CLARIFICATIONS TO CONTRACT DOCUMENTS & TECHNICAL SPECIFICATIONS J-26963 TRAVIS FIELD WRF EVENT #-7169

ADDENDUM NO. 2

June 18, 2019

GENERAL

This Addendum has been issued on behalf of the City of Savannah. The following information should be considered by prospective bidders in preparation of their bids and are hereby incorporated into the Bid Documents. Bidders shall be responsible for acknowledging receipt of this addendum in the Bid Form. Failure to do so will result in the bid being rejected by the Purchasing Director.

This addendum answers questions received by Tuesday, June 11, 2019. All questions received after that time will be addressed in a separate addendum that will be issued at a later date.

The bid dates are revised as follows:

Q & A Close:		12	:00 PM,	July	8 th
Event Close (bids due)	: 1	:30 PM,	July	16^{th}

PART I – CONTRACT DOCUMENTS

The Bid Documents shall be changed in the following respects:

Specifications:

Section 01 21 00 – Part 2- Schedule of Cash Allowance- Only 2.02, UV disinfection allowance includes state taxes. All other items add state taxes.

Substitution

Requested substitution to the Following specifications:

- a. Section 07 21 00 Thermal Insulation Add Demilec SPF Products as an approved manufacturer
- b. Section 44 11 20.18 Extruded Aluminum Cover Add Ultraflote as an approved manufacturer
- c. Section 40 29 50 Specialty Valves 2.10 Telescoping Valve Add RW Gate as an approved manufacturer

Questions:

1. Utility notes 9 and 15 on drawing G0.3 States all ductile iron pipe, valves, and fittings are to be polywrapped. Please provide a specification or products that are acceptable for the polywrap.

Response-

The poly-wrap shall be equal to Northtown Pipe Protection products or approved equal. The poly- wraps shall be 8 mil minimum, low density liner, with 3600 psi tensile strength. Spec Section 40 27 05.04-2.01 C States bolts for submerged service shall be made of Type 316 stainless steel in conformance with ASTM F593, marking F593F. Nuts for submerged service shall be made of copper-silicon alloy bronze conforming to ASTM B98, alloy C65100, designation H04 or alloy C65500. Is it acceptable to use 316 stainless steel nuts in lieu of that stated above?

Response- 316 S.S. is acceptable

3. Please provide at what location or which service each of the gaskets named in Spec. Section 40 27 05.04-2.03 must be used?

Response-

- A. EPDM: General purpose use
- B. Neoprene: for air piping up to temperature of 280 degrees F. and other General purpose use
- C. Nitrile: nitrile (Buna N). For use with all AWWA ductile iron pipe
- D. Compressed organic fiber gasketing- used in wastewater pump application
- E. Gylon gasketing. For use in chemicals line such as chlorine, caustics, and ammonia
- F. PTFE bonded EPDM: for use in plumbing application.

For more information refer to gasket manufacturer guideline.

4. The 24" force main bypass line that ties into the existing pump station shown on drawing G1.2, Please clarify if this line is D.I or C900 pipe?

Response:

The 24" line shall be D.I. The 90-degree bend shall be provided according to the City of Savannah specification 002554 Section 1.01.D – Ductile Iron Pipe – Exposed High Corrosion Applications. All piping provided in the existing pump station wet well shall meet this specification.

5. We plan on bidding the subject project on 7/02. I am concerned that subcontractor and vender participation will be limited due to the 4th of July holiday. Would the city consider extending the bid date to July 11th?

Response: See revised bid dates provided on page 1 of this addendum #2.

6. On drawings G1.2 and G1.3 just south of the headworks on the 24" influent force main there is shown what appears to be a 24" plug valve and manhole. This valve is not shown on drawing M2.0A. I don't believe this valve is included in the valve schedule on drawing G1.5. Please clarify if this valve is needed.

Response: This value and manhole is added per City's request. Please install the value and the manhole. Add this plug value to value schedule.

7. Spec. section 33 05 01.09 2.01 C states there is a pipe schedule included as a supplement to section 40 27 00. Please provide Spec. Section 40 27 00 and pipe schedule.

Response: Disregard this statement. There is no pipe schedule and Section 40 27 00. All pipes are labeled on the drawings.

8. Drawing G0.3 Note 20 states that the Contractor is to pay for the building permit. Other places within the Bid Documents states that the Owner will pay (handle) the building permit. Please confirm that the Contractor is not to include any costs for a building permit.

Response: The City will pay building permit

9. Section 00 0150 Bidder's Checklist requests an "Event Number". Please provide this number for inclusion in the Bidder's Checklist.

Response: Event #7169

10. There is a 15' wide gravel access road shown around the EQ basin at finish grade. The contractor, as is standard, will be required to construct an access road at top of slab elevation for the prestressed tank subcontractor for their use. It will not be at the elevation shown on the drawings. Was the intent to have a permanent 15' wide access road around perimeter of the tank at finish grade after backfill of the tank? (Is the intent for the Contractor to provide a final access road in addition to the one required for construction which will be at a lower elevation?)

Response: No 15' access road needed. However, please provide 5' wide area around the tank at finish grade to include 6" compacted dense graded aggregate base with geotextile underlayment similar to MIRAFI 500x.

11. Please confirm that prestressed concrete (PSC) piles shall be utilized for the 1.9-MG Equalization Tank such that the same pile type is utilized for both the Equalization tank and MBR structures.

Response: Yes, PSC shall be used throughout the entire project. However, the tank manufacturer is responsible for their own pile design (number of piles, depth & size) for the tank. Provide design calculation to Engineer for review and approval.

12. Specification 44 42 73, 3.10B, notes that there is no need for an exterior ladder to be installed on the Equalization tank. However, Drawing Sheet M3.1 depicts an exterior ladder with safety cage. Please confirm that an exterior ladder is required.

Response: Yes, please provide exterior ladder as shown on the plans

13. Specification 44 42 73 3.11A, notes either Thoroseal or Tnemec 156 shall be installed on the exterior of the Equalization tank. Please confirm that two coats of Tnemec 156 shall be required and Thoroseal will not be an acceptable exterior tank coating system

Response: There should be no paint to exterior of the EQ tank. However, the exterior of the tank shall be treated with water repellent similar to SONOSHIELD White ROC 10 VOC or approved equal.

14. Specification 099000, 3.11-I.1.a, requires the interior wall and base slab of the Equalization Tank be coated with Waterproof Coating System No. 19. Please confirm a waterproof coating system is required on the prestressed equalization tank with embedded galvanized diaphragm. Also, if the coating is required for purposes other than waterproofing, please confirm the coating should not also be applied to the underside of the dome.

Response: The interior of the EQ tank shall be coated with Raven 405 Coating system. The coating shall include underside of the dome all the way down to 3 ft. from tank floor. No need to coat base slab.

15. Can Tnemec 262 product be used in lieu of the required CIM 1000 for the interior Equalization Tank coating, as required in Specification 099000 3.11-1. A?

Response: See No. 14

16. Regarding Drawing sheet M3.1, please provide the current centerline elevations for the jet mixing pump 16" suction lines and 12" aeration header lines. In addition, we would like to request changing the centerline elevation of all the tank wall pipes to EL 15.00. This includes the two 12" jet mixing outlet wall pipes, the two 16" jet mixing suction wall pipes, and the 16" suction pipe to the Equalization pumps. This change would allow the tank manufacturer to apply prestressing more uniformly at the base of the tank and the manufacturer would not be required to add additional reinforcing steel due to a large un-banded area.

Response: The 12" header pipe center line shall be elevation 12.50', 2'-6" above tank floor. We have no objection to El. 15.00 for all pipes to entire the tank. However, this must be coordinated with the GC for any changes to piping configuration during bidding process.

17. Please confirm that flanged wall pipes can be used in lieu of link seals, as detailed on Drawing Sheet M3.1. There is a history of link seals becoming unseated within wall sleeves while tanks are loaded, due to long term exposure to thermal expansion and contraction. We would recommend utilizing wall pipes in lieu of link seals to eliminate this risk

Response: Flanged wall pipe is acceptable in lieu of link seal.

18. Regarding Drawing M3.3, detail 3, please confirm that the radius of the 30" inlet pipe can be changed to 50'-10½" in lieu of the 51'-10½" noted in order to keep the inlet pipe out of the interior raised tank perimeter footing

Response: okay to change the radius to 50'-10 $\frac{1}{2}$ "

19. Please advise us of all "general" and "project-specific" "costs to conduct business" associated with the work with (or inside the limits of) the City of Savannah, County (Chatham), State (Georgia), utility owners, and/or other governing authorities (GADOT, railroads, etc.) having interest in or authority over this project. Please include any costs associated with permanent, temporary, and/or demolition work associated with the project.

Response: As indicated in the specification, the city pays or waives any "City permit" fees as well as LDA/E&SC fees. No burning or blasting on this project. All other fees (if any) shall be coordinated with other agencies.

20. We are in receipt of Addendum 1 including the response with regard to project duration. We too feel the project schedule is not realistic. Furthermore, we feel the suggested schedule of 720 days to also be unrealistic. We do not currently have sufficient information, and nor have we had time to assess the overall schedule as things like demo duration, pile installation duration, concrete coatings, startup durations, etc. affect the durations. Nevertheless, we offer the following: a very similar project was completed in Richmond Hill with NO demolition upfront, NOT behind a Defense installation, less size, less complexity that took 23-24months (award in March 2014 and online ~April 2016). This reference project was a "green-field" and had lots of space. Furthermore, due to the addition of demolition on the critical path and complications associated with being on/behind a military installation, we think 26 months to construct Travis Field <u>prior to startup</u> is a reasonable schedule at a minimum if the intention is to single shift, 5 days per week and assuming lead times provided by major subcontractors and suppliers (see question #2 below) support this schedule.

Response: Construction time will be extended to 720 days (to substantial completion), and start-up to 120 days.

21. Please provide guaranteed, not-to-exceed submittal and fabrication and delivery timeframes for the vendors selected. Please ensure vendors know the time sensitivity of the project and any damages the City may impose (i.e. LD's or other) if times are exceeded in addition to Contractor's extended performance costs. Realize that even though these vendors may feel their times are far less than project duration, we often need finalized submittal data just to start structures. With recent economic conditions we are seeing manufacturers and suppliers miss submittal dates by months! A more realistic schedule will make this project more commercially acceptable to vendors and more economical to City.

Response: Construction time will be extended to 720 days (to substantial completion). Coordinate all delivery time with the vendors.

22. During the pre-bid it was mentioned that the contract time was prior to startup. Addendum 1 states an additional time of 90 days for startup. With the complexity of this project we doubt it can be started in 90 days. Can you point us to contract provisions/ specifications that define substantial completion, specifically the inclusion or exclusion of startup and commissioning? Who is responsible for startup? If it takes longer than 90 days do, we have to finish construction faster? Has the main process vendor (Kubota) guaranteed commissioning within 45 days (allowing the other item for upfront components and electrical commissioning)?

Response: Substantial completion is when the plant is functioning manually, and the effluent can be discharged at the facility outfall. Final completion is when plant operating automatically, and SCADA system controls all the components remotely, and plant effluent meets all NPDES permit requirements. Final completion must be reached prior to the end of the start-up period (maximum 840 days from notice to proceed to final completion).

- The contractor is responsible for start-up. please see specification Section 01 78 25 (Plant Testing, Start-up & commissioning)
- 23. If the schedule is not increased as requested, is the City and its agents prepared to bear the costs of extended work hours (~12+ hours per day), multiple shifts, and 7 day per week operations to meet the City's schedule. We are asking for time that will be required to keep costs and work schedule reasonable but if not given the time, the only way to meet that time is to increase work hours. This too will cost the City in additional labor, expediting, etc. in both Contractor costs as well as City direct expenses in inspections, special inspections, City staff, and potentially consultants.

Response: See #20

24. It appears some structures have piles that are installed where old timber piles are installed. How has this been Engineered? What will the procedure be? Again, with time being tight small issues become larger issues (i.e. time extensions with cost) as there is not time to solve these types of issues. These issues are known now and have been known since the footprint was established.

Response: see demolition plan drawing C2.0

25. Request Dutchland Inc. be added as an equal to bid the manufacture and installation of the rectangular tank for the Travis Field WRF

Response:

Precast, post-tensioned concrete products will not be considered as an "or-equal" to cast-in-place concrete at this time. These products may be considered for substitution post-bid if requested as such by the successful bidder (GC).

26. Section 33 32 21 Flow Diversion talks about the bypass of LS #40 but does not state what the Flow and Head requirements. M1.0 existing pump data note states the 3892GPM @ 64.3 TDH, is this the bypass requirements for station #40?

Response- 4,000 gpm at 65 ft TDH

Electrical

1- 1) E.01 note G14 calls to reference P&ID drawings for conduit, wire and connections to SCADA and instrumentation. I-1 thru I-17 and MBR-1 thru MBR-15 drawings do not show conduit and wire requirements. Please provide conduit and conductor schedule for I&C devices shown on I and MBR plans.

Response: The P&ID will be revised to include Conduits schedule by the next addendum

2- Are all I&C devices and control panel locations shown on mechanical drawings?

Response: The majority of I&C devices have been shown on mechanical and electrical drawings.

3- Where does power come into the site to power the existing pump station. Are there conflicts between what keeps this online and all the demolition, etc.

Response: Based on our site visit, the power to the pump station comes from a riser pole on the westside of the property and will not be affected if the rest of the plant is demolished. Coordinate with City & Georgia Power.

4- Transformers deep within the to-be-demolished plant were heard "humming" at site visit. Will/can the power to the site be shut off by the utility with the exclusion of the feed to the pump station that must remain in service.

Response: The existing abandoned plant can be de-energized without affecting the pump station operation. Please coordinate with the City and Georgia Power.

All other aspects of the project remain unchanged.

End of ADDENDUM NO.2