

# LEON CREEK WRC IMPROVEMENTS AND UPGRADES PHASE 2 Solicitation Number: CO-00386 Job No.: 19-6502

# <u>ADDENDUM 4</u> March 10, 2021

To Respondent of Record:

This addendum, applicable to work referenced above, is an amendment to the price proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the price proposal.

### **RESPONSES TO QUESTIONS**

#### Question 1:

Can you please supply as-built drawings for the structures to be demolished, including profile views of the below grade structures?

*Response: Available as-builts for demolition of abandoned facilities are included as the Facility 10 sheets in the set of Plans.* 

#### Question 2:

Can we use crushed concrete from the demolished structures as fill for the demolished below grade structures?

Response: Demolition debris shall not be used as backfill material per Specification 02 41 00, Paragraph 3.6.B.2.

#### Question 3:

On drawing 10-D101, OPS/Maint bldg. is indicated to be demolished but there are no drawings for this structure. Please provide as built and demolition drawings for this structure.

Response: The Operations and Maintenance buildings shall not be demolished. Please see No. 1 in the Changes to the Plans portion of this Addendum.

#### Question 4:

Ref Plan Page 26-M142. This shows several 316SS Bellows Expansion Joint. Please provide a specification for these Stainless Bellows. Spec 40 24 00 doesn't appear to have a spec for Stainless Bellows.

*Response: Requirements for stainless steel bellows have been added to Specification 40 24 00. Please see No. 1 in the Changes to the Specifications portion of this Addendum.* 

**Question 5:** 

Specification Section 44 42 20 Paragraph 1.3.B.2.a.1) & 7) requires that flow and efficiency readings be taken in the field to verify blower performance. Field measurement of flow is inaccurate, (and efficiency relies on the flow reading). Can these parameters be required for factory performance testing only?

Response: These readings shall be taken during testing as specified. Field instrument accuracy will be considered in the field performance testing.

AD-1

### **Question 6:**

Specification Section 44 42 20 Paragraph 1.4.A requires that factory testing of the blower motor include functionality testing of blower protection, (surge, overload and blower bearing temperature and vibration). Please modify the specification to allow bench testing of these devices; they needn't be part of the blower performance and mechanical testing.

Response: The requirement for factory testing of blower bearing temperature and vibration sensors has been removed. Paragraph 1.4.A has also been modified to allow blower/motor units and controls to be tested separately. Please see No. 2 in the Changes to the Specifications portion of this Addendum.

#### Question 7:

Specification Section 44 42 20 Paragraph 2.6.E.4 – If the blower bearing temperature and vibration sensors are to terminate in a base mounted junction box this should be specified as such.

Response: Requirements for blower bearing temperature and vibration sensors have been removed. Please see No. 3 in the Changes to the Specifications Portion of this Addendum.

#### **Question 8:**

Specification Section 44 42 20 Paragraph 2.6.H – Please replace "Provide lifting eyes..." with "Provide lifting provisions..."

Response: Paragraph 2.6.H has been revised to require lifting provisions compatible with lifting hooks or straps. Please see No. 4 in the Changes to the Specifications portion of this Addendum.

#### **Question 9:**

Specification Section 44 42 20 Paragraph 2.7.A.1 – Unless piping is connected, inlet (suction) expansion joints are not recommended.

*Response: Paragraph 2.7.A.1 has been revised to remove suction piping expansion joints. Please see No. 5 in the Changes to the Specifications portion of this Addendum.* 

#### Question 10:

Specification Section 44 42 20 Paragraph 3.6.A – Please indicate whether the startup activities and the operator training activities can be accomplished during the same trip.

Response: Manufacturer's services required by Section 44 42 20 may be provided in one or more trips.

#### Question 11:

Specification Section 44 42 20 Data Sheet - If motor winding temperature detectors are to be terminated in a separate motor junction box this should be specified as such.

*Response: The Data Sheet has been revised to remove motor winding temperature detectors. Please see No. 6 in the Changes to the Specifications portion of this Addendum.* 

#### Question 12:

Drawing 26-M145 does not designate the discharge butterfly valve in the blower supplier's scope of work, but specification 44 42 20-2.7.D.1 requires a discharge butterfly valve. Should drawing be changed?

Response: Provide discharge butterfly values as specified in Section 44 42 20. The drawing will be modified to show that the discharge butterfly values are in the blower supplier's scope of work. Please see No. 2 in the Changes to the Plans portion of this Addendum.

AD-2

Question 13: On Drawing 26-E603, Note 5 related to the Auto-Throwover on the switchboard for this project calls for Allen Bradley PLC when spec 26 24 13 Paragraph 1.5.B states:

B. The manufacturer of the assembly shall be the manufacturer of the major components within the assembly. All assemblies shall be of the same manufacturer. Equipment that is manufactured by a third party and "brand labeled" will not be acceptable."

We are wondering if we can bid our standard offering, with a communications converter for ethernet/ip protocol. ABB will provide the RX3i as the ATO controller which has been vetted, proven, tested, and is ABB factory supported.

Response: Provide Allen Bradley PLCs as required by SAWS standards for all PLCs.

# CHANGES TO THE SPECIFICATIONS

- 1. Specification Section 40 24 00:
  - Add Paragraph 2.4.E and sub-paragraphs: "Metallic Bellows Type Expansion Joints:
  - 1. Expansion joints: Flexible bellows type with equalizing rings, or as otherwise specified or indicated on the Drawings.
  - 2. Manufacturers:
    - a. Expansion joints: One of the following or equal:
      - 1) Senior Flexonics Pathway, Inc., Controlled Flexing Expansion Joint.
      - 2) Flex-Weld, Inc., Keflex, Series 308.
      - 3) US Bellows, Inc., Single Pipe
      - 4) Victaulic Depend-o-Lok, Omniflex stainless bellows expansion joint.
    - b. Pipe alignment guides: One of the following or equal:
      - 1) Senior Flexonics Pathway, Inc.
      - 2) Flex-Weld, Inc.
    - c. Intermediate supports: Provide with protective saddles. One of the following or equal:
      - 1) Unistrut Corporation, Roller-type.
      - 2) Bergen-Paterson Pipe Support Corp.
  - 3. Design
    - a. Expansion joint rating: 150 pounds per square inch gauge, at 300 degrees Fahrenheit.
    - b. See Section 40 23 39.1 Process Piping Schedule for design operating conditions.
    - c. Bellow: Multi-ply stainless steel, equipped with a self-draining liner guide.
    - d. Axial travel of expansion joints. Not less than 1.50 inches.
    - e. Ends: 150 pound ASME flanges, Victaulic Depend-o-Lok Airmaster/Fluidmaster coupled ends, or plain suitable for welding connections, as required for piping in which installed."
- 2. Specification Section 44 42 20:

Revise Paragraph 1.4.A to read as follows: "Factory performance tests shall be conducted for each Blower/Motor unit furnished under this Section. Blower/motor unit(s) shall be operated to test the preprogrammed parameters and the functionality of the blower protection devices, i.e., surge and motor overload monitoring devices, alarms and shutdowns and the blower factory-mounted sensors. Blower control panels may be tested separately from the blower/motor units."

- 3. Specification Section 44 42 20: Remove Paragraph 2.6.E.4.
- 4. Specification Section 44 42 20: Replace Paragraph 2.6.H. with: "Provide lifting eyes or other provisions compatible with lifting hooks or straps on blowers, motors, and frames so that each major component of the blower system or entire unit may be removed."
- Specification Section 44 42 20 Replace Paragraph 2.7.A.1 with: "Provide elastomer expansion joints in discharge piping connections."

 Specification Section 44 42 20.1 – Data Sheet Revise Motor Data Section by removing the "X" from the Thermal protection embedded in windings check box.

The remaining specifications shall remain the same.

### CHANGES TO THE PLANS

- 1. Drawing 10-D101: Remove demolition hatching from the structures labeled as "OPS & MAINT." and "TELECOM".
- 2. Drawing 26-M145: Replace Keynote No. 2 with "6" V513 Butterfly Valve\* (Typ of 2)".

The remaining drawings shall remain the same.

### **END OF ADDENDUM 4**

This Addendum is 4 pages in its entirety, including attachments.

Attachments: None.



Digitally Signed: March 10, 2021 Greg T. Swoboda, P.E. 76706 Garver, LLC. Registration No. 5713