



Department of Purchasing & Contract Compliance

March 20, 2014

Re: **#14ITB91556K-DB**
Construction Services for the Big Creek WRF Immediate Needs
Rehabilitation Project S-134

Dear Vendors:

Attached is one (1) copy of Addendum 5, hereby made a part of the above referenced **#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134.**

Except as provided herein, all terms and conditions in the ITB referenced above remain unchanged and in full force and effect.

Sincerely,

Darlene A. Banks

Darlene A. Banks, APA

Winner 2000 - 2009 Achievement of Excellence in
Procurement Award • National Purchasing Institute



**#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate
Needs Rehabilitation Project S-134**

Addendum No. 5

Page 2

This Addendum forms a part of the contract documents and **modifies** the original ITB documents as noted below:

1. THE BID DATE AND TIME FOR THIS PROJECT IS CHANGED TO **Monday, March 31, 2014, @ 11:00 A.M.** No further questions will be taken, no further requests for equipment pre-approvals will be taken nor will any further reviews be provided.
2. ADDENDUM 4 IS DELETED AND REPLACED WITH ADDENDUM 5.
3. The plan holder's list is attached to this addendum.

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 3

RESPONSE TO QUESTIONS:

QUESTION:	1	Section 44 3119.2.4.A and B includes specifications for both FRP and HDPE vessels. HDPE (unreinforced plastic) is often used in very small odor control vessels (less than 4' diameter) are rarely used in 6' diameter vessels. To our knowledge HDPE has never been used for a 14' diameter odor control system. This is due to the fact that HDPE lacks the long term rigidity that is required for a vessel under air pressure. Additionally, HDPE will soften when it gets hot (Atlanta Summer) and will most likely deform. Based on the lack of experience with HDPE and the long-term concerns of HDPE in these service conditions we recommend that all radial flow carbon systems be fabricated of FRP. Thus we ask that Section 44 3119.2.4.B – HDPE VESSEL SPECIFICATIONS be deleted.
RESPONSE:	1	Section 2.4B will not be deleted
QUESTION:	2	Section 44 3119.2.4.B HDPE Vessel Specifications – this section does not reference many of the standards required in Section 2.4.A for FRP vessels. Additionally, the vessel specifications require a top flange rated for up to 10" differential pressure with design calculations. It is not clear whether this top flange is required for the HDPE vessel, or if this pressure differential is even possible with an unreinforced plastic HDPE tank.
RESPONSE:	2	The requirements stated in Paragraph 2.4 B apply to either FRP or HDPE supplied vessels.
QUESTION:	3	Section 44 3119.1.4.8 outlines specific experience requirements for the supply of the radial flow carbon odor control systems. Are these experience requirements going to be enforced? Experience is key for RADIAL flow odor control systems, which are much more difficult to manufacture and design for long-term life expectancy. Therefore, we ask that Fulton County require each manufacturer listed in Section 44 3119 to provide of experience this with their bid.
RESPONSE:	3	Paragraph 1.4 A.8 shall be modified as follows: revise the second sentence "At least five shall have been operating for over five years and at least three should meet the flow rate for equipment on this contract" to be "At least five shall have been operating for over five years and at least three shall have a flow rate of 10,000 cfm or greater."
QUESTION:	4	ECS was the basis of design for Section 44 3119. Some named manufacturers do not have the experience (see question #3 above) or will attempt to provide a lower quality HDPE tank. Therefore, we ask that the Bid Form be modified to list ECS as a Base Bid manufacturer. Other manufacturers wanting to be listed as a Base Bid supplier can be added provided they 1) meet the experience requirement for manufacturing radial flow systems of this size, and 2) are providing FRP vessels per the specifications. Please modify the Bid Form accordingly.
RESPONSE:	4	Bid form will not be modified. "Lower quality" HDPE is not acceptable and must meet the requirements for HDLPE tanks as specified.
QUESTION:	5	Section 43 3064 1.3.A.1 requires "manufacturer to have a minimum of five years of experience of producing substantially similar equipment and shall be able to show evidence of at least five installations in satisfactory operation for at least five years." a. Will the County enforce this qualification? b. Will the County consider asking for these references prior to the bid to confirm a named manufacturer can meet this requirement? c. Will installations outside the United States be acceptable? d. Will the County consider limiting the reference list to installations inside the US so proper references can be contacted?
RESPONSE:	5	a. yes b. References of named manufacturers were reviewed during design. c. Section 43 3064 does not specify experience location. d. No.

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 4

QUESTION:	6	Per Section 43 3064 1.4.B.2.a and 2.6.A1 to 4 requires shop tests on each gate prior to shipping and that shop tests are requires as part of the submittal. Please note that shop tests cannot be performed until after fabrication so cannot be included as part of the submittal. a. Will certified shop tests still be required prior to shipment? b. Will the County allow a manufacturer to refrain from performing and submitting these tests?
RESPONSE:	6	Certified shop tests shall be submitted as supplemental information to the approved submittal that releases fabrication. a. Yes b. no
QUESTION:	7	Section 43 3064 1.6.A requires the manufacturer to provide a warranty "for a period of two (2) years from the date of Substantial Completion." The Ashbrook composite weir gates come with a standard 10-year warranty and we feel that any manufacturer that is not willing to provide a 10-year warranty is not confident in the quality, trouble-free operation and longevity of their product. a. Will the County modify this to require a 10-year, non-prorated warranty from the date of startup? b. Will the County consider requiring a bond for manufacturers with limited experience or no office located with the United States? Without a bond the 10-year warranty may not be enforceable and cost Fulton County money over the long term.
RESPONSE:	7	a. Specification warranty language is not specific to one manufacturer and represents the minimum required warranty. Manufacturers shall supply their standard warranty if greater than what is specified. b. No
QUESTION:	8	Section 43 3064 2.3.B states that "FRP, GRP, plastic coated steel or externally reinforced gate body shall not be acceptable." This is due to the fact that these materials cannot withstand the operating forces over time, and may require additional maintenance and replacement costs borne by Fulton County. - Will the County enforce this requirement?
RESPONSE:	8	Yes
QUESTION:	9	1. Drawing - D-09.01- D-09.04 Pipe length between polymer injection and screw press inlet varies between 32 ft and 118 ft Retention time at 95GPM and 6" line varies between 28 seconds and 106 seconds The minimum retention time is required be 40 seconds for optimal flocculation: the piping in the pump gallery needs to be adjusted (see drawing: D-09.04) o Pump on left side shall feed screw press DSP-01, currently DSP-04 o Pump next to above one: feed DSP-03 (currently connected to DSP-02) o Third pump from left: use for future DSP-05 o Fourth from left: use for future DSP-06 o The two pumps currently shown as future pumps shall be used for DSP-02, and DSP-04 (pump on right)
RESPONSE:	9	Answer: See revised sheets D-09.02, D-09.03 and D-09.04. The Contractor will be responsible to coordinate with screw press manufacturer to ensure that the pipe configuration meets the screw press manufacturer requirements.
QUESTION:	10	Drawing D-09.03, note 9: Huber takes exception to the type of proposed injection ring as it is reducing the pipe cross section
RESPONSE:	10	Answer: Secondary injection ring to be eliminated from the Scope of Work. Delete Notes 8 and 9 from the sheet.
QUESTION:	11	D-09.03, note 4: Huber is providing injection and mixing valve for all screw presses (not just for two).
RESPONSE:	11	Answer: Note is for injection ring at the discharge of the cake pump and not for sludge feed to screw presses.

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 5

QUESTION:	12	Drawing - D-09.01- D-09.04 - Pipe design at pump outlet is not optimal: Huber suggests - 4" outlet of pump - Four inch line to plug valve - 4" line to Huber's injection and mixing device for polymer - Increase pipe diameter to 6" right after mixing valve - Eliminate check valve (item 6 in D-09.03); check valves are creating a lot of turbulence which affects the flocculation negatively - Pipe between polymer injection and screw press inlet shall not contain any items which reduce the cross section of the 6" pipe (see INYO injection ring, note above) - Full port plug valves are acceptable; eliminate all valves which are not providing full port opening for 6" pipe
RESPONSE:	12	Answer: Pipe is actually shown as 4-inches from the pump outlet to the check valve downstream of the mixing valve. Equipment callout Nos. 4, 5 and 6 on sheet D-09.04 to be changed to read 4-inches in diameter. Relocate mixing valve downstream of plug valve and eliminate current check valve. All plug valves to be full port type.
QUESTION:	13	Drawing D-09.03 – There is no need for 5" reducer at screw press: screw press will be delivered with 6" flange connection
RESPONSE:	13	See revised drawings attached to this addendum
QUESTION:	14	Drawing D-09.03 - INYO injection ring might be moved to suction side of pump – utilizing pump as additional mixing (OPTIONAL)
RESPONSE:	14	Answer: Injection ring eliminated from the Contract.
QUESTION:	15	Drawing D-09.05 - Polymer system: provide flow meter for indication of GPM for diluted polymer to injection ring; sludge flow meter is located after polymer injection ring and therefore the signal from this flow meter is a combination of sludge flow and dilution water for the polymer. ATTENTION four additional flow meters 1 1/2" are needed as specified on page 17 but the flow meters are not shown on any of the drawings received.
RESPONSE:	15	Answer: Agreed. Flowmeters to be provided.
QUESTION:	16	Specification 467627, page2 paragraph 2.6 - It seems there is a 8" utility water supply line feeding the wash system of each screw press; written specification 467627, page2 lists four (4) booster pumps which are specified in paragraph 2.6 (additional two pumps are required with future screw presses). The location of the booster pumps is not shown on any of the drawings. The wash water pressure needs to be minimum 70 PSI and provide 68 GPM without any drop in pressure.
RESPONSE:	16	Answer: Screw press manufacturer to coordinate with Owner and Engineer in the field the final location of the booster pumps.
QUESTION:	17	Drawing D-09.07, section 2- The utility water supply seems to be also connected to each of the four (total 6) polymer systems, the booster pump station BP-07 and BP-08, drawing D-09.07, section 2 But is not identified on drawing D-09.05.
RESPONSE:	17	Answer: The booster pump station is shown on sheet D-09.07 on the west wall of the polymer room, just south of polymer skid 55-PB-01.
QUESTION:	18	Specification 467627 page 12 paragraph 2.9, B - Polymer system specification - 2.9 B: solution ranging from 0.1 to 0.5% in lieu of 0.1 to 1% - 2.9 B: delete "with active contents up to 75%." - D, c Neat polymer capacity provided: 5 GPH
RESPONSE:	18	Answer: Change polymer solution concentration to 0.1 to 0.5%. Active content of up to 75% will not be deleted. This value is from the current polymer solution used at the Big Creek WRF. Neat polymer flow to range from 3 to 5 gph.
QUESTION:	19	Specification 467627 page 18 paragraph 3.1, E – Clarify this is only for one basket/auger, not all 4.
RESPONSE:	19	See response in addendum 2

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 6

QUESTION:	20	Section 43 2623 Stainless Steel Slide Gates Gates tagged as 22-IG-01 thru 22-IG-16 are shown in the gate schedule to have 4.5 feet of Unseating Head Pressure; however, the distance from "Floor Elevation" to "Gate Invert Elevation" is 19.0 feet. Please verify head pressure. .
RESPONSE:	20	Additional response to this question is as follow: Unseating head pressure relates to the WSE in the influent channel as compared with the invert of the gate in the closed (up) position.
QUESTION:	21	Section 43 2623 Stainless Steel Slide Gates Gates tagged as 22-FF-01 thru 22-FF-08 are shown in the gate schedule as with "FF" in the tag number; however, on plan drawing D-03.01 show the tag numbers as FG. Please verify tag numbers.
RESPONSE:	21	Answer: Specification 43 3063 table shall be revised to indicate the tag numbers labeled 22-FF-01 thru 22-FF-08 to be 22-FG-01 thru 22-FG-08.
QUESTION:	22	Section 43 2623 Stainless Steel Slide Gates Gates tagged as 22-IBG-01 thru 22-IBG-12 are shown in the gate schedule as 66x72; however, on plan drawing D-03.02 they are shown as 72x72. Please verify size of gates.
RESPONSE:	22	Answer: Specification 43 3063 table shall be revised to indicate 22-IBG-01 thru 22-IBG-12 as 6 ft. x 6 ft. dimension to match what is shown on the Drawings.
QUESTION:	23	Section 43 2623 Stainless Steel Slide Gates Gates tagged as 22-IBG-01 thru 22-IBG-12 are shown in the gate schedule to have 19.0 feet of Unseating Head Pressure; however, the distance from "Floor Elevation" to "Gate Invert Elevation" is 4.5 feet. Please verify head pressure.
RESPONSE:	23	Answer: Unseating head pressure relates to the WSE in the basin as compared with the invert of the gate in the closed position.
QUESTION:	24	Drawing S-04.01 Section A shows the surface repair for the clarifier launder trough. The elevations for the top of the wall and slab are noted as 895.00 and 892.50 respectively. Based on the given elevations, the height should be 2'-6", but when we scale the distance we get approximately 5'-6". Can you clarify the height of the clarifier launder wall?.
RESPONSE:	24	Answer: Elevation 892.50 was taken from available plant record drawings. The Contractor is responsible to field verify this and all elevations.
QUESTION:	25	Can you provide details for the connection of the bridge crane steel to the floor and also for connection to the precast shown on drawing S 09.03?.
RESPONSE:	25	Answer: Bridge crane supplier to design connection with pre-cast and floor.
QUESTION:	26	Section 41 22 13 Bridge Cranes, 2.3 Hoist Technical Data specifies a quantity of two (2) each 2-ton hoists per crane so there will be a total of 4 hoists in the Dewatering Building. Drawing S-09.03 calls for two (2) each "2-4 Ton Bridge Crane". The "2-4" appears to refer to a capacity range for these cranes. Can you clarify the quantity and capacity of the bridge cranes in the Dewatering Building?
RESPONSE:	26	Answer: There will be two 4- ton bridge cranes in the dewatering building. Each bridge crane has two 2-ton hoists. The "2-4 Ton Bridge Crane" is not a capacity range of 2 to 4 ton.
QUESTION:	27	Please find below questions in regards to Spec Section 41 1213 – Screw Conveyors: Conveyor lengths: a. The spec (page 5) says the conveyors are each 30' long but the drawings scale to 26' and 29' long (reference dwg D-09.01). b. Please advise the lengths we are to quote for each conveyor. c. We will quote 26' and 29' lengths unless advised otherwise.
RESPONSE:	27	a. Final conveyor length must be field verified and coordinated with the screw press and cake pump manufacturer. b. Use the length in the specification, 30 feet. c. See response above. Final conveyer length to be coordinated with screw press and cake pump manufacturer in the field.

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 7

QUESTION:	28	Please find below questions in regards to Spec Section 41 1213 – Screw Conveyors: 2.3.B.6: - The spec calls for T-316 shaft & T-316 flights. This is very costly and rarely specified since typically abrasion resistance is the most common governing design concern (over corrosion resistance). - We recommend abrasion resistant high strength alloy steel flights with a min 220 Brinell with a steel shaft. We can provide either stainless steel or steel, but recommend the AR alloy steel..
RESPONSE:	28	Please provide materials as specified.
QUESTION:	29	Please find below questions in regards to Spec Section 41 1213 – Screw Conveyors: 2.5 Instru & Controls: Conflict in spec - 2.5.B.2 and 4 state the panel is to offer a forward/reverse controls, but the conveyors are not reversing per 2.1.D chart, and per drive system spec. • Are the conveyors to be reversing? 2.5.B.1 states provide a LCP for each conveyor, then 2.5.B.2 states also provide a local control station for each conveyor: •• Are we reading this correctly that the conveyor manufacturer is to provide a total of two (2) NEMA 4X local control station panels (i.e. they are LCP Local Control Panels - one for each conveyor). •• Where are these two local control stations located on the drawings?
RESPONSE:	29	•The conveyors are not reversing. ••There is no local control panel. The H-O-A is located in the VFD.
QUESTION:	30	Please find below questions in regards to Spec Section 41 1213 – Screw Conveyors: 1.6 Maintenance: • Two motion sensors (zero speeds) for spares are specified. Is this intentional? • We recommend one motion sensor and one emergency stop switch.
RESPONSE:	30	yes. We accept this recommendation and will accept one motion Sensor and One Emergency Push-Button.
QUESTION:	31	Please clarify specification section 40 0523; Paragraph 2.3 and 2.4. This describes 2 very different styles of air valves for the same service. Paragraph 2.3 describes the Vent-O-Mat RGX which carries a 10 year warranty and is all stainless while paragraph 2.4 describes conventional cast iron air valves that carry a 1 year warranty. As you might guess, including paragraph 2.4 effectively negates paragraph 2.3 as the conventional cast iron valves are less costly to the contractor but more costly to maintain. If the owner wants the benefit of the more cost effective Vent-O-Mat stainless steel air valve with 10 year warranty then paragraph 2.4 should be deleted.
RESPONSE:	31	Answer: Section 2.3 describes the air release/vacuum valves required for the RAS pumps and 2.4 describes the air release valves (not vacuum) for the dewatering building.
QUESTION:	32	Drawing D-03.02 shows inter-basin sluice gates as 72"x72", but the gate schedule under Section 43 30 63 shows 66"x72" size for these gates (22-IBG-01 thru 12). Please clarify which size should be used.
RESPONSE:	32	Answer: Specification 43 3063 table shall be revised to indicate 22-IBG-01 thru 22-IBG-12 as 6 ft. x 6 ft. dimension to match what is shown on the Drawings.
QUESTION:	33	Do all of the gates require floor stands as depicted on Detail 1/D-03.05?
RESPONSE:	33	Answer: No. All gates are motor actuated per Specification 43 3063 and 43 3064. The gates shown on detail 1/D-03.05 shall be in accordance with Specification 43 3063 Part 2.1 A.7.
QUESTION:	34	Can you provide more details for the aeration basin grid layout?
RESPONSE:	34	Answer: Specific details for the diffuser layout should be provided by the diffuser manufacturer. The layout shown on the drawings represent general arrangement for one of the named manufacturers in Specification 46 5131.
QUESTION:	35	Drawing S-00.02, Detail states that the new platform framing and handrails is "by others" and refers to Note 1 on S-09.02. Note 1 on S-09.02 doesn't indicate this is to be provided by others and says the platforms shall be designed by a registered engineer. Please clarify who provides these platforms and railing.

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 8

RESPONSE:	35	Answer: Platforms are part of the scope of the work and need to be provided by the Contractor. Delete the phrase "by others".
QUESTION:	36	Drawing D-05.01. Should the valves identified as 1, 4, 7 & 10 actually be 6" to match the size of the pipe in those lines?
RESPONSE:	36	Answer: Valves 1, 4, 7 and 10 on Drawing D-05.01 shall be 6 inch Plug Valves
QUESTION:	37	Addendum #1 Changes to Volume 3: Construction Drawings Item 1 directs the Contractor to tap into an unknown size water line. Initially this line was sized as 4". Now the Contractor is to determine the size of the existing line. Please review and advise what is the existing line size in to which we are tapping or provide an assumed size for this line so all bidders may price the same work.
RESPONSE:	37	The existing line size has not been verified, but the as-built drawings indicate a 6 inch line. Assume 6 inch line will be tapped but tapping sleeve will need to be as required.
QUESTION:	38	Addendum #1 Changes to Volume 3: Construction Drawings Item 2 requires the Contractor to temporarily relocate equipment and re-install after the roof membrane is installed. Please provide a list of the equipment to be relocated & re-installed
RESPONSE:	38	Review the Drawings for general equipment locations. Exact equipment will be determined at time of work.
QUESTION:	39	Does this equipment need to remain in service while it is relocated during the re-roofing of the Admin Building?
RESPONSE:	39	Yes, or temporary systems may be provided. Also, review 011416 and division 23
QUESTION:	40	What is the approximate percent of solids of the process waste to be removed from the Aeration Basins and Secondary Clarifiers?
RESPONSE:	40	Answer: Percent solids is unknown and may be variable.
QUESTION:	41	What is the approximate percent of solids of the process waste to be removed from the Digesters?
RESPONSE:	41	Answer: WAS percent solids feed from the digesters to the dewatering units is estimated to range from 1.5% to 2.5%, although process waste % solids can exceed or be lower than this range.
QUESTION:	42	Drawing D-06.01. Plug Valve Schedules on this sheet seem to be incomplete when compared to the number shown on the drawings. Please confirm.
RESPONSE:	42	Answer: Sludge Thickening Building #1 will have plug valves 51-PV-01 through 51-PV-05. Sludge Thickening Building #2 will have plug valves 51-PV-06 through 51-PV-10. Also shown on the plan view for D-06-01 and D-06-02 show 2 plug valves 53-PV-04 and 53-PV-05 and are for the sludge discharge line from the Sludge Receiving Station
QUESTION:	43	Drawings D-06.01 & 2. The same line on both drawings has been labeled as SL, RAS, and WAS. Please provide the correct label for this pipe.
RESPONSE:	43	Answer: Pipe Label should be WAS
QUESTION:	44	Drawing D-00.01. The pipe schedule does not have a "Fluid Abbreviation" for "SL". As some of the pipe is labeled as such, please provide information on "SL" lines.
RESPONSE:	44	Answer: SL is the piping abbreviation for Sludge, which matches the information in the pipe schedule for Digested Sludge (DSL).
QUESTION:	45	Drawing D-09.02. Drain discharge lines 5, 6, 7, and 8 from the screw presses are labeled as "DR-DIP" lines. According to the pipe schedule on D-00.01, "DR" lines are to be PVC if equal to or less than 4 inches and "N/A" 6" and over. Please confirm that they are supposed to DIP and not PVC.
RESPONSE:	45	Answer: Drain lines to be PVC.
QUESTION:	46	Drawing D-09.02. Sludge Feed Piping from the screw press is show as 5" DIP. 5" is not a size made in DIP. Is this supposed to be 6"?
RESPONSE:	46	Answer: Yes, the DIP piping should be 6".

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 9

QUESTION:	47	General Conditions 00 0700-3 Definitions (Page 7-3) Contract Time is defined as the term of this Agreement and shall be for a period of 900 consecutive calendar days. Work is to commence within 10 days of the Notice to Proceed. Substantial Completion is within 700 calendar days of NTP and Final Completion is within 730 calendar days of NTP. Please explain what the 170 calendar days between the term of the Agreement and Final Completion represent. Of particular importance is this a period of time during which the Contractor must provide a bond? This would require additional cost due to the period being greater than 2 years.
RESPONSE:	47	The time between Final Completion and the Contract Term is an Owner-directed time allowance to permit authorized extensions to the final and substantial completion milestones, as approved by the construction project manager. It is the County's intention for the Contractor to achieve the Final Completion date, if this date is achieved the contract will be terminated prior to the final contract time. Bonding requirements will be per the bid documents.
QUESTION:	48	Does this project require a Building Permit to be obtained by the Contractor? What is the rate for this permit, if so required?
RESPONSE:	48	Refer to page 1 of 000010 "Invitation To Bid" for Contractor's responsibility in obtaining permits. Building and trade permits would be obtained from the City of Roswell.
QUESTION:	49	Is the Contractor required to comply and not work at the site on any Fulton County Holiday that does not coincide with its own holiday schedule?
RESPONSE:	49	Refer to 000700-21 "HOURS OF OPERATION"
QUESTION:	50	Section 0800 requires the submission with the Bid of Exhibits B, C, & D for Subcontractors that we propose to utilize on the project. As we will not know until nearly last minute which subcontractors will potentially be utilized we request that these Exhibits be required to be filed post-bid (within 24 – 72 hours) in order to avoid confusion and inclusion of incorrect forms. This will allow the Contractor to concentrate on obtaining the best price for the County on this project and not divert resources to culling out papers that do not need to be submitted.
RESPONSE:	50	No, all subcontractors need to be submitted at time of bid. The prime Contractor should know what subcontractors are needed for this project and has had time to get a team together.
QUESTION:	51	Layne Heavy civil requests that the County consider moving the Bid submission date from Monday to either Tuesday or Wednesday in order to allow vendors time to submit their scopes and documents and provide the Contractor time to review said documents and ensure they are compliant with the Specifications. A Monday morning bid requires these documents to be submitted the previous week and vendors may think they can submit over the weekend. This would not allow the Contractor sufficient time to adequately and thoroughly review the documents.
RESPONSE:	51	Bid Due Date has been changed per this addendum.
QUESTION:	52	Drawing S-04.01 Note 1 states to clean the existing clarifier concrete and apply an epoxy repair mortar. Does this occur at the effluent troughs prior to the placement of the protective coating? Does this occur at the concrete slab prior to the epoxy coating? Does this occur on the side walls above the 1' line? Is the placement of the epoxy repair mortar to be paid under Bid Item 4 Concrete Repair? Is this work to be included as part of the Lump Sum Bid Item A.3? If this work is to be included as part of the Lump Sum Item then the Owner needs to provide either an Allowance (preferable) or at least a unit price item with specified quantity as the Contractor is unable to quantify this work and accurately price based on available information.

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 10

RESPONSE:	52	<p>1. Answer: Note on Drawing S-04.01 applies to all concrete to be coated</p> <p>2. Answer: Per Note 4, epoxy coating is applied on the bottom slab and 1'-0" up the side walls. No epoxy is applied above the 1'-0" line.</p> <p>3. These would be covered under the Lump Sum item. Allowance Item B4 "does not cover repairs specifically called out elsewhere in the contract" the concrete repair and coating called out on S-04.01 would not be paid for out of the allowance item.</p> <p>4. Dimensions, description of extent of coverage are provided. No additional allowance or lump sum item should be necessary. Effluent troughs were visible during both site visits.</p>
QUESTION:	53	<p>Specification 46 4141 Top Entering Tank Mixers 1.1.A.3 states to coordinate design and installation of this equipment with the work in Section 43 4113 Bolted Steel Tanks. Specification 46 4141.1.1.A.3.a states to provide information to the FRP tank manufacturer. Should this not be to the Bolted Steel Tank Manufacturer?</p>
RESPONSE:	53	<p>Answer: Specification 46 4141.1.1.A.3 should quote "Bolted Steel Tank Manufacturer" instead of "FRP".</p>
QUESTION:	54	<p>Specification 46 4141 does not name any manufacturer for this mixer. Please provide at least one acceptable manufacturer for this equipment so it can be coordinated with the Bolted Steel Tank manufacturer.</p>
RESPONSE:	54	<p>Answer: Acceptable Manufacturers:</p> <ol style="list-style-type: none">1. Lightnin.2. Engineer approved equal.
QUESTION:	55	<p>Is there a temporary power source at the site or must the Contractor provide its own drop from the local power provider? Who is the local power provider for this location?</p>
RESPONSE:	55	<p>There is no temporary power source at the site. The power provider is Georgia Power.</p>
QUESTION:	56	<p>Specification 01 1416 1.4.B Liquid Treatment Sequence of Work Stage 1 says to remove 2 existing RAS pumps and remove from room. Do these pumps get re-installed if we do not have the new RAS pumps to install?</p>
RESPONSE:	56	<p>Answer: Specification 01 1416 1.4.B allows the Contractor to use the existing RAS pumps and make the piping/valve modifications to accommodate the new RAS pump configuration prior to installation of the new RAS pumps. If the existing RAS pumps are to be used temporarily, the Contractor shall use temporary connections to the new piping arrangement – removal and reinstallation of the existing RAS pumps would not be necessary in this scenario. The existing RAS pumps shall remain in place until the new pumps are delivered.</p> <p>In general, it is advised that Contractor has new equipment, materials, and all necessary items ready to install prior to any shutdown or the removal of equipment.</p>
QUESTION:	57	<p>Specification 01 1416 1.4 Solids Treatment Sequence of Work Stage II Item 1 says to install a 20" equalization pipe and tie into existing 10" sludge feed pipe to dewatering building. Where is this pipe shown in the drawings? We are unable to find any detail.</p>
RESPONSE:	57	<p>Answer: Specification 01 1416 1.4 Solids Treatment Sequence of Work Stage II Item 1 should quote "install a 10" equalization pipe and tie into existing 10" sludge feed pipe".</p>
QUESTION:	58	<p>What material is in the odor control system tanks @ the Cobb-Willeo pump station?</p>
RESPONSE:	58	<p>Answer: Existing material of the Cobb-Willeo Pump Station odor control system appears to be FRP.</p>
QUESTION:	59	<p>Specification section 41 1213.36 shafted screw conveyors calls out a field operation test of 14 days to be conducted by contractor & equipment manufacturer field service representative. In addition the specifications call out four visits (unloading & installation instruction, assistance in installing equipment, checking equipment installation, and O&M training). Page 13 calls out "5. Manufacturer's representative shall make a minimum of 2 visits". There appear to be 5 visits required, with one of them being a 14 day requirement, is this correct.</p>

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 11

RESPONSE:	59	Correct, 3.2.B calls out four separate visits with a minimum of 8 hours each visit. 3.2.A calls out a 14 day field operating test - number of trips and duration shall be of sufficient quantity for manufacturer and contractor to meet the requirement.
QUESTION:	60	Is field vibration testing required for all pumps?
RESPONSE:	60	Field vibration testing will be required per the individual equipment specification, and as required to meet section 432000. For a minimum, vibration testing will be required for equipment greater than or equal to 25 HP unless stated differently in the Contract Documents.
QUESTION:	61	Are the pump tests for the sludge cake pumps to be witnessed?
RESPONSE:	61	Field tests are to be witnessed
QUESTION:	62	Specification section 43 2136.01 calls out a sludge cake pump with a 6", 300# raised face discharge, drawing D-09.03 calls out an 8" x 4" concentric reducer to connect to the pump discharge. Should the reducer be 8" x 6"? In the discharge piping, where is the transition from 250# flanges to 150# flanges to occur?
RESPONSE:	62	Answer: Reducer to be 8 x 6". Provide the transition piece between the reducer and the pump discharge flange.
QUESTION:	63	Does the sludge cake pump control panel control the polymer pumps specified in that same section?
RESPONSE:	63	Yes
QUESTION:	64	Specification section 43 2136.02, rotary lobe pumps states "The contractor shall furnish all power, water, facilities, labor, materials, supplies and test instruments required to conduct field test." Will the Contractor be allowed to use existing utilities & facilities?
RESPONSE:	64	Yes, except that existing utilities and facilities may be used for field testing installed pumps.
QUESTION:	65	Specification section 43 2149 vertical, centrifugal, non-clog pumps, page 9 calls out 2 days of manufacturers services any time within six months of the date of startup. Page 10 calls out 3 more days for installation check, start-up, & training. Can all of the RAS pumps be taken out of service at one time, if not will additional manufacturer services be required for installation check & start-up services?
RESPONSE:	65	Answer: See Specification 01 1416 Coordination with Owners Operations for details on shut down of existing systems. RAS pumping system shut down is limited to 4 hours. The manufacturer's field services noted in Specification Section 43 2149 are minimum field services. Additional manufacturer services will depend on Contractor's coordination with RAS pump replacement. Regardless of sequence of installation and startup, Contractor is not relieved of the requirement to have each pump checked and started up per commissioning and start up requirements.
QUESTION:	66	Bid item C on the bid form is for "the sum of items A and B and shall be the total base bid amount. " Should this item be the total of Base bid amount, item a subtotal, and item B subtotal?
RESPONSE:	66	See item number 2 in "CHANGES TO VOLUME 1: BIDDING INFORMATION"
QUESTION:	67	Please provide approved manufacturers for specification section 46 4141 top entering tank mixers. This section references specification section 43 4113 bolted steel tank (polymer storage); this tank is 9' 2" diameter & 11' 2" deep. The mixer specification lists the shaft length as 182". Should the shaft length be changed to match the depth of the tank? A plan view of the tank is shown on plan sheet D-09.05 with the "slurry mixer vertical mount approximately 1'6" from the tank wall. The mixer is specified with 55" diameter impellers, should the opening in the tank be moved to the center of the tank?
RESPONSE:	67	Answer: Mixer manufacturer to be Lightnin Mixers or approved equal. Mixer dimensions to match the dimensions of the tank as recommended by the Mixer manufacturer. Tank opening final location to be coordinated with mixer manufacturer.
QUESTION:	68	Plan sheet S-03.06, detail 1 calls out "remove deteriorated concrete, form and replace with repair mortar". Where does this detail apply to?
RESPONSE:	68	Refer to Mixed Liquor Splitter Box Plan on same sheet for callouts
QUESTION:	69	Plan sheet X-04.01 calls out cleaning pipe line into & out of the secondary clarifiers. Is the required cleaning flushing the pipe lines with water, or is pigging required? If pigging is required are there any valves in line that will not pass a pig?

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 12

RESPONSE:	69	Contractor may choose most efficient method as required to meet the requirement. Contractor shall field verify valves, fitting, and pipes and may consult Volume 4 Reference Documents for additional information.
QUESTION:	70	Plan sheet X-04.01 calls out "Contractor shall clean clarifier drain piping (typ all clarifiers)." What is the limit of this cleaning, to the valve 10' outside the wall?
RESPONSE:	70	The drain piping is to be cleaned to the point of connection with the 16 inch drain at the aeration basins.
QUESTION:	71	Plan sheet X-04.02 calls out "demolish epoxy coating from clarifier floor & tank wall". Please provide information on what type of epoxy we are to remove.
RESPONSE:	71	Answer: The design intent is for the Contractor to prepare the surface of the clarifier floor and existing coating such that the new epoxy coating can be applied per manufacturer's recommendations. Contractor shall adhere to the requirements of Specification Section 09 9911 Protective Coatings paragraph 2.10 C for exterior immersed concrete. Any phosphate-containing cleaners used to prepare the existing surface as part of SSPC-SP 13/NACE6 specifications shall be disposed of off-site and shall not be permitted to discharge into the plant drain system.
QUESTION:	72	In a typical clarifier 2" of grout is placed on top of the structural slab with the clarifier mechanism. Is the existing 2" of grout required to be removed and then reinstalled with the new clarifier mechanisms?
RESPONSE:	72	No modifications of the existing grout are anticipated.
QUESTION:	73	Plan sheet D-09.04 & plan sheet DI-0901 call out & show the sludge feed discharge piping. Plan sheet D-09.04 shows what appear to be an injection ring & a valve. Plan sheet DI-09.01 shows this same line & calls out an injection ring & a blending valve. Plan sheet D-09.03 calls out an injection ring check valve assembly and a 6" plug valve. Specification section 46 7627, page 12, states polymer mixing valves shall be supplied by the screw press manufacturer. Are the two items shown on plan sheet D-09.04 an injection ring & a blending valve, and are these being supplied by the screw press manufacturer?
RESPONSE:	73	Answer: Yes, the Screw Press manufacturer must provide the polymer injection and blending valve.
QUESTION:	74	The cake pumps are specified to have 250# raised face discharge flanges, plan sheet D-09.01 calls out "cake pumping ductile iron piping is pressure class 250". Are the cake discharge piping & valves to be provided with 250# flanges?
RESPONSE:	74	Answer: Provide standard fittings with standard drilling patterns per AWWA C110 and C153. Delete Note 1 on sheet D-09.01. Cake discharge piping to meet the requirement of AWWA C150 and C151. The pipe pressure rating must be 350 psi. The fittings must be rated for 350 psi. Provide manufacturer recommended gaskets (Toruseal by American or Ring Flange TYTE by US Pipe) for a pressure rating of 350 psi.
QUESTION:	75	Plan sheet D-09.05 calls out a 4" pvc drain line from the polymer loading pad. Plan sheet C-00.05 calls out this same line as 6". Please clarify.
RESPONSE:	75	Drain lines are to be 6 inches
QUESTION:	76	Plan sheet D-09.05 references a floor drain on 2/C-00.05. I am unable to locate a detail of a floor drain on that sheet, please clarify.
RESPONSE:	76	Answer: Replace callout for detail 2/C-00.05 on sheet D-09.05 with a callout to detail 3/C-00.09.
QUESTION:	77	Note 9 on plan sheet D-09.05 calls out a 4" flushing connection on polymer piping. The polymer discharge piping is 1-1/2" should the flushing connection be 1-1/2"?
RESPONSE:	77	Yes. Flushing connections to be 1-1/2" PVC wye with ball valve and hose connections.
QUESTION:	78	Note 2 on plan sheet D-09.04 calls out tapped bosses for flushing connection at all critical locations. Please define critical locations, what size is the tapped boss and what goes in the tapped boss.
RESPONSE:	78	Each boss shall be tapped for and have a 2 inch ball valve installed. Locations to be on the 90 deg bends between grinder and sludge feed pumps and on blind flange on 10" sludge feed line downstream of pumps.
QUESTION:	79	Plan sheet D-09.02 calls out the filtrate discharge piping to be ductile iron pipe. Plan sheet D-09.03 appears to call out this same line as PVC, please clarify.
RESPONSE:	79	Answer: Drain pipe to be PVC. Replace all drain DIP references on this sheet with PVC pipe.
QUESTION:	80	Plan sheet D-09.02 calls out the 4" utility water from the 8x4 tee to be dip. A little ways up the page the 4" utility line is called out as PVC, please clarify.

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 13

RESPONSE:	80	Answer: Utility water pipe to be PVC. Replace all "UW" DIP references on this sheet with PVC pipe.
QUESTION:	81	Specification section 01 1416 requires the contractor to provide a temporary polymer system during the demo phase in the sludge dewatering building. Will the owner be providing the polymer, and if not how much polymer is the contractor to provide?
RESPONSE:	81	refer to 01-1416 1.3.B.8 and See the included chemical information. The chemical usage provided may or may not reflect actual usage requirements during time of work.
QUESTION:	82	While the lime storage tank is out of service who is to provide lime? If the contractor is to provide lime, how much should he include in his bid?
RESPONSE:	82	Refer to 01-1416 1.3.B.8 and See the included chemical information. The chemical usage provided may or may not reflect actual usage requirements during time of work.
QUESTION:	83	Specification section 01 1416, page 6, calls out draining the RAS header in order to install new ras discharge piping. Where should the contractor plan on pumping the RAS to?
RESPONSE:	83	Answer: Contractor shall assume to pump drained RAS from the header to the aeration basin influent RAS Parshall flume. Contractor shall coordinate and confirm with Owner during construction for pumping location.
QUESTION:	84	Plan sheet D-03.04 & X-03.03 show removing 12" & 8" ras piping, and replacing with 12" s.s. pipe & fittings. The lower end of this piping connects into a 24" s.s. pipe line with an 8" flange. Is the contractor to cut into the 24" s.s. line, remove the 8" outlet, and weld in a new 12" outlet?
RESPONSE:	84	Answer: Yes. Connection to the 24" header shall be 12".
QUESTION:	85	Plan sheet D-03.04 calls out installing a 24" plug valve in the 24" RAS header located on each side of the of the aeration basin gallery. This work and the work described in the above item will require the RAS pump station to be shut down while this work is progressing. How long can the RAS flow be shut down? If the allowable shut down period is shorter than the time required to complete the work where should the contractor plan on pumping RAS from the clarifiers to?
RESPONSE:	85	Answer: See Specification Section 01 1416 for maximum duration without RAS. If Work cannot be completed within that time period, Contractor shall assume to pump drained RAS from the header to the aeration basin influent RAS Parshall flume. Contractor shall coordinate and confirm with Owner during construction for pumping location.
QUESTION:	86	On plan sheet D-03.04, 12" s.s. ras piping is shown. A 12" plug valve is shown in this line; does this valve have an electric actuator? What is on top of the 12" plug valve, 12" s.s. flanged piping, 12" s.s. flange x plain end pipe & a flange coupling adaptor or something else?
RESPONSE:	86	Answer: 12" PV are electrically actuated as noted on Drawing E-03.03. Please note that Drawing E-03.03 shall be clarified such that the electrically actuated "AFV" valves represent the 8" butterfly valves ("BFV") as shown on D-03.04. The element on top of the 12" PV is a 12" flow meter as noted on the Drawing D-03.04. Valves and flow meters are flanged. Contractor shall coordinate lay-lengths and flange connections with spool pieces and fittings requirements.
QUESTION:	87	Drawing X-10.07 Keyed Note 1 says that the storm collar is to be removed with asbestos remediation performed by others. a. Please confirm whether this work is by others? b. If this work is in this contract, will the asbestos remediation work be paid for by the unit price allowances?
RESPONSE:	87	A. This work is included in the scope of this contract. B. yes
QUESTION:	88	Section 00 0700 General Conditions, Item 21 Hours of Operation (starting on Page 10) states that the Contractor is responsible for costs of inspector overtime if the Contractor works extended hours. Please advise on the overtime rate of the resident inspector.
RESPONSE:	88	\$30.00 per hour

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 14

QUESTION:	89	Section 01 1416 page 5 of 16 states that contractor will provide all chemicals and pay for all chemical costs for temporary systems. Please advise on the average polymer usage in the sludge dewatering building along with polymer type.
RESPONSE:	89	See the included chemical information. The chemical usage provided may or may not reflect actual usage requirements during time of work.
QUESTION:	90	Section 46 7627 Sludge Dewatering Screw Press, Paragraph 3.2A requires the Contractor to guarantee the screw press performance and also provide a Letter of Credit to secure the guarantee. a. Can this requirement be revised to place responsibility of the guarantee with the screw press Manufacturer? b. Please advise whether a Surety Bond be acceptable in lieu of a Letter of Credit?
RESPONSE:	90	a. No b. No
QUESTION:	91	Drawing S-03.06 shows details for removing and replacing the concrete columns at the existing slide gates. Can you clarify whether all eight (8) columns are required to be replaced?
RESPONSE:	91	Answer: All concrete columns and concrete surfaces were not observed, contractor shall inspect all existing concrete and make necessary repairs. Sections and details on S-03.06 show how to make repairs when concrete reinforcing is exposed and deteriorated.
QUESTION:	92	Drawing S-04.01, Note 1 says to apply an epoxy repair mortar and Section A indicates that this is required throughout the entire effluent channel of each clarifier. a. Is this repair mortar covered by the Chip & Patch Bid Item B4? b. Can you specify the thickness of the repair mortar application? c. Can you specify the material for the repair mortar?
RESPONSE:	92	a. No b. The thickness will be per the manufacturer's instructions to provide sufficient cover over the exposed aggregate. The repair mortar will be also applied and finished to accept the epoxy coating. C. Answer: See Section 03 0190 "Concrete Repairs" for recommended suppliers. Repair mortar will be compatible with epoxy coating.
QUESTION:	93	Drawing S-11.03, Note 2 says to apply an epoxy repair mortar to the slab of the existing Lime Feed Building. a. Is this repair mortar covered by the Chip & Patch Bid Item B4? b. Can you specify the thickness of the repair mortar application? c. Can you specify the material for the repair mortar?
RESPONSE:	93	a. No b. The thickness will be per the manufacturer's instructions. c. Answer: See Section 03 0190 "Concrete Repairs" for recommended suppliers.
QUESTION:	94	Drawing A-10.01 Roof Plan Notes 1 and 5 refer to unit prices for roofing repairs and modifications but the current bid form does not include unit price items for this work. Please clarify. If unit prices won't be utilized, please provide quantities or consider adding an allowance amount to cover the cost of this work.
RESPONSE:	94	see item 2 in Changes in volume one: Bidding Information
QUESTION:	95	Section 00 0020 Sample Contract specifies the "Agreement Period" as 900 days, Substantial/Final Completion as 700/730 Days, and liquidated damage amount is \$500/Day. Based on our current estimate for schedule, the 900 days is more realistic considering lead times on major equipment and sequencing requirements for maintaining existing plant operations. a. Please clarify the Substantial and Final Completion durations? b. Why would "Final Completion" and "Agreement Period" durations not be the same? c. Which milestone does the \$500/day damage amount apply to (substantial or final)?
RESPONSE:	95	a. See 00700-3 b. Time between "Final Completion" and "Agreement Period" (Term of Contract) is an Owner-Directed Time allowance. C. It applies to both Final Completion and Substantial Completion

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 15

QUESTION:	96	Please see the questions below from WesTech, our clarifier manufacturer quoting on Section 46 4321. 1) Drawing D-04.03 shows what appears to be an EDI. None of the other drawings or the specifications indicate an EDI. Given that these are secondary clarifiers we would recommend that EDI's be added and required by all manufacturers. 2) If EDI's are added we ask that Fulton County add Dual Gates with the impinged flows to the EDI for the best results. 3) Please confirm that the clarifier control panels are to be supplied by the electrical subcontractor and not the clarifier manufacturer.
RESPONSE:	96	1. See Addendum #3, Question #23 2. See Addendum #3, Question #23 3. "The Contractor shall coordinate with the clarifier manufacturer for the supply of local control panels. Specification Section 46 4321 indicates overload devices, alarms and local control as part of the scope of equipment components of the clarifier system."
QUESTION:	97	Section 01 1416 page 5 of 16 states that contractor will provide all chemicals and pay for all chemical costs for temporary systems. a. Please advise what the average usage rate is for lime. b. Please advise how the chemical usage varies by season.
RESPONSE:	97	See the included chemical information. The chemical usage provided may or may not reflect actual usage requirements during time of work.
QUESTION:	98	Section 02 41 10, page 14, indicates that only (2) two Gravity Belt Thickeners are to be removed from the Sludge Thickening Buildings, but Drawing X-06.01 notes that there are (2) two per building for a total of (4) four to be removed. Please clarify.
RESPONSE:	98	A total of 4 gravity belt thickeners are to be removed (two GBTs per building)
QUESTION:	99	Please clarify the number of Existing Belt Filter Presses to be removed. Section 02 41 10, page 14 calls for (6) six. Drawing X-09.01 calls out (4) four, but shows (3) three.
RESPONSE:	99	All existing belt filter presses are to be removed for a total of four.
QUESTION:	100	Please clarify the number of Existing Belt Filter Press pumps to be removed. Section 02 41 10, page 14 calls for (6) six and Drawing X-09.01 shows (4) four.
RESPONSE:	100	All existing belt filter press pumps are to be removed for a total of four.
QUESTION:	101	What type of covering is intended for the walkway and platform on the clarifiers? It is unclear whether aluminum grating or diamond checkered floor plate is required.
RESPONSE:	101	Response: Grating as noted in Specification Section 46 4321 1.2.B.7
QUESTION:	102	I have a question in regards to the info provided in spec sections 43 2136.02 Rotary Lobe Pumps and 46 2423 Inline Grinders along with the info on the P&ID labeled DI-07.01. Note 1 on DI-07.01 states that a single control panel is to be provided for both the grinder and the rotary lobe pump at the sludge receiving station. Meanwhile, the panels for these items are labeled differently. Since these pieces of equipment are supplied under separate spec sections by different suppliers, who is responsible for this control panel? In order to eliminate any coordination issues between unrelated manufacturers, could this panel be required to be provided by the control systems integrator?
RESPONSE:	102	Answer: Both equipment to be controlled from a common Local Control Panel that is to be supplied by the system integrator.
QUESTION:	103	Spec Section 01 5000 page 6 of 8 (3.2 G) Temp Facilities and Control. There is no complex provided for the engineer or owner, however various section in this spec section references sanitary facilities, telephone services, electric power. If this is required please provide sqft area, number of offices, number of bathrooms that the contractor must maintain for the engineer or owner during duration of project.
RESPONSE:	103	Owner will use Owner's existing facilities onsite. Engineer will not be onsite full time.
QUESTION:	104	Spec Section 01 3350 1.2 G.1, Add#1 Are portable computers kept by engineer and owner at completion of the project?

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 16

RESPONSE:	104	Portable computers will be retained by the Owner at the end of the project. Licenses for project DTCS software installed on the portable computers will be retained by the Owner.
QUESTION:	105	Spec Section 00 0700 GC page 7 of 21. Section – 65 Please respond if payroll reports are required for this project due to the fact there is no owner furnished insurance provided for this project.
RESPONSE:	105	00-0700-65 would be required if applicable.
QUESTION:	106	Spec Section 00 0700 GC page 7 of 24. Section - 83 Commencement of Warranties. States “Warranties required by this agreement shall commence on the date of final completion of the project as determined under Article 00 07000-84 unless otherwise provided in the certificate of Substantial Completion”. This project will have multiple areas that require milestone date for completion. Whereupon, equipment will be place into service. Please confirm when these dates are achieved and equipment is put into service and the warranty will commence. Otherwise this will place a hardship on vendors supplying the equipment for warranties for over multiple years.
RESPONSE:	106	Equipment which have been installed, tested, accepted, and placed into service according to the Contract Documents, but prior to Substantial Completion will have warranties start on day of acceptance. All deliverables associated with a piece of equipment, e.g. O & M data, spare parts, etc., shall be provided at acceptance.
QUESTION:	107	Spec Section 01 3350 1.2.A DTCS System Please confirm number of licenses required for each software group.
RESPONSE:	107	see 01 -3350,1.2.E
QUESTION:	108	Spec Section 01 3350 1.2.A DTCS System Does the contractor have to provide an independent third party to create and maintain the two web sites and project software – this could be an issue if owner or engineer need technical assistance. Contractor requests an allowance be provided to eliminate this problem.
RESPONSE:	108	An allowance will not be provided
QUESTION:	109	Spec Section 00 0700 page 7-3 Contract Time and sample contract (page -1). It appears the owner can elect to extend the contract to 900 days from the stipulated 730 day final completion. Will the contractor be allowed to request extended overhead cost for this add or does the contractor have to provide that cost in the bid.
RESPONSE:	109	It is the County's intention for the Contractor to achieve the Final Completion date. If a time extension is agreed upon, the extension will be per the Terms and Conditions of the Contract.
QUESTION:	110	Spec Section Bid Form page 2 of 3 A.1 & A.2. Bid form states “contractor is required to dewater the waste prior to hauling”. Please confirm this means only to pump off free water remaining from the truck/tank after vacuuming due to heavy solids and rags present in the tanks that will make it impossible to dewater.
RESPONSE:	110	It is not understood what the extent of “pump off free water” is. The Owner has no desire to pay to haul or dispose of liquids; all liquids which can be removed from the waste by draining, pumping, or other methods will be discharged at an owner-designated point onsite. The contractor is responsible for the disposal cost of this material, reference bid item numbers A.1 and A.2, as such, the County will not pay the disposal cost of this material in excess of the unit prices listed on the bid form.
QUESTION:	111	Spec Section 00 0900 – Special Conditions. There is no sheet 9-9 in our spec book. Also, after the last page there are multiple pages with P.E. confirmation – please respond this is not required to be submitted with section 09 0900.
RESPONSE:	111	See Addendum #2 for revised section 00-0900 Special Conditions. Revised 00-0900 starts on page 8 of 31 in the addendum and continues until page 18 of 31 in the addendum - the "Project Superintendent's Experience" sheet 9-11, the "Project Manager's Experience" sheet 9-10, and the "Company Project Experience" sheet 9-9 are pages 16, 17, and 18 of the addenda, respectively. All information requested in 00-0900 - Special Conditions is required.

CHANGES TO VOLUME 1: BIDDING INFORMATION

1. IN SECTION 00 0100 INSTRUCTION TO BIDDERS:

DELETE: ITEM 26 TERM OF CONTRACT

“The term of this Agreement shall be for a period of 900 consecutive calendar days.. The Contractor shall commence the Work with adequate force and equipment within ten (10) days from receipt of Notice to Proceed from the County, and shall substantially complete the work within 700 days from the Notice to Proceed and finally complete the Work within 730 days from Notice to Proceed, unless the Construction Manager, in writing, approves alternate dates for substantial and final completion that do not exceed 900 calendar days. Any adjustment in the Contract Time that exceeds 900 calendar days must be by approved Change Order authorized by the Fulton County Board of Commissioners pursuant to Fulton County Code Section 102-420.”

REPLACE WITH: ITEM 26 TERM OF CONTRACT

“The term of this Agreement shall be for a period of 1,122 consecutive calendar days from the Notice to Proceed. The Contractor shall commence the Work with adequate force and equipment within ten (10) days from receipt of Notice to Proceed from the County, and shall substantially complete the work within 922 consecutive calendar days from the Notice to Proceed and finally complete the Work within 952 consecutive calendar days from Notice to Proceed, unless the Construction Manager, in writing, approves alternate dates for substantial and final completion that do not exceed 1,122 consecutive calendar days from Notice to Proceed. Any adjustment in the Contract Time that exceeds 1,122 calendar days must be by approved Change Order authorized by the Fulton County Board of Commissioners pursuant to Fulton County Code Section 102-420.”

- 2. Delete Summary of Lump Sum Prices and Base Bid Form pages 2-3, 2-4, 2-5 in Section 00-0200 and replace with the attached Summary of Lump Sum Prices and Base Bid Form pages 2-3, 2-4, 2-5.**

CHANGES TO VOLUME 2: TECHNICAL SPECIFICATIONS

1. Revise Section “Vertical, Centrifugal, Non-Clog Pumps” 43-2149 as follows:

REVISE Item 2.1 PUMP CRITERIA as follows:

- A. Provide complete pumping units designed to comply with the following pump criteria and Preferred Operating Range:**
1. Total Number of Pumps..... 6
 2. Number of Pumps Running at Firm Capacity⁴
 - a. Two pumps running on each suction side of the discharge header.
 3. Minimum Shut-off Head..... 47.3 feet
 4. Design Point Condition (Single pump condition with four pumps running)
 - a. Design Flow Rate 5,208 gpm
 - b. Design Pump Head..... 33.1 feet
 - c. Minimum Pump Efficiency..... 71 percent
 5. Maximum Flow Condition (Single pump running)
 - a. Maximum Flow Rate at Maximum Speed..... 9,505 gpm

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 18

- b. Pump Head at Maximum Speed 21.0 feet
- c. Minimum Pump Efficiency..... 75 percent
- d. Net Pressure Suction Head Required 31 feet
- 6. Maximum Pump Speed 900 rpm
- 7. Approximate Minimum Pump Speed 500 rpm
- 8. Maximum Motor Horsepower..... 75 horsepower
- 9. Approximate Impeller Diameter 16.75 Inches
- 10. Maximum Operation Boundary (Single pump running)
 - a. Point No. 1.....0 gpm at 3.5 feet
 - b. Point No. 2..... 1,000 gpm at 3.7 feet
 - c. Point No. 3.....2,000 gpm at 4.2 feet
 - d. Point No. 4.....3,000 gpm at 5.1 feet
 - e. Point No. 5.....4,000 gpm at 6.4 feet
 - f. Point No. 6.....5,000 gpm at 8.0 feet
 - g. Point No. 7.....6,000 gpm at 9.9 feet
 - h. Point No. 8.....7,000 gpm at 12.1 feet
 - i. Point No. 9.....8,000 gpm at 14.7 feet
 - j. Point No. 10.....9,000 gpm at 17.6 feet
 - k. Point No. 11..... 10,000 gpm at 20.8 feet
 - l. Point No. 12..... 11,000 gpm at 24.4 feet
 - m. Point No. 13..... 12,000 gpm at 28.3 feet

REVISE Item 2.3, D, 1 as follows: **ADD** the following sentence to the end of the paragraph, "Taper roller line and thrust bearings are also acceptable."

REVISE Item 2.3, F as follows:

F. Pump Shaft:

1. The pump shaft shall be constructed of high grade carbon steel having a tapered impeller extension and accurately machined. The shaft's diameter shall be sufficiently large enough to transmit safely the maximum torque developed by the drive unit and of such a design as to provide a rigid support for the impeller and to prevent excessive vibration. The pump shaft shall be protected from wear by a stainless steel shaft sleeve. An O-ring type gasket or continuous Loctite seal must be provided between the impeller hub and the shaft sleeve to prevent pumped liquid from corroding the shaft. The shaft sleeve shall be held in a place by a key. Maximum shaft deflection at the shaft sleeve shall not exceed requirements of the mechanical seal.
2. Vertical flexible coupled pumps shall be furnished with a steel fabricated motor support which is to be bolted to the pump frame or backhead. The motor support must be machined with a register fit to insure proper alignment of motor and pump shaft. The pump to motor coupling shall be sized to handle the radial and axial loads transmitted by the pump.
3. The motor fabricated steel support shall be strengthened for use with variable frequency drives.

REVISE Item 2.3, H as follows:

H. Wear Rings:

1. A wear ring system shall be incorporated into the pump design to provide efficient sealing between the volute and suction inlet of the impeller. Each pump shall be equipped with a bronze or stainless steel ring insert that is drive fitted to the volute inlet.

**#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate
Needs Rehabilitation Project S-134**

Addendum No. 5

Page 19

2. This pump shall also have a stainless steel impeller wear fitted onto the suction inlet of the impeller.

REVISE 2.3 C.L item 3 to read: "Two complete sets of split mechanical seals."

2. Revise Section "Flexible Membrane Tube Diffusers " 46-5135 as follows:

Revise Item 2.2 C.2 as follows:

Min. SOTE = 34.7%

CHANGES TO VOLUME 3: CONSTRUCTION DRAWINGS

1. Delete the following drawings: D-09.02, D-09.03, D-09.04 and replace with the attached revised drawings: D-09.02, D-09.03, D-09.04.
2. Drawing D-04.02: Callout that states "Existing 36" DIP RAS Effluent" shall be revised to state "Existing 36" DIP Settled Effluent"
3. Drawing D-05.01: Add a note 9 that states the following: "Existing seal water system not shown for clarity. Contractor shall field verify seal water piping configuration and connect to existing for new RAS pumps. See also Specification 43 2149."
4. Drawing S-00.02, Section 10- Delete the phrase "by others".

#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134

Addendum No. 5

Page 21

GENERAL ITEMS

1. The chemical usage listed here represents past consumption. Actual consumption during construction may or may not be as represented here. Actual consumption depends on flow and treatment requirements.

	Ferric Chloride (38%)		Polymer - Polydyne C6266		Lime - Hical Quick Lime	
	Monthly Avg gal/per day	Daily Max gal/per day	Monthly Avg gal/per day	Daily Max. gal/per day	Monthly Avg. ton/per day	Daily Max. ton/per day
January 2013	140 gal	1500gal	59gal	300gal	3 Ton	3 Ton
February 2013	93gal	1500gal	66gal	300gal	3 Ton	3 Ton
March 2013	104gal	1500gal	60gal	300gal	3 Ton	3 Ton
April 2013	121gal	1500gal	75gal	300gal	3 Ton	3 Ton
May 2013	123gal	1500gal	72gal	300gal	3 Ton	3 Ton
June 2013	112gal	1500gal	78gal	300gal	3 Ton	3 Ton
July 2013	137gal	1500gal	79gal	300gal	3 Ton	3 Ton
August 2013	265gal	1500gal	109gal	300gal	3 Ton	3 Ton
September 2013	408gal	1500gal	116gal	300gal	3 Ton	3 Ton
October 2013	143gal	1500gal	61gal	300gal	3 Ton	3 Ton
November 2013	124gal	1500gal	61gal	300gal	3 Ton	3 Ton
December 2013	51gal	1500gal	43gal	300gal	3 Ton	3 Ton

2. Contractor shall heat trace and insulate all exposed outdoor piping, fittings, and valves to prevent freezing. Heat trace tape shall be constant wattage; self-regulating rated at 8 watts per foot. Heat tracing and insulation shall maintain piping at a minimum temperature of 40 deg-F during an ambient temperature of 0 deg-F. Heat tape shall be powered by 120 VAC single phase circuits. Heat tape shall be Equal to Rapid Trace as manufactured by Chloromax or Approved Equal. Provide heat tracing panel, required junction box, conduits, cables, 120 volt circuit breaker at the nearest panel, and end of tape lights.

Heat trace and insulation shall be provided including but not limited to the following exposed outdoor piping, fittings, and valves:

- Lime Feed Piping
- Ferric Feed Piping
- Mixed Liquor Polymer Feed Piping
- Clarifier Scum Flush Piping and Valves

**#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate
Needs Rehabilitation Project S-134**

Addendum No. 5

Page 22

ACKNOWLEDGEMENT OF ADDENDUM NO. 5

The undersigned bidder acknowledges receipt of this addendum by returning one (1) copy of this form with the proposal package to the Department of Purchasing & Contract Compliance, Fulton County Public Safety Building, 130 Peachtree Street, Suite 1168, Atlanta, Georgia 30303 by the ITB due date and time **Monday, March 31, 2014, @ 11:00 A.M.**

This is to acknowledge receipt of Addendum No. 5, _____ day of _____, 20__.

Legal Name of Bidder

Signature of Authorized Representative

Title