

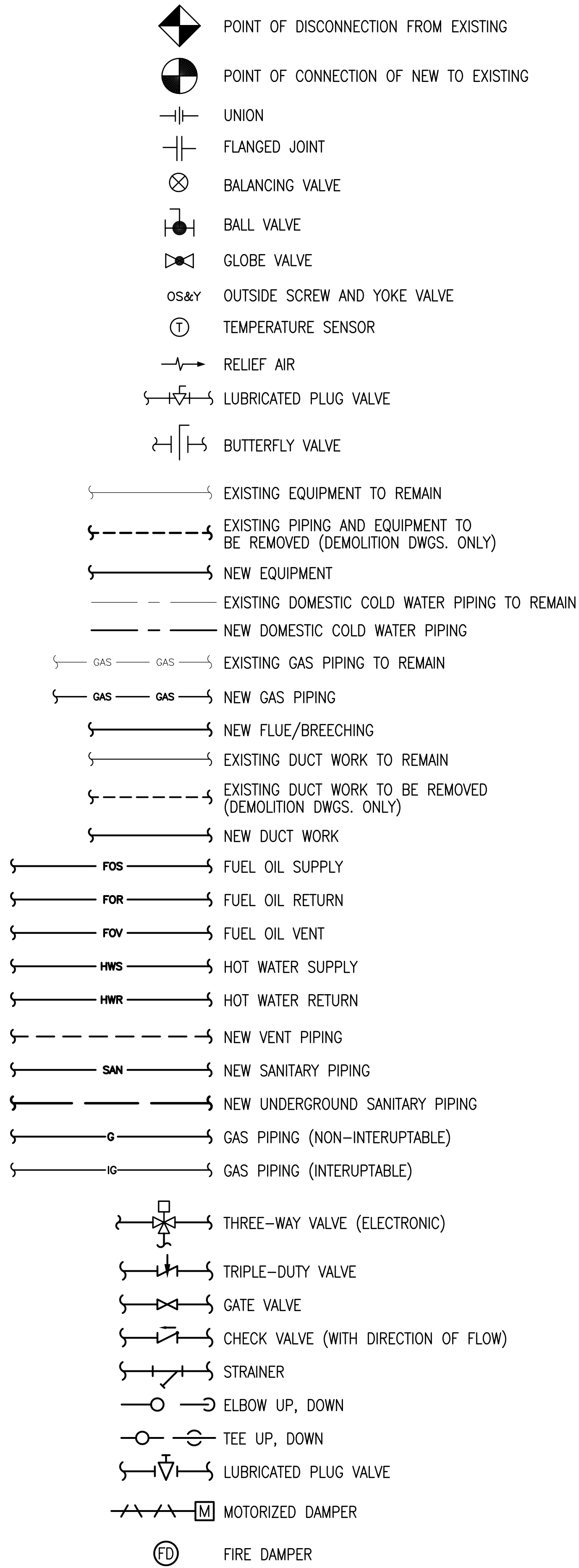
GENERAL NOTES:

- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING CONDITIONS AFFECTING THIS PROJECT AND COORDINATE WITH OTHER DISCIPLINES.
- THE WORK IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS SHALL CONSIST OF FURNISHING ALL EQUIPMENT, MATERIALS, LABOR, SERVICES AND PERFORM ALL OPERATIONS TO COMPLETE THE INSTALLATION OF SYSTEMS. THE WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE APPLICABLE CODES AND STANDARDS.
- ALL EQUIPMENT SHALL BE HANDLED, STORED AND PROTECTED TO PREVENT DAMAGE BEFORE AND DURING INSTALLATION IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- ALL EQUIPMENT SHALL BE INSTALLED AND ADEQUATE CLEARANCES FOR MAINTENANCE AND SERVICING SHALL BE PROVIDED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE CODES.
- ALL NEW WORK SHALL BE TESTED IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. LEAKS, IF ANY, SHALL BE REPAIRED AND THE PIPING SHALL BE RETESTED TO MEET THE REQUIREMENTS.
- ALL NEW WORK IS SHOWN IN APPROXIMATE POSITION. THE CONTRACTOR SHALL FIELD VERIFY THE ROUTING AND TIE-INS OF NEW AND EXISTING PIPING. ALL NEW PIPING SHALL BE INSTALLED AND ADEQUATELY SUPPORTED IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- THE CONTRACTOR SHALL CHECK AND FIELD VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE PRIOR TO SUBMITTING BID AND BEFORE START OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL EQUIPMENT SHOWN ON PLAN, INCLUDING COORDINATION OF ANY EQUIPMENT OF ALTERNATE MANUFACTURER. THE CONTRACTOR SHALL PROVIDE COMPOSITE DRAWINGS AS REQUIRED FOR THE INSTALLATION OF EQUIPMENT AS SHOWN ON PLAN FOR APPROVAL BY ENGINEER.
- ANY EQUIPMENT, MATERIALS, LABOR OR SERVICES NOT SPECIFICALLY MENTIONED HEREIN WHICH MAY BE NECESSARY TO COMPLETE OR PERFECT ANY PART OF INSTALLATION IN A SUBSTANTIAL MANNER SHALL BE FURNISHED WITHOUT EXTRA COST TO THE OWNER.
- ALL WORK SHALL COMPLY WITH LOCAL AND NATIONAL CODES AND STANDARDS, UNDERWRITERS LABORATORY APPROVAL AND ALL STATE AND FEDERAL OSHA SAFETY REQUIREMENTS. LOCAL CODES SHALL INCLUDE, BUT NOT LIMITED TO THE PHILADELPHIA MECHANICAL CODE (2009 IMC), PHILADELPHIA PLUMBING CODE, PHILADELPHIA ELECTRICAL CODE (2008 NEC), PHILADELPHIA CROSS-CONNECTION CODE, PHILADELPHIA GAS CODE (2009 IGC), PA L&I BOILER DIVISION, PHILADELPHIA ENERGY CONSERVATION CODE (2009 IECC), PHILADELPHIA GAS WORKS PIPING SPECIFICATIONS AND EQUIPMENT INSTALLATIONS MANUAL AND PHILADELPHIA AIR MANAGEMENT REQUIREMENTS. LOCAL CODES SHALL SUPERSEDE THE 2009 IBC WHERE CONFLICTS OCCUR.
- THE CONTRACTOR SHALL PAINT ALL UNINSULATED PIPING, IRON OR STEEL VALVES, EQUIPMENT FOUNDATIONS AND ALL SUPPORTS AS SPECIFIED IN SPECIFICATIONS. CONTRACTOR SHALL PRIME PAINT ALL INSULATED PIPING OR VALVES PRIOR TO INSULATION APPLICATION.
- ALL NEW PIPING SHALL BE WELDED CARBON STEEL SCHEDULE 40 AND SHALL BE PITCHED AWAY FROM BOILERS AND CHILLERS.
- ALL NEW AS WELL AS EXISTING PIPING IN BOILER ROOM SHALL BE INSULATED IN ACCORDANCE WITH APPLICABLE CODES, STANDARDS AND SPECIFICATIONS. ALL VALVES IN CHILLED WATER AND DUAL TEMPERATURE PIPING IN BOILER ROOM SHALL BE INSULATED. REMOVE ALL EXISTING INSULATION AND PROVIDE NEW.
- TEMPORARY HEAT REQUIREMENTS: THE CONTRACTOR SHALL COORDINATE DEMOLITION OF THE EXISTING BOILER SYSTEM WITH NEW WORK SO A FUNCTIONING HEATING SYSTEM IS ON LINE AND PROVIDING HEAT TO THE BUILDING FROM OCTOBER 1, 2011 THROUGH APRIL 30, 2012. IF BOILER IS NOT PROVIDING SUFFICIENT HEAT (MAINTAINING A MINIMUM OF 70°F INDOORS WITH OUTDOOR CONDITIONS DOWN TO 10°F) TO THE BUILDING BY OCTOBER 1, 2011 THE CONTRACTOR SHALL AT THE EXPENSE PROVIDE TEMPORARY HEAT. TEMPORARY HEAT SHALL INCLUDE ALL COSTS FOR INSTALLATION, FUEL, POWER, PERMITS, OPERATING/SERVICE PERSONNEL, REMOVAL AND RESTORATION OF ANY DISTURBED ITEMS. CONTRACTOR SHALL OPERATE AND MAINTAIN TEMPORARY HEATING SYSTEM UNTIL 100% OF REPLACEMENT BOILER DESIGN CAPACITY IS OPERATING AND PROVIDING SUFFICIENT HEAT TO MAINTAIN THE BUILDING TEMPERATURE (MINIMUM OF 70°F INDOORS WITH OUTDOOR CONDITIONS DOWN TO 10°F).
- DRAIN CLEANING REQUIREMENTS: PROVIDE 30 HOURS OF DRAIN CLEANING SERVICE FOR DURATION OF PROJECT. SERVICE SHALL BE 24/7 AVAILABLE FROM ON-CALL PROVIDER, AND THE VENDOR SHALL RESPOND TO THE DISTRICT ON REQUEST FOR CLEANING. AT CONCLUSION OF PROJECT ALL DRAINS ARE TO BE VERIFIED CLEAN AND FREE RUNNING.
- DOMESTIC HOT WATER: CONTRACTOR TO PROVIDE TEMPORARY DOMESTIC HOT WATER SERVICE THROUGHOUT CONSTRUCTION.
- CHIMNEYS, BREECHING AND FLUE PASSAGES: ALL ASH, SOOT, AND MISCELLANEOUS DEPOSITS ENCOUNTERED WITHIN THE BOILERS AND BREECHING, REGARDLESS OF QUANTITY, SHALL BE REMOVED AND DISPOSED OF AS ASBESTOS-CONTAINING WASTE.
- PERMITTING REQUIREMENTS:
 - PA LABOR AND INDUSTRY: THE DESIGN CONSULTANT HAS FILED ON BEHALF OF THE DISTRICT THE STATE'S DEPARTMENT OF LABOR AND INDUSTRY INTENT TO INSTALL (LBI-302) PERMIT(S) UTILIZING THE BOILER LISTED AS THE BASIS OF DESIGN. CONTRACTORS SUBMITTING A BOILER(S) OTHER THAN THE BASIS OF DESIGN INDICATED ON THE DESIGN DOCUMENTS MUST SUBMIT A NEW APPLICATION TO THE DEPARTMENT OF LABOR AND INDUSTRY IN ACCORDANCE WITH THE DEPARTMENT'S REQUIREMENTS. FEES FOR PREPARATION OF APPLICATION AND DESIGN ARE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR MAY EMPLOY DESIGN ENGINEER OF RECORD TO ASSIST IN PREPARATION OF APPLICATION, AND DESIGN DOCUMENTS WHERE REQUIRED HOWEVER THE SCHOOL DISTRICT DOES NOT REQUIRE THEIR EXCLUSIVE USE. VARIANCE FOR CLEARANCE WHERE NOT REQUIRED FOR THE BASIS OF DESIGN AND ARE NOT ACCEPTABLE FOR ANY ALTERNATES. CONTRACTORS MAY FILE THESE APPLICATIONS BY MAIL. EXPEDITED FILING PROCESS CAN BE MADE BY FILING IN PERSON. THE PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY REQUIRES AN APPOINTMENT FOR IN PERSON SUBMISSION. INTENT TO INSTALL AND OTHER NECESSARY PERMITS MUST BE OBTAINED PRIOR TO ERECTION OF BOILERS. BOILERS FAILING TO MEET CLEARANCE REQUIREMENTS WILL BE RELOCATED AT CONTRACTORS COST FOR COMPLIANCE.
 - AIR MANAGEMENT PERMITS: PRIOR TO COMMENCEMENT OF WORK CONTRACTOR MUST OBTAIN FOR EACH BOILER AIR POLLUTION CONTROL PERMITS FROM THE CITY'S AIR MANAGEMENT SERVICE. FEE FOR PERMITS IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR.
 - FUEL TANK PERMITS: PRIOR TO COMMENCEMENT OF WORK CONTRACTOR MUST OBTAIN FOR EACH TANK CITY LICENSING AND INSPECTIONS PERMIT(S). FEE FOR PERMIT(S) IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR.

GENERAL NOTES (DEMOLITION)

- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING CONDITIONS AFFECTING THIS PROJECT AND COORDINATE WITH OTHER DISCIPLINES.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND TURN OFF ALL UTILITIES BEFORE STARTING WORK.
- THE DEMOLITION/REMOVAL OF ITEMS BY THE MECHANICAL CONTRACTOR SHALL BE AS FOLLOWS: UNLESS SPECIFICALLY NOTED OTHERWISE, ITEMS SHOWN IN HEAVY LINE WEIGHT ARE EXISTING ITEMS TO BE REMOVED-LIGHT LINE WEIGHT ITEMS ARE EXISTING ITEMS TO REMAIN.
- ALL DEMOLITION/REMOVAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS AND REGULATIONS.
- THE CONTRACTOR SHALL CONTACT "PA ONE CALL SYSTEM" AND FIELD VERIFY ALL OTHER PIPING/UTILITIES NOT ASSOCIATED WITH THIS WORK BUT LYING WITHIN THE WORK AREA AND WILL NOT DISTURB THESE PIPING/UTILITIES UNLESS REQUIRED BY RIGGING. THESE PIPING/UTILITIES SHALL BE PROTECTED SO THAT SERVICE IS NOT INTERRUPTED. THE CONTRACTOR SHALL REPAIR ANY DAMAGE DONE TO THE PIPING/UTILITIES IN THE PERFORMANCE OF CONTRACT WORK.

MECHANICAL SYMBOLS LEGEND

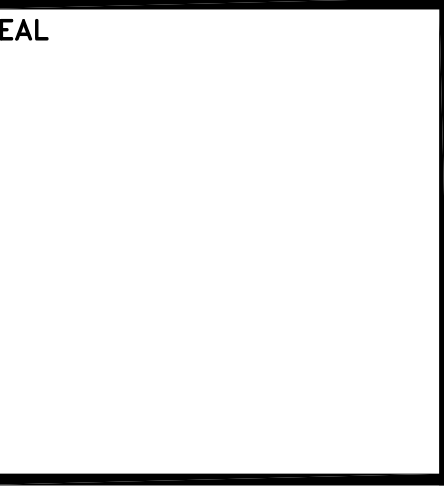
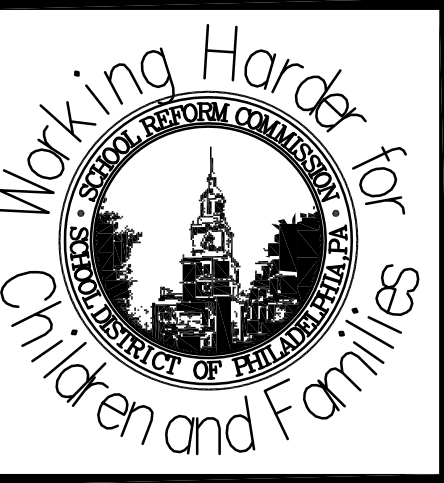
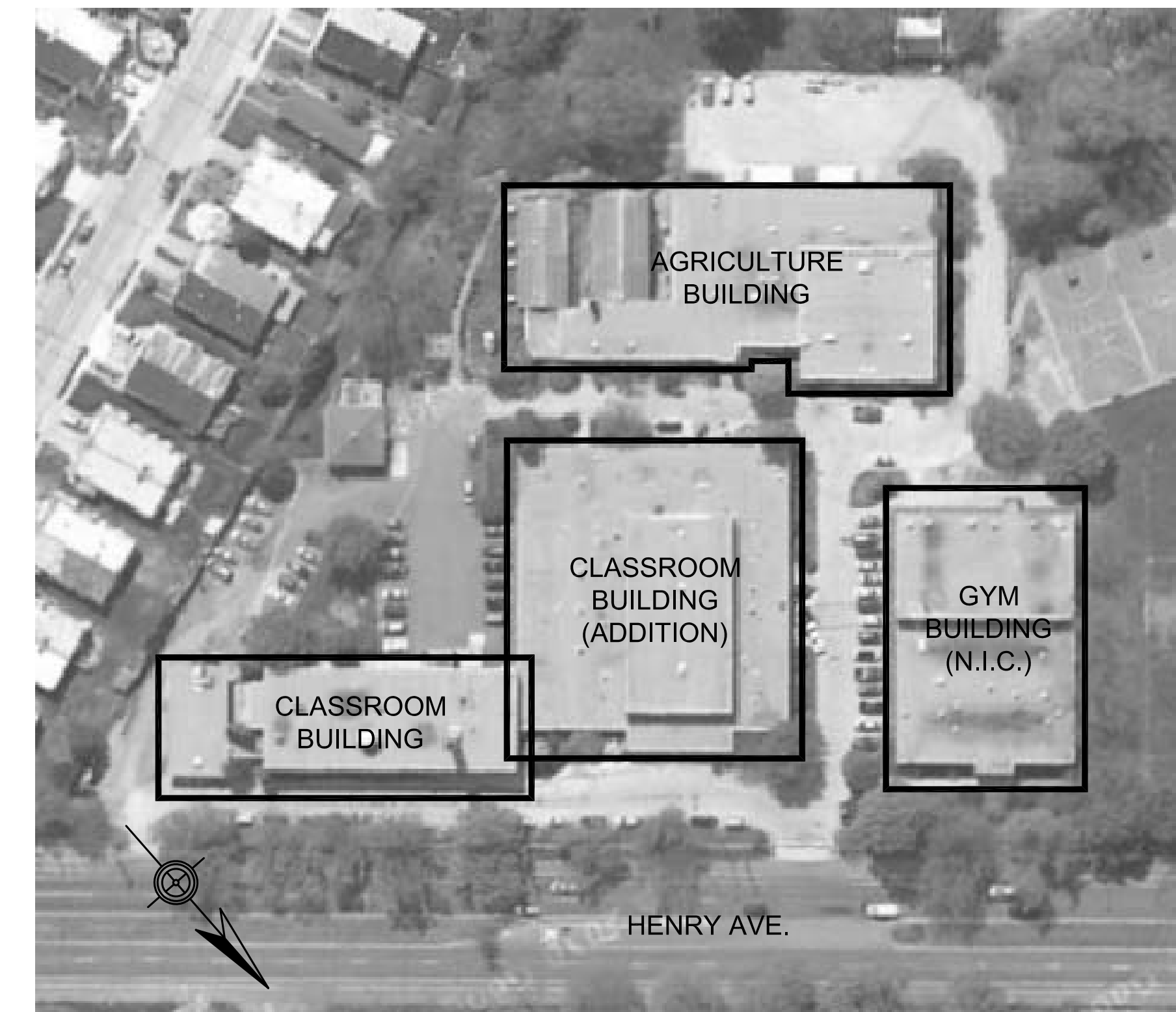


MECHANICAL ABBREVIATION

AFF	ABOVE FINISHED FLOOR
B	BOILER
BOP	BOTTOM OF PIPE
CO	CLEAN OUT
CW	COLD WATER (DOMESTIC)
DDC	DIRECT DIGITAL CONTROL
DN	DOWN
(E)	EXISTING
(ED)	EXISTING TO BE DEMOLISHED
(ER)	EXISTING TO BE RELOCATED
E.C.	ELECTRICAL CONTRACTOR
EG	EXHAUST GRILLE
FD	FLOOR DRAIN
FOP	FUEL OIL PUMP
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOT	FUEL OIL TANK
G	GAS
GPM	GALLONS PER MINUTE
HP	HORSE POWER
HRP	DOMESTIC HOT WATER RECIRCULATION PUMP
ICF	INSTANTANEOUS CURRENT FLOW
IG	INTERRUPTIBLE GAS
LFMC	LIQUID TIGHT FLEXIBLE METALLIC CABLE
M.C.	MECHANICAL CONTRACTOR
MCP	MAIN CONTROL PANEL
MU	MAKE-UP WATER
(N)	NEW
NPW	NON POTABLE WATER
PCH	PACKAGED CHILLER
PD	PUMP DISCHARGE
(R)	EXISTING TO BE REMOVED
(RE)	RELOCATED EXISTING
RPM	REVOLUTIONS PER MINUTE
SAN	SANITARY (BELOW)
SC	STORAGE CABINET
SP	SUMP PUMP
SRV	SAFETY RELIEF VALVE
SW	SOFT WATER
TP	TRAP PRIMER
UH	UNIT HEATER
V	VENT OR VOLTS
WH	WATER HEATER
WS	WATER SOFTENER

LIST OF MECHANICAL DRAWINGS

DWG NO.	DRAWING TITLE
M0.1	MECHANICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES
M1.0	CLASSROOM BUILDING - MECHANICAL DEMOLITION PLANS
M1.1	CLASSROOM BUILDING BOILER ROOM - DEMOLITION PLAN
M1.2	AGRICULTURAL BUILDING - MECHANICAL DEMOLITION PLANS
M1.3	CLASSROOM BUILDING ADDITION - DEMOLITION PLAN
M2.1	CLASSROOM BUILDING GND & FIRST FLOOR - MECH NEW WORK PLAN
M2.2	CLASSROOM BUILDING SECOND FLOOR - MECH NEW WORK PLAN
M2.3	AGRICULTURAL BUILDING GROUND FLOOR - MECH NEW WORK PLAN
M2.4	AGRICULTURAL BUILDING FIRST FLOOR - MECH NEW WORK PLAN
M2.5	CLASSROOM BUILDING BOILER ROOM - MECH NEW WORK PLAN
M3.0	CLASSROOM BUILDING BOILER ROOM - MECH NEW WORK PLAN
M3.1	CLASSROOM BUILDING BOILER ROOM - MECH ELEVATIONS
M3.2	AGRICULTURAL BUILDING BOILER ROOM - MECH NEW WORK & DEMO PLAN
M4.0	MECHANICAL SCHEDULES
M5.0	MECHANICAL DETAILS
M5.1	MECHANICAL DETAILS
M5.2	MECHANICAL - PIPING DIAGRAMS
M5.3	MECHANICAL - ATC DIAGRAMS



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PROJECT TITLE
 Mechanical Plant Replacement

DRAWING TITLE
 MECHANICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES

APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
 THE SCHOOL REFORM COMMISSION

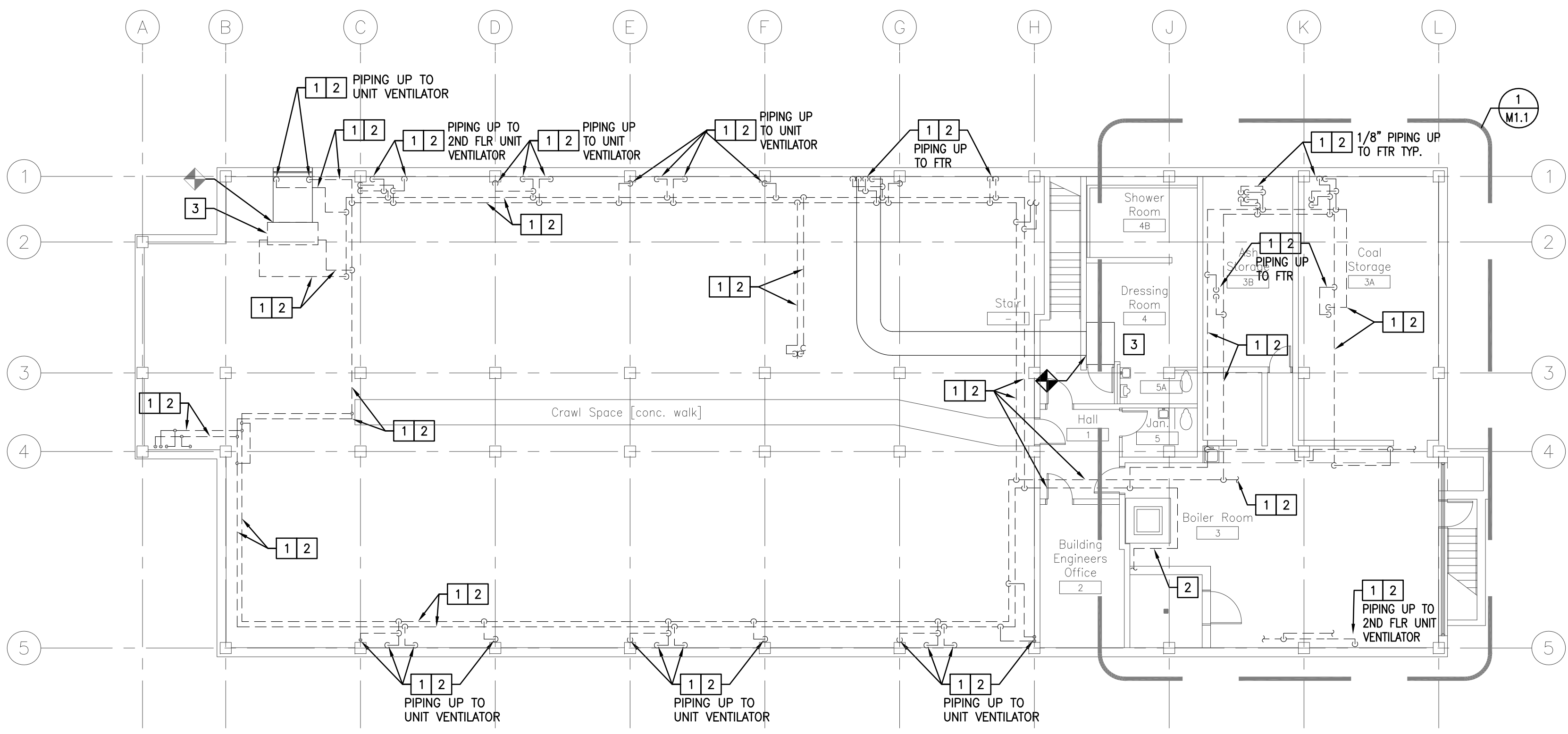
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CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

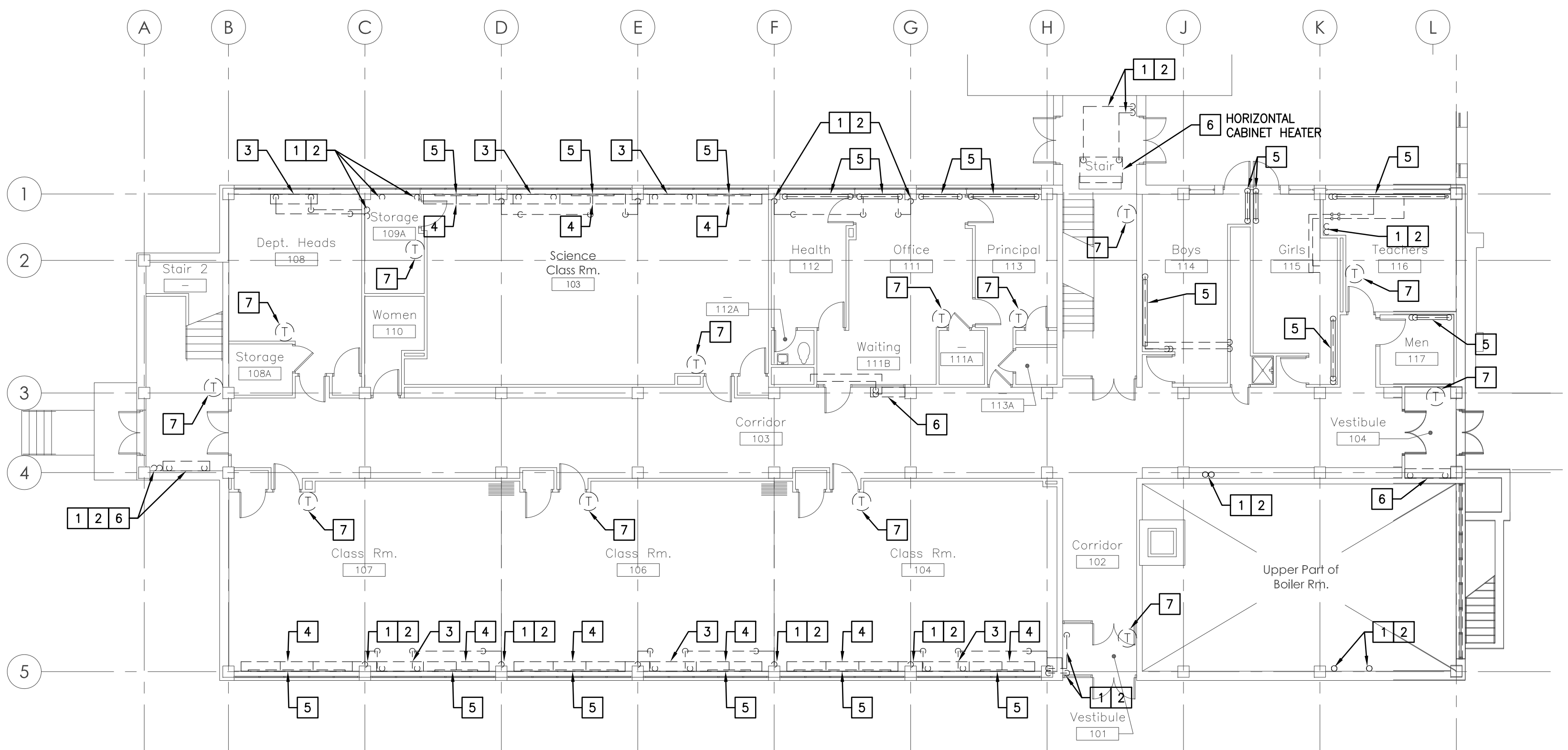
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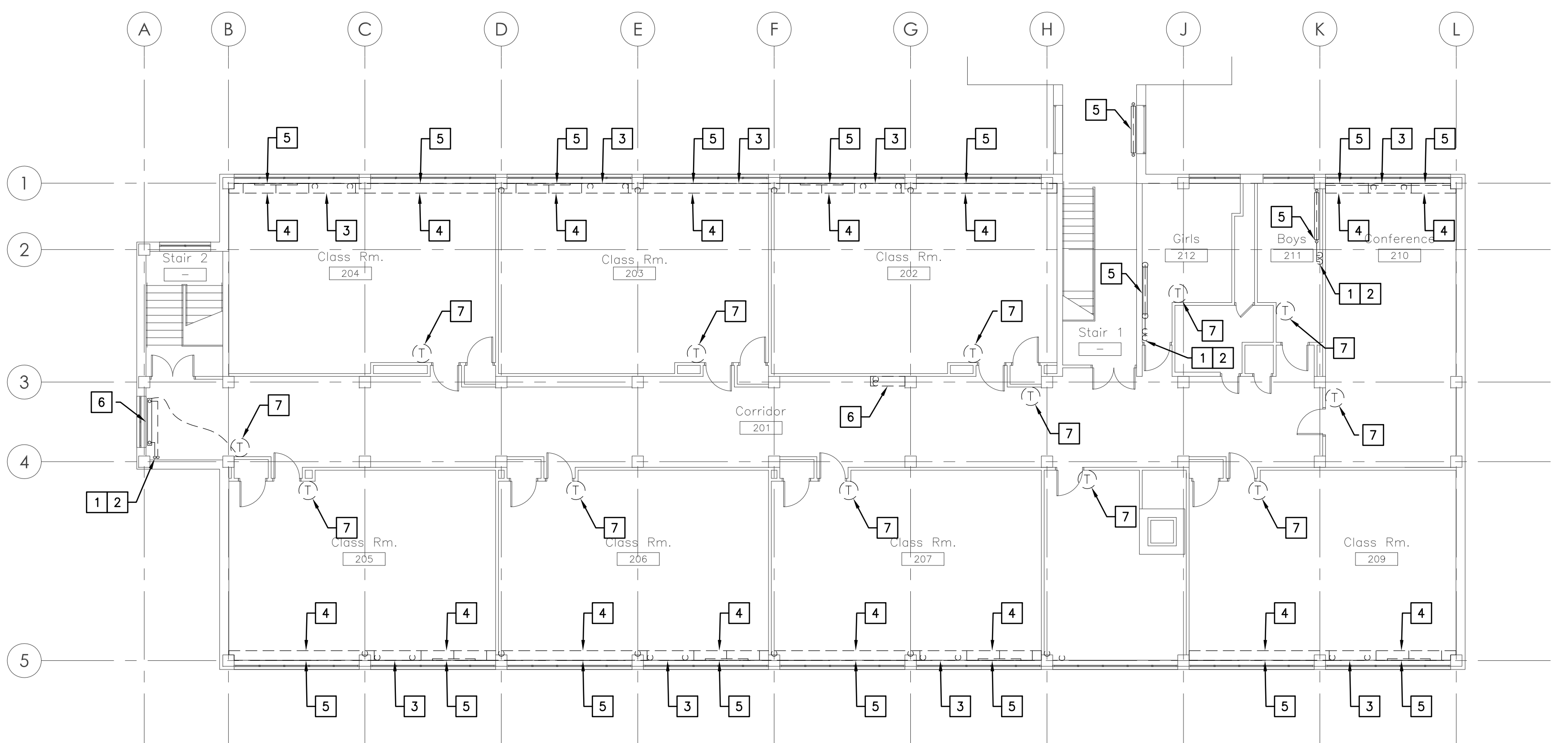
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1 CLASSROOM BUILDING - GROUND FLOOR MECHANICAL DEMOLITION PLANS
 Scale: 3/32" = 1'-0"



2 CLASSROOM BUILDING - FIRST FLOOR MECHANICAL DEMOLITION PLANS
 Scale: 3/32" = 1'-0"



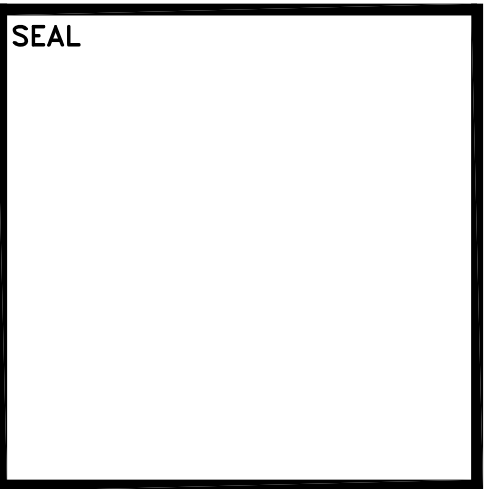
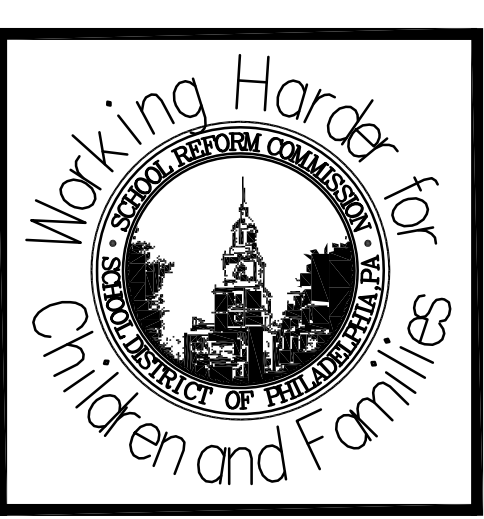
3 CLASSROOM BUILDING - SECOND FLOOR MECHANICAL DEMOLITION PLANS
 Scale: 1/8" = 1'-0"

DRAWING NOTES

1. CONTRACTOR SHALL COORDINATE DISCONNECTING OF POWER WIRING BY E.C.
2. MATERIALS, EQUIPMENT AND PIPING THAT ARE NOT DIRECTLY INDICATED TO BE REMOVED BUT ARE PART OF A SYSTEM TO BE REMOVED, SHALL BE DEMOLISHED.
3. ALL EQUIPMENT, MATERIALS AND SYSTEMS MADE OBSOLETE BY THE NEW WORK SHALL BE DEMOLISHED.
4. REFER TO DRAWING M0.01 FOR ADDITIONAL DEMOLITION NOTES.

DEMOLITION NOTES

- 1 DEMOLISH STEAM CONDENSATE PIPING INCLUDING BUT NOT LIMITED TO INSULATION, FITTINGS, HANGERS, METAL RAMP AND ALL ACCESSORIES. ALL STEAM CONDENSATE PIPING IN THE BOILER ROOM SHALL BE DEMOLISHED.
- 2 DEMOLISH STEAM PIPING INCLUDING BUT NOT LIMITED TO STEAM HEADERS, PIPE HANGERS, INSULATION, VALVES, CONTROLS, CONTROL PIPING AND WIRING, TRAPS AND PIPE ACCESSORIES. ALL STEAM PIPING IN THE BOILER ROOM SHALL BE DEMOLISHED.
- 3 DEMOLISH UNIT VENTILATOR INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- 4 DEMOLISH STORAGE SHELVES INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING SUPPORTS, SHELVES AND ALL ACCESSORIES.
- 5 DEMOLISH FINNED TUBE RADIATION INCLUDING BUT NOT LIMITED TO HANGERS, SUPPORTS, PIPING, INSULATION, COVERS, CONTROLS, AND ALL ACCESSORIES.
- 6 DEMOLISH CABINET HEATERS INCLUDING BUT NOT LIMITED TO SUPPORTS, COVERS, PIPING CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- 7 DEMOLISH PNEUMATIC/ELECTRIC THERMOSTAT INCLUDING PIPING CONNECTIONS, WIRING CONNECTIONS, HANGERS AND ALL ACCESSORIES.



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PROJECT TITLE
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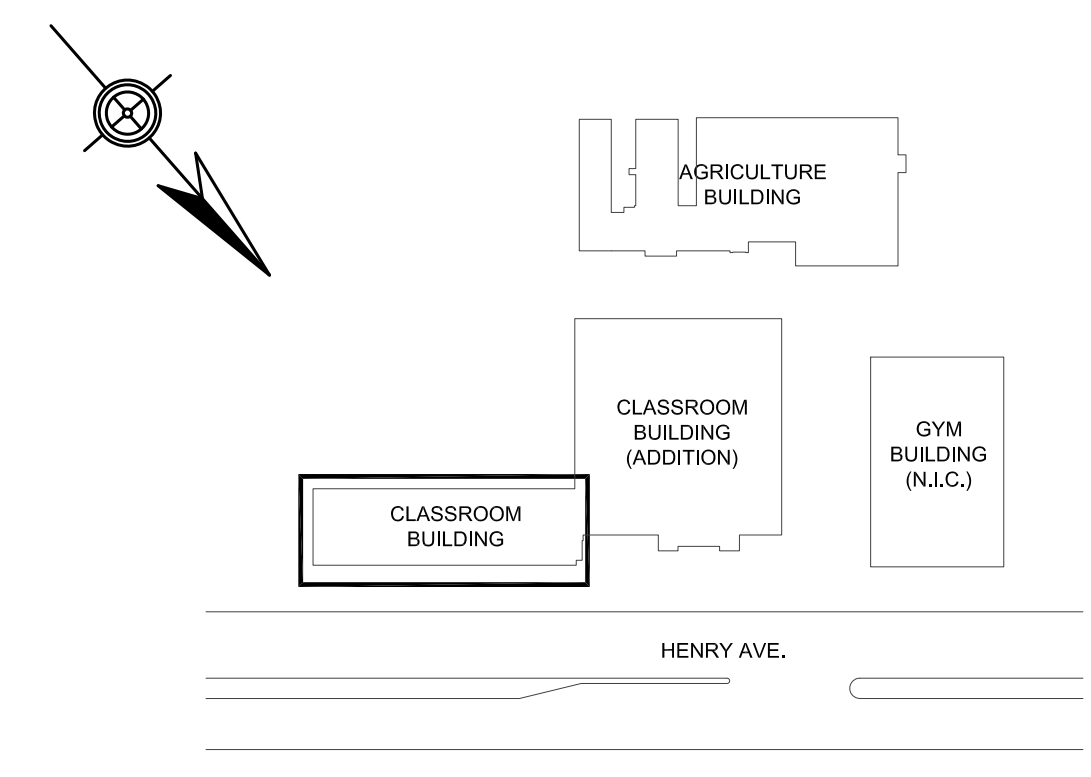
DRAWING TITLE
 CLASSROOM BUILDING - MECHANICAL DEMOLITION PLANS

APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
 THE SCHOOL REFORM COMMISSION

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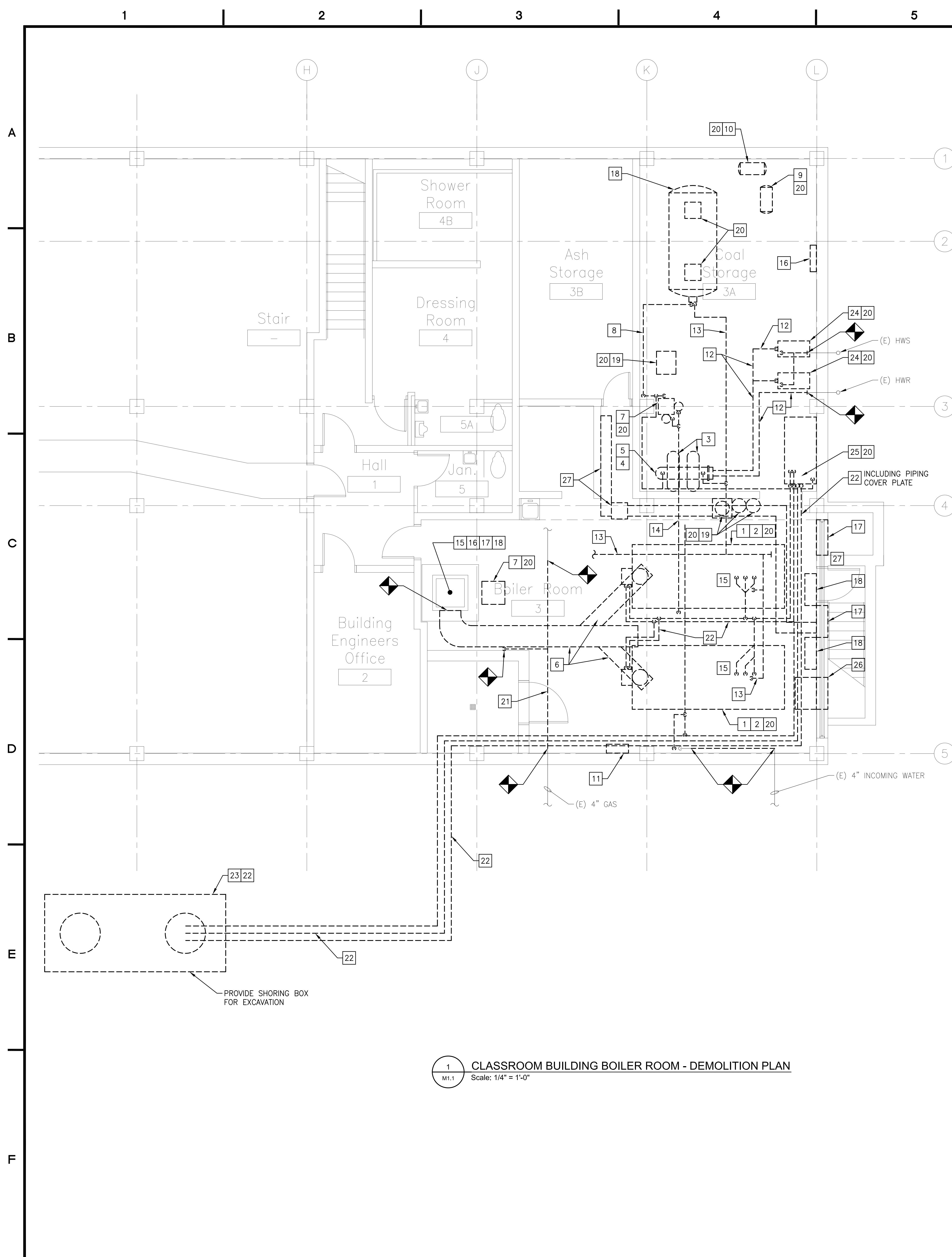


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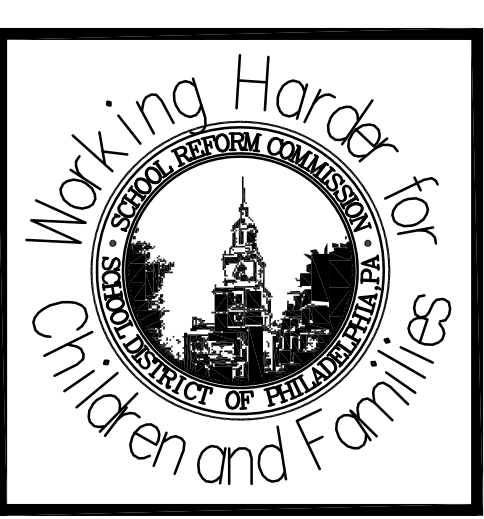
1 CLASSROOM BUILDING BOILER ROOM - DEMOLITION PLAN
 M1.1 Scale: 1/4" = 1'-0"

DRAWING NOTES

1. PROVIDE DOMESTIC HOT WATER TO THE BUILDING ALL DURING CONSTRUCTION UNTIL THE NEW DOMESTIC WATER HEATER IS OPERATIONAL WITHOUT INTERRUPTION. THE TEMPORARY WATER HEATER SHALL PROVIDE 100 GALLON STORAGE, 175 GAL/HR RECOVERY AND 180 MBH INPUT. COORDINATE ELECTRICAL CONNECTIONS WITH THE ELECTRICAL CONTRACTOR.
2. CONTRACTOR SHALL COORDINATE DISCONNECTING OF POWER WIRING BY E.C.
3. MATERIALS, EQUIPMENT AND PIPING THAT ARE NOT DIRECTLY INDICATED TO BE REMOVED BUT ARE PART OF A SYSTEM TO BE REMOVED, SHALL BE DEMOLISHED.
4. ALL EQUIPMENT, MATERIALS AND SYSTEMS MADE OBSOLETE BY THE NEW WORK SHALL BE DEMOLISHED.

DEMOLITION NOTES

- 1 DEMOLISH STEAM BOILER INCLUDING BUT NOT LIMITED TO PIPE CONNECTIONS, CONTROLS, BREACHING CONNECTIONS AND INSULATION.
- 2 DEMOLISH BOILER BURNER INCLUDING BUT NOT LIMITED TO PIPE CONNECTIONS, CONTROLS, CONTROL WIRING, SUPPORTS, COMPRESSORS AND MOTORS.
- 3 DEMOLISH EXPANSION TANK INCLUDING BUT NOT LIMITED TO PIPE CONNECTIONS, HANGERS, INSULATION AND GAUGES.
- 4 DEMOLISH STEAM/HOT WATER HEAT EXCHANGER INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, INSULATION AND GAUGES.
- 5 DEMOLISH STEEL PLATFORM SUPPORTING THE EXISTING HEAT EXCHANGER AND CONNECTED TO THE EXISTING COLUMN. GRIND ALL WELD POINTS SMOOTH AND PREP FOR FINAL PAINTING.
- 6 DEMOLISH BREACHING/FLUE INCLUDING BUT NOT LIMITED TO BOILER CONNECTIONS, CONTROLS, WATER HEATER CONNECTION, HANGERS AND INSULATION.
- 7 DEMOLISH BOILER FEED CONDENSATE SUMP PUMP INCLUDING BUT NOT LIMITED TO MAKE-UP WATER CONNECTION, TRIPLEX PUMPS, CONTROLS, CONTROL WIRING, MOTORS, TANK, TANK COVER AND BOILER FEED CONNECTIONS.
- 8 DEMOLISH STEAM CONDENSATE PIPING INCLUDING BUT NOT LIMITED TO INSULATION, FITTINGS, HANGERS, METAL RAMPS AND ALL ACCESSORIES. ALL STEAM CONDENSATE PIPING IN THE BOILER.
- 9 DEMOLISH PNEUMATIC AIR COMPRESSOR UTILIZED FOR HVAC CONTROLS INCLUDING BUT NOT LIMITED TO CONTROLS, PIPING CONNECTIONS, AIR DRYER AND AIR FILTER.
- 10 DEMOLISH ABANDONED PNEUMATIC AIR COMPRESSOR UTILIZED FOR HVAC CONTROLS INCLUDING BUT NOT LIMITED TO CONTROLS, PIPING CONNECTIONS, AIR DRYER AND AIR FILTER.
- 11 DEMOLISH CONTROL PANEL WITH OIL TANK INVENTORY CONTROLLER, GAUGES, SWITCHES, CONTROLS, CONTROL PIPING AND WIRING, INCLUDING BUT NOT LIMITED TO PIPING AND WALL SUPPORTS AND CURB SUPPORTS.
- 12 DEMOLISH HEATING HOT WATER SUPPLY AND RETURN PIPING INCLUDING BUT NOT LIMITED TO PIPE HANGERS, INSULATION, VALVES, CONTROLS, CONTROL PIPING AND WIRING AND PIPE ACCESSORIES.
- 13 DEMOLISH STEAM PIPING INCLUDING BUT NOT LIMITED TO STEAM HEADERS, PIPE HANGERS, INSULATION, VALVES, CONTROLS, CONTROL PIPING AND WIRING, TRAPS AND PIPE ACCESSORIES. ALL STEAM PIPING IN THE BOILER ROOM SHALL BE DEMOLISHED. COORDINATE WITH NEW WORK PLANS.
- 14 DEMOLISH BOILER MAKE-UP WATER INCLUDING BUT NOT LIMITED TO PIPE HANGERS, INSULATION, VALVES, CONTROLS, CONTROL PIPING AND WIRING, TRAPS AND PIPE ACCESSORIES.
- 15 DEMOLISH VENT PIPING INCLUDING BUT NOT LIMITED TO PIPE HANGERS, INSULATION, VALVES, CONTROLS, CONTROL PIPING AND WIRING AND PIPE ACCESSORIES.
- 16 MAINTAIN AND REMOVE ATC PANEL INCLUDING BUT NOT LIMITED TO DEMOLISHING PNEUMATIC AND ELECTRICAL CONTROLS ASSOCIATED WITH THE REMOVAL OF EQUIPMENT MADE OBSOLETE BY THE NEW WORK. ALL CONTROLS ASSOCIATED WITH EQUIPMENT THAT IS REMAINING IN OPERATION SHALL BE MAINTAINED. M.C. SHALL PROVIDE DEVICES AND MATERIAL NECESSARY TO MAINTAIN THE OPERATION OF THIS EQUIPMENT. THE BUILDING'S PNEUMATIC CONTROL SYSTEM SHALL REMAIN IN OPERATION DURING AND AFTER RENOVATIONS.
- 17 DEMOLISH MOTORIZED DAMPERS/LOUVERS INCLUDING BUT NOT LIMITED TO CONTROLS, ACTUATORS, PNEUMATICS, CONTROL WIRING AND ALL ACCESSORIES.
- 18 DEMOLISH DOMESTIC WATER HEATER INCLUDING BUT NOT LIMITED TO PIPING CONNECTIONS, RECIRC. TANK, FLUE CONNECTIONS, CONTROLS AND ALL ACCESSORIES.
- 19 DEMOLISH WATER TREATMENT CONTAINER INCLUDING BUT NOT LIMITED TO CONTAINMENT TANK, PIPING, PUMPS, VALVES, PIPING CONNECTIONS, CONTROLS, SENSORS AND CONTROL WIRING.
- 20 DEMOLISH CONCRETE HOUSEKEEPING PAD TO 2" BELOW FINISHED FLOOR INCLUDING BUT NOT LIMITED TO REBAR AND ANCHORS.
- 21 DEMOLISH GAS PIPING BUT NOT LIMITED TO VALVES, FITTINGS, HANGERS AND ALL ACCESSORIES.
- 22 DEMOLISH FUEL OIL SUPPLY, RETURN, VENT AND FUEL OIL GAUGE PIPES INCLUDING BUT NOT LIMITED TO PIPE HANGERS, PIPE SUPPORTS. SAFE DISPOSAL OF FUEL OIL SLUDGE AND MATERIALS. DEMOLISH FLOOR PIPING COVER PLATE IN BOILER ROOM.
- 23 DEMOLISH 12,000 GALLON FUEL OIL TANK INCLUDING BUT NOT LIMITED TO PIPING CONNECTIONS, MANWAYS, FILL CONNECTION, MANWAY COVERS, TIE DOWN STRAPS, CONCRETE FOUNDATION, CONCRETE PAD UNDER ASPHALT, FILL BOX, TANK HEATER AND ALL ACCESSORIES. SCHOOL DISTRICT WILL REMOVE AND RETAIN ALL VIABLE FUEL OIL FROM TANK. CONTRACTOR SHALL BE RESPONSIBLE FOR SAFE DISPOSAL OF SLUDGE IN THE TANK PER LOCAL, STATE AND FEDERAL CODES. PROVIDE EXCAVATION, BACKFILL AND COMPACTION PER SPECIFICATIONS AND NOTES.
- 24 DEMOLISH HW PUMP INCLUDING BUT NOT LIMITED TO PIPE CONNECTIONS, PIPING SUPPORTS, POWER CONNECTIONS, GAUGES, VALVES AND ACCESSORIES.
- 25 DEMOLISH FUEL OIL TRANSFER PUMP INCLUDING BUT NOT LIMITED TO PIPING CONNECTIONS, VALVES, POWER CONNECTION, FILTERS AND ALL ACCESSORIES.
- 26 DEMOLISH EXHAUST FAN INCLUDING BUT NOT LIMITED TO POWER CONNECTIONS, HANGERS, SUPPORTS, DAMPERS AND ALL ACCESSORIES.
- 27 DEMOLISH EXHAUST FAN INCLUDING BUT NOT LIMITED TO PLATFORM, HANGERS, DUCT CONNECTIONS, POWER WIRING, DUCT WORK AND ALL ACCESSORIES.



SEAL

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 CLASSROOM BUILDING BOILER ROOM - DEMOLITION PLAN

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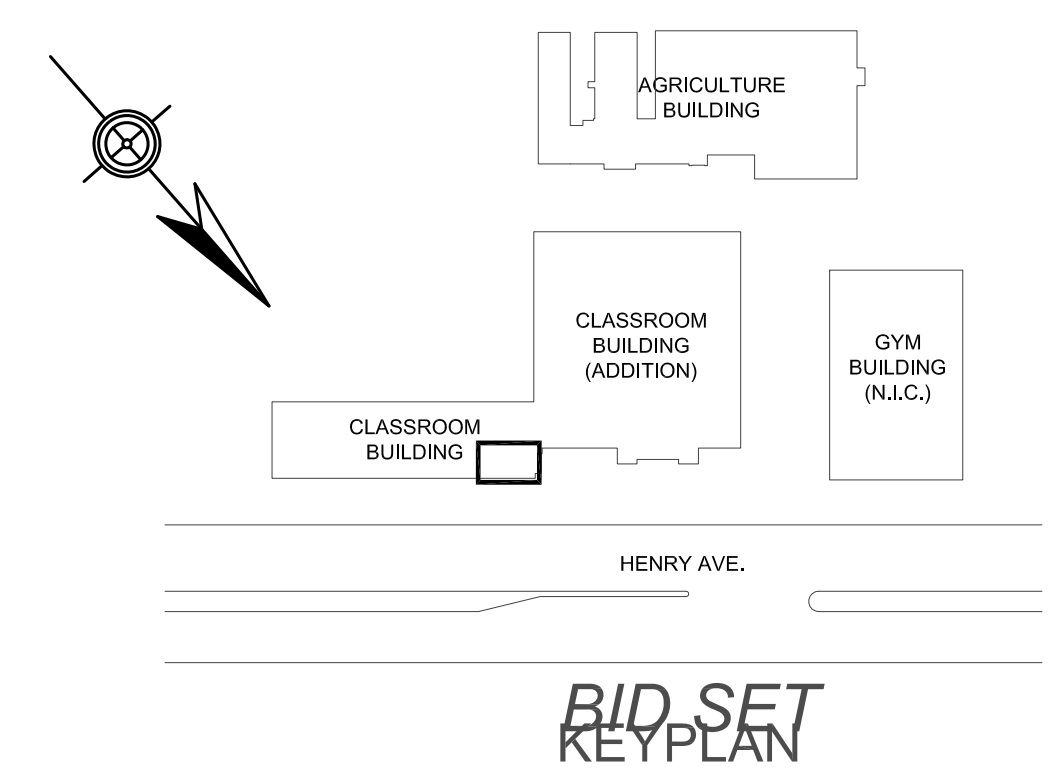
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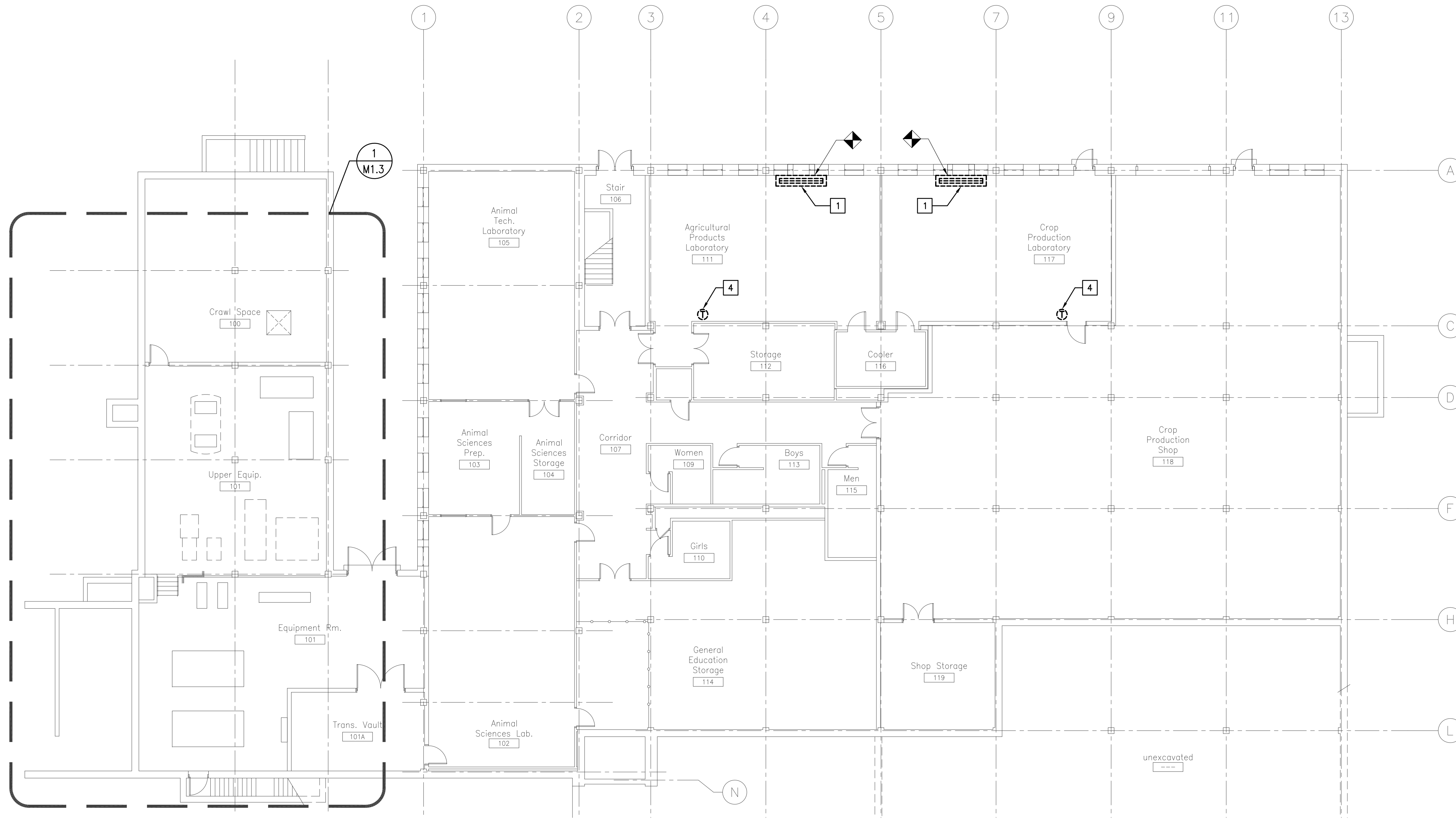
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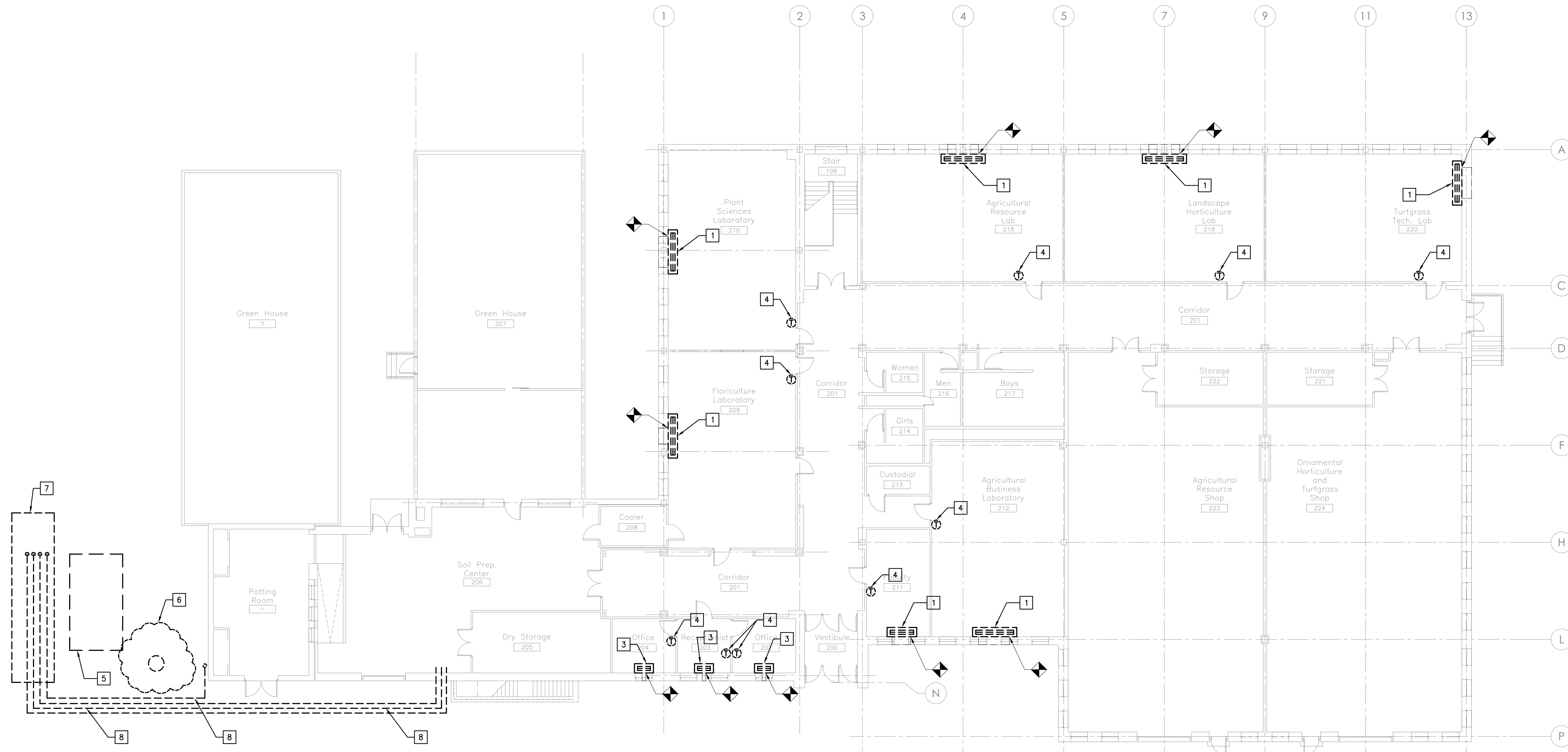
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M1.1





1 AGRICULTURAL BUILDING - GROUND FLOOR MECHANICAL DEMOLITION PLANS
 M1.2 Scale: 3/32" = 1'-0"



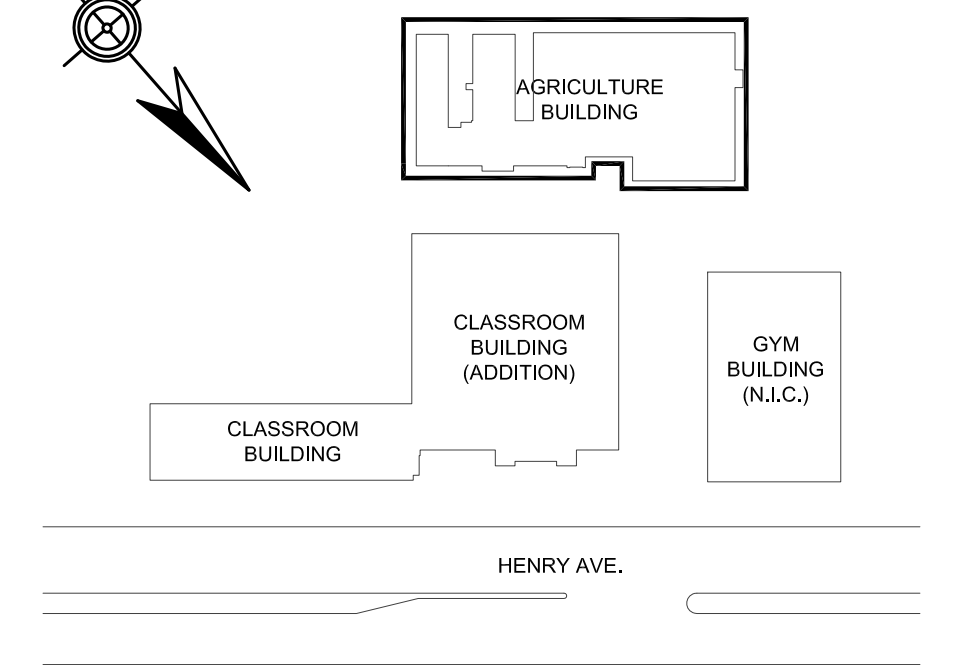
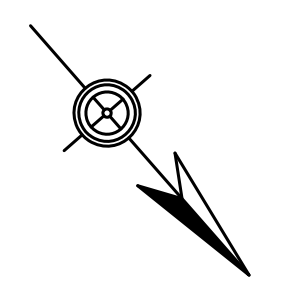
2 AGRICULTURAL BUILDING - FIRST FLOOR MECHANICAL DEMOLITION PLANS
 M1.2 Scale: 3/32" = 1'-0"

DRAWING NOTES

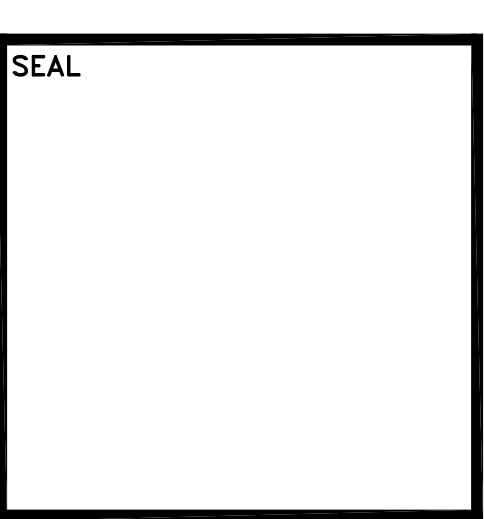
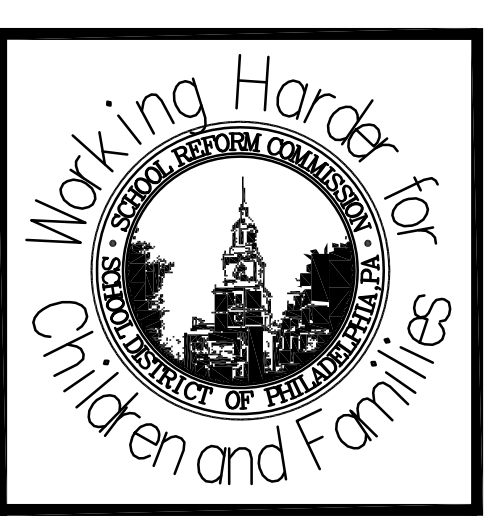
1. CONTRACTOR SHALL COORDINATE DISCONNECTING OF POWER WIRING BY E.C.
2. MATERIALS, EQUIPMENT AND PIPING THAT ARE NOT DIRECTLY INDICATED TO BE REMOVED BUT ARE PART OF A SYSTEM TO BE REMOVED, SHALL BE DEMOLISHED.
3. ALL EQUIPMENT, MATERIALS AND SYSTEMS MADE OBSOLETE BY THE NEW WORK SHALL BE DEMOLISHED.

DEMOLITION NOTES

- 1 DEMOLISH UNIT VENTILATOR INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- 2 DEMOLISH UNIT VENTILATOR INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- 3 DEMOLISH UNIT VENTILATOR INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- 4 DEMOLISH PNEUMATIC/ELECTRIC THERMOSTAT INCLUDING PIPING CONNECTIONS, WIRING CONNECTIONS, HANGERS AND ALL ACCESSORIES. PROVIDE SS COVER PLATE.
- 5 REMOVE COOLING TOWER AND HAND OVER TO SCHOOL DISTRICT. DISCONNECT PIPING, POWER, CONTROL WIRING, AND ALL ACCESSORIES. COOLING TOWER SHALL BE COMPLETELY DRAINED AND STORED ONSITE AT A LOCATION DESIGNATED BY THE DISTRICT PROJECT MANAGER. UNIT SHALL BE PLACED ON 6x6 PRESSURE TREATED SLEEPERS AND WRAPPED IN 10 MILL PLASTIC.
- 6 REMOVE TREE AND SAFELY DISPOSE OF OFFSITE. REMOVE TREE STUMP UTILIZING A GRINDER. RETURN AREA TO SURROUNDING CONDITIONS.
- 7 SAME AS 23 ON SHEET M1.1.
- 8 SAME AS 22 ON SHEET M1.1.



KEYPLAN
 BID SET



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SCHOOL & LOCATION
 Walter B. Saul High School
 7100 Henry Avenue, Philadelphia, PA 19128
PROJECT TITLE
 Mechanical Plant Replacement
DRAWING TITLE
 AGRICULTURAL BUILDING - MECHANICAL DEMOLITION PLANS
APPROVED BY

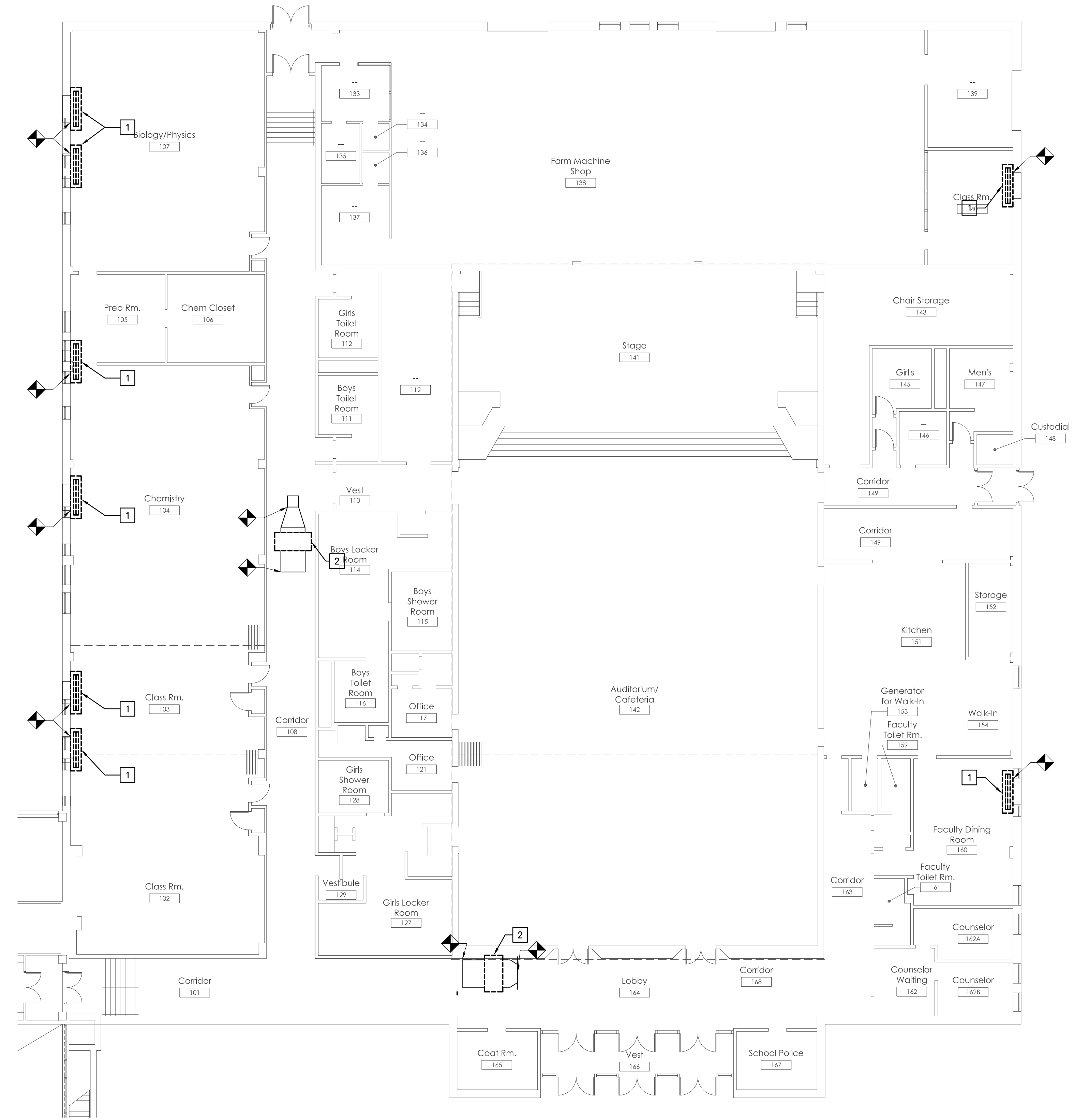
SCHOOL DISTRICT OF PHILADELPHIA
THE SCHOOL REFORM COMMISSION
 DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES
 440 NORTH BROAD STREET
 PHILADELPHIA, PA 19106
 215-400-4730 FAX 215-400-0751
 www.philad.k12.pa.us
 CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

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SPEC. NO. B-023	DATE 14 FEB 10
SCALE AS NOTED	LOCATION NO. 6040
DRAWN BY DC	TYPE NO. 200
CHECKED BY MWO/MKA	FILE NO. 127

DRAWING NO.
M1.2

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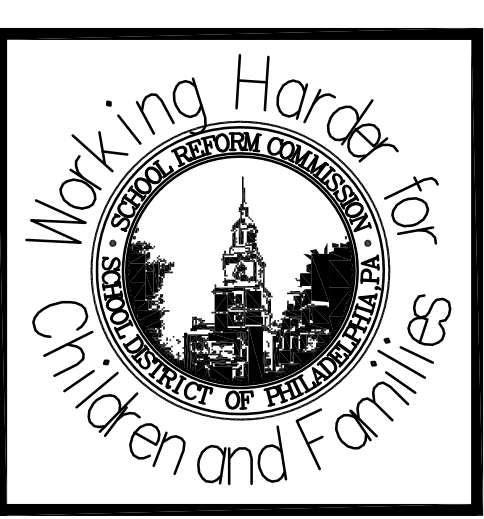
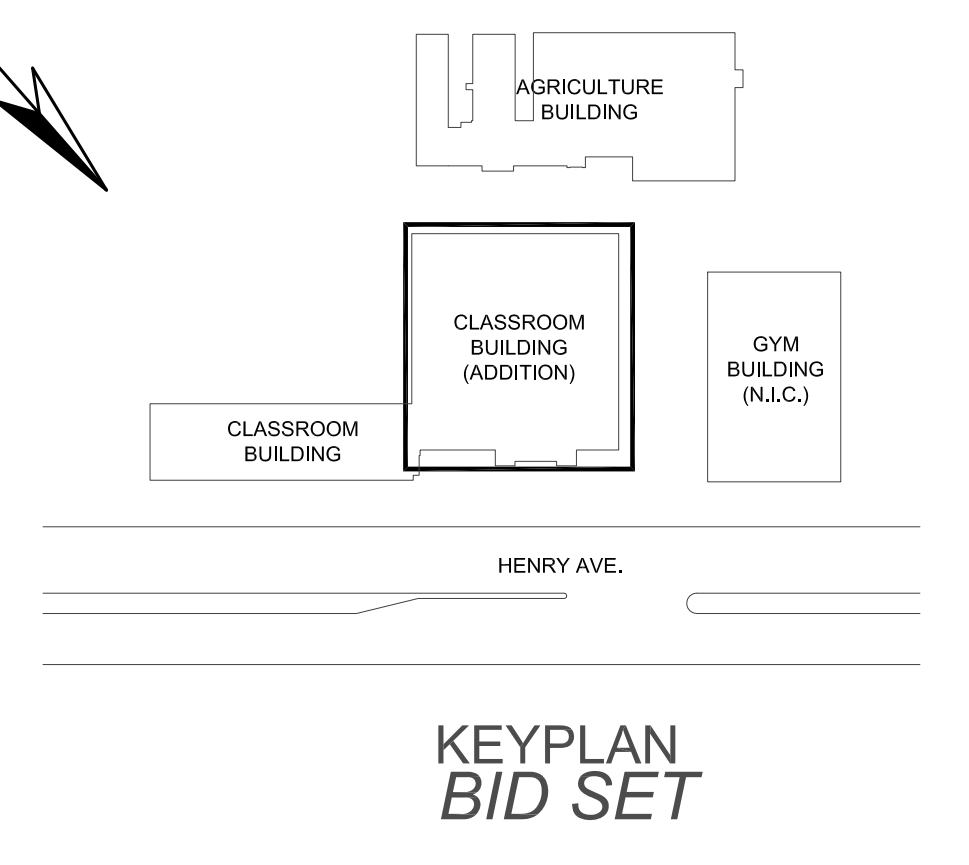
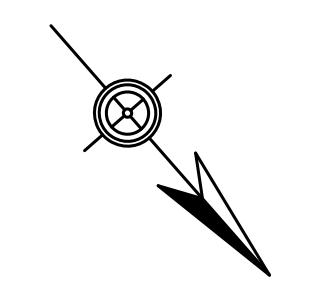
1 CLASSROOM BUILDING ADDITION - DEMOLITION PLAN
M1.3 Scale: 3/32" = 1'-0"

DRAWING NOTES

- CONTRACTOR SHALL COORDINATE DISCONNECTING OF POWER WIRING BY E.C.
- MATERIALS, EQUIPMENT AND PIPING THAT ARE NOT DIRECTLY INDICATED TO BE REMOVED BUT ARE PART OF A SYSTEM TO BE REMOVED, SHALL BE DEMOLISHED.
- ALL EQUIPMENT, MATERIALS AND SYSTEMS MADE OBSOLETE BY THE NEW WORK SHALL BE DEMOLISHED.

DEMOLITION NOTES

- DEMOLISH UNIT VENTILATOR INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- DEMOLISH HORIZONTAL UNIT VENTILATOR INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.



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PROJECT TITLE
Mechanical Plant Replacement
DRAWING TITLE
CLASSROOM BUILDING ADDITION -
DEMOLITION PLAN
APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
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PHILADELPHIA, PA 19106
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CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

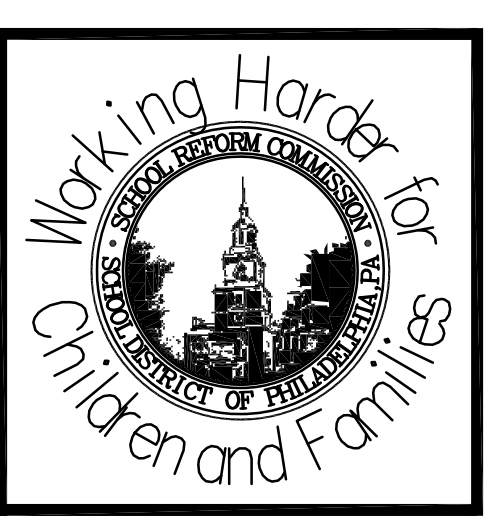
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SPEC. NO. B-023	DATE 14 FEB 10
SCALE AS NOTED	LOCATION NO. 6040
DRAWN BY DC	TYPE NO. 200
CHECKED BY MWO/MKA	FILE NO. 128

DRAWING NO.
M1.3

GENERAL NOTES:

- REFER TO DRAWING M0.1 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.



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PROJECT TITLE
Mechanical Plant Replacement

DRAWING TITLE
CLASSROOM BUILDING GND + FIRST FLOOR - MECH NEW WORK PLAN

APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
THE SCHOOL REFORM COMMISSION

DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES
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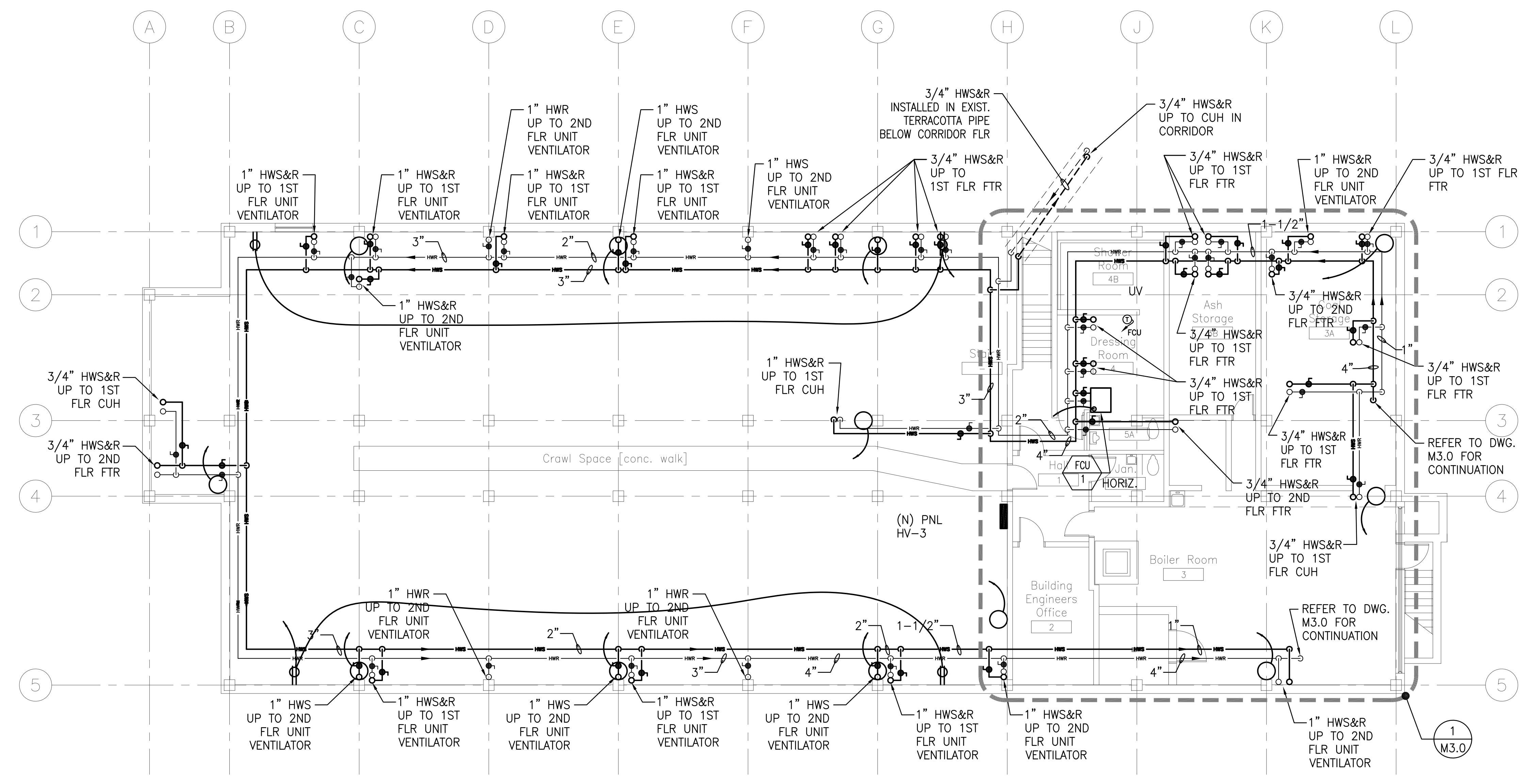
CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

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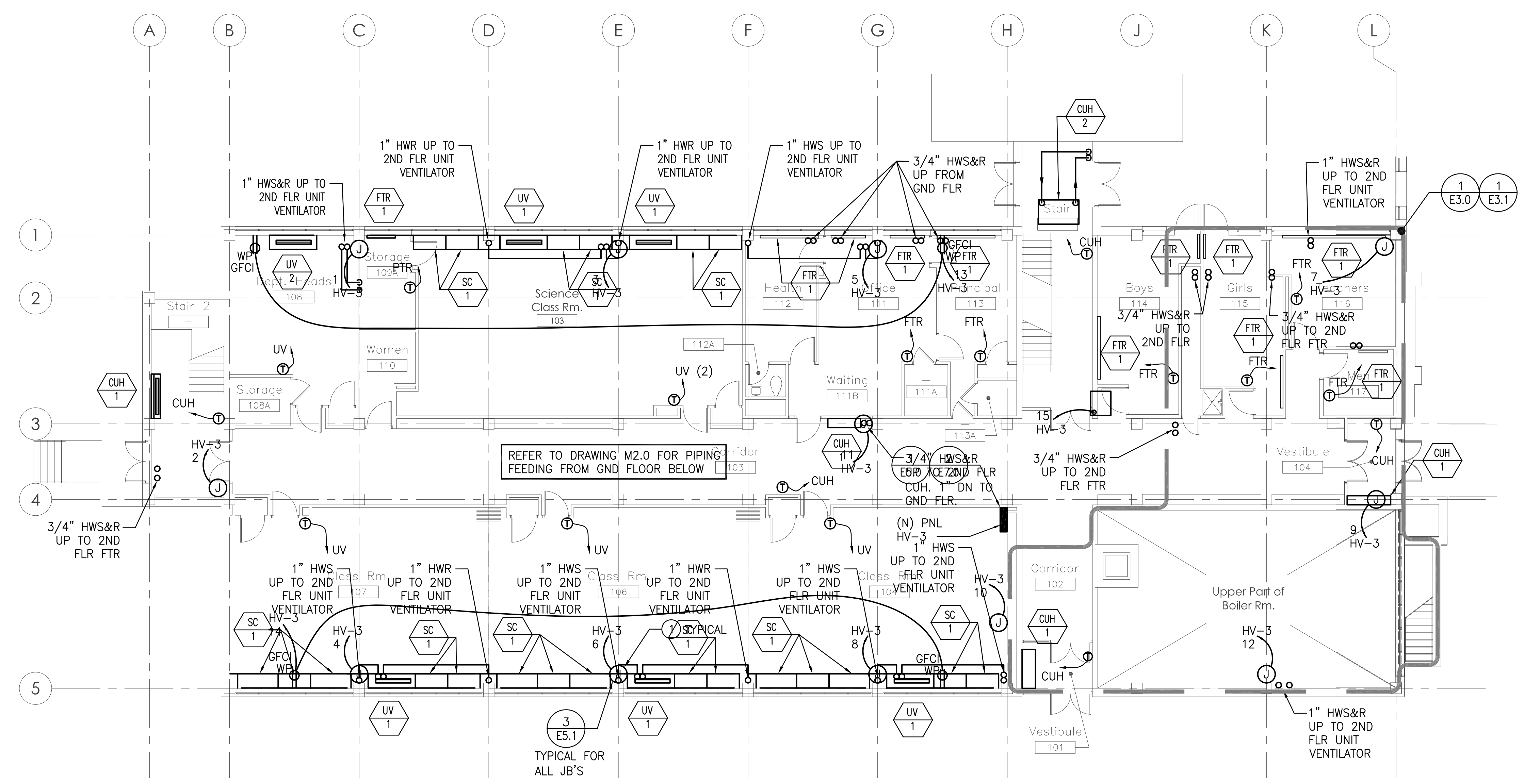
SPEC. NO.	DATE
B-023	14 FEB 10
SCALE	LOCATION NO.
AS NOTED	6040
DRAWN BY	TYPE NO.
DC	200
CHECKED BY	FILE NO.
MWO/MKA	129

DRAWING NO.
M2.1

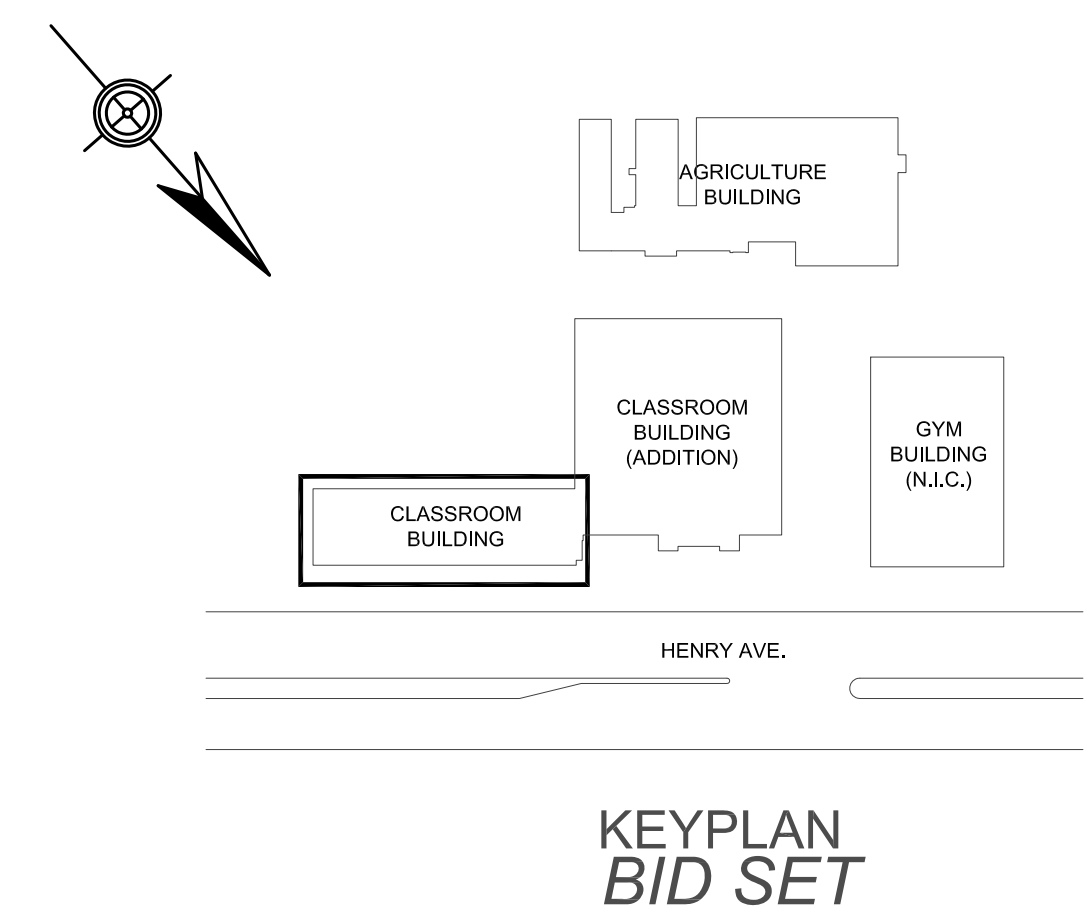
B-023 OF 2010/11
SHEET 11 OF 44



1 CLASSROOM BUILDING GND & FIRST FLOOR - MECH NEW WORK PLAN
Scale: 1/8" = 1'-0"



2 CLASSROOM BUILDING GND & FIRST FLOOR - MECH NEW WORK PLAN
Scale: 1/8" = 1'-0"



KEYPLAN
BID SET

GENERAL NOTES:

1. REFER TO DRAWING M0.1 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.



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PROJECT TITLE
Mechanical Plant Replacement
DRAWING TITLE
CLASSROOM BUILDING SECOND FLOOR
- MECH NEW WORK PLAN
APPROVED BY

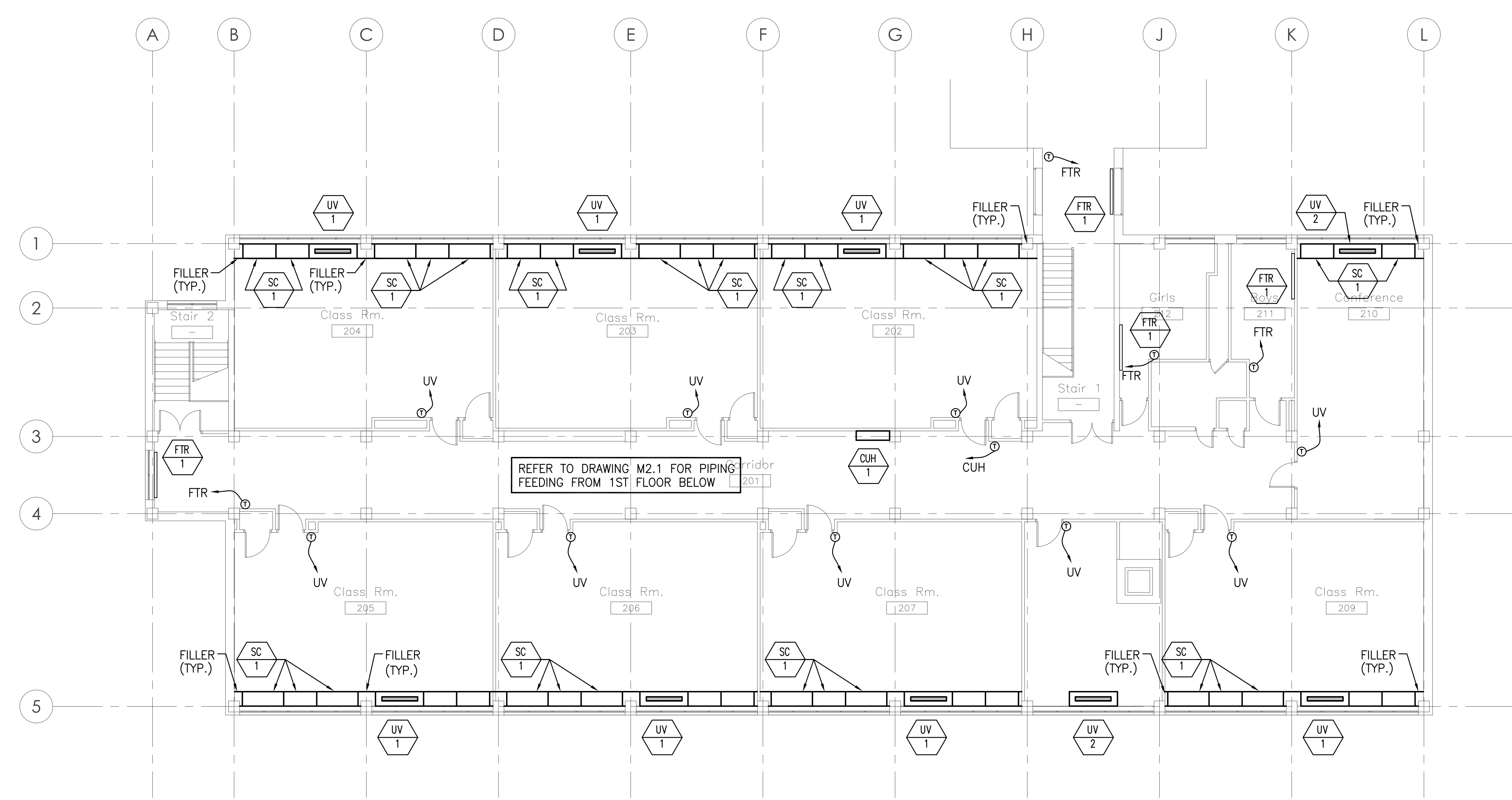
SCHOOL DISTRICT OF PHILADELPHIA
THE SCHOOL REFORM COMMISSION
DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES
440 NORTH BROAD STREET
PHILADELPHIA, PA 19106
215-400-4730 FAX 215-400-4731
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CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

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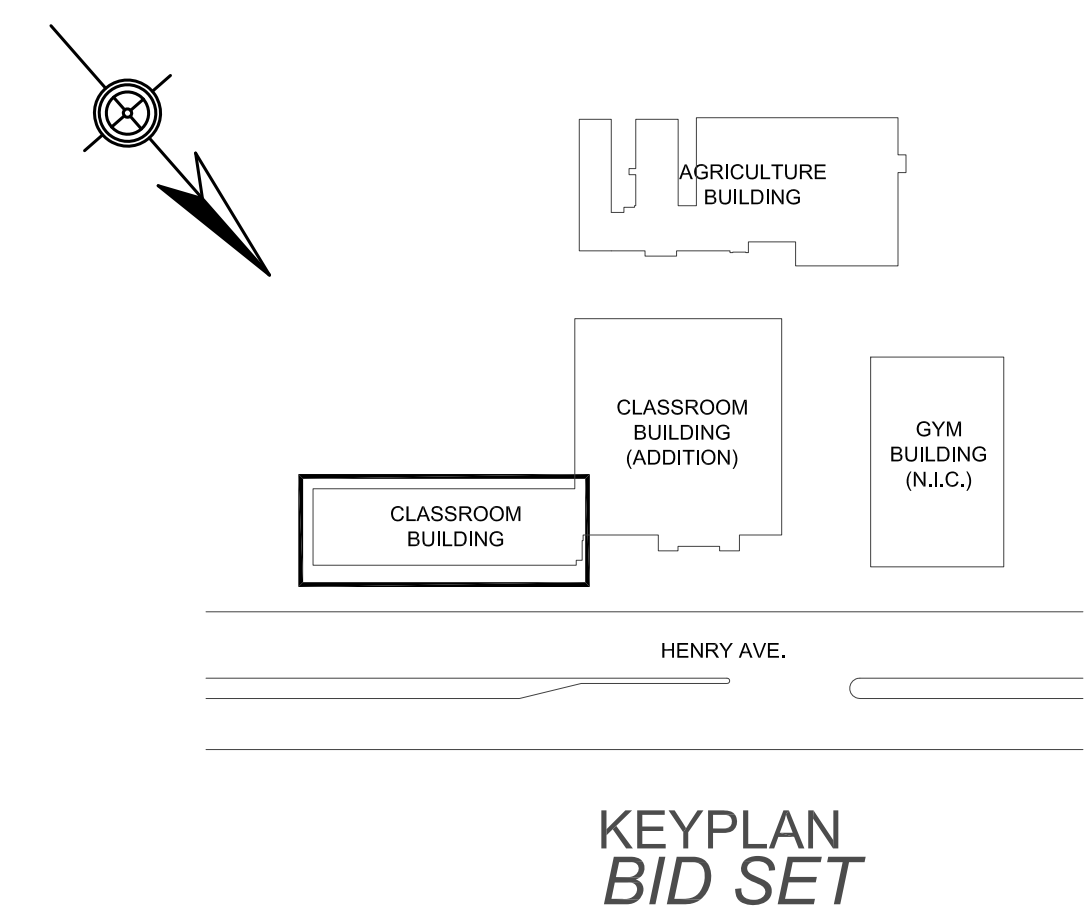
SPEC. NO. B-023	DATE 14 FEB 10
SCALE AS NOTED	LOCATION NO. 6040
DRAWN BY DC	TYPE NO. 200
CHECKED BY MWO/MKA	FILE NO. 130

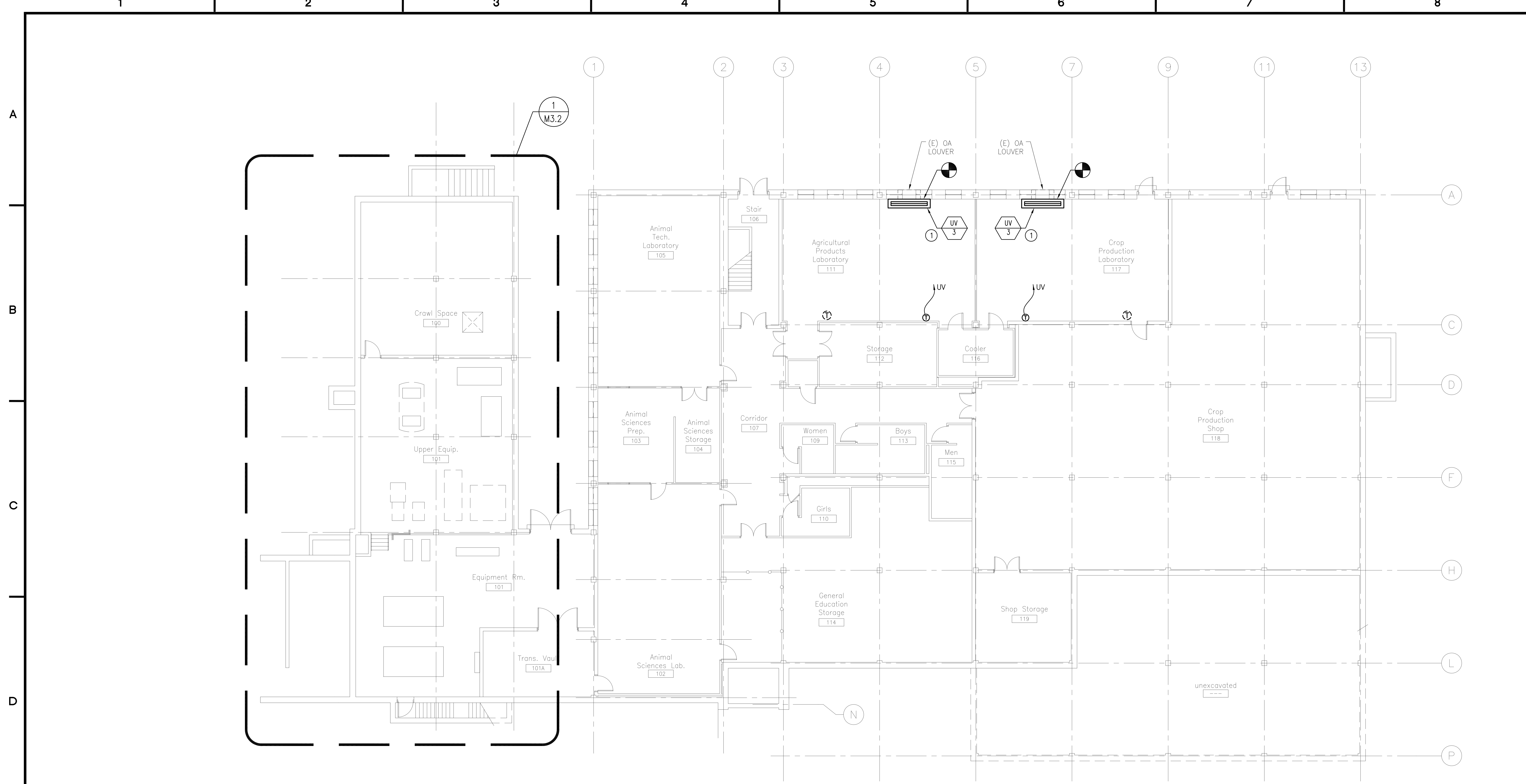
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M2.2

B-023 OF 2010/11
SHEET 12 OF 44



1 CLASSROOM BUILDING SECOND FLOOR - MECH NEW WORK PLAN
M2.2 Scale: 1/8" = 1'-0"





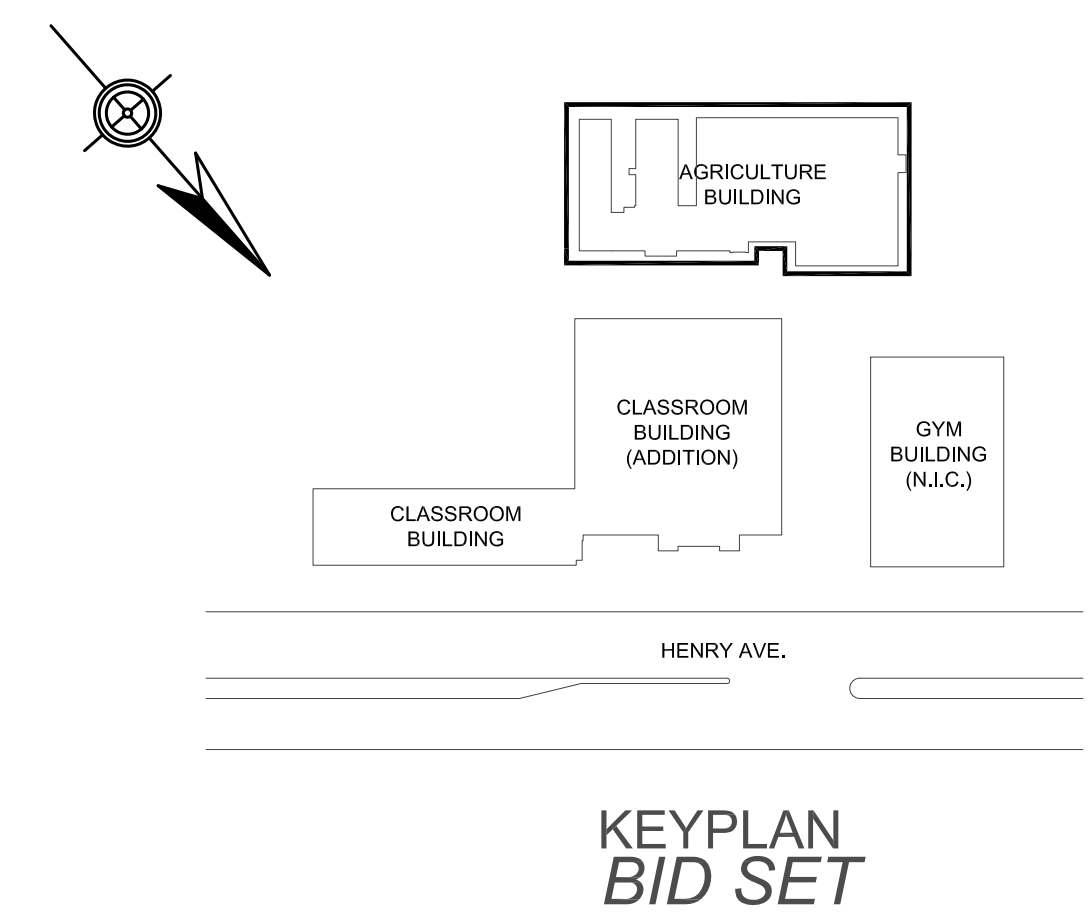
1 M2.3 AGRICULTURAL BUILDING GROUND FLOOR - MECH NEW WORK PLAN
 Scale: 1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO DRAWING M0.1 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

KEYED NOTES:

1 PROVIDE UNIT VENTILATOR. MAINTAIN EXISTING OUTSIDE AIR LOUVER. PROVIDE CHILLED WATER AND HOT WATER COIL CONNECTION WITH ASSOCIATED CONTROL VALVES. PROVIDE LOCAL CONTROL SYSTEM.



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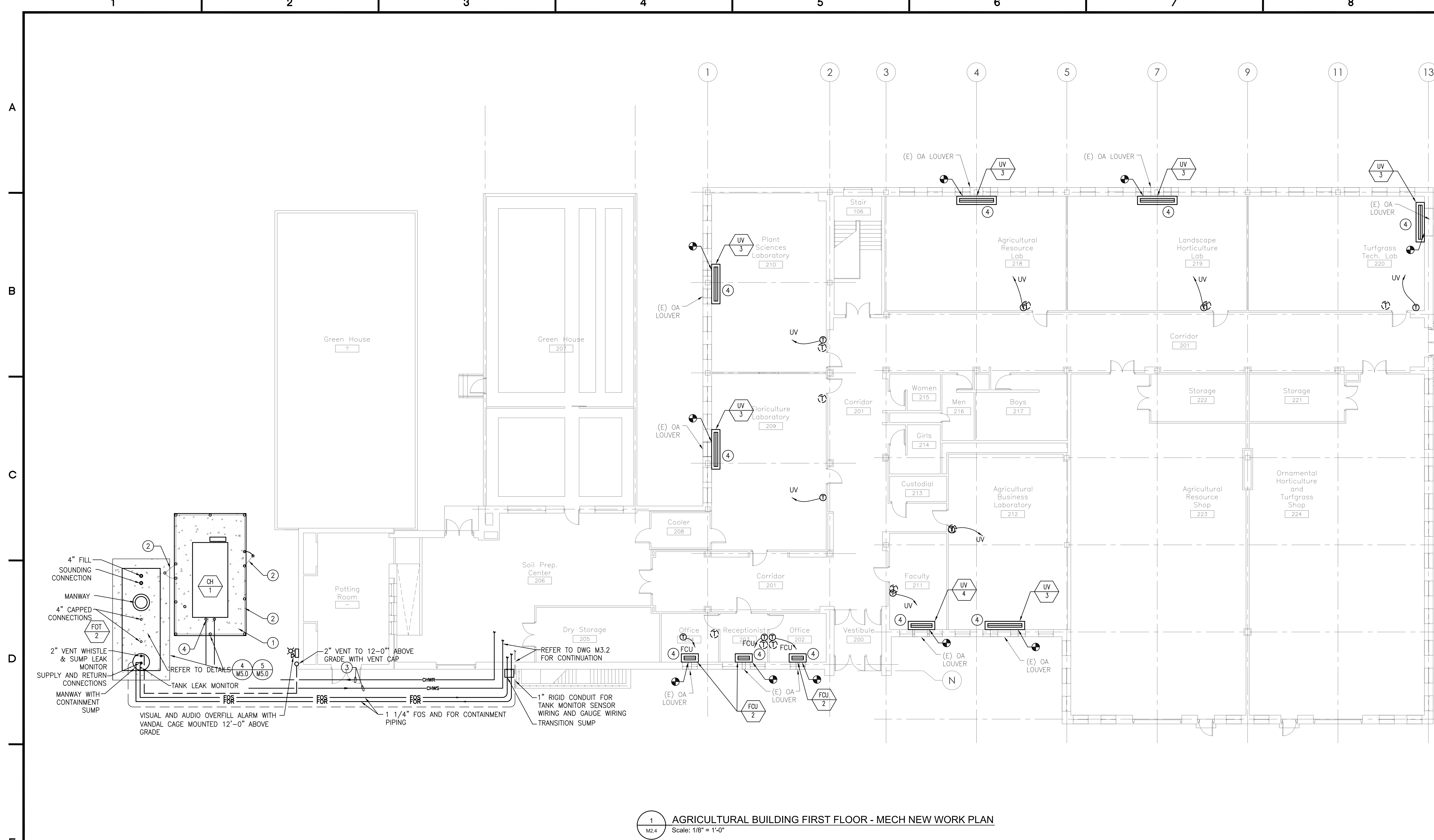
SCHOOL & LOCATION
 Walter B. Saul High School
 7100 Henry Avenue, Philadelphia, PA 19128
 PROJECT TITLE
 Mechanical Plant Replacement
 DRAWING TITLE
 AGRICULTURAL BUILDING GROUND
 FLOOR - MECH NEW WORK PLAN
 APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
 THE SCHOOL REFORM COMMISSION
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 CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

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SPEC. NO.	DATE
B-023	14 FEB 10
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SCALE	LOCATION NO.
AS NOTED	6040
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DRAWING NO.
M2.3



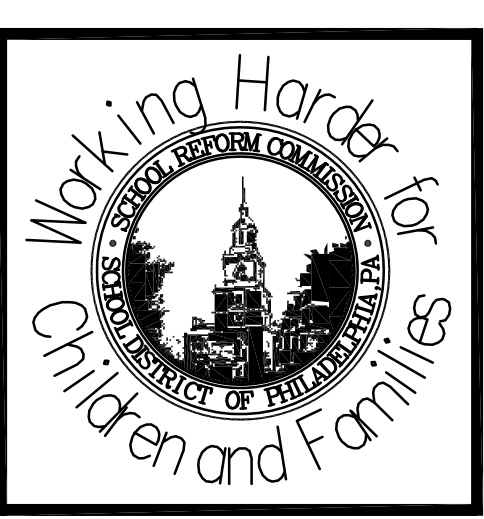
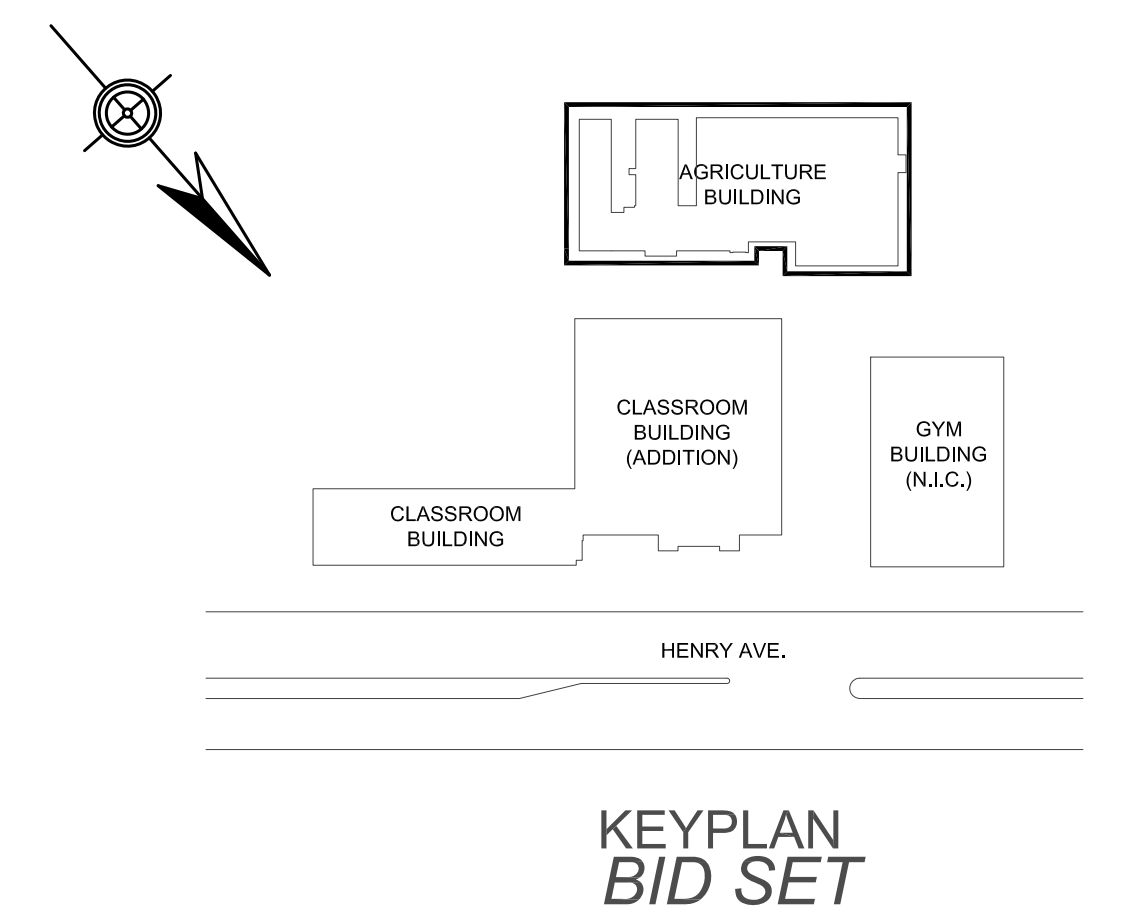
1 AGRICULTURAL BUILDING FIRST FLOOR - MECH NEW WORK PLAN
 M2.4 Scale: 1/8" = 1'-0"

GENERAL NOTES:

- 1. REFER TO DRAWING M0.1 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

KEYED NOTES:

- ① PROVIDE REINFORCED CONCRETE PAD. REFER TO DETAIL
- ② PROVIDE 8'-0" HIGH CHAIN LINK FENCE WITH GATE. REFER TO DETAIL.
- ③ PROVIDE CHILLED WATER SUPPLY AND RETURN "PERMA-PIPE" MODEL XTRATHERM WITH SCHEDULE 40 PIPE, 2" POLYURETHANE INSULATION, HDPE INSULATION JACKET. INSTALL 42" BELOW GRADE.
- ④ PROVIDE UNIT VENTILATOR AND FAN COIL UNIT. MAINTAIN EXISTING OUTSIDE AIR LOUVER. PROVIDE CHILLED WATER AND HOT WATER COIL CONNECTION WITH ASSOCIATED CONTROL VALVES. PROVIDE LOCAL CONTROL SYSTEM.



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 Walter B. Saul High School
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 PROJECT TITLE
 Mechanical Plant Replacement
 DRAWING TITLE
 AGRICULTURAL BUILDING FIRST FLOOR -
 MECH NEW WORK PLAN
 APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
 THE SCHOOL REFORM COMMISSION
 DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES
 440 NORTH BROAD STREET
 PHILADELPHIA, PA 19106
 215-400-4730 FAX 215-400-0751
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 CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

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SPEC. NO. B-023	DATE 14 FEB 10
2010/2011	LOCATION NO. 6040
SCALE AS NOTED	TYPE NO. 200
DRAWN BY DC	FILE NO. 132
CHECKED BY MWO/MKA	

DRAWING NO.
M2.4

GENERAL NOTES:

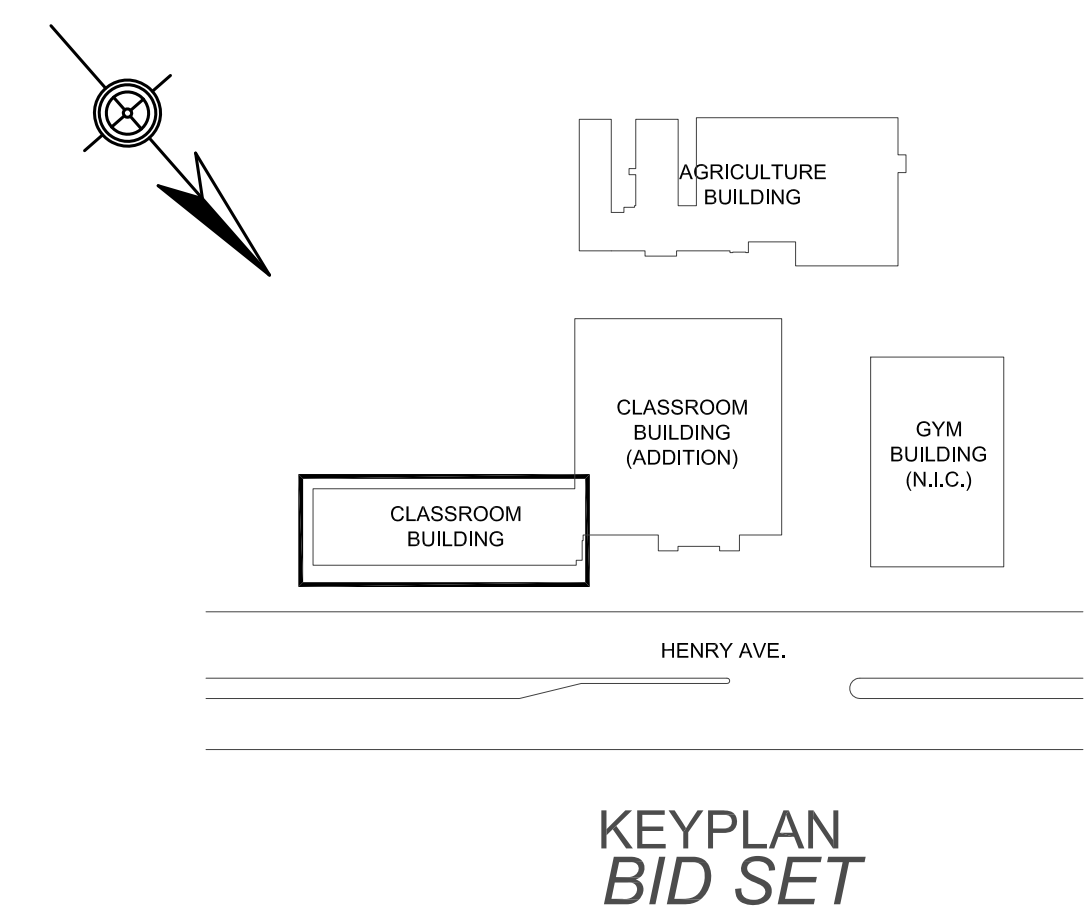
1. REFER TO DRAWING M0.0 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

KEYED NOTES:

① PROVIDE UNIT VENTILATOR. MAINTAIN EXISTING OUTSIDE AIR LOUVER. PROVIDE CHILLED WATER AND HOT WATER COIL CONNECTION WITH ASSOCIATED CONTROL VALVES. PROVIDE LOCAL CONTROL SYSTEM.



1 CLASSROOM BUILDING ADDITION FIRST FLOOR - MECH NEW WORK PLAN
Scale: 1/8" = 1'-0"



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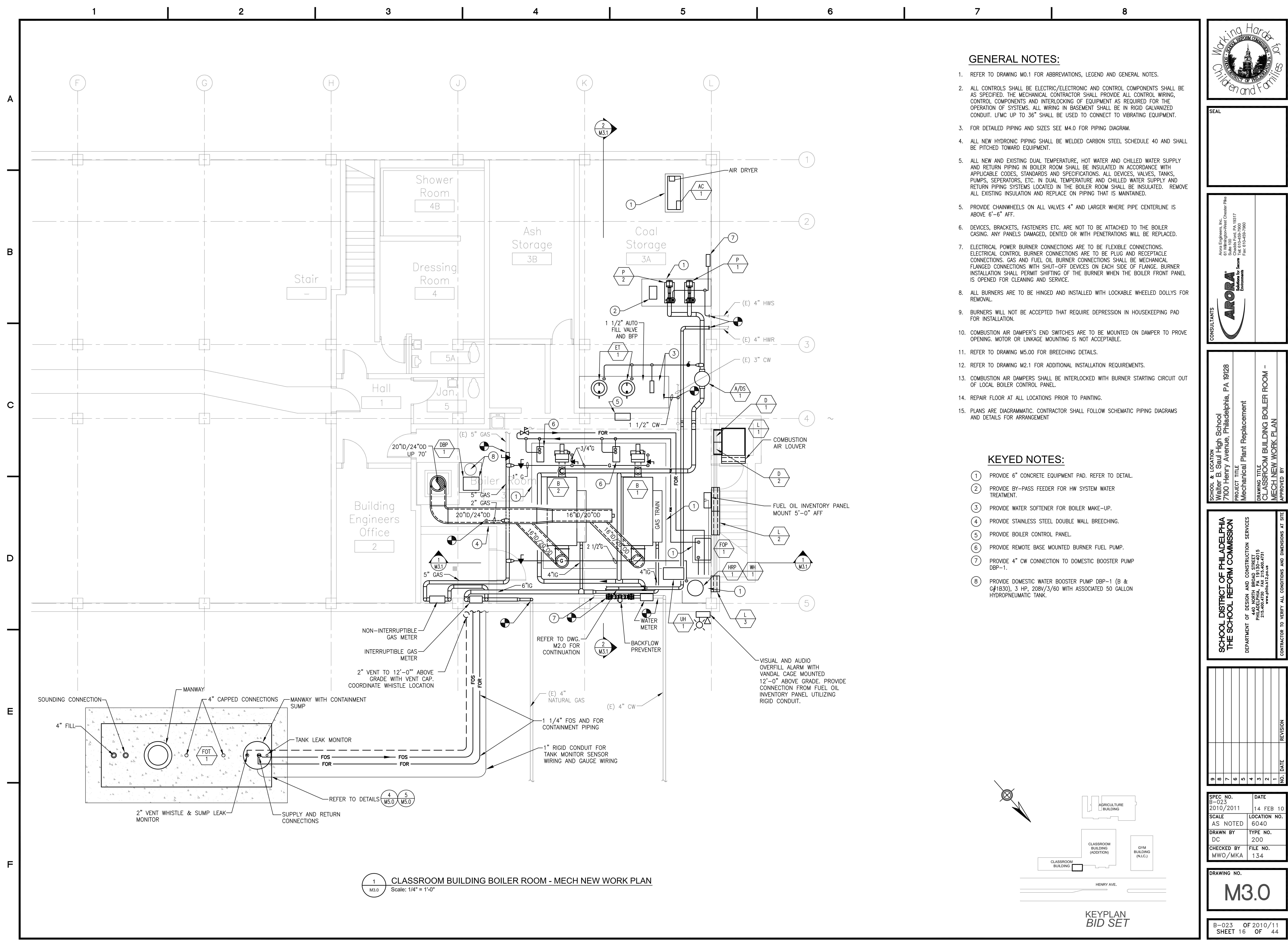
SCHOOL & LOCATION
Walter B. Saul High School
7100 Henry Avenue, Philadelphia, PA 19128
PROJECT TITLE
Mechanical Plant Replacement
DRAWING TITLE
CLASSROOM BUILDING ADDITION FIRST FLOOR - MECH NEW WORK PLAN
APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
THE SCHOOL REFORM COMMISSION
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CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

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SPEC. NO. B-023	DATE 14 FEB 10
SCALE AS NOTED	LOCATION NO. 6040
DRAWN BY DC	TYPE NO. 200
CHECKED BY MWO/MKA	FILE NO. 133

DRAWING NO.
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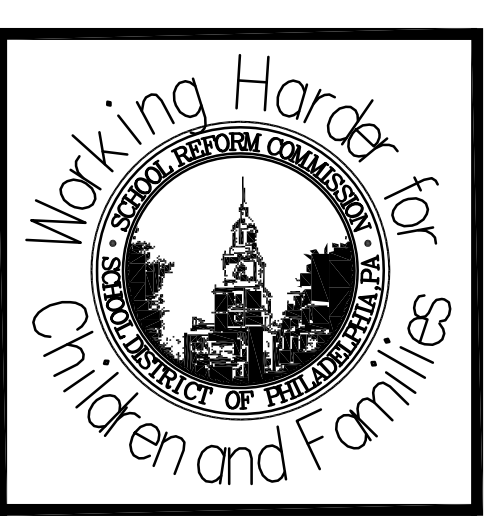
GENERAL NOTES:

- REFER TO DRAWING M0.1 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.
- ALL CONTROLS SHALL BE ELECTRIC/ELECTRONIC AND CONTROL COMPONENTS SHALL BE AS SPECIFIED. THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL CONTROL WIRING, CONTROL COMPONENTS AND INTERLOCKING OF EQUIPMENT AS REQUIRED FOR THE OPERATION OF SYSTEMS. ALL WIRING IN BASEMENT SHALL BE IN RIGID GALVANIZED CONDUIT. LFMC UP TO 36" SHALL BE USED TO CONNECT TO VIBRATING EQUIPMENT.
- FOR DETAILED PIPING AND SIZES SEE M4.0 FOR PIPING DIAGRAM.
- ALL NEW HYDRONIC PIPING SHALL BE WELDED CARBON STEEL SCHEDULE 40 AND SHALL BE PITCHED TOWARD EQUIPMENT.
- ALL NEW AND EXISTING DUAL TEMPERATURE, HOT WATER AND CHILLED WATER SUPPLY AND RETURN PIPING IN BOILER ROOM SHALL BE INSULATED IN ACCORDANCE WITH APPLICABLE CODES, STANDARDS AND SPECIFICATIONS. ALL DEVICES, VALVES, TANKS, PUMPS, SEPARATORS, ETC. IN DUAL TEMPERATURE AND CHILLED WATER SUPPLY AND RETURN PIPING SYSTEMS LOCATED IN THE BOILER ROOM SHALL BE INSULATED. REMOVE ALL EXISTING INSULATION AND REPLACE ON PIPING THAT IS MAINTAINED.
- PROVIDE CHAINWHEELS ON ALL VALVES 4" AND LARGER WHERE PIPE CENTERLINE IS ABOVE 6'-6" AFF.
- DEVICES, BRACKETS, FASTENERS ETC. ARE NOT TO BE ATTACHED TO THE BOILER CASING. ANY PANELS DAMAGED, DENTED OR WITH PENETRATIONS WILL BE REPLACED.
- ELECTRICAL POWER BURNER CONNECTIONS ARE TO BE FLEXIBLE CONNECTIONS. ELECTRICAL CONTROL BURNER CONNECTIONS ARE TO BE PLUG AND RECEPTACLE CONNECTIONS. GAS AND FUEL OIL BURNER CONNECTIONS SHALL BE MECHANICAL FLANGED CONNECTIONS WITH SHUT-OFF DEVICES ON EACH SIDE OF FLANGE. BURNER INSTALLATION SHALL PERMIT SHIFTING OF THE BURNER WHEN THE BOILER FRONT PANEL IS OPENED FOR CLEANING AND SERVICE.
- ALL BURNERS ARE TO BE HINGED AND INSTALLED WITH LOCKABLE WHEELED DOLLYS FOR REMOVAL.
- BURNERS WILL NOT BE ACCEPTED THAT REQUIRE DEPRESSION IN HOUSEKEEPING PAD FOR INSTALLATION.
- COMBUSTION AIR DAMPER'S END SWITCHES ARE TO BE MOUNTED ON DAMPER TO PROVE OPENING. MOTOR OR LINKAGE MOUNTING IS NOT ACCEPTABLE.
- REFER TO DRAWING M5.00 FOR BREECHING DETAILS.
- REFER TO DRAWING M2.1 FOR ADDITIONAL INSTALLATION REQUIREMENTS.
- COMBUSTION AIR DAMPERS SHALL BE INTERLOCKED WITH BURNER STARTING CIRCUIT OUT OF LOCAL BOILER CONTROL PANEL.
- REPAIR FLOOR AT ALL LOCATIONS PRIOR TO PAINTING.
- PLANS ARE DIAGRAMMATIC. CONTRACTOR SHALL FOLLOW SCHEMATIC PIPING DIAGRAMS AND DETAILS FOR ARRANGEMENT

KEYED NOTES:

- PROVIDE 6" CONCRETE EQUIPMENT PAD. REFER TO DETAIL.
- PROVIDE BY-PASS FEEDER FOR HW SYSTEM WATER TREATMENT.
- PROVIDE WATER SOFTENER FOR BOILER MAKE-UP.
- PROVIDE STAINLESS STEEL DOUBLE WALL BREECHING.
- PROVIDE BOILER CONTROL PANEL.
- PROVIDE REMOTE BASE MOUNTED BURNER FUEL PUMP.
- PROVIDE 4" CW CONNECTION TO DOMESTIC BOOSTER PUMP DBP-1.
- PROVIDE DOMESTIC WATER BOOSTER PUMP DBP-1 (B & G#1830), 3 HP, 208V/3/60 WITH ASSOCIATED 50 GALLON HYDRO-PNEUMATIC TANK.

1 CLASSROOM BUILDING BOILER ROOM - MECH NEW WORK PLAN
 M3.0 Scale: 1/4" = 1'-0"



SEAL

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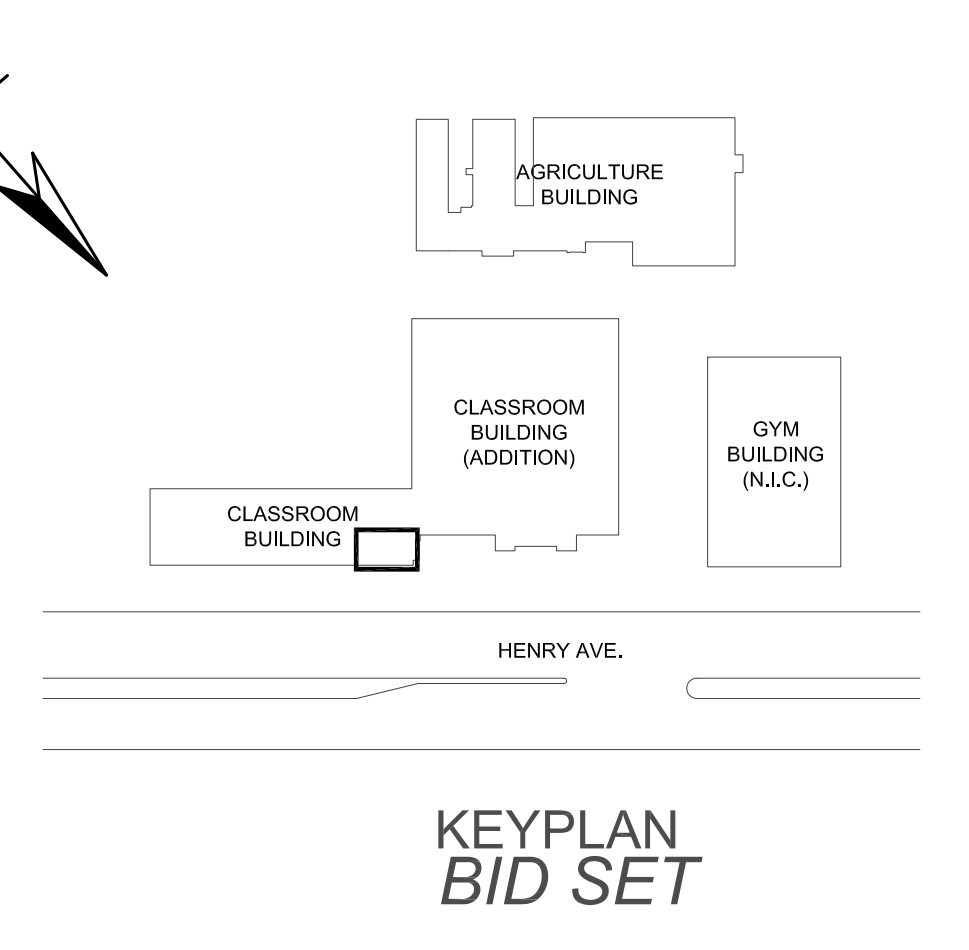
SCHOOL & LOCATION
 Walter B. Saul High School
 7100 Henry Avenue, Philadelphia, PA 19128
 PROJECT TITLE
 Mechanical Plant Replacement
 DRAWING TITLE
 CLASSROOM BUILDING BOILER ROOM -
 MECH NEW WORK PLAN
 APPROVED BY

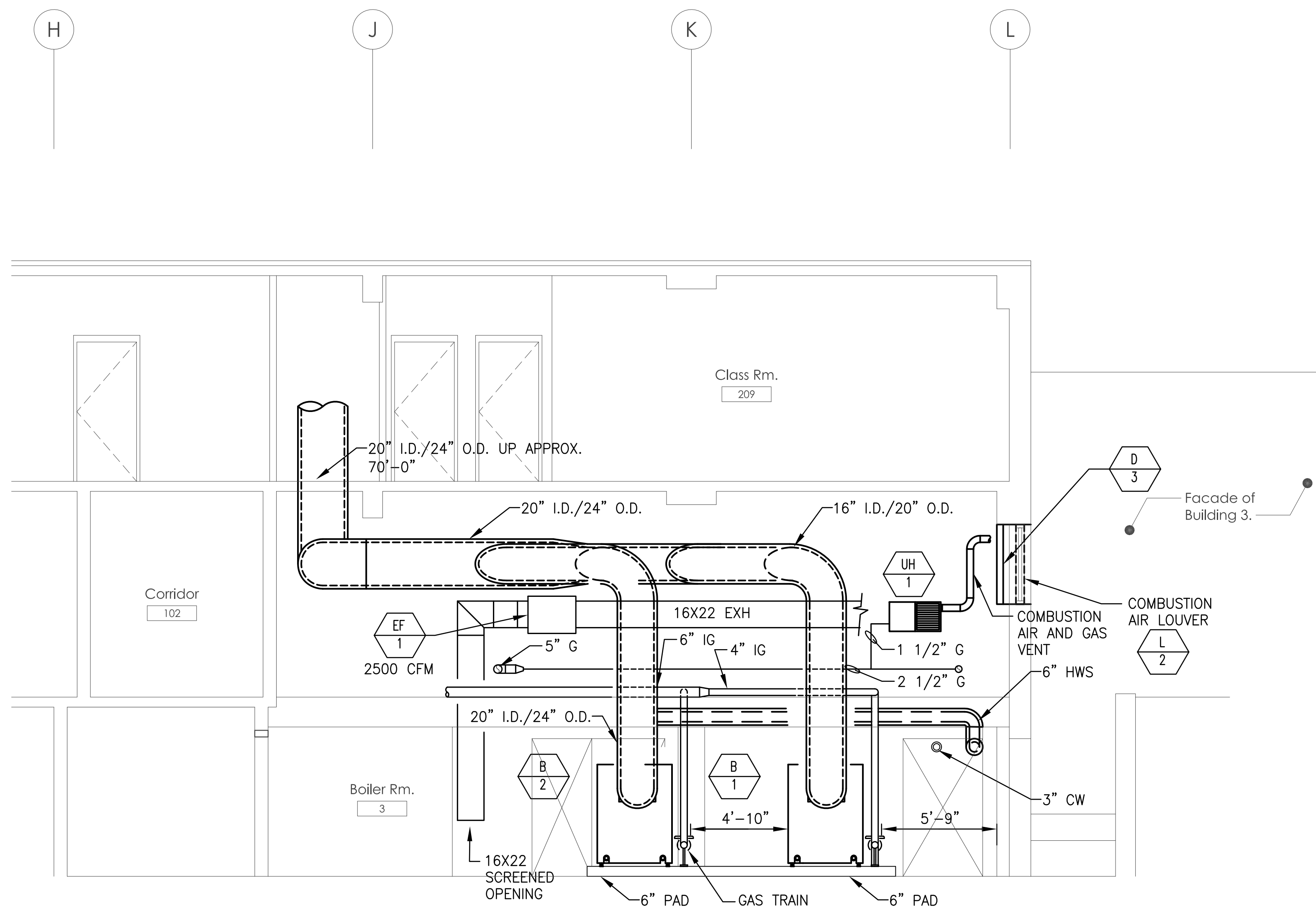
SCHOOL DISTRICT OF PHILADELPHIA
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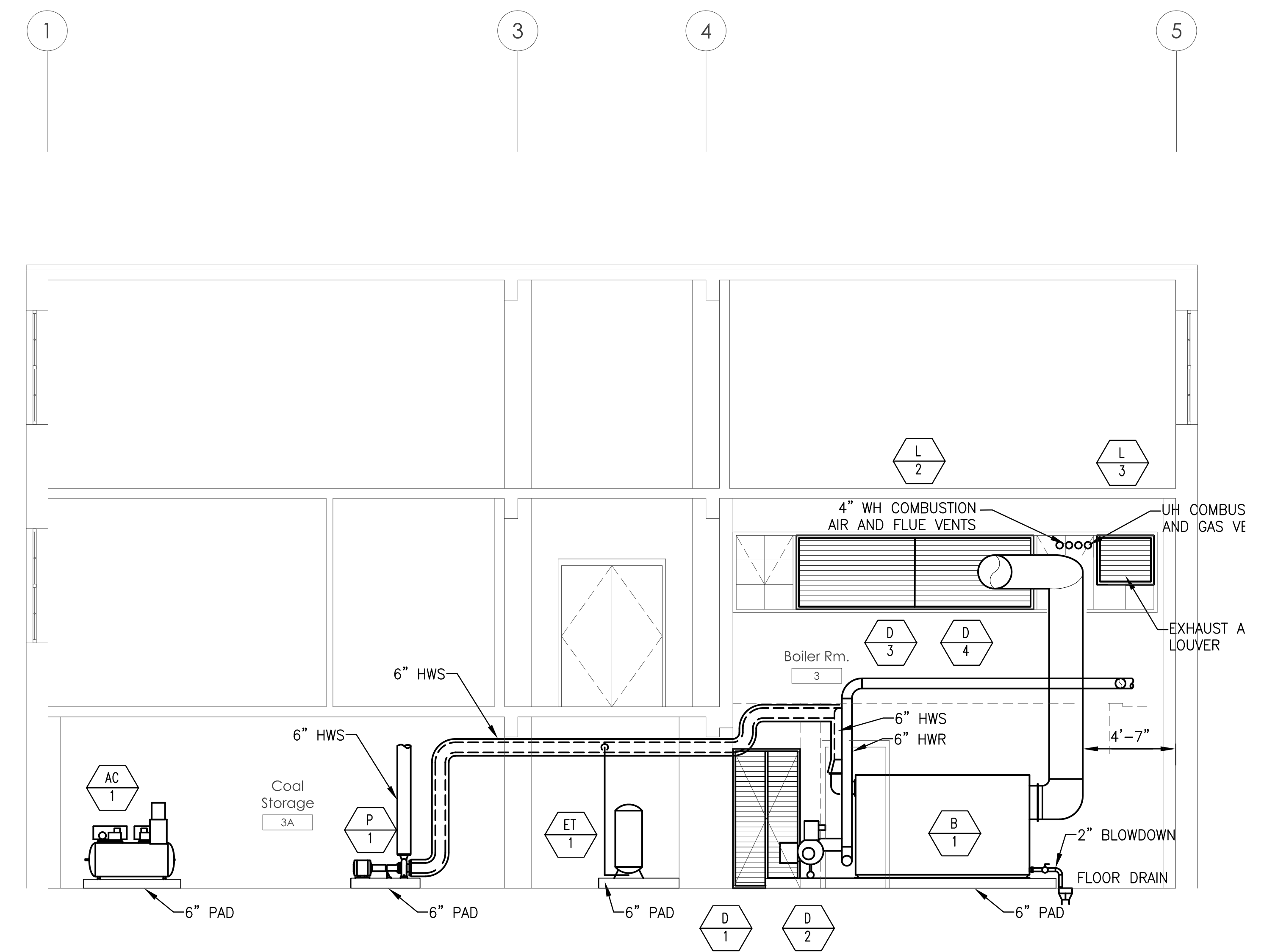
SPEC. NO. B-023	DATE 14 FEB 10
SCALE AS NOTED	LOCATION NO. 6040
DRAWN BY DC	TYPE NO. 200
CHECKED BY MWO/MKA	FILE NO. 134

DRAWING NO.
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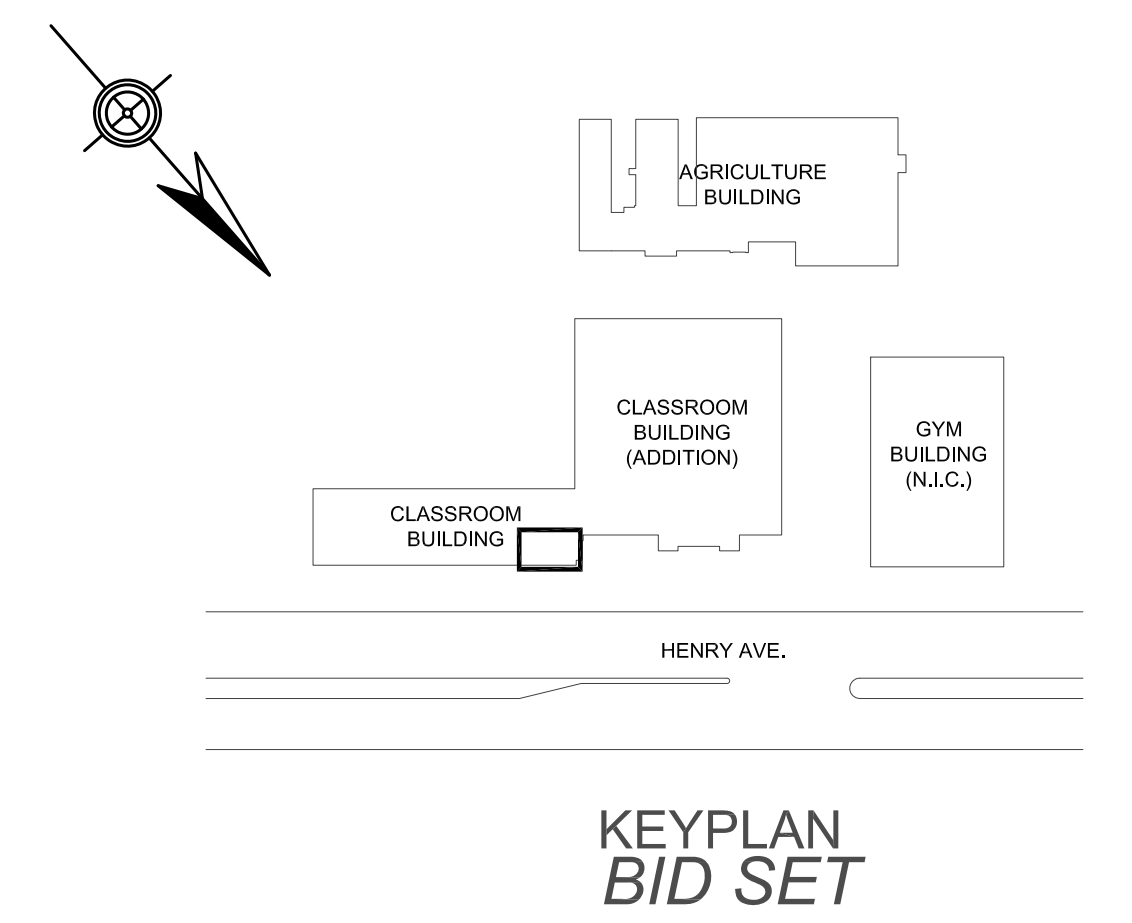




1 CLASSROOM BUILDING BOILER ROOM - MECH ELEVATIONS
M3.1 Scale: 1/4" = 1'-0"



2 CLASSROOM BUILDING BOILER ROOM - MECH ELEVATIONS
M3.1 Scale: 1/4" = 1'-0"



KEYPLAN
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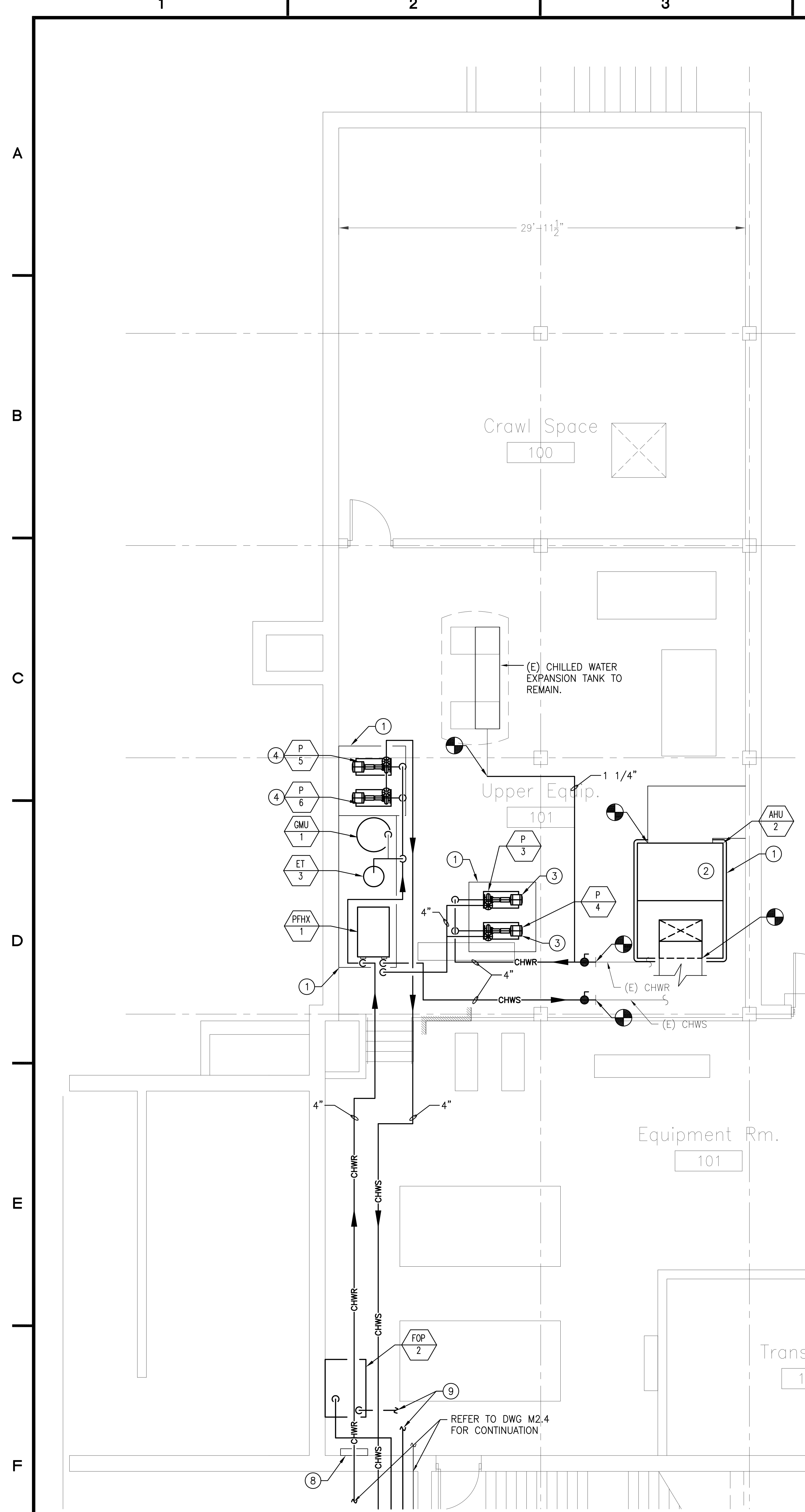
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PROJECT TITLE
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DRAWING TITLE
CLASSROOM BUILDING BOILER ROOM -
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DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES
440 NORTH BROAD STREET
PHILADELPHIA, PA 19106
215-400-4730 FAX 215-400-4751
www.philak12.edu

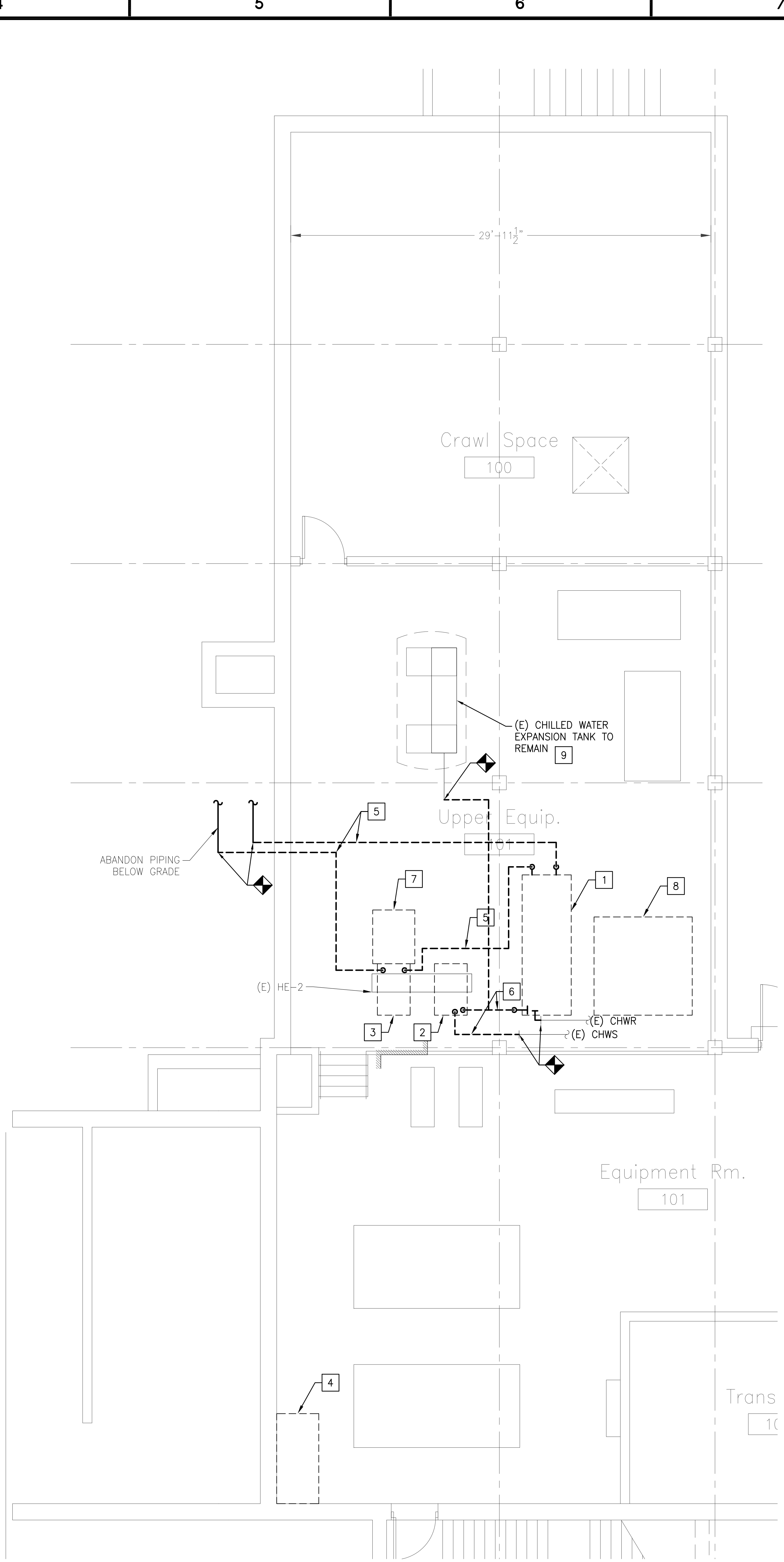
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SPEC. NO.	DATE
B-023	14 FEB 10
2010/2011	
SCALE	LOCATION NO.
AS NOTED	6040
DRAWN BY	TYPE NO.
DC	200
CHECKED BY	FILE NO.
MWO/MKA	135

DRAWING NO.
M3.1



1 AGRICULTURAL BUILDING BOILER ROOM - MECH NEW WORK PLAN
 M3.2 Scale: 1/4" = 1'-0"



2 AGRICULTURAL BUILDING BOILER ROOM - MECH DEMOLITION PLAN
 M3.2 Scale: 1/4" = 1'-0"

GENERAL NOTES:

- REFER TO DRAWING M0.1 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

KEYED NOTES:

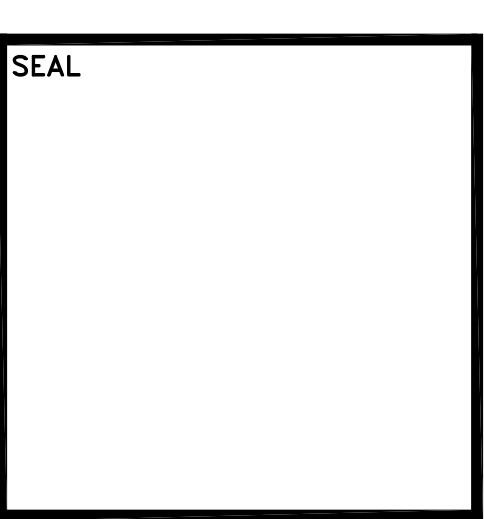
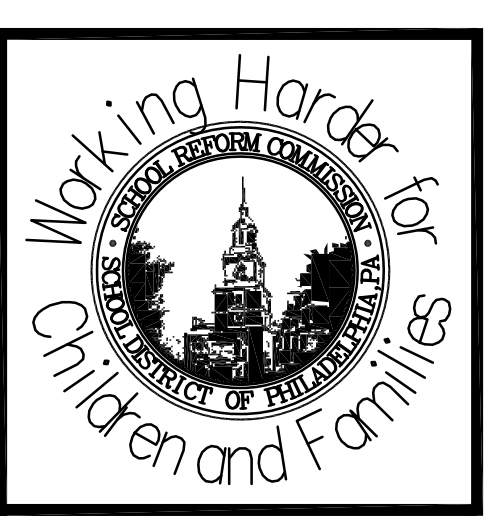
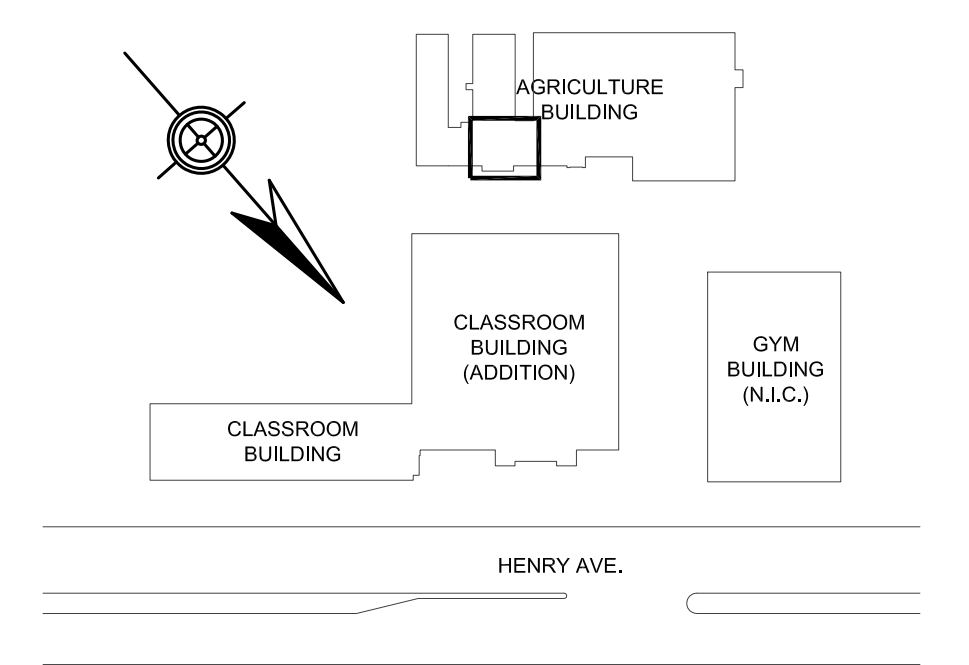
- PROVIDE REINFORCED CONCRETE PAD.
- PROVIDE AIR HANDLING UNIT REPLACING EXISTING.
- PROVIDE CHILLED WATER PUMPS.
- PROVIDE CHILLER (30% GLYCOL) PUMPS.
- PROVIDE GLYCOL MAKE-UP UNIT.
- PROVIDE EXPANSION TANK.
- PROVIDE PLATE AND FRAME HEAT EXCHANGER.
- PROVIDE TANK INVENTORY CONTROL PANEL.
- PROVIDE PIPING CONNECTIONS TO EXISTING FUEL OIL SYSTEM.

DEMOLITION NOTES

- CONTRACTOR SHALL COORDINATE DISCONNECTING OF POWER WIRING BY E.C.
- MATERIALS, EQUIPMENT AND PIPING THAT ARE NOT DIRECTLY INDICATED TO BE REMOVED BUT ARE PART OF A SYSTEM TO BE REMOVED, SHALL BE DEMOLISHED.
- ALL EQUIPMENT, MATERIALS AND SYSTEMS MADE OBSOLETE BY THE NEW WORK SHALL BE DEMOLISHED.

DEMOLITION KEYED NOTES

- DEMOLISH CHILLER INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- DEMOLISH CHILLED WATER PUMP INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- DEMOLISH CONDENSER WATER PUMP INCLUDING BUT NOT LIMITED TO SUPPORTS, PIPING CONNECTIONS, CONTROLS, POWER CONNECTIONS, INSULATION AND ALL ACCESSORIES.
- DEMOLISH FUEL OIL TRANSFER PUMP INCLUDING PIPING CONNECTIONS, WIRING CONNECTIONS, HANGERS AND ALL ACCESSORIES.
- DEMOLISH CONDENSER WATER PIPING INCLUDING BUT NOT LIMITED TO FITTINGS, HANGERS, SUPPORTS, INSULATION, VALVES AND ALL ACCESSORIES.
- DEMOLISH CHILLED WATER PIPING INCLUDING BUT NOT LIMITED TO FITTINGS, HANGERS, SUPPORTS, INSULATIONS, VALVES AND ALL ACCESSORIES.
- DEMOLISH SEPARATOR INCLUDING BUT NOT LIMITED TO PIPE CONNECTIONS AND ALL ACCESSORIES.
- DEMOLISH AIR HANDLING UNIT INCLUDING BUT NOT LIMITED TO SUPPORTS, HANGERS, CONTROLS, DUCT CONNECTIONS, INSULATION, STEAM, CHILLED WATER, LOW PRESSURE STEAM CONDENSATE AND AC CONDENSATE PIPING CONNECTIONS.
- DEMOLISH INSULATION FROM EXPANSION TANK.



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 7100 Henry Avenue, Philadelphia, PA 19128

PROJECT TITLE
 Mechanical Plant Replacement

DRAWING TITLE
 AGRICULTURAL BUILDING BOILER ROOM -
 MECH NEW WORK + DEMO PLAN

SCHOOL DISTRICT OF PHILADELPHIA
 THE SCHOOL REFORM COMMISSION

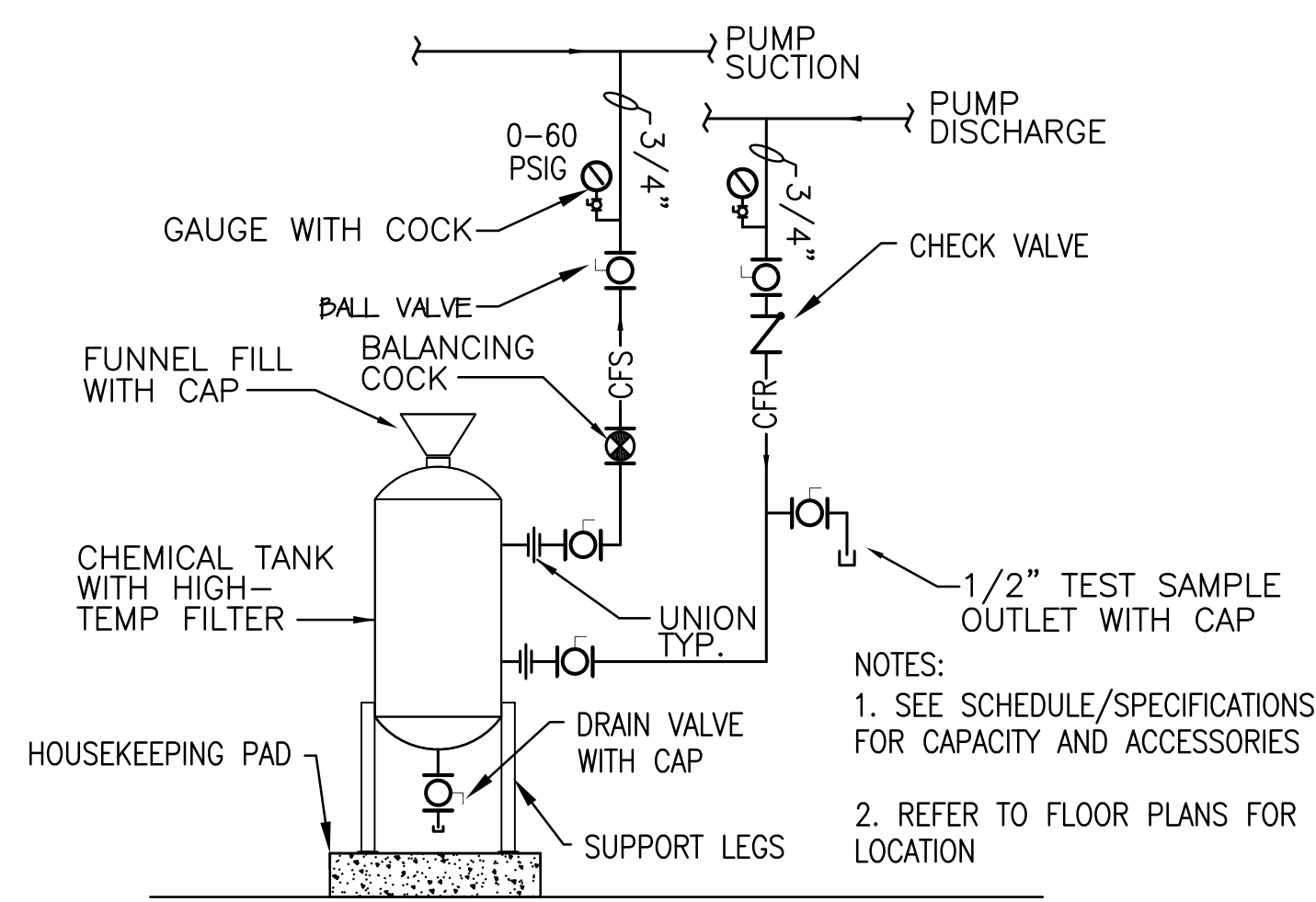
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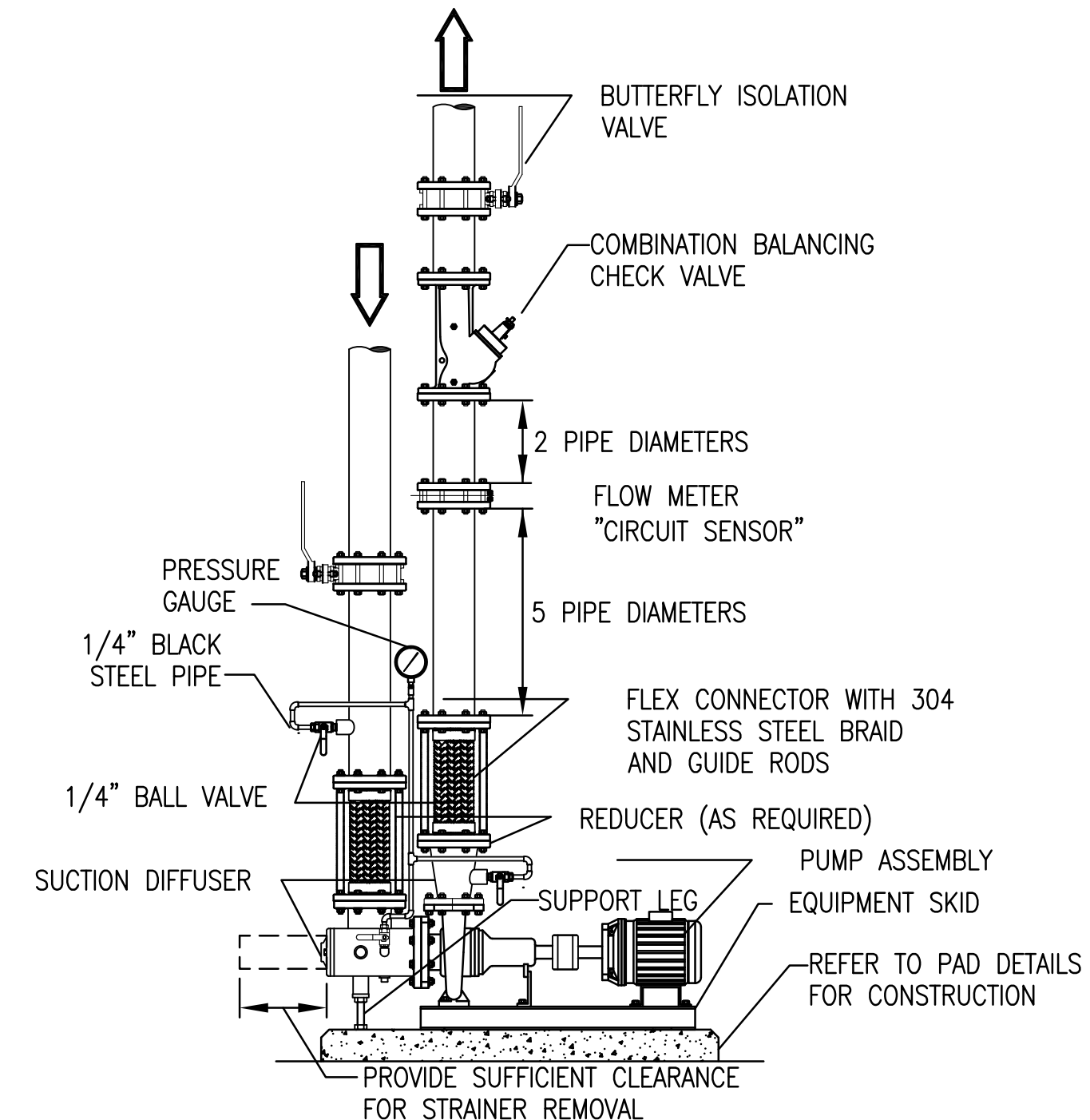
SPEC. NO. B-023	DATE 14 FEB 10
SCALE 2010/2011	LOCATION NO. 6040
DRAWN BY DC	TYPE NO. 200
CHECKED BY MWO/MKA	FILE NO. 136

DRAWING NO.
M3.2

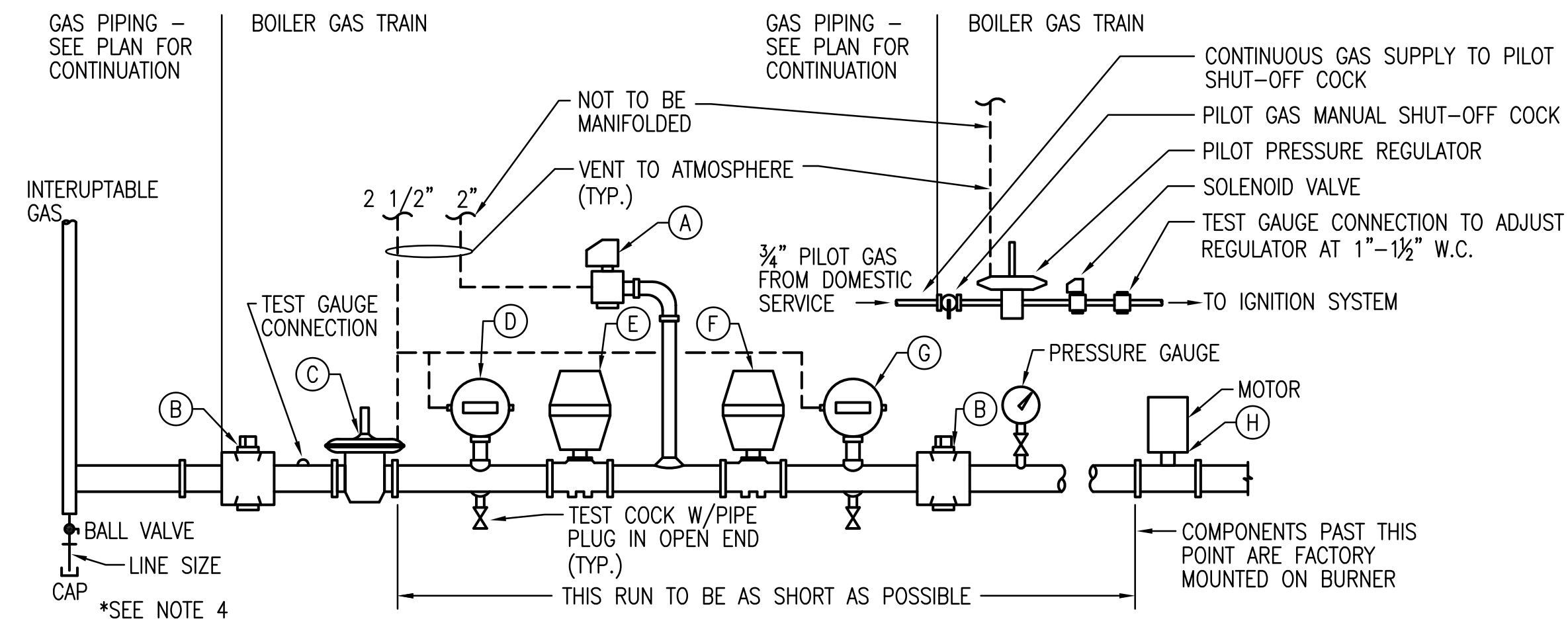
INSTALLATION NOTES:
 1. PROVIDE SEPERATE ISOLATION VALVE AND TRIPLE DUTY VALVE ON PUMP DISCHARGE.
 2. PROVIDE PUMP INERTIA BASE ON ALL UNITS ABOVE _____ HORSEPOWER.
 3. PROVIDE BELL AND GOSSETT CIRCUIT SENSOR ON ALL PUMPS ABOVE _____ GPM
 4. PROVIDE BELL AND GOSSETT MODEL RO-2 READOUT KIT FOR CIRCUIT SENSOR. OTHER MODEL READOUT KITS (RO-3, 4, AND 5) ARE NOT ACCEPTABLE.
 5. PROVIDE SINGLE PRESSURE GAUGE AND MANIFOLD PIPING. PIPING SHALL BE MINIMUM 1/4" BLACK STEEL. PROVIDE ONE ADDITIONAL SPARE GAUGE FOR EACH INSTALLATION. USE FACTORY PROVIDED PORTS OR WELD-O-LET CONNECTIONS ON PIPING.



1 CHEMICAL BYPASS FEEDER DETAIL
 M5.0 SCALE: NONE



2 END SUCTION PUMP DETAIL (TYP.)
 M5.0 SCALE: NONE

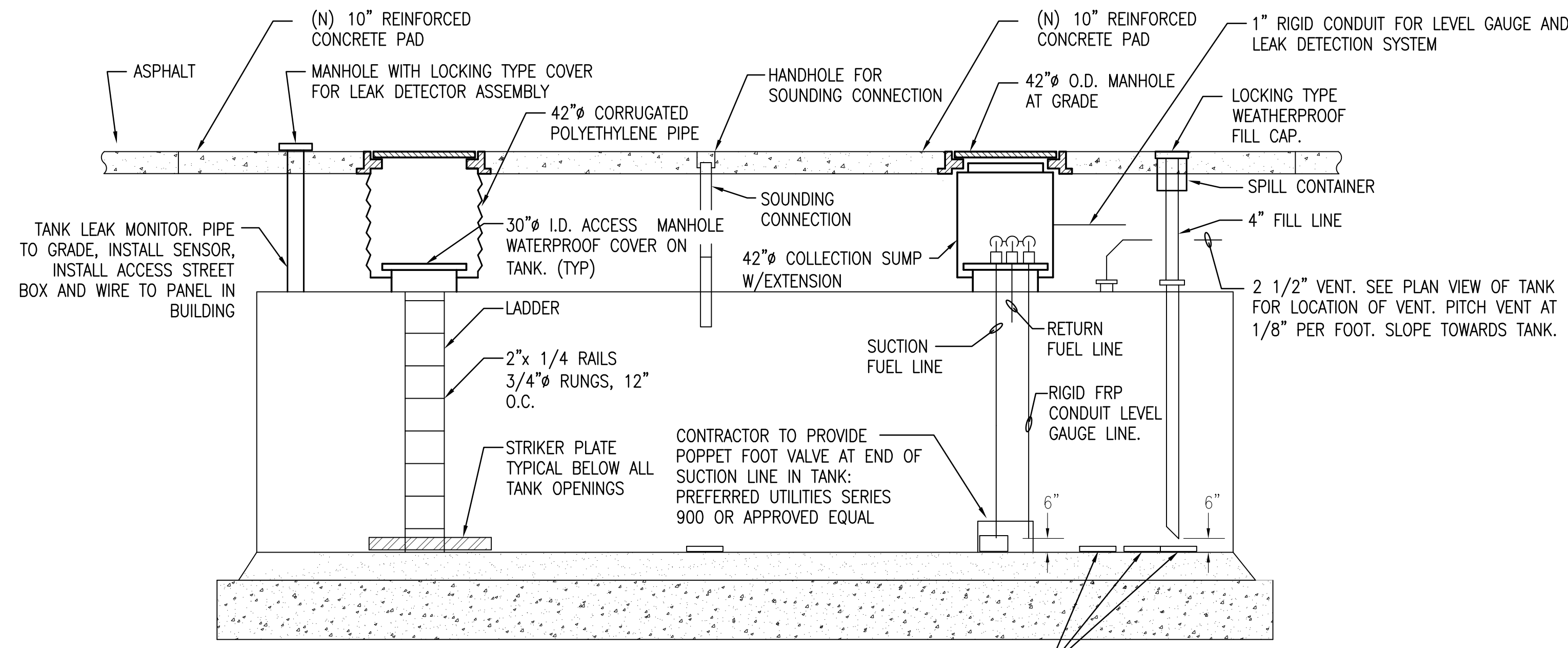


NOTE:
 1. TEST GAUGE SHIPPED LOOSE; INSTALL ON BURNER MANIFOLD & ADJUST REGULATOR AS PER MANUFACTURER INSTRUCTIONS WITH RATE OF FIRE VALVE WIDE OPEN IN HIGH POSITION.
 2. GAS TRAIN ARRANGEMENT SHALL MEET THE REQUIREMENTS OF INDUSTRIAL RISK INSURERS.
 3. CHECK WITH P.G.W. FOR LOCAL CODES.
 4. MANIFOLD VENT LINES PER PGW REGULATIONS.
 5. PROVIDE DRIP-LEG WITH MIN 3" LONG NIPPLE, FULL LINE SIZE BALL VALVE, & A NIPPLE WITH CAP AT THE END, AS INDICATED.
 6. CONTRACTOR SHALL ROUTE GAS PIPING FROM END OF GAS TRAIN TO FIRING RATE VALVE SO THAT FRONT BOILER DOORS CAN BE OPENED WITHOUT REMOVING OR DISTURBING GAS PIPING.

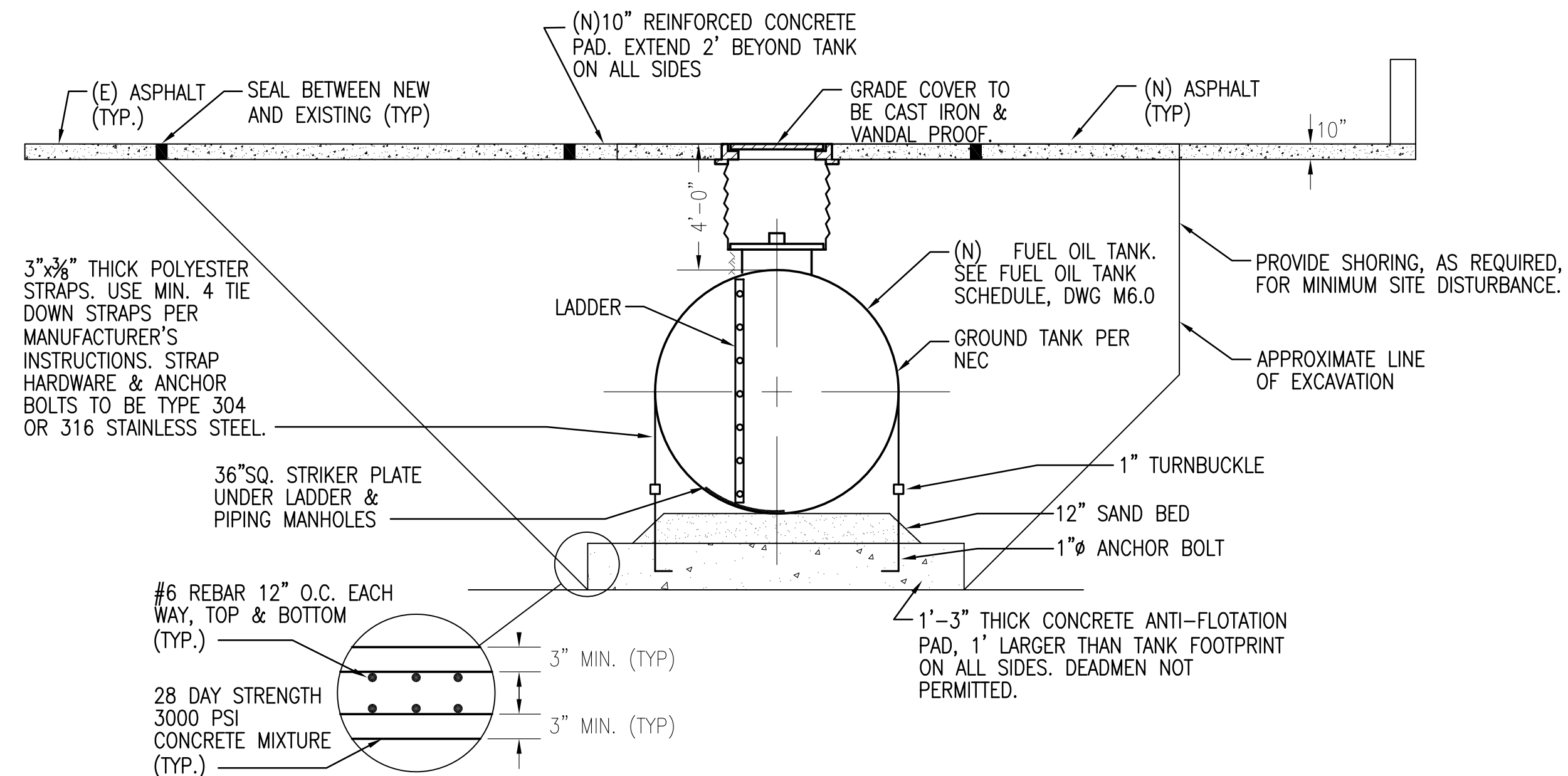
3 GAS TRAIN ARRANGEMENT
 M5.0 SCALE: NONE

FACTORY FURNISHED GAS-TRAIN COMPONENTS			
ITEM	MAIN BLDG. SIZE *	DESCRIPTION	MFG/MODEL NO.
A	---	SOLENOID VENT VALVE	ASCO 330055
B	3"	LUBRICATED SHUT OFF COCKS	ASCO 321013
C	3"	MAIN GAS PRESS-URE REGULATOR	MAXITROL 335023
D	---	LOW GAS PRESSURE SWITCH-AUTO RESET	HONEYWELL 770065
E	3"	SAFETY SHUT OFF VALVE W/PROOF OF CLOSURE	ASCO 330050
F	3"	SAFETY SHUT OFF VALVE	ASCO 331042 + 332009
G	---	HIGH GAS PRESSURE SWITCH MANUAL RESET	HONEYWELL 770066
H	3"	FIRING RATE CONTROL VALVE	ASCO 384034

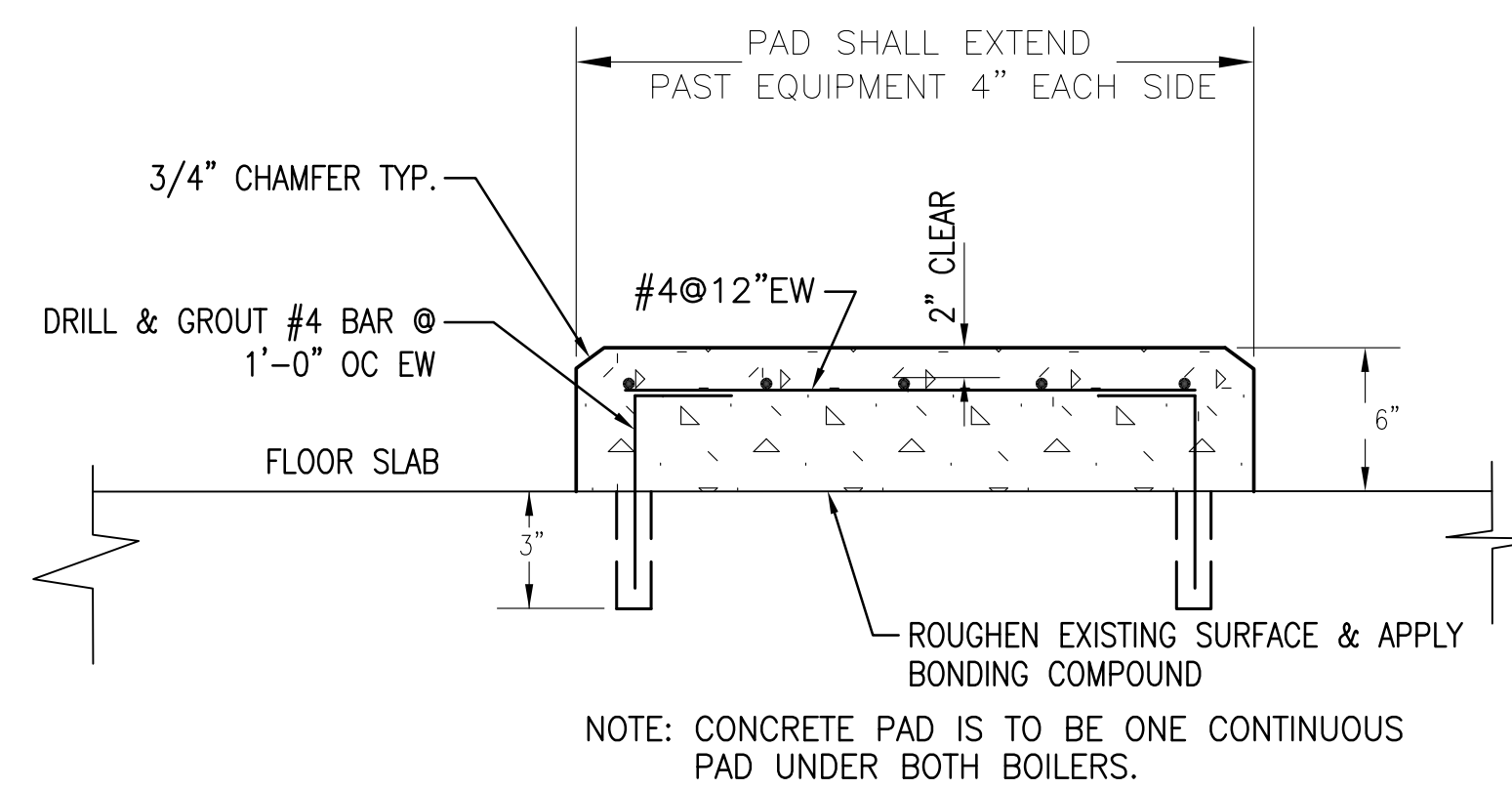
BURNER MANUFACTURER TO CONFIRM EXACT SIZE OF GAS TRAIN



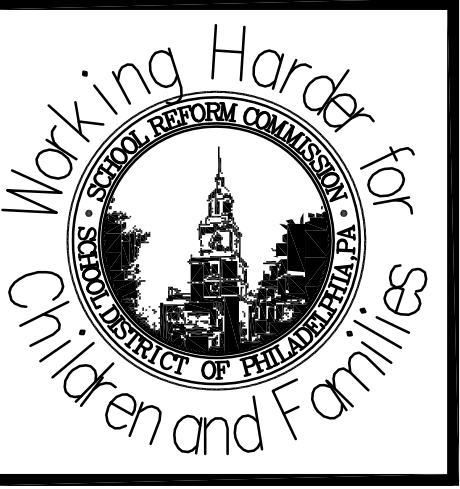
4 SIDE VIEW OF NEW FUEL OIL TANK INSTALLATION
 M5.0 SCALE: NONE



5 END VIEW OF NEW FUEL OIL TANK INSTALLATION
 M5.0 SCALE: NONE



6 CONCRETE PAD DETAIL
 M5.0 SCALE: NONE



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SCHOOL & LOCATION
 Walter B. Saul High School
 7100 Henry Avenue, Philadelphia, PA 19128
 PROJECT TITLE
 Mechanical Plant Replacement
 DRAWING TITLE
 MECHANICAL DETAILS
 APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
 THE SCHOOL REFORM COMMISSION
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 CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

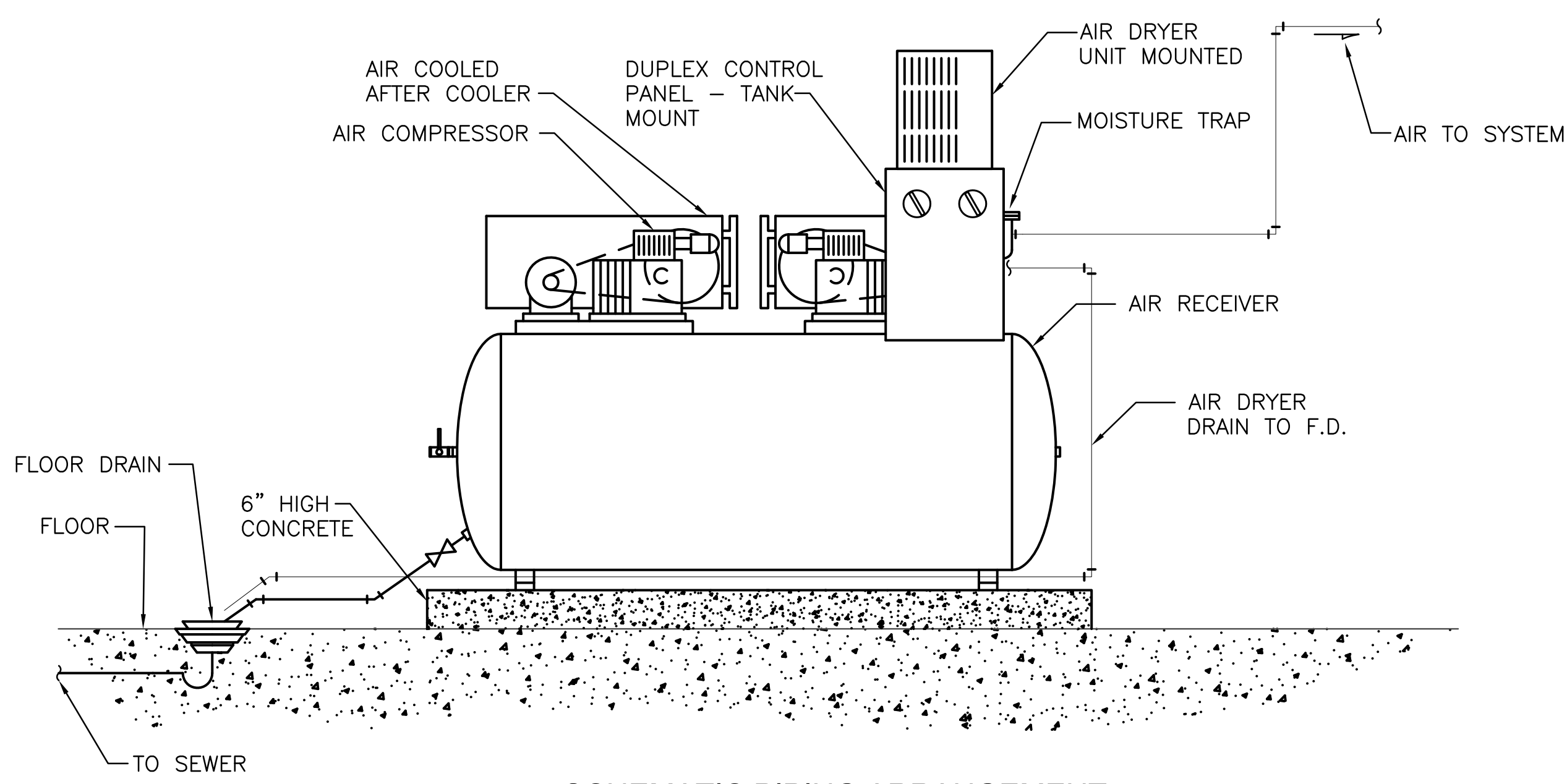
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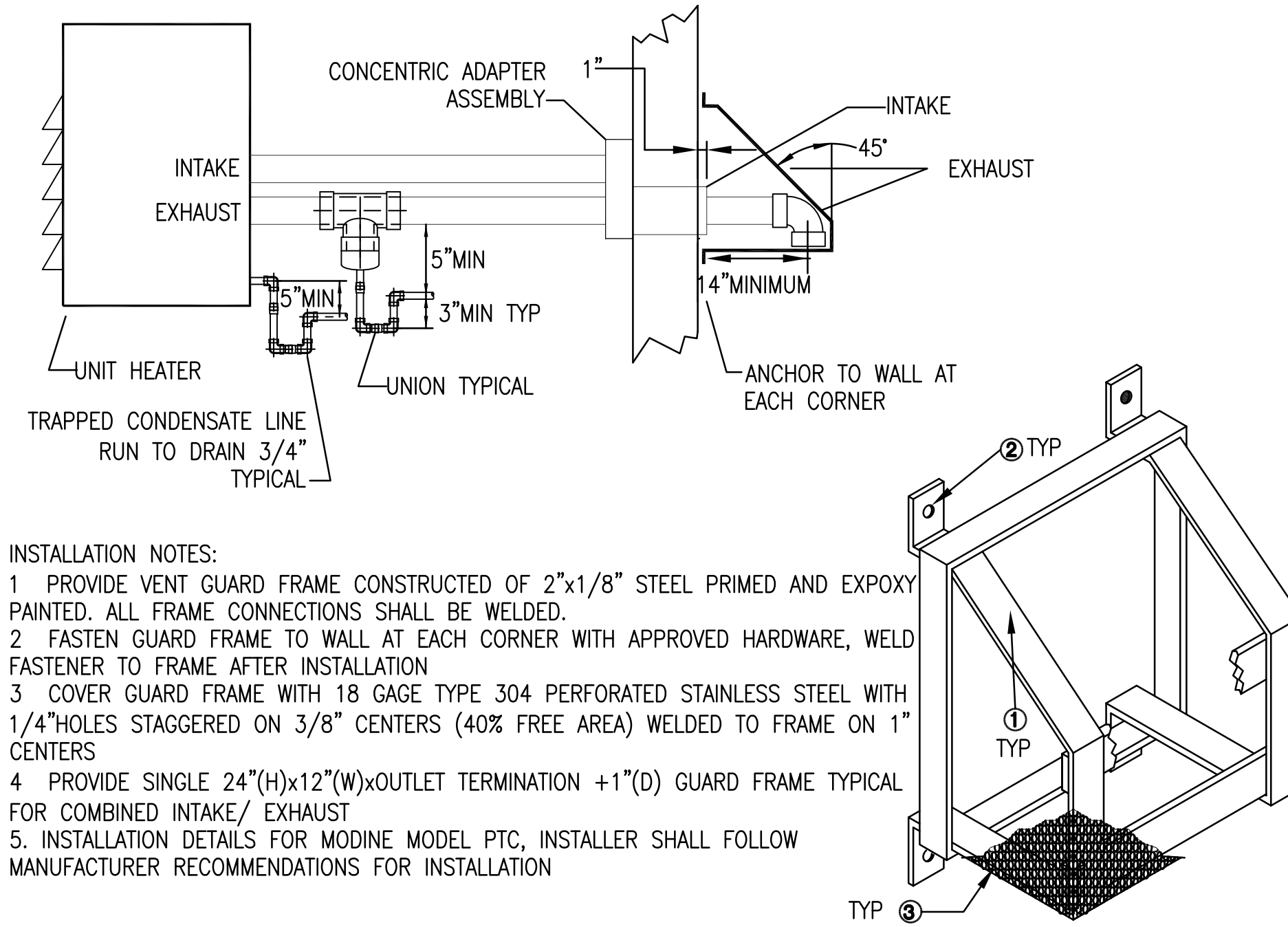
DATE
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 LOCATION NO.
 6040
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 200
 FILE NO.
 138

DRAWING NO.
M5.0

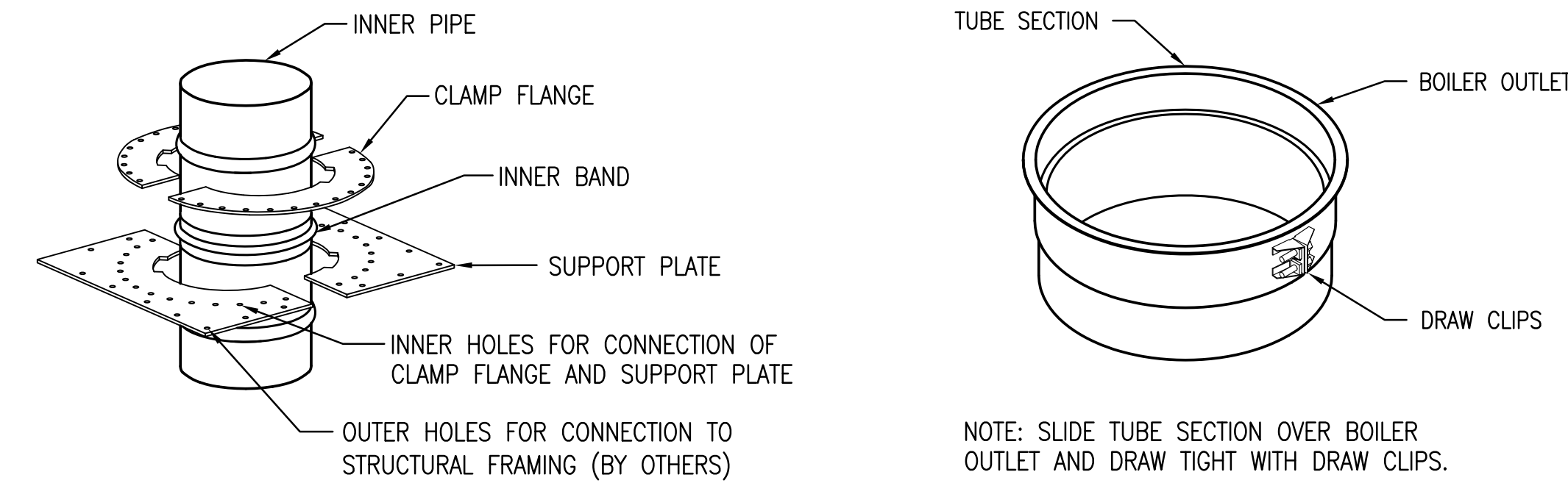
A
B
C
D
E
F



1 SCHEMATIC PIPING ARRANGEMENT
DUPLIX AIR COMPRESSOR
SCALE: NONE

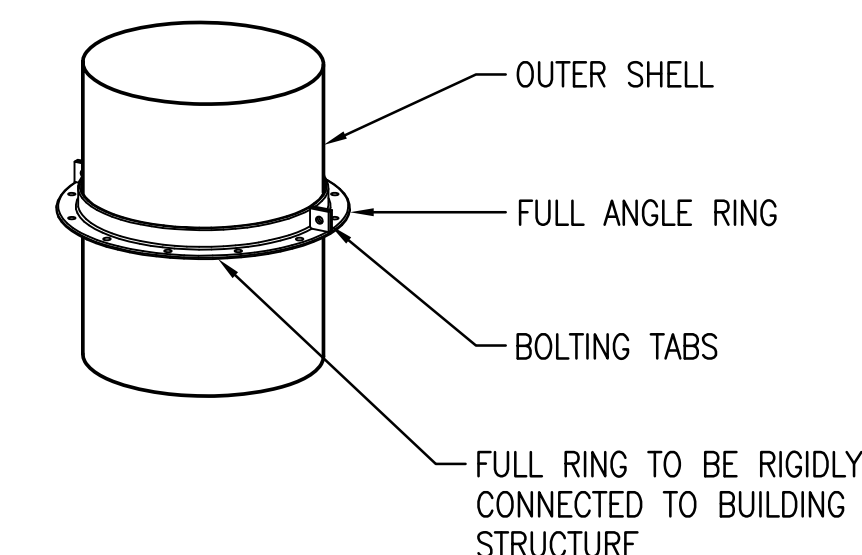


4 GAS UNIT HEATER FLUE AND GUARD DETAIL
SCALE: NONE

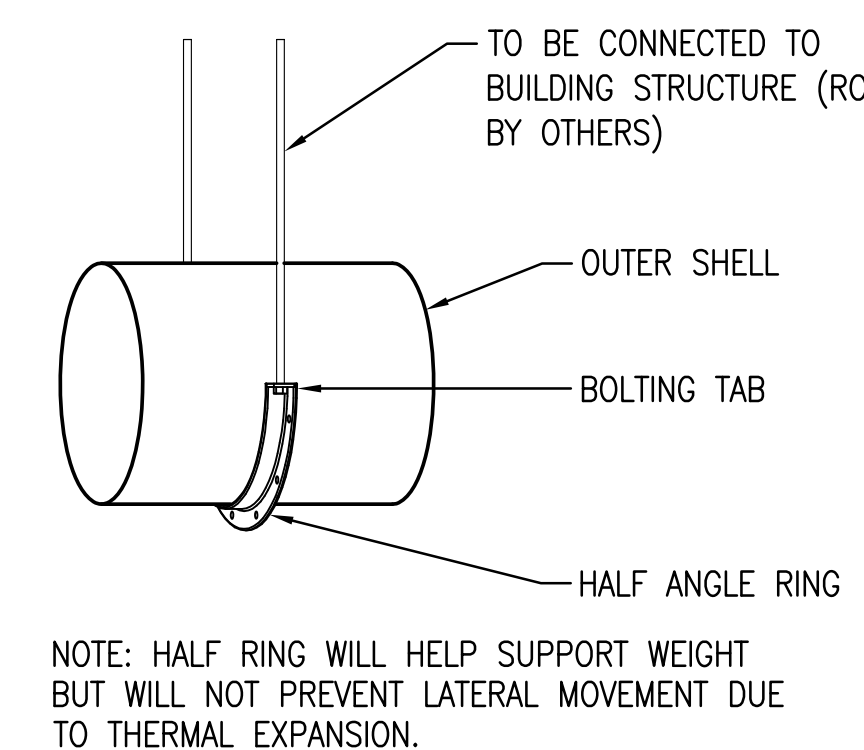


7A SUPPORT PLATE DETAIL
SCALE: NTS

7B BOILER KIT (RAW)
SCALE: NTS



7C FULL RING DETAIL
SCALE: NTS

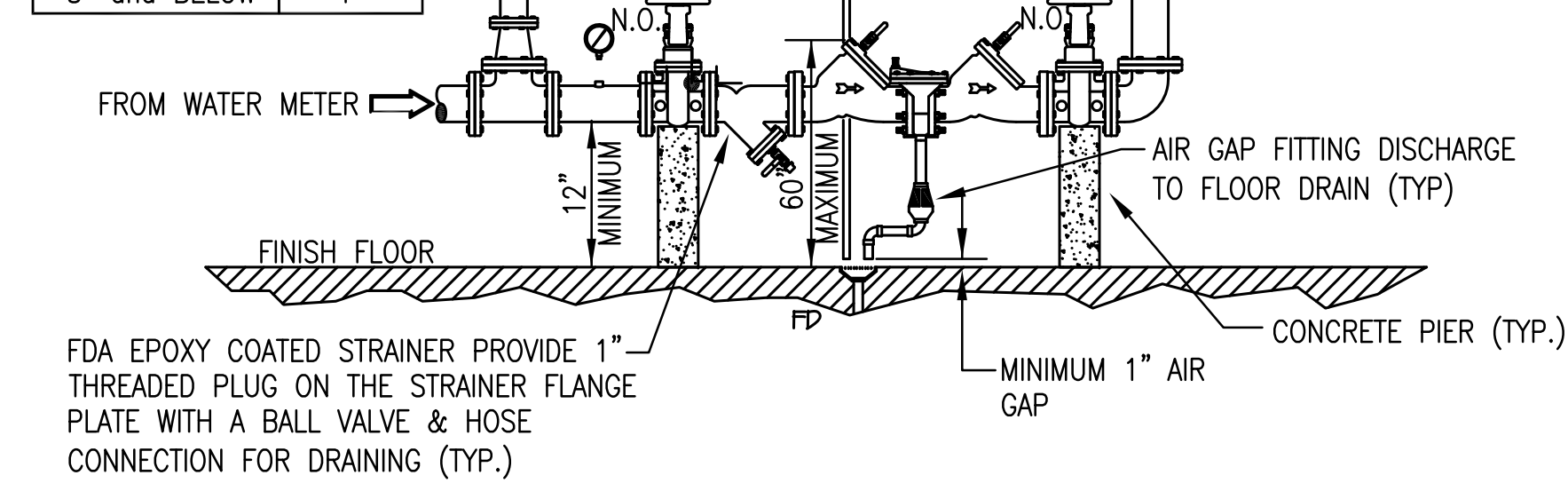


7D HALF RING DETAIL
SCALE: NTS

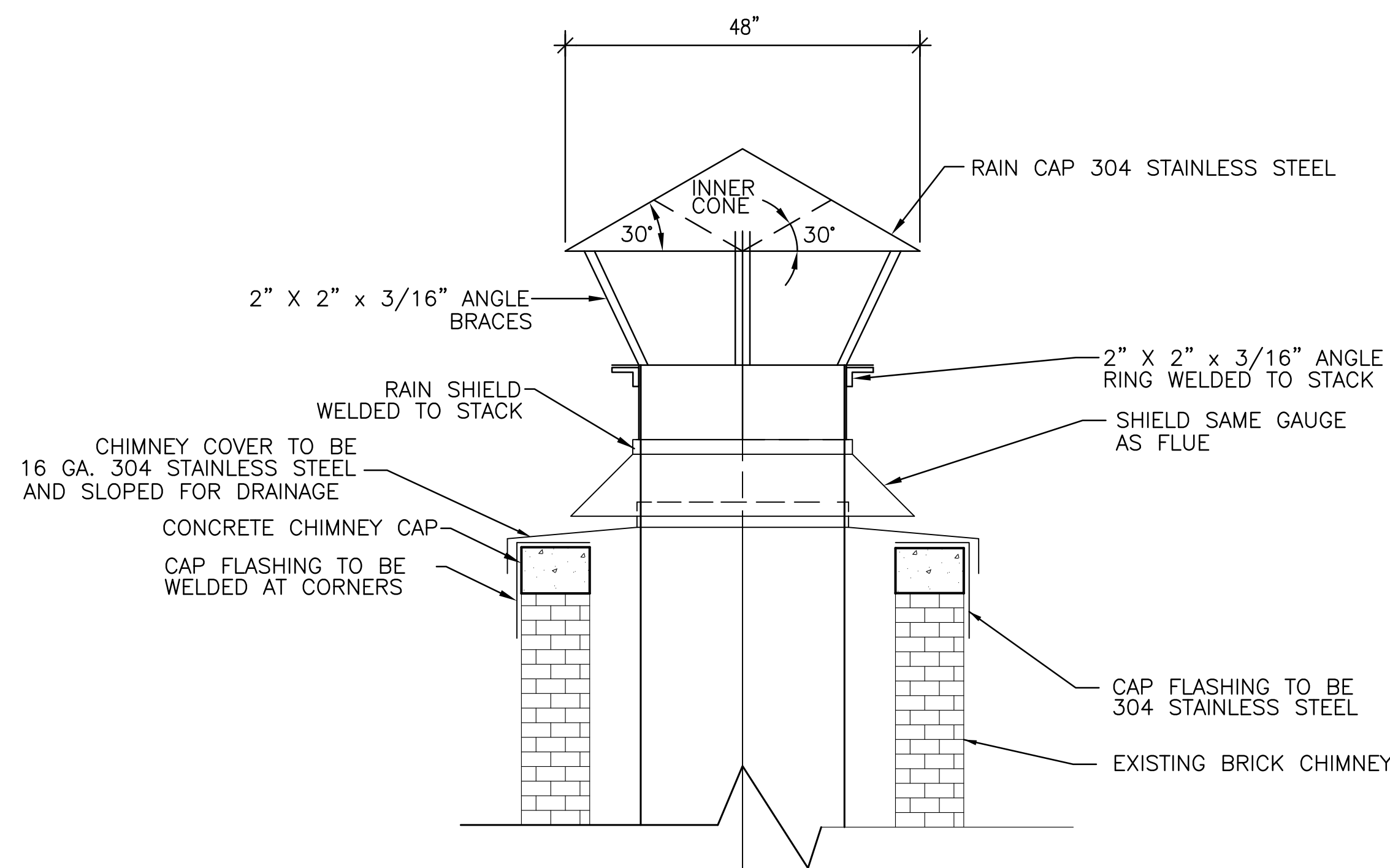
INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL STATE AND NATIONAL CODES AND THE PHILADELPHIA WATER DEPARTMENT'S CROSS CONNECTION CONTROL MANUAL. WHERE CONFLICTS EXIST LOCAL CODES AND REQUIREMENTS SHALL PREVAIL.

THE BACKFLOW PREVENTER SHALL BE WATTS MODEL 909 REDUCED PRESSURE ZONE ASSEMBLY

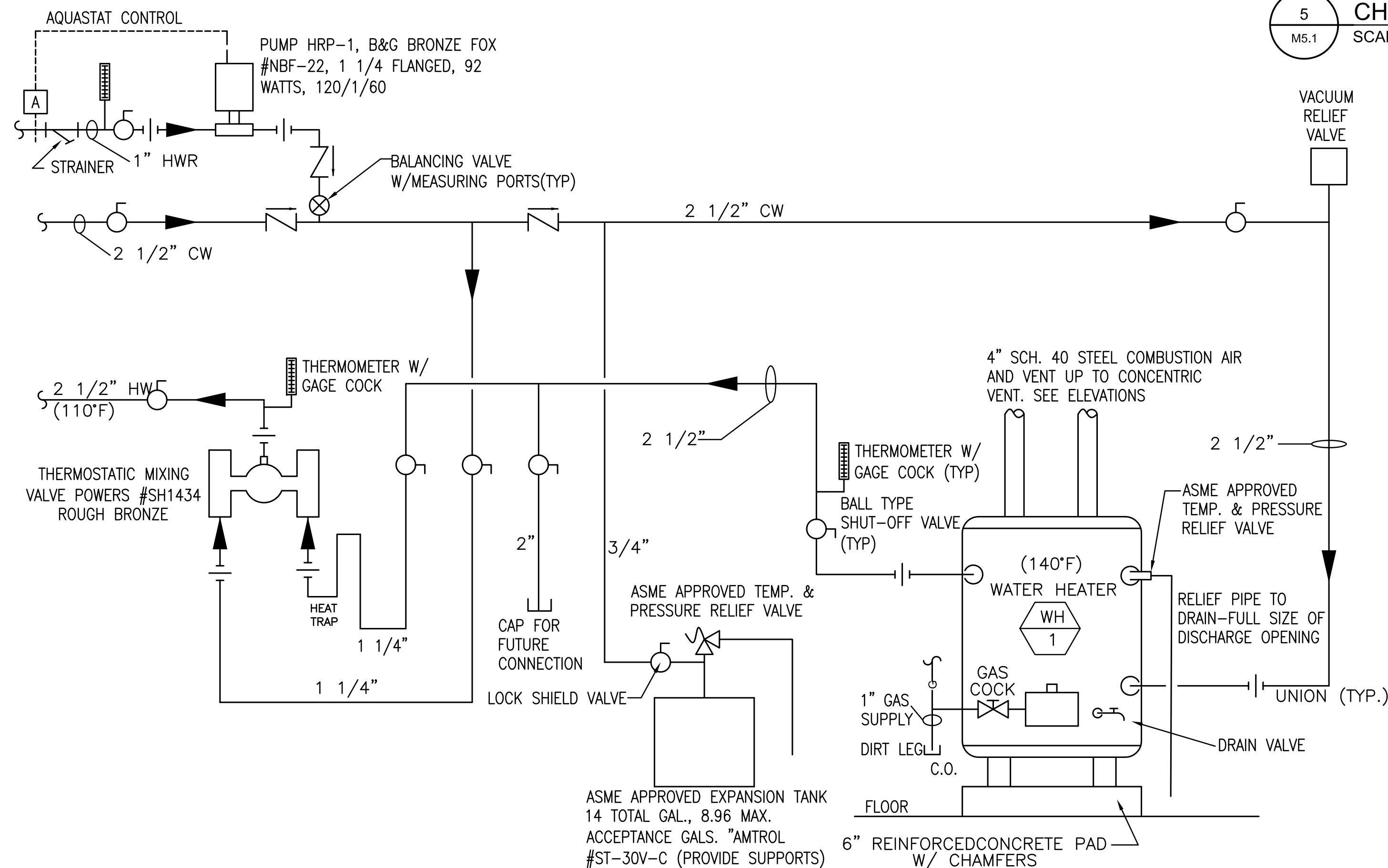
SERVICE SIZE	BYPASS
4" and BELOW	2 1/2"
6" and BELOW	3"
8" and BELOW	4"



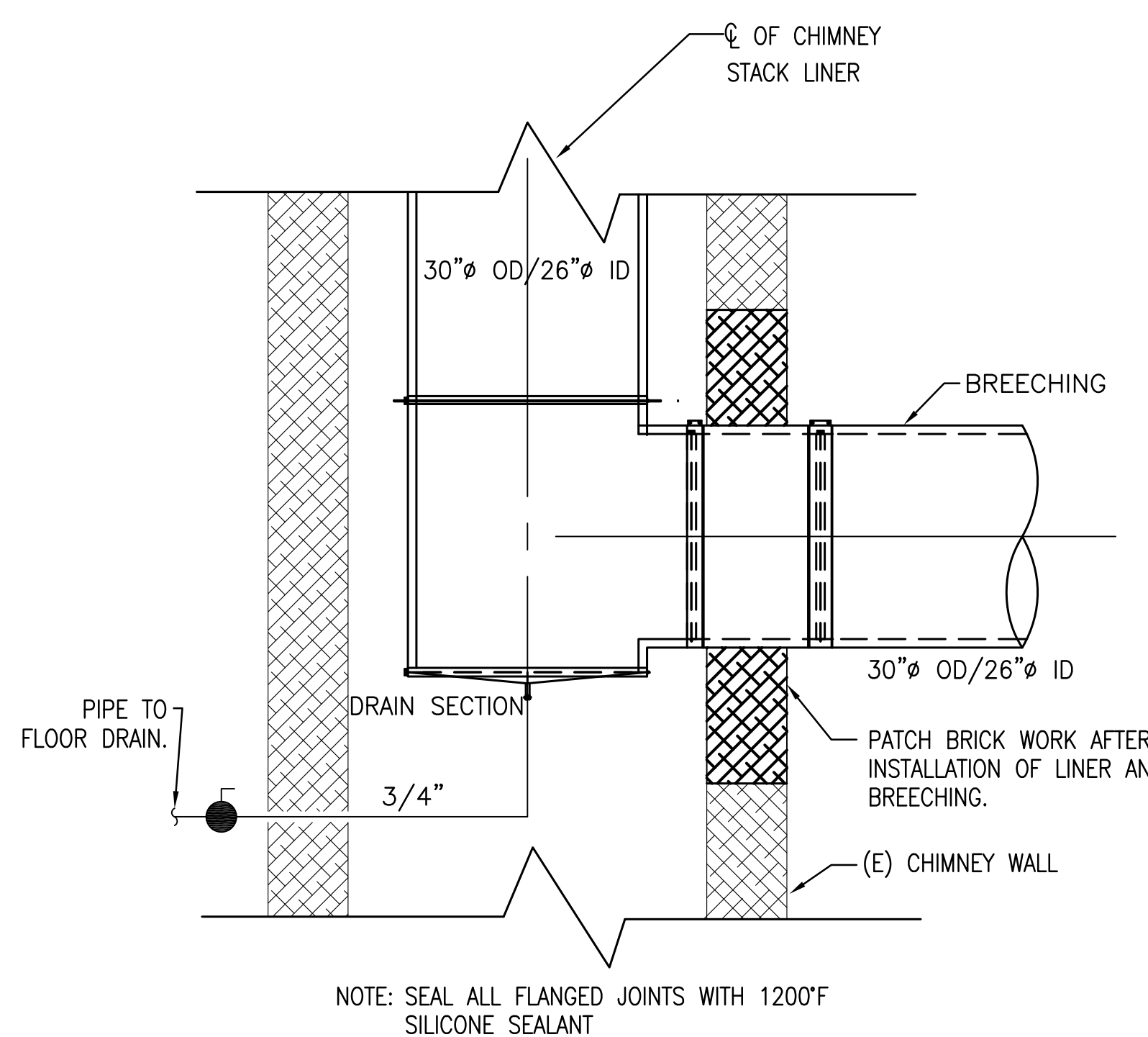
2 BACKFLOW PREVENTER DETAIL
SCALE: NONE



5 CHIMNEY STACK TERMINATION
SCALE: NONE

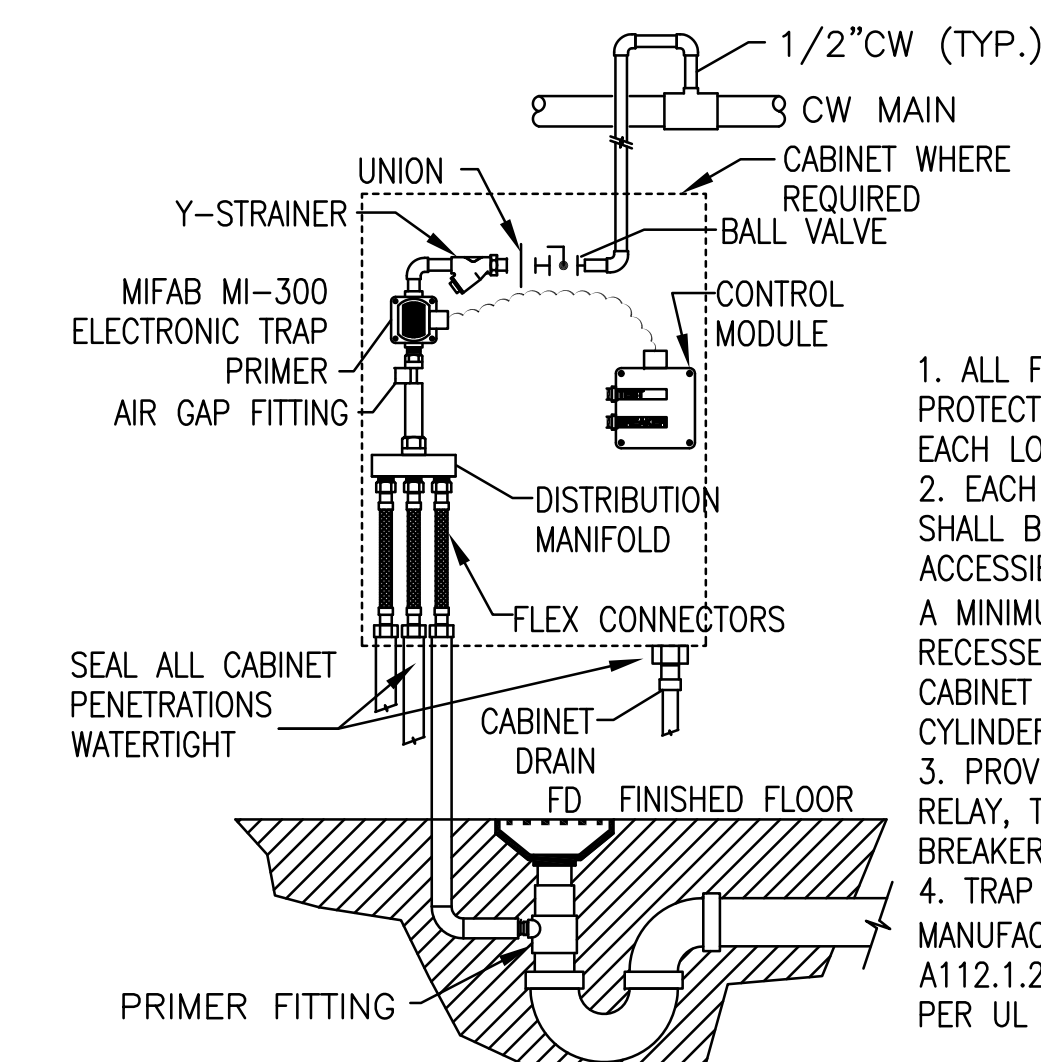


3 DOMESTIC WATER HEATER DETAIL
SCALE: NONE



6 ENTRY PIECE OF BREACHING INSIDE CHIMNEY
SCALE: NONE

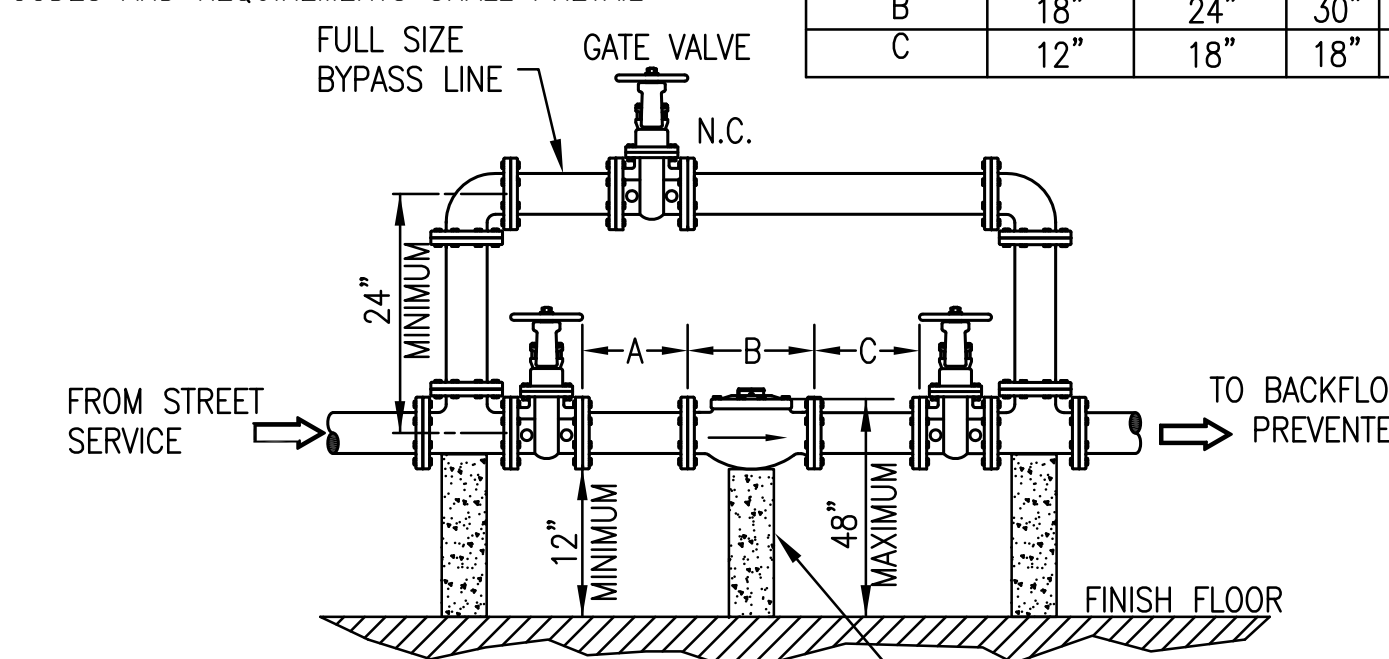
7 BREACHING DETAILS
SCALE: NONE



8 TRAP PRIMER DETAIL (TYPICAL)
SCALE: NONE

INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL STATE AND NATIONAL CODES AND THE PHILADELPHIA WATER DEPARTMENT'S CROSS CONNECTION CONTROL MANUAL. WHERE CONFLICTS EXIST LOCAL CODES AND REQUIREMENTS SHALL PREVAIL.

DIMENSION	3"	4"	6"	8"	10"
A	24-1/2"	29-1/2"	37"	53-1/2"	68-3/4"
B	18"	24"	30"	42"	30"
C	12"	18"	18"	24"	30"



9 WATER METER INSTALLATION DETAIL
SCALE: NONE



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SCHOOL & LOCATION
Walter B. Saul High School
7100 Henry Avenue, Philadelphia, PA 19128

PROJECT TITLE
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DRAWING TITLE
MECHANICAL DETAILS

APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
THE SCHOOL REFORM COMMISSION

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CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

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B-023

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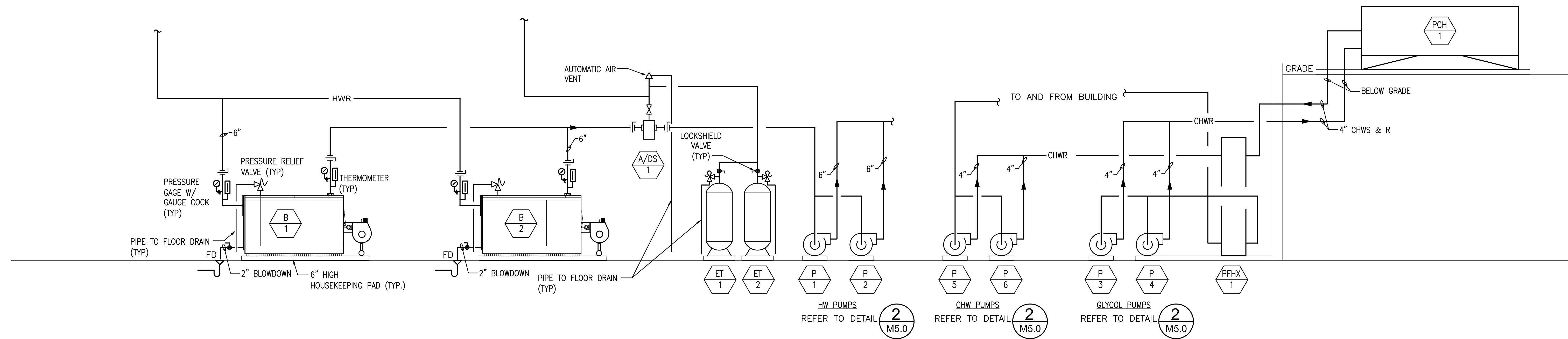
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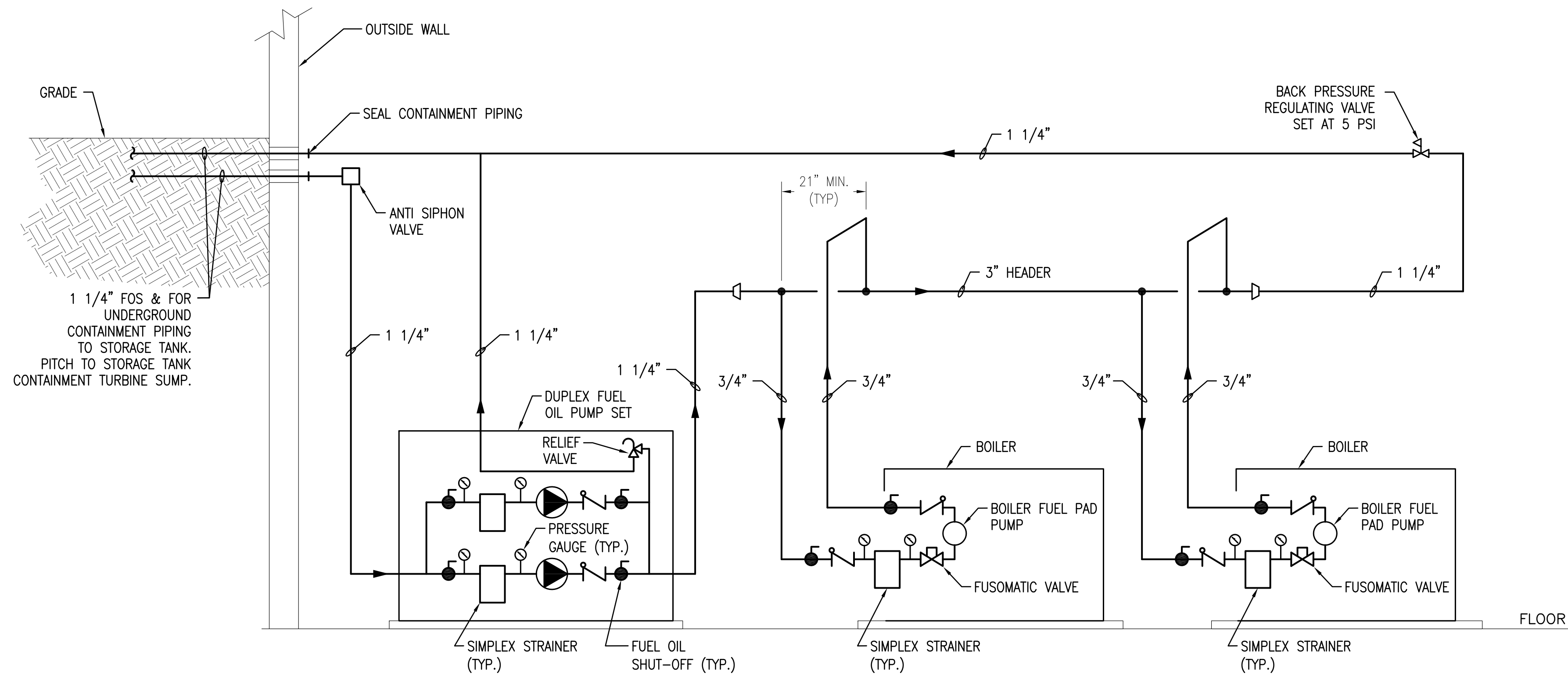
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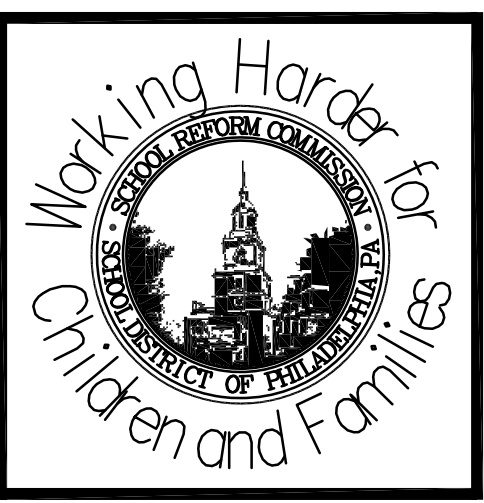
B-023 OF 2010/11
SHEET 21 OF 44



1 HW HEATING SYSTEM DETAIL
SCALE: NONE



2 FUEL OIL PIPING SYSTEM DETAIL
SCALE: NONE



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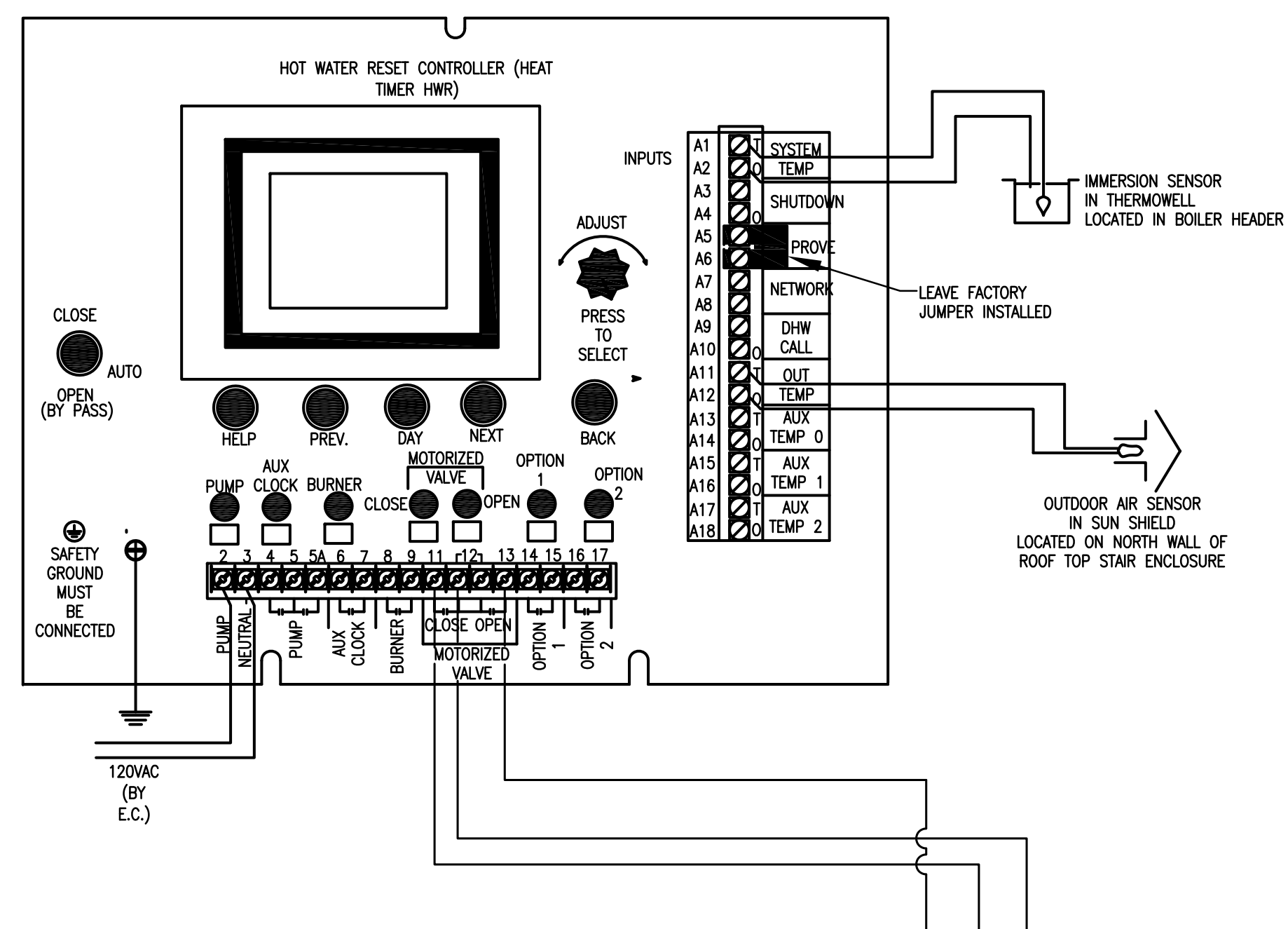
SCHOOL & LOCATION
Walter B. Saul High School
7100 Henry Avenue, Philadelphia, PA 19128
PROJECT TITLE
Mechanical Plant Replacement
DRAWING TITLE
MECHANICAL - PIPING DIAGRAMS
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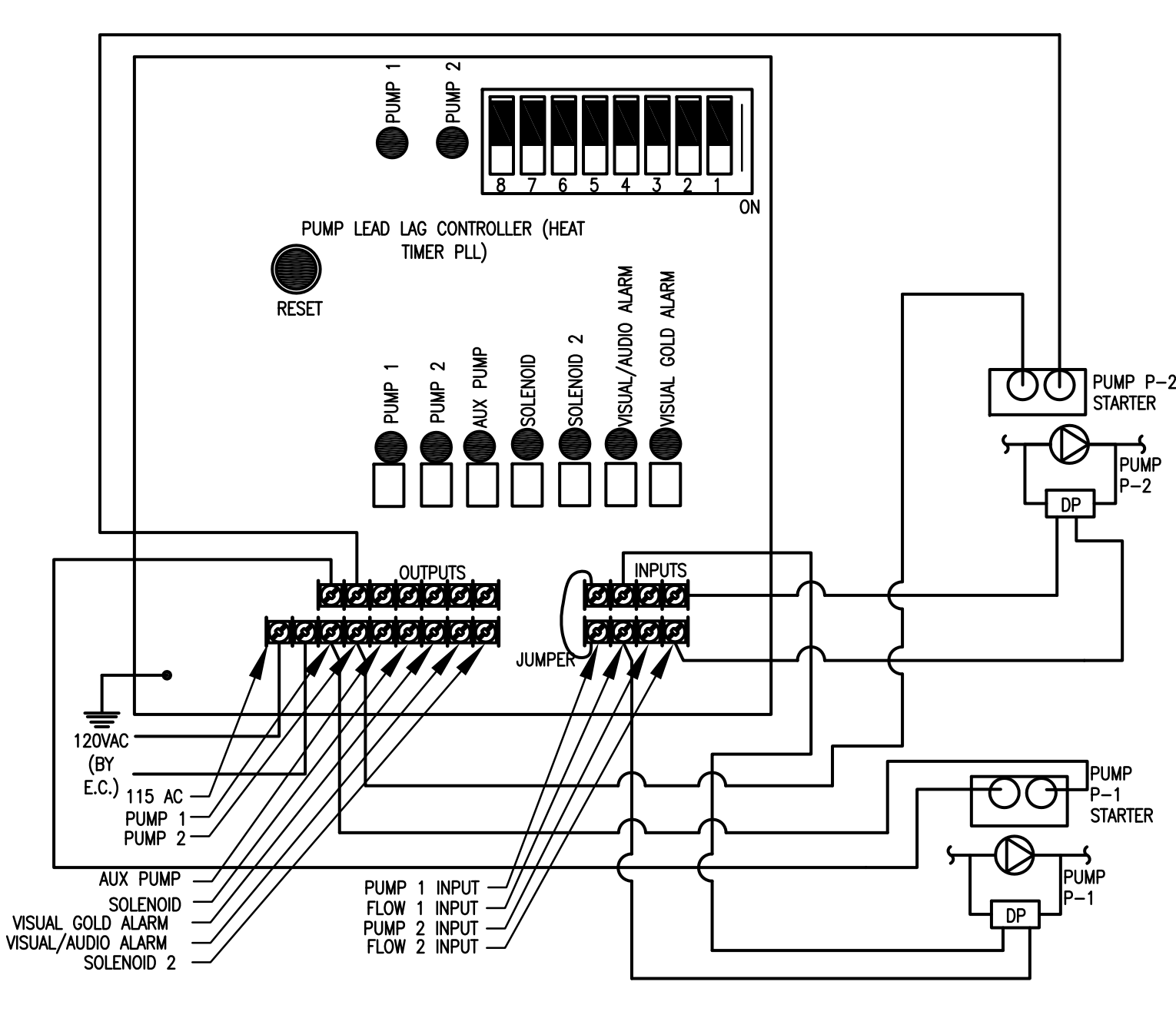
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SCALE AS NOTED	LOCATION NO. 6040	
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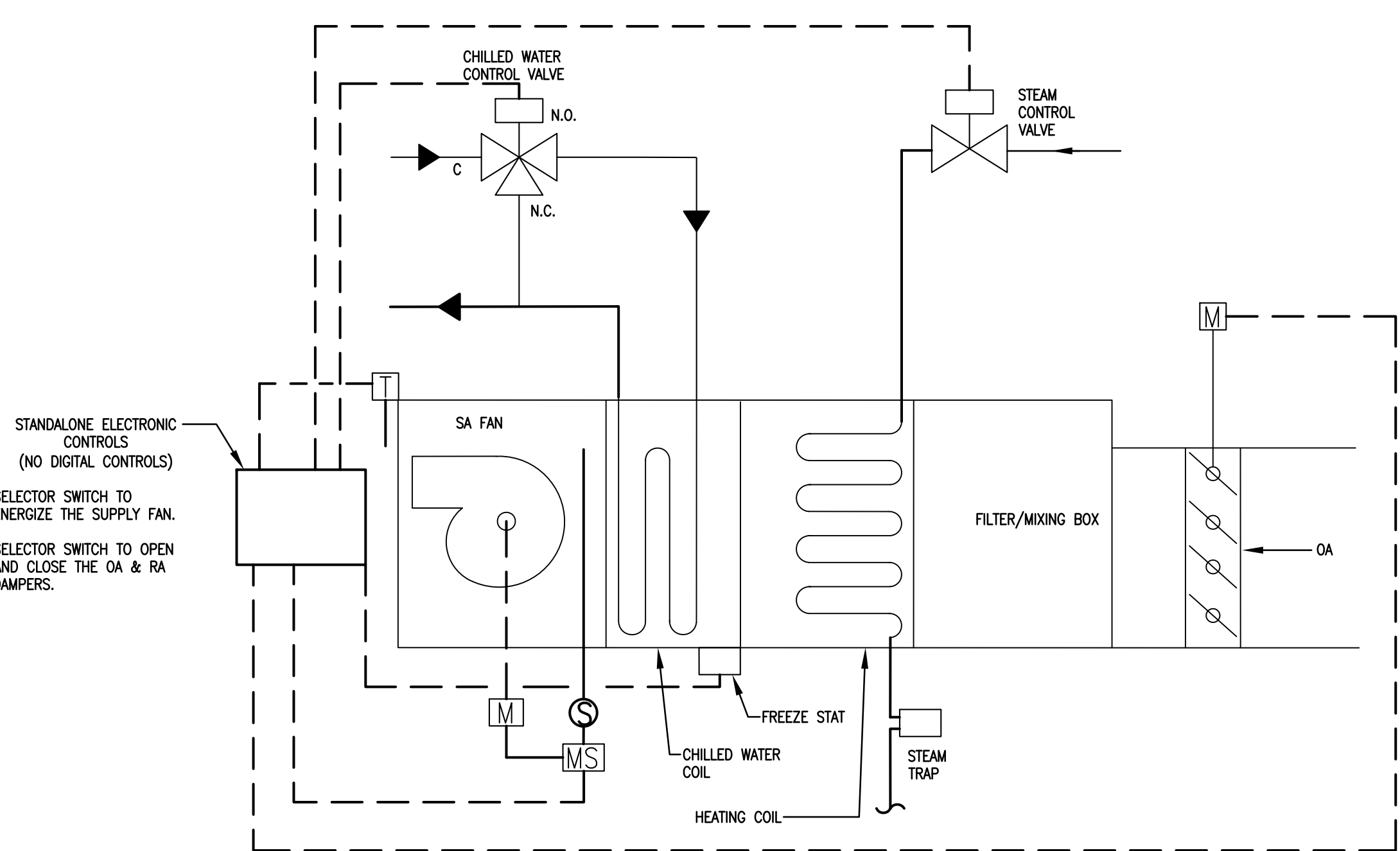
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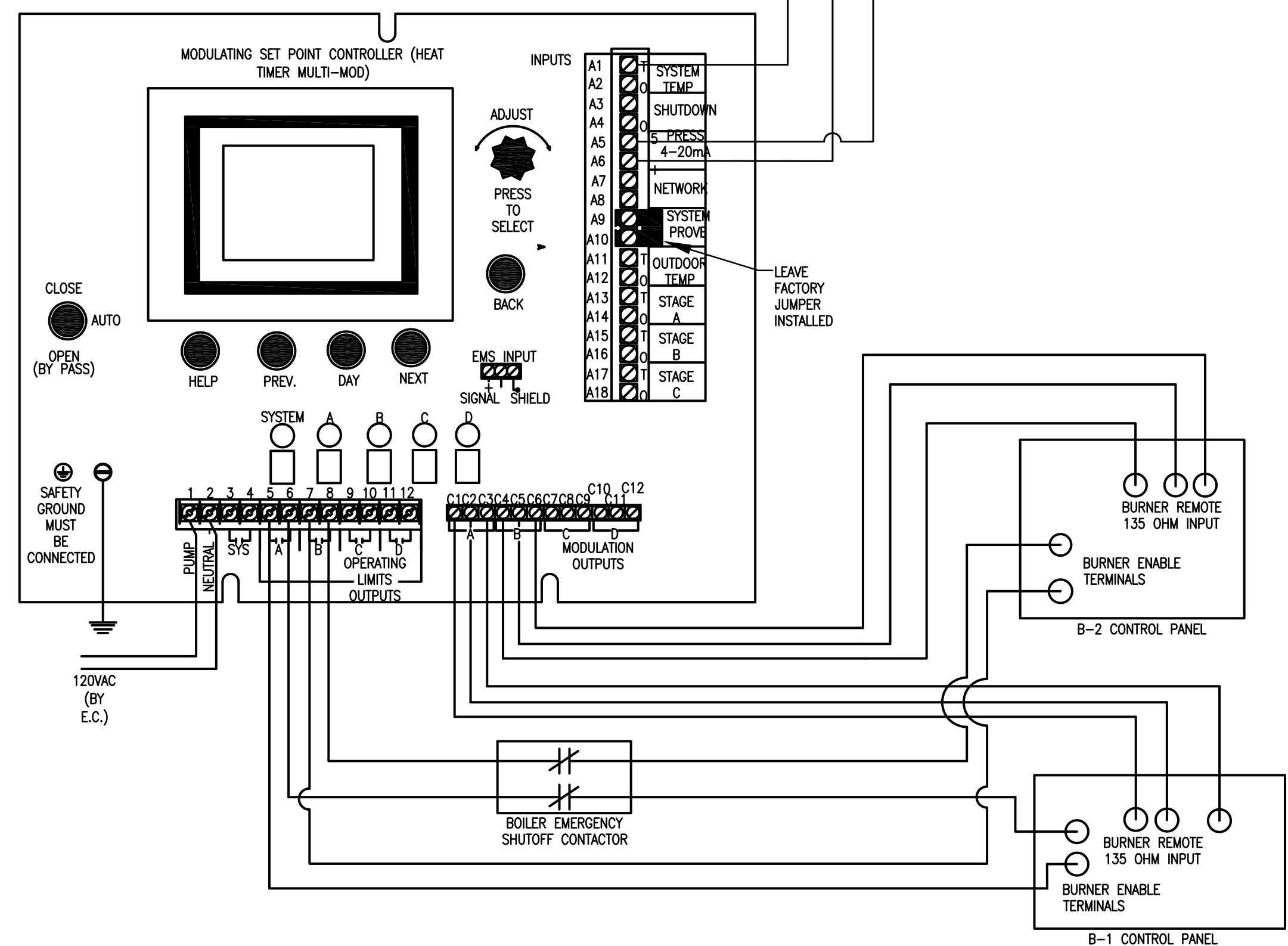
1 HOT WATER RESET CONTROLLER
Scale: NO SCALE



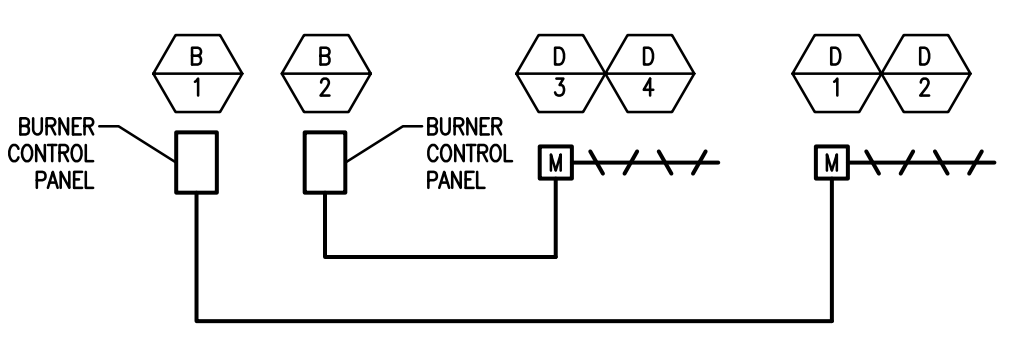
3 PUMP LEAD LAG SEQUENCE
Scale: NO SCALE



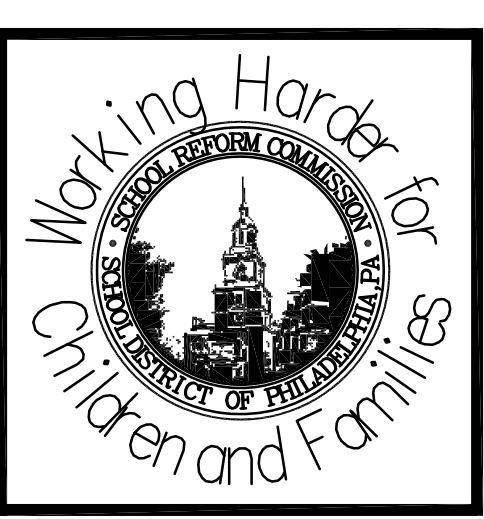
4 AHU-2 CONTROL DIAGRAM
Scale: NO SCALE



2 MODULATING SET POINT CONTROLLER
Scale: NO SCALE



4 COMBUSTION AIR DIAGRAM
Scale: NO SCALE



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MWO/MKA	141

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