DEPARTMENT OF HEALTH AND SOCIAL SERVICES MCLAUGHLIN YOUTH CENTER ANCHORAGE, ALASKA

MARCH 23, 2017

ADDENDUM NO. 3

TO: ALL PLAN HOLDERS

FROM: PDC ENGINEERS

David Apperson, Mechanical EIT Eric Bridgman, Electrical PE

SUBJECT: REQUEST FOR PROPOSALS

McLaughlin Youth Center Boiler Renovation & Replacement

This addendum consists of:

1. Addendum document.

2. Drawing Attachments; Mechanical Sketch-03

3. Reference Information; None.

Information in this addendum takes precedence over original information. All other provisions of the document remain unchanged.

Note to Bidders: Bidders are required to acknowledge this addendum on the proposal form. The following additions, corrections, and changes are hereby made to the subject invitation to bid.

NOTE: BID DUE DATE REMIANS 2:00PM MARCH 30, 2017

CLARIFICATIONS; IN RESPONSE TO QUESTIONS:

1. Question: Is it acceptable for Boiler B-3 to have a different burner manufacturer than Boiler B-1 & B-2?

Response (PDC Engineers): Per request from the MYC Maintenance Personnel the intention of the project is to have the same burner manufacturer across all three boilers for simplicity of maintenance, parts ordering, and on-hand parts availability.

However, this specification requirement has been relaxed by the owner to allow a different burner manufacturer for Boiler B-3 than B-1 & B-2. If the B-3 burner does not match the B-1 & B-2 burner, then provide additional owner training to support both burners. A Master Boiler Controller shall allow seamless boiler enable/disable, staging, and firing rate regardless of burner manufacturer per sequence, clarification below. Availability of parts and product support must be factory guaranteed for 10 years. See change to specifications below.

The following manufactures have been pre-approved:

Boiler: Burner:

Viessmann, Model CA3 Weishaupt, Model WM Lochinvar, Model Crest Webster, Model JB

Superior, Model Creek-XL

All submitted boilers and burners must meet specifications as shown on Sheets M002 & M003 and capacities listed on Sheet M004. The Basis of Design for B-3 remains the Riello RTC 5000 with Riello RS burner. Note to Bidders: Review the height clearance and access requirements described in Addendum 2.

2. Question: Is Johnson Controls an acceptable vendor for the controls for this space?

Response (PDC Engineers): Controls for this project are not limited to specific manufactures or vendors, however, controls provided for this project must seamlessly integrate or accommodate the existing controls (control panels, control protocols, graphics, alarms, trending, associated programming, etc.) without a major renovation of the controls system. An example would be to provide an open sourced front-end software capable of pulling-in the existing controls as well as the new controls provided for this project. Due to these technical complications it is anticipated, but not required, that Siemens will be the controls contractor and the existing Siemens front-end workstation will be utilized to pull-in the new controls provided for this project.

3. Question: Clarification: HVAC Sequence of Operations; B-1, B-2, B-3. If HWS temperature ever decreases below 140 degrees then generate an alarm at the BMS, disable Boilers 1 & 2 to avoid Condensing, only boiler B-3 shall operate. Question: who is responsible for this sequence, Building Controls or Boiler Sequencing Panel?

Response (PDC Engineers): The intention is for a Master Boiler Controller to control all boiler sequencing, individual boiler enable/disable, and firing rate. The DDC shall provide HWS setpoint and boiler plant enable to the master boiler controller. The master boiler controller is expected to monitor HWS temperature and provide the logic to disable Boilers B-2 & B-2 if the HWS temperature decreases below 140 F.

5. **Question:** Why are we limited to GRC inside the building envelope? The facility has EMT existing throughout the facility? Would EMT be acceptable for new conduit runs for this project?

Response (PDC Engineers): EMT is acceptable for all new raceway applications within the building.

6. **Question:** XHHW is exterior rated and intended for underground or outdoor use. THHN conductors are the standard for interior branch circuit wiring. Is THHN acceptable?

Response (PDC Engineers): Yes, THHN is acceptable.

7. **Question:** M002 paragraph 5 under VFD's references VFD cable for the load side wiring between the VFD & motor. This requirement is not listed under the electrical specs & I have never seen VFD cable as a requirement. The pathways are existing between the gutter under the existing starters, routing under

the concrete slab, to the pumps mounted on a strut frame in the middle of the room. Are the existing pathways adequate for this VFD cable? The basis of design cable (Belden 29502) is 0.65" in diameter. This would correlate to a $1\,1/4$ " conduit requirement for it. Is this VFD cable necessary since it is not referenced in the electrical spec?

Response (PDC Engineers): Yes, use VFD cable (Belden 29502 or similar) as called out on M002 (VFD cable language written by the electrical engineer). Provide new conduit as required.

CHANGES TO SPECIFICATIONS:

ITEM # CHANGES TO SPECIFICATIONS

- 1. Sheet M002, **CHANGE** to NATURAL GAS BURNER (B-1, B-2, B-3) to read, "BURNER MANUFACTURER FOR REFURBISHED BOILERS B-1 AND B-2 SHALL MATCH. DUE TO OPERATION AND MAINTENANCE CONSISTENCY IT IS PREFERRED BUT NOT REQUIRED FOR BOILER B-3 BURNER MANUFACTURER TO MATCH B-1 & B-2 BURNER MANUFACTURER. IF THE B-3 BURNER DOES NOT MATCH THE B-1 & B-2 BURNER, THEN PROVIDE AN ADDITIONAL 4 HOURS OF OWNER TRAINING LEAD BY A FACTORY-TRAINED AND FACTORY-CERTIFIED TECHNICIAN. PARTS AVAILABILITY AND PRODUCT SUPPORT SHALL BE FACTORY GUARANTEED FOR 10 YEARS PAST THE DATE OF SUBSTANTIAL COMPLETION, CONFIRM WITH FACTORY PRIOR TO PRODUCT SUBMITTAL."
- 2. Sheet M002, **ADD** to NATURAL GAS BOILER (B-3) to read, "... PARTS AVAILABILITY AND PRODUCT SUPPORT SHALL BE FACTORY GUARANTEED FOR 10 YEARS PAST THE DATE OF SUBSTANTIAL COMPLETION, CONFIRM WITH FACTORY PRIOR TO PRODUCT SUBMITTAL. ..."
- 3. Sheet M003, **ADD** to CONTROLS, "CONTROLS PROVIDED FOR THIS PROJECT MUST SEAMLESSLY INTEGRATE OR ACCOMMOTE THE EXISTING CONTROLS WITHOUT A MAJOR RENOVATION OF THE CONTROLS SYSTEM."

CHANGES TO DRAWINGS:

ITEM # CHANGES TO DRAWINGS

1. Sheet M201, **ADD** Sheet Key Note 12, "LENGTHEN EXISTING BOILER B-3 HOUSEKEEPING PAD. EXTEND HOUSEKEEPING PAD TO MATCH LENGTH OF EXISTING B-1 & B-2 HOUSEKEEPING PAD. TIE INTO EXISTING PAD TO TRANSFER SHEAR FORCES, SEE DETAIL 5/M301."

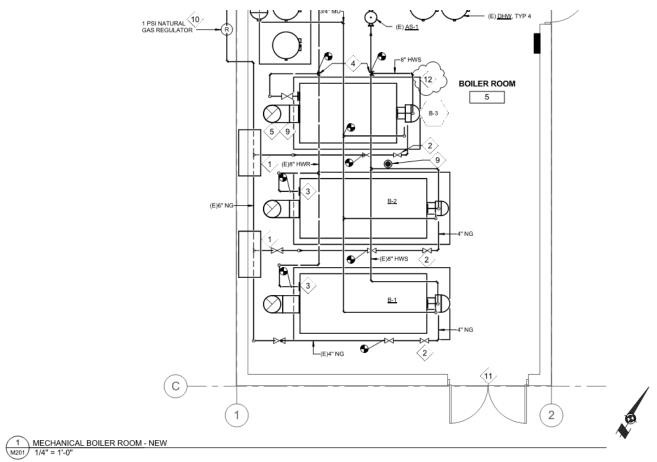
ATTACHMENTS:

Specifications: None.
 Drawings: None.
 Sketch: Sketch-03

END OF ADDENDUM

Issued by: Mark Moon, Project Manager

Issue Date: March 24, 2017



Sketch-03

(Note: Sketch-01 & Sketch-02 included in Addendum 2)