

ADDENDUM NO. 1 TO: PROJECT MANUAL FOR:

ARKANSAS TECH UNIVERSITY (ATU) | TUCKER COLISEUM PHASE 1 MECHANICAL ROOM RENOVATION (HW) BID NO. B025054

18 October 2025

This Addendum forms a part of the Contract Documents and modifies or interprets the Project Manual and Drawings, as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject bidder to disqualification.

A. CLARIFICATIONS

- 1. The intent of the controls note on M2.0 is to mark for demo *existing equipment* controls serving existing equipment to be demolished. These controls could be via electrical or controls panels. Marking them for demo will allow verification that these are no longer in use and allow for demo in a future phase.
- 2. M5.1 controls intent is to provide *new equipment* controls as required by the sequence of operations and also to have those integrated into the existing Siemens building control system.
- 3. The manufacturers for the Existing MCC and Switchboard P (for replacement breaker purposes are:

MCC = Eaton Freedom Series 2100 Motor Control Center Switchboard P = Eaton Pow-R-Line C Switchboard

B. PROJECT MANUAL

1. Division 00, Section 00100 – INFORMATION FOR BIDDERS: 12 SUBMISSION OF BIDS, Item 12.1: omit the reference to bound bids in the project manual as shown below:

Bids shall be submitted at the time and place indicated in the Advertisement or Invitation to Bid. Bids shall be bound in the original project manual and shall be enclosed in an opaque sealed envelope, marked with the Project Title (and, if applicable, the designated position of the Project for which the Bid is submitted) and name, address, and contractor's license number of the Bidder, and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

C. PROJECT DRAWINGS

- 1. Sheet M3.1 Mech Room HW Renovation Sections: Replace in its entirety with the attached.
- 2. Sheet M4.1 Mechanical Schedule HW: Replace in its entirety with the attached.

END OF ADDENDUM NO. 1



PROVIDE COMBINATION **AIR DIRT SEPARATOR LOW LOSS HEADER**, <u>ADS</u>, EQUAL TO SPIROTHERM QUAD VDX800FAM (FLANGED, MAGNETIC) ASME WITH BLOWDOWN VALVE AND MAGNETS. SEE DETAIL FOR ADDITIONAL INSTALLATION

CONCOURSE FLOOR 47' - 3"

- GAS ENTRANCE AND DISTRIBUTION PIPING BY PLUMBING CONTRACTOR.
- PROVIDE **EXPANSION TANK**, <u>EXP-HW</u>, EQUAL TO WESSELS NLA-500, BLADDER TANK WITH 132 GAL ACCEPTANCE RATED TO 125 PSI WORKING PRESSURE.
- PROVIDE WALL-MOUNTED, HEAVY-DUTY RATED SYSTEM <u>PUMP VFD</u> EQUAL TO SQUARE D, YASKAWA, ABB, DANFOSS OR ENGINEER APPROVED. VFD SHALL BE PROVIDED WITH BYPASS AND DISCONNECT. TYPICAL OF 2.
- PROVIDE SS BOILER FLUE TERMINATION PER MANUFACTURER'S RECOMMENDATION AND TERMINATE WITHIN 6" OF TOP OF MASONRY CHIMNEY. PROVIDE SUPPORT AT TOP OF CHIMNEY. TYPICAL OF 4.
- EXTEND WATER HEATER FLUE THROUGH AND UP CHIMNEY. PROVIDE TERMINATION PER MANUFACTURER'S RECOMMENDATION AND TERMINATE WITHIN 6" OF TOP OF MASONRY CHIMNEY. PROVIDE SUPPORT AT TOP OF
- CONNECT TO BLDG DCW RISER. DOMESTIC WATER ENTRANCE AND PIPING (BY PLUMBING CONTRACTOR). CONNECT BOILER MAKEUP WATER PIPING (BY MECHANICAL CONTRACTÓR) DOWNSTREAM OF BUILDING BACKFLOW
- PROVIDE <u>CONDENSATE NEUTRALIZER</u> FROM BOILER MANUFACTURER.. NEUTRALIZERS SHALL BE RATED FOR 2,000 MBH HEATING CAPACITY, MINIMUM, WITH TRANSLUCENT CONSTRUCTION TO VERIFY NEUTRALIZING MEDIA LEVELS. NEUTRALIZERS SHALL BE INSTALLED IN HORIZONTAL ORIENTATION, WITH PIPE UNIONS ON BOTH SIDES OF NEUTRALIZER FOR MAINTENANCE. DISCHARGE CONDENSATE TO NEAREST FLOOR DRAIN. TYPICAL AT EACH BOILER CONDENSATE DISCHARGE.
- DUCT BOILER COMBUSTION AIR AS SHOWN TO EXISTING LOUVER. PROVIDE DUCT PLENUM ON LOWER HALF OF LOUVER AND PROVIDE BLANKOFF PLATE FOR UPPER HALF OF LOUVER, SEALING AROUND EDGES.







ATU-002-T01

REV # DESCRIPTION DATE 10-18-25

ADD 001

ISSUE DATE: 06/23/25

ONE INCH AT FULL SIZE. IF NOT

ONE INCH SCALE ACCORDINGLY

MECH ROOM HW RENOVATION SECTIONS

HVAC BOILER SCHEDULE								
DESIGNATION					INPUT BTUH (EACH	OUTPUT BTUH	ELECTRICAL REQUIREMENTS	
Type Mark	Mark	Manufacturer	Model	Description	BOILER)	(EACH BOILER)	VOLTAGE	PHASE
BLR	1	Viessmann	Vitocrossal 200 Cl2 2000	Commercial Condensing Boiler With Filtered Combustion Air Intake	2,000,000 Btu/h	1,940,000 Btu/h	120 V	1
BLR	2	Viessmann	Vitocrossal 200 Cl2 2000	Commercial Condensing Boiler With Filtered Combustion Air Intake	2,000,000 Btu/h	1,940,000 Btu/h	120 V	1
BLR	3	Viessmann	Vitocrossal 200 Cl2 2000	Commercial Condensing Boiler With Filtered Combustion Air Intake	2,000,000 Btu/h	1,940,000 Btu/h	120 V	1
BLR	4	Viessmann	Vitocrossal 200 Cl2 2000	Commercial Condensing Boiler With Filtered Combustion Air Intake	2,000,000 Btu/h	1,940,000 Btu/h	120 V	1

BOILER SCHEDULE NOTES:

1. PROVIDE FOUR (4) GAS-FIRED CONDENSING BOILERS, WITH MAX OF THREE (3) IN OPERATION AT PEAK LOAD FOR N+1 REDUNDANCY.

2. BOILERS SHALL BE UTILIZED IN A PRIMARY / SECONDARY HEATING WATER SYSTEM.

3. HEATING WATER SUPPLY AND RETURN DESIGN TEMPERATURE SHALL BE AT 185/165°F.

4. VIESSMANN HEATING CURVE SLOPE SHALL BE SET TO 1.8 SUCH THAT THE SUPPLY TEMPERATURE WILL INCREASE TO 194F WHEN THE OUTDOOR AIR TEMPERATURE IS 4F.

5. THE BOILER AND HEATING HOT WATER PUMP SEQUENCES OF OPERATION SHALL ALTERNATE THE LEAD PUMPS AND LEAD BOILER SO THAT ALL EQUIPMENT WILL HAVE SIMILAR RUN TIMES. 6. PROVIDE BOILER RATED AND TESTED FOR 80 PSI MAX.

7. PROVIDE EACH BOILER WITH MANUFACTURER RECOMMENDED POLYPROPYLENE FLUE EXHAUST VENT TERMINATION. 8. BOILERS SHALL BE PROVIDED WITH THE FOLLOWING:

GAS FIRED, CONDENSING FIRETUBE BOILER.

TITANIUM STABILIZED SERIES 441 STAINLESS STEEL HEAT EXCHANGER

97% THERMAL EFFICIENCY 96.5% COMBUSTION EFFICIENCY

20:1 TURNDOWN

O2 TRIM DIGITAL TOUCHSCREEN

OUTDOOR RESET

ADJUSTABLE AUTO-RESET HIGH LIMIT FIXED MANUAL RESET HIGH LIMIT

LP AND HP GAS SWITCHES

CONDENSATE NEUTRALIZATION TANK

WALL MOUNTED BUILDING MANAGEMENT SYSTEM BACNET MSTP GATEWAY

THE CONDENSATION RATE CONTROLLED BY OPTIMUM COMBUSTION, SHALL BE ABLE TO MEET A CO2 VALUE OF 10% THROUGH THE ENTIRE FIRING RANGE.

4" OF MINERAL WOOL NYLON BACKED INSULATION ON HEATEXCHANGERS

BOILERS SHALL BE EQUIPPED WITH 3 RETRACTABLE ON-BOARD CASTERS FOR EASY TRANSPORT AND POSITIONING. HIGH MASS BOILERS WITH 99 GALLON WATER CONTENT

BOILER SHALL NOT REQUIRE A FLOW SWITCH

CERTIFIED FOR 8" POLYPROPYLENE FLUE

•	258.8 SQUARE FEET HEAT EXCHANGER SURFACE AREA
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HVAC HEATING WATER PUMP SCHEDULE											
DESIGNATION				MOTOR							
		MANUFACTURER	MODEL	HORSEPOWER	FLOW	TOTAL HEAD	MOTOR RPM	VOLTAGE	PHASE	POWER	REMARKS
BP	1	Bell & Gossett	3x3x7C	1	129 GPM	15.0 ftH2O	1800	480 V	3	1.75 kVA	BOILER CIRCULATION PUMP
BP	2	Bell & Gossett	3x3x7C	1	129 GPM	15.0 ftH2O	1800	480 V	3	1.75 kVA	BOILER CIRCULATION PUMP
BP	3	Bell & Gossett	3x3x7C	1	129 GPM	15.0 ftH2O	1800	480 V	3	1.75 kVA	BOILER CIRCULATION PUMP
BP	4	Bell & Gossett	3x3x7C	1	129 GPM	15.0 ftH2O	1800	480 V	3	1.75 kVA	BOILER CIRCULATION PUMP
HW	P1	Bell & Gossett	VSC-4x6x10.5B	15	570 GPM	60.0 ftH2O	1800	480 V	3	17.55 kVA	BUILDING HW PUMP
HW	P2	Bell & Gossett	VSC-4x6x10.5B	15	570 GPM	60.0 ftH2O	1800	480 V	3	17.55 kVA	BUILDING HW PUMP

PUMP SCHEDULE NOTES:

THE BOILER AND HEATING HOT WATER PUMP SEQUENCES OF OPERATION SHALL ALTERNATE THE LEAD PUMPS AND LEAD BOILER SO THAT ALL EQUIPMENT WILL HAVE SIMILAR RUN TIMES.

THE PRIMARY BOILER PUMPS (BP) SHALL BE DEDICATED TO EACH BOILER WITH THE SECONDARY HEATING WATER PUMPS (HWP) HEADERED FOR REDUNDANCY.

PROVIDE NEW PUMPS WITH BRONZE FITTED FEATURE.

PROVIDE BUILDING HW PUMPS WITH WALL-MOUNTED VFDs. REFER TO M3.1.

NOTE THAT MOTORS SHALL BE BELL AND GOSSETT OR APPROVED EQUAL WITH NEMA PREMIUM EFFICIENCY MOTOR

REFER TO PLANS AND DETAILS FOR ADDITIONAL HEATING WATER SYSTEM EQUIPMENT, CONTROLS, AND ACCESSORIES.







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MECHANICAL SCHEDULES - HW

M4.1