## QUESTIONS AND ANSWERS NO. 2 TO THE CONTRACT DOCUMENTS

For the Construction of Hilliard N. Fletcher WRRF Phase II Improvements Tuscaloosa, Alabama

To All Plan holders and/or Prospective Bidders:

Date: December 5, 2023 Project No.: 19W10160

Question No.	Specification Section	Drawing/ Detail Number	Question	Response
2. 1.		11-S301	Plans say we are to replace Digester 1 seal per Manufacturer's recommendation. Do you know if they are aware of this and planning on supplying that info with their proposal?	The intent of the note on 11-S301 is not for the cover man evaluate/assess the existing seal during their site visit. Ins intended to have the contractor to coordinate with the man complete this replacement in accordance with their require bid should include the effort to replace the digester seal in accordance with Standard Detail D07 / 9200-001, with inp coordination with the cover manufacturer. This detail has b further clarify this requirement.
2. 2.			Is the depth of the existing PD lines we are tying into known at the digester mixing pump locations? I believe they are deep.	The tie-in's shown on the yard piping drawings for each di pump is not into the tank drains. These tie-in's will be into digester overflow piping, which is not as deep. Elevations for these pipes can be approximated from the Improvements drawings (P-7, P-8, P-11A, and P-12). The with other drawings, will be made available to bidders.
2. 3.			Specs say we are to jet drain lines to first manhole at digesters. How about Sludge pump suction lines? Those are usually completely full of sand/solids after Owner finishes pulling down contends as much as possible.	<ul> <li>Contractor will be required for flushing existing piping from prior to placing the digester back into service. For each diginclude:</li> <li>1) Digested sludge transfer piping, suction piping</li> <li>2) Digested sludge transfer piping, suction piping</li> <li>3) Sludge heating loop, suction piping</li> <li>4) Sludge heating loop, discharge piping</li> </ul>

	Addendum Information
manufacturer to Instead, the note is manufacturer to quirements. The base al in Digester No. 1 in input and has been revised to	Reference Addendum No. 2
h digester mixing nto the existing	
he 1991 These drawings, along	
irom/to equipment n digester, this will	Reference Addendum No. 2
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2. 4.			Will digester tops need to be leak tested before being put back into service? I would assume so because even if you don't want to leak test, tops have to be pressurized to confirm air/vac valve setting are correct. If leak testing is required and leaks are found, will contractor be responsible for fixing leaks? If test is required, will it be done before interior coating is applied? If testing is required, will Owner furnish water at no charge (that said, I believe the mixing system will require testing so water will be needed for that)?	Prior to placing back into service, the Contractor will be redigester with water to complete the required functional te digester mixing pumps, as specified. Leak testing of each completed in parallel with this effort. Any repairs to resolve leaks associated with the work not project will be paid from the contingency allowance. Repaire leaks associated with work on this project including, but redigester cover seal, new cover penetration(s), digester missludge transfer piping shall be at no additional cost to the Water required for testing will be provided by Owner.
2. 5.			Digesters 2 and 3 are floating covers and have large concrete ballast blocks located against inside face of skirt. If these digesters require painting, will ballast block removal be required? They probably weight several tons/ea.	The ballast blocks will not be required to be removed. The protective coating system replacement is to rehabilitate the the cover, if needed. Any deviations or additional work needefects that are discovered during the assessments will be paid from the contingency allowance.
2. 6.			I expect there to be a good deal of sand/solids in the Aeration Basins after draining. Will Owner clean this out or will contract be responsible? If contractor is responsible, can sand be washed into the tank drains or will it need to removed and disposed of?	There are no drains in the aeration basins. Any debris re- aeration basins can be transferred to the opposite aeratio existing sump pumps located at the east end of the basin is responsible for cleaning the basins, as needed, to com construction effort. These pumps may be utilized during t
2. 7.			Is a field office required or can we utilize an on-site room for meetings. If the city has a space to meet, it would be a waste of money to put this on-site for the project.	No field office will be required for this project. Project-relate be held at the existing training room in the administration location at the facility.
2. 8.			Reference sheet 18. Can you provide the approximate elevations of the Wye connections to the drain line for each mixer pump?	Elevations for these pipes can be approximated from the Improvements drawings (P-7, P-8, P-11A, and P-12). The with other drawings, will be made available to bidders.
2. 9.			Do you have a Geotech report to help identify the groundwater/subsurface conditions?	No geotechnical investigation was completed for this proj report that was prepared for borings in the vicinity of the will be made available to bidders.

	Addendum Information
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ot included in this pairs to address not limited to, mixing piping, and ne Owner.	
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lated meetings will n building or other	
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oject. A previous disinfection facility	

Question No.	Specification Section	Drawing/ Detail Number	Question	Response
2. 10.			What type of roof is on the existing blower building?	Details of the existing roofing system are available in the 1 Drawings. These details were not confirmed during design to still be valid.
				During the design effort, Tuscaloosa provided the following person/company who had most recently worked on the roc Building. Garver provided details of the project and develo attach the pipe supports in such a way that it would not voi warranty.
				Bob Freeman Freeman Sheet Metal <u>freemansheetbob@bellsouth.net</u> (205) 345-7782
2. 11.		40-X101	Sheet 095 Note 2 references spec section 01 73 80. I do not see this section.	Note to be modified to remove reference to Specification S
2. 12.		40-X102	Sheet 096 Note 3 References spec section 01 11 20. I do not see this section.	Note to be modified to remove reference to Specification S
2. 13.		40-S414	Sheet 114. I am confused on what pipe supports are type A, B, C and D. Can you clarify the quantity of each on the roof?	Drawing 40-S414 will be revised and reissued as part of A further clarify the location of each pipe support type.
2. 14.			Sheet 115 and 116. The details for a Type B and C support appear to be the same.	Yes, they are similar. The only real difference is that for the supports, the webs of the precast double tees are parallel and for type C they are perpendicular to the air pipe.
2. 15.			Will the City require a building permit for the work related to this project?	A building permit will not be required for this project.
2. 16.		40-P102	Sheet 120 Note 1. Can you define this better for me. Maybe by elevation. (Ex. Everything below El. 165 gets insulated)	An aluminum insulated jacket is not required for ALP piping
2. 17.	40 05 06	40-P303	Plan Sheet 40-P303 shows a 24" fabricated steel insulated coupling. Spec section 40 05 06, 2.11, D.2 calls for insulated couplings to be Dresser – Style 39 or RH Baker – Series 216. Please confirm that this spec is for this coupling and that coupling isn't restrained. Detail is a little confusing since it seems to show restraint rods bolted to ears on either side of coupling instead of bolting gland to gland.	Drawing 40-P303 will be revised and reissued as part of A further clarify the requirement for the fabricated steel insula This coupling is necessary due to dissimilar pipe materials provided with insulated joint harnesses.
2. 18.			If digester building roof isn't replaced, what should be done at removed pipe supports and exhaust fan?	In the event that the digester building roof isn't replaced, the need to coordinate with a roofing contractor to patch any of the existing roofing system. These repairs would be conside temporary until the roofing system can be replaced, in its en- project.

	Addendum Information
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wing contact as the roof at the Blower veloped the details to a void the roof	
on Section 01 73 80.	Reference Addendum No. 2
on Section 01 11 20.	Reference Addendum No. 2
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or the Type B llel to the air pipe,	
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d, the Contractor will ny openings/gaps in nsidered to be its entirety, in a future	

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2. 19.			Detail D22/0529-003 isn't included in my typical details manual.		Reference Addendum No. 2
2. 20.			Won't some pipe supports be needed between digesters 1-3 and 4 for 12" DS lines? I don't see any.	Pipe supports are indicated on drawings 20-P301 and 20-P302. To further clarify these requirements, drawing 20-P101 will be revised and reissued as part of Addendum No. 2.	Reference Addendum No. 2
2. 21.	44 42 00		Will the City of Tuscaloosa WRRF plant staff analyze the eight samples required in Specification Section 44 42 00 3.5.B? Plant staff is analyzing the sludge samples during the dewatering & removal process and the testing should be the same.	Owner will provide testing/analysis of samples. Contractor/Manufacturer to provide all necessary equipment/material/items/etc. to collect samples in accordance with testing requirements. Samples are to be collected by the Contractor/Manufacturer in the presence of the Owner and Engineer.	

END OF QUESTIONS AND ANSWERS