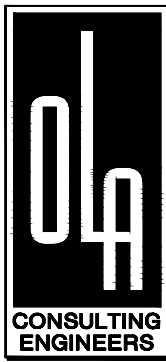


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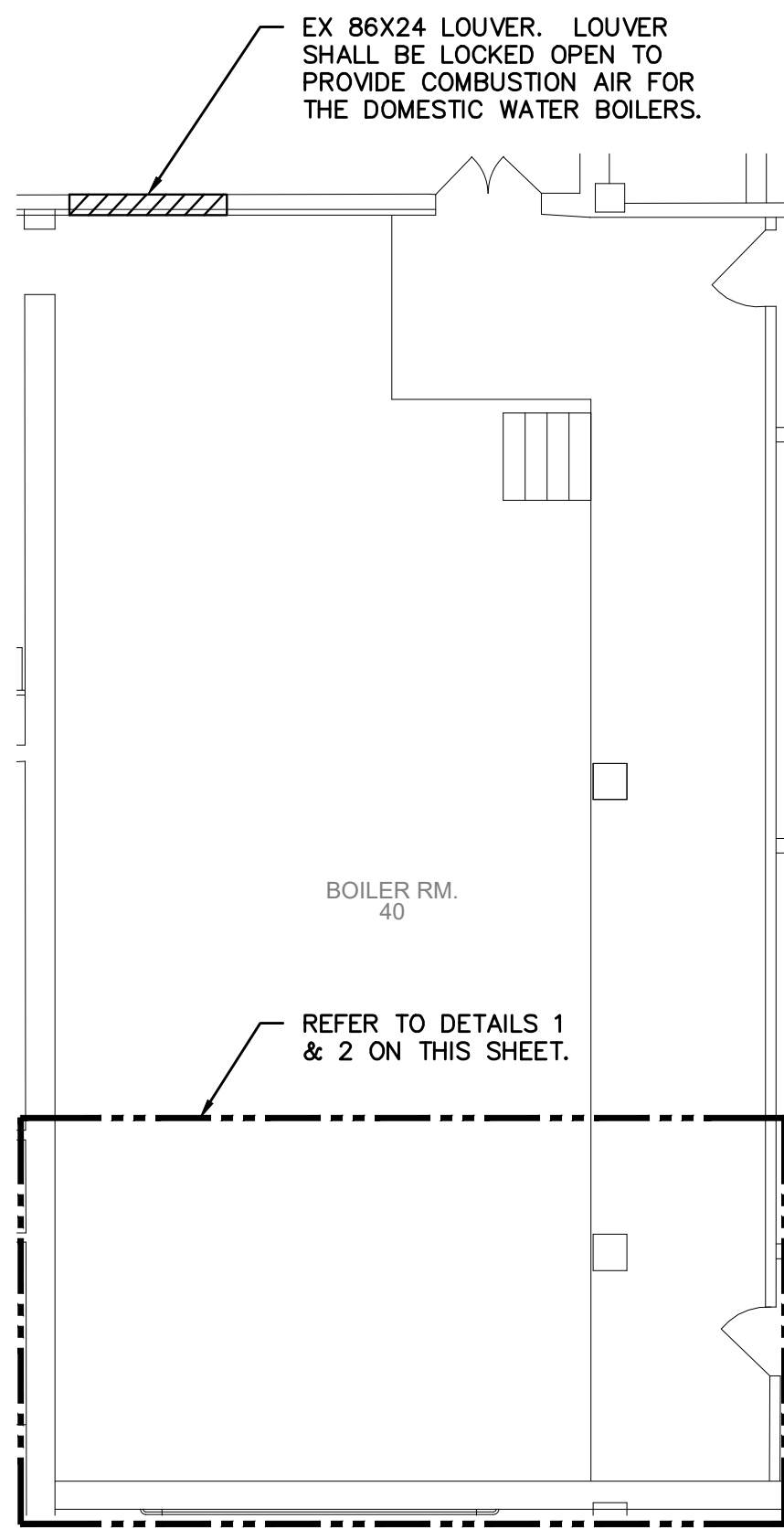


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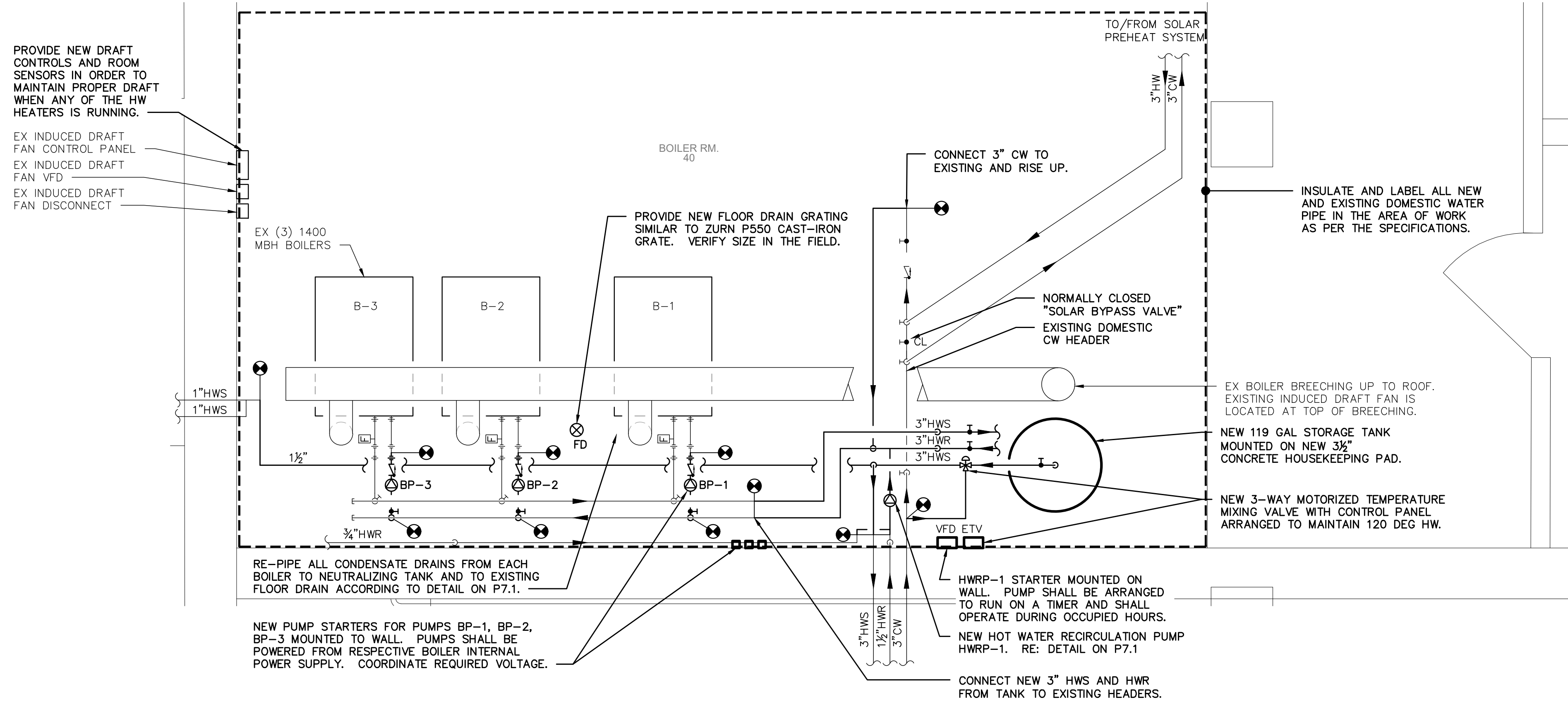
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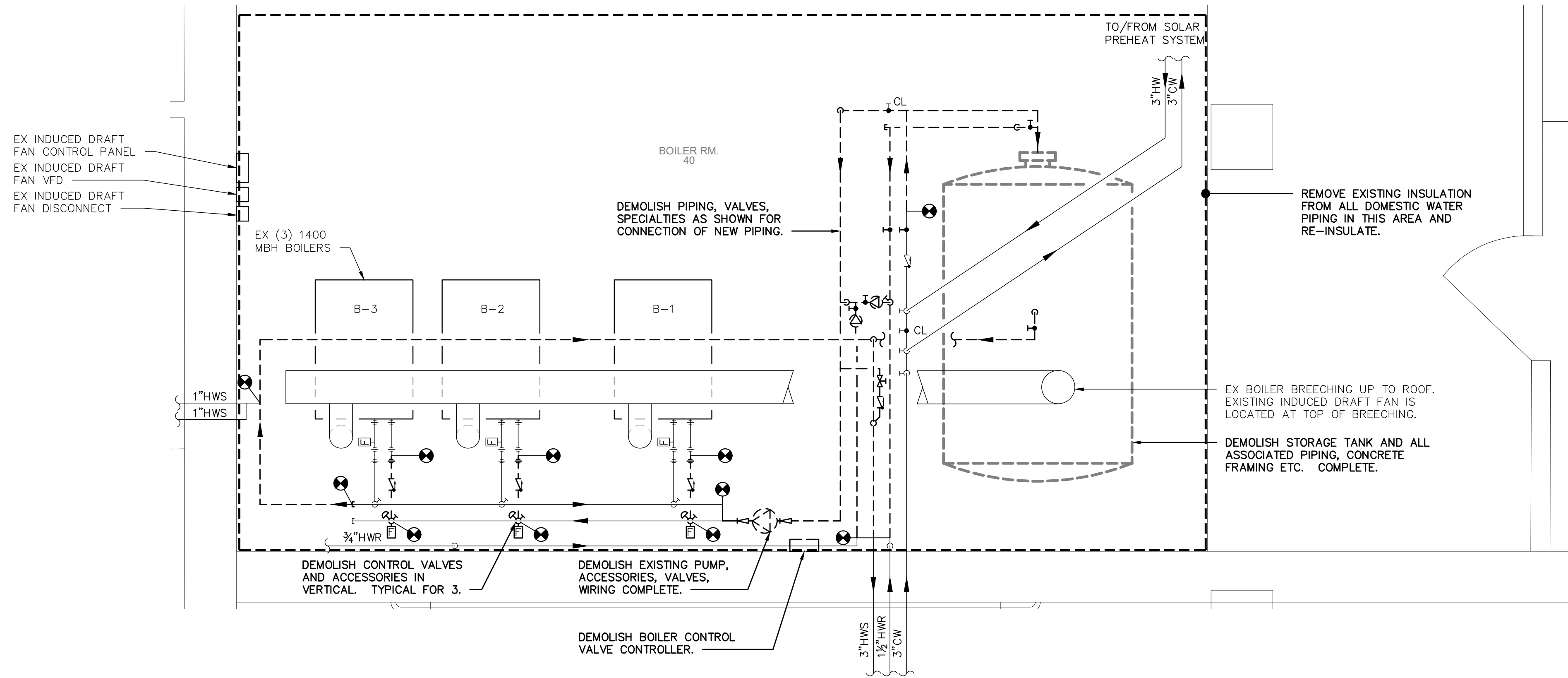
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PLUMBING BOILER ROOM  
COMBUSTION AIR  
SCALE: 1/8" = 1'-0"  
NORTH



2 PLUMBING BOILER ROOM NEW WORK PART PLAN  
SCALE: 1/2" = 1'-0"  
NORTH



1 PLUMBING BOILER ROOM DEMOLITION PART PLAN  
SCALE: 1/2" = 1'-0"  
NORTH

2	ISSUED FOR BID	05/07/21
1	100% REVIEW	06/15/20
No.	ISSUE OR REVISION	DATE

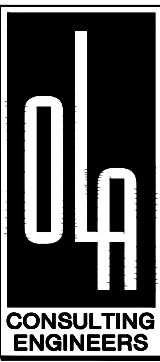
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PROJECT TITLE  
**WCC PHYSICAL  
EDUCATION BUILDING  
DOMESTIC HOT WATER  
UPGRADE**  
75 Grasslands Rd, Valhalla, NY 10595

DRAWING TITLE  
**PLUMBING BOILER ROOM  
PART PLANS**

SCALE AS SHOWN	PROJECT NO. NWCC000800
DRAWN BY NW	DRAWING NO. P1.1
CHECKED BY RS	
DATE 03-17-2020	

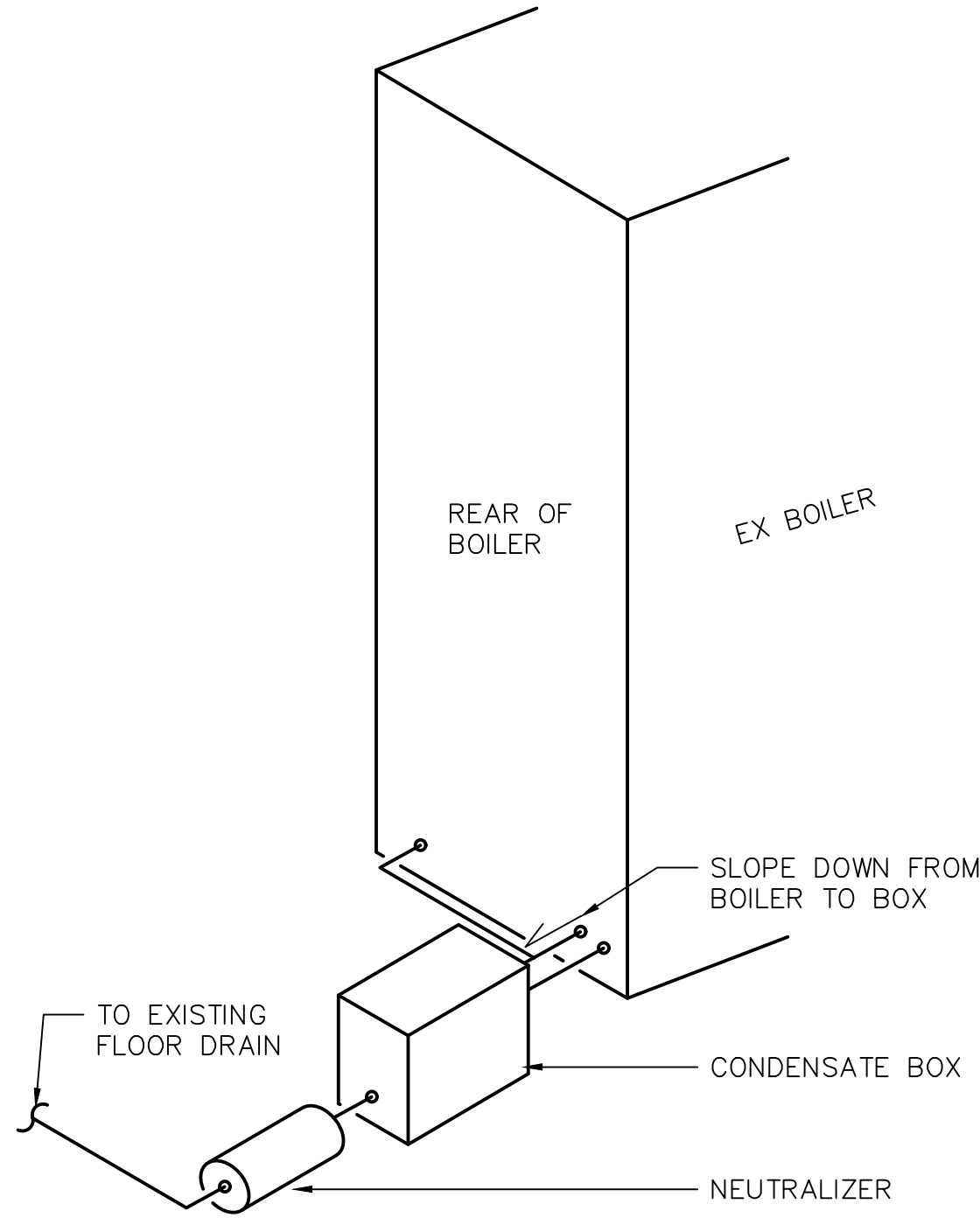




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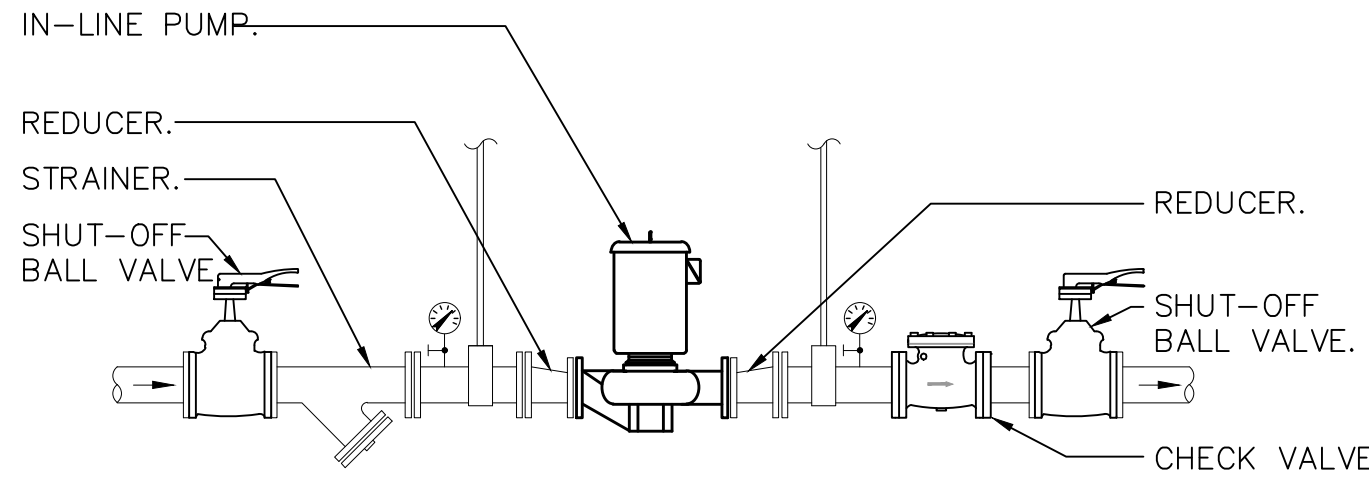


Westchester  
Community College  
State University of New York  
75 Grasslands Rd,  
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NOTES:  
1.) REPIPE BOILER DRAIN SYSTEM TO BE AS SHOWN.  
2.) PROVIDE NEW PIPING AND FITTINGS AS REQUIRED.  
3.) ALL PIPING SHALL BE PVC. TYPICAL FOR 3 BOILERS.

4 BOILER CONDENSATE SCHEMATIC  
SCALE: NONE

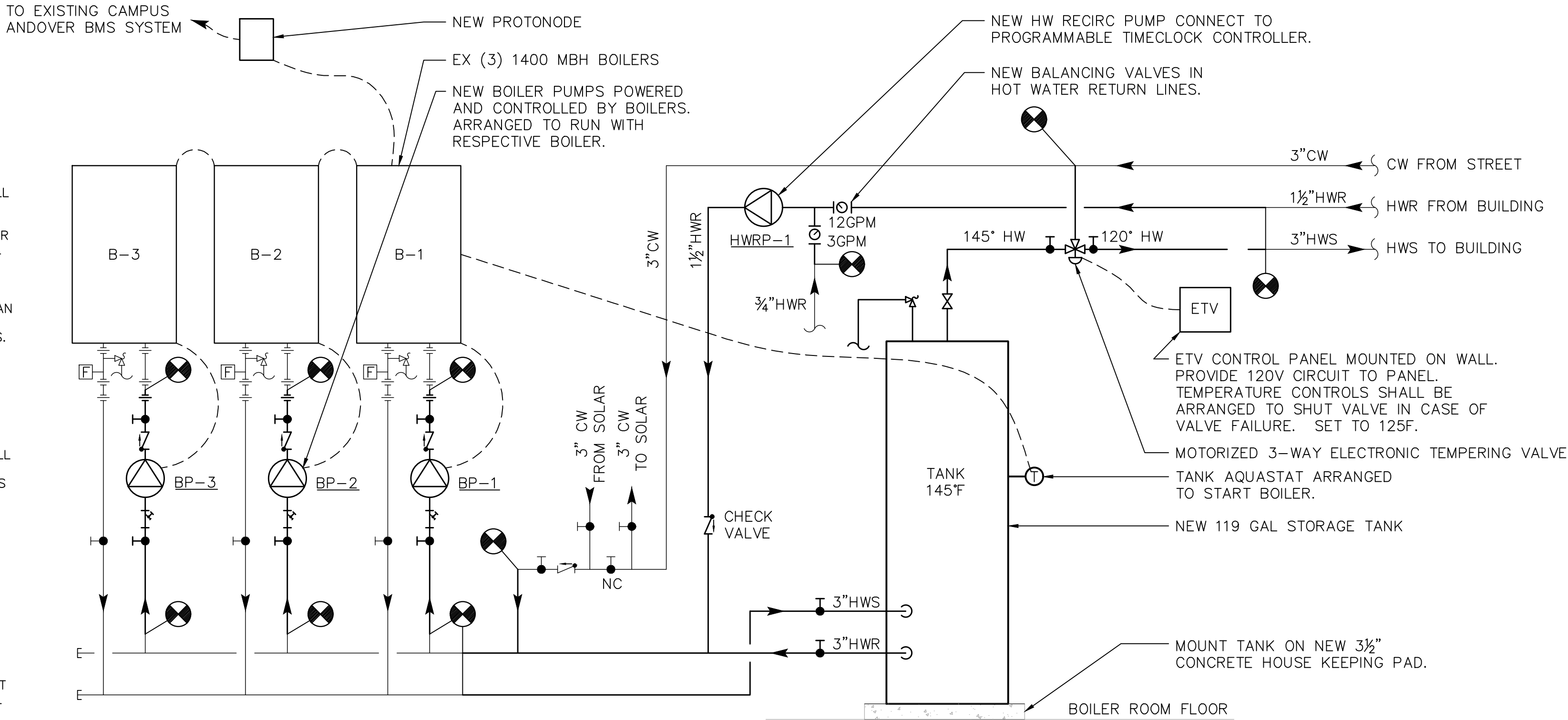


NOTES:  
1.) REFER TO PLANS FOR PIPE SIZES.

2 TYPICAL IN-LINE PUMP SCHEMATIC  
SCALE: NONE

FAN CONTROL SEQUENCE:

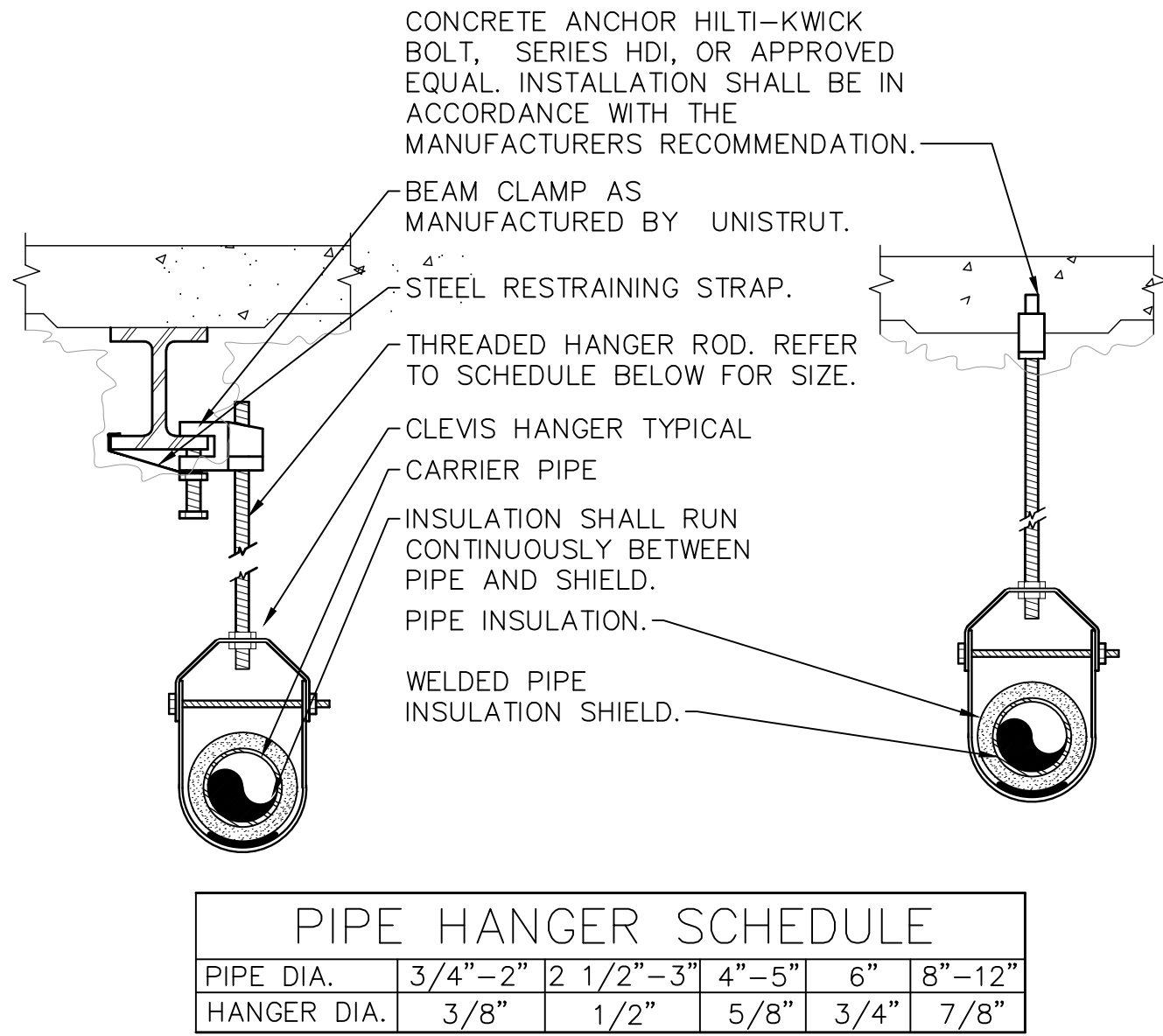
- 1.) EACH HEATING APPLIANCE SHALL BE INTERLOCKED WITH THE EXISTING INDUCED DRAFT FAN CONTROL PANEL. UPON A CALL FOR HEAT, THE CONTROL PANEL SHALL ACTIVATE THE EXISTING INDUCED DRAFT FAN TO ESTABLISH DRAFT IN THE CHIMNEY SYSTEM. ONCE DRAFT CONDITIONS ARE MET, THE CONTROL SYSTEM WILL RELEASE THE FLAME PROGRAMMER OR GAS VALVE OF THE APPLIANCE CALLING FOR HEAT. THE SEQUENCE IS REPEATED EVERY TIME AN INITIAL APPLIANCE CALLS FOR HEAT. EACH ADDITIONAL CALL FOR HEAT, THE CONTROL WILL NOT DELAY THE SEQUENCING OF THE ADDITIONAL HEATING APPLIANCES.
- 2.) WHEN APPLIANCES SHUT DOWN, THE INDUCED DRAFT FAN WILL CONTINUE TO RUN IN POST-PURGE MODE FOR A SET PERIOD OF TIME TO REMOVE RESIDUAL FLUE GASES.
- 3.) ONCE THE POST-PURGE CYCLE IS COMPLETED THE SYSTEM SECURES AND THE CONTROL PANEL ENTERS STAND-BY MODE.
- 4.) IF PROPER DRAFT CANNOT BE MAINTAINED OR AN EXTERNAL MECHANICAL LIMIT OPENS BECAUSE OF MECHANICAL OR ELECTRICAL FAILURE, THE CONTROL WILL GO IN ALARM MODE AND THE INTEGRATED PROVEN DRAFT FUNCTION WILL SHUT DOWN ALL THE APPLIANCES WITHIN 15 SECONDS. WHILE IN ALARM MODE, THE CONTROL CONSTANTLY MONITORS THE DRAFT AND LIMIT INPUTS. IF THE FAILURE CORRECTS ITSELF OR IS CORRECTED VIA INTERVENTION, THE SYSTEM WILL RESTART AUTOMATICALLY. IF THE FAILURE IS NOT CORRECTED BEFORE THE ADJUSTABLE SYSTEM RELEASE FAULT TIMER EXPIRES, THE CONTROL WILL DISABLE AND LOCKOUT THE SYSTEM FOR FREEZE PROTECTION.
- 5.) WHEN THE FAN TEST IS ENABLED, THE CONTROL PANEL WILL RUN A SELF DIAGNOSTIC ON THE STATUS OF THE VENT SYSTEM EACH HEATING CYCLE TO VERIFY THAT THE SYSTEM IS FUNCTIONING PROPERLY. IF THE FAN TEST FAILS, THE CONTROL PANEL WILL ALARM, LOCKOUT THE SYSTEM AND ANNUNCIATE THE TEST FAILURE. ALL ALARMS SHALL BE VISIBLE ON THE EXISTING CAMPUS BMS SYSTEM.



NOTES:  
1) PROVIDE PROGRAMMABLE TIMECLOCK CONTROLLER FOR HWRP-1.  
2) CONTROLS SHALL BE PROVIDED TO FOLLOW THE SEQUENCE LISTED BELOW:

BOILER SEQUENCE:  
1. UPON A DROP IN TANK TEMPERATURE, BOILER (B-1) SHALL BE ENERGIZED.  
2. BOILER B-1 SHALL INITIATE BOILER PUMP (BP-1) TO START.  
3. UPON CONFIRMATION OF FLOW FROM BP-1, BOILER B-1 SHALL START FIRING.  
4. IF BOILER TEMPERATURE CONTINUES TO DROP, THERE SHALL BE CASCADING CONTROLS INTERNAL TO THE BOILERS FROM THE BOILER MANUFACTURER TO INITIATE THE OTHER BOILERS TO ENERGIZE.

3 DOMESTIC HOT WATER PIPING SCHEMATIC  
SCALE: NONE



PIPE HANGER SCHEDULE					
PIPE DIA.	3/4"-2"	2 1/2"-3"	4"-5"	6"-8"	8"-12"
HANGER DIA.	3/8"	1/2"	5/8"	3/4"	7/8"

- NOTES:
- 1.) CLEVIS HANGERS WITH WELDED INSULATION SHIELDS SIMILAR TO RAUCH FIG. 100SH ON ALL PIPES LARGER THAN 1".
  - 2.) FOR PIPES 1" OR SMALLER, A BAND HANGER WITH INSULATION SHIELD MAY BE USED SIMILAR TO RAUCH FIG. NO. 1ASH.
  - 3.) FOR NON-INSULATED PIPE, INSULATION SHIELDS MAY BE OMITTED.
  - 4.) ALL PIPE HANGERS SHALL BE GALVANIZED STEEL OR FACTORY PAINTED BLACK WITH ENAMEL.
  - 5.) FOR NON FERROUS PIPING WITHOUT INSULATION, ALL HANGERS SHALL BE COPPER PLATED OR FURNISHED WITH A DI-ELECTRIC BETWEEN PIPE AND HANGERS.
  - 6.) WHERE EXISTING BUILDING STRUCTURAL COMPONENTS HAVE FIREPROOF MATERIAL, ANY AREA THAT IS DISTURBED OR DAMAGED AS A RESULT OF HANGER INSTALLATION SHALL BE PATCHED WITH UL AND FM APPROVED FIREPROOFING TO MATCH EXISTING.

1 PIPE HANGER DETAIL  
SCALE: NONE

2	ISSUED FOR BID	05/07/21
1	100% REVIEW	06/15/20
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DOMESTIC HOT WATER  
UPGRADE**  
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DRAWING TITLE  
**PLUMBING DETAILS**

SEAL 	SCALE <b>AS SHOWN</b>	PROJECT NO. <b>NWCC000800</b>
	DRAWN BY <b>NW</b>	DRAWING NO.
	CHECKED BY <b>RS</b>	<b>P7.1</b>
	DATE <b>03-17-2020</b>	