ADDENDUM 1

DATE: October 11, 2019
PROJECT: UCT-CHW & Booster Pump Replacement
ITB NO: 744-B2002
OWNER: The University of Texas Health Science Center at Houston
TO: Prospective Proposers

This Addendum forms part of and modifies Proposal Documents dated, September 20, 2019, with amendments and additions noted below.

1. **Clarifications, Questions and Answers:**

1. Question: The scheduled pump on this project was discontinued in 2016. May we use any pump of our choosing or do you want to tell me what pump to use?
   Answer: Confirmed! Found the exact pump you have scheduled. It is absolutely available.


3. Question: Who is responsible to demo the low voltage or the BAS raceway and connection to the existing VFD's?
   Answer: The bidding contractor is responsible for returning the system to fully operational.

4. Question: Is the new VFD's going to have the BAS system? If so, Who is responsible for the raceway and connections?
   Answer: The bidding contractor is responsible for returning the system to fully operational.

5. Question: On alternate #1, is the Chiller Pump going to be off for about a week to get the work done on normal hours or is the work going to be performed on one weekend to get all of it done after hours?
   Answer: It is up to the contractor to determine the amount of time it will take to replace the booster pump and provide the schedule to UT Health. This lab area can be cleared out and the unit shut off for a duration of 2-3 days maximum.

6. Question: On alternate #1, are we allowed to re-use part of the conduit going to the 21st floor (the electrical panel is located on the 21st floor) so that we don't have to core a hole?
   Answer: Yes as long as the existing conduit meets UT Health specifications. Minimum 3/4 inch EMT conduit with hangers and supports every 6 FT.

7. Question: During our walkthrough of the CHW pump portion of the project, it was indicated that the Harmonic Guard was not active, and was only being used as a pull-box at this point. Can this be confirmed? Additionally, is there a need for us to replace the Guard with a pull-box when reinstalling the conduit and wire for the new pumps?
Answer: The harmonic guard is not being used and is scheduled to be demolished. There is no requirement to replace it with another pull box. Conduit can go directly to the VFD’s.

8. Question: For the AHU Alternate, it was mentioned that the panel serving the AHU is actually located on the next floor up within a room directly above the AHU. Can this be confirmed?
   Answer: See revised drawings from SSA confirming accurate location of the panel on the 21st floor.

9. Question: Please confirm how much overtime should be accounted for in this proposal.
   Answer: It is up to the contractor to determine the amount of overtime needed based on the UGC guidelines.

END OF ADDENDUM 1
SECTION 26 28 16

ENCLOSED SAFETY SWITCHES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies the furnishing and installation of enclosed safety switches. All switches shall be fused.

1.2 REFERENCE STANDARDS

A. ANSI/UL 98 - Enclosed and Dead-Front Switches.
B. NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches.
C. NFPA 70 - National Electrical Code (NEC).
D. NFPA 70E - Standard for Electrical Safety in the Workplace.

1.3 RELATED WORK

A. Section 26 00 00, Electrical General Provisions.
B. Section 26 28 13, Fuses - 600 Volt and Below.
C. Section 26 05 73, Overcurrent Protective Device Coordination Study.

1.4 SUBMITTALS

A. Provide product data on each type and rating of switch.
   1. Ratings including voltage, and horsepower or continuous current.
   2. Dimensioned outline drawings.
   3. Conduit entry/exit locations.
   4. Cable terminal sizes.
   5. Wiring diagrams.

B. Provide arc-flash calculations and associated incident energy levels. Refer to Section 26 05 73, Overcurrent Protective Device Coordination Study.

PART 2 - PRODUCTS

2.1 CHARACTERISTICS

A. Voltage. Provide switches with a voltage rating of 250 volts d-c, 240 volts or 600 volts a-c, as required for the installed system voltage.

B. Type. Provide switches conforming to NEMA KS 1 standard for Type HD (heavy duty).

C. Contacts. Provide switches with quick-make, quick-break contacts.
D. Poles. Unless otherwise shown, provide 3-pole, visible blade switches.

2.2 CONSTRUCTION

A. Enclosure. Provide NEMA 1 enclosures for switches in indoor dry locations. Provide NEMA 3R enclosures for switches located outside the building conditioned envelope. Provide NEMA 4X stainless steel enclosures for switches located in corrosive environments, unless otherwise shown.

B. Operating Handle. Provide a handle suitable for padlocking in the OFF position with as many as three padlocks of 5/16-inch diameter shank. Use a defeatable, front accessible, coin-proof door interlock to prevent opening the door when the switch is in the ON position and to prevent turning the switch ON when the door is open.

C. Terminal Shield. Provide incoming line terminals with an insulated shield so that no live parts are exposed when the door is open.

D. Neutral. Provide each switch with an isolated, fully rated neutral block. Make provisions for bonding the block to the enclosure.

E. Ground. Provide each switch with a ground lug.

F. Fuse Holders. Provide switches with rejection-type fuse holders which are suitable for use with fuses specified under Section 26 28 13, Fuses - 600 Volt and Below. All switches shall be fused.

G. Nameplates. Provide metal nameplates, front cover mounted, which indicate the switch type, catalog number and horsepower rating (with both standard and time delay fuses).

2.3 LISTING


2.4 MANUFACTURER

A. ABB/GE Company.

B. Square D Company.

C. Eaton/Cutler-Hammer.

PART 3 - EXECUTION

3.1 DELIVERY, STORAGE, AND HANDLING

A. Deliver products individually wrapped, on pallets or in factory-fabricated fiberboard type containers.

B. Store products in a clean and dry space, elevated above grade, and protected from weather, sunlight, moisture, corrosion, dirt and damage.
C. Handle products carefully to avoid damage to material components, enclosure and finish. Damaged products shall be rejected and not be installed on project.

D. Refer to Paragraph 3.2 of Section 26 00 00, Electrical General Provisions.

3.2 INSTALLATION

A. Install safety or disconnect switches where indicated, in accordance with the manufacturer's written instructions, and the applicable requirements of NEC. Install safety and disconnect switches in accordance with the directions of the Owner's Representative.

B. In general, mount switches and disconnects so that operating handle is approximately 60 inches above finished floor. Where grouped, align tops of switches.

C. For equipment with motors larger than 1/8 hp, provide disconnect switches within sight of the motor.

D. Mount motor and circuit disconnect enclosures, independent of equipment served, on columns or freestanding on a bolted unistrut-type or galvanized welded angle iron framework anchored to floor. Refer to Section 26 05 29, Metal Framing and Supports.

E. Switch interiors shall be maintained clean until final acceptance by Owner. Switch exteriors shall be maintained free of mud, spray-on insulation, paint spray and other substances not placed on the exterior surface by the switch manufacturer.

3.3 FUSIBLE DISCONNECT SWITCHES

A. Provide fusible disconnect switches only. Coordinate with Divisions 14, 21, 22, 23, and equipment supplier for warranty and listing requirements of equipment approved by submittal.

B. Coordinate fuse selection with the overcurrent protective device coordination study. Refer to Sections 26 05 73 and 26 28 13.

C. Install fuses in fusible disconnect switches. Provide permanent marking inside switch enclosure for fuse type and size.

END OF SECTION