

LIFT STATIONS REHABILITATION - PHASE 5 Solicitation Number: CO-00431 Job No.: 16-2502

ADDENDUM 2

June 4, 2021

To Respondent of Record:

This addendum, applicable to work referenced above, is an amendment to the price proposal, 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 Respondent Questionnaire.

RESPONSES TO QUESTIONS

1. Question: We request that HCP Pumps America, Inc be accept for the [project] and with exceptions will be accepted.

For the Non-Clog pumps

- 2. Impeller
 - b. Our impeller is not self-cleaning
 - d. We will not have an alkyd resin primer on the impeller
 - e. Not adjustable
- 4. Insert Ring is a standard wear plate
- 8. Mechanical Seal
 - b. Not tungsten-carbide lower seal Silicon/Silicon (Lower)
 - c. Not tungsten-carbide upper seal Carbon/Ceramic (Upper)
 - e. Single spring between seals

For the grinders

- 2. Impeller
- d. No primer
- 4. Grinder
- b. Not adjustable
- 8. Mechanical Seal
 - b. Not tungsten-carbide lower seal Silicon/Silicon (Lower)
 - c. Not tungsten-carbide upper seal Carbon/Ceramic (Upper)
 - e. Single spring between seals

Response: SAWS does not review alternate requests during the solicitation period. Such requests shall follow the appropriate procedure after the award the Contract as outlined in the Contract Documents, including but not limited to, Section 5.11 of Article V of the General Conditions and Section 01600 – Product Requirements of the Technical Specifications. Equipment and materials that do not meet and are not in compliance with plans and contract documents/specifications will not be acceptable.

 Question: Attached is a document requesting our permission to bid pumps approved as equal for the upcoming lift station rehabilitations project. The attached document includes all of the pumps included on Section 11311. Included in the document are pump datasheets for each of the 12 lift stations on the section for the pumps we would like to bid.
 Please review for consideration.

I will be sending a follow up with the document for section 11312 regarding the grinder pumps.

Response: SAWS does not review alternate requests during the solicitation period. Such requests shall follow the appropriate procedure after the award the Contract as outlined in the Contract Documents, including but not limited to, Section 5.11 of Article V of the General Conditions and Section 01600 – Product Requirements of the Technical Specifications. Equipment and materials that do not meet and are not in compliance with plans and contract documents/specifications will not be acceptable.

CHANGES TO THE SPECIFICATIONS

NONE

CHANGES TO THE PLANS

- 1. Sheet S-1 (110 of 150) REMOVE and REPLACE in its entirety.
 - a. S-1 Structural Notes

END OF ADDENDUM

This Addendum, including these two (2) pages, is three (3) pages with attachments in its entirety.

Attachments:

S-1 Structural Notes



Steven H. Thai, P.E. BGE, Inc. TBPE Registration No. F-1046

STRUCTURAL NOTES FOR LIFT STATION SLABS:

- 1. ALL ACCESS OPENINGS FOR WET WELL SHALL HAVE FALL PROTECTION SAFETY GRATE.
- 2. ALL ACCESS HATCHES FOR WET WELL STRUCTURES SHALL BE WATERTIGHT AND BOLTED.
- MAXIMUM WATER-CEMENT RATIO SHALL NOT EXCEED 0.45 BY WEIGHT.
- CALCIUM CHLORIDE AS AN ADMIXTURE SHALL NOT BE USED IN CONCRETE FOR SANITARY SEWER STRUCTURES.
- CONTRACTOR SHALL BRACE AND SUPPORT EXISTING WET WELLS DURING THE CONSTRUCTION OF THE SUPPORT SLABS UNDER AND AROUND THE EXISTING WET WELLS.
- ALL EXPOSED INTERIOR SURFACES OF WET WELL STRUCTURES SHALL BE COATED IN ACCORDANCE WITH ITEM NO. 850. SUBMIT INSTALLATION AND TESTING PROCEDURE IN ACCORDANCE WITH COATING MANUFACTURER'S REQUIREMENTS AT LEAST 14 DAYS PRIOR TO
- ALL PIPES PENETRATING CONCRETE STRUCTURES SHALL HAVE WATERTIGHT PIPE-TO-MANHOLE CONNECTIONS AS RECOMMENDED BY PIPE MANUFACTURER. SUBMIT WATERTIGHT CONNECTOR FOR ENGINEER'S APPROVAL.
- ALL BARS FIELD CUT AT OPENINGS SHALL BE REPLACED WITH SAME BAR SIZE AND NUMBER ON BOTH SIDES OF OPENINGS
- CONCRETE FOR STRUCTURES SHALL BE CLASS "G" 4500 PSI IN 28 DAYS, WITH TYPE I-P OR TYPE II
- 10. ALL DIMENSIONS RELATING TO REINFORCING BARS ARE TO CENTER OF BARS. ALL REINFORCING BARS AT THE INTERIOR FACES OF THE STRUCTURE SHALL HAVE A MINIMUM CLEAR COVER OF 3".
- 11. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
- 12. ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615, GRADE 60.
- 13. PLACE TWO EXTRA #4 BARS AROUND EACH OPENING CORNER.
- 14. CONTRACTOR SHALL SUBMIT REINFORCING BAR SHOP DRAWINGS TO ENGINEER FOR REVIEW AT LEAST 14 DAYS IN ADVANCE PRIOR TO FABRICATION.
- 15. ALL INTERIOR SURFACES SHALL HAVE CLASS "A"CONCRETE FINISH. ALL BUG HOLES SHALL BE FILLED FLUSH WITH HIGH STRENGTH GROUT. THE SURFACES SHALL BE SAND BLASTED TO A 'MEDIUM SANDPAPER" SURFACE AND PREPARED IN ACCORDANCE WITH MANHOLE COATING INSTALLATION INSTRUCTIONS.
- 16. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4". ALL EXPOSED EXTERIOR CONCRETE SURFACES SHALL HAVE CLASS "B" CONCRETE FINISH.
- 17. CONTRACTOR TO SUBMIT LIFTING DEVICE DESIGN AND REINFORCING DETAILS FOR ALL PRECAST MEMBERS TO ACCOMMODATE THE LIFTING OPERATION.
- 18. METHODS PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, CONTRACTOR IS REQUIRED TO CORRECT AT HIS OWN EXPENSE ANY CONSTRUCTION DAMAGE, STRUCTURE DAMAGE OR OTHER OBJECTIONABLE CONDITIONS CAUSED BY HIS OPERATIONS.

SAFETY GRATE NOTES:

- THE SAFETY GRATE DESIGN SHALL COMBINE COVERING OF THE OPENING, FALL THROUGH PROTECTION PER OSHA STANDARD 1910.23 AND CONTROLLED CONFINE SPACE ENTRY PER OSHA STANDARD 1910.146.
- THE SAFETY GRATE SHALL BE MADE OF 6061-T6 ALUMINUM AND DESIGNED PER THE SPECIFICATIONS FOR ALUMINUM STRUCTURES BY THE ALUMINUM ASSOCIATION, INC. 5TH EDITION, DECEMBER 1986 FOR "BRIDGE TYPE STRUCTURES".
- THE GRATING SHALL BE DESIGNED TO WITHSTAND A MINIMUM LIVE LOAD OF 300 LB. PER SQUARE FOOT USING 17,300 PSI AS THE DESIGN STRESS FOR THE ALUMINUM. DEFLECTION SHALL NOT EXCEED 1/150TH OF THE SPAN.
- GRATE OPENINGS SHALL NOT EXCEED 5" AND SHALL ALLOW FOR VISUAL INSPECTION, LIMITED MAINTENANCE AND FLOAT ADJUSTMENTS WHILE THE SAFETY GRATE FALL THROUGH PROTECTION IS LEFT IN PLACE
- DESIGN MUST ASSURE THAT THE FALL THROUGH PROTECTION IS IN PLACE BEFORE THE DOORS CAN BE CLOSED, THEREBY PROTECTING THE NEXT OPERATOR.
- EACH GRATE SHALL BE PROVIDED WITH A PERMANENT HINGING SYSTEM. WHICH WILL LOCK THE GRATE IN THE 90° POSITION ONCE OPENED. GRATES IN THE OPEN POSITION CREATE A VISUAL BARRIER AROUND THE OPENING, ALERTING PASSING PEDESTRIANS.
- WELDING SHALL BE IN ACCORDANCE WITH ANSI/AWS D1.2-90 STRUCTURAL WELDING CODE FOR ALUMINUM
- SAFETY GRATE SHALL BE FLUSH WITH WET WELL TOP SLAB SURFACE
- 9. SEE SAWS DETAIL DD-903-03

HATCH DOOR NOTES:

- EACH HATCH SHALL BE SUPPLIED WITH ALUMINUM SAFETY GRATE FALL-THROUGH PROTECTION.
- MATERIAL SHALL BE 316 STAINLESS STEEL OR ALUMINUM. ALUMINUM SHALL BE 6061-T6 ALUMINUM FOR BARS, ANGLES, AND EXTENSIONS. 1/4" DIAMOND PLATE SHALL BE 5086
- UNIT SUPPLIED WITH HEAVY DUTY PNEU-SPRING, FOR EASE OF OPERATION WHEN OPENING SAFETY GRATE. GRATE SHALL BE COUNTER BALANCED, SO ONE PERSON CAN EASILY OPEN THE SAFETY GRATE.
- FRAME SHALL BE 316 STAINLESS STEEL OR EXTRUDED ALUMINUM. THE FRAME SHALL INCLUDE EPDM OR SILICONE GASKET TO PREVENT DEBRIS ENTERING INTO AND GASES ESCAPING FROM THE VAULT
- EACH HATCH SHALL BE EQUIPPED WITH A STAINLESS STEEL HOLD OPEN ARM. DOOR SHALL LOCK OPEN IN THE 90 DEGREE POSITION. HOLD OPEN ARM SHALL BE FASTENED TO THE FRAME WITH A 1/2" GRADE 316 STAINLESS STEEL BOLT.
- HINGES SHALL BE OF HEAVY DUTY DESIGN. MATERIAL SHALL BE GRADE 316 STAINLESS STEEL. EACH HINGE SHALL HAVE A GRADE 316 STAINLESS STEEL, 3/8" DIAMETER HINGE PIN. HINGE SHALL BE FASTENED TO THE CHANNEL FRAME AND DOOR PLATE WITH GRADE 316 STAINLESS STEEL BOLTS AND NY-LOCK NUTS.
- ALUMINUM SHALL BE SUPPLIED WITH ANTI-SLIP TOP SURFACE FINISH WITH A MINIMUM OF 0.6 COEFFICIENT OF FRICTION. EXTERIOR OF FRAME WHICH COMES IN CONTACT WITH CONCRETE SHALL HAVE ONE COAT BLACK PRIMER.
- EACH HATCH SHALL BE EQUIPPED WITH A STAINLESS STEEL LIFT HANDLE. LIFT HANDLE SHALL BE FLUSHED WITH TOP OF 1/4" DIAMOND PLATE.
- EACH HATCH IS SUPPLIED WITH A 1-1/2" THREADED DRAIN COUPLER ON UNDERSIDE OF CHANNEL FRAME FOR PIPE CONNECTION.
- EACH HATCH SHALL BE SUPPLIED WITH A GRADE 316 STAINLESS STEEL SLAM LOCK, WITH KEY WAY PROJECTED BY A THREADED PLUG. PLUG SHALL BE FLUSH WITH THE TOP OF THE 1/4" DIAMOND PLATE. SLAM LOCK SHALL BE FASTENED WITH FOUR GRADE 316 STAINLESS STEEL BOLTS AND WASHERS.
- 11. EACH HATCH SHALL HAVE A RECESSED PADLOCK CLIP. PADLOCK CLIP SHALL HAVE A FLUSHED HINGED LID AND FULLY WELDED RECEPTACLE DESIGNED TO RECEIVE A STANDARD PADLOCK. WHEN CLOSED, THE HINGED LID SHALL BE FLUSH WITH TOP OF DIAMOND PLATE.
- 12. ALL HATCH ASSEMBLIES SHALL BE WATERTIGHT AND FLOOD-PROOF.
- 13. HATCH ASSEMBLIES SHALL HAVE REMOVABLE ALUMINUM POSTS AND STAINLESS STEEL SAFETY CHAIN WITH "S" HOOKS ON 3 SIDES FOR SINGLE AND 2 SIDES OF DOUBLE DOORS

SUB GRADE AND SELECT FILL

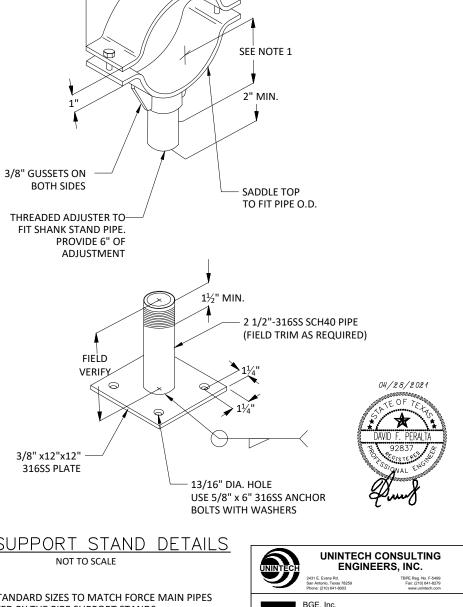
- GROUND WATER LEVELS SHOULD BE VERIFIED IMMEDIATELY PRIOR TO CONSTRUCTION. GROUNDWATER WAS ENCOUNTERED AT A DEPTH OF 11' (LS 321) & 27.5' (LS 304) BELOW GRADE. CONTRACTOR SHOULD ANTICIPATE THE NEED FOR DEWATERING MEASURES. (NSPI)
- POSITIVE DRAINAGE AND WATER PUMPING SHALL BE MAINTAINED AT ALL TIMES SUCH THAT STORM WATER OR EXCESS MOISTURE IS KEPT FROM ACCUMULATING AT THE BOTTOM OF THE EXCAVATION.
- THE BOTTOM OF THE EXCAVATION SHALL BE COMPACTED PRIOR TO FORM AND REBAR PLACEMENT. THE UPPER SIX (6) INCHES OF SUBGRADE SOIL SHOULD BE COMPACTED TO ACHIEVE A DENSITY OF NO LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. HAND OPERATED TYPE COMPACTION EQUIPMENT SHOULD BE UTILIZED.
- SELECT FILL TYPE:
 - CRUSHED LIMESTONE BASE: TxDOT ITEM 247, TYPE A, GRADE 1-2
 - SELECT FILL: LL<40, PI=8-20, #200>50 (PREFERRED)
 WORKING SURFACE: TOP 6" TO BE CRUSHED LIMESTONE BASE MEETING REQUIREMENTS OF TXDOT ITEM 247 TYPE A, GRADE 1-2
- UTILITY BEDDING SHOULD NOT INCLUDE GRAVEL AT THE PERIMETER OF THE FOUNDATION. COMPACTED CLAY OR FLOWABLE FILL TRENCH BACKFILL SHOULD BE USED IN LIEU OF PERMEABLE BEDDING MATERIALS BETWEEN 2 FEET INSIDE THE SLAB EDGES TO THE OVERBUILD EDGES. A CLAY CAP CAN BE USED AROUND THE PERIMETER OF THE PLANNED FOUNDATION OVER THE SELECT FILL OVERBUILD AREAS.
- EXCAVATIONS OVER 20' DEEP REQUIRES THE SIDE SLOPES BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN TEXAS.

PIPE SUPPORT STAND DETAILS

- 1. SELECT STANDARD SIZES TO MATCH FORCE MAIN PIPES SUPPORTED BY THE PIPE SUPPORT STANDS.
- 2. CONFORMS TO FEDERAL SPECIFICATION WW-H-171E & A-A-1192A, TYPE 38 AND MANUFACTURES STANDARDIZATION SOCIETY ANSI/MSS SP-69 & SP-58, TYPE 37.
- 3. ALL PIPE SUPPORT STAND COMPONENTS SHALL BE 316 STAINLESS STEEL, INCLUDING ANCHOR BOLTS & NUTS
- 4. SEE SAWS DETAIL DD-903-03(DETAIL 2)
- 5. DEFERRED SUBMITTALS:

FOR THE PURPOSE OF THIS SECTION, DEFERRED SUBMITTALS ARE DEFINED AS PER SECTION 107.3.4.1 OF THE IBC. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ENGINEER, ARCHITECT AND CITY OFFICIAL FOR THEIR REVIEW FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE STRUCTURE. DEFERRED STRUCTURAL SUBMITTALS FOR THIS PROJECT ARE:

STRUCTURAL COMPONENT	SUBMITTAL REQUIREMENT		
VOID FORMS	DESIGN CERTIFIED BY AN ENGINEER LICENSED IN THE STATE OF TEXAS		



SEE NOTE 1

BGE, Inc 7330 San Pedro, Suite 202 San Antonio, Tx 78216 Tel: 210-581-3600 • www.bgeinc.com TBPE Registration No. F-1046 1 DELETED H-20 WHEEL LOAD NOTE IG DP 5-12-2 Drawn Approved Date REVISIONS LIFT STATIONS

	REHABILITATION - PHASE 5			
	STRUCTURAL NOTES			
DEVELOPER:				
CONT.	BUDGET PROJ.			
SUBMITTED				

SUBMITT	ED				
APPROVI	ED				
MAP No.					SHEET
SECT. No				S-1	
DR. JA	CK. DP	JOB	No.	16 - 2502	110 OF 150