

# WATER RESOURCES INTEGRATION PROGRAM, PHASE 1 PIPELINE SEGMENT 2B

Solicitation No. B-14-044-DD SAWS Job No. 14-8606

#### ADDENDUM No. 1

SEPTEMBER 17, 2014

To Respondent of Record:

This addendum, applicable to work referenced above, is an amendment to the proposal and plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the proposal.

#### MODIFICATIONS TO THE SPECIFICATIONS

1. BIDDING AND CONTRACT REQUIREMENTS, INVITATION FOR COMPETITIVE SEALED PROPOSALS, Page IV-2: Add the following at the end of the Invitation:

#### "Mandatory Pre-Proposal - Firms in Attendance

Proposals will not be accepted from any firm not represented at the mandatory pre-proposal meeting held on August 27, 2014. The following list is a record of represented firms:

- 1. Hanson Pressure Pipe
- 2. Condie Construction
- 3. Ameron International
- 4. SJ Louis
- 5. Webber, Inc.
- 6. Spiess Const. Co. Inc
- 7. The Lane Construction
- 8. Texas Sterling Constr
- 9. CYMI Industrial
- 10. Atlas Const. Corp
- 11. Northwest Pipe
- 12. T&T Construction
- 13. BRH Garver
- 14. Holloman Corp
- 15. JMI
- 16. Oscar Renda Contracting-
- 17. Thompson Pipe Group
- 18. Carboline (coatings)
- 19. MK1
- 20. Mountain Cascade
- 21. Team Inc
- 22. Brinker Jones Environmental
- 23. Garney Companies
- 24. Bortunco

- 2. Instructions to Respondents, Page IR-6, Remove and replace the first paragraph of item 17 with the following:
  - "17. San Antonio Water System Contracting Office may reject the Proposal when: (a) the Respondent misstates or conceals any material fact in the proposal, or if (b) the proposal does not strictly conform with the law or the requirements of this RFCSP, or if (c) the proposal is conditional, or if (d) the price proposal is unbalanced, or if (e) the Respondent fails to acknowledge in the final price of the price proposal any and all addendums issued on the price proposal prior to the solicitation deadline."
- 3. Supplementary Instructions to Respondents, Page SIR-7, Remove paragraph #6 and replace with the following:
  - "6 Proposals shall be printed on letter-size 8-1/2" x 11" paper and assembled with plastic spiral-type binding, t-post type that screw together or staples. 11 x17 pages will be allowed for "
- 4. Insert the attached Proposal Checklist to be utilized when submitting a proposal for this project (Attachment 1).
- 5. Price Proposal, remove the Price Proposal and Proposal Certification page in their entirety (pages PP-1 of 4 through PP 4 of 4 and PC-1) and replace with the revised Price Proposal and Proposal Certification, which changes the calendar days for substantial completion to 412 and calendar days for final completion to 442 attached hereto as Attachment 2:
- **6.** Wage Decisions: Remove Wage Decision titled General Decision Number TX140045 01/03/14 TX 45 for On-Shore Pipeline Construction in its entirety.
- 7. General Conditions, Page GC-25, Section 5.7.1.6, remove and replace the following sentence:

"Excess/Umbrella Liability (UL) insurance shall have minimum policy limits of \$5,000,000 per occurrence and \$5,000,000 in the aggregate. This policy shall be of an "Occurrence" type and the limit of liability shall be concurrent with (following form) and in excess of the EL, CGL, and AL lines of insurance coverage as described in Articles 5.7.1.1.2, 5.7.1.1.3, and 5.7.1.1.5 listed above."

The remainder of the paragraph remains unchanged.

- 8. Insert TWDB DBE forms (TWDB-0216, TWDB-0217, TWDB-0373) provided in Attachment 3 immediately following the TWDB-0210, Guidance for U.S. Environmental Protection Agency Disadvantaged Development Business Enterprise Program and use these forms when submitting a proposal for this project within 24 hours of the proposal opening deadline.
- 9. Remove The United States Environmental Protection Agency memorandum dates March 20, 2014 (pages 213-232 of the pdf) in its entirety. TWDB- 1106 (Revised 7/28/14) the American Iron and steel (AIS) Guidance for Clean Water & Drinking Water State Revolving Funds shall serve as the sole guidance manual as part of this contract.
- **10.** Supplemental Conditions, Item 7, add to the text being inserted on page GC-47 Section 8.6 with the following additional liquidated damages provision:
  - "3. Project Milestones: Completion date after 12/31/2015 for hydrostatic testing per Special Condition Item No. 10 shall be \$5,000/day; additive to other liquidated damages."
- 11. Section 01270, 1.04 V 1 (pg. 13), Replace paragraph 1 with the following:
  - "1. **Description:** This item shall govern disinfection requirements for Segment 2B in addition to program disinfection requirements for all four pipeline segments (2B, 2A, 1B, and 1A) of the SAWS WRIP. The combined length of all four segments is approximately 146,000 linear feet. Effort will include all labor, materials, management, planning, coordination, preparation, chemicals, incidentals and any other work or costs required to complete program disinfection as specified."

12. Section 01270, 1.04 Y 1 (pg 15), 1, Replace paragraph 1 Description, Replace the second paragraph with the following

"For the purpose of this pay item, rock shall be defined as material in a shape and with a hardness preventing excavation and casing pipe installation using boring equipment with a minimum 200,000 foot-pounds of available torque (in 1st gear) and a thrust capacity of at least 1,000,000 pounds."

- 13. Section 2317, 1.02, H, replace "Tape Coated" with "Polyurethane Coated".
- **14.** Section 2519, remove Section 2519 DISINFECTION OF WATER SYSTEMS and replace with the revised specification provided in Attachment 4.
- **15.** Section 2571, 1.03 B.8.d (pg. 7): Remove and replace the second sentence with the following

"Submit Welding Procedure Specification(s) (WPS) used for welder certifications."

16. Section 2571, 1.04 D.1.b (pg. 11): Remove and replace the second sentence with the following

"The WPS shall describe the minimum weld to be placed in each pass."

17. Section 2571, 3.01 G, Remove and replace paragraph G with the following:

"Long-term Exposure: Pipe that is exposed to UV rays for a period of over 180 days after application shall either be provided with a UV resistant topcoat, covered to prevent UV degradation, or be certified in writing by the coating manufacturer that UV exposure will not affect the thickness of the coating if exposed up to 1 year of sunlight. Exposure greater than 1 year shall not impact the dry film thickness of the coating. Areas of coating that display UV degradation and more than 2 mils per year of coating loss in accordance with SSPC PA2-2012 shall be removed and repaired at sole cost of the CONTRACTOR. For exposures greater than 1 year with UV degradation, the required application of a UV resistant topcoat will depend on the project location, laying schedule, anticipated length of exposure, and type of outer wrap. The manufacturer shall be consulted for 3,000 psi water blasting minimum and a compatible UV resistant topcoat or pipe shall be stored under a protective cover. Protective covering can be colored plastic sheeting, canvas, or other UV blocking material. Clear plastic sheets are not acceptable."

18. Section 02571, 3.01.K.3 (pg. 27): Replace the last sentence with the following:

"Pipe which has floated shall be removed, cleaned, the trench repaired and restored, and the pipe reinstalled in accordance with these specifications to the required line and grade at no additional cost to the OWNER. Pipe damaged for any reason shall be repaired or replaced in accordance with these specifications at no expense to the OWNER."

- 19. Section 2571, Section 3.05 A, replace "tape coated" with "polyurethane coated".
- 20. Section 2572, 3.01 H (pg. 8): Remove and replace the paragraph with the following:
  - "H. Field Welding. Field welding shall conform to ANSI/AWWA C206."
- 21. Section 9910 3.07.B, 94 a. Replace paragraphs 1, 3, and 4 with the following:
  - 1. Acceptance will be based on one pull minimum, with no pulls less than the minimum 1,750 criteria where multiple accepted pulls are conducted on the same joint of pipe.

- 3. Adhesion testing shall be conducted on two sufficiently cured, coated sections of pipe from each shift selected at random with one from the beginning of the shift and one from halfway through the shift. Adhesion testing shall be conducted in accordance with ASTM D4541 using a Type V tester. The coating around the dolly shall be scored completely through to the steel substrate. If the adhesion is not satisfactory, two additional tests shall be made at two different locations on the same pipe. If either additional test fails, the pipe shall be rejected. If the pipe is rejected, a systematic inspection of all pipe coated on that shift shall be made, and all pipe not meeting this adhesion requirement shall be rejected. Damaged test areas of accepted pipe and areas determined to have unsatisfactory adhesion shall be repaired as outlined in this specification
- 4. Each pipe in a lot shall be tested if the initial average value for the first two pipe spools is below the minimum requirement. Pipe lots that do not meet the average value for all adhesion pulls shall be rejected. Each pipe that fails the minimum adhesion criteria shall be rejected as determined above.

Paragraphs 2 and 5 will remain unaltered.

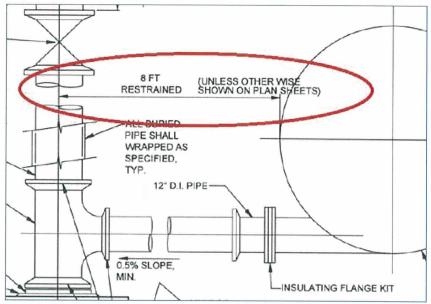
- **22.** Section 13110, Remove and replace the first page of this specification with the page provided on Attachment 5
- **23.** Section 13110, 3.01 C (pg.8): In the first sentence replace the reference to "tape coating" with "polyurethane coating".

#### MODIFICATIONS TO THE PLANS

1. Sheet PP50A: Insert the following note on this page in the vicinity of the UPRR pipeline crossing and between Station 592+50 to Station 594+50.

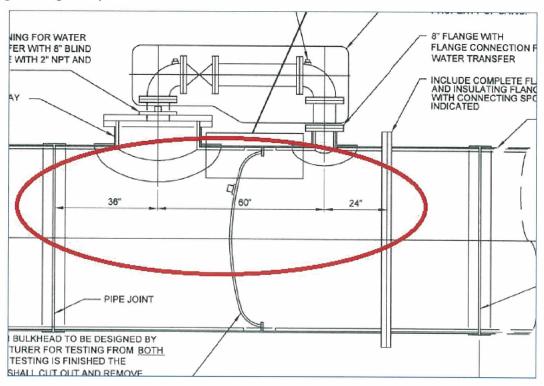
"Utilities shown near the RR XING have changed due to new construction, including the addition of a new railroad spur, regrading of bar ditches, and placement of rock riprap. CONTRACTOR shall verify the horizontal and vertical location of all utilities, including within railroad right of ways when required, and submit this utility information to the Engineer well prior to preparation of any pipeline "Make and Lay" drawings. Engineer will review and revise pipeline plan and profile where needed and provide to CONTRACTOR to finalize "Make and Lay" drawings and related submittals."

2. Detail Sheet DT06, Section view, Remove the note "SEE PLAN SHEET FOR REQUIRED DISTANCE" located between the transmission main and the vertical riser pipe and replace it with the "8 FT RESTRAINED (UNLESS OTHERWISE SHOWN ON PLAN SHEETS)" as indicated in the following drawing excerpt:



- 3. Detail Sheet DT10, PIPELINE CLOSURE TESTING AND CHLORINATION REQUIREMENTS notes, remove and replace notes 7 through 10 with the following
  - "7. AFTER CONTRACTOR A & B HAVE BOTH PASSED HYDROSTATIC TESTING, CONTRACTORS SHALL DRAIN WATER FROM EACH SIDE. CONTRACTOR B SHALL REMOVE TEMPORARY PIPING AND DISH BULKHEAD. AND APPLY MORTAR TO INTERIOR SURFACES PER THE SPECIFICATIONS.
  - 8. CONTRACTOR B SHALL SWEEP AND THOROUGHLY CLEAN ALL IMPACTED WORK AREAS INSIDE THE PIPE AND THEN SWAB OR SPRAY ALL PIPE SURFACES TO AT LEAST 10 FT BEYOND IMPACTED WORK AREA ON BOTH SIDES OF THE TEST BULKHEAD WITH A 1% HYPOCHLORITE SOLUTION. SAWS INSPECTOR SHALL WITNESS AND INSPECT AND MUST APPROVE FINAL CLOSURE.
  - 9. ACTIVITIES RELATED TO THE PROGRAM DISINFECTION WILL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS.
  - 10. CONTRACTOR A: WILL BE PAID FOR ONE INTERNAL TEST BULKHEAD ASSEMBLY. CONTRACTOR B WILL BE PAID FOR ONE TIE IN. EACH CONTRACTOR SHALL INCLUDE ALL COSTS NOT IN OTHER PAY ITEMS INCLUDING ALL TESTING, CLEANING, AND ALL OTHER REQUIRED EFFORT AND COSTS

4. Detail Sheet DT10, Add fitting dimensions to the section view on this sheet in accordance with the following drawing excerpt:



#### **RESPONSES TO QUESTIONS**

1. See Attachment 6 for a log of questions and responses.

CIVIL ENGINEERING CONSULTANTS Terry L. Conn, P. E.

#### **ACKNOWLEDGEMENT BY RESPONDENT**

Each Respondent shall acknowledge receipt of this Addendum No. 1 by noting such and signing the Price Proposal.

This undersigned acknowledges receipt of this Addendum No. 1 and the proposal submitted herewith is in accordance with the information and stipulations set forth.

Date Signature of Respondent

**END OF ADDENDUM** 

## **RESPONDENT'S PROPOSAL CHECKLIST**

Project Name: Water Resources Integration Program, Pipeline Segment 2B

SAWS Job No.: <u>14-8606</u>

SAWS Solicitation Number: <u>B-14-044-DD</u>

	Signed Price Proposal/Acknowledgement of Addendums (Do not include this Price Proposal within
	the 7 required copies)
$\parallel$	Signed Proposal Certification Page (PC-1)
Ш	Bid Bond/Cashier's Check
	ENIVELODE (OD DOV ) 2
	ENVELOPE (OR BOX ) 2
$\overline{}$	ORIGINAL PROPOSAL
닏	Proposal Checklist
Щ	One (1) CD of Original Proposal Packet (excluding the Price Proposal and Financial Statement)
$\sqsubseteq$	Statement on President's Executive Orders – Page IB 6 or 7
$\sqsubseteq$	Good Faith Effort Plan
$\sqsubseteq$	Conflict of Interest Questionnaire – Form CIQ
빝	Financial Statement
$\sqsubseteq$	W-9
$\sqsubseteq$	Proof of Insurability (Letter from Insurer or Sample Certificate of Insurance)
$\sqsubseteq$	Respondent Questionnaire
$\sqsubseteq$	Background, Experience, Qualifications and Past Performance narrative A. 111. (pages SIR-1 to SIR-3)
$\sqsubseteq$	Pipe Manufacturer/Fabricator Qualifications 12. ah. (pages SIR-3 to SIR-4)
Ш	Project Approach and Quality Program narrative <b>B. 15</b> . (pages SIR-4 to SIR-5)
	OSHA 300
	OSHA Form 300A
	□ TRIR
	Any OSHA Citations
_	Experience Modifier Rate (EMR) from insurance carrier
Ш	TWDB Form WRD 255
$\sqcup$	TWDB Form TWDB-0459
	TWDB Form SRF 404
Iten	ns to be submitted with 24 hours of the Proposal Opening:
	TWDB Form TWDB-0216 (include copy of current SMWB certification) (Reference DB-0210 and FAQ)
	TWDB Form TWDB-0217 (Reference DB-0210 and FAQ)
	TWDB Form TWDB-0373 (Reference DB-0210 and FAQ)
	EPA Form 6100-3 Subcontractor Performance Form
	EPA Form 6100-4 Subcontractor Utilization Form
lton	ns to be submitted with Awarded Contract:
=	TWDB Form ED 103
	TWDB Form ED 104

Rev. 08/14 WRIP 2B, Addenda 1, Attachment 1

SAWS Solicitation Number: <u>B-14-044-DD</u> **PROPOSAL PACKET COPIES -7** (separate sealed envelope or box for all 7 copies) **Proposal Checklist Respondent Questionnaire** Background, Experience, Qualifications and Past Performance narrative A. 1.-11. (pages SIR-1 to SIR-3) Pipe Manufacturer/Fabricator Qualifications 12. a.-h. (pages SIR-3 to SIR-4) Project Approach and Quality Program narrative **B. 1.-5**. (pages SIR-4 to SIR-5) **OSHA 300** OSHA Form 300A TRIR **Any OSHA Citations** Experience Modifier Rate (EMR) from insurance carrier I certify that the proposal packet submitted includes the items as indicated above. Signature Date Printed Name

Project Name: Water Resources Integration Program, Pipeline Segment 2B

Title

SAWS Job No.: <u>14-8606</u>

# **Price Proposal**

PROPOSAL OF	
a corporation	
a partnership consisting of	
an individual doing business as	

## To: THE SAN ANTONIO WATER SYSTEM

Pursuant to Instructions and Invitations for Competitive Sealed Proposals, the undersigned proposes to furnish all labor and materials as specified and perform the work required for construction of the Water Resources Integration Program (WRIP) Project 1, Segment 2B, San Antonio Water System Job Number 14-8606, in accordance with the Plans and Specifications for the following prices, to wit:

Part 1: Base Bid Items

ITEM NO.	ITEM DESCRIPTION (UNIT PRICE TO BE WRITTEN IN WORDS)	UNIT	QTY	UNIT PRICE IN FIGURES	TOTAL IN FIGURES
1	EROSION AND SEDIMENT CONTROLS / SWPPPDollars	LS	1	\$	\$
	and Cents				
	36" DIA. C200 STEEL WATER PIPE (OPEN CUT, RESTRAINED) - 200 PSI, 0.25 IN. WALL MIN.				
2	Dollars andCents	LF	27	\$	\$
3	60" DIA. C200 STEEL WATER PIPE (OPEN CUT, RESTRAINED) - 200 PSI, 0.308 IN. WALL MINDollars and Cents	LF	23,402	\$	\$
4	60" DIA. C200 STEEL WATER PIPE (OPEN CUT, RESTRAINED) - 250 PSI, 0.367 IN. WALL MIN.	LF	824	\$	\$
5	36" DIA. C200 STEEL WATER PIPE (CARRIER PIPE, RESTRAINED)- 200 PSI, 0.25 IN. WALL MIN, INSTALLED IN CASINGDollars andCents	LF	121	\$	\$
	60" DIA. C200 STEEL WATER PIPE (CARRIER PIPE, RESTRAINED) - 200 PSI, 0.308 IN. WALL MIN, INSTALLED IN CASING				
6	Dollars andCents	LF	1,114	\$	\$

ITEM NO.	ITEM DESCRIPTION (UNIT PRICE TO BE WRITTEN IN WORDS)	UNIT	QTY	UNIT PRICE IN FIGURES	TOTAL IN FIGURES
7	60" DIA. C200 STEEL WATER PIPE (CARRIER PIPE, RESTRAINED) - 250 PSI, 0.367 IN. WALL MIN, MEDINA RIVER TUNNEL	LF	726	\$	\$
	and Cents  60" DIA. C200 STEEL WATER PIPE (CARRIER PIPE, RESTRAINED) - 250 PSI, 0.367 IN. WALL MIN, MEDIO				
8	CREEK TUNNELDollars andCents	LF	555	\$	\$
9	60" DIA C200 STEEL WATER PIPE (INSTALLED IN VERT SHAFT) - 250 PSI, 0.367 IN. WALL MIN. Dollars and Cents	LF	200	\$	\$
10	MEDINA RIVER TUNNEL SHAFTS, ENTRANCE AND EXIT, COMPLETE, AS NEEDED  Dollars	LS	1	\$	\$
	and Cents  MEDIO CREEK TUNNEL SHAFTS, ENTRANCE AND EXIT, COMPLETE, AS NEEDED				
11	Dollars andCents TRENCH EXCAVATION SAFETY PROTECTION	LS	1	\$	\$
12	Dollars andCents	LF	24,358	\$	\$
13	54" CASING PIPE INSTALLED BY BORE, JACK OR TUNNELINGDollars and Cents	LF	121	\$	\$
14	78" CASING PIPE INSTALLED BY BORE, JACK OR TUNNELINGDollars and Cents	LF	700	\$	\$
15	78" CASING PIPE INSTALLED UNDER MEDINA RIVERDollars andCents	LF	726	\$	\$
16	78" CASING PIPE INSTALLED UNDER MEDIO CREEK	LF	555	\$	\$
17	78" CASING PIPE INSTALLED BY BORE, JACK OR TUNNELING, RRXINGDollars and Cents	LF	309	\$	\$
18	78" CASING PIPE INSTALLED BY OPEN CUTDollars andCents	LF	105	\$	\$
19	60" BUTTERFLY VALVES - 250 PSI, D.IDollars andCents	EA	5	\$	\$

ITEM NO.	ITEM DESCRIPTION (UNIT PRICE TO BE WRITTEN IN WORDS)	UNIT	QTY	UNIT PRICE IN FIGURES	TOTAL IN FIGURES
20	8" COMB AIR VALVE ASSEMBLY W SURGE, 250 PSI, D.I., TY 2Dollars andCents	EA	2	\$	\$
21	4" COMB. AIR VALVE & ASSEMBLY - 250 PSI, D.I., TY 2Dollars	EA	1	\$	\$
22	8" COMB. AIR VALVE & ASSEMBLY - 250 PSI, D.I. TY 2	EA	9	\$	\$
23	10" COMB. AIR VALVE & ASSEMBLY - 250 PSI, D.I. TY 2Dollars andCents	EA	1	\$	\$
24	12" COMB. AIR VALVE & ASSEMBLY - 250 PSI, D.I. TY 2Dollars andCents	EA	1	\$	\$
25	12" PIPE DRAIN ASSEMBLY - 250 PSIDollars andCents	EA	9	\$	\$
26	12" PIPE FLUSH ASSEMBLY - 250 PSIDollars andCents	EA	2	\$	\$
27	30" FUTURE CONNECTION, 30" BUTTERFLY VALVE, PIPE & FITTINGSDollars andCents	LS	1	\$	\$
28	36" WATER TIE-INDollars andCents	EA	2	\$	\$
29	60" WATER TIE-IN	EA	2	\$	\$
30	PIPELINE INTERNAL TEST BULKHEAD ASSEMBLY, 60 IN DIADollars andCents	EA	7	\$	\$
31	PIPELINE INTERNAL TEST BULKHEAD ASSEMBLY, 36 IN DIADollars andCents	EA	1	\$	\$
32	SUBGRADE FILLER AS APPROVED FOR POOR CONDITIONSDollars andCents	CY	1,340	\$	\$

ITEM NO.	ITEM DESCRIPTION (UNIT PRICE TO BE WRITTEN IN WORDS)	UNIT	QTY	UNIT PRICE IN FIGURES	TOTAL IN FIGURES
33	CONCRETE ENCASEMENT FOR 60 IN PIPE IN TRENCHDollars andCents	LF	164	\$	\$
	BARBED WIRE FENCEDollars andCents	LF	3,743	\$	\$
35	8' CHAIN LINK FENCEDollars andCents	LF	269	\$	\$
36	GATES, 16 FT, TYPE 1 METAL GATEDollars andCents	EA	16	\$	\$
37	6" BASE MATERIAL FOR ROADS, DRIVES AND DRIVEWAYSDollars andCents LAND RESTORATION & REVEGETATION	SY	3,807	\$	\$
38	Dollars	LF	26,769	\$	\$
39	WATER PIPELINE TESTING  Dollars and Cents	LS	1	\$	\$
40	DISINFECTIONDollars andCents	LS	1	\$	\$
41	HEAT SHRINK SLEEVE INSPECTIONDollars andCents	EA	12	\$	\$
42	OPEN CUT ROCK EXCAVATION, 0 TO 5000 CYDollars andCents	CY	5,000	\$	\$
43	OPEN CUT ROCK EXCAVATION, ABOVE 5000 TO 10000 CYDollars andCents	CY	5,000	\$	\$
44	JACK AND BORE ROCK EXCAVATIONDollars andCents	LF	200	\$	\$
45	RECTIFIER INSTALLATION W/ ELECTRICAL ENCLOSUREDollars andCents	EA	1	\$	\$
46	CATHODIC PROTECTION TEST STATIONDollars andCents	EA	57	\$	\$
47	60-INCH INSULATING FLANGE KITDollars andCents	EA	1	\$	\$

Line A, Base Bid Subtotal

Part 2: Mobilization and Preparation of Right of Way (ROW)

ITEM NO.	ITEM DESCRIPTION (UNIT PRICE TO BE WRITTEN IN WORDS)	UNIT	QTY	UNIT PRICE IN FIGURES	TOTAL IN FIGURES
	MOBILIZATION Percent of Line A Base Bid Subtotal Percent	EA	1	xxxx	\$
	PREPARING RIGHT OF WAY Percent of Line A Base Bid Subtotal Percent	EA	1	xxxx	\$

The Mobilization lump sum bid shall be limited to a maximum 6% of the Line A Base Bid Subtotal amount. The Preparing Rights-of-Way lump sum bid shall be limited to a maximum of 4% of the Line A Base Bid Subtotal amount. The Line A Base Bid Subtotal is defined as all bid items EXCLUDING Mobilization and Preparing Right-of-Way. In the event of a discrepancy between the written percentage and dollar amount shown for Mobilization and Preparation of ROW bid items the written percentage will govern. If the percentage written exceeds the allowable maximum stated for mobilization and or preparation of ROW, SAWS reserves the right to cap the amount at the percentages shown and adjust the extensions of the bid items accordingly.

Mobilization and Preparing ROW Subtotal \$\_\_\_\_\_

#### Part 3: TOTAL AMOUNT BID

TOTAL BID AMOUNT	(Part 1 + Part 2)		
		DOLLARS	
		CENTS	\$

#### Part 4: RESPONDENT'S CONCURRENCE AND SIGNATURE

The Respondent offers to construct the Project in accordance with the Contract Documents for the contract price, and that the Project shall be Substantially Complete within 412 calendar days after the start date and Final Completion shall occur within 442 calendar days after the start date, as set forth in the Authorization to Proceed. The Respondent understands and accepts the provisions of the Contract Documents relating to liquidated damages if the project is not completed on time and has completed the additional requirements of the Proposal which are included on the following pages.

RESPONDENT'S SIGNATURE & TITLE
FIRM'S NAME (TYPE OR PRINT)
FIRM'S ADDRESS
FIRM'S PHONE NO. /FAX NO.
FIRM'S EMAIL ADDRESS

#### Part 5 ACKNOWLEDGEMENT OF ADDENDA

The Contractor her	rein acknowledge	es receipt of the	following:
Addenda Nos:			

End of Section

# **PROPOSAL CERTIFICATION**

Water System for	Certified or Cashier's Check payable to the Order of t	dollars
be returned to the bidder unless the proposal is a calendar days after the award of the Contract, in Water System, and shall be considered as paymen	esents five percent (5%) of the total bid price. Said bo accepted and the bidder fails to execute and file a co which case the check shall become the property of soft for damages due to delay and other inconveniences the bidder to execute the contract. The San Antoni	ntract within 10 aid San Antonio suffered by said
and award of the contract to the undersigned by t System Contract Documents and make Performa calendar days after the award of the Contract to so to insure and guarantee the work until final cor	oposal within 90 calendar days after the bid opening. Use the Owner, the undersigned shall execute standard Sarnce and Payment Bonds for the full amount of the confecure proper compliance with the terms and provisions impletion and acceptance, and the guarantee period state performed and materials furnished in the fulfillment of	Antonio Water ontract within 10 s of the contract, ipulated, and to
It is anticipated that the Owner will provide write Contract.	itten Authorization to Proceed within 30 days after t	he award of the
	mence on the date indicated in the SAWS written a commence prior to the date provided for in the SAWS ed in full within 442 consecutive calendar days.	
The undersigned certifies that the bid prices contacorrect and final.	ained in the proposal have been carefully checked and	are submitted as
	ce with "Wage and Labor Standard Provisions" of this at of equipment rental rates whether owned or leased d	
	al the undersigned certifies that bidder's practices and igion, sex or national origin and that the bidder w and practices.	
Signed:		
	Company Representative	
	Company Name	
	Address	
Please return bidder's check to:	Company Name	
	Address	
	Address	

Rev. 03/14 PC-1

Page 1 of 2

TWDB-0216 Revised 2/16/2012

## TWDB-0216

# TEXAS WATER DEVELOPMENT BOARD AFFIRMATIVE STEPS SOLICITATION REPORT

SAWS WRIP 2B ADDENDA 1 ATTACHMENT 3

#### I. PROJECT INFORMATION

A. TWDB Project	t No. B. Applicant/Entity Name	C. Total TWDB Funding Request	D. Program Type (insert "X" for all that apply)			
			☐ Drinking Water SRF (DWSRF)			
			Clean Water SRF (CWSRF)			
Project Name:						
Solicitatio	<b>By:</b> ☐ Applicant/Entity ☐ Prime Contractor:					
Project Ph	ase: Application Planning/Design Const	ruction Contract#_				
II. PROJE	CT BIDDERS LIST:					
Instructions Columns 1 - 4	List on this form, or provide on a separate list, each business entity solicited for procurement, the following:  1-Full business name & point of contact, 2-business address, 3-telephone number and 4-email for each business or firm. Entities must solicit to a minimum of 3 business/firms for each type of contract sought (i.e. three engineering, financial advisor, and bond counsel firms) to demonstrate a Good Faith Effort.					
Instructions Column 5	Enter one of the following procurement or contract categories: CONSTRUCTION – SUPPLIES – EQUIPMENT – SERVICES					
Instructions 6	Enter the type of business: Minority Business Enterprise (MBE), Wome (NOTE! "OTHER" = Company or firm is Non-MBE or WBE)	n-Owned Business En	terprise (WBE), or OTHER			
Instructions Column 7	To achieve a "Good Faith Effort" a minimum of two methods must be utilized for solicitation, however, additional methods are encouraged by the TWDB should any of the attempted methods fail to meet DBE program requirements. Adequate backup documentation must be attached to this form for each method used. Methods of solicitation include:  1. Newspaper Advertisements 2. Direct Contact by Phone, Fax, USPS Mail, E-mail					

**Notice:** Entities receiving federal SRF loans must create and maintain a bidder's list if the recipient of the loan is subject to competitive bidding requirements. The list must include all firms that bid or quote on subcontracts under EPA assisted projects, including both MBE/WBEs and non-MBE/WBEs. Entities must keep the bidders list until the project is complete, the project period has expired, and the recipient is no longer receiving EPA funding under the loan.

	Column 1	Column 2	Column 3	Column 4	Column 5	Column	
	Business Name & Point of Contact	Business Address	Telephone Number	E-Mail Address	Procurement Category	MBE/WE Status	
1.							
2.							
3.							
J.							
4.							
5.							
6.							
7.							
7.			_				
8.							
9.							
Use additional sheets if necessary  Signature - Applicant/Entity or Prime Contractor  Title							Certification Date
Organical e - Applicative Intro Origination Title							Certification Date
	III. TWDB APPROVA	L SIGNATURE	I				
Form meets DBE Requirements						•	Yes No No
		DBE	Coordinator				Approval Date

TWDB-0217 Revised 2/16/2012

# TWDB-0217

## **TEXAS WATER DEVELOPMENT BOARD (TWDB) AFFIRMATIVE STEPS CERTIFICATION and GOALS**

SAWS WRIP 2B **ADDENDA 1** ATTACHMENT 3

	PRO	JECT	INFORMATION
1.	FIND	$J \perp C I$	

PR	PROJECT INFORMATION							
	TWDB ject No. B.	Applicant/Entity Name		C. Total TWDB Funding Request	(	D. insert ".	Program Type X" for all that apply)	
						rinking	g Water SRF DWSRF)	
						Clean V	Vater SRF (CWSRF)	
Prime	Prime Contractor:							
Cont	ract Number:	Cont	ract Amou	unt:				
. GO	OD FAITH EFFORT (	Applicable to all sub-agre	eements av	varded by the prime o	ontract	or)		
Mino	I understand that it is my responsibility to comply with all state and federal regulations and guidance in the utilization of Minority and Women-Owned Businesses in procurement. I certify that I will make a "good faith effort" to afford opportunities for Minority Business Enterprise (MBE), and Women-Owned Business Enterprise (WBE) by:							
1	Including qualified MBB	Es and WBEs on procurer	ment solicit	ation lists				
2	Soliciting potential MBI	E's and WBE's						
3	Reducing contract size	quantities when econom	ically feasil	ole to permit maximur	n partici	pation l	by MBE's and WBE's	
4	Establishing delivery so	chedules to encourage pa	articipation	by MBE's and WBE's				
5		assistance of the Small Erce, and Texas Marketpla		dministration, Minority	/ Busine	ss Dev	velopment Agency, U.S.	
6	Submitting documentation	on to the Texas Water Dev	elopment B	oard to verify good fait	h effort,	steps 1	-5.	
	EXCEPTION: As the Prime Contractor, I certify that I have reviewed the contract requirements and found no available subcontracting opportunities. I also certify that I will fulfill 100 percent of the contract requirements with my own employees & resources. (Check if applicable)							
	Signature - Consultant	/Prime Contractor		Title			Certification Date	
I. PR	OJECT PARTICIPATION	ON ESTIMATES						
	Total Procure	ment	Potential <b>MBE</b> Participation			Potential WBE Participation		
	Cost Category	Total	Goal	Extension		Goal	Extension	
	Construction	\$	12.94%	\$	8.72% \$			

**Total Procurement** \$ (must equal contract amount) The fair share goals listed above are required by 40 CFR Part 33 Subpart D and are directly negotiated with EPA Region 6. Entities receiving federal financial assistance are subject to the TWDB's goals and may not be substituted with other agency or

7.12%

9.68%

10.84%

\$

\$

\$

5.39%

9.34%

5.72%

\$

\$

\$

#### IV. TWDB APPROVAL SIGNATURE

program goals.

Equipment

**Supplies** 

Services

\$

\$

\$

Form Meets DBE Requirements	Yes 🗌	No 🗌
DBE Coordinator	Approv	/al Date
	<del></del>	

TWDB-0373 Revised 2/16/2012

# TWDB-0373

# SAWS WRIP 2B ADDENDA 1 ATTACHMENT 3

# TEXAS WATER DEVELOPMENT BOARD LOAN/PRINCIPAL FORGIVENESS PARTICIPATION SUMMARY

#### I. PROJECT INFORMATION

	OT IN ORMATION								
A. TWDB Project No.	B. Applicant/Entity Name		C. Total TWDI	3 Funding ັ^∙c			gram Type or all that apply)		
						Drinking Wat	er SRF (DWSRF)		
						Clean Water	SRF (CWSRF)		
Project Name:	Project Name:								
Solicitation By	Solicitation By: Applicant/Entity Prime Contractor:								
Project Phase:	☐ Loan Commitment/Closing	☐ Planning/	Design 🔲	Construction Co	ontract :	#			
II. LIST O	F ACTUAL CONTRACTS/PROCUREMENTS								
Instructions Column 1	Enter the full name, street address, city/state/zip fo	or each firm awarde	ed a contract for	the project					
Instructions Column 2	Enter one of the following procurement or contract	categories: CON	STRUCTION - S	SUPPLIES – EQUI	PMENT ·	- SERVICES			
Instructions Column 3	Enter the type of business: Minority Business Er (NOTE: "OTHER" = Company or firm is Non-M		Vomen-Owned	Business Enterpri	se (WBE	E), or OTHER			
Instructions Column 4	Enter the exact amount of the awarded contract								
Instructions Column 5	Enter the exact date the contract was or will be exe	ecuted							
Instructions Column 6	Indicate if valid MBE/WBE Certification is attached								
	Column 1	Column 2	Column 3	Column 4	C	Column 5	Column 6		
r	lame & Address of Contracted Firm/Vendor	Procurement Category	MBE/WBE Status	Actual Contract Awarded (\$)	Contra	act Execution Date	MBE/WBE Certification Included? (Y/N) (if applicable)		
1							☐ Yes ☐ No		
2							☐ Yes ☐ No		

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Name & Address of Contracted Firm/Vendor	Procurement Category	t MBE/WBE Status	Actual Contract Awarded (\$)	Contract Execution Date	MBE/WBE Certification Included? (Y/N) (if applicable)
3						☐ Yes ☐ No
4						☐ Yes ☐ No
5						☐ Yes ☐ No
6						☐ Yes ☐ No
7						☐ Yes ☐ No
8						☐ Yes ☐ No
9						☐ Yes ☐ No
	Signature - Applicant/Entity Representative			Title		Certification Date
	III. TWDB APPROVAL SIGNATURE					
For	m meets DBE Requirements		Yes No No			
	DBE C	oordinator				Approval Date
			<del></del>	<del></del>		

#### **SECTION 02519**

#### DISINFECTION OF WATER SYSTEMS

#### PART 1 GENERAL

This specification indicates requirements of the program disinfection plan and communicates associated responsibilities of the CONTRACTOR.

#### 1.01 PIPELINE AND PROGRAM DISINFECTION PLAN

- A. Disinfect the facilities conveying potable water to comply with the standards for potable water of the regulatory agency of jurisdiction. Potable water is defined as any water that has been filtered, disinfected or otherwise treated to the meet regulatory standards.
- B. Disinfect piping systems that are used to convey water, solutions, or chemicals to the potable water facilities.
- C. Test water from the disinfected system per regulatory standards to verify that water is acceptable. Repeat procedure if tests do not meet standards.

#### 1.02 CONTRACTOR REPONSIBLITIES

- A. The WRIP Segment 2B Contractor shall be designated as the PROGRAM DISINFECTION CONTRACTOR responsible for the PROGRAM DISINFECTION as described herein.
- B. For the purposes of this specification, all WRIP pipeline Contractors (Segments 2B, 2A, 1B and 1A) shall be designated as the PROJECT CONTRACTOR, with responsibilities as described herein.
  - 1. The PROGRAM DISINFECTION CONTRACTOR responsibilities will include:
    - a. Coordinating with SAWS to introduce water from the Old Pearsall Road Pumping Station site into the new pipeline. SAWS intent is to provide water from this location to facilitate slug disinfection of all 4 pipeline segments in the program, including all pipeline appurtenances and connecting pipes and drains.
    - b. Coordinating to add sufficient disinfectant into the pipeline at that point and along the pipeline as needed to disinfect the 60 inch pipeline using the slug method.
    - c. At the Twin Oaks Treatment Plant existing lagoon, coordinating with SAWS to dispose of excess clean water and to treat and dispose of

- dechlorinated water using temporary piping and available appurtenances at the site.
- d. Select, provide, install, use, maintain, move, reuse, and remove up to 500 LF of temporary piping during disinfection and disposal operations. The main disposal site shall be at the Twin Oaks Plant and the connection there shall be via the standard internal test bulkhead assembly to be installed at the end of the Segment 1A. If other disposal sites become necessary, temporary disposal lines shall utilize existing flanged connections that could vary in size depending on where disposal is required. The actual disposal site(s), flows, and configuration at or near the existing lagoon shall be coordinated with SAWS. Damage caused by water disposal shall be anticipated, managed, and any damage repaired.
- e. Review readiness of all pipeline segments for disinfection and coordinate with the Contractors from Segments 2A, 1B, and 1A to assure sampling locations, valves positions, and all pipe appurtenances are ready for program disinfection. If any deficiencies are found, report findings to make sure repairs are made prior to program disinfection.
- f. Initiate disinfection operations. Complete the program disinfection in a single, coordinated event.
- g. Direct valve and appurtenance operations needed to achieve and complete the disinfection process.
- h. Obtain all samples needed along segments 2B, 2A, 1B and 1A and in accordance with regulatory requirements and these contract documents. Document and maintain sample chain of custody throughout the process.
- i. Sample and obtain test results within 48 hours from a testing lab approved by the OWNER and report any findings to the OWNER along with a written and detailed summary with recommendations to address any failed results.
- j. Repeat disinfection operations for the all parts of the program until passing tests are achieved and results are certified by the testing lab and disinfection provider for the entire pipeline system.
- k. Direct valve operations and maintain pressure on the pipeline throughout and residual disinfectant to maintain potable water status of the pipeline upon receipt of passed bacteriological test results.

## 2. THE PROJECT CONTRACTOR responsibilities will include:

- a. Upon project completion and acceptance of the hydrostatic testing and tie-ins as described in the plans and specifications, communicate readiness for the PROGRAM DISINFECTION TESTING to SAWS and others as directed.
- b. Along the PROJECT CONTRACTORS pipeline segment, operate, maintain, and monitor all pipeline appurtenances as required for the chlorination process, including valves, ARV's, sample ports, etc., until the PROGRAM DISINFECTION has been completed and accepted by

- the OWNER. Should introduction of disinfectant be required along the PROJECT CONTRACTOR'S segment, provide connections necessary to facilitate that work in conjunction with the PROGRAM DISINFECTION CONTRACTOR.
- c. Respond to and address in a timely manner any issues associated with the PROJECT CONTRACTORS pipeline segment.
- C. The Disinfection pay item included on each contract shall be utilized for each Contractor to include all costs, effort, material, labor, equipment, chemicals (if any), and incidentals necessary to complete the responsibilities indicated above for the pipeline segment being bid in accordance with the roles and responsibilities indicated above.

#### 1.03 REFERENCES

The following is a list of standards which may be referenced in this section:

- A. American Water Works Association (AWWA):
  - 1. B300, Hypochlorites
  - 2. B301, Liquid Chlorine
  - 3. B303, Sodium Chlorite
  - 4. C651, Disinfecting Water Mains, Dechlorination
  - 5. C652, Disinfection of Water Storage Facilities
- B. Standard Methods for the Examination of Water and Wastewater, as published by the American Public Health Association, American Water Works Association, and the Water Environment Federation.

#### 1.04 SUBMITTALS

### PROGRAM DISINFECTION CONTRACTOR:

- A. A Program Disinfection Plan, to include procedures and plans for the disinfection and testing of all segments of the pipeline, inclusive of drains, lateral piping, connections ,and related appurtenances. Plan shall be signed by the person responsible for performing and coordinating the work, and shall be submitted to SAWS for approval. Plan shall communicate and confirm the understood role of the PROJECT DISINFECTION CONTRACTOR and required coordination items involving the PROJECT CONTRACTORS on other parts of the program.
- B. Certification of testing lab that PROGRAM DISINFECTION CONTRACTOR proposes to use, subject to SAWS approval.
- C. Type of pipeline disinfecting solution and method of preparation.

- D. Method of disposal for highly chlorinated disinfecting water at Twin Oaks and any intermediate sites along the pipeline route.
- E. A water supply plan for disinfection. Confirm understanding of where and how water will be obtained, how much will be needed, how it will be accounted for and how connections will be made to fill and disinfect all pipeline segments.
- F. Submit proposed arrangement of temporary piping and appurtenances including pressure sustaining valves (if any), backflow prevention, and fittings.
- G. Certification that employees working with concentrated chlorine solutions or gas have received appropriate safety training

#### PROJECT CONTRACTOR

- A. A written work plan, including all methods and equipment required and to be used by the PROJECT CONTRACTOR to get ready for pipeline disinfection and to fulfill the assigned role in achieving program disinfection. Plan shall be signed by the person responsible for performing and coordinating the work, and shall be submitted to SAWS for approval. Plan shall communicate the understood role of the PROJECT CONTRACTOR.
- B. Confirm sample site locations to be utilized by the PROGRAM DISINFECTION CONTRACTOR.

#### PART 2 PRODUCTS

#### 2.01 WATER FOR DISINFECTION

- A. Clean, uncontaminated and potable.
- B. To facilitate a Program Disinfection Plan, it is SAWS intent to make water available to the PROGRAM DISINFECTION CONTRACTOR from the new Old Pearsall Road Pump Station site. The PROGRAM DISINFECTION CONTRACTOR shall account for all water obtained from SAWS as described in SAWS Standard Specification Item No. 906 Water Use Accountability (www.saws.org). The PROGRAM DISINFECTION CONTRACTOR is required to provide SAWS with a written 30 day notice prior to obtaining water for disinfection. The PROGRAM DISINFECTION CONTRACTOR is advised that water availability may have limitations subject to SAWS operational needs. Testing requirements shall conform to Section 02643.

#### 2.02 MATERIALS

#### PROGRAM DISINFECTION CONTRACTOR

A. Liquid Chlorine: Meeting the requirements of AWWA B301.

### B. DELIVERY, STORAGE AND HANDLING

Chlorination and dechlorination shall be performed by competent individuals knowledgeable and experienced in the operation of the necessary application and safety equipment in accordance with applicable Federal, State and Local laws and regulations. The transport, storage and handling of these materials shall be performed in accordance with Code of Federal Regulations (CFR) 1910.120 Hazardous Waste Operations and Emergency Response, CFR 49.172 Hazardous Materials Regulations. Storage location of chemicals on site shall be approved by SAWS.

### 2.03 CONTRACTOR'S EQUIPMENT

#### PROGRAM DISINFECTION CONTRACTOR shall:

- A. Furnish chemicals and equipment, such as pumps and hoses, to accomplish disinfection. PROGRAM DISINFECTION CONTRACTOR shall provide all necessary valves, piping, backflow prevention devices, pressure sustaining valves, fittings, and any other appurtenances to convey disinfection water to the pipeline at NSPI including any equipment, piping and appurtenances to facilitate disposal of any water from the pipeline to facilitate disinfection.
- B. Provide protection as required by AWWA C651 05, Disinfecting Water Mains, Section 4.3.9 against cross-connections.

#### PROJECT CONTRACTORS shall:

A. Furnish connections needed to facilitate disinfection, sampling and flushing of water.

#### PART 3 EXECUTION

Contractors shall perform preparation, disinfection, and associated work in accordance with their identified roles and as indicated below.

### 3.01 GENERAL

In accordance with contractor roles and responsibilities described herein, the following items further describe required work:

- A. Cleaning and disinfection procedures shall conform to AWWA C651 05, Disinfecting Water Mains and this Specification.
- B. Clean and disinfect the following items installed or modified under this project, intended to hold, transport, or otherwise contact potable water:
  - 1. Pipeline, beginning of project to end of project, inclusive of all appurtenances and connecting outlets.
  - 2. During construction keep basins, pipe, fittings, equipment, and appurtenances free from dirt and debris.
  - 3. Seal the open ends of pipe with water-tight plugs when pipe is not being laid.
  - 4. Pump water from trenches before removing the plug when water accumulates in the trench.
- C. Wash the surfaces to be disinfected, including unclean pipe walls, valve components, and other surfaces that will be in contact with potable water.
- D. Pipelines: clean and disinfect new pipelines that connect to existing pipelines up to point of connection.
- E. Disinfect surfaces of materials that will contact finished water, both during and following construction. Disinfect prior to contact with finished water. Take care to avoid recontamination following disinfection.
- F. Prior to application of disinfectants, clean pipelines of loose and suspended material. Use water suitable for flushing and disinfecting.
- G. Conform to AWWA C651 for pipes and pipelines, except as modified in these Specifications.
- H. Allow freshwater and disinfectant solution to flow into pipe or vessel at a measured rate so that chlorine-water solution is at specified strength. Do not place concentrated commercial disinfectant in pipeline or other facilities to be disinfected before it is filled with water.

#### 3.02 SEQUENCING AND SCHEDULING

- A. Commence disinfection after completion of following:
  - 1. Completion and acceptance of pipeline installation and thorough cleaning.

2. Pneumatic testing, hydrostatic testing, pressure testing, and acceptance of pipelines.

#### 3.03 PIPELINES

#### PROJECT CONTRACTORS

- A. Flushing (for pipelines smaller than 24-inch diameter, prior to disinfection):
  - 1. Before disinfecting, flush all foreign matter from pipe in accordance with AWWA C651. Provide hoses, temporary pipes, ditches, and other conduits as needed to dispose of flushing water without damage to adjacent properties.
  - 2. Flush service connections and hydrants. Flush distribution lines prior to flushing hydrants and service connections.
  - 3. Operate valves during flushing process at least twice during each flush.
  - 4. The minimum quantity of water used for flushing must exceed the capacity of the line to insure that clean water has traversed the entire length of the pipe.
  - 5. Disinfection can then be performed in accordance with AWWA C651, unless herein modified.
  - 6. Restore and repair areas damaged by any flushing operations
- B. Cleaning (for pipelines larger than 24-inch diameter):
  - 1. For pipelines larger than 24-inch diameter, ALL Contractors shall clean all pipe in their segment by broom sweeping and then removing all debris from sweeping.
  - 2. Cleaning and Disinfection shall be performed in accordance with AWWA C651-99 Paragraph 4.4.3.2.

## 3.04 DISPOSAL OF WATER AND HEAVILY CHLORINATED WATER

A. The PROGRAM DISINFECTION CONTRACTOR shall dispose of water and heavily contaminated chlorinated water by providing temporary piping and connections and discharging "de-chlorinated" water into the existing designated lagoons at the Twin Oaks Treatment Plant.

- B. Water not disposed of at this site shall be disposed of by the PROGRAM DISINFECTION CONTRACTOR in an acceptable manner at no expense to the OWNER.
- C. If the PROGRAM DISINFECTION CONTRACTOR elects to dispose of disinfectant water in another manner, he shall notify federal, state, and local regulatory agencies to determine if any special procedures or permits are required for disposal of water used for pipeline testing and cleaning and to identify acceptable locations for disposal of the water. Such effort shall be documented and provided to the OWNER for the file in advance of any discharge. All requirements and costs associated with notifications and obtaining any discharge permit or approvals shall be responsibility of the PROGRAM DISINFECTION CONTRACTOR. In addition to complying with any federal, state, or local requirements regarding water disposal, following completion of testing, the PROGRAM DISINFECTION CONTRACTOR and PROJECT CONTRACTOR if applicable shall dispose of water in a manner acceptable to the OWNER.
- D. Prior to disposal, chlorinated water must be "de-chlorinated" to eliminate adverse impacts to the surrounding environment. Water released to the environment shall meet all AWWA, EPA, and TCEQ regulatory requirements.
- E. CONTRACTOR shall take care when disposing of water to assure the disposal location can handle the flow without damage, and that there will be no adverse impacts downstream. Damage caused downstream due to disposed water will be the responsibility of the PROGRAM DISINFECTION CONTRACTOR to remedy at no expense to OWNER.
- F. The use of the sanitary sewer system for disposal will not be allowed. This section shall conform to Section 02643 Water Pipeline Testing.
- G. Valves shall be manipulated by the PROJECT CONTRACTOR so that the strong chlorine solution in the main being treated will be flushed out of the main and will not flow back into the main supplying the water under the supervision of the PROGRAM DISINFECTION CONTRACTOR.
- H. See the appendix of AWWA C651 for acceptable neutralization methods.
- I. PROGRAM DISINFECTION CONTRACTOR shall monitor, track, and estimate all flows being disposed, and provide a report to the OWNER.

#### 3.05 TESTING

A. Collection of Samples:

Disinfection of all pipelines shall be monitored by the Inspector

PROJECT DISINFECTION CONTRACTOR shall coordinate and take all samples.

### PROJECT CONTRACTOR shall:

- 1. Coordinate activities to allow samples to be taken in accordance with this Specification.
- 2. Provide temporary sampling facilities, including valves, as indicated on the details and as directed by the engineer or inspector. Flexible tubing shall not be used.
- 3. Provide access to sampling points.

## B. Test Equipment:

- 1. Chlorine Residual Kit: PROGRAM DISINFECTION CONTRACTOR shall take chlorine residual measurements using method approved by the US Environmental Protection Agency. Test kits shall be Hach Pocket Colorimeter, or approved equal. The kits must be capable of measuring Free Chlorine Residual in the range of 0.02 to 2.00 mg/L and the Total Chlorine in the range of 0.01 to 8.00 mg/L. The use of swimming pool test devices is specifically prohibited.
- 2. Bacteriologic Test Kit: PROGRAM DISINFECTION CONTRACTOR shall obtain sampling bottles with instructions for handling from the approved testing laboratory.
- C. Testing Laboratory PROGRAM DISINFECTION CONTRACTOR'S testing laboratory shall be located within 100 miles of the project site. Testing laboratory certifications shall be submitted to OWNER for approval prior to use.
- D. Chlorine Concentration Sampling and Analysis: (PROGRAM DISINFECTION CONTRACTOR)
  - 1. Collect and analyze samples in accordance with AWWA C651.
  - 2. De-chlorinated Disinfecting Wastewater Residual Samples: A minimum of 2 grab samples are to be taken for every hour that discharge occurs.
  - 3. Analysis to be performed by laboratory obtained by PROGRAM DISINFECTION CONTRACTOR. Samples will be analyzed using method for free chlorine as described in latest edition of Standard Methods for Examination of Water and Wastewater. OWNER may take random samples to verify PROGRAM DISINFECTION CONTRACTOR's laboratory results.

- E. After all contractors have completed hydrostatic testing and completed the tie-ins, the PROGRAM DISINFECTION CONTRACTOR will disinfect the pipeline, take water samples and have them analyzed for conformance to bacterial limitations for public drinking water supplies and other requirements of the regulatory agency of jurisdiction for potable water. The PROGRAM DISINFECTION CONTRACTOR will monitor the system for two (2) days. All PROJECT CONTRACTORS will witness testing on their pipeline segment to assure compliance with these specifications and regulatory requirements.
- F. If any samples required above are bacterially positive, disinfecting procedures and bacteriological testing shall be repeated until bacterial limits are met, at no additional cost to the OWNER.

When applicable, additional costs to repeat the program disinfection shall be equally borne by all PROJECT CONTRACTORS, except if the location of a failed sample(s) is indicative of a particular segment(s) having responsibility for the failed test as determined by the OWNER, in which case said PROJECT CONTRACTOR(S) on associated with the failed segment(s) will provide full reimbursement to the PROJECT DISINFECTION CONTRACTOR for all additional work. Additional costs to be reimbursed shall be promptly communicated by the PROJECT DISINFECTION CONTRACTOR.

-END OF SECTION-

#### **SECTION 13110**

#### CATHODIC PROTECTION SYSTEM



V&A Consulting Engineers, Inc. Texas Registered Engineering Firm F-9154

#### PART 1 GENERAL

#### 1.01 THIS SECTION INCLUDES

- A. The WORK of this Section includes providing a complete impressed current cathodic protection system for the San Antonio Segment 2B Pipeline as outlined in this section and on the Drawings:
  - 1. The Pipeline consists of Approximately 5 miles of 60-inch diameter water transmission pipeline. Starting at Segment 2A and ending at the Old Pearsall Pump Station.
- B. Electrical isolation of above structures from adjacent metallic structures, reinforcing steel, structures of dissimilar metal, conduits, and all other metallic components that may impact the operation of the cathodic protection system. Install dielectric insulating joints in CAV and blow off vaults at the indicated pipe flanges.
- C. Electrical bonding of all non-insulated, non-welded pipe or mechanical joints.
- D. Installation of rectifiers, anode wells, and all other work described herein and on the Drawings.
- E. Provision of electrical power for rectifiers including any permits, trenching, conduits, services meters, and other items required. Not all required items are shown on the Drawings.
- F. Testing the system during installation.
- G. Cleanup and restoration of work site.
- H. Testing the system after installation and backfill (Final System Checkout).

### 1.02 REQUIREMENTS

- A. If the products installed as part of this Section are found to be defective or damaged or if the WORK of this Section is not in conformance with these Specifications then the products and WORK shall be corrected at the CONTRACTOR's expense.
- B. Any retesting required due to inadequate installation or defective materials shall be paid for by the CONTRACTOR.

#### WRIP PIPELINE SEGMENT 2B

NI.	D-4c	Overtions	Demonsor
No.	<b>Date</b> 8/20/2014	Questions  1. Specification Section 13110 "Cathodic Protection System" has a requirement for	Responses Contractor shall perform continuity testing and system checkout for the segment
1	8/20/2014	testing services (3.12.A and 3.13.A) for pipeline segments 1 A, 1 B, 2A, and 2B. The plan documents cp test station matrix on sheet CP1 only contains test station locations for Segment 2B. Please confirm that the scope of work is correct. If so, please provide plan drawings and a TS matrix for the other three segments/	of pipeline they are responsible for installing.
2		2. Detail 1 Sheet CP3 calls for a" $\times$ 48" tubular titanium mixed metal oxide anode while Detail 1 sheet CP2 calls for a type TA-3 anode. Specification 13110 para. 2.19 calls for a 2.65 $\times$ 84" tubular high silicon iron anode. Please confirm the type or anode required and if equivalent manufacturers of anodes are acceptable.	Anode shall be TA-3 High silicon cast iron anodes per specification 13110.2.19
3	8/20/2014	3. Detail 1 Sheet CP2 and specification 13110 paragraph 2.21 specifies 2-inch schedule 80 PVC pipe for venting (holes to be drilled around pipe) Request approval of Loresco All-Vent as an acceptable alternative for groundbed venting. Loresco All-Vent has been in use for venting cathodic protection wells for decades and facilitates faster installation over field fabrication of the specified product.	The standard diameter of Loresco All-Vent is one inch. 2-inch diameter All-Vent is available as a special request from Loresco. The use of 1-inch diameter All-Vent (any schedule) is not approved. 2-Inch diameter, schedule 80 PVC All-vent is an approved equal.
4	8/20/2014	<ol> <li>Please confirm the number of anode centralizers per anode that are to be provided and installed.</li> </ol>	3 anode centralizers shall be provided and installed per anode.
5	8/20/2014	5. Is a Geotechnical report available? If so, we request a copy for review to determine what the soil conditions might be at the location of the groundbed.	Per Special Condition 11 on page SC-2 of the project manual, "A Geotechnical Report has been developed for SAWS on this project and upon request will be made available for informational purposes only. Please contact Diana W. Dwyer via email at Diana.Dwyer@saws.org. SAWS will require the execution of a SAWS disclaimer form by the Contractor as a condition of and prior to the release of the report."
6	8/20/2014	6. What is SAWS experience with deep anode groundbed in this area as it pertains to casing of the well (surface casing or deeper casing)? Those decisions are made by the Railroad Commission Groundwater Advisory Unit during the permitting process.	SAWS has no experience to offer related to the question. Respondents should be familiar with regulatory requirements, perform any needed investigations, and do what is needed to meet permit and specification requirements.
7		7. Detail 1 sheet GP 2 calls for a concrete cap. Is flowable fill acceptable to plug the top of the well?	Cap shall be in accordance with permit issued by Railroad Commission Groundwater Advisory Unit.
8	8/20/2014	8. Detail 2 and Detail 5 sheet CP2 appear to be in conflict. Detail 2 shows the vent pipe housing assembly installed with a 6" pad and next to the rectifier electrical enclosure. Detail 5 shows a 12" x 24" deep concrete collar. Since the vent pipe housing will be mounted next to the closure and in the rectifier pad, that the 12" x 24" concrete collar be omitted.	Concrete collar shown on Detail 5 Sheet CP2 can be omitted. Vent pipe housing assembly shall be installed per Detail2 Sheet CP2.
9	8/20/2014	9. Based upon an inspection of satellite pictures of the groundbed location, there appears to be a high voltage power line in line with an existing fence. Is the proposed pipeline installed 30' from that fence or is there an unidentified structure from which to measure and if so, will the drill rig be clear of those overhead wires?	The locations shown on the plans are approximate. Contractor shall field locate rectifier and well to ensure drill rig is clear of overhead power.
10	8/20/2014	10. There appears to be a set of transformers at the proposed ground bed location. Is this location the source for the AC power to the rectifier?	Contractor shall contact energy provider and verify power availability.
11	8/20/2014	11. Does the DI pipe at Air valve assemblies require continuity bonding past the electrical isolation fittings?	Continuity bonding is not required past the electrical isolation fittings.
12		12. Sheet DT207 calls for epoxy paint, wax tape fill and wrap, and shrink wrap of the valves. We suggest that a properly applied petrolatum wax complete with primer and a poly ply wrap with out the epoxy paint and shrink-wrap provides a superior level of protection at a much lower cost than what is detailed.	No changes will be made.
13		I emailed Diana this question but with her out of the office it said to direct questions to you. Is this something you can help me with? I wanted to double check the estimated cost for this project. The website shows \$22,351,648.00 and I wanted to make sure this is correct.	
13	8/25/2014	On the above mentioned projects there are mandatory pre-proposal meetings We are bidding these projects as a sub-contractor for the cathodic protection. '  Is it mandatory that we attend these meetings?	No, only firms that intend to submit a proposal as a prime contractor are required to attend the mandatory pre-proposal meeting.
14	8/27/2014	I wanted to double check that since we are certified under the federal SBA size guidelines as a smallbusiness that we qualify as a SBE for the two projects above. Do we need to register with SCTRCA orwill our federal certification with SAM suffice?	Yes, in addition to certification by the SCTRCA, SAWS also accepts the State of Texas Historically Underutilized Business (HUB) certification, and federal SMWB designation as found in the federal System for Award Management ("SAM") website
15	8/29/2014	I plan to bid the furnishing & installation of the clsm(flowable fill), regular and quick set, on these projects. Would you please post a cubic yardage quantity. A larger volume of product would allow us to post a lower bid per cubic yard.  We will also bid the cellular grout & grouting portion of these projects. We would also	CLSM, flowable fill and cellular grout are incidental to other pay items and quantities of incidental items are not generally provided.
		appreciate a volume statement on the cellular grout.	

No.	Date	Questions	Responses
16	9/2/2014	Would SAWS consider adding Add/Deduct Line to the bidding Proposal? The purpose would be to allow the Bidding Contractor the opportunity to adjust the total Contract Price during Bid Closeout times due to late last minute cuts/adds to the Contract Price. This method has worked in similar large diameter pipeline proposals where pipe material prices are volatile.	SAWS will not consider this option.
17		2) In the Bidding Proposals there are two (2) Wage Scales included. One Wage Scale is for Heavy/Highway and the other is for On-Shore Pipeline. They are significantly different wage rates and Classifications.	For the purposes of this Contract, Heavy/Highway is the applicable wage scale. The wage decision for On Shore Pipeline Constructin has been removed as part of this Addendum.
18	9/2/2014	3) On Sheet GN 07 under the section title "Oil and Gas Field Facility Notes" Note # 3 requires the Contractor to cut well casings 3 feet below the bottom of the trench when the Contractor encounters an abandoned oil well. This very hard to quantify and price an unknown such as mentioned in the note. Will SAWS add a bid item that lists an allowance per occurrence that can be used to serve as a basis for pricing when this situati	No changes will be made
19		4) Will SAWS consider delaying until after the bid time the Qualifications of the Pipe Supplier? At the least some portion relating to the Production capabilities of the Pipe Supplier. The Pipe supplier may not know how many sections he is being considered for at Bid Time and therefore be at a disadvantage when certifying the capabilities. The Contractor will be the best determiner of what his schedule is and once the Bid Process has finish	All information must be submitted with the proposal
20	9/10/2014	Specification 02571 Steel Pipe, Mortar-Lined (ANSI/AWWA C200, MODIFIED)  Section 1.01.B (pg 1): Request adding list of approved Steel Pipe manufacturers.	No change will be made.
20	3/10/2014	This list was previously in the draft specifications. Doing so will ensure steel pipe will be manufactured by companies who are experienced and qualified for this work.	the charge thin be made.
21	9/10/2014	Section 1.03.B.4 (pg 5): Please clarify what is meant by "complete stress analysis."  Does this mean that the manufacturer is supposed to verify the adequacy of the pipeline and appurtenances based on the hydraulic gradient?	No. The referenced section does not specify stress analysis for appurtances.
22	9/10/2014	Section 1.04.B.1 (pg 10): 2nd paragraph, the (80) hour requirement for onsite manufacturer observation is excessive. A manufacturer field representative typically observes the first (2) days of delivery and installation, will follow up visits as needed. Requiring (80) hours will result in increased cost, without benefit, to the project.	No change will be made.
23	9/10/2014	Section 1.04.D.1.f (pg 12): Please strike the requirement for liquid penetrant testing for 12-inches on the bell and spigot ends. Bell ends are required to have magnetic particle testing by AWWA C200. Spigot ends are not "formed" and do not require testing.	No change will be made.
24	9/10/2014	Section 1.04.D.3 (pg 12): Please strike the requirement for Charpy testing on 0.3-inch steel and thicker. Per AWWA C200-12, charpy testing is only required for steel in excess of ½-inch thickness. Not modifying this requirement will add unnecessary costs to the project, without benefit to the owner.	No change will be made.
25	9/10/2014	Section 1.04.D.3.b (pg 13): SAME AS PREVIOUS COMMENT. Please strike the requirement for Charpy testing on ¼-inch steel and thicker. Per AWWA C200-12, charpy testing is only required for steel in excess of ½-inch thickness. Not modifying this requirement will add unnecessary costs to the project, without benefit to the owner.	No change will be made.
26	9/10/2014	Section 2.02.0 (pg 18): Please strike the words, "and installation." Stulling is provided for handling and transport to the job site only. It is not "designed" to withstand backfill or live loads on the job site during installation. This requirement can be construed as the pipe manufacturer being responsible for deflection control once the pipe has reached the job-site, which is under the control of the Contractor. That is not the purpose of stulls.	No change will be made
27	9/10/2014	Section 2.02.0.2.b (pg 18): For pipe joints 36 to 50 ft long, please change the minimum 4 stulls requirement to 3 stulls, or as determined by the pipe manufacturer.	No change will be made
28	9/10/2014	Section 2.03.B (pg. 20): Please change the last sentence in this paragraph so as to allow the cement mortar lining to be used in pipe wall stiffness calculations, as permitted by both AWWA M11 and ASCE MOP 119. For stiffness calculations, cement mortar lining is considered a laminar ring which adds stiffness to a steel piping system.	No change will be made
29	9/10/2014	Section 2.02.D (pg 20): Based on the type of backfill material specified for this project, we request that the E' value be raised to at least 2000 psi or higher. Values of E' listed in Table 6-1 of the AWWA M11 Steel Pipe Design Manual are much higher. It is also requested that an E' value for CLSM also be specified in this section as we were unable to find it elsewhere; industry accepted E' value for CLSM is typically 3000 psi.	No change will be made
30	9/10/2014	<b>Section 3.01.A.1 and 2 (pg 23)</b> : It appears that both items 1 and 2 are identical, recommend removing item 2 and renumbering the remaining items in this section.	No change will be made

No.	Date	Questions	Responses
31	9/10/2014	Section 3.01.G (pg 26): Request replacing this paragraph in its entirety and replacing with the following wording: "Pipe shall be coated with "off white" or light colored polyurethane to lower pipe surface temperature. Pipe shall not be exposed for longer periods than what is recommended by the polyurethane coating manufacturer. For exposure longer than recommended, pipe shall be covered as per coating manufacturer recommendations." Reason for change: UV inhibitors are not part of polyurethane formulation and would require new formulation (change in chemistry) of approved polyurethane materials. Polyurethane manufactures have extensive experience and proven science into exposure limits of current polyurethane formulations and will make recommendations on long term exposure limits specific to their formulations.	
32	9/10/2014	Section 3.01.K.3 (pg 27): The requirement to replace any floated pipe is excessive and unnecessary if the condition of the pipe isn't first assessed. Request changing the last to read as follows: "Pipe which has floated shall be replaced at no cost to OWNER if it is determined to have sustained any damage by the Engineer."	The intent of this item is to indicate the CONTRACTOR shall remove and re-install floated but otherwise undamaged pipe if it no longer meets specifications requirements, including line and grade. Pipe damaged due to floating shall be removed and either repaired or replaced in accordance with the specification. The specification will be modified so the intent is more clear
33	9/10/2014	Section 3.03.A. (pg 28): Request that the first sentence be changed to read as follows: "No pipe and specials shall be installed where the lining or coating/interior or exterior surfaces show cracks wider than that permitted by AWWA C205 or damage that may jeopardize the integrity of the pipe as determined by the OWNER." This will ensure that the width of cracks is within the limits of AWWA standards (which will heal over time through the process of Autogenous Healing) and not subject simply to the discretion of an inspector.	No change will be made
34	9/10/2014	Specification 02572 Steel Pipe Fabricated Specials (ANSI/AWWA C200, MODIFIED)	
35	9/10/2014	Section 3.01.C (pg 8): Suggest removing this paragraph so as not to create any confusion since Tape Coating is not specified on this Project.	Remnant language references to tape coating are being removed with this addenda.
36	9/10/2014	Section 3.01.H (pg 8): Request removal of ANSI/AWS D1.1 since ANSI/AWWA C206 contains all pertinent sections of the former. Listing both may result in conflicts.  ANSI/AWWA C206 pertains specifically to the field welding of pipe.	Requirements have been modified per Addendum 1.
37	9/10/2014	Specification 09910 Polyurethane Coating	
38	9/10/2014	Section 3.07.B.94.a.1 thru 5 (pg 28): Request consideration be given to making adhesion values consistent with that listed in AWWA C222 of 1,500 psi. The currently stated minimum value of 1,750 psi and average value of 2,000 psi is excessive. Furthermore, the other items addressing corrective action for adhesion values below the average are also excessive and unnecessary, and will likely result in substantially added costs to the Owner, with no additional value to the project. Suggest removing items 1 thru 5, and replacing with the wording found in the current version of AWWA C222 as follows:	See the specification changes in this addenda, and note that items 1, 3, and 4 of this specificaiton are being replaced
39	9/10/2014	"Adhesion testing shall be conducted on two sufficiently cured, coated sections of pipe from each shift selected at random with one from the beginning of the shift and one from halfway through the shift. Adhesion testing shall be conducted in accordance with ASTM D4541. The coating around the dolly shall be scored completely through to the steel substrate. The adhesion will be considered	
		satisfactory if the test value is a minimum of 1,500 psi. If the adhesion is not satisfactory, two additional tests shall be made at two different locations on the same pipe. If either additional test fails, the pipe shall be rejected. If the pipe is rejected, a systematic inspection of all pipe coated on that shift shall be made, and all pipe not meeting this adhesion requirement shall be rejected. Damaged test areas of accepted pipe and areas determined to have unsatisfactory adhesion shall be repaired as outlined in this specification."	
40	9/10/2014	satisfactory if the test value is a minimum of 1,500 psi. If the adhesion is not satisfactory, two additional tests shall be made at two different locations on the same pipe. If either additional test fails, the pipe shall be rejected. If the pipe is rejected, a systematic inspection of all pipe coated on that shift shall be made, and all pipe not meeting this adhesion requirement shall be rejected. Damaged test areas of accepted pipe and areas determined to have unsatisfactory adhesion shall be repaired as outlined in this specification."  Specification 09970 Painting and Protective Coatings	
40 41	9/10/2014 9/10/2014	satisfactory if the test value is a minimum of 1,500 psi. If the adhesion is not satisfactory, two additional tests shall be made at two different locations on the same pipe. If either additional test fails, the pipe shall be rejected. If the pipe is rejected, a systematic inspection of all pipe coated on that shift shall be made, and all pipe not meeting this adhesion requirement shall be rejected. Damaged test areas of accepted pipe and areas determined to have unsatisfactory adhesion shall be repaired as outlined in this specification."	No change shall be made
	9/10/2014	satisfactory if the test value is a minimum of 1,500 psi. If the adhesion is not satisfactory, two additional tests shall be made at two different locations on the same pipe. If either additional test fails, the pipe shall be rejected. If the pipe is rejected, a systematic inspection of all pipe coated on that shift shall be made, and all pipe not meeting this adhesion requirement shall be rejected. Damaged test areas of accepted pipe and areas determined to have unsatisfactory adhesion shall be repaired as outlined in this specification."  Specification 09970 Painting and Protective Coatings  Section 1.07 A (pg 5): The industry-accepted warranty period for pipe materials and accompanying coating and lining systems is ONE YEAR following acceptance of the project. We request that the 2- year guarantee requirement be removed. The quality control measures outlined in these Project Specifications are very stringent as is for the polyurethane coatings, per Section 09910. The requirement of a 2-year guarantee will likely result in added costs to the Owner, with no additional value to the project.	No change shall be made  No change shall be made

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No. 44	<b>Date</b> 9/10/2014	Questions  Section 2.01 A (pg 6): We request that the Permalok casing pipe with proprietary	Responses The casing pipe for the Program is welded steel pipe. After the contract has been
	5, 10, 2014	joint be included as an acceptable casing pipe option. This product can be provided	awarded, the Contractor can submit the use of Permalok to the Owner for
		in sizes and thicknesses outlined in Table 1. A completed package as part of the new	consideration.
		product approval process has been submitted to the Chairman of the Materials	
		Committee of SAWS.	
45	9/10/2014	Section 3.02 C (pg 11): By permitting Permalok as requested above, casing pipe	The casing pipe for the Program is welded steel pipe. After the contract has been
		joints can be installed without butt welding, substantially increasing productivity	awarded, the Contractor can submit the use of Permalok to the Owner for
		and minimizes seizing of the casing on longer tunnel installations The proprietary	consideration.
		Permalok joint utilizes a precision machined interference fit interlocking jointing	
		system for the connection of successive casing pipe sections, thereby eliminating	
		the need to perform any field welds. Use of a silicon gel during joint assembly	
		results in leak-free joints.	
46	9/10/2014	Although all projects are required to test before 12/31/15 per the Special Conditions	Timeframes for review of propsoals, award of contracts and issuance of the Notic
		(Item 9, 10, or 11 depending on which segment), Project 2B could contractually hold up	to Proceed are maximum allowable days. Specifically, on these projects, SAWS
		the progress of the other projects if the test was completed on 12/31/15. Additionally,	intends to award all four (4) WRIP Pipeline Segments at the December 2 2014
		disinfection of segment 2B could significantly delay the other projects if performed	Board Meeting. In addition, SAWS intends to issue the Authorization to Proceed
		after hydrostatic testing. See below:	for all Segments by the end of December. Contract milestones shall be as stated
			in these specifications or as modified in this addendum for each project."
	_	WRIP - 1B	
		Submital Date     September 24, 2014	
		September 24, 2014      Item 11 – IR-5 States "contract will be awarded within 90 days after the	
		solicitation deadline"	
	1	o December 23, 2014	
	1	PC-1 states " Owner will provide written Authorization to Proceed within 30	
		days after the award"	
		o January 22, 2015	
		Substantial is 340 days award	
	_	o December 28, 2015	
	_	Final is 370 days after award     O January 27, 2016	
		WRIP - 2B	
		Submital Date	
		o September 26, 2014	
		Item 11 – IR-5 States "contract will be awarded within 90 days after the	
		solicitation deadline"	
	_	o December 25, 2014	
		PC-1 states " Owner will provide written Authorization to Proceed within 30  days often the guard"	
		days after the award"  o January 24, 2015	
		Substantial is 400 days award	
		o February 28, 2016	
		Final is 430 days after award	
		o March 29, 2016	
	_	WRIP – 1A	
	1	Submital Date     October 2, 2014	
	1	Item 11 – IR-5 States "contract will be awarded within 90 days after the	
		solicitation deadline"	
		o December 31, 2014	
		PC-1 states " Owner will provide written Authorization to Proceed within 30	
	4	days after the award"	
	-	o January 30, 2015	
	1	Substantial is 340 days award     January 5, 2016	
	1	Final is 370 days after award	
		o February 4, 2016	
		WRIP – 2A	
	_	Submital Date	
	4	o October 2, 2014	
		<ul> <li>Item 11 – IR-5 States "contract will be awarded within 90 days after the solicitation deadline"</li> </ul>	
	1	o December 31, 2014	
	1	PC-1 states " Owner will provide written Authorization to Proceed within 30	
		days after the award"	
		o January 30, 2015	
		Substantial is 400 days award	
	1	o February 4, 2016	
		Final is 430 days after award  - March 5, 2016.	
	L	o March 5, 2016	

No.	Date	Questions	Responses
47	9/9/2014	I am requesting that Permalok be considered as an alternate to the casing as specified. Permalok offers a water tight joint that is readily made up saving time and ultimately money. The fabricated joint delivers a level of quality that is difficult to maintain in the field. We see a lot of projects that use the AWWA C210 specification to cover the production and installation of the casing, this specification is used for the production of steel water lines and casing cannot be installed in the field under the same controlled environment that the water line can be manufactured. Unfortunately I am not aware of a good casing specification otherwise I would be sending it instead of this request. Permalok is not cheap and if allowed as an alternate may not compete but I can assure you that we will give its benefits a thorough consideration.	The casing pipe for the Program is welded steel pipe. After the contract has been awarded, the Contractor can submit the use of Permalok to the Owner for consideration.
		My request is based upon my past experiences not only on large diameter SAWS projects but other projects as well. On a recent bid to install some 48" diameter casing using a pneumatic hammer the equipment manufacturer asked what casing we were using and how it would be welded. The problem with hammer jobs is that they are very hard on the casing and casing connections. When we told them we were using Permalok they said their concerns over welding and welding procedure no longer were a problem. Once the joints are made up they provide a joint that is flush both on the inside and on the outside and they are almost impossible to separate we have used diameters up to 96" on a bore and jack project in El Paso.	
48		Would you change Section 02571, Page 17, Paragraph 2.02.F to remove the statement, "Gaskets shall be furnished by the PIPE MANUFACTURER" and replace with the statement, "Gaskets shall be furnished by the CONTRACTOR."? The justification for this change is that the pipe manufacturer will not have readily available access to valve dimensions or flange sizes on the valves. Also, having the pipe manufacturer attempt to coordinate with the valve supplier through the contractor will result in delays for supplying the materials as well as greater chance of miscommunication and mistakes in ordering of materials. Contractors, who typically purchase valves directly, have a much better position for coordinating flange gasket purchasing, which is why they have traditionally supplied those gaskets on other projects	The specification does indicate the PIPE Manufacturer is to provide the gaskets. This requirement will not change for this project. The Pipe Manufacturer, by being responsible for providing the gaskets, will then be able to assure and certify the flanges he is providing have a matching gasket compliant with the pressure requiremetns for the pipeline. The Contractor is responsible for assuring valves and other components are fully coordinated
49		(2) We request a clarification about the temperature control joints, which are currently required to be butt strap joints. The clarification for this would be as follows: Would you change Section 02571, Page 22, Paragraph 2.04.C as follows: "Where restrained joints are required, a special longer lap joint (temperature control joint) shall be"? The justification for this change is that butt strap joints require 3 extra welds compared to lap welded joints while providing no additional benefit over a lap welded joint. The higher number of welds means that there is more opportunity for problems with the welds to develop longer term. The lap joints provide the same function and can be provided on the pipe with the required extra lap dimension (2") without the need for the extra welding. Also, changing the verbiage to lap joint does not necessarily preclude the use of butt strap joints for the temperature control joints, but it does allow those manufacturers who can provide a more economical and structurally sound joint to do so.	No change in the type of temperature control joints will be made at this time.
50		(3) Would you change Section 02571, Page 7, Paragraph 1.03.B.8.d as follows: Either 1) delete the following sentence "Welder's certification shall be in the same Welding Procedure Specification that has been submitted." or 2) change wording to "Submit Welding Procedure Specification(s) (WPS) used for welder certifications."? The justification for this change: Welding codes (ASME BPVC and AWS D1.1) require a single WPQ per process for each qualified welder. Welders are qualified by process and position, not to a specific weld procedure (WPS).	
51		This item may also apply to Section 02571, Page 11, Paragraph 1.04.C  (4) Would you change Section 02571, Page 12, Paragraph 1.04.D.1.b as follows: This paragraph limits each pass for hand welds to 1/8". ASME allows up to %" and AWS allows up to 3/8" per pass. Besides being inefficient, our Senior Certified Welding Inspector (SCWI), based on his 25+ years welding experience, tells me such a small weld size will increase the chances of weld cracking. The weld pass thickness limit should be based on the codes and procedure qualification. Would you change the 2nd sentence be change to read "For hand welds, no less than 2 passes and not more than 3/8-inch thickness of metal shall be deposited in each pass."? The justification for this change is: 1/8" passes in our experience increase the probability of weld cracking. Welding codes allow up to ½" per pass; our weld procedures have been qualified and shown to produce acceptable welds using 3/8" passes.	This specification section is being revised in Addenda 1.