

PROJECT NAME: ANTHONY WEST BOILER REPLACEMENT
OWNER NAME: BALL STATE UNIVERSITY
BSU PROJECT NO. 2025-031.01 AN / CES PROJECT NO. 2025-002.AAW
ADDENDUM NO. 01
DATED: 04/17/2025

This Addendum consists of two (2) addendum pages and nine (9) attachment pages totaling eleven (11) pages. This Addendum shall supplement, amend, and become part of the Bid Documents. All Bids shall be based on these modifications. Bidders shall acknowledge the receipt of this addendum on their Bid Form.

PART 1 - CHANGES TO THE PROJECT MANUAL

Modifications described herein shall be incorporated in the Project Manual. All other Work shall remain unchanged.

1.1 DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING(HVAC)

A. Section 230900 "DIRECT DIGITAL CONTROLS"

1. ADD Subparagraph as follows:

"1.8, A." Add Johnson Controls to list of acceptable manufacturers.

PART 2 - CHANGES TO THE DRAWINGS

Modifications described herein shall be incorporated in the Drawings. All other Work shall remain unchanged.

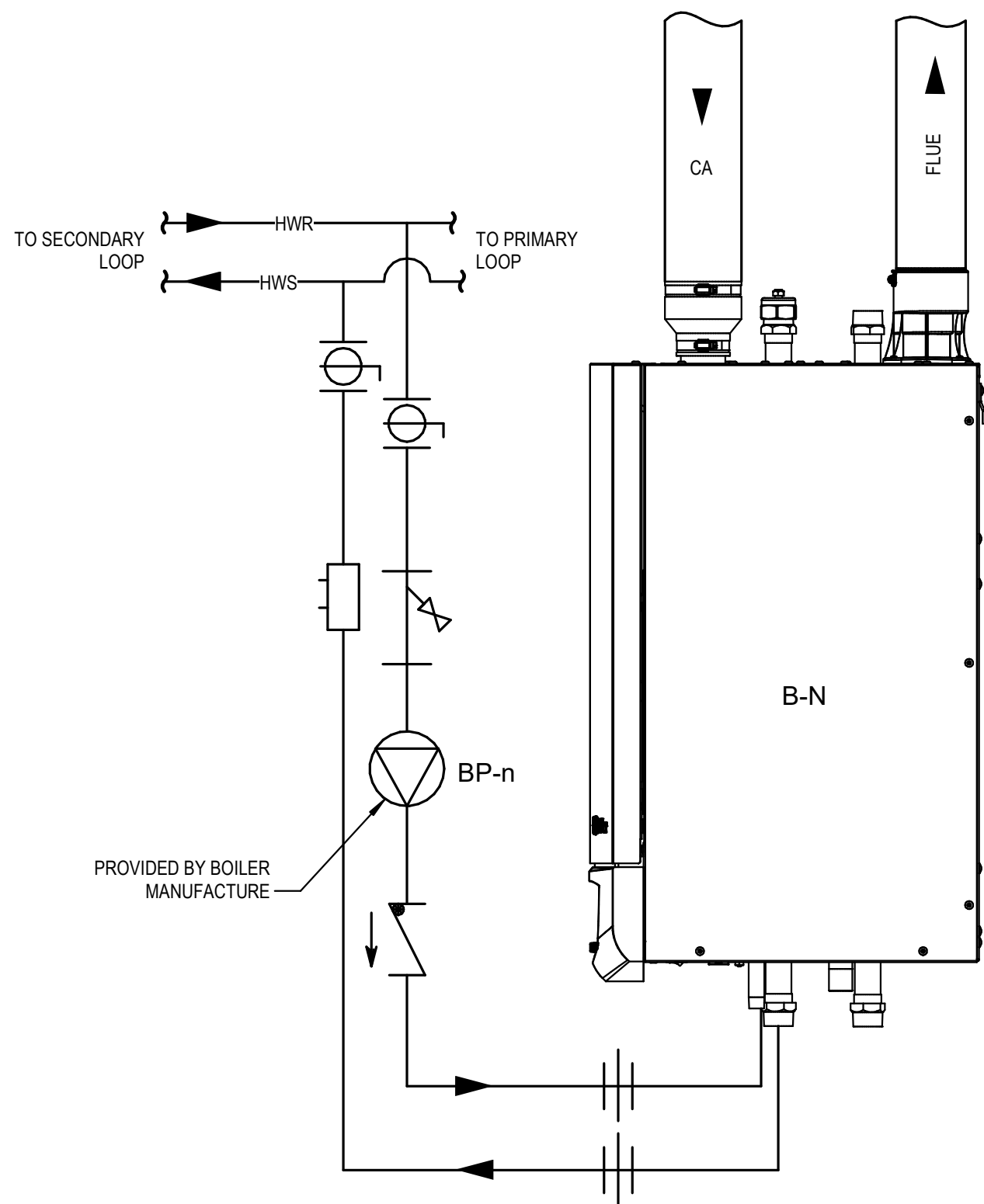
2.1 DRAWING SHEETS: ADDITIONS, DELETIONS AND REPLACEMENTS

DRAWING NO.	INDICATE ACTION: REPLACE (R), ADD (A), DELETE (D)
M-SERIES DRAWINGS	
M501 – MECHANICAL DETAILS	DELETE AND REPLACE
M601 – MECHANICAL SCHEDULES	DELETE AND REPLACE
M701 – TEMPERATURE CONTROL SCHEMATICS	DELETE AND REPLACE
MP101 – MECHANICAL ROOM FLOOR PLANS	DELETE AND REPLACE
P-SERIES DRAWINGS	
PP101 – PLUMBING FIRST FLOOR PLANS	DELETE AND REPLACE

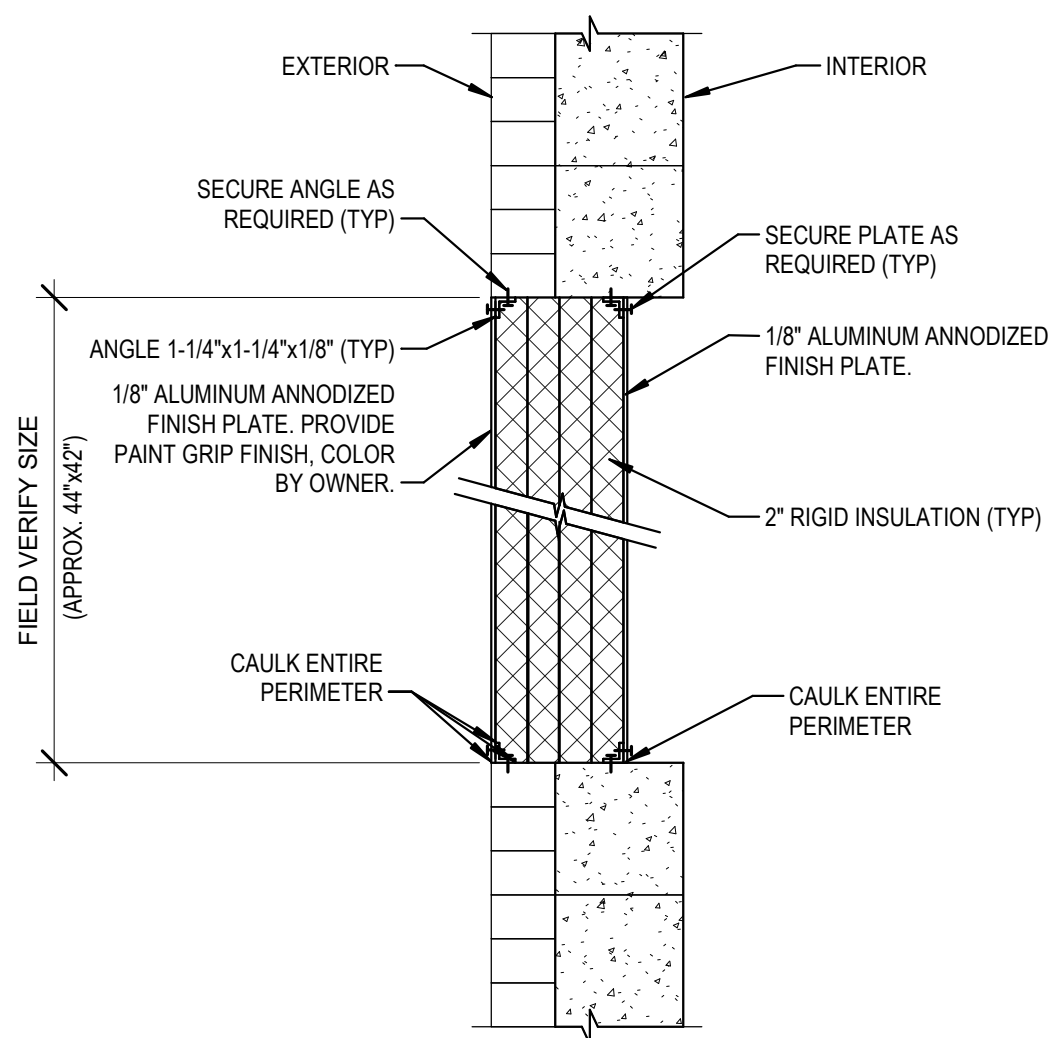
PRE-BID MEETING MINUTES / SIGN IN SHEET

The following information is being made available to Bidders which are being made a part of the project records. These minutes contain a summary of questions and clarifications.

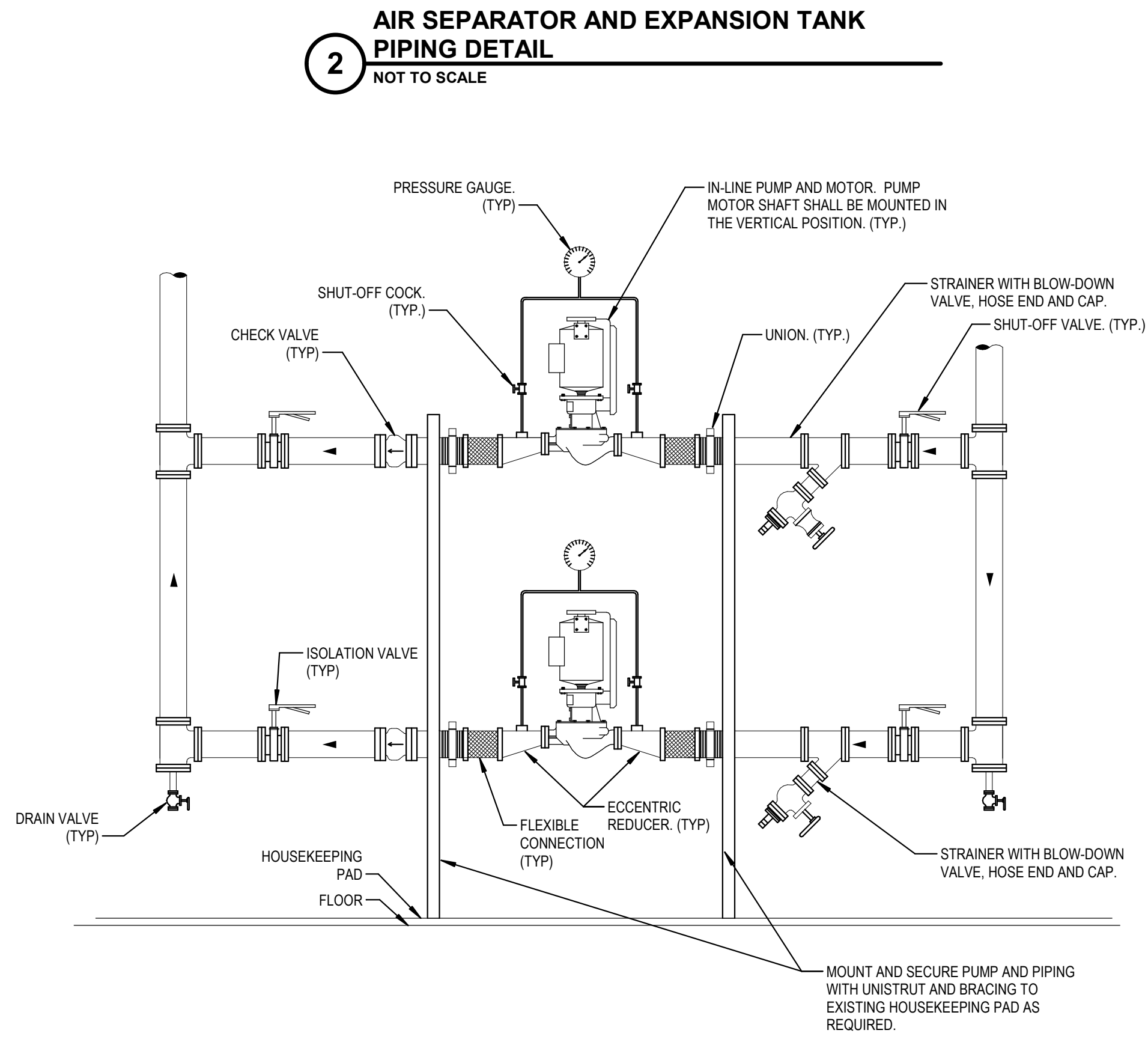
END OF ADDENDUM NO. 1



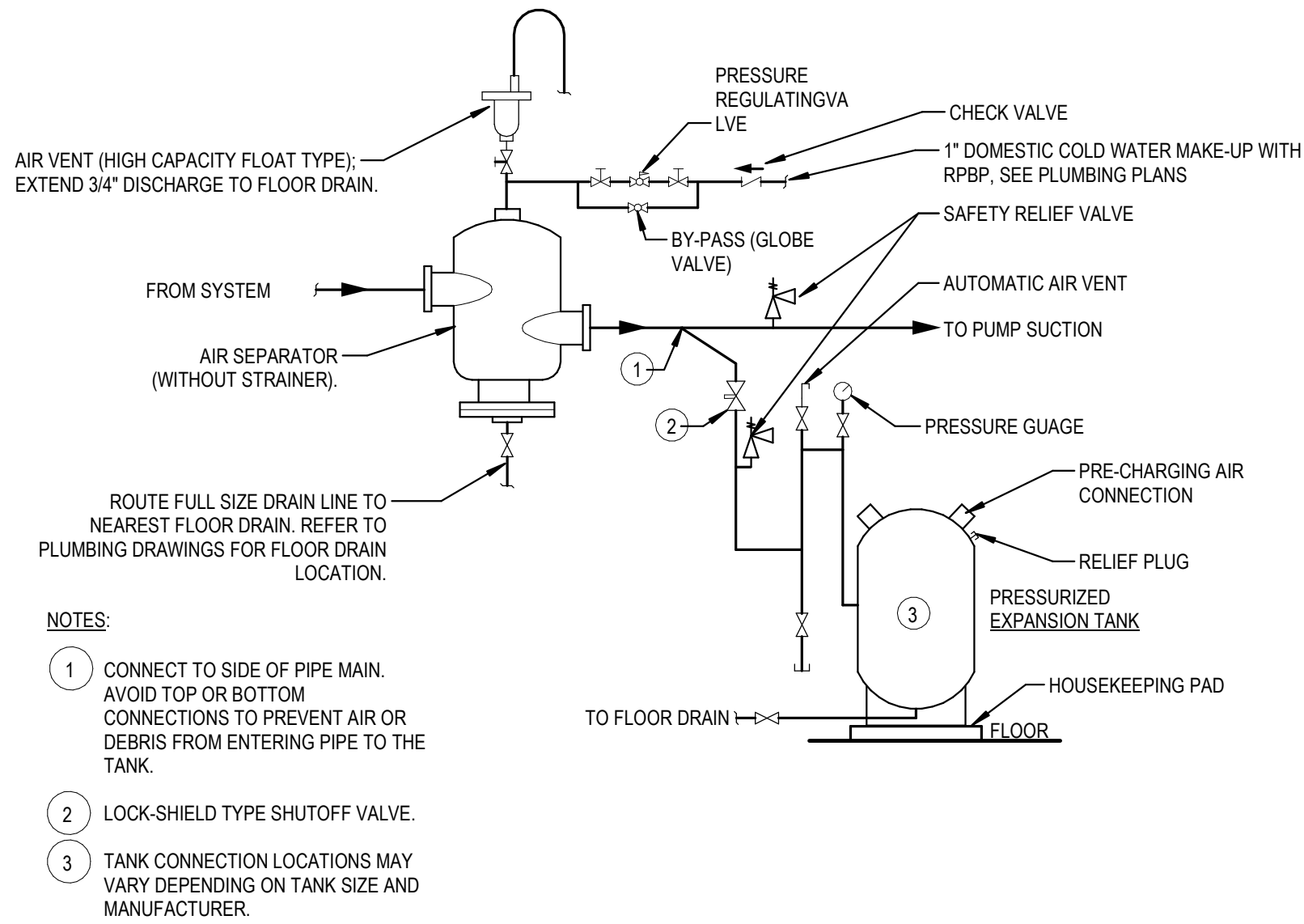
5 CONDENSING BOILER PIPING DETAIL
NOT TO SCALE



6 METAL INFILL PANEL DETAIL
NOT TO SCALE

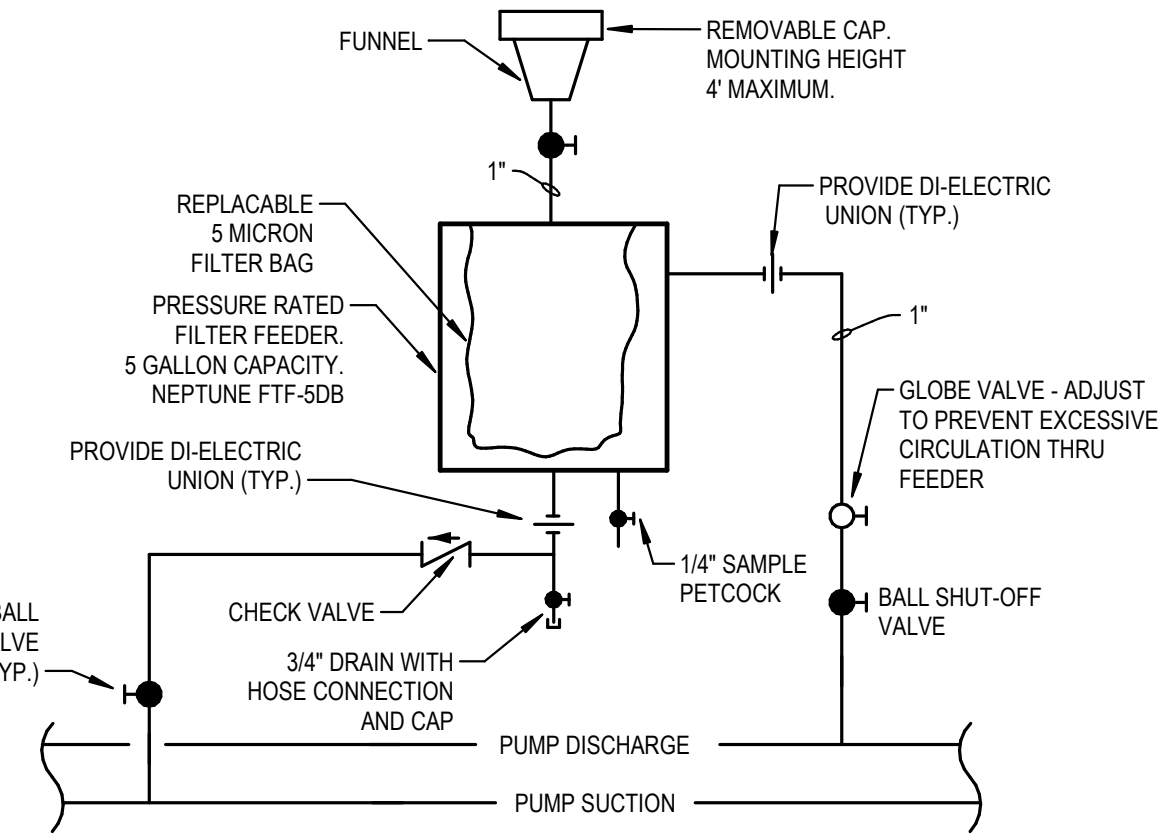


1 IN-LINE PUMP PIPING DETAIL
NOT TO SCALE

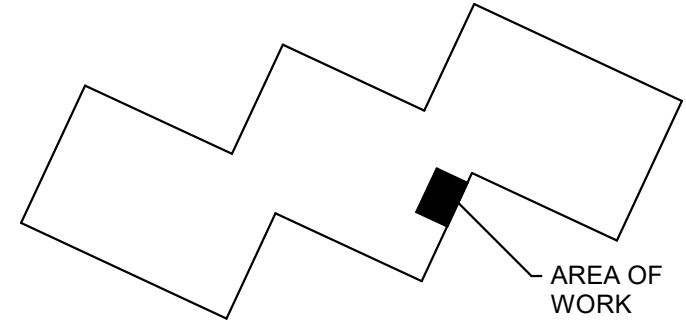
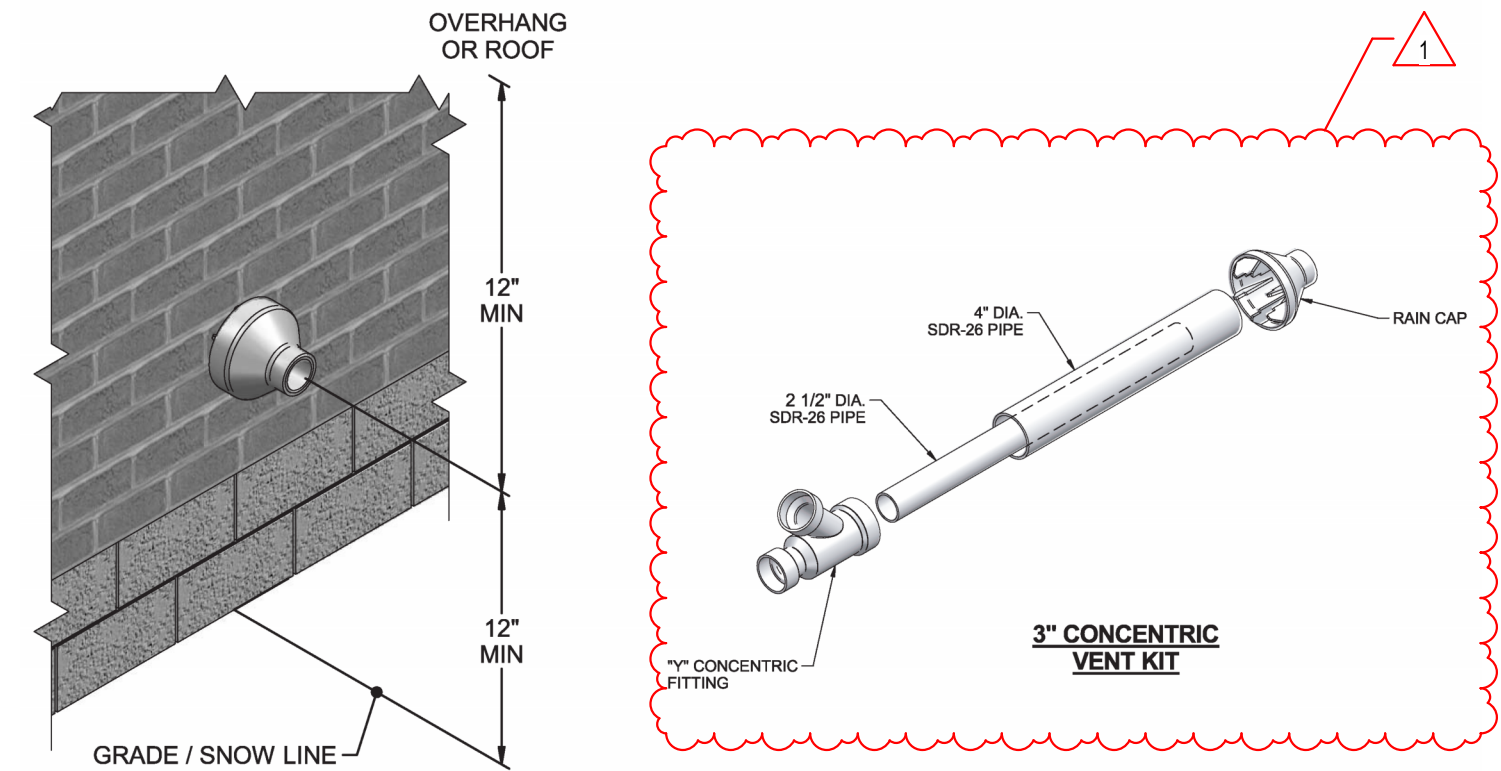


2 AIR SEPARATOR AND EXPANSION TANK PIPING DETAIL
NOT TO SCALE

3 FILTER FEEDER PIPING DETAIL
NOT TO SCALE



4 CONDENSING BOILER VENT DETAIL - PVC
NOT TO SCALE



KEY PLAN

#	Description	Date
1	Addendum #01	04/15/2025

JOB NO. 2025-002.AAW
PRODUCED CSM
DATE 04/02/2025

MECHANICAL DETAILS

M-501



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ANTHONY WEST APARTMENT
BOILER REPLACEMENTS

BALL STATE UNIVERSITY

2301 W BETHEL AVE MUNCIE, IN 47304

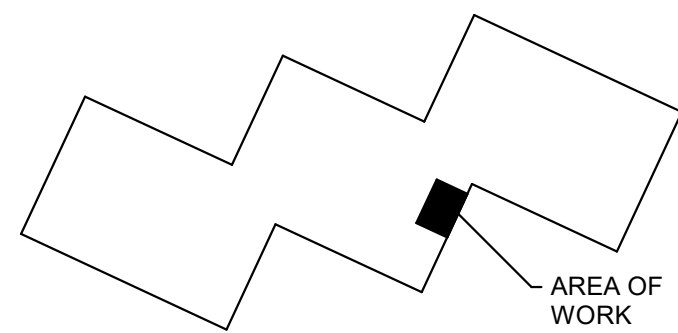




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KEY PLAN

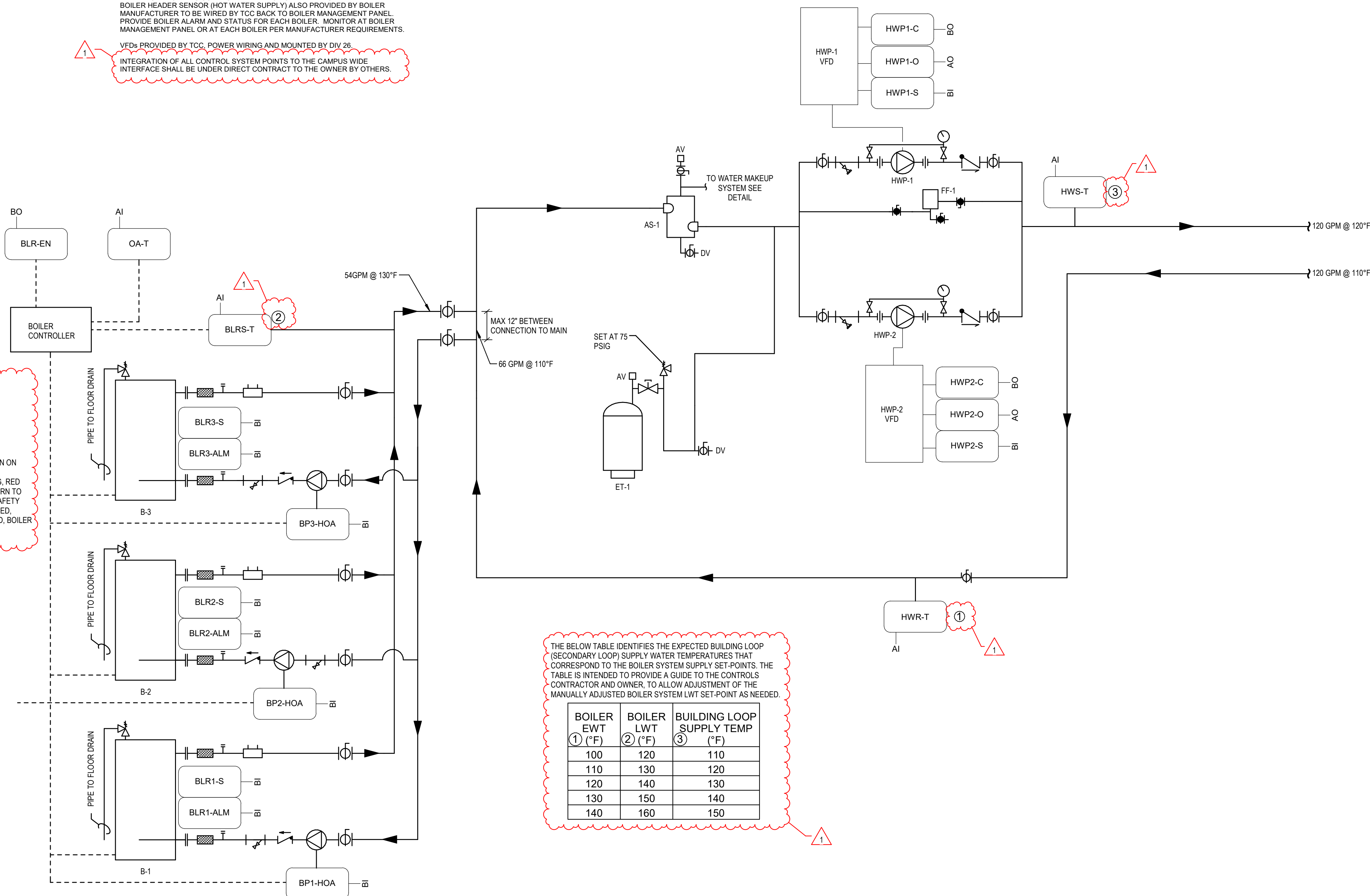
#	Description	Date
1	Addendum #01	04/15/2025

JOB NO. 2025-002.AAW
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TEMPERATURE CONTROLS SCHEMATICS

M-701

CONTROL SCHEMATIC PLAN NOTES
BOILER MANAGEMENT PANEL SUPPLIED BY BOILER MANUFACTURER AS A SEPARATE PANEL OR MAY BE FACTORY MOUNTED IN ONE OF THE BOILER MODULES. IN ADDITION TO DIGITAL CONTROL POINTS, PROVIDE BINNET M5/T5 INTERFACE FROM DDC CONTROL SYSTEM TO BOILER MANAGEMENT PANEL. BOILER HEADER SENSOR (HOT WATER SUPPLY) ALSO PROVIDED BY BOILER MANUFACTURER TO BE WIRED BY TCC BACK TO BOILER MANAGEMENT PANEL. PROVIDE BOILER ALARM AND STATUS FOR EACH BOILER. MONITOR AT BOILER MANAGEMENT PANEL OR AT EACH BOILER PER MANUFACTURER REQUIREMENTS.
VFDs PROVIDED BY TCC, POWER WIRING AND MOUNTED BY DIV 25
INTEGRATION OF ALL CONTROL SYSTEM POINTS TO THE CAMPUS WIDE INTERFACE SHALL BE UNDER DIRECT CONTRACT TO THE OWNER BY OTHERS.



HOT WATER SEQUENCE OF OPERATION

HOT WATER SYSTEM ENABLE: HEATING HOT WATER SYSTEM ENABLE: THE HEATING HOT WATER SYSTEM WILL BE ENABLED WHEN THE OUTDOOR AIR TEMPERATURE IS BELOW 60F (ADJ.) AS SENSED BY OUTDOOR AIR TEMPERATURE SENSOR (OA-T). THE HEATING HOT WATER SYSTEM WILL BE DISABLED WHEN THE OUTDOOR AIR TEMPERATURE IS ABOVE 65F (ADJ.). ALTERNATE LEAD BOILER STATUS EVERY 7 DAYS (ADJ.)

HOT WATER PUMP CONTROL: THE LEAD HOT WATER PUMP (HWPn-C) SHALL START AND SLOWLY RAMP UP TO SPEED. IF THE LEAD PUMP FAILS TO START, THE LAG PUMP SHALL START AND AN ALARM SHALL BE SENT TO THE FRONT END OPERATORS TERMINAL. PUMP STATUS (HWPn-S) SHALL BE PROVEN BEFORE BOILERS ARE ENABLED (BLR-EN). THE LEAD HOT WATER PUMP WILL OPERATE AT CONSTANT SPEED. SPEED WILL BE DETERMINED AT TIME OF SYSTEM BALANCING TO MAINTAIN FLOW RATE OF 120 GPM (ADJ.). ALTERNATE LEAD PUMP STATUS EVERY 7 DAYS (ADJ.)

POINTS LIST: THE FOLLOWING REPRESENTS THE MINIMUM POINTS TO BE PROVIDED AND VALUES CALCULATED TO BE DISPLAYED IN THE SYSTEM GRAPHICS. ADDITIONAL POINTS REQUIRED TO MEET THE SEQUENCE SHALL BE PROVIDED AND ALSO SHOWN. ALL OPERATING SETPOINTS SHALL BE ADJUSTABLE FROM THE FRONT END GRAPHICS.

BINARY INPUTS:

HOT WATER PUMPS STATUS (HWPn-S)
BOILER STATUS (BLRn-S)
BOILER ALARM (BLRn-ALM)
BOILER PUMP STATUS (BPh-HOA)

BINARY OUTPUTS:

HOT WATER PUMPS START/STOP (HWPn-C)
BOILER ENABLE (BLR-EN)

ANALOG INPUTS:

OUTSIDE AIR TEMPERATURE (OA-T)
HOT WATER SUPPLY TEMPERATURE (HWS-T)
HOT WATER RETURN TEMPERATURE (HWR-T)
BOILER HEADER SUPPLY TEMPERATURE (BLRS-T)

ANALOG OUTPUTS:

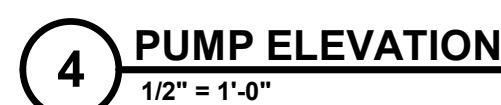
HOT WATER PUMPS SPEED CONTROL (HWPn-O)

THE BELOW TABLE IDENTIFIES THE EXPECTED BUILDING LOOP (SECONDARY LOOP) SUPPLY WATER TEMPERATURES THAT CORRESPOND TO THE BOILER SYSTEM SUPPLY SET-POINTS. THE TABLE IS INTENDED TO PROVIDE A GUIDE TO THE CONTROLS CONTRACTOR AND OWNER TO ALLOW ADJUSTMENT OF THE MANUALLY ADJUSTED BOILER SYSTEM LWT SET-POINT AS NEEDED.

BOILER EWT ① (°F)	BOILER LWT ② (°F)	BUILDING LOOP SUPPLY TEMP ③ (°F)
100	120	110
110	130	120
120	140	130
130	150	140
140	160	150

TEMPERATURE CONTROL NOTES

- PROVIDE MANUAL PUSH-BUTTON AT LOCATION SHOWN ON MP101. PROVIDE PUSH-BUTTON EQUAL TO SAFETY TECHNOLOGY INTERNATIONAL SS2, YELLOW HOUSING, RED BUTTON, SURFACE MOUNTED, PUSH TO ACTIVATE, TURN TO RESET. WIRE PUSH-BUTTONS IN SERIES TO BOILER SAFETY CIRCUIT AT EACH BOILER. WHEN BUTTON IS DEPRESSED, BOILER SHALL BE DISABLED. WHEN BUTTON IS PULLED, BOILER SYSTEM SHALL BE ENABLED.



A.	DARK DASHED LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND/OR MECHANICAL ACCESSORIES DEMOLISHED COMPLETE. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING AND DEMOLITION. CONTRACTOR TO INCLUDE ALL COST TO REMOVE ITEMS MADE OBSOLETE DUE TO NEW WORK.
B.	LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, PIPING, AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO DEMOLITION AND BIDDING.
C.	VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND DEMOLITION.

- 1 REMOVE FILTER FEEDER AND ALL ASSOCIATED PIPING COMPLETE.
- 2 REMOVE BOILER, BOILER FLUE AND ALL ASSOCIATED PIPING COMPLETE TO WHERE SHOWN.
- 3 REMOVE EXPANSION TANK AND ALL ASSOCIATED PIPING COMPLETE.
- 4 REMOVE PUMP AND ALL ASSOCIATED PIPING COMPLETE.
- 5 REMOVE PIPING TO WHERE SHOWN.
- 6 REMOVE FLUE TO WHERE SHOWN. FIELD VERIFY QUANTITY AND SIZE OF EXISTING FLUE INSIDE ENCLOSURE.
- 7 REMOVE COVER AND SHEET METAL COMPLETE.
- 8 REMOVE EXISTING FLUE CAP AT CHIMNEY. PREPARE CHIMNEY FOR NEW WEATHER PROOF CAP.

1. PVC CONCENTRIC VENT KIT EQUAL TO LOCHMHV# 102009005. SEAL TO METAL INFIL PLATE WATER TIGHT. FOLLOW MANUFACTURER'S RECOMMENDED INSTALLATION INSTRUCTIONS.
2. EMERGENCY BOLLER SHUT-OFF. SEE M-10 DRAWING FOR SEQUENCE.
3. METAL SPLIT PANEL.
4. METAL BOLLER ON LOWER SHUT-OFF AND MAINTAIN MANUFACTURER'S RECOMMENDATIONS AND CLEARANCES.
5. MOUNT 1/2 HP 1 & 1/2 PUMP 2 PUMPS ON UNISTRUT IN A STACKED ARRANGEMENT. MOUNT VFD'S TO UNISTRUT. MAINTAIN MAINTAINANCE CLEARANCE FOR PUMPS.
6. 1" PIPE DOWN TO 1/4" ON FLOOR. SEE M501 FOR DETAIL.
7. *POREMASTIC COLD WATER-USE WITH RIGID RIGID. SEE M501 FOR DETAIL.
8. PROVIDE WATER-PROOF SHEET METAL BLANK FLOOR PAN OVER EXISTING FLUE/PLENUM OPENING (FIELD VERIFY SIZE). SEAL WEATHER TIGHT.
9. PROVIDE WATER-PROOF CHIMNEY CAP (FIELD VERIFY SIZE). SEAL WEATHER TIGHT TO EXISTING CHIMNEY.

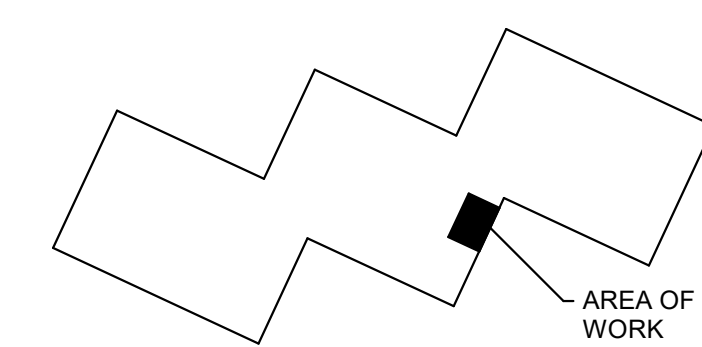


ANTHONY WEST APARTMENT
BOILER REPLACEMENTS
BALL STATE UNIVERSITY
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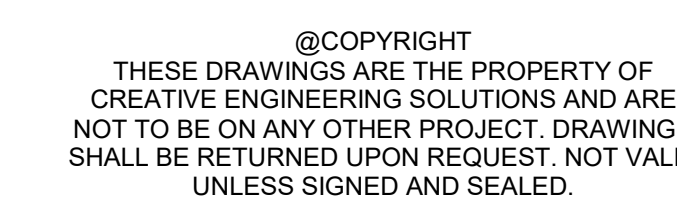
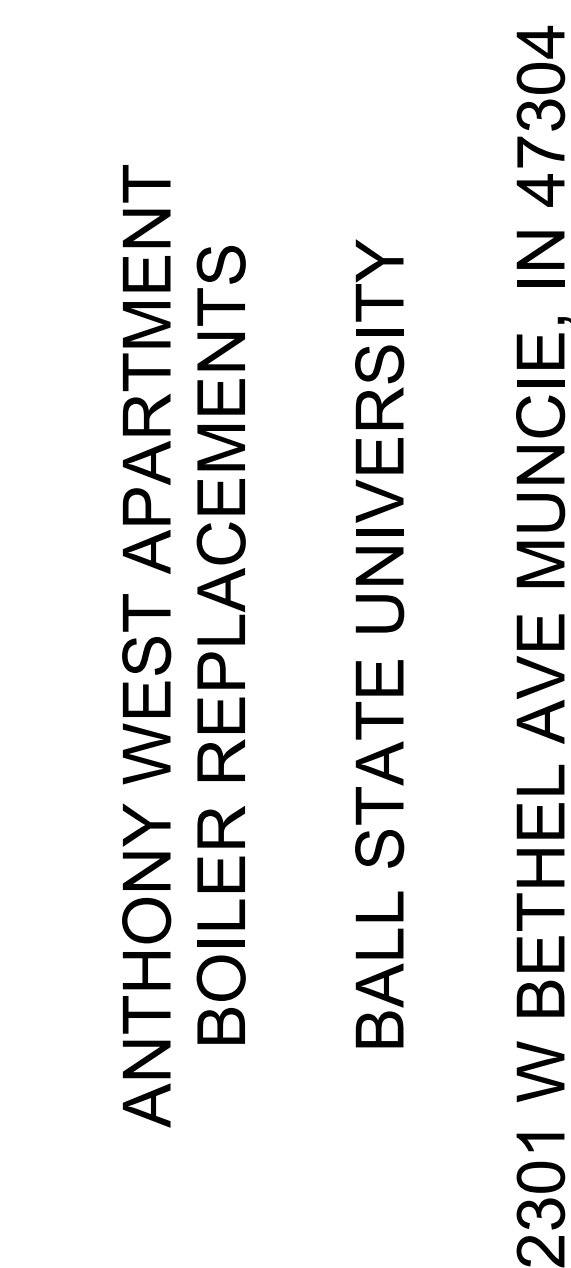
#	Description	Date
1	Addendum #01	04/15/2025

JOB NO. 2025-002.AAW
PRODUCED CSM
DATE 04/02/2025

MECHANICAL ROOM FLOOR PLANS

MP101

SPH1_MECHANICAL_BOOM_FLOOR_PLANS
2023-03-03 AMB_BALL STATE UNIVERSITY_ANTHONY WEST APARTMENTS BOILER REPLACEMENTS_
User:tomcdonald Documents\2023-03-03 AMB_Ballgoon_M_2023_Central_mechanical\SPH1.Lvt
14/03/2023 4:51:27 PM



JOB NO. 2025-002.AAW
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PP101

1 SEE "M" SERIES DRAWINGS FOR CONNECTION TO THE BOILER MAKEUP WATER
SYSTEM
2 CONTACT NATHAN KUNKLER AT CENTERPOINT ENERGY AT 1-812-446-4969 TO
REQUEST A SERVICE PRESSURE INCREASE FROM 6" W.C. TO 2 PSI.
3 PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (2 PSI) SERVICE PRESSURE
AND REGULATE DOWN TO 6" W.C. SUPPLYING 100 CFH.
4 PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (2 PSI) SERVICE PRESSURE
AND REGULATE DOWN TO 10" W.C. SUPPLYING 200 CFH.
5 PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (2 PSI) SERVICE PRESSURE
AND REGULATE DOWN TO 6" W.C. SUPPLYING 800 CFH.
6 PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (2 PSI) SERVICE PRESSURE
AND REGULATE DOWN TO 8" W.C. SUPPLYING 150 CFH.



- 1 REMOVE EXISTING BACKFLOW PREVENTER AND PREPARE PIPING TO ACCOMMODATE NEW BACKFLOW PREVENTER TO BE INSTALLED.
- 2 REMOVE EXISTING WALL HYDRANT AND ASSOCIATED PIPING COMPLETE. PATCH WALL TO MATCH EXISTING.
- 3 PATCH WALL TO MATCH EXISTING AFTER REMOVAL OF GAS PIPING.
- 4 REMOVE PIPING FROM HVAC MAKE-UP WATER ASSEMBLY. PREPARE PIPING FOR CONNECTION TO NEW ASSEMBLY. SEE "M" SERIES DRAWINGS FOR MORE INFORMATION.
- 5 REMOVE EXISTING GAS PIPING FROM EXISTING GENERATOR COMPLETE AND PREPARE EXISTING GENERATOR FOR NEW CONNECTION.



2025-02-02 AMM_BALL STATE UNIVERSITY_ATHLETIC BOILER SE PLACEMENTS_

MEETING MINUTES

Anthony Apartments West Building Boiler Replacement
Ball State University
BSU Project No. 2025-031.01 AN
April 11, 2025

I. Project Team

A. Owner's Representative(s):

Chris Rowlett	Facilities Planning & Mgmt.	765-285-5628	email: chris.rowlett@bsu.edu
Ryan Koenker	Facilities Planning & Mgmt.	765-285-2821	email: rrkoenker@bsu.edu
Robert Ramey	Facilities Planning & Mgmt.	765-285-2835	email: rramey2@bsu.edu
Paul Sternberg	Facilities Planning & Mgmt.	765-285-2823	email: pmsternberg@bsu.edu
June Sanders	Purchasing	765-285-1548	email: jasanders3@bsu.edu
George Edwards	Housing	765-285-1520	email: gedwards@bsu.edu
Amanda Knerr	Housing	765-285-8000	email: amanda.knerr@bsu.edu

B. Consultant's Representative(s):

Charlie Wilson	Creative Engineering Solutions	317-658-4348	email: cwilson@creativeng.net
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See attached sign-in sheet for attendees.

II. Contract Documents: Project Manual and Drawings.

A. Availability of Contract Documents.

1. Contract Documents are available through the Purchasing Services.

B. Interpretation of Contract Documents.

1. All questions shall be emailed to Charlie Wilson with Creative Engineering Solutions at the email address as indicated above.

The deadline for questions is Tuesday, April 22, 2025, EOD.

C. Addenda.

No addenda have been issued to date.

D. Substitutions.

1. If there are substitution requests, these need to be requested pre-bid, for review and consideration. Substitutions will not be allowed post bid.

The deadline for questions is Tuesday, April 22, 2025, EOD.

III. Bidding Procedures.

A. Bidding Date:	Wednesday, April 30, 2025 at 11:00 am EDT
Location:	Purchasing Conference Room Service & Stores Building 3401 N. Tillotson Avenue Muncie, Indiana 47306

B. Bidding Form and Other Documents.

1. Indiana Form 96 (Revised 2013).
 - a. Fill out Part II., Section I. Experience Questionnaire
 - b. Fill out Part II., Section II. Plan and Equipment Questionnaire.
 - c. Attach Part II., Section III. Contractor's Financial Statement.

The Financial Statement must be recent and cannot be older than 90-days.

- d. Fill out Part II., Section IV. Contractors Non – Collusion Affidavit
 - e. Fill out Part II., Section V. Oath and Affirmation

2. Bid Form Supplements, Document 00 43 00

Appendix A.

- (1) Acknowledgment of Receipt of Addenda.
- (2) Project Completion

Appendix B.	Alternates – Not Applicable
Appendix C.	Unit Prices – Not Applicable
Appendix D.	Principal Subcontractors
Appendix E.	Supplementary General Construction Information
Appendix F.	Supplementary Mechanical Information
Appendix G.	Supplementary Electrical Information
Appendix H.	Supplementary Telecommunication Information – Not Applicable

3. Bid Security, Document 00 43 13.
4. Representations and Certifications, Document 00 45 00

All Certifications, Drug Testing Plan, and Bidder's Check List must be submitted with the bid.

- | | |
|-------------|---|
| Appendix 1. | Nondiscrimination Compliance Statement |
| Appendix 2. | Contractors Certification of Self Performance |

The General Contractor must contribute at least 15% of the total Contract Price.

- | | |
|-------------|--|
| Appendix 3. | Contractors Certification of Authorized Employment |
|-------------|--|

Every contractor shall enroll in and verify the work eligibility status of all employees through the E-Verify program.

- | | |
|-------------|--|
| Appendix 4. | Contractors Certification of Training Program Compliance |
|-------------|--|

Each Contractor, which applies to all tiers, employing ten (10) or more employees shall provide access to a training program applicable to the tasks to be performed in the normal course of the employee's employment.

- | | |
|-------------|---|
| Appendix 5. | Drug Testing Plan |
| Appendix 6. | Contractors Certification of Pre-Qualification Compliance |

Each Contractor, which applies to all tiers, with a contract value of \$300,000 or more shall be pre-qualified by the Indiana Department of Administration (IDOA) or Indiana Department of Transportation (INDOT) according to the type and value of the work to be performed.

- | | |
|-------------|---------------------|
| Appendix 7. | Bidder's Check List |
|-------------|---------------------|

Bidders shall review and complete the checklist.

5. Documents that must be submitted by the Awarded Contractor prior to mobilization.

Section 00 61 00 – Bond Forms: AIA Document A312 - Performance Bond and Payment Bond
Section 00 73 73 – Escrow Agreement: Owner will provide document after the award of the project.

IV. Scope of Project.

A. Summary of Work.

Replacement of existing gas-fired, modular boiler and associated piping within boiler room with three high-efficiency, gas-fired boilers and associated piping and controls. Replacement of two existing base mounted heating water circulation pumps with new in-line circulating pumps. Replacement of existing heating water expansion tank, air separator and other work indicated in contract documents.

B. Project Schedule:

1. Commence: May 19, 2025

2.

Construction may commence as early as Monday, May 5, 2025.

3. Complete: September 19, 2025

C. Access to Project Area: Access to be coordinated with Owner, specifically equipment & material logistics.

D. Coordination with Owner Occupancy which includes Students, Faculty, and Staff. Shutdowns will be coordinated with the Owner and Project Representatives.

V. Questions.

The following comments were made during the meeting:

1. *A bid bond is required.*

2. *Typical work hours are Monday through Friday from 7:00 am to 7:00 pm.*

a. Work beyond 7:00 pm and on weekends will need to be approved by BSU.

3. *Contractor will need to coordinate with gas utility.*

4. *There are residents in the apartment building throughout summer and the gas service will need to remain active.*

5. *All technical questions need to be submitted to Charlie Wilson via email.*

VI. Tour of Project Site.

A tour of the project site was conducted immediately after the meeting.

End of Minutes

Ball State University
Facilities Planning & Management

Pre-Bid Conference

SIGN-IN SHEET

Anthony Apartments West Building Boiler Replacement
Ball State University
BSU Project No. 2025-031.01 AN
April 11, 2025

NAME	REPRESENTING	PHONE NUMBER	EMAIL ADDRESS
Scott Davis	Greiner Brothers	317-726-6501	scott.davis@greinerbrothers.com
Jim Spencer	Automated Logic	765-212-4951	James.Spencer1@comcast.com
Jane Sanders	BSU Purchasing	765-285-1548	JSanders3@BSU.EDU
CHARLIE WILSON	CES	317-658-4348	cwilsoncreativeng.NET
Andrew Niemann	CES	618-578-9228	anienmann@creativeng.net
George Edwards	BSU Housing	765-285-1520	gedwards@BSU.EDU
CHRIS ROWLETT	BSU FP&M	765-620-0737	CHRIS.ROWLETT@BSU.EDU
KEN ELDREDGE	BSU Housing	765-908-1526	kreldridge3@BSU.EDU
PAUL STERNBERG	BSU FP&M	765-285-2823	pmsternberg@bsu.edu
Matt Evans	DEEM, LLC	765-247-9037	mevans@deemfirst.com
Butch Sprinkle	HMH	963-203-9992	bsprinkle@HMH Mechanical.com
Matt Smith	HMH	765-803-1600	Matt.Smith@HMH Mechanical.com
Sawn DeBor	Shambaugh + Son	260-740-2388	sdebdr@shambaugh+son