Krebs Engineering, Inc.
2100 River Haven Drive
Suite 100
Birmingham, AL 35244
205-987-7411
May 10, 2022

ADDENDUM NO. 2

CONTRACT NO.: 20065
OWNER: CITY OF LaGRANGE
PROJECT: LONG CANE CREEK POLLUTION CONTROL PLANT IMPROVEMENTS
BID DATE: MAY 18, 2022
TO: ALL PROSPECTIVE BIDDERS

The changes, modifications, and/or additions covered by and outlined in this Addendum No. 2 shall become part of and be incorporated in the Specifications, Contract Documents, and Bid Documents for the above-referenced project:

CONTRACT CLARIFICATIONS TO BE PROVIDED BY ADDENDUM:

AD2.1 **SPECIFICATION 44 42 13 – AERATION EQUIPMENT**

1. Reference Specification Section 44 42 13 – Aeration Equipment, 2.4.C.3.b. The control panel should be designed to house the future components of either alternate, if Alternate 1 or Alternate 3 are chosen but not both. If either Alternate 1 or Alternate 3 is selected (but not both), the intent is the panel will have the components for control/monitoring of the selected alternate and will have the ability to house the components of the unselected alternate in the future.

2. Reference Specification Section 44 42 13 – Aeration Equipment, 2.5.A.1 & 2. If Alternate 1 is selected, the aerator supplier will supply the instruments for the Pre-Aeration Basin (Alternate 1), regardless of if Alternate 3 is selected.

AD2.2 **SHEET C3-02 – AERATION BASIN IMPROVEMENTS UPPER PLAN**

1. Reference Sheet C3-02 – Aeration Basin Improvements Upper Plan. The existing D.O. probes shown will be removed as part of this project. All removed equipment shall be made available to the Owner in good condition.

AD2.3 All communication with aerators and instruments shall be by hardwired I/O signals as designed. Ethernet will not be an acceptable substitute.

SPECIFICATIONS TO BE REPLACED BY ADDENDUM:

AD2.4 **SECTION 011000 – SUMMARY**

1. Replace Specification Section 011000 – Summary in its entirety with the attached.

SPECIFICATIONS TO BE REVISED BY ADDENDUM:

AD2.5 **SECTION 444213 – AERATION EQUIPMENT**

1. Specification Section 44 42 13 – Aeration Equipment, 1.2.B.3, Remove and replace with the following:

    3. Certified oxygen and horsepower data from a minimum of two (2) separate installations demonstrating the mechanical aerators are capable of providing 3.6 lbs O2 per HP-hr based on motor output power at standard transfer conditions. Data shall be provided for full scale aeration basin testing. The tests shall be of the Clean Water Oxygen Transfer type in accordance with ASCE-2.06, current standard, which requires third party testing. Aeration equipment manufacture shall submit results from previous third party testing of similar size and application. Clean Water Oxygen Transfer testing will not be required to be performed on this project after installation and start up of equipment.

2. Specification Section 44 42 13 – Aeration Equipment, 2.3.B.2, Remove and replace with the following:

    2. Oxygen Transfer: Each aerator shall be capable of developing no less than 3.6 lb. O2/HP-hr based on the motor output power at standard transfer conditions. (Tap water, 20 degrees C, atmospheric pressure, zero dissolved oxygen DO, α=1, β=1).

Krebs Engineering, Inc.

By_____
Scott T. Lee, P.E.
Sr. Associate

THIS IS THE LAST PAGE

Attachments to Addendum No. 2 preceding this page:

1. Specification Section 011000 – Summary

A total of 9 pages or sheets of drawings (including this page) have been included in Addendum No. 2. General Contractors are requested to return this page as an acknowledgement that you have received this Addendum by e-mail. This will NOT be mailed. A copy of this Addendum may be picked up at the office of the Engineer.

Return acknowledgement to Krebs Engineering, Inc. by email to Shelly Fritz – Shelly.Fritz@krebseng.com

Received By_____

Contractor_____

Date_____

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 PROJECT INFORMATION

A. Project Name: Long Cane Creek Pollution Control Plant Improvements
1514 Old Hutchinson Mill Road
LaGrange, GA 30240

B. Owner Information:
City of LaGrange
200 Ridley Avenue, LaGrange, GA 30240

C. Owner Contact:
Jason Clifton
JClifton@lagrangega.org
200 Ridley Avenue, LaGrange, GA 30240

D. Engineer Information
Krebs Engineering, Inc.
Jacob Maynard
Jacob.Maynard@krebseng.com
2100 River Haven Drive, Suite 100, Birmingham, AL 35244
205.987.7411

E. Sub consultant Information.

1. Jackson, Renfro & Associates, Inc.(Electrical)
Phil Black
Phil@JRAee.com
141 Village St Suite #1
Birmingham, AL 35242
205.995.1078

2. Grant Engineering, LLC. (Structural)
Terry W. Grant, P.E., S.E.
terry@grantengineering.net
432 Herron Street
Montgomery, AL 36104
334.265.4631

3. W.D. Gray and Associates, Inc.(Surveying)
Matt Langley, PLS
wdjmattl@numail.org
160 Greencastle Road, Suite B

Tyrone, GA 30290
770.486.7552

1.2 DESCRIPTION OF WORK INCLUDED IN THIS CONTRACT

A. The work includes modifications and improvements to the existing wastewater treatment plant to include yard piping, hydraulic splitter box modifications, secondary clarifier modifications, aerobic digestion basin improvements, thickener reconditioning, and miscellaneous electrical and SCADA improvements. In addition to the base bid work, three alternate bid items are included with the Contract and consist of improvements to an existing pre-aeration basin mixing systems and baffles, aeration basin equipment replacement, new septage receiving station, and associated instrumentation, electrical, and SCADA work. The requirements of this Section and Division 1 apply to all of the Contract Documents.

1.3 PHASING AND SEQUENCE OF CONSTRUCTION

A. The Wastewater Treatment Plant shall be maintained in operation for the duration of the project. It is anticipated that this will require substantial coordination between the Contractor and Owner as work proceeds in each area of the plant. The responsibility of temporary facilities and any other coordination/sequencing items shall remain solely that of the Contractor. The Contractor should not proceed with isolating any portion of the Wastewater Plant without prior written permission from the Owner. The Contractor is made aware the operation of the wastewater treatment plant in compliance with all regulatory requirements is the priority of the facility, and as such, work schedules may be altered at any time to accommodate the operation of the wastewater treatment plant. Consideration for additional compensation due to work stoppage or changes in schedule due to the required operation of the wastewater treatment plant, at the sole discretion of the Owner, shall not be considered.

1. Milestone Dates

a. The installation of the Owner provided weir gates and electrical actuators (two weir gates and two electric actuators) at the RAS/WAS Wet Well shall be complete and in operation no later than 60 days from issuance of the Notice to Proceed. The Owner will provide the proposed equipment in accordance with the Bill of Material included in Appendix C of the Contract Documents (Milestone Date Does Not Include the Installation of the Two Slide Gates in the Secondary Clarifier No. 1 and No. 2 Splitter Box; The Slide Gates Will Be Provided by the Owner, but the Contractor May Install at a Time Which Best Meets the Construction Schedule). The installation will not include the electric actuators for the two weir gates. The actuators will not be available until later in the project. The Owner has made provisions for the weir gates to operate in manual mode.

1.4 EXISTING FACILITY REQUIREMENTS

A. The following wastewater treatment facility operational requirements:

a. Pre-Aeration Basins:

1) A scheduled shutdown or by-pass pumping is required for the work associated with the installation of the new RAS pipeline in the Pre-Aeration Basin influent channel. The Pre-Aeration Basin influent channel can be isolated for a maximum of six (6) consecutive hours without bypass pumping. It may be necessary to schedule multiple shutdowns to complete the work. If additional shutdowns are required, the Owner will require at least four (4) consecutive days to allow the Plant to recover from the shutdown and to plan for a subsequent shutdown.

2) The Pre-Aeration Basins can remain out of service during the time required for the mixer and baffle wall installation.

3) A scheduled shutdown and/or bypass pumping is required to cut, cap, brace, and abandon the existing 18-inch RAS pipeline for Clarifier Nos. 1 and 2 and to place the new RAS pipeline in operation. The Pre-Aeration Basin effluent channel/splitter box can be isolated for a maximum of eight (8) hours without bypass pumping. It may be necessary to schedule multiple shutdowns to complete the work. If additional shutdowns are required, the Owner will require at least four (4) consecutive days to allow the Plant to recover from the shutdown and to plan for a subsequent shutdown.

4) The Owner reserves the right to shorten the duration of the above shutdowns/isolations and/or to require additional days between shutdowns if required by high influent flows or other circumstances/events occurring at such time. The Contractor shall be prepared to perform minimal bypass pumping if the existing gates, valves, or other facilities required for isolation do not fully stop the flow.

b. Aeration Basins: Shall remain in service at all times unless a scheduled shutdown is approved.

1) A scheduled shutdown and/or by-pass pumping is required to make the 42-inch Aeration Basin effluent tie-in. The Aeration Basin effluent pipeline can be isolated for a maximum of eight (8) hours. It may be necessary to schedule multiple shutdowns to complete the work. If additional shutdowns are required, the Owner will require at least four (4) consecutive days to allow the Plant to recover from the shutdown and to plan for a subsequent shutdown.

2) The Owner reserves the right to shorten the duration of the above shutdown and/or to require additional days between shutdowns if required by high influent flows or other circumstances/events occurring at such time. The Contractor shall be prepared to perform minimal to moderate bypass pumping if the existing gates, valves, or other facilities required for isolation do not fully stop the flow.

c. Secondary Clarifier Nos. 1 & 2 Splitter Box: Shall remain in service at all times unless a scheduled shutdown is approved.

1) A scheduled shutdown and/or by-pass pumping is required to install the Clarifier Nos. 1 and 2 RAS weir gates in the RAS/WAS wet well (included in the 60-day milestone). The RAS/WAS wet well can be isolated for a maximum of eight (8) hours. It may be necessary to schedule multiple shutdowns to complete the work. If additional shutdowns are required, the Owner will require at least four (4) consecutive days to allow the Plant to recover from the shutdown and to plan for a subsequent shutdown.

2) A scheduled shutdown and/or by-pass pumping is required to install the Clarifier Nos. 1 and 2 slide gates and weir gates. It is anticipated this work will be performed after the 42-inch Aeration Basin effluent tie-in is made and after the Contractor stops flow to Clarifier Nos. 1 and 2 Splitter Box by directing flow to Clarifier Nos. 3-5 Splitter Box. If flow has been redirected as described above and Secondary Clarifier Nos. 3-5 are in operation, the Secondary Clarifier Nos. 1 and 2 Splitter Box can be isolated for an extended period of time. If the flow cannot be redirected to Clarifier Nos. 3-5, the Secondary Clarifier Nos. 1 and 2 Splitter Box can be isolated for a maximum of eight (8) hours. The Contractor is responsible for providing plug(s) and/or temporary bulkheads to prevent the flow from entering the Secondary Clarifier Nos. 1 and 2 Splitter Box. It may be necessary to schedule multiple shutdowns to complete the work. If additional shutdowns are required, the Owner will require at least four (4) consecutive days to allow the Plant to recover from the shutdown and to plan for a subsequent shutdown.

3) The Owner reserves the right to shorten the duration of the above shutdowns and/or to require additional days between shutdowns if required by high influent flows or other circumstances/events occurring at such time. The Contractor shall be prepared to perform minimal to moderate bypass pumping if the existing gates, valves, or other facilities required for isolation do not fully stop the flow.

d. Secondary Clarifiers: Only one (1) secondary clarifier may be removed from service at a time.

e. Thickeners: At least one pre and one post thickener shall be operational at all times.

f. Aerobic Digesters: Can remain out of service for the installation of the surface aerators and mixers.

g. Solids Holding Basins: At least one Solids Holding Basin shall remain in service at all times.

h. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:

1. ***Notify Engineer not less than 72 hours in advance of proposed utility interruptions.***

2. ***Obtain Owner's written permission before proceeding with utility interruptions.***

1.2 ACCESS TO SITE

A. The Contractor shall have full use of the site unless otherwise stated in the Contract Documents. The Contractor shall limit work activities to areas within the limits of disturbance shown on the Drawings, and shall not disturb areas of the site that are beyond the Limits of Disturbance.

B. The Contractor shall maintain Owner use and access to buildings, driveways and other facilities at all times, unless specific exceptions are included in the Contract Documents.

C. The Contractor shall be solely responsible for protecting all existing and adjacent facilities from construction activities at all times, and shall be responsible for any repairing any damage that results from construction of the Work.

1.3 COORDINATION WITH THE OWNER

A. Full Owner Occupancy: Owner will occupy site and buildings during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

B. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.

1. Engineer may prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner acceptance of the completed Work.
2. Obtain a Certificate of Occupancy from authorities having jurisdiction before limited Owner occupancy.
3. Before limited Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed.

On occupancy, Owner will operate mechanical and electrical systems serving occupied portions of Work.

D. Shutdowns shall be approved by the Owner and include a submittal by the Contractor identifying the following:
   1. Duration of shutdown
   2. Impact on facilities; which systems to be shutdown.
   3. Intended work to be performed.
   4. Contingency plans to bring the facility back to operation even if the work is incomplete.
   5. Any details deemed necessary by the Owner to confirm Plant operation.
   6. It may be necessary to schedule multiple shutdowns to complete the work.

E. Shutdowns shall be scheduled no less than 72 hours from the Owner approving the shutdown plan.

1.4 WORK HOURS AND OTHER RESTRICTIONS

A. The facility is a 24 hour, seven day a week facility. No restrictions on work times unless it interrupts plant operation.

B. The Contractor shall take all necessary precautions/measures to limit noise, dust, odors and other disruptive impacts to the Owner and/or neighboring properties.

C. Holiday Hours: No regular work activities by the Contractor shall occur on Holidays observed by the Owner. The following is a list of the Holidays.

   1. Martin Luther King Day
   2. Memorial Day
   3. Independence Day
   4. Labor Day
   5. Veteran's Day
   6. Thanksgiving (2 Days)
   7. Christmas (2 days)
   8. New Year’s Day

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 10 00