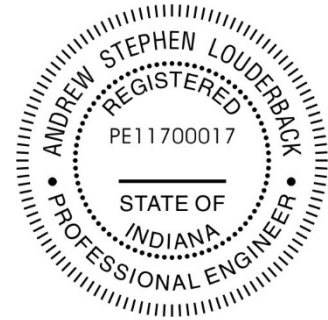




Primary Engineering, Inc.
 2828 Lake Ave.
 Fort Wayne, Indiana 46805
 260-424-0444 ph
 www.primary-eng.com



Addendum: **1**
 Date: **08/05/2022**
 Project: **FWCS 2023 ESSER Boiler/Chiller Repairs**

Comm #: **21281**

The following items shall be incorporated into the specifications and drawings and are considered to be integral to the bid documents for the project. Acknowledgement of receipt of this addendum is required on the bid form.

Item #1: General Clarifications.

- A. Refer to attached sign-in sheet and meeting agenda for the pre-bid meeting.
- B. Relief valves for pressure vessels on the chilled water system shall be rated in BTU/HR and GPM, similar to Kunkle Valve model 912BFG.
- C. 3D scan information:
 - Use the following link or QR code to download a Matterport Scan Agreement Form. A link to access the 3D scans will be emailed after the form is completed.



Matterport Scan Agreement Form:
<https://forms.gle/vtUFWbxKYsk2z4mx6>

Item #2: Drawing Sheet IN-M201

- A. Add automatic control valve to gas piping for existing atmospheric gas water heater. TCC shall interlock with refrigerant monitor panel and shut down supply of gas on detection of refrigerant leak. Control valve furnished by TCC, installed by MC. Refer to attached drawing revision.

Item #3: Drawing Sheet NC-M201

- A. Add automatic control valve to gas piping for existing atmospheric gas water heater. TCC shall interlock with refrigerant monitor panel and shut down supply of gas on detection of refrigerant leak. Control valve furnished by TCC, installed by MC. Refer to attached drawing revision.

Item #4: Drawing Sheet PO-M301

- A. Revise plan note 19, refer to attached drawing revision. Provide and install IBC compliant 42" tall guard rail with mid rail at 21". Guard rail shall be constructed of 1-1/2" std pipe and shall be capable of resisting linear load of 50 pounds per foot and concentrated loads of 200 pounds at any given point. Vertical posts shall be at 4'-0"

O.C. maximum and shall be flanged at the base and anchored to the existing concrete. Epoxy anchor or bolt flange to floor slab as required to meet loading requirements. Prime and paint to match existing guard rails.

- B.** Add automatic control valve to gas piping for existing atmospheric gas water heater. TCC shall interlock with refrigerant monitor panel and shut down supply of gas on detection of refrigerant leak. Control valve furnished by TCC, installed by MC. Refer to attached drawing revision.

Fort Wayne Community Schools
Facilities Department

2023 ESSER Boiler/Chiller Repairs

Pre-Bid Meeting
August 3, 2022



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2023 ESSER Boiler/Chiller Repairs



Travis Searles

Coordinator of Capital Projects
Fort Wayne Community Schools
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Randy Treadway

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2023 ESSER Boiler/Chiller Repairs

- Bids are due on August 17, 2022 at 2:00 pm local time.
Deliver to 1519 Catalpa St, Fort Wayne, IN to the Facilities Reception Desk (Sarah) via the West Entry #1.
- Submit all bid forms in duplicate and include all forms filled out, including Form 96, E-Verify, E/M/W Owned Business, Subcontractor/Vendor List, Iran Certification
- The apparent low bidder will be contacted and must submit the following items within 48 hours of the bid opening:
 - A complete list of all sub contractors.
 - A complete list of all material suppliers.

2023 ESSER Boiler/Chiller Repairs

- Single prime contract
- 000126 – Background Check Requirement
- 004343 – Responsible Bidder Requirements
 - Federal funding requires Davis Bacon wage requirements with certified payroll.
- 000131 – FWCS Document Management Procure
- 000127 – Smoking Policy
- 000129 – Dust Control
- 000133 – Liquidated Damages - \$1,500 per day



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2023 ESSER Boiler/Chiller Repairs



Boiler Replacements at Brentwood, Fairfield, Indian Village, Northcrest, and Portage

Construction Start Date:

October 3, 2022

Substantial Completion Date:

September 15, 2023

Final Completion Date:

January 7, 2024

Electric Heaters at Brentwood, Fairfield, and Portage, and rooftop unit at Fairfield

Construction Start Date:

October 3, 2022

Substantial Completion Date:

July 21, 2023

Final Completion Date:

January 7, 2024

Chiller Replacements at Northcrest

Construction Start Date:

October 3, 2022

Substantial Completion Date:

December 31, 2023

Final Completion Date:

January 7, 2024

2023 ESSER Boiler/Chiller Repairs

Estimated cost:	\$2,500,000 Base Bid (excluding work by Owner)
Bid Bond:	5%
Perf. Bond:	100%
Allowance:	\$50,000 Contingency (included in bid)
Permits:	Include all construction permits in bid

2023 ESSER Boiler/Chiller Repairs

Procedure for Visiting the Schools:

- August 3, 2022 after pre-bid meeting
- August 4, 2022 from 9:00 am until 2:00 pm
- Visits need to be scheduled ahead of time with Travis Searles
- Check in at main office

2023 ESSER Boiler/Chiller Repairs

- Project Management will be done using FWCS's Procore Online system to submit and track all submittals, RFI's, PR's, etc. If you are not familiar with it, there are training classes at FWCS periodically and you will need to use this tool.
- Dust control and housekeeping Spec Section 000129. You must use wet cutting methods, use dust control partitions, protect smoke detectors, seal doors/louvers/diffusers, and do not use FWCS trash cans/dumpsters.
- Disposal of scrap metal will be by FWCS

2023 ESSER Boiler/Chiller Repairs

- Hot work permits are required for any grinding, welding, torching, etc. and must have a fire watch person observing. This is not another person in the room working, but another person observing the hot work and nothing else.
- Construction staging/storage allowed on site as long as it does not obstruct doors/corridors. C.O.I.'s are required for material stored off-site.

2023 ESSER Boiler/Chiller Repairs

CUTTING AND PATCHING:

- i. ALL PENETRATIONS INTO EXISTING SURFACES WHERE EXISTING EQUIPMENT, DUCTWORK, PIPING, CONDUIT, WIRING, WIRE MOLD, ETC. IS TO BE REMOVED SHALL BE PATCHED BY PROPER TRADES USING MATERIALS THAT ARE IDENTICAL TO EXISTING MATERIALS. REFER TO CUTTING AND PATCHING SPECIFICATION SECTION 017329 FOR MORE INFORMATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS. CONTRACTOR'S SUBMISSION OF BID SHALL BE CONSIDERED AN ACKNOWLEDGEMENT OF EXISTING CONDITIONS.
- ii. PATCHING OF EXISTING PAINTED SURFACES SHALL INCLUDE PAINTING TO MATCH EXISTING PAINT COLOR AND SHEEN.
- iii. EXISTING PENETRATIONS OF CMU BLOCK AND BRICK WALLS LARGER THAN 2" IN DIAMETER SHALL BE PATCHED WITH FULL TOOTHED-IN MATCHING CMU BLOCK OR BRICK UNITS WITH COLOR MATCHING GROUT. PENETRATIONS 2" IN DIAMETER AND SMALLER SHALL BE PATCHED WITH COLOR MATCHING GROUT. PROVIDE PHYSICAL SAMPLES OF COLOR MATCHING GROUT FOR REVIEW BY OWNER AT EACH LOCATION
- iv. EXISTING PENETRATIONS OF GLAZED BLOCK AND BRICK WALLS LARGER THAN 2" IN DIAMETER SHALL BE PATCHED WITH FULL TOOTHED-IN MATCHING GLAZED BLOCK OR BRICK UNITS WITH COLOR MATCHING GROUT. PENETRATIONS 2" IN DIAMETER AND SMALLER SHALL BE PATCHED WITH STAINLESS STEEL COVER PLATES. PROVIDE PHYSICAL SAMPLES OF GLAZED BLOCK AND COLOR MATCHING GROUT FOR REVIEW BY OWNER AT EACH LOCATION
- v. EXISTING PENETRATIONS OF PLASTER OR GYPSUM WALLS SHALL BE PATCHED WITH (2) LAYERS 5/8" USG FIBEROCK AQUA TOUGH DRYWALL, FINISHED AND PAINTED TO MATCH EXISTING.
- vi. EXISTING PENETRATIONS OF CARPET FLOOR TILE AND VINYL FLOOR TILE SHALL BE PATCHED BY REMOVING AND REPLACING FULL TILES TO MATCH EXISTING.
- vii. EXISTING PENETRATIONS OF TERRAZZO FLOORING SHALL BE PATCHED TO MATCH EXISTING. PATCH SHALL MATCH EXISTING RESIN COLOR AND AGGREGATE CONTENT AND SIZE. PROVIDE PHYSICAL SAMPLES FOR REVIEW BY OWNER IN EACH LOCATION.



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FLUSH AND FILL NOTE: CONTRACTOR SHALL FULLY DRAIN ALL HYDRONIC SYSTEM FLUID INCLUDING BRANCH PIPING AND COILS. REPEATEDLY FLUSH WITH WATER AND CHEMICAL DETERGENT AND DRAIN THE HYDRONIC SYSTEM IN ITS ENTIRETY UNTIL SYSTEM FLUID IS CLEAR. CHEMICAL DETERGENT FURNISHED BY WATER TREATMENT SERVICE PROVIDER.

SCRAP METAL SALVAGE NOTE: CONTRACTOR SHALL DISPOSE OF ALL SCRAP METAL INTO OWNER PROVIDED CONTAINER FOR SCRAP METAL SALVAGING BY OWNER. CONTRACTOR SHALL PROVIDE PROPER DISPOSAL OF ALL OTHER CONSTRUCTION WASTE. COORDINATE WITH OWNER FOR DELIVERY AND LOCATION OF SCRAP METAL CONTAINER.



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2023 ESSER Boiler/Chiller Repairs



FWCS OWNER SPECIFIC GENERAL NOTES

1. ALL HVAC EQUIPMENT SHALL HAVE CUSTOM METAL FILTER FRAMES SUPPLIED WITH EQUIPMENT. FRAMES SHALL BE FABRICATED BY HOMETOWN FILTER OF FORT WAYNE. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE PAPER/CARDBOARD TEMPORARY FILTERS AND INSTALL METAL FILTER FRAME WITH FILTER MEDIA AT THE COMPLETION OF THE WORK.
2. ANY ELECTRICAL CIRCUIT THAT IS MODIFIED, ADDED, MOVED AS PART OF THIS PROJECT SHALL HAVE ALL J-BOXES, DEVICES, AND CIRCUIT PANEL DIRECTORIES UPDATED AND LABELED WITH PANEL AND CIRCUIT NUMBERS.
3. IF ANY WORK IS DONE WITHIN AN EXISTING ELECTRICAL PANEL, THE ELECTRICAL CONTRACTOR SHALL TRACE ALL EXISTING CIRCUITS AND UPDATE THE CIRCUIT DIRECTORY.
4. WHEN TIEING INTO ANY EXISTING SANITARY DRAIN OR FLOOR DRAIN FOR DRAINAGE, THE CONTRACTOR SHALL VERIFY THAT THE DRAIN IS CLEAR OF DEBRIS AND FLOWS FREELY BY TESTING WITH FULL GARDEN HOSE FLOW FOR A MINIMUM OF 15 MINUTES. IF AN OBSTRUCTION IS FOUND, REPORT TO OWNER AND ENGINEER.
5. ALL ROOF CURBS THAT ARE ABANDONED AS PART OF THIS PROJECT SHALL BE CAPPED WITH 16 GAUGE GALVANIZED STEEL WELDED SHEET METAL CAP WITH CROSS BREAKS AND SEALED AIR AND WATER TIGHT, INSULATE BELOW CAP WITH 4" RIGID INSULATION AND MARK TOP OF ROOF CAP "N.I.S." (NOT IN SERVICE), UNLESS NOTED OTHERWISE TO REMOVE AND PATCH ROOF.
6. CONTRACTOR SHALL RECLAIM ALL EXISTING R-22 REFRIGERANT INTO OWNER'S CONTAINER AND PROVIDE TO OWNER.
7. CONTRACTOR AND/OR SUBCONTRACTORS SHALL NOT STAGE AND/OR STORE MATERIALS ON EXISTING ROOF SYSTEMS THAT ARE NOT PART OF THIS WORK. AS NOTED ON ROOF PLANS. IF A N.I.C. ROOF AREA IS APPROVED BY OWNER/AE FOR USE IN MATERIAL STORAGE OR TRAFFICKING OVER THEN THE CONTRACTOR MUST PROVIDE PROTECTION BOARD (1/2" PLYWOOD OVER 2" XPS) OVER STAGING OR TRAFFICKING AREA.
8. ITEMS NOTED TO BE SALVAGED AND DELIVERED TO OWNER SHALL BE DELIVERED TO FWCS FACILITIES AT 1519 CATALPA ST. FORT WAYNE, UNLESS NOTED OTHERWISE. COORDINATE WITH OWNER AND PROVIDE TRANSMITTAL TO OWNER TO CONFIRM DELIVERY AND RECEIPT BY OWNER.
9. COORDINATE WITH OWNER FOR EXACT MATCH TO EXISTING FINISHES INCLUDING, BUT NOT LIMITED TO PAINT, VINYL AND CARPET FLOOR TILE, AND ACOUSTICAL CEILING TILE.



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2023 ESSER Boiler/Chiller Repairs



GENERAL DEMOLITION NOTES

1. ALL EXISTING PENETRATIONS FROM DUCT/PIPE/WIRE/CONDUIT THAT IS REMOVED SHALL BE PATCHED BY PROPER TRADES TO MATCH SURROUNDINGS UNLESS PENETRATION IS TO BE REUSED. PATCH ALL FLOOR AND WALL PENETRATIONS TO MAINTAIN FIRE RATED CONSTRUCTION.
2. ALL ROOF PENETRATIONS NOT BEING REUSED SHALL BE PATCHED TO MAINTAIN EXISTING ROOF WARRANTY. EXISTING CURBS TO BE ABANDONED SHALL BE CAPPED WITH ALUMINUM HOOD PAINTED WITH "N.I.S." (NOT IN SERVICE). INSULATE CAVITY BELOW CAP WITH TIGHT FITTING 3" FOAM BOARD WRAPPED WITH SHEET METAL.
3. ALL PIPE SHALL BE REMOVED TO WITHIN AREAS THAT ARE INACCESSIBLE SUCH AS WALL CAVITIES AND BELOW SLAB. IN FINISHED SPACES REMOVE BELOW SURFACE, CAP WATER TIGHT, AND PATCH SURFACE TO MATCH SURROUNDINGS.
4. ALL PATCHING OF WALLS SHALL MATCH MATERIALS AND WHEN COMPLETE SHALL NOT LOOK LIKE A PATCH.
5. TOOTH-IN NEW BRICK/BLOCK WITH FULL UNITS, DO NOT CUT FILLER PIECES.
6. PRIOR TO CUTTING EXISTING SLAB ON GRADE, CONTRACTOR SHALL VERIFY EXISTENCE OF EXISTING UTILITIES SUCH AS PIPING, CONDUIT, WIRE, ETC. BY MEANS OF GROUND PENETRATING RADAR TO LOCATE AND DETERMINE DEPTH OF BURY. TAKE PRECAUTIONS TO DE-ENERGIZE POWER TO CIRCUITS AND CAREFULLY CUT AND REMOVE SLAB. ANY UTILITIES THAT WERE LOCATED AND SUBSEQUENTLY DAMAGED SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDED COST TO THE OWNER.



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2023 ESSER Boiler/Chiller Repairs



GENERAL MECHANICAL NOTES

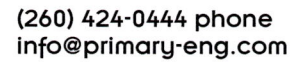
1. DUCT AND PIPING LAYOUTS ARE SCHEMATIC IN NATURE. ADDITIONAL TRANSITIONS, ELBOWS, OFFSETS, AND FITTINGS SHALL BE ADDED AS REQUIRED TO COORDINATE WITH OBSTRUCTIONS AND OTHER TRADES.
2. COORDINATE ALL WORK WITH OTHERS TRADES AND EXISTING WORK TO PERMIT ACCESS AND SERVICE CLEARANCES TO ALL SYSTEMS. COORDINATE DUCT WITH ELECTRICAL J-BOXES TO PREVENT OBSTRUCTIONS.
3. DO NOT SCALE DRAWINGS FOR DIMENSIONS. REFER TO DIMENSIONED DRAWINGS.
4. ALL GRILLES, DIFFUSERS, AND REGISTERS SHALL HAVE A VOLUME CONTROL DAMPER UNLESS NOTED OTHERWISE. DAMPER SHALL BE IN AN ACCESSIBLE LOCATION.
5. REFER TO DETAIL SHEETS FOR ADDITIONAL INFORMATION ON INSTALLATION METHODS.
6. DEVIATIONS FROM BASIS OF DESIGN THAT AFFECT OTHER TRADES ARE THE RESPONSIBILITY OF THIS CONTRACTOR. ADDITIONAL COSTS TO PROVIDE LARGER ELECTRICAL CIRCUITS, MORE FLOOR SPACE, ADDITIONAL SUPPORTS, ADDITIONAL MATERIALS, ETC. SHALL BE BORNE BY THIS CONTRACTOR. COORDINATE WITH OTHER TRADES.
7. ALL THERMOSTATS/HUMIDITY SENSORS WITH ADJUSTMENT BUTTONS/ SLIDERS/ KNOBS/ DISPLAYS, ETC. SHALL BE MOUNTED WITH THE TOP OF THE DEVICE NO MORE THAN 48" AFF, IN COMPLIANCE WITH LOCAL AND FEDERAL ADA WHEELCHAIR REACH DISTANCE GUIDELINES. PROVIDE ADDITIONAL SURFACE RACEWAY, BOXES, CONDUIT, ETC AS REQUIRED TO OFFSET AROUND EXISTING DEVICES IN RENOVATION WORK.
8. ALL DUCT SIZES LISTED ARE FOR INTERIOR FREE AREA. ANY DUCTS DESIGNATED OR SPECIFIED TO BE DOUBLE WALL OR INTERNALLY LINED SHALL HAVE OUTER DIMENSIONS ENLARGED TO ACCOMMODATE THE LINER OR INTERSTITIAL INSULATION.
9. EXISTING CEILING TO REMAIN. CONTRACTOR SHALL CAREFULLY SALVAGE CEILING TILES AND WORK THROUGH GRID AS REQUIRED. REINSTALL SALVAGED TILES. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF TILES DAMAGED DURING CONSTRUCTION. COORDINATE WITH OWNER FOR SELECTION OF MATCHING TILES.

2023 ESSER Boiler/Chiller Repairs

- Asbestos testing reports are available for each building. If ACM or suspected, contact Jayde Steffen (260)467-2075 immediately for testing by Owner.
- Test and Balance: Fluid Dynamics, Inc.
- Temperature controls by Owner (Automated Logic).
- TCC supplies all control devices such as control valves, pipe wells, and VSD's. This contractor installs. See Controls Responsibility Chart on M001.
- Boiler venting is polypropylene

2023 ESSER Boiler/Chiller Repairs

- All requests for clarification or material additions to specs shall be submitted via email to alouderback@primary-eng.com no later than 12:00 Noon on August 12, 2022. This is the cut off for questions that can be answered via addendum.
- Addendum #1: Friday August 5, 2022
- Addendum #2: Friday August 12, 2022
- Bids due: Wednesday August 17, 2022



0 16 32 48 0 8 16 24 32 0 8 16 24 0 4 8 12 0 2 4 6 0 3/4" = 1'-0" 0 1 2 3 0 1/4" = 1'-0"

SCALE: 1/16" = 1'-0"

SCALE: 3/32" = 1'-0"

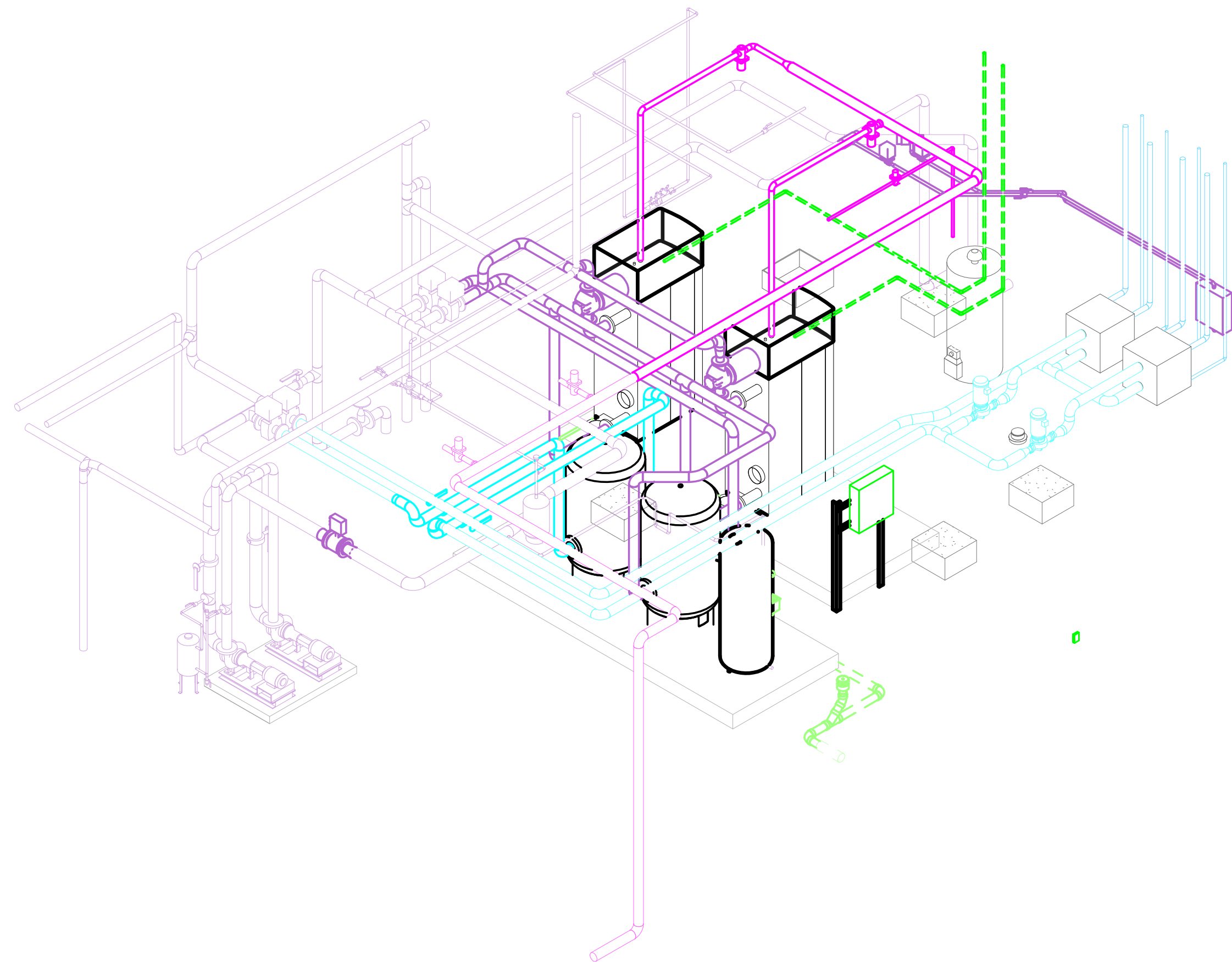
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SCALE: 1/4" = 1'-0"

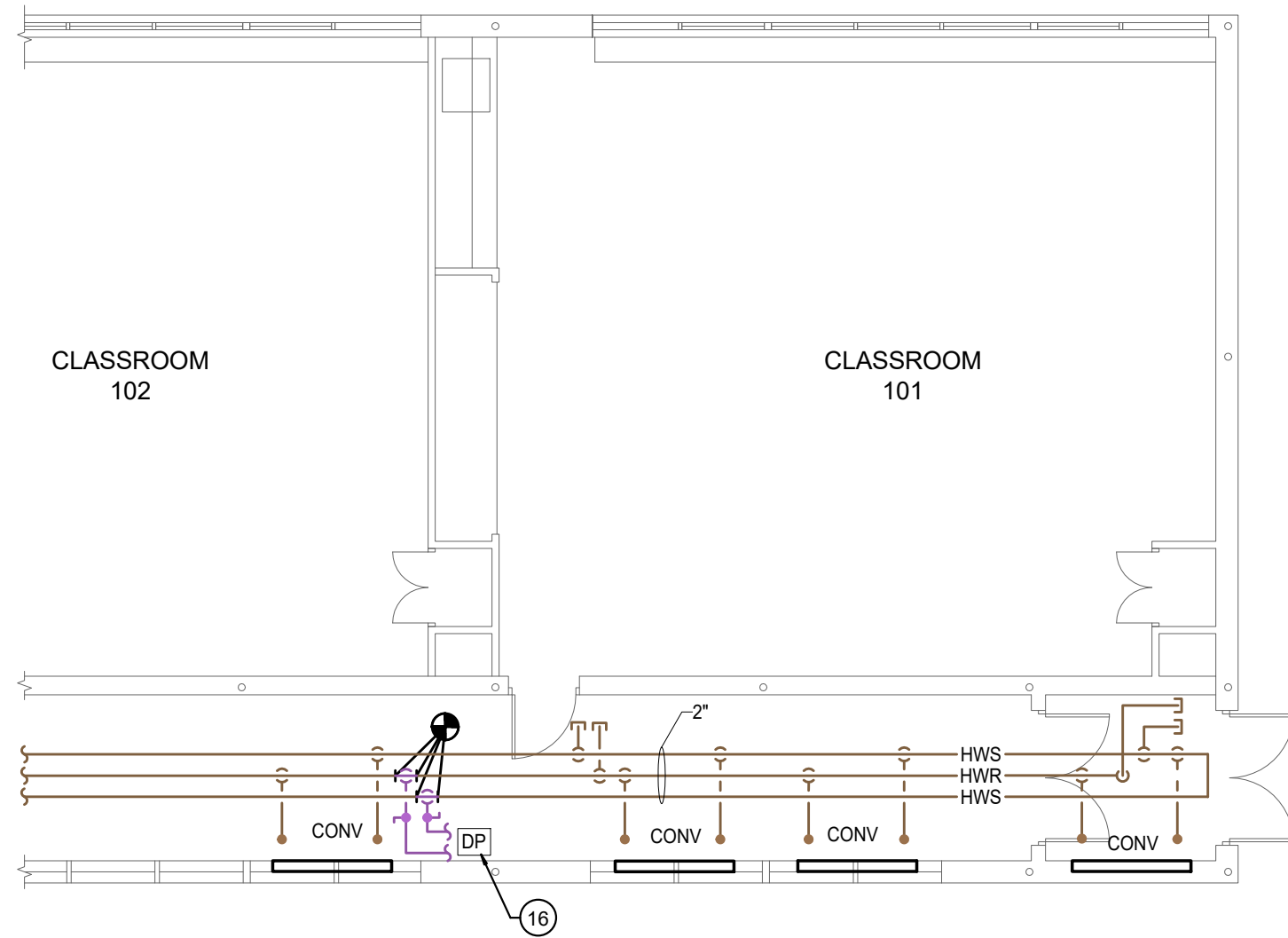
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SCALE: 3/4" = 1'-0"

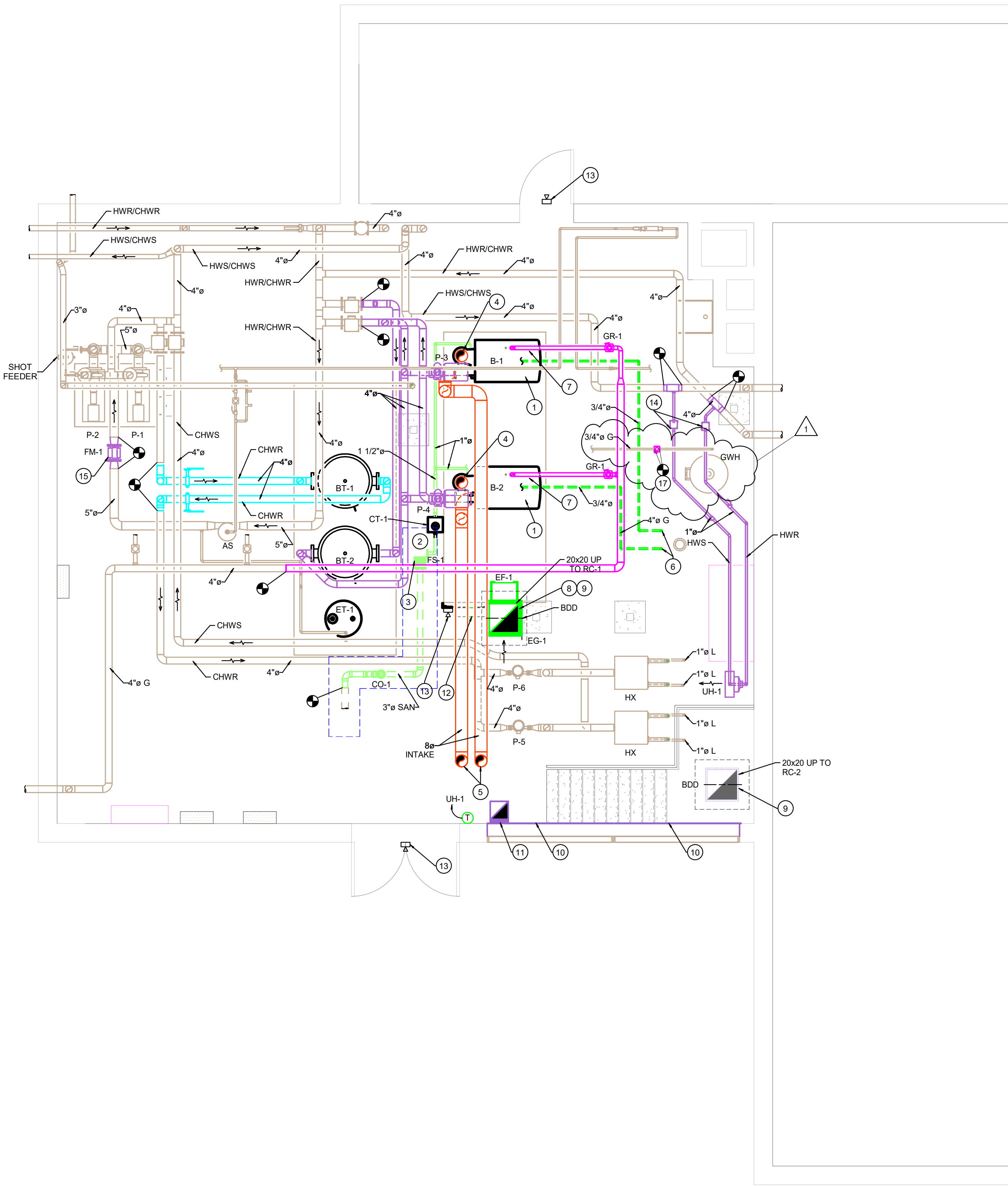
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3 **BOILER ROOM ISOMETRIC**



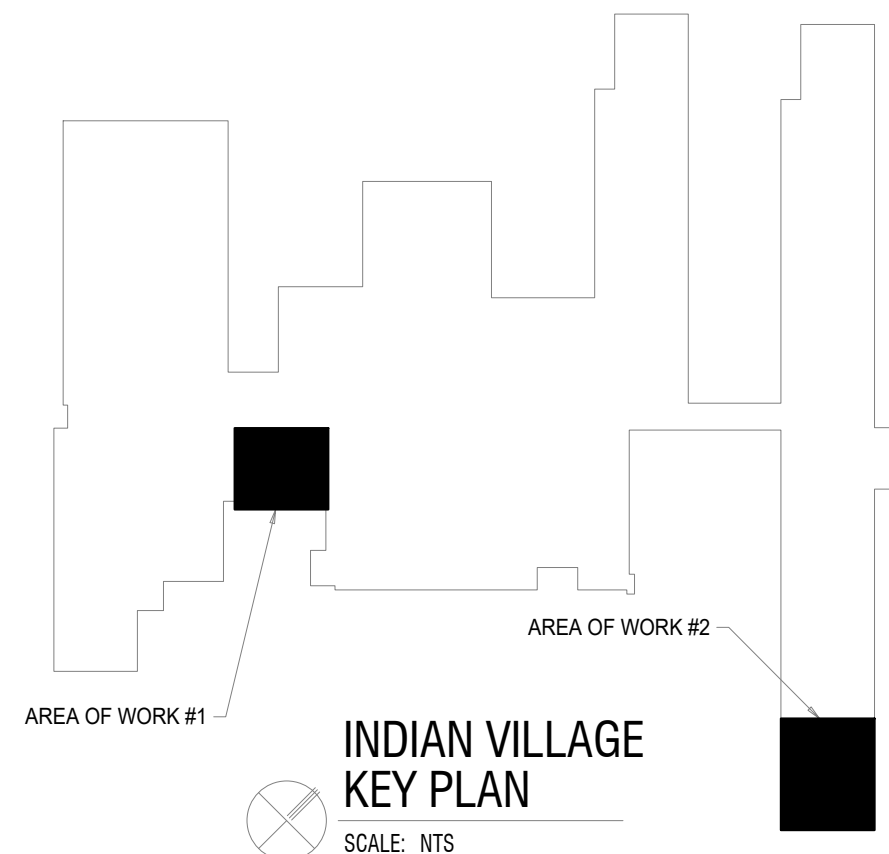
2 **PARTIAL MECHANICAL PLAN**
1/8" = 1'-0"



1 **BOILER ROOM MECHANICAL PLAN**
1/4" = 1'-0"

- PLAN NOTES**
- PROVIDE AND INSTALL NEW MODULAR CONDENSING BOILER. REFER TO DETAILS ON DRAWING SHEET IN-M401 FOR MORE INFORMATION. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR CLEARANCE, PIPING, AND VENTING.
 - ROUTE BOILER FLUE CONDENSATE DRAIN TO NEW FLOOR MOUNTED CONDENSATE NEUTRALIZATION TANK CT-1. MODIFY CT-1 INLET AND OUTLET CONNECTIONS AS REQUIRED FOR TRAP DEPTH AND CONDENSATE PIPE FALL. DISCHARGE DIRECTLY INTO NEAREST FLOOR DRAIN.
 - PROVIDE AND INSTALL NEW FLOOR SINK. RECONNECT TO EXISTING DRAIN PIPING. BACKFILL WITH COMPACTIBLE FILL, DOWEL INTO EXISTING SLAB, AND POUR NEW CONCRETE SLAB TO MATCH EXISTING.
 - CUT ROOF AND ROUTE NEW POLYPROPYLENE BOILER FLUE UP THROUGH NEW ROOF PENETRATION.
 - CUT ROOF AND ROUTE BOILER COMBUSTION AIR INTAKE UP THROUGH NEW ROOF PENETRATION.
 - ROUTE GAS REGULATOR VENT PIPING UP THROUGH EXISTING ROOF CURB. SEAL PENETRATION WATER TIGHT.
 - PROVIDE AND INSTALL NEW GAS REGULATOR. REFER TO DETAIL ON DRAWING SHEET IN-M401 FOR MORE INFORMATION.
 - PROVIDE AND INSTALL REFRIGERANT EXHAUST GRILLE AT FLOOR.
 - CUT ROOF AS REQUIRED TO ROUTE DUCT UP TO NEW ROOF CAP.
 - BLANK OFF EXISTING LOUVER WITH 20 GA GALVANIZED SHEET METAL INSULATED WITH 2" THICK RIGID POLYSTYRENE INSULATION. SEALED AIR AND WATER TIGHT. PROVIDE AND INSTALL METAL JACKETING ON INTERIOR SIDE OF NEW INSULATION.
 - PROVIDE AND INSTALL NEW 12x12 COMBUSTION AIR INTAKE OPENING FOR EXISTING ATMOSPHERIC WATER HEATER. OPENING SHALL BE APPROX. 12" BELOW CEILING.
 - REFRIGERANT MONITORING PANEL. FURNISHED AND INSTALLED BY TCC. REFER TO REFRIGERANT MONITORING DETAIL ON DRAWING SHEET IN-M601 FOR MORE INFORMATION.
 - REFRIGERANT MONITOR A/V ALARM WITH ENGRAVED PLASTIC LABEL INSTALLED AT EACH ENTRANCE TO THE BOILER ROOM. FURNISHED AND INSTALLED BY TCC. REFER TO REFRIGERANT MONITORING DETAIL ON DRAWING SHEET IN-M601 FOR MORE INFORMATION.
 - AUTOMATIC SUMMER/WINTER CHANGEOVER VALVE. FURNISHED BY TCC, INSTALLED BY MC.
 - FLOW METER FURNISHED BY TCC, INSTALLED BY MC.
 - TIE-IN TO EXISTING MAINS IN TUNNEL AND INSTALL DIFFERENTIAL PRESSURE SENSOR, FURNISHED BY TCC.
 - TIE-IN TO EXISTING GAS PIPING AND INSTALL AUTOMATIC CONTROL VALVE. FURNISHED BY TCC.

ADDENDUM #1 08-05-2022



INDIAN VILLAGE
KEY PLAN
SCALE: NTS

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FORT WAYNE COMMUNITY SCHOOLS
ESSER 2023 BOILER/CHILLER REPAIRS
Mechanical Projects
Fort Wayne, Indiana

CERTIFICATION:

[Signature]

DATE: 7/25/2022
COMM: 21281

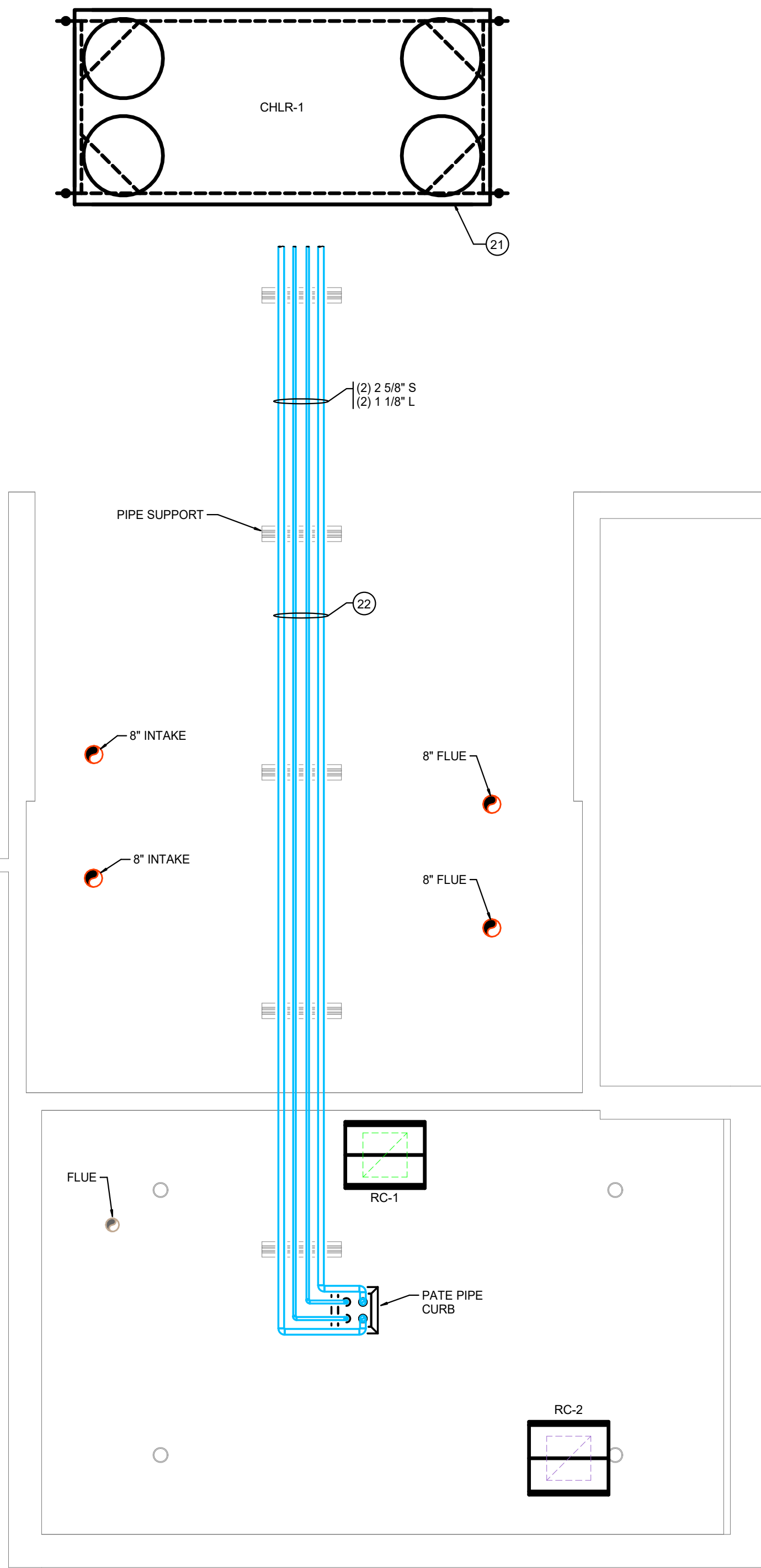
SCHOOL: Indian Village Elementary School
3835 Wenonah Lane
Fort Wayne Indiana 46809

TITLE:
**BOILER ROOM
MECHANICAL PLAN**

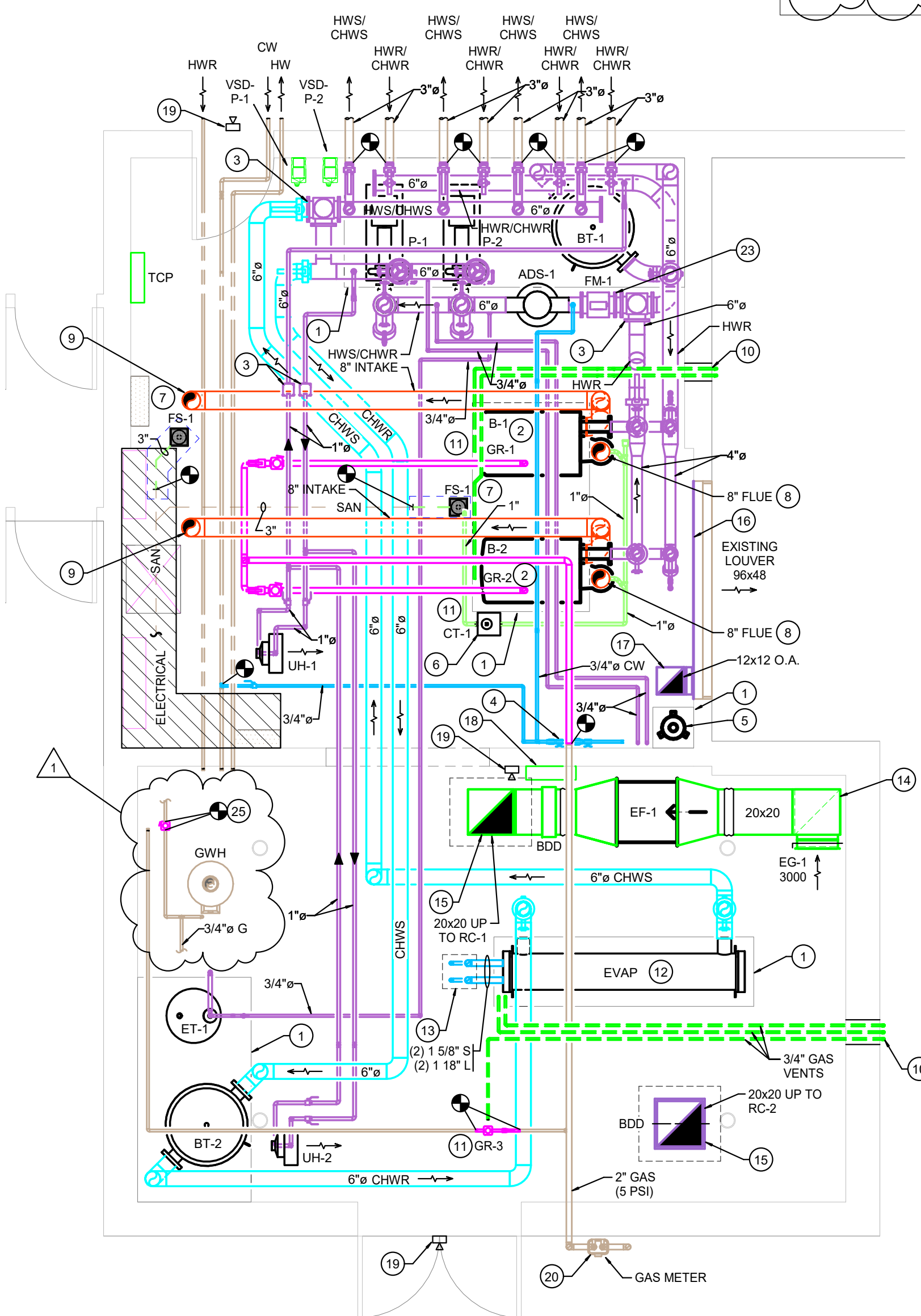
SHEET:
**IN-
M201**



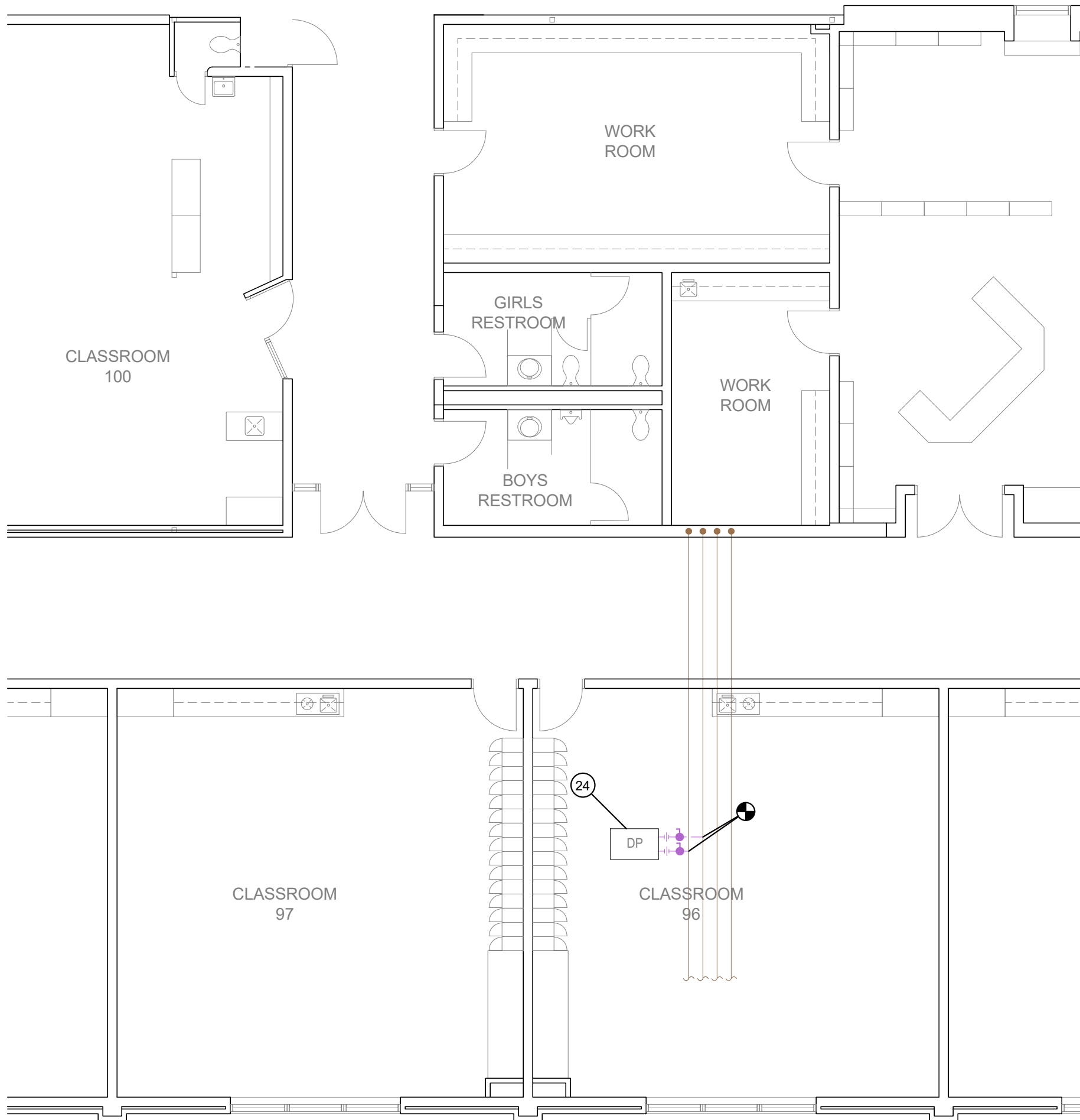
1 ROOF MECHANICAL PLAN
1/4" = 1'-0"



1 BOILER ROOM MECHANICAL PLAN
1/4" = 1'-0"

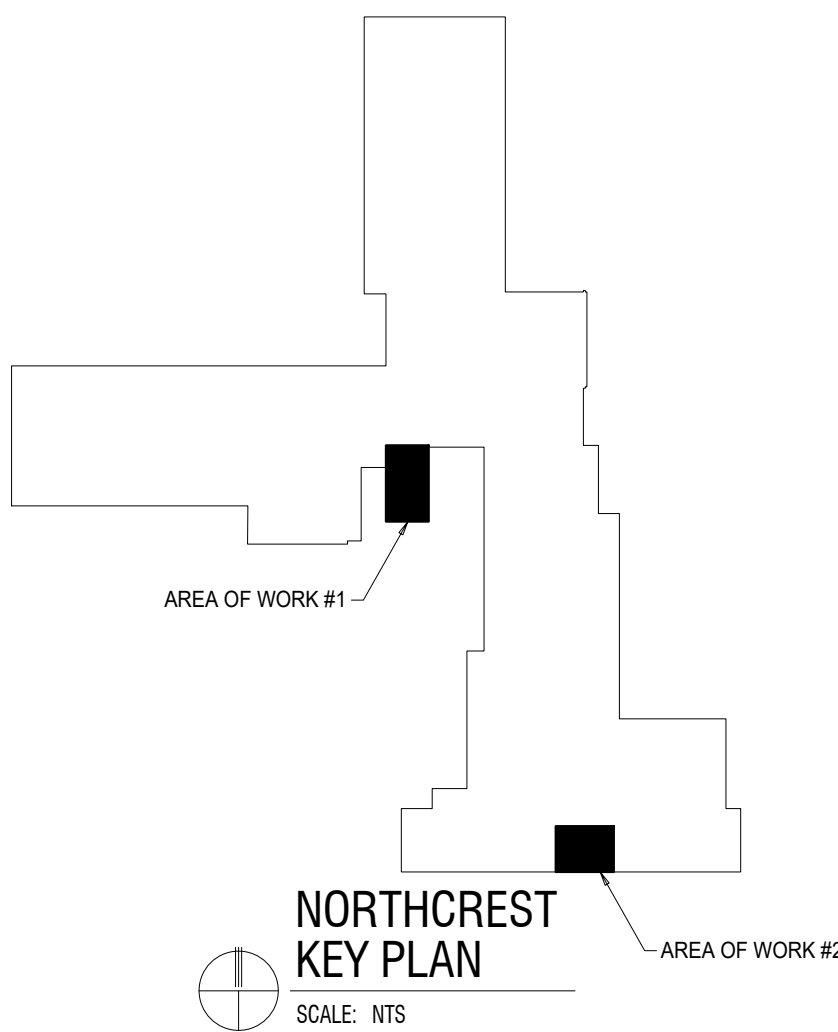


2 PARTIAL FIRST FLOOR MECHANICAL PLAN
1/8" = 1'-0"



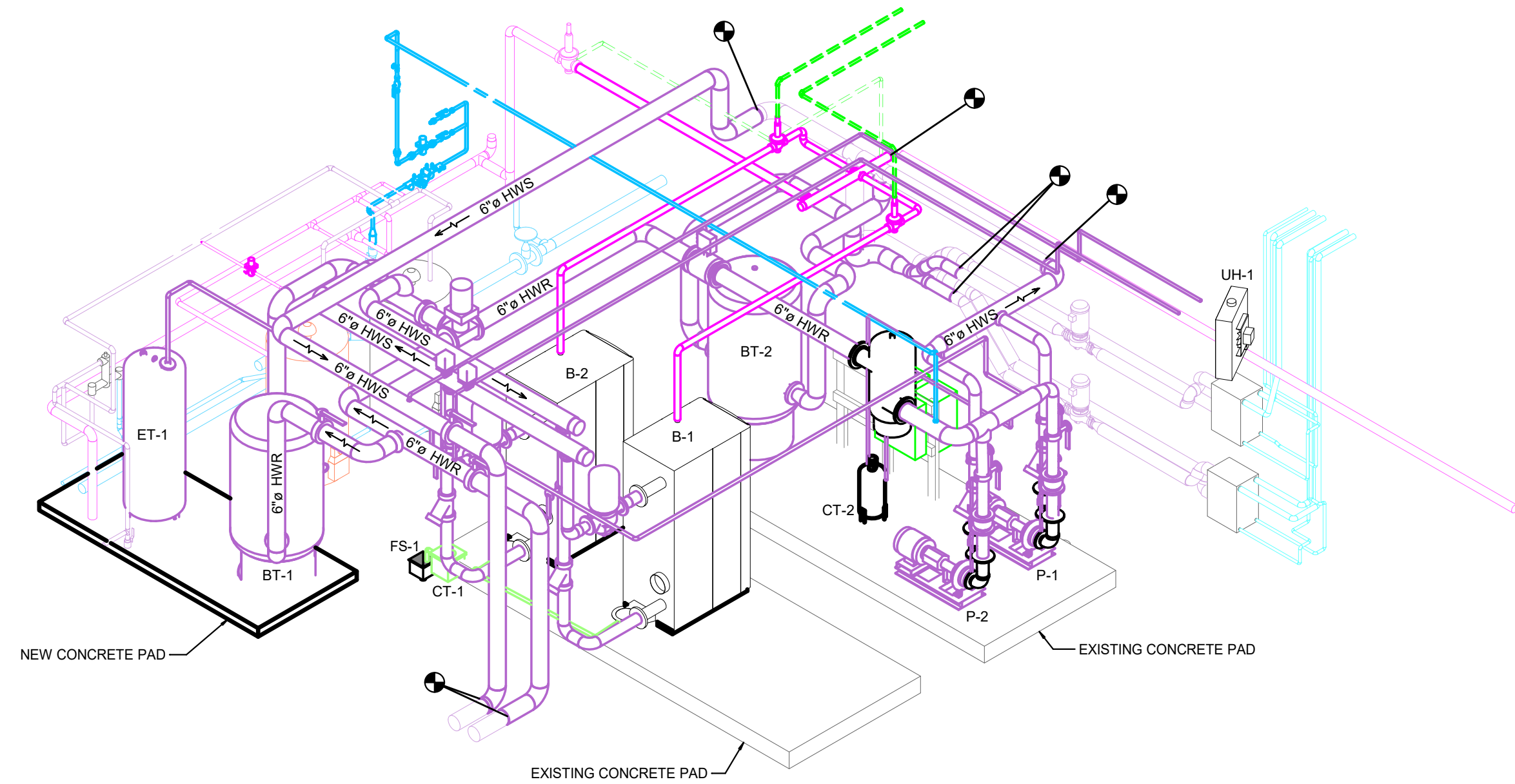
PLAN NOTES

- PROVIDE AND INSTALL NEW 4" TALL CONCRETE HOUSEKEEPING PAD FOR NEW EQUIPMENT.
- PROVIDE AND INSTALL NEW MODULAR CONDENSING BOILER. REFER TO DETAILS ON DRAWING SHEET NC-M402 FOR MORE INFORMATION. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR CLEARANCE, PIPING, AND VENTING.
- AUTOMATIC SUMMER/WINTER CHANGEOVER VALVE, FURNISHED BY TCC, INSTALLED BY MC.
- TIE-IN TO EXISTING DOMESTIC COLD WATER PIPING AND ROUTE NEW TO NEW SYSTEM FILL STATION. REFER TO SYSTEM FILL STATION DETAIL ON DRAWING SHEET NC-M402 FOR MORE INFORMATION.
- PROVIDE AND INSTALL NEW BYPASS FILTER FEEDER, FURNISHED BY CHEMICAL TREATMENT PROVIDER. REFER TO WATER TREATMENT SPECIFICATIONS FOR MORE INFORMATION.
- ROUTE BOILER FLUE CONDENSATE DRAIN TO NEW FLOOR MOUNTED CONDENSATE NEUTRALIZATION TANK CT-1. MODIFY CT-1 INLET AND OUTLET CONNECTIONS AS REQUIRED FOR TRAP DEPTH AND CONDENSATE PIPE FALL. DISCHARGE DIRECTLY INTO NEAREST FLOOR DRAIN.
- PROVIDE AND INSTALL NEW FLOOR SINK. RECONNECT TO EXISTING DRAIN PIPING. BACKFILL WITH COMPACTIBLE FILL, DOWEL INTO EXISTING SLAB, AND POUR NEW CONCRETE SLAB TO MATCH EXISTING.
- PROVIDE AND INSTALL NEW POLYPROPYLENE BOILER FLUE. ROUTE THROUGH ROOF USING REMAINING ROOF OPENING. MODIFY ROOF OPENING AS REQUIRED.
- CUT ROOF AND ROUTE BOILER COMBUSTION AIR INTAKE UP THROUGH NEW ROOF PENETRATION.
- CORE DRILL EXISTING MASONRY FROM EXTERIOR AS REQUIRED TO ROUTE NEW VENT PIPING. PATCH AND SEAL WALL PENETRATION WITH GROUT.
- PROVIDE AND INSTALL NEW GAS REGULATOR. REFER TO DETAIL ON DRAWING SHEET NC-M401 FOR MORE INFORMATION.
- PROVIDE AND INSTALL REMOTE CHILLER EVAPORATOR BARREL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR CLEARANCE AND PIPING. ROUTE REFRIGERANT VENT PIPING TO EXTERIOR.
- ROUTE NEW REFRIGERANT PIPING UP TO NEW PATE PIPE CURB. VERIFY EXACT PIPE SIZES AND QUANTITIES WITH MANUFACTURER.
- PROVIDE AND INSTALL REFRIGERANT EXHAUST GRILLE AT FLOOR.
- CUT ROOF AS REQUIRED TO ROUTE DUCT UP TO NEW ROOF CAP.
- BLANK OFF EXISTING LOUVER WITH 20 GA GALVANIZED SHEET METAL INSULATED WITH 2" THICK RIGID POLYSTYRENE INSULATION, SEALED AIR AND WATER TIGHT. PROVIDE AND INSTALL METAL JACKETING ON INTERIOR SIDE OF NEW INSULATION.
- PROVIDE AND INSTALL NEW 12x12 COMBUSTION AIR INTAKE OPENING FOR EXISTING ATMOSPHERIC WATER HEATER. OPENING SHALL BE APPROX. 12" BELOW CEILING.
- REFRIGERANT MONITORING PANEL. FURNISHED AND INSTALLED BY TCC. REFER TO REFRIGERANT MONITORING DETAIL ON DRAWING SHEET NC-M601 FOR MORE INFORMATION.
- REFRIGERANT MONITOR A/V ALARM WITH ENGRAVED PLASTIC LABEL INSTALLED AT EACH ENTRANCE TO THE BOILER ROOM. FURNISHED AND INSTALLED BY TCC. REFER TO REFRIGERANT MONITORING DETAIL ON DRAWING SHEET NC-M601 FOR MORE INFORMATION.
- CONTRACTOR SHALL COORDINATE WITH NIPSCO FOR NATURAL GAS SERVICE PRESSURE UPGRADE TO 5 PSI. CONTRACTOR SHALL PAINT ALL NEW EXTERIOR GAS PIPING PER SPECIFICATIONS.
- PROVIDE AND INSTALL NEW CHILLER ON NEW STRUCTURAL STEEL PLATFORM. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION. INSTALL CHILLER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR CLEARANCE AND PIPING.
- ROUTE REFRIGERANT PIPING ON ROOF TO CHILLER ON NEW B-LINE DURA-BLOK EQUIPMENT SUPPORTS. MINIMUM 18" ABOVE ROOF. EXACT SPACING AND QUANTITY PER MANUFACTURER. ALL EXTERIOR HARDWARE SHALL BE STAINLESS STEEL. PROVIDE AND INSTALL PIPE INSULATION AND METAL JACKETING PER SPECIFICATIONS.
- FLOW METER FURNISHED BY TCC, INSTALLED BY MC.
- TIE-IN TO EXISTING MAINS ABOVE CEILING AND INSTALL DIFFERENTIAL PRESSURE SENSOR, FURNISHED BY TCC.
- TIE-IN TO EXISTING GAS PIPING AND INSTALL AUTOMATIC CONTROL VALVE, FURNISHED BY TCC.

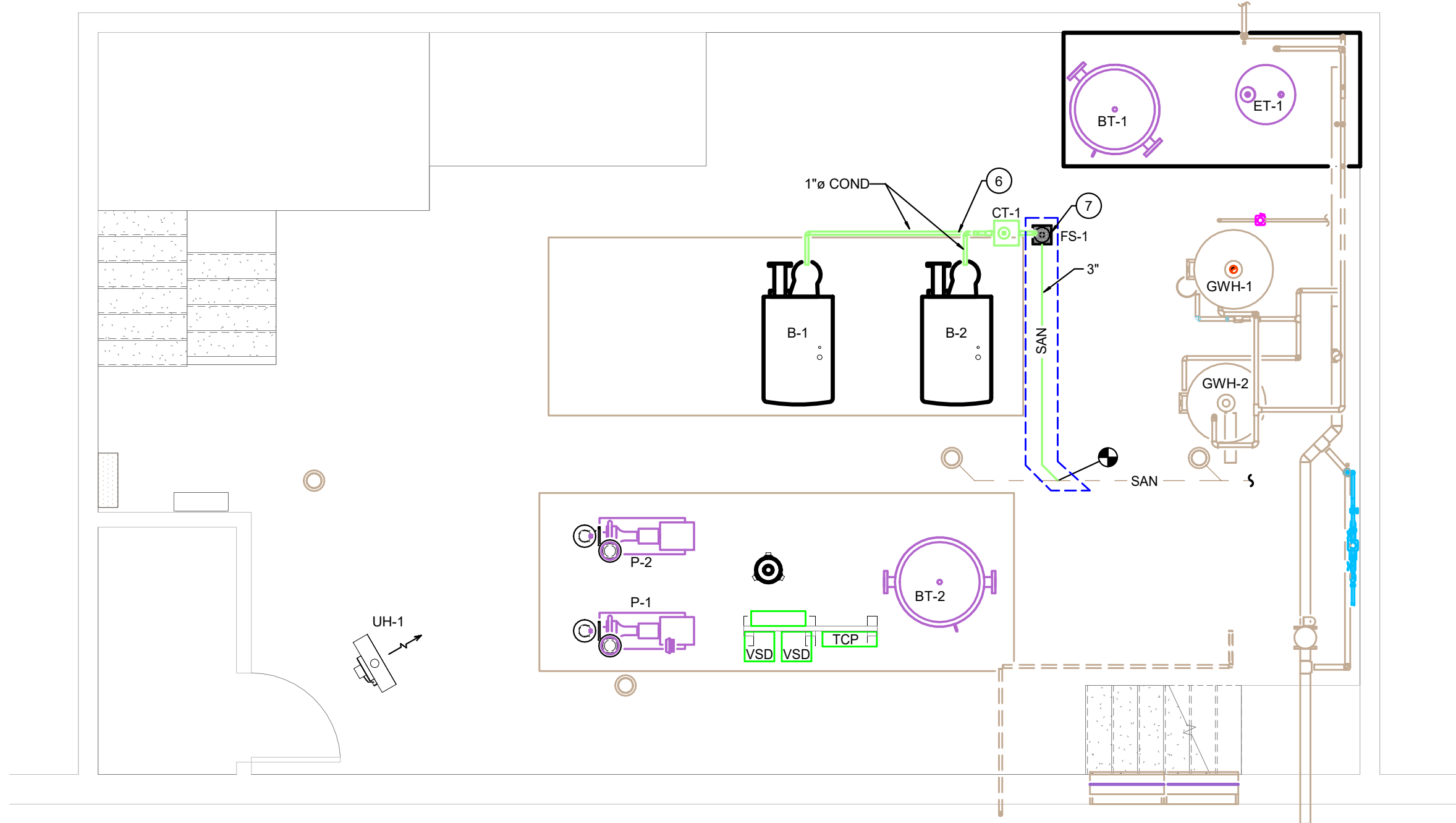


ADDENDUM #1 06-05-2022

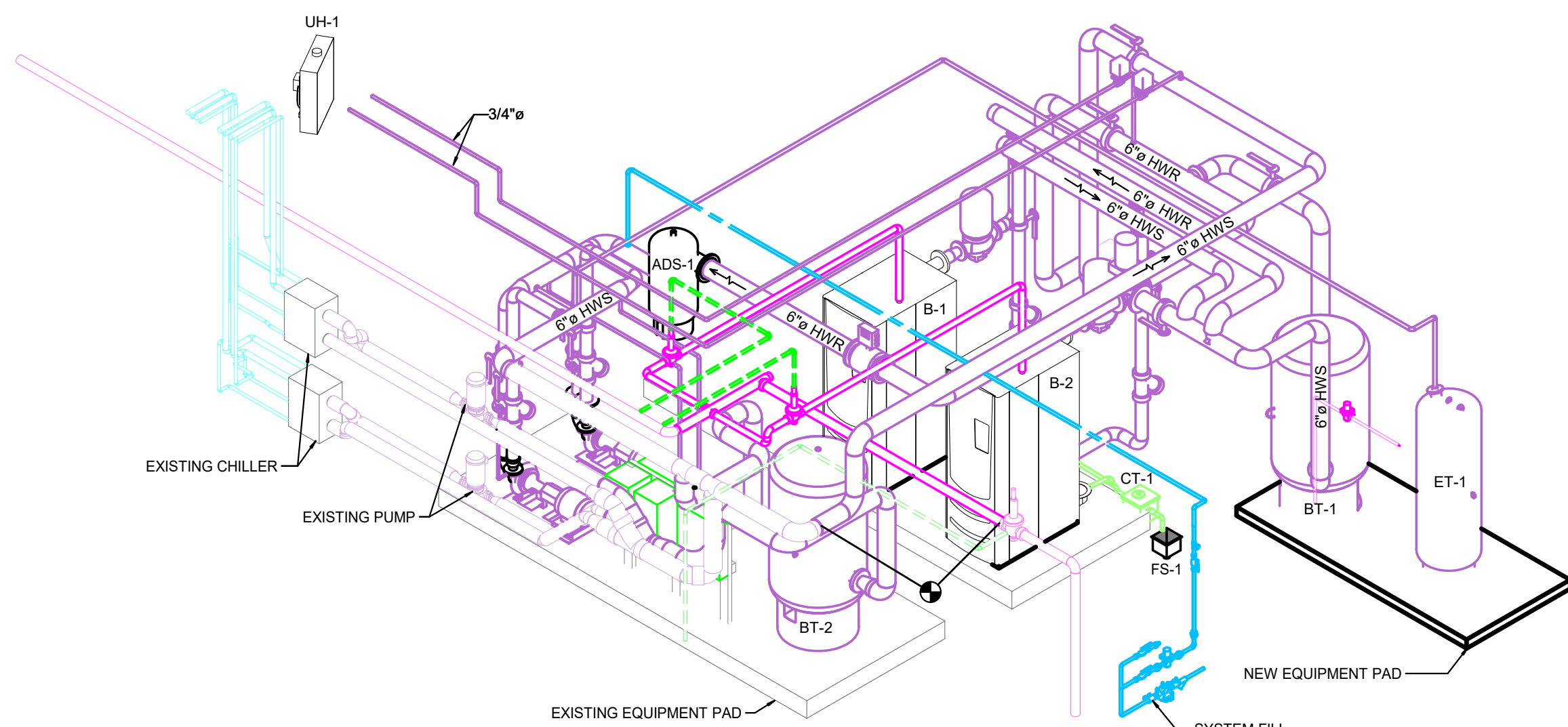
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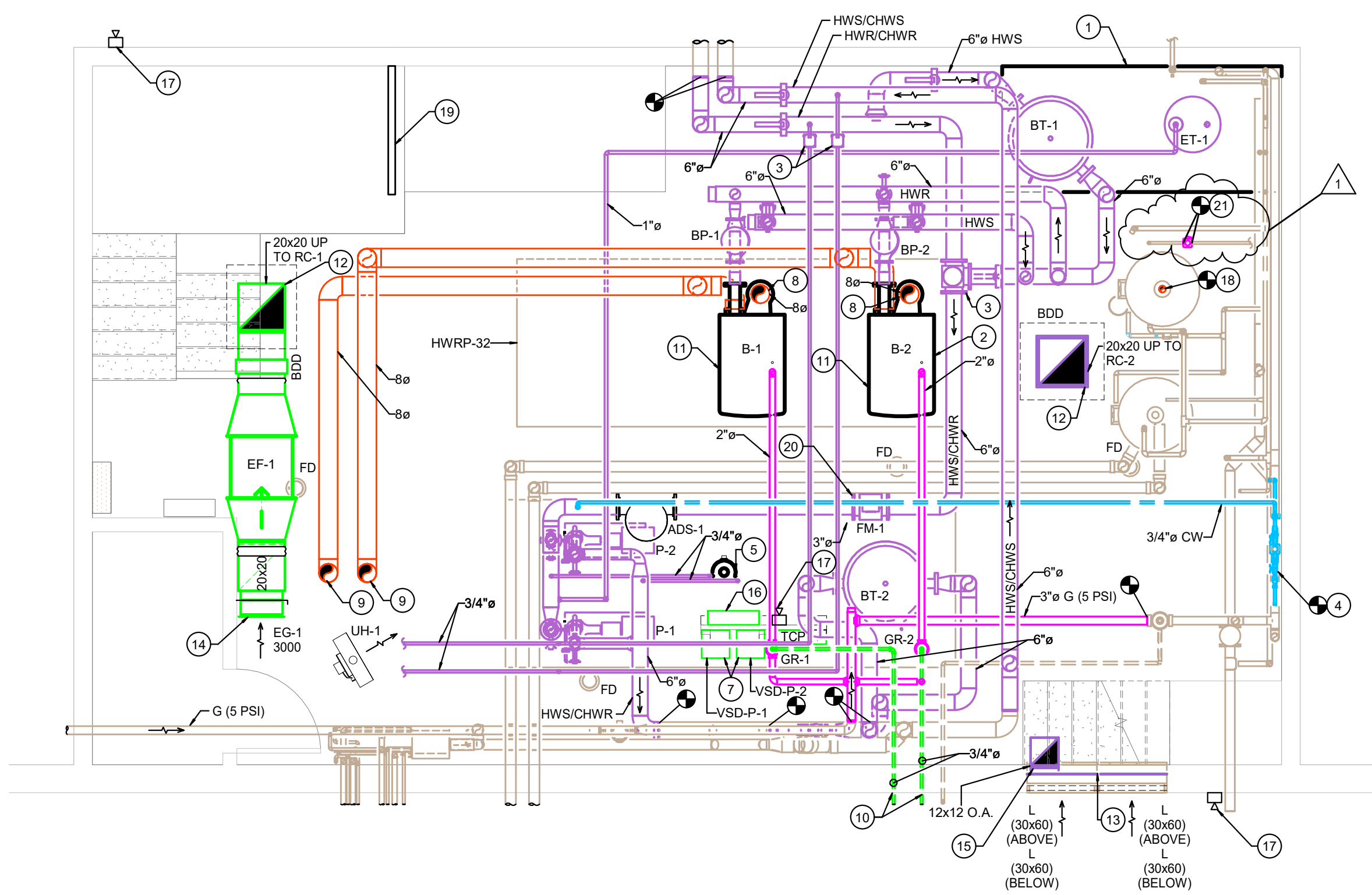
2 BOILER ROOM ISO 1



BOILER ROOM SANITARY AND CONDENSATE
1/4" = 1'-0"



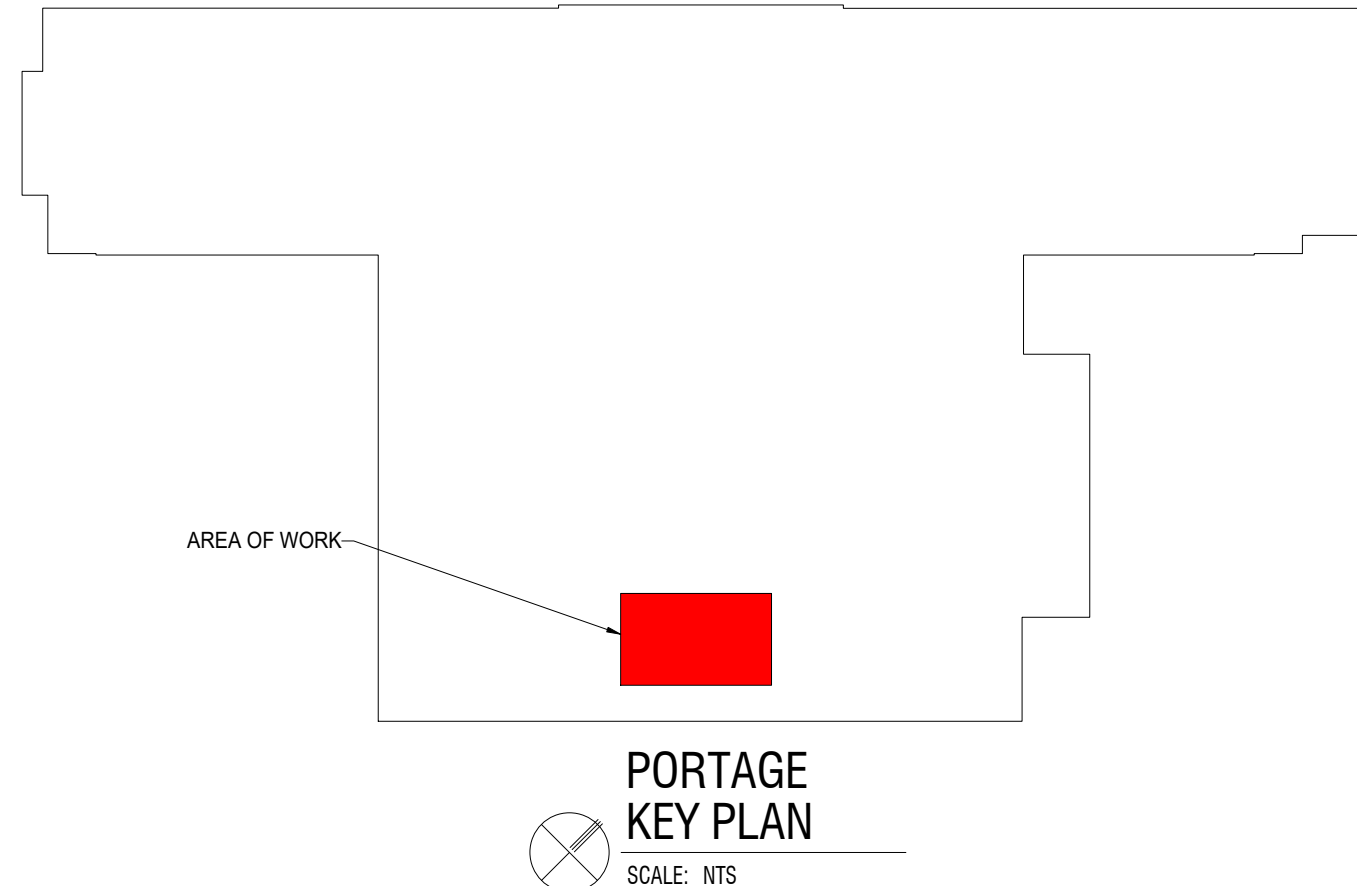
1 BOILER ROOM ISO 2



BOILER ROOM MECHANICAL PLAN
1/4" = 1'-0"

PLAN NOTES

1. PROVIDE AND INSTALL NEW 4" TALL CONCRETE HOUSEKEEPING PAD FOR NEW EQUIPMENT.
2. PROVIDE AND INSTALL NEW MODULAR CONDENSING BOILER. REFER TO DETAILS ON DRAWING SHEET PO-M401 FOR MORE INFORMATION. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR CLEARANCE, PIPING, AND VENTING.
3. AUTOMATIC SUMMER/WINTER CHANGEOVER VALVE, FURNISHED BY TCC, INSTALLED BY MC.
4. TIE-IN TO EXISTING DOMESTIC COLD WATER PIPING AND ROUTE NEW TO NEW SYSTEM FILL STATION. REFER TO SYSTEM FILL STATION DETAIL ON DRAWING SHEET PO-M401 FOR MORE INFORMATION.
5. PROVIDE AND INSTALL NEW BYPASS FILTER FEEDER, FURNISHED BY CHEMICAL TREATMENT PROVIDER. REFER TO WATER TREATMENT SPECIFICATIONS FOR MORE INFORMATION.
6. ROUTE BOILER FLUE CONDENSATE DRAIN TO NEW FLOOR MOUNTED CONDENSATE NEUTRALIZATION TANK CT-1. MODIFY CT-1 INLET AND OUTLET CONNECTIONS AS REQUIRED FOR TRAP DEPTH AND CONDENSATE PIPE FALL. DISCHARGE DIRECTLY INTO NEAREST FLOOR DRAIN.
7. PROVIDE AND INSTALL NEW FLOOR SINK. AUGER AND FLUSH APPROX 50' OF EXISTING DRAIN LINE. RECONNECT TO EXISTING DRAIN PIPING. BACKFILL WITH COMPACTABLE FILL, DOWEL INTO EXISTING SLAB, AND POUR NEW CONCRETE SLAB TO MATCH EXISTING.
8. PROVIDE AND INSTALL NEW POLYPROPYLENE BOILER FLUE. CUT ROOF AS REQUIRED.
9. CUT ROOF AND ROUTE BOILER COMBUSTION AIR INTAKE UP THROUGH NEW ROOF PENETRATION.
10. CORE DRILL EXISTING MASONRY FROM EXTERIOR AS REQUIRED TO ROUTE NEW VENT PIPING. PATCH AND SEAL WALL PENETRATION WITH GROUT.
11. PROVIDE AND INSTALL NEW GAS REGULATOR. REFER TO DETAIL ON DRAWING SHEET PO-M401 FOR MORE INFORMATION.
12. CUT ROOF AS REQUIRED TO ROUTE DUCT UP TO NEW ROOF CAP.
13. BLANK OFF EXISTING LOUVER WITH 20 GA GALVANIZED SHEET METAL INSULATED WITH 2" THICK RIGID POLYSTYRENE INSULATION, SEALED AIR AND WATER TIGHT. PROVIDE AND INSTALL METAL JACKETING ON INTERIOR SIDE OF NEW INSULATION.
14. PROVIDE AND INSTALL REFRIGERANT EXHAUST GRILLE AT FLOOR.
15. PROVIDE AND INSTALL NEW 12x12 COMBUSTION AIR INTAKE OPENING FOR EXISTING ATMOSPHERIC WATER HEATER. OPENING SHALL BE APPROX. 12" BELOW CEILING.
16. REFRIGERANT MONITORING PANEL, FURNISHED AND INSTALLED BY TCC. REFER TO REFRIGERANT MONITORING DETAIL ON DRAWING SHEET PO-M401 FOR MORE INFORMATION.
17. REFRIGERANT MONITOR A/V ALARM WITH ENGRAVED PLASTIC LABEL INSTALLED AT EACH ENTRANCE TO THE BOILER ROOM. FURNISHED AND INSTALLED BY TCC. REFER TO REFRIGERANT MONITORING DETAIL ON DRAWING SHEET PO-M401 FOR MORE INFORMATION.
18. PROVIDE AND INSTALL NEW FLUE AND ROUTE UP THROUGH ROOF. CUT ROOF AS REQUIRED.
19. PROVIDE AND INSTALL NEW IBC COMPLIANT 42" TALL GUARD RAIL WITH MID RAIL AT 21". GUARD SHALL BE CONSTRUCTED OF 1-1/2" STD PIPE WITH VERTICAL POSTS 4'-0" O.C. FLANGED AT BASE AND ANCHORED TO EXISTING CONCRETE. PRIME AND PAINT TO MATCH EXISTING GUARD RAIL.
20. FLOW METER FURNISHED BY TCC, INSTALLED BY MC.
21. TIE-IN TO EXISTING GAS PIPING AND INSTALL AUTOMATIC CONTROL VALVE, FURNISHED BY TCC.



ADDENDUM #1 08-05-2022

0 16 32 48 0 8 16 24 32 0 8 16 24 0 4 8 12 0 2 4 6 0 3/4" = 1'-0" 0 1 2 3 0 1/2" = 1'-0"

CERTIFICATION:



DATE: 07/25/22

COMM: 21281

SCHOOL: Portage Middle School
3521 Taylor Street
Fort Wayne Indiana 46802

TITLE:
BOILER ROOM
MECHANICAL PLAN

SHEET:

PO-M301