations that piles will be needed to support the pipe. Is this the only locations helical piles are required on this project?

<u>Answer</u>: Helical piles are to be installed at nine (9) locations generally as follows. Contractor will determine locations based upon site conditions:

- River Crossing Pipe Support with Piles: near stations 12+50 and 13+10. Four (4) piles at two (2) locations for a total of eight (8) piles.
- Pipe Support with Piles: near stations 10+50, 10+90, 11+30, 11+70, 12+10, 13+50 and 13+90. Two (2) piles at seven (7) locations for a total of fourteen (14) piles.

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ADDENDUM #1

27. Sheet P19 shows working loads for the pipe support & river crossing pipe support locations while the specifications list a different design/working capacity per pile. Please clarify which the piles should be designed for.

<u>Answer</u>: The design working/service loads listed in the specifications for each pile are to be used and as follows:

- Vertical Compression 20.0 kips
- Vertical Tension/Uplift 6.0 kips
- Lateral/Horizontal Bending 5.0 kips
- 28. The river crossing pipe support detail on drawing P-19 shows battered piles & requires a working capacity (per pile) of 4 kips in lateral. Is this lateral capacity assumed to be taken by the battered piles?

<u>Answer</u>: Yes. The design working/service loads listed in the specifications for each pile are to be used and as follows:

- Vertical Compression 20.0 kips
- Vertical Tension/Uplift 6.0 kips
- Lateral/Horizontal Bending 5.0 kips
- 29. Can you clarify which direction the lateral force is applied to the pile cap?

<u>Answer</u>: The direction of the horizontal/lateral force on the piles is in the direction of river flow from upstream to downstream, which at the pile locations is approximately from northeast to southwest.

SIGNATURE	COMPANY NAME
DATE	

Clayton County Water Authority

Non-Mandatory Pre-Bid Meeting and Site Visit

Tuesday, August 8, 2017 at 10:00 a.m. (local time) 688 Flint River Road, Jonesboro, GA 30238

Department: PROGRAM MANAGEMENT & ENGINEERING

Bid Title: FLINT RIVER OUTFALL REPLACEMENT – PHASE 2

Bid Date and Time: Thursday, August 24, 2017 at 10:00 a.m. (local time)

COMPANY NAME	REPRESENTATIVE	PHONE NUMBER	EMAIL ADDRESS
REYMOLDS	Tim Dunn	404.323.7646	TIM. DUNN C REYNOLDS CON. CO.
Rain For Rent	Ken Timermon	404-620-6099	Btimemonerain for Rut. con sarder cooler dolepho
Rain for Best Steven Arche	Steven Ard	270.972.800	sardore John d steple
Trovis BCIII.	Trovis Brilliant	70.487.2300	trovis, brillion + @ kiew H. co
Kiewit	Don Dohallow	770-437-2300	Don. Dohallow exicuit. Com
Strack, Inc.	Jan Cabot	(678) 591 4685	iance stracking.com
Strack, Inc.	Tommy Haynes	G78-230-3731	tommyhastrackinc.com
CIVIL WORKS	BILL MONSHO	404-787-2846	GACIVILWONKS@ ADL. CON

Clayton County Water Authority

Non-Mandatory Pre-Bid Meeting and Site Visit

Tuesday, August 8, 2017 at 10:00 a.m. (local time) 688 Flint River Road, Jonesboro, GA 30238

Page <u>2</u> of <u>3</u>

Department: PROGRAM MANAGEMENT & ENGINEERING

Bid Title: FLINT RIVER OUTFALL REPLACEMENT – PHASE 2

Bid Date and Time: Thursday, August 24, 2017 at 10:00 a.m. (local time)

COMPANY NAME	REPRESENTATIVE	PHONE NUMBER	EMAIL ADDRESS
JOHN DISTEPHENS	HANK MERRILL	770-972-8000	HMERHUL & JOHNTO STEPHENS, COA
Cheoah	Jimmic Masshyd	464-886-8559	Jimmass 2 a Gmal. com
CKECASTE PREZAST	BOB FARMER	678-673-8193	bob. palmer@ oldrastle. ron
OLD CASTLE PRECAST	TREY CAMPRELL	404-694-4201	trey. cantralle old castle . com
Cantsink of Atlanta	Ryan Yeomans	404-862-2257	Ryan O Containt. Com
CANTSWK OF ATLANTA	JONATHAN HAYWORDS	770-378-1643	JOHATHAN @ CANTSINK. COM
AMERICAN PIPE	JEFF McCulough	678.772.6551	inccullough@american-use.com

Clayton County Water Authority

Non-Mandatory Pre-Bid Meeting and Site Visit

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Department: PROGRAM MANAGEMENT & ENGINEERING

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Page 3 of 3

COMPANY NAME	REPRESENTATIVE	PHONE NUMBER	EMAIL ADDRESS
DENE I MOW! 110	a ccup	404- 960-	Jene 1. meminion @ cowa.
Sunhelt Rentals	Kebin Fire 1	464-557- 7377	Kebin. Fire @ Sunbeltiental
Pumpt Power	Kathy Bozaert		ccwa-procurementeccwa.us
Yolanda Jackson		3605	yolanda jackson@cowa. 45
CCWA	Karen Riser	770-960-	Karen . riser & CCWA.US
CCUA	CLIFFORD BENOSET		
CCWA	Keith Workins		
CCWA	Larry Michaels		

Bid Requirements

Section 3: Bid Submittals - Revised

3.1 Bid Submittal Requirements:

The following items are required to be included as part of the bid submittal. Failure to include any of these items may result in the bid being deemed non-responsive.

- A. Bid Form.
- B. Georgia Bid Bond in the amount of five percent (5%) of the total bid amount.
- C. Bidder Qualification Information Form including References.
- D. Georgia Security and Immigration Compliance Act of 2006 form.
- E. Contractor Affidavit and Agreement form.
- F. Subcontractor Affidavit form.

If a Contractor/Subcontractor will not be performing any services under this contract, the Contractor/company submitting the bid MUST also complete, sign, date, and have both Affidavit forms notarized and make proper notation of "N/A" - Not Applicable.

Clayton County Water Authority (CCWA) cannot consider any bid which does not include completed affidavits. It is not the intent of this notice to provide detailed information or legal advice concerning the Georgia Security & Immigration Compliance Act of 2006, as amended on May 11, 2009. All Bidders intending to do business with CCWA are responsible for independently apprising themselves and complying with the requirements of that law and its effect on CCWA procurements and their participation in those procurements.

G. Deleted.

H. GEFA Forms as follows:

Supplemental General Conditions (see Attachment A)

- 1. DBE Compliance Form and related documentation.
- 2. Certification Regarding Equal Employment Opportunity.
- 3. Certification Regarding Debarment, Suspension, and Other Responsible Matters.

Bid Requirements

Section 3: Bid Submittals – Revised

- 4. EPA Forms 6100-3 and 6100-4 (DBE Subcontractor Performance and Utilization Forms, respectively) unless ALL of the work is self-performed by the prime Contractor.
- I. Addenda (if any).

END OF SECTION

In compliance with the Request for Bids, Bidder hereby proposes to perform all Work for <u>Flint River Outfall Replacement – Phase 2</u> in strict accordance with the Contract Documents as enumerated in the Request for Bids, within the time set forth therein, and at the prices stated below.

By submission of this bid, Bidder certifies, and in the case of joint bid each party thereto certifies as to the party's own organization that this bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this bid with any other Bidder or with any competitor. Bidder also certifies compliance with the Instructions to Bidders.

In submitting this bid, Bidder certifies Bidder is qualified to do business in the state of Georgia as required by laws, rules, and regulations or, if allowed by statute, covenants to obtain such qualification prior to contract award.

CONTRACT EXECUTION AND BONDS:

The undersigned Bidder agrees, if this bid is accepted, to enter into an Agreement with CCWA on the form included in the Documents to perform and furnish Work as specified or indicated in the Documents for the Contract Price derived from the bid and within the times indicated herein and in accordance with the other terms and conditions of the Documents.

Bidder accepts the terms and conditions of the Documents.

INSURANCE:

Bidder further agrees that bid amount(s) stated herein includes specific consideration for the specified insurance coverage.

CONTRACT TIME:

Bidder hereby agrees to commence work within fourteen (14) calendar days under this contract or on a date to be specified in the Notice to Proceed. The total time for the Bidder to complete this project shall not exceed four hundred (400) calendar days. The Bidder

Bid Requirements

Section 4: Bid Form - Revised

and CCWA recognize that time is of the essence in completing this work and that there are delays, expense and difficulties involved in resolving a dispute related to a loss suffered by CCWA if the Work is not completed on time. Accordingly, instead of requiring such proof, CCWA and Bidder agree that as liquidated damages for delay (but not as a penalty), the Bidder shall pay to CCWA, as liquidated damages the amount of \$500.00 per calendar day for each and every day or part of a day thereafter that any work as described in the Contract Documents remains incomplete and/or not accepted by CCWA.

PAYMENT TERMS:

Payment terms are net 30 days after approval of completed work and receipt of a detailed payment application.

RETAINAGE:

Bidder accepts the provisions in the Agreement Form as to retainage.

ADDENDA:

Bidder acknowledges receipt of the following Addenda:

SURETY:

The project work will require Performance and Payment Bonds prior to the commencement of the work. Such work shall not commence until approval of such bonds has been given by CCWA.

BID:

By submitting a bid, and by executing this construction contract, the Contractor acknowledges that it understands that the goods and services under this contract are being funded with monies made available by the Clean Water State Revolving Fund or the Drinking Water State Revolving Fund, and agrees to comply with any and all such requirements.

The undersigned proposes to complete, in all respects, sound and conformable with this Contract Document the work for the amounts as shown on the following Pay Item Schedule.

Bid Requirements

Section 4: Bid Form – Pay Item Schedule – Revised

No.	Work Item	Detail	Unit	Estimated Quantity	Unit Price	Extended Total
1	Mobilization	Shall not exceed 5% of total bid amount	LS	1		
2	Easement Clearing	N/A	SF	1,236,000		
3	Silt Fence Installation	N/A	LF	41,500		
4	Silt Fence Removal	N/A	LF	41,500		
5	Construction Access Road Installation	N/A	LF	14,500		
6	Construction Access Road Removal	N/A	LF	14,500		
7	Erosion and Sediment Control Installation	N/A	SF	1,360,000		
8	Permanent Re-grassing	N/A	SF	665,700		
9	NPDES Monitoring and Reporting	N/A	LS	1		
10	Permanent Fence Replacement	N/A	LF	3,700		
11	Temporary Fence	Install/Remove	LF	9,300		
12	Asphalt Placement	N/A	SF	65,000		
13	Concrete Placement	N/A	CF	7,300		
14	Concrete Curb Placement	N/A	LF	600		
15	Tie-In No. 1	N/A	LS	1		
16	Tie-In No. 2	N/A	LS	1		
17	Coood Crooping	Cased Crossing	LF	90		
18	Cased Crossing	Pipe and Grout	LF	90		

Bid Requirements

Section 4: Bid Form – Pay Item Schedule – Revised

No.	Work Item	Detail	Unit	Estimated Quantity	Unit Price	Extended Total
19	Gas Right-of-Way Crossing	N/A	LS	1		
20	River Crossing	N/A	LS	1		
21	Primary 60-inch Pipe Installation	N/A	LF	435		
22	Primary 48-inch Pipe Installation	N/A	LF	1,808		
23	Primary 42-inch Pipe Installation	N/A	LF	9,509		
24	Secondary Pipe Installation	N/A	LF	122		
25	0	Initial 20 Feet	EA	20		
26	Service Re-Connection	Additional Footage	LF	40		
27	Pipe Coating	N/A	LF	1,000		
28	Primary 10-ft Diameter	Base	EA	2		
29	Manhole Installation	Riser	VF	30		
30	Primary 8-ft Diameter	Base	EA	10		
31	Manhole Installation	Riser	VF	100		
32	Primary 6-ft Diameter Manhole Installation	Base	EA	36		
33	Primary 6-ft Diameter Manhole Installation	Riser	VF	374		
34	Primary 4-ft Diameter Manhole Installation	Riser	VF	<mark>135</mark>		
<mark>35</mark>	Primary 8-foot X 8-foot	Base	EA	0	Deleted	Deleted
<mark>36</mark>	Vault Installation (Removed from Contract)	Riser	VF	0	Deleted	Deleted

Bid Requirements

Section 4: Bid Form – Pay Item Schedule – Revised

No.	Work Item	Detail	Unit	Estimated Quantity	Unit Price	Extended Total
37	Secondary 4-ft Diameter	Base	EA	8		
38	Manhole Installation	Riser	VF	88		
39	Secondary 6-ft Diameter	Base	EA	1		
40	Manhole Installation	Riser	VF	19		
41		10-Foot Diameter	EA	2		
42	Manhole Invert Construction	8-Foot Diameter	EA	<mark>10</mark>		
43	Mannole invert Construction	6-Foot Diameter	EA	<mark>36</mark>		
44		4-Foot Diameter	EA	8		
<mark>45</mark>	Vault Invert Construction (Removed from Contract)	8-Foot X 8-Foot	EA	0	Deleted	Deleted
46	Unsuitable Soil Excavation	N/A	CF	245,000		
47	Rock Excavation	N/A	CF	136,500		
48	Pipe Collar Installation	N/A	EA	19		
49	Concrete Slab over Pipe	N/A	LF	1,100		
50	Pipe Anchor	N/A	EA	50		
51	Pipe Support with Piles	N/A	EA	<mark>7</mark>		
52	Demolition Bulkhead	36-Inch Pipe	EA	57		
53	Installation	24-Inch Pipe	EA	12		
54	Demolition Manhole Abandonment	Riser Removal	VF	53		

Bid Requirements

Section 4: Bid Form – Pay Item Schedule – Revised

No.	Work Item	Detail	Unit	Estimated Quantity	Unit Price	Extended Total
55	Demolition Manhole	Gravel Fill 6 Foot x 6 Foot Box	VF	48		
56	Abandonment	Gravel Fill 4-Foot Diameter Riser	VF	26		
57	Unforeseen Existing Conditions Allowance	N/A	Allow- ance	1	\$400,000.00	\$400,000.00
	TOTAL BID AMOUNT					

N/A = Non-applicable; **LS** = Lump Sum; **LF** = Linear Foot; **SF** = Square Foot; **CF** = Cubic Foot; **EA** = Each; **VF** = Vertical Foot.

(COMPANY NAME OF BIDDER)

Bid Requirements

Section 4: Bid Form – Revised

I have read and understand the requirements of this request for bid and agree to provide the required goods and services in accordance with this bid and all attachments, exhibit(s), and drawings.

Submitted by:		
(COMPANY NAME OF BIDDER)		
By: (OFFICER NAME)		
(SIGNATURE)		
(TITLE)	(DATE)	
(COMPANY ADDRESS)		
(CITY, STATE, ZIP CODE)		
PHONE NUMBER:		
FAX NUMBER:		
EMAIL ADDRESS:		
WEBSITE:		
DATE:		
UTILITY CONTRACTOR'S LICENSE NUMBER:		

END OF SECTION

Section 1: Work Items and Measurement – Revised

Work Item 20. River Crossing: Defined as the Contractor completing all necessary work as described in the Contract Documents to install "River Crossing" from station 12+37 to and including station 13+12 as shown on Drawing # P-2. Installation of the two (2) river crossing pipe supports with piles as detailed on Drawing # P-19 "River Crossing Pipe Supports with Piles" is part of this Work Item. Erosion and Sediment Control Installation will be paid from other Work Item. The Work Item will be paid on a per "lump sum" unit cost in accordance with the Pay Item Schedule and applicable work Detail as authorized/approved by CCWA."

Work Items 21-23. Primary Pipe Installation: Defined as the Contractor completing all necessary work as described in the Contract Documents to install the Primary 60", 48" and 42" Sewer Main from survey station 0+40 to survey station 120+75. This Work Item does not include pipe installed as part of Work Items Cased Crossing, Gas Right-of-Way Crossing or River Crossing. The work will be measured horizontally from the end of pipe to the end of pipe. Only pipe installed where testing has been accepted by CCWA will be eligible for payment. The Work Item will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 24. Secondary Pipe Installation: Defined as the Contractor completing all necessary work as described in the Contract Documents to install the Secondary Sewer Main. The work will be measured horizontally from the end of pipe to the end of pipe at manhole locations. Only pipe installed where testing has been accepted by CCWA will be eligible for payment. The Work Item will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Items 25-26. Service Re-Connection: Defined as the Contractor completing all necessary work as described in the Contract Documents to install the existing sewer service connections designated as Service Re-Connect A through T. Where a re-connection is indicated, install up to 20 feet of pipe at the location. Install additional pipe beyond 20 feet as indicated/required to complete the work. The Work Item detailed as "Initial 20 Feet" will be paid on a per "each" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA. The Work Item "Additional Footage" will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

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Work Item 27. Pipe Coating: Defined as the Contractor completing all necessary work as described in the Contract Documents to install coatings to pipe exterior surfaces that will be exposed above finished grade. Existing pipe exterior surfaces damaged as part of the work shall be coated at the contractor's expense. The work will be measured horizontally from the start of coating to the end of coating. The Work Item will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Items 28-40. Primary and Secondary Manhole Installation (Work Items 35 and 36 removed from contract): Defined as the Contractor completing all necessary work as described in the Contract Documents to install manholes from survey station 0+40 to survey station 120+75. The base and riser diameter of a manhole will be determined by measuring the inside diameter. The riser above the base will be measured vertically from the top of the constructed manhole invert to the top of reducer slab or to the top of the cone section if a reducer slab is not installed. The riser above the reducer slab will be measured for diameter and vertically from the top of the reducer slab to the top of the cone section. Only manholes installed where testing has been accepted by CCWA will be eligible for payment. The Work Items for manhole base sections will be paid on a per "each" unit cost in accordance with the Pay Item Schedule and applicable Detail as authorized/approved by CCWA. The Work Items for manhole riser height will be paid on a per "vertical foot" unit cost in accordance with the Pay Item Schedule and applicable Detail as authorized/approved by CCWA.

Work Items 41-44. Manhole Invert Construction: Defined as the Contractor completing manhole invert construction as described in the Contract Documents. The size of invert construction will be determined by measuring the inside diameter of the manhole base. The Work Items will be paid on a per "each" unit cost in accordance with the Pay Item Schedule and applicable Detail as authorized/approved by CCWA.

Work Item 45. Vault Invert Construction: (Work Item 45 removed from contract).

Work Item 46. Unsuitable Soil Excavation: Defined as the Contractor completing the excavation and disposal of unsuitable soil and replacing excavated volume with suitable soil or stone in accordance with the Contractor Documents. The quantity of work completed will be determined by measuring the vertical and horizontal distance of removed material from the planned excavation. The Work

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Item will be paid on a per "in-place cubic foot" unit cost of material removed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 47. Rock Excavation: Defined as the Contractor completing the removal and disposal of rock and replacing excavated volume with stone in accordance with the Contract Documents. The quantity of work completed will be determined by measuring the vertical and horizontal distance of removed material from the planned excavation. Any Rock Excavation associated with the Gas Right-of-Way Crossing is not part of this work item. The Work Item will be paid on a per "in-place cubic foot" unit cost of material removed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

<u>Work Item 48. Pipe Collar Installation:</u> Defined as the Contractor completing the installation of pipe collars in accordance with the Contract Documents. The Work Item will be paid on a per "each" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 49. Concrete Slab over Pipe: Defined as the Contractor completing the installation of concrete of various depths, lengths and widths placed above sewer pipe to resist pipe flotation in accordance with the Contract Documents. The Work Item will be paid on a per "liner foot" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

<u>Work Item 50. Pipe Anchor:</u> Defined as the Contractor completing the installation of concrete of various sizes to anchor pipe in accordance with the Contract Documents. The Work Item will be paid on a per "each" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 51. Pipe Support with Piles: Defined as the Contractor completing the installation of seven (7) pipe supports with piles from station 10+43 to 12+37 and 13+12 to 14+00 as shown on Drawing # P-2 and as detailed on Drawing # P-19 "Pipe Support with Pile" in accordance with the Contract Documents. The Work Item will be paid on a per "each" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Items 52-53. Demolition Bulkhead Installation: Defined as the Contractor completing demolition bulkhead work in accordance with the Contract Documents. Bulkheads will be installed on 24" and 36" nominal size concrete pipe with increased cross-sectional area due to deterioration. The Work Items

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will be paid on a per "each" unit cost in accordance with the Pay Item Schedule and applicable Detail as authorized/approved by CCWA.

Work Items 54-56. Demolition Manhole Abandonment: Defined as the Contractor completing manhole abandonment work in accordance with the Contract Documents. The height of riser removed will be measured from top of remaining riser section to the top of the cone section whether the cone is at surface grade or above grade. Gravel fill will be measured from existing invert to where gravel fill stops. The Work Items will be paid on a per "vertical foot" unit cost in accordance with the section titled "Pay Item Schedule" of the "Bid Form" and applicable detail as authorized/approved by CCWA.

Work Item 57. Unforeseen Existing Conditions Allowance: The Contractor shall provide additional services only as directed and approved in writing by CCWA as may be required for the Project. This Work Item will only be used when unexpected conditions arise as determined by the CCWA. Payment shall be for all labor, equipment, materials and incidental costs which are necessary to complete the work.

END OF SECTION

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2.3 Ductile Iron Pipe

- A. Provided by CCWA.
- B. Material conformance reference.
 - 1. ANSI/AWWA C151/A21.51: Ductile-Iron Pipe, Centrifugally Cast.
 - ANSI/AWWA C153/A21.53: American National Standard for Ductile-Iron Compact Fittings for Water Service.
 - 3. ANSI/AWWA C111/A21.11: Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
 - 4. ANSI/AWWA C104/A21.4: Cement-Mortar Lining for Ductile-Iron Pipe and Fittings.
 - 5. ANSI/AWWA C116/A21.16: Protective Fusion-Bonded Coatings for the Interior and Exterior Surfaces of Ductile-Iron and Gray-Iron Fittings.
 - 6. ASTM B117: Standard Practice for Operating Salt Spray (Fog) Apparatus.
 - 7. ASTM 2794: Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
 - 8. ASTM G95: Standard Test Method for Cathodic Disbondment Test of Pipeline Coatings (Attached Cell Method).

C. Pipe description.

- Nominal diameter shall /size shall be as indicated on the Construction Drawings.
- 2. Pipe shall be pressure class 250.
- 3. Pipe barrel (Typical) shall be within manufacturer's casting tolerances.
- 4. Pipe barrel (For Field Adjustment) shall be fully gauged within manufacturer's tolerances for spigot ends.
- 5. Joint for 20-inch and 24-inch shall standard push-on.
- 6. Joint for 42-inch and 48-inch pipe shall restrained and of the lock-ring type or similar having a welded retainer ring.
- 7. The following information shall be cast in or stamped on each pipe.
 - a) Weight, class or nominal thickness.

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- b) Casting period.
- c) Manufacturer's identifying mark.
- d) Year the pipe was manufactured.
- e) The letters "DI" or "DUCTILE".
- 8. Nominal length per joint of pipe is 20 feet.
- 9. Joint lubricant as provided by the pipe manufacturer.
- D. Gasket description.
 - 1. Gaskets shall be plain rubber (Styrene Butadiene Copolymer).
- E. Retaining gland description.
 - 1. Retaining gland shall be a split lock-rind with bolted adjustment or ductile iron segmented retainer ring.

F. Lining / Coating description.

- 1. Pipe Typical (Lining / Coating Type A) shall have a manufacturer provided liner of Protecto 401TM ceramic epoxy or approved equal. Exterior spigot end (coated 6 inches along the exterior barrel of the pipe) shall be coated with a manufacturer provided Protecto 401TM ceramic epoxy or approved equal. Remaining portion of the exterior barrel of the pipe shall have a manufacturer provided coating of asphalt. All linings and coatings shall be in accordance with manufacturer's standard published lining / coating requirements.
- 2. Pipe Typical (Lining / Coating Type B) shall have a manufacturer provided liner of Protecto 401TM ceramic epoxy or approved equal. Exterior spigot end (coated 24 inches along the exterior barrel of the pipe) shall be coated with a manufacturer provided CeramapureTM PL90 or approved equal. Remaining portion of the exterior barrel of the pipe shall have a manufacturer provided coating of asphalt. All linings and coatings shall be in accordance with manufacturer's standard published lining / coating requirements.
- 3. Pipe Field Adjustment (Lining / Coating Type C) shall have manufacturer provided interior liner of Protecto 401TM ceramic epoxy or approved equal. Exterior of the pipe (along the entire exterior barrel of the pipe) shall be coated with a manufacturer provided CeramapureTM PL90 or approved equal. All linings and coatings shall be in accordance with manufacturer's standard published lining / coating requirements.

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Acceptable Manufacturers

- ➤ U.S. Pipe.
- > American Cast Iron Pipe Company.

END OF SECTION