JACOBS ch2m

ADDENDUM NUMBER 3

Date: December 6, 2018

TO THE CONTRACT DOCUMENTS

Jacobs Project No.: 438920

for the **Duck River Reservoir Phase II – Raw Water Pump Station**

To All Plan Holders:

The following changes, additions, and/or deletions are hereby made part of the Contract Documents for the Duck River Reservoir Phase II – Raw Water Pump Station, dated July 2018, as fully and completely as if the same set forth fully therein:

Site Lighting Modifications:

Provisions for future site perimeter lighting is currently shown on Dwgs. 60-E-102, 60-E-203 and 60-E-406. These three drawings, in addition to Dwg. 60-E-405, will be modified to incorporate a fully functioning site lighting system that shall be included in the Contractor's Base Bid. Drawings are not being modified at this time as sufficient information is currently shown on the Plans, coupled with modifications described in this narrative. Drawings will be updated for the Conformed Set after award of the Bid.

1. Drawing 60-E-102:
    a. Keynote 8 will be modified to delete any reference to a 'future' site lighting installation and will reflect the supply and installation of direct-buried concrete poles for the UG conduits to turn up into. Side mounting of conduits into the pole are not allowed.
    b. While the quantity of the site lighting poles will remain the same as currently shown on the Plans, their positions will be adjusted to reflect a more balance spacing of approximately 50ft on average.
    c. An equipment schedule will be added for the site lighting with prescriptive selections as follows:
        i. Poles: concrete, pre-stressed, direct-buried, hollow w/ cast handholes at 48" AFG, 7000psi, 13EPA at pole tip with 130mph sustained wind. Lonestar Prestress Product Code 301202. Luminaire attachment shall be top tenon, mounting height of approximately 25ft.
        ii. Luminaire: LED floodlight, IP66, 6x6 beam spread, w/ integral photocontrol and surge protection, 480VAC, bronze color, upper/bottom cutoff visor. American Electric Lighting Product Code ACP1LED-510A-480-66-4K-TM-BZ-NL-PCL4-ACP1LEDDUBV-BZ. Cutoff visor is shipped separately and must be field installed.
    d. A circuit code will be added to reflect the number and size of conductors to be routed in a) the homeruns, and b) the balance of the branch circuits as follows:
        i. Homeruns: 2-#8, 1-#8 Gnd in 2" PVC Sch 80, direct buried conduit.
        ii. Balance of branch circuits: 2-#10, 1-#10 Gnd in 1" PVC Sch 80 direct buried conduits.
2. Drawing 60-E-203:
    a. Two (2) Plan Notes will be modified to delete any reference to a 'future' site lighting installation.

3. Drawing 60-E-405:
    a. Panelboard Schedule for 60-DP-1 will be modified to incorporate two (2) 20A/2P branch circuit breakers for the site lighting.
4. Drawing 60-E-406:
    a. The two (2) empty conduit circuits originating from Panel 60-DP-1 will be modified to reflect the homerun branch circuits required and described above under Dwg. 60-E-102.
5. Standard Electrical Details:
    a. An additional pole-mounted luminaire detail will be added to the Standard Electrical Details.
6. Specification 26 41 00B Facility Lightning Protection:
    a. Lightning protection design and installation shall be included for all site lighting poles.

Specifications

1. Specification 09 90 00 – **RAPLACE** paragraph 3.07.H with *"H. Not Used".*
2. Specification 33 05 01.01 – **DELETE** paragraph 1.05.A.2.e.
3. Specification 33 05 01.01 – **REPLACE** paragraph 2.07.B with the following:
   "B. Exterior Buried Coating:
        1. General:
            a. Notify the Owner at least 3 Days prior to application of coating products.
            b. Holdback of and coating from field-welded joints as recommended by the manufacturer.
        2. Shop-applied:
            a. Polyurethane complying with the requirements of AWWA C222.
            b. Coating system for field joints along with repair of any external coating during handling, shipping and installation shall be in accordance with the manufacturer's recommendations.
            c. Manufacturers/Products:
                i. Chemline, Chemthane 2265.
                ii. Carboline, Polyclad 777PL."

Questions and Answers

The following questions were emailed to the engineer with Jacobs' responses provided:

No.	Question	Answer
1	Re. Dwg. 60-E-102. The lightning protection specs call for a price to install lightning protection on the exterior light poles and the drawings call for the light poles to be future. Please confirm if the price is needed for the lightning protection on these.	See "Site Lighting Modifications" described above in this Addendum.
2	Re. bypass pumping, would it be possible to dig a trench and place a pipe through the road on the dam?	No.
3	Re. Specification 08 11 00. Please confirm the hollow metal door frames need to be with thermal break. Thermal break frames are not available in sizes larger than 8 feet.	Provide door frames as specified in Section 08 11 00. Engineer has confirmed with at least one of the specified door manufacturer's that frames with thermal break are available in the sizes called for in the contract documents.

4	Re. Specification 33 05 01.01 - 2.07. Please allow polyurethane in accordance with AWWA C222 as an alternate to AWWA C214 tape wrap coating as specified for steel pipe.	Shop-applied polyurethane complying with the requirements of AWWA C222 is acceptable for the exterior coating on the buried steel piping and associated fittings.
5	Re. Specification 33 05 01.01 a. 2.08.D - This section says that Spot RT is required unless welds can't be radiographed, then they can be UT'd. If a form of NDE is preferred, please allow UT in accordance with API 5L. b. 1.05.A.2.e - This section states that we must provide documentation for 5 heat treated crotch plates produced in the last 5 years. We don't see any required crotch plates on this project. Please remove this requirement from the specifications as it is irrelevant to the project. c. 2.02.A - There are two conflicting steel standards presented here. One says ASTM A1018, SS, Grade 36, Type 1, and the other says A1018, HSLAS, Grade 50, Class 2. Both are modified to 36 ksi msys and 53 ksi msts. Please clarify. The industry standard steel used for C200 steel pipe is A139 Gr C. We would recommend adding A139 Gr C steel as an option. d. 2.07.A - This section requires a three coat NSF epoxy lining. This 3-coat lining system is very expensive compared to standard single-layer system as required by AWWA C210. Why would AWWA C205 not work? If cement mortar lining cannot be added, please modify the current system to be an epoxy in accordance with AWWA C210. e. 2.04.B - This section states that joints are butt type with a 3" x 3/8" continuous backer bar, unless shown otherwise on the drawings. Underground C200 pipe is typically a single lap weld joint. The fit-up and weld cost is significantly more for a butt weld and is not necessary for C200 water pipe. Please modify to allow lap weld joints.	a. Perform testing as specified. b. Agreed. Delete this requirement. c. The standards present two options for the coils. We will evaluate adding A139 Gr C as an alternate. d. Provide NSF lining as specified. e. Butt weld as specified.

6	Re. Flood Insurance Requirements / Builders Risk Insurance. Please provide an address or elevation certificate.	Use the following address: 68 COUNTY RD 1640 Cullman, AL 35056
7	Re. Dwg. 08-N-701. The block diagram for the fiber optic cable indicates there is a new fiber to be installed from the existing box that is run with the pipeline to the Electrical Maintenance Closet. I cannot find any other information on this cable. E.g.: Where the box will end up? What size conduit? How many fibers?	Provide fiber as specified in Section 40 95 80 Para 2.02.A (48 strand fiber). Provide 2-4" conduits from the existing splice enclosure to the Water Treatment Plant electrical building/room. The existing splice enclosure is located next to the main entrance (driveway) to the Water Treatment Plant, just off of 3rd Street SE.
8	Do you have a wage rate for pipelayer? All I see is pipelayer laborer.	Contractor shall determine appropriate wage rates based on the wage determinations provided in the front end documents and in accordance with labor laws.
9	Will an Engineers office trailer be required?	No.
10	Can we do away with a landline to the office trailers and use cell service communication?	Yes.
11	Can the Superintendent act as the Contractor Quality Control Inspector?	Re. Specification 01 45 16.13. Yes, if qualified.
12	Please confirm if Construction Testing is paid by the Owner? 00 73 00-20 says by the Contractor and 01 45 33 suggest it may be by the Owner. Please clarify.	All quality control testing shall be paid for by the Contractor.
13	Might DIP be allowed in lieu of the steel pipe?	Provide piping material as specified and as shown on plans.

Jacobs Engineering Group, Inc.

Derek Kelley

Derek Kelley, PE, CCM, PMP