JUNE 15, 2018

ATTENTION ALL REQUEST FOR BID (RFB) HOLDERS

RFB NO. 318015 - ADDENDUM NO. 1

FEN OAK HEAT PUMP REPLACEMENT

BIDS DUE: THURSDAY, JUNE 21, 2018, 2:00 PM. DUE DATE AND TIME ARE CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Bid (RFB) and is hereby made a part of the RFB. Please attach this Addendum to the RFB.

PLEASE MAKE THE FOLLOWING CHANGES:

1. Section 23 09 23

Page 1 - Item 1.1.A.1.a.: Change: Revise to read: "Remove 34 existing air to water source heat pumps, associated Johnson Controls (JCI) DDC controllers and thermostats. Replace with new air to water source heat pumps, Distech DDC controllers and wall mounted thermostat".

Page 16 - Item 3.7.A.:

Delete Section 3.7.A and replace with:

- 1. System consists of:
 - a. New packaged air to water heat pump.
- 2. Provide:
 - a. New heat pump DDC controller.
- b. New wall mounted digital communicating thermostat (thermostat to match existing thermostats).
- c. New discharge air temperature sensor for communication to heat pump controller.
 - d. All required relays and controls required.
- e. Existing control wiring can be reused. Provide new control wiring as required.
- 3. Each heat pump to include:
 - a. High condensate alarm switch (factory installed and wired by 23 81 46).
 - b. 2 position heat pump supply water control valve (factory installed and wired by 23 81 46) (Alternate Bid #2 only).
- 4. Heat pump control shall migrate from the existing JCI DDC system to the existing Distech DDC system.
 - 5. The BAS shall control the heat pump.
 - 6. Units shall be enabled/disabled (occupied/unoccupied) by the BAS.
 - 7. Occupied Mode
 - a. During the occupied mode the fan shall be energized and run continuously.

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- b. On a call for either heating or cooling, the unit mounted DDC controller shall open the 2-way isolation valve (Alternate Bid #2 only) and the unit, via unit controls shall provide heating or cooling to maintain space temperature setpoint.
- c. Upon satisfied setpoint, unit heating or cooling shall be disabled via unit controls and the 2-way isolation valve (Alternate Bid #2) shall close.

8. Unoccupied Mode

a. During the unoccupied mode, the unit supply fan and heating/cooling shall be "off". On a call for setback or setup heating/cooling, the unit fan shall cycle on and unit heating/cooling shall be enabled to maintain setback/setup space temperature setpoint.

Page 19:

Delete current page 19 and replace with attached page 19 (23 09 23-19)

2. Section 23 81 46

Page 5 - Item 2.3.H.1:

Change: "Heat pump controls and controller will be provided by the 23 09 23 contractor", to: "The heat pump manufacturer shall provide a discharge air temperature sensor."

3. Sheet M2.1 & M2.2

Modify current Sheet M2.1 & M2.2. Add general note #7 to: "New work drawings are diagrammatical in nature. HC is responsible for all new work (duct, piping, insulation, controls, etc.) for installation of new air to water heat pumps in location of heat pumps removed."

If any additional information about this Addendum is needed, please call Ryan Shore at 608/266-4475, shore@countyofdane.com.

Sincerely, *Ryan Shore*Project Manager

Enclosures:

Page 23 09 23-19

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DDC INPUT / OUTPUT SUMMARY TABLE

| JDR Project No: 18.0036 | | — | \neg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| PROJECT: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Т | |
| Fen Oak Heat Pump | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Replacement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | HARDWARE | | | | | | | | | | | | | | | SOFTWARE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LOCATION: | | _ | | | _ | _ | П | _ | _ | _ | | | | | | | | T | | | | | | | | | | | | | | | | | | | | | | | | 十 | |
| Madison, WI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | OUTPUT | | | | | | | INPUT | | | | | | | | | | ALARMS | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | DIGITAL ANALOG | | | | | | 3 | DIGITAL | | | | | ANALOG | | | | | 0 |)IGI | IGITAL | | ANALOG | | } | ENERGY MANAGEMENT SYSTEM FUNCTIONS | | | | | | | | | | | | | | | | | | |
| SYSTEM: Air to Water Heat Pumps | | | | | nator | | | itch | ct | | | | | | | | | | | | | | | | | | | | | 2 | | _ | | u | gration | u | | | | | | | |
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| (Тургові) | Control Relay | piou | Contactor | Tri-State Actuator | Duration Adjust Actuator | mA | 0-10 VDC | Surrent Sensing Switch | rol Relay C | Switch Closure | Diff Pressure Switch | Flow Switch | Temperature | Relative Humidity | rential Pres | ator Feedba | Static Pressure | Town | Maintenance | sure | High Limit | Limit | Maintenance | 0.44 | INIGINI GELDO | Demand Limiting | O/I dn | outy Cycling | Optimum Start/Stop | Scrieduled Start Totalization | | Redundancy Control | ing Integrat | Fire Alarm Integration | Security/Access Integration | Elect PQM Integration | Chiller Integration | CFM Offset | HW/OA Reset | 1W Keset | Alarm Over | Alarm Override | Comments |
| POINT DESCRIPTION | Cont | Sole | Cont | Tri-S | Dura | 4-20 mA | 0-10 | Curr | Con | Swit | Diff | Flow | Tem | Rela | Diffe | Actu | Stati | E E | Mair | Pres | High | Low | Mair | Č | Day S | Dem | | Onti | ind o | Tota | Trend | Red | Ligh | Fire | Secu | Elec | Shill Chi | CFI | À E | A L | 2 1 1 1 | E E | |
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Notes: