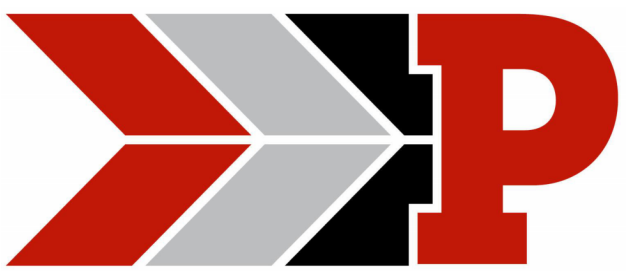


JONES ELEMENTARY SCHOOL MECHANICAL UPGRADES

2374 MCCOOL ROAD
PORTAGE, IN 46368

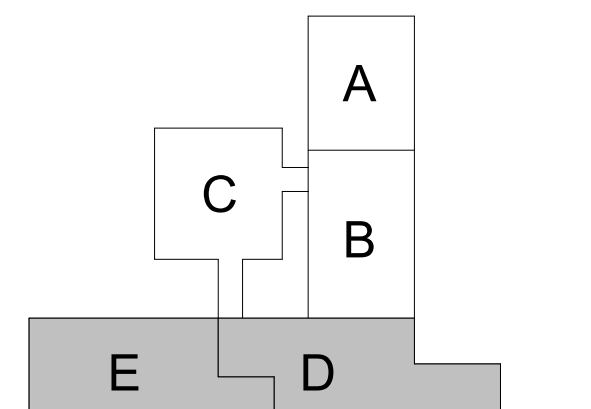
PORTAGE TOWNSHIP
SCHOOLS



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30 E. NEW YORK ST., SUITE 300, INDIANAPOLIS, IN 46204



KEY PLAN

CONSTRUCTION DOCUMENTS



DRAWN BY: DJA
PROJECT NUMBER: 224070.00
PROJECT ISSUE DATE: 10-02-2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	10-30-2024

FIRST FLOOR DEMOLITION PLAN - UNIT D & E

MD.03

MECHANICAL DEMOLITION PLAN GENERAL NOTES

- A. THE DIVISION 23 CONTRACTOR SHALL VISIT THE PROJECT AND DETERMINE THE EXACT EXTENT OF THE DEMOLITION WORK REQUIRED BEFORE BIDDING THE PROJECT.
- B. WHERE BUILDING SURFACES ARE DAMAGED BY THE REMOVAL OF OLD WORK, SAME SHALL BE PATCHED TO MATCH THE ADJACENT SURFACES BY THIS CONTRACTOR.
- C. EXISTING OPENINGS WHICH ARE TO BE REUSED SHALL NOT BE REMOVED AND SHALL BE MODIFIED OR ENLARGED AS NECESSARY TO SUIT THE NEW SYSTEMS. PROVIDE ALL REQUIRED CUTTING AND PATCHING TO MATCH ADJACENT SURFACES.
- D. IF ASBESTOS IS PRESENT CONTACT THE ARCHITECT. IT WILL BE REMOVED OR RENDERED HARMLESS UNDER SEPARATE CONTRACT BY THE OWNER.
- E. THE OWNER SHALL HAVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE. CONTRACTOR IS REQUIRED TO VERIFY THAT THE OWNER DOES NOT WANT TO CLAIM AN ITEM BEFORE DISPOSING THEM OFF SITE.
- F. ALL FLOOR, WALL AND ROOF CUTTING WORK TO BE DONE BY DIVISION 23-HVAC CONTRACTOR UNLESS OTHERWISE NOTED. PATCH ALL FLOOR, WALL AND ROOF OPENINGS THAT ARE NOT REUSED TO MATCH ADJACENT CONSTRUCTION.
- G. DIVISION 23 CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILING TO WORK ABOVE THE CEILING AND REINSTALL THOSE CEILING AFTER COMPLETION OF WORK. IF ANY CEILING PADS OR GRIDS ARE DAMAGED, THIS CONTRACTOR SHALL REPLACE WITH NEW.

MECHANICAL DEMOLITION PLAN NOTES

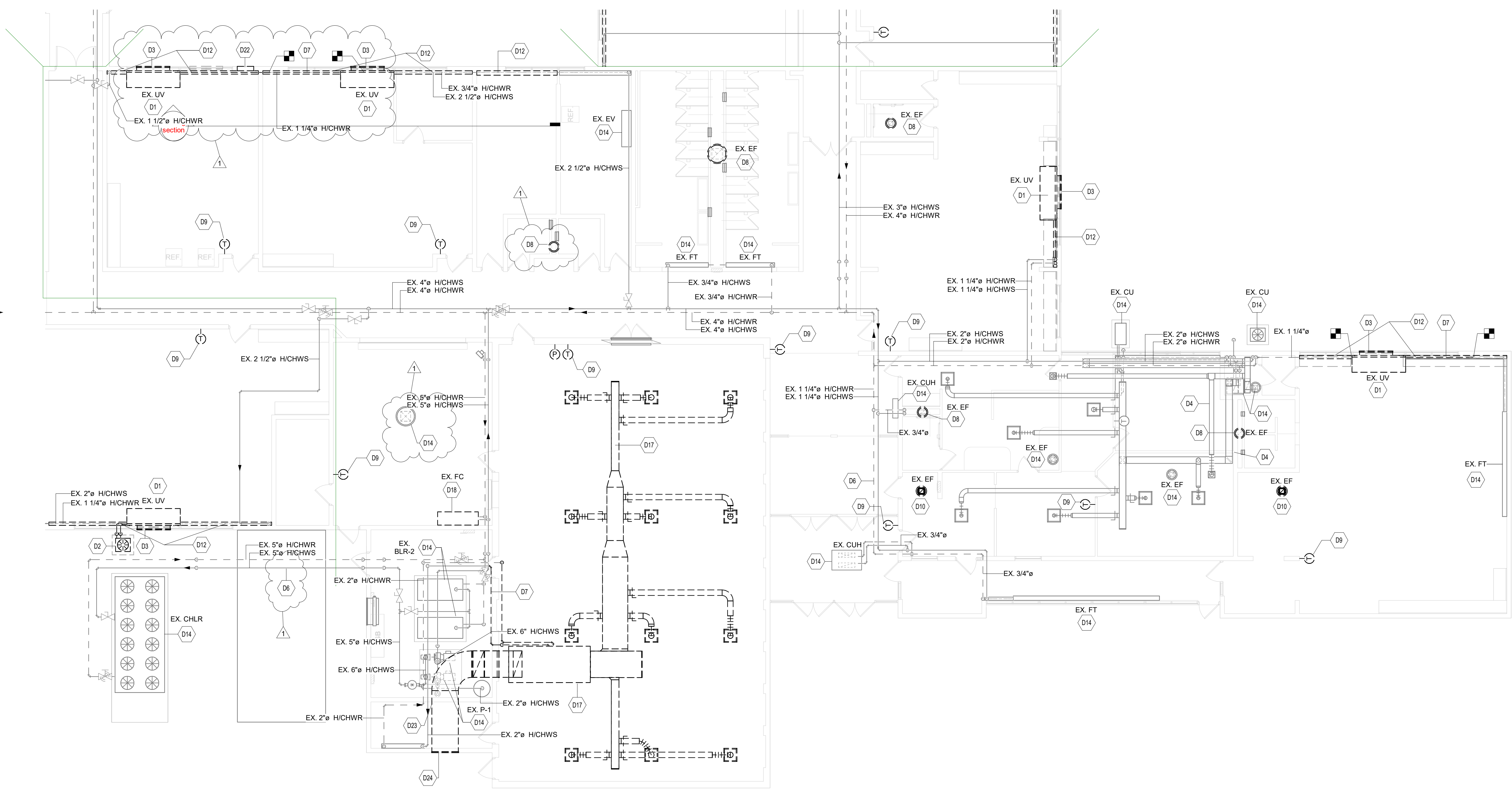
(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

- | NO. | DESCRIPTION |
|-----|---|
| D1 | EXISTING UNIT VENTILATOR TO BE REMOVED WITHOUT DAMAGING EXISTING CABINETRY OR PIPING IN AREA. THIS SHALL INCLUDE REMOVAL OF ALL VALVES, INSULATION, CONDENSATE PIPING, ETC. EXISTING PIPING TO BE DISCONNECTED FROM THE UNITS AND REMOVED BACK TO MAIN PIPE IN AREA. CAP WATER-TIGHT. COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO REMOVAL. DISPOSE OF ALL MATERIAL OFF SITE. REFER TO NEW WORK PLAN. |
| D2 | DISCONNECT AND REMOVE EXISTING CONDENSING UNIT, EXISTING REFRIGERANT PIPING, HOUSEKEEPING PAD AND RELATED APPURTENANCES. DISPOSE OF ALL MATERIALS OFFSITE. COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO REMOVAL. |
| D3 | BASE BID: EXISTING WALL LOUVER TO REMAIN. EXISTING WALL OPENING TO BE CAPPED AND INSULATED WITH A 2" RIGID INSULATION PROTECTED BY BLACK SHEET METAL ON BOTH SIDES. SEAL AIR AND WATER TIGHT. ALTERNATE #1: EXISTING WALL LOUVER TO BE REMOVED AND DISPOSED OF OFF SITE. REFER TO ARCHITECTURAL FOR PATCHING. |
| D4 | EXISTING DUCTWORK, DIFFUSERS & GRILLES TO REMAIN TO REMAIN, UNLESS NOTED OTHERWISE. |
| D6 | EXISTING PIPING TO REMAIN, UNLESS NOTED OTHERWISE. FIELD VERIFY EXISTING SIZE AND EXACT LOCATION. |
| D7 | REMOVE EXISTING HYDRONIC PIPING BACK TO POINT SHOWN ON PLAN. DISPOSE OF ALL MATERIAL OFF SITE. PREPARE PIPING FOR NEW CONNECTION. REFER TO NEW WORK PLAN. |
| D8 | DISCONNECT AND REMOVE EXISTING EXHAUST FAN AND RELATED APPURTENANCES. ALL EXISTING DUCTWORK/GRILLES TO REMAIN. DISPOSE OF ALL MATERIALS OFF SITE. COORDINATE WITH NEW WORK PLAN. |
| D9 | THERMOSTAT TO BE REMOVED AND DISPOSED OF OFFSITE. |
| D10 | DISCONNECT AND REMOVE EXISTING EXHAUST FAN AND RELATED APPURTENANCES. ALL EXISTING DUCTWORK/GRILLES TO BE DISCONNECTED AND REMOVED. DISPOSE OF ALL MATERIALS OFF SITE. IF EXISTING EXHAUST FAN IS NOT BEING REPLACED IN THE SAME LOCATION THEN THE EXISTING CURBS SHALL BE PROVIDED WITH GALVANIZED SHEET METAL CAPS FASTENED TO CURBS WITH CROSS BREAKS TO PREVENT PONDING. UNDERSIDE OF CAPS SHALL BE INSULATED TO MEET ENERGY CODE REQUIREMENTS FOR ROOF INSULATION. COORDINATE WITH NEW WORK PLAN. |
| D12 | REMOVE EXISTING METAL ENCLOSURE. REFER TO NEW WORK PLAN. DISPOSE OF ALL MATERIAL OFFSITE. |
| D14 | EXISTING MECHANICAL EQUIPMENT TO REMAIN. |
| D17 | EXISTING AIR HANDLING UNIT TO BE REMOVED AND DISPOSED OF OFF SITE ALONG WITH CONTROLS, SENSORS, PNEUMATIC DAMPERS/OPERATORS, ETC. EXISTING DUCTWORK TO BE DISCONNECTED FROM THE AIR HANDLING UNIT AND REMOVED BACK TO THE POINT INDICATED. EXISTING PIPING TO BE DISCONNECTED AND REMOVED FROM THE AIR HANDLING UNIT BACK NEAR MAIN. EXISTING ISOLATION VALVES AND PNEUMATIC CONTROL VALVES TO BE DISCONNECTED AND REMOVED. NEW DOC CONTROL VALVES TO BE PART OF NEW WORK. REFER TO DETAIL. CAP WATER TIGHT. PREPARE PIPING FOR NEW WORK. REFER TO THE NEW WORK PLAN FOR CONNECTION OF PIPING AND DUCTWORK TO THE NEW AIR HANDLING UNIT. COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO REMOVAL. DISPOSED OF ALL MATERIAL OFF-SITE. |
| D18 | EXISTING FAN COIL UNIT TO BE REMOVED AND DISPOSED OF OFF SITE. EXISTING CONDENSATE TO BE REMOVED FROM FAN COIL UNIT. EXISTING HYDRONIC PIPING TO BE DISCONNECTED AND REMOVED FROM THE FAN COIL UNIT BACK TO PAST THE EXISTING ISOLATION VALVES. EXISTING ISOLATION VALVES AND PNEUMATIC CONTROL VALVES TO BE DISCONNECTED AND REMOVED. PROVIDE NEW BALL VALVES AND PREPARE PIPING FOR NEW WORK PLAN. NEW DOC CONTROL VALVES TO BE PART OF NEW WORK. REFER TO DETAIL. CAP WATER TIGHT. PREPARE PIPING FOR NEW WORK. REFER TO THE NEW WORK PLAN FOR CONNECTION OF PIPING TO THE NEW FAN COIL UNITS. COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO REMOVAL. EXISTING CONDENSATE PUMP TO REMAIN IF PRESENT. DISPOSED OF ALL MATERIAL OFF-SITE. |
| D22 | EXISTING WINDOW HVAC UNIT TO BE REMOVED. REFER TO ARCHITECTURAL PLANS FOR PATCHING. COORDINATE WITH ARCHITECTURAL AND NEW WORK PLANS. |
| D23 | FILL IN EXISTING OPENING TO MATCH SURROUNDINGS. |
| D24 | EXISTING WALL LOUVER TO BE CAPPED AND INSULATED TO WITH A 2" RIGID INSULATION PROTECTED BY BLACK SHEET METAL. SEAL AIR AND WATER TIGHT. REMOVE EXISTING TEMPERATURE CONTROLS SENSORS, OPERATOR, ETC. FROM LOUVER. DISPOSED OF ALL MATERIAL OFF-SITE. COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO REMOVAL. |

VERIFICATION NOTE

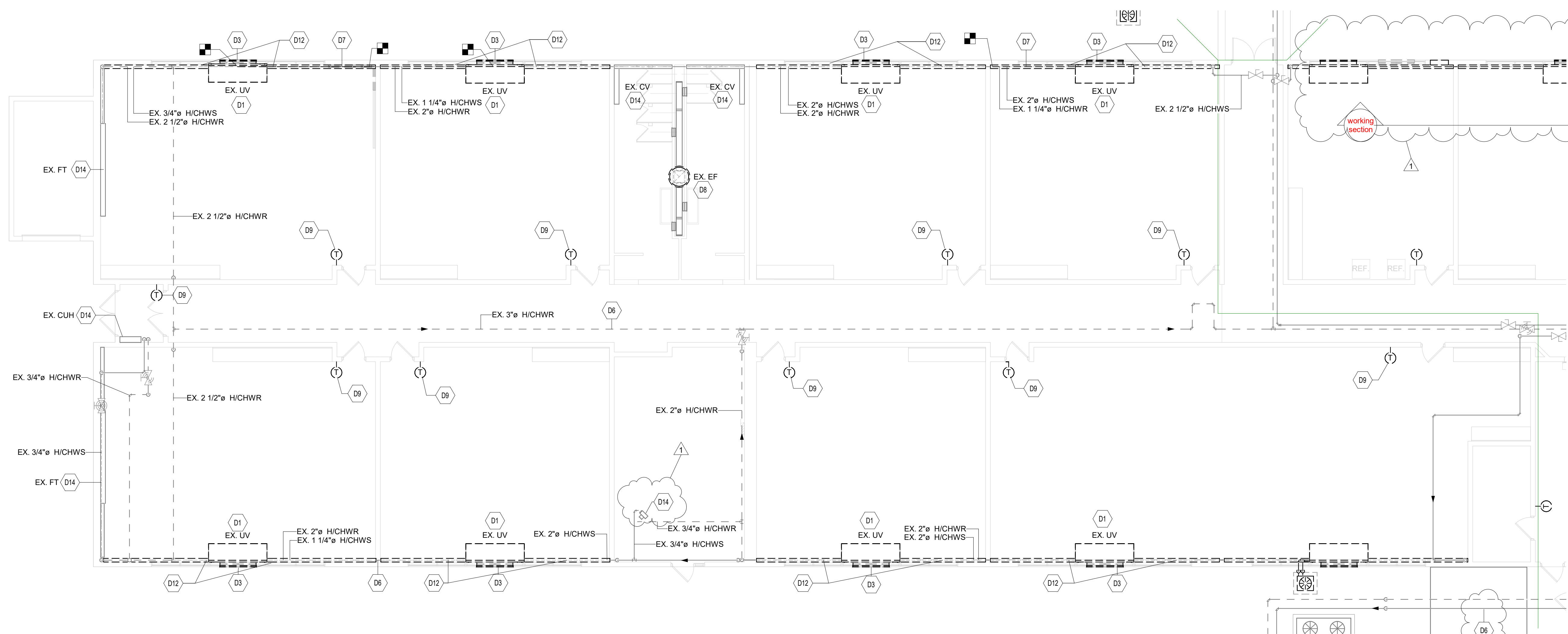
CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.



FIRST FLOOR DEMOLITION PLAN - UNIT D

SCALE: 1/8" = 1'-0"



FIRST FLOOR DEMOLITION PLAN - UNIT E

SCALE: 1/8" = 1'-0"

JONES ELEMENTARY SCHOOL MECHANICAL UPGRADES

2374 MCCOOL ROAD
PORTAGE, IN 46368

PORTAGE TOWNSHIP SCHOOLS



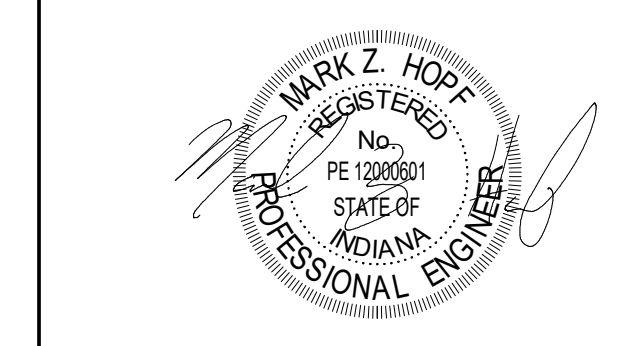
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KEY PLAN

CONSTRUCTION DOCUMENTS



DRAWN BY: DJA
PROJECT NUMBER: 224070.00
PROJECT ISSUE DATE: 10-02-2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	10-30-2024

FIRST FLOOR VENTILATION PLAN - UNIT D & E

M2.03

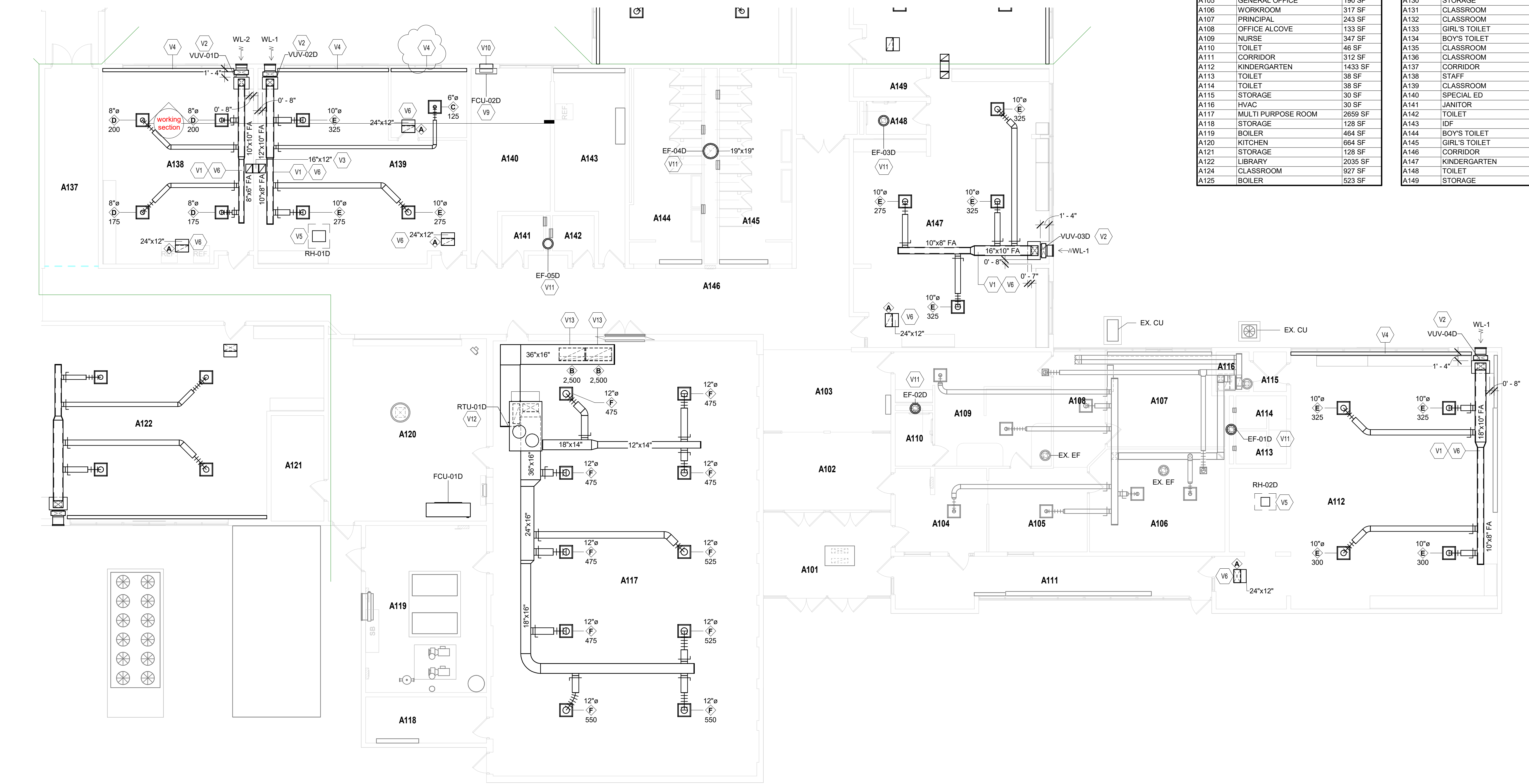
ROOM NO.	ROOM NAME	AREA (SF)	ROOM NO.	ROOM NAME	AREA (SF)
A101	SECURITY VESTIBULE	248 SF	A126	CLASSROOM	927 SF
A102	SUB LOBBY	228 SF	A127	CLASSROOM	1115 SF
A103	LOBBY	239 SF	A128	VESTIBULE	48 SF
A104	WAITING	174 SF	A129	CORRIDOR	1262 SF
A105	GENERAL OFFICE	190 SF	A130	STORAGE	205 SF
A106	WORKROOM	317 SF	A131	CLASSROOM	1115 SF
A107	PRINCIPAL	243 SF	A132	CLASSROOM	927 SF
A108	OFFICE ALCOVE	133 SF	A133	GIRL'S TOILET	241 SF
A109	NURSE	347 SF	A134	BOY'S TOILET	240 SF
A110	TOILET	46 SF	A135	CLASSROOM	927 SF
A111	CORRIDOR	312 SF	A136	CLASSROOM	927 SF
A112	KINDERGARTEN	1433 SF	A137	CORRIDOR	244 SF
A113	TOILET	38 SF	A138	STAFF	667 SF
A114	TOILET	38 SF	A139	CLASSROOM	738 SF
A115	STORAGE	30 SF	A140	SPECIAL ED	292 SF
A116	HVAC	30 SF	A141	JANITOR	41 SF
A117	MULTI PURPOSE ROOM	2659 SF	A142	TOILET	41 SF
A118	STORAGE	128 SF	A143	IDF	263 SF
A119	BOILER	464 SF	A144	BOY'S TOILET	311 SF
A120	KITCHEN	664 SF	A145	GIRL'S TOILET	322 SF
A121	STORAGE	128 SF	A146	CORRIDOR	1370 SF
A122	LIBRARY	2035 SF	A147	KINDERGARTEN	1112 SF
A124	CLASSROOM	927 SF	A148	TOILET	46 SF
A125	BOILER	523 SF	A149	STORAGE	48 SF

VENTILATION PLAN GENERAL NOTES

- ALL DUCTWORK, PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED.
- REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.
- ARRANGE DUCTWORK, PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COILS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OBSTRUCTIONS.
- SEAL DUCT PENETRATIONS THROUGH THE FLOOR AND/OR WALLS IN ACCORDANCE WITH MECHANICAL CODES AND SMACNA REQUIREMENTS. SEAL DUCT PENETRATIONS THROUGH FIRE RATED FLOORS AND/OR WALLS WITH A MATERIAL HAVING SAME FIRE RATING AS THE WALL AND/OR FLOOR.
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVERMENTS. ALL RECTANGULAR SHEET METAL DUCT SIZES SHOWN ARE INSIDE FREE AREA DIMENSIONS. ALL ROUND DUCT SIZES SHOWN ARE INSIDE DIAMETERS.
- PROVIDE BALANCING DAMPERS AT EACH DUCT BRANCH, SERVING DIFFUSER, GRILLE AND REGISTER.
- INSTALL WALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS, ETC. 4' ABOVE THE FINISH FLOOR IN ACCORDANCE WITH ADA REQUIREMENTS.
- COORDINATE ALL REQUIRED WALL, ROOF AND FLOOR OPENINGS (BOTH DIMENSIONS AND LOCATIONS) WITH ALL OTHER TRADES.
- COORDINATE MECHANICAL SYSTEM INSTALLATION WITH STRUCTURE, FIRE PROTECTION AND LIGHTING LAYOUT. PROVIDE ALL NECESSARY TRANSITIONS TO EQUIPMENT FROM SIZES SHOWN ON PLAN.
- ALL RETURN EXHAUST AIR DUCT ABOVE LOCKERS/SHOWER AREAS SHALL BE MADE OF ALUMINUM IN ACCORDANCE WITH SMACNA REQUIREMENTS.
- CONTRACTOR SHALL REMOVE THE CEILING TILES AS REQUIRED FOR INSTALLATION OF DUCTWORK. CONTRACTOR SHALL REPLACE ANY BROKEN OR DAMAGED CEILING TILES AS RESULT OF THE WORK.

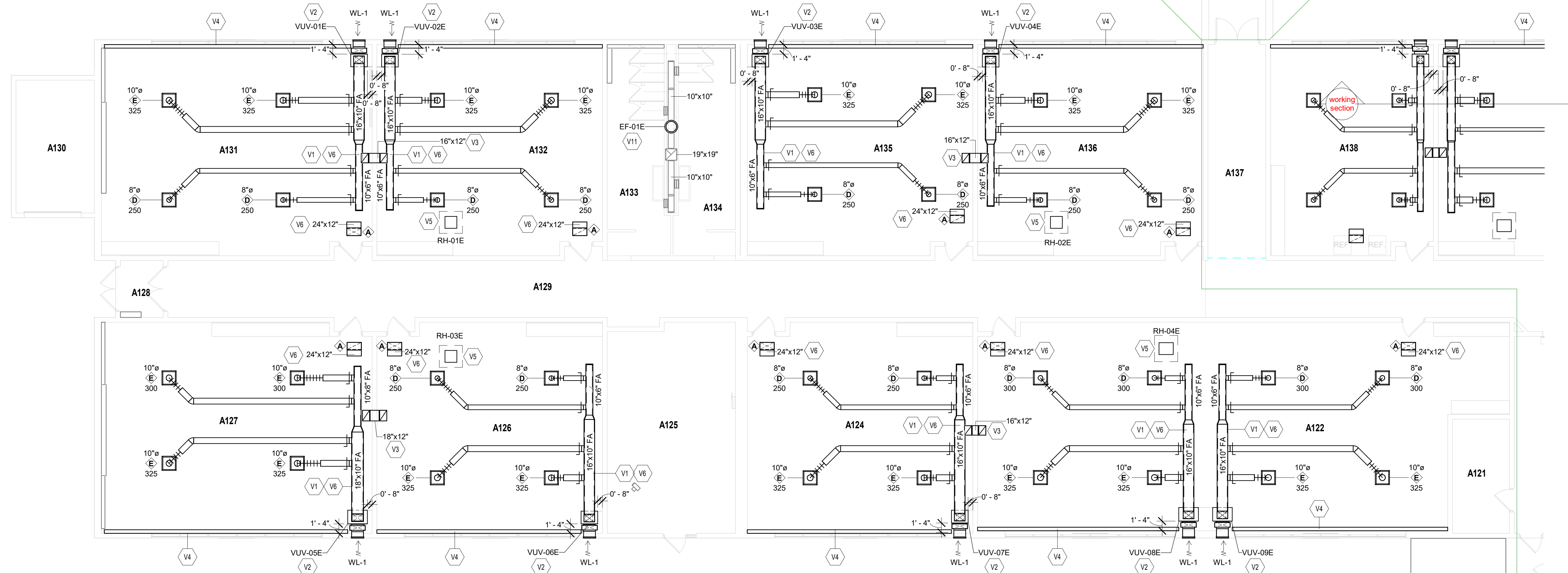
VENTILATION PLAN NOTES
(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

- | NO. | DESCRIPTION |
|-----|---|
| V1 | COORDINATE NEW DUCTWORK WITH EXISTING STRUCTURAL IN AREA. ROUTE BRANCH DUCTWORK BETWEEN EXISTING STRUCTURAL STEEL JOIST IN AREA. IF APPLICABLE, FLATTEN DUCTWORK AS REQUIRED TO GET UNDER EXISTING PIPING TO REMAIN. DUCTWORK IS FLATTENED, THE INSIDE FREE AREA OF THE DUCTWORK SHALL BE MAINTAINED. MODIFY DUCT ROUTING AS REQUIRED. |
| V2 | NEW VERTICAL UNIT VENTILATOR. CONTRACTOR SHALL PROVIDE METAL ENCLOSURE TO MATCH VERTICAL UNIT VENTILATORS MATERIAL, VIA TEMSPEC. METAL ENCLOSURE SHALL MATCH VIV HEIGHTS. UNLESS NOTED OTHERWISE, PROVIDE AN 8" WIDE METAL ENCLOSURE ON THE SIDE OF THE VIV AND A 14" DEEP ENCLOSURE TO BUD UP TO THE EXISTING EXTERIOR WALL. COORDINATE WITH DIMENSIONS ON SHEET AND FINAL FIELD DIMENSIONS PRIOR TO PURCHASE. |
| V3 | PROVIDE AIR TRANSFER DUCTWORK BETWEEN THE TWO AREAS. COORDINATE EXACT LOCATION WITH ALL TRADES. |
| V4 | CONTRACTOR SHALL PROVIDE 6" DEEP 18 GAUGE COLD-ROLLED STEEL PIPE COVER TO MATCH WIDTH OF EXISTING FIN TUBE ENCLOSURE. VERIFY IN FIELD. EXTEND PIPE COVER FROM TOP OF FIN TUBE ENCLOSURE TO FLOOR. PROVIDE ADDITIONAL PIPE COVER NEAR VUV AS REQUIRED. PAINTED TO MATCH VERTICAL UNIT VENTILATOR. |
| V5 | PROVIDE NEW AIR RELIEF HOOD WITH FACTORY MOTORIZED BACKDRAFT DAMPER. SEE SCHEDULE AND DETAILS ON M5.01. CONTRACTOR SHALL INSTALL ROOF VENTILATOR IN THE EXISTING ROOF IN SUCH A MANNER THAT IT DOES NOT VOID ANY WARRANTY THE OWNER HAS ON THEIR ROOFING SYSTEM. |
| V6 | DUCTWORK PROVIDED WITH INTERNAL LINED INSULATION. REFER TO SPECIFICATIONS. |
| V9 | NEW FAN COIL UNIT. PROVIDE 6" DEEP 18 GAUGE COLD-ROLLED STEEL PIPE COVER AROUND NEW FAN COIL. MATCH WIDTH OF ROOM. EXTEND PIPE COVER FROM TOP OF FAN COIL TO FLOOR. PAINTED TO MATCH FAN COIL UNIT. |
| V10 | FIELD INSTALL FACTORY PROVIDED WALL BOX PER MANUFACTURERS GUIDE. COORDINATE INSTALLATION WITH ARCHITECTURAL DRAWINGS. |
| V11 | INSTALL NEW ROOF MOUNTED EXHAUST FAN. COORDINATE NEW EXHAUST FAN INSTALLATION WITH EXISTING FIELD CONDITIONS. PROVIDE CURB ADAPTOR. FIELD VERIFY EXISTING CURB DIMENSIONS. MODIFY DUCTWORK AS REQUIRED. CONTRACTOR SHALL INSTALL EXHAUST FAN IN THE EXISTING ROOF IN SUCH A MANNER THAT IT DOES NOT VOID ANY WARRANTY THE OWNER HAS ON THEIR ROOFING SYSTEM. MODIFY DUCTWORK LAYOUT AS REQUIRED BASED ON APPROVED ROOFTOP UNIT SELECTIONS DURING SUBMITTAL PHASE. |
| V12 | COORDINATE NEW ROOFTOP UNIT PLACEMENT WITH EXISTING FIELD CONDITIONS (ROOF VENTRATIONS, ETC.). CONTRACTOR SHALL INSTALL ROOFTOP UNIT IN THE EXISTING ROOF IN SUCH A MANNER THAT IT DOES NOT VOID ANY WARRANTY THE OWNER HAS ON THEIR ROOFING SYSTEM. MODIFY DUCTWORK LAYOUT AS REQUIRED BASED ON APPROVED ROOFTOP UNIT SELECTIONS DURING SUBMITTAL PHASE. |
| V13 | PROVIDE VOLUME DAMPER IN VERTICAL DUCTWORK TO AIR DEVICE. |



FIRST FLOOR VENTILATION PLAN - UNIT D

SCALE: 1/8" = 1'-0"



FIRST FLOOR VENTILATION PLAN - UNIT E

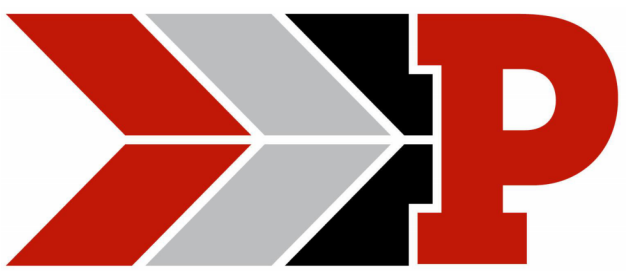
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VERIFICATION NOTE
CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.
SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

JONES ELEMENTARY SCHOOL MECHANICAL UPGRADES

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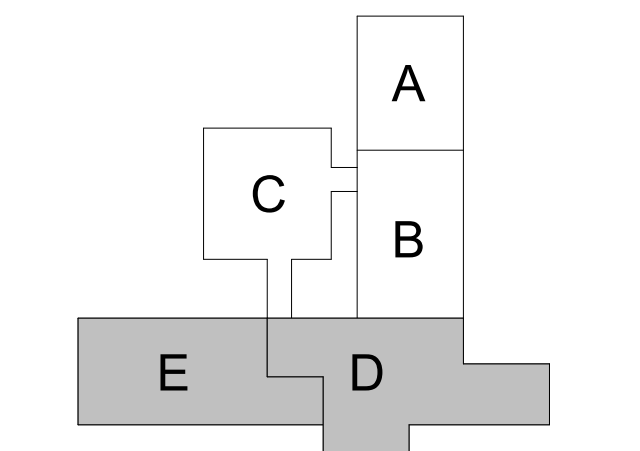
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KEY PLAN

CONSTRUCTION DOCUMENTS



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PROJECT NUMBER: 224070.00
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REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	10-30-2024

FIRST FLOOR PIPING AND
TEMPERATURE CONTROL PLAN -
UNIT D & E

M3.03

ROOM NO.	ROOM NAME	AREA (SF)
A101	SECURITY VESTIBULE	248 SF
A102	SUB LOBBY	228 SF
A103	LOBBY	239 SF
A104	WAITING	174 SF
A105	GENERAL OFFICE	190 SF
A106	WORKROOM	317 SF
A107	PRINCIPAL	243 SF
A108	OFFICE ALCOVE	133 SF
A109	NURSE	347 SF
A110	TOILET	46 SF
A111	CORRIDOR	312 SF
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A113	TOILET	38 SF
A114	TOILET	38 SF
A115	STORAGE	30 SF
A116	HVAC	30 SF
A117	MULTI PURPOSE ROOM	2659 SF
A118	STORAGE	128 SF
A119	BOILER	464 SF
A120	KITCHEN	664 SF
A121	STORAGE	128 SF
A122	LIBRARY	2035 SF
A124	CLASSROOM	927 SF
A125	BOILER	523 SF

ROOM NO.	ROOM NAME	AREA (SF)
A126	CLASSROOM	927 SF
A127	CLASSROOM	1115 SF
A128	VESTIBULE	48 SF
A129	CORRIDOR	1262 SF
A130	STORAGE	205 SF
A131	CLASSROOM	1115 SF
A132	CLASSROOM	927 SF
A133	GIRL'S TOILET	241 SF
A134	BOY'S TOILET	240 SF
A135	CLASSROOM	927 SF
A136	CLASSROOM	927 SF
A137	CORRIDOR	244 SF
A138	STAFF	667 SF
A139	CLASSROOM	798 SF
A140	SPECIAL ED	292 SF
A141	JANITOR	41 SF
A142	TOILET	41 SF
A143	IDF	263 SF
A144	BOY'S TOILET	311 SF
A145	GIRL'S TOILET	322 SF
A146	CORRIDOR	1370 SF
A147	KINDERGARTEN	1112 SF
A148	TOILET	46 SF
A149	STORAGE	48 SF

HVAC PIPING PLAN GENERAL NOTES

- ALL PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.
- ARRANGE PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COILS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OBSTRUCTIONS.
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT. HYDRONIC SUPPLY AND RETURN PIPING SHALL BE THE SAME SIZE UNLESS OTHERWISE NOTED.
- THE EXISTING PIPING WAS ORIGINALLY LAID OUT IN A 2-PIPE APPROACH WITH REVERSE RETURN.

HVAC TEMPERATURE CONTROL GENERAL NOTES

- ALL EXISTING PNEUMATIC CONTROLS SHALL BE REMOVED AS PART OF THIS WORK. CONTRACTOR IS RESPONSIBLE FOR REPORTING ANY MISSING PNEUMATIC DEVICES.
- ALL EXISTING PNEUMATIC DEVICES INCLUDING BUT NOT LIMITED TO PNEUMATIC TUBING, AIR COMPRESSOR, ETC. SHALL BE REMOVED AS PART OF THIS WORK.

HVAC PIPING PLAN NOTES

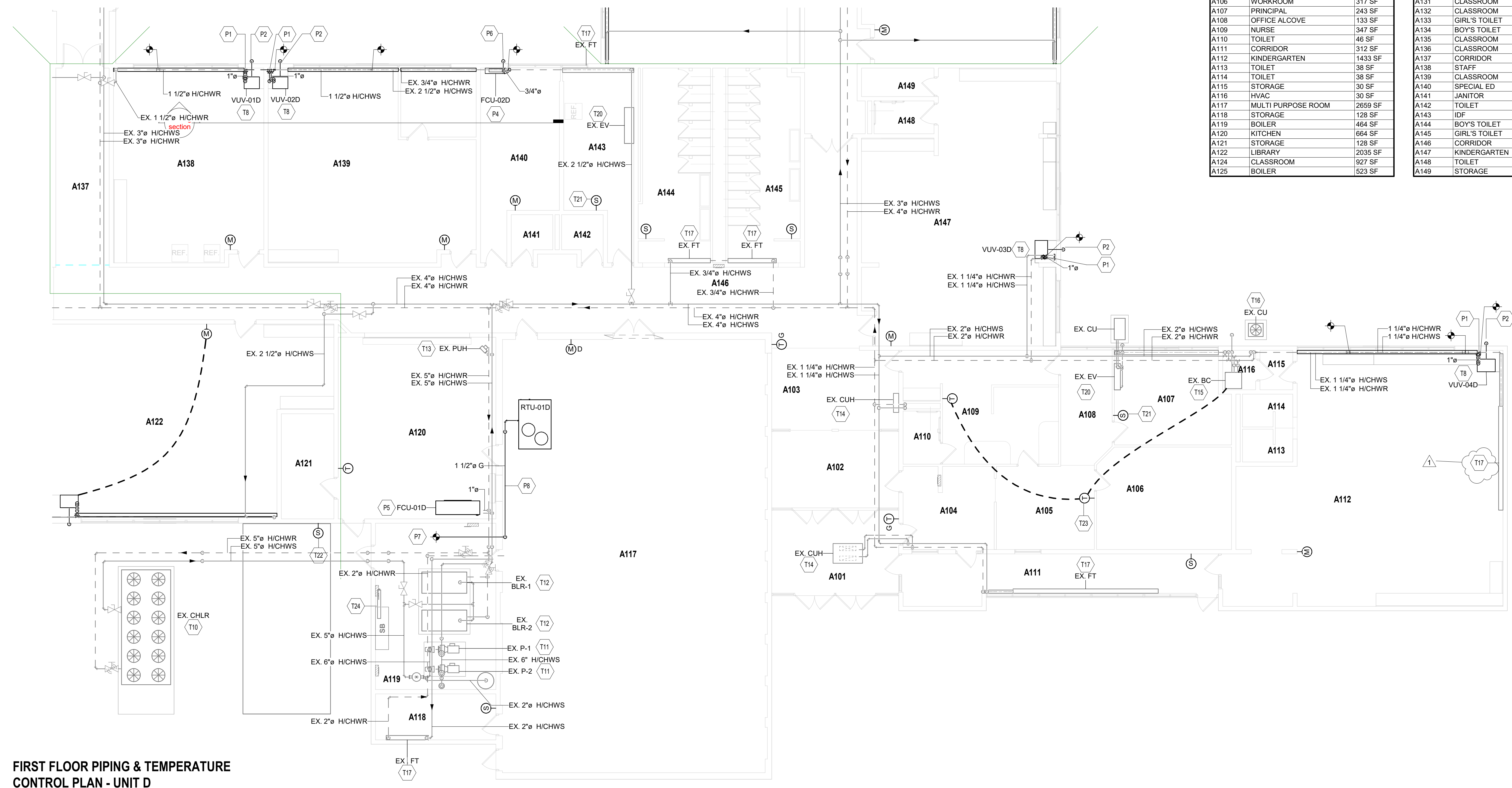
(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

- | NO. | DESCRIPTION |
|-----|--|
| P1 | EXTEND CHANGEOVER WATER PIPING TO NEW VERTICAL UNIT VENTILATOR. SIZE PIPE CONNECTIONS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. MAKE MODIFICATIONS AS REQUIRED. |
| P2 | CONTRACTOR SHALL DRILL A NEW CONDENSATE HOLE IN THE VERTICAL UNIT VENTILATOR AND RELOCATED FLEXIBLE HOSE WITHIN THE UNIT THE NEW LOCATION. NEW HOLE SHALL BE A MINIMUM OF AT LEAST 18" AFF. EXTEND INSULATED CONDENSATE PIPING THROUGH EXTERIOR WALL. SEAL WATER TIGHT. TURN PIPING DOWN AND CUT AT 45° ANGLE. INSTALL END OF PIPE 6" ABOVE GRADE WITH AN INSECT SCREEN. |
| P4 | EXTEND CHANGEOVER WATER PIPING TO NEW FAN COIL UNIT. SIZE PIPE CONNECTIONS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. MAKE MODIFICATIONS AS REQUIRED. EXTEND INSULATED CONDENSATE PIPING THROUGH EXTERIOR WALL. SEAL WATER TIGHT. TURN PIPING DOWN AND CUT AT 45° ANGLE. INSTALL END OF PIPE 6" ABOVE GRADE WITH AN INSECT SCREEN. |
| P5 | INSTALL NEW FAN COIL UNIT IN THE SAME LOCATION AS EXISTING FAN COIL UNIT. RECONNECT TO EXISTING CONDENSATE AND HYDRONIC PIPING AS SHOWN. INSTALL PER MANUFACTURER'S GUIDE. BOTTOM OF UNIT TO MATCH EXISTING FAN COIL INSTALLATION HEIGHT. FASTEN UNIT AND SUPPORT SECURELY. |
| P6 | EXTEND INSULATED CONDENSATE PIPING THROUGH EXTERIOR WALL. SEAL WATER TIGHT. TURN PIPING DOWN AND CUT AT 45° ANGLE. INSTALL END OF PIPE 6" ABOVE GRADE WITH AN INSECT SCREEN. |
| P7 | CONNECT NEW 1-1/2" GAS LINE (250 MBH) TO EXISTING GAS PIPING UP THROUGH ROOF. CONTRACTOR SHALL VERIFY EXISTING METER/REGULATOR IS ADEQUATE FOR ADDITIONAL LOAD WITH UTILITY COMPANY. |
| P8 | PROVIDE 2 PSI x 7"WC PRESSURE REDUCING REGULATOR WITH GAS COOK, UNION AND DIRT LEG. RUN GAS LINES UP THROUGH THE SAME PORTALS AS ELECTRICAL. COORDINATE LOCATIONS WITH ELECTRICAL CONTRACTOR. |
| T8 | TEMPERATURE CONTROL. CONTRACTOR SHALL FIELD INSTALL A THERMOSTAT IN EACH UNIT TO MONITOR INTERNAL VAV TEMPERATURE. |
| T10 | EXISTING CHILLER TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED. REPLACE EXISTING PNEUMATIC CONTROL VALVES WITH NEW ELECTRONIC CONTROL VALVES. |
| T11 | EXISTING PUMPS TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. |
| T12 | EXISTING BOILER TO REMAIN IN PLACE. REMOVE ALL EXISTING HEATING WATER ELECTRONIC TEMPERATURE SENSORS, ASSOCIATED CONTROLS, SAFETIES AND CONTROL ACCESSORIES SHALL BE REMOVED AND DISPOSED OF OFF SITE. PROVIDE NEW COMBUSTION AIR INTERLOCK, CONTROLS, SENSORS, SAFETIES AND CONTROL ACCESSORIES. |
| T13 | EXISTING PROPPELLER UNIT HEATER TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. REPLACE EXISTING PNEUMATIC VALVES WITH NEW ELECTRONIC VALVES. |
| T14 | EXISTING CABINET UNIT HEATER TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. REPLACE EXISTING PNEUMATIC VALVES WITH NEW ELECTRONIC VALVES. |
| T15 | EXISTING BLOWER COIL TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. |
| T16 | EXISTING CONDENSING UNIT TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. |
| T17 | EXISTING FINNED-TUBE TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. REPLACE EXISTING PNEUMATIC VALVES WITH NEW ELECTRONIC VALVES. |
| T18 | EXISTING CONDENSING UNIT TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. REPLACE EXISTING PNEUMATIC VALVES WITH NEW ELECTRONIC VALVES. |
| T20 | EXISTING WALL EVAPORATOR AND ASSOCIATED CONDENSING UNIT TO REMAIN IN PLACE. |
| T21 | PROVIDE NEW TEMPERATURE SENSOR FOR MONITORING THROUGH GAS. |
| T22 | PROVIDE NEW TEMPERATURE SENSOR IN EXISTING WALK-IN COOLER AND EXISTING WALK-IN FREEZER (IF PRESENT) FOR MONITORING THROUGH GAS. |
| T23 | CONTROL CONTRACTOR SHALL PROVIDE AVERAGING BETWEEN BOTH THERMOSTATS. |
| T24 | EXISTING COMBUSTION AIR DAMPER TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. REPLACE EXISTING PNEUMATIC DAMPER OPERATOR WITH NEW ELECTRONIC DAMPER OPERATOR. DAMPER OPERATORS PROVIDED AND INSTALLED BY TEMPERATURE CONTROL CONTRACTOR. |

VERIFICATION NOTE

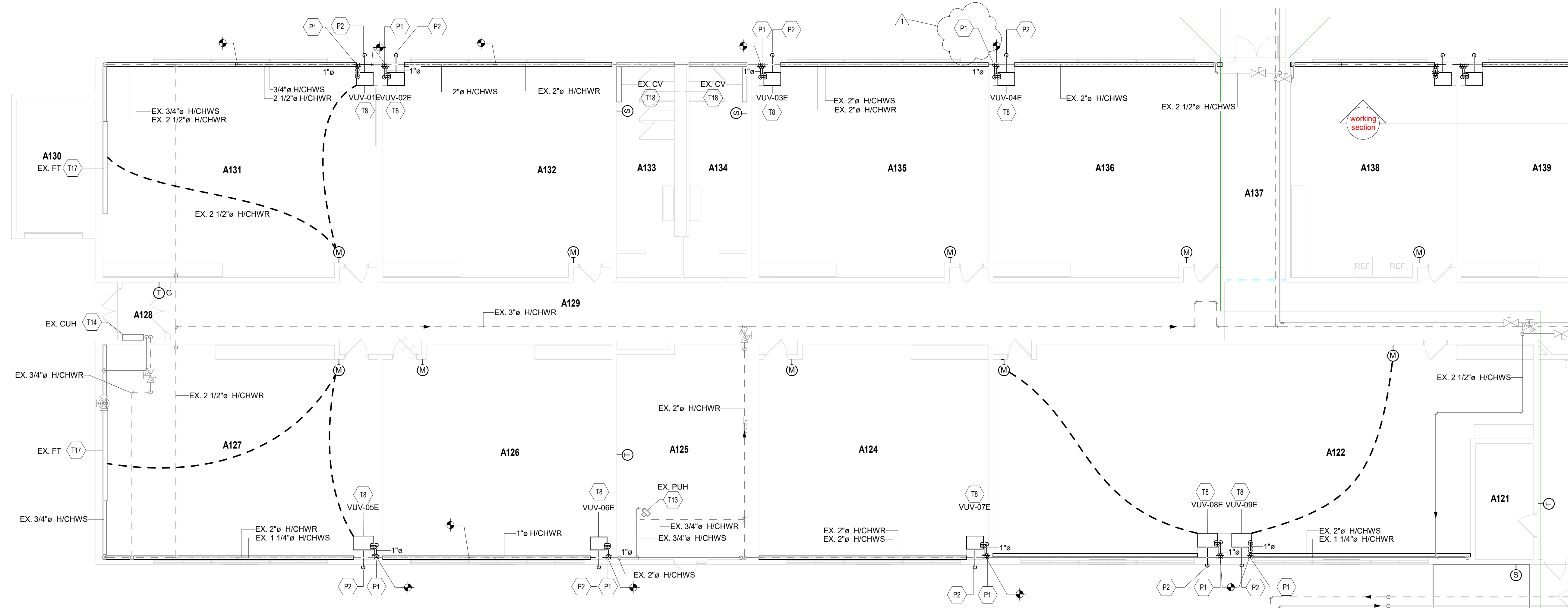
CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.



FIRST FLOOR PIPING & TEMPERATURE CONTROL PLAN - UNIT D

SCALE: 1/8" = 1'-0"



FIRST FLOOR PIPING & TEMPERATURE CONTROL PLAN - UNIT E

SCALE: 1/8" = 1'-0"

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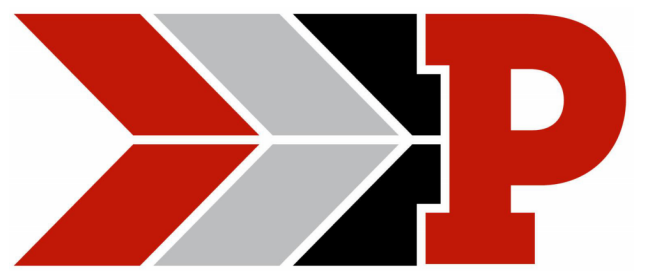
TEMPERATURE CONTROL PLAN GENERAL NOTES

- A. ALL EXISTING PNEUMATIC CONTROLS SHALL BE REMOVED AS PART OF THIS WORK. CONTRACTOR IS RESPONSIBLE FOR REPORTING ANY MISSING PNEUMATIC DEVICES.
- B. ALL EXISTING PNEUMATIC DEVICES INCLUDING BUT NOT LIMITED TO PNEUMATIC TUBING, AIR COMPRESSOR, ETC. SHALL BE REMOVED AS PART OF THIS WORK.

JONES ELEMENTARY SCHOOL MECHANICAL UPGRADE

2825 Russell St,
Portage, IN 46368

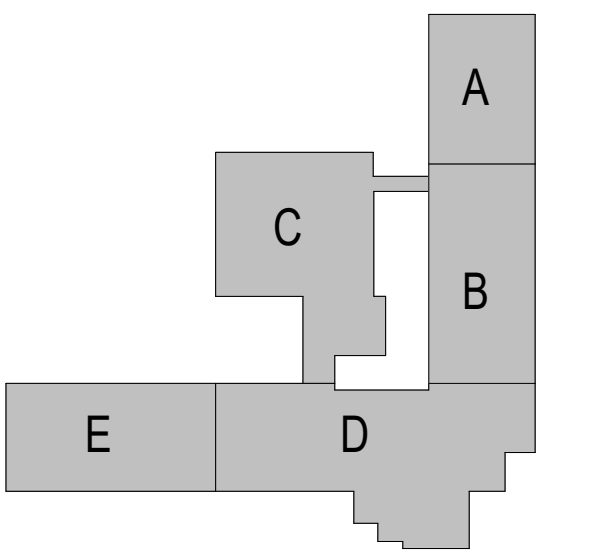
PORTAGE TOWNSHIP SCHOOLS



ARCHITECT

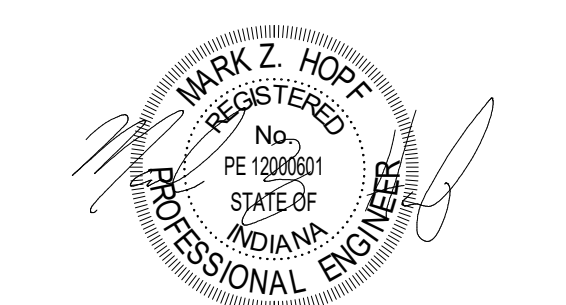


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350 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204



KEY PLAN

CONSTRUCTION DOCUMENTS

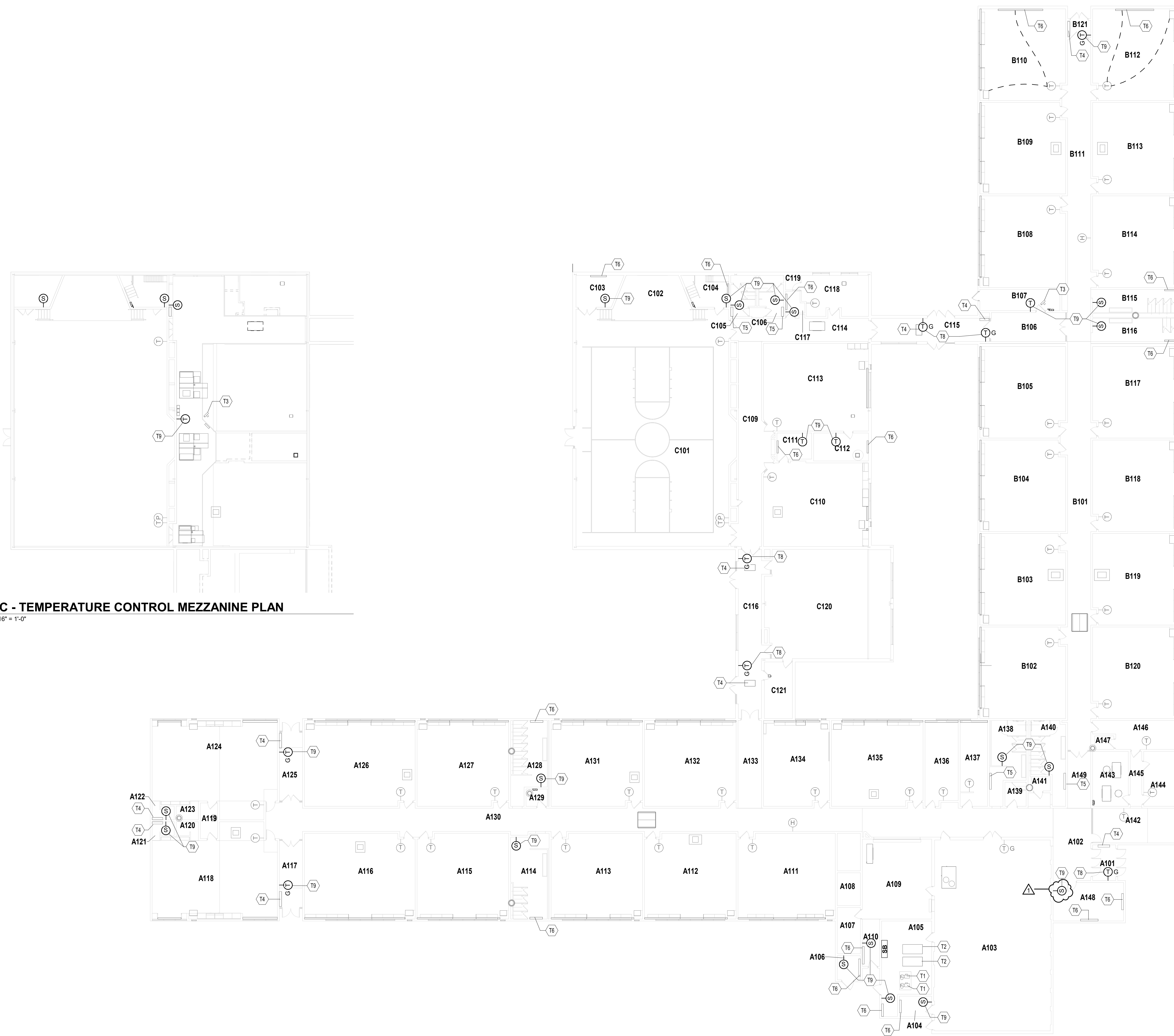


DRAWN BY: DJA
PROJECT NUMBER: 224070.0
PROJECT ISSUE DATE: 10-02-2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	10-30-2024

CENTRAL ELEMENTARY SCHOOL TEMPERATURE PLANS

M3.11



UNIT C - TEMPERATURE CONTROL MEZZANINE PLAN
SCALE: 1/16" = 1'-0"

FIRST FLOOR CENTRAL TEMPERATURE CONTROL PLAN
SCALE: 1/16" = 1'-0"

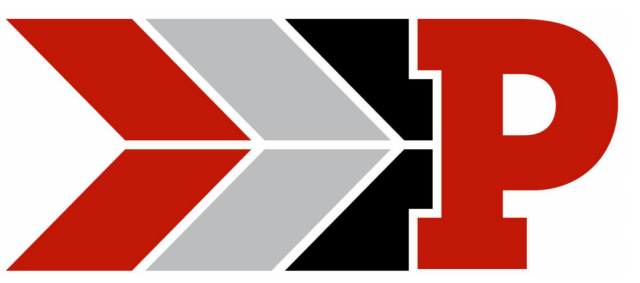
VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

JONES ELEMENTARY SCHOOL MECHANICAL UPGRADES

2374 MCCOOL ROAD
PORTAGE, IN 46368

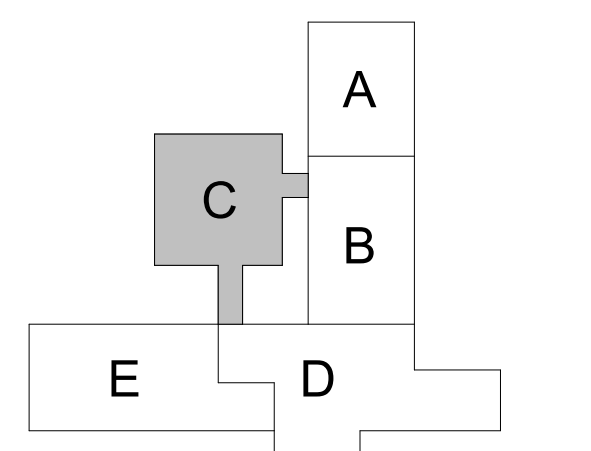
PORTAGE TOWNSHIP
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KEY PLAN

CONSTRUCTION DOCUMENTS



DRAWN BY: DJA
PROJECT NUMBER: 224070.00
PROJECT ISSUE DATE: 10-02-2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	10-30-2024

MECHANICAL MEZZANINE PLAN

M-401

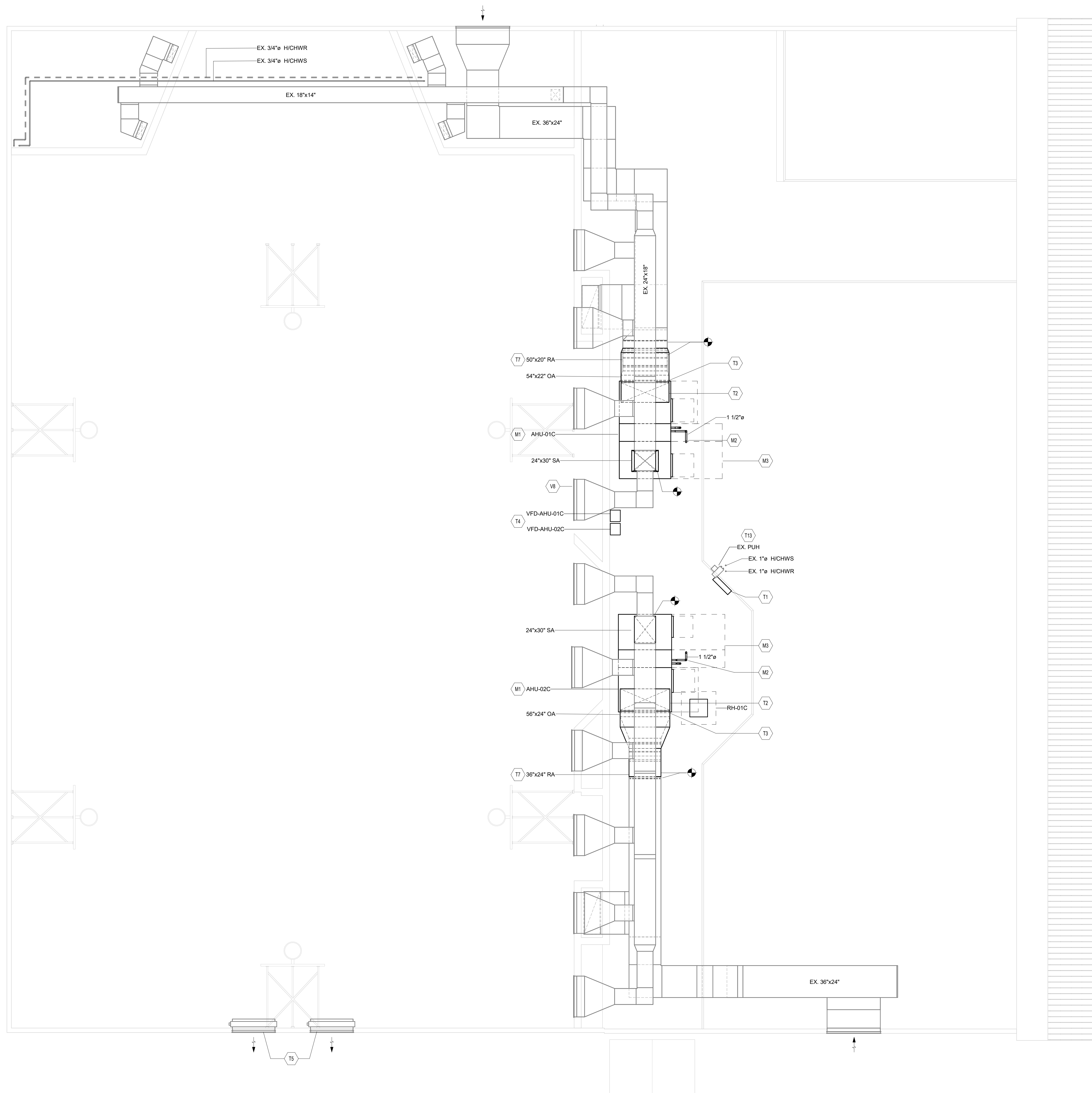
MECHANICAL ROOM PLAN GENERAL NOTES

- A. ALL DUCTWORK, PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED.
- B. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.
- C. ARRANGE DUCTWORK, PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COOLS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OBSTRUCTIONS.
- D. SEAL DUCT PENETRATIONS THROUGH THE FLOOR AND/OR WALLS IN ACCORDANCE WITH MECHANICAL CODE AND SMACNA REQUIREMENTS. SEAL DUCT PENETRATIONS THROUGH FIRE RATED FLOORS AND/OR WALLS WITH A MATERIAL HAVING SAME FIRE RATING AS THE WALL AND/OR FLOOR.
- E. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT.
- F. ALL RECTANGULAR SHEET METAL DUCT SIZES SHOWN ARE INSIDE FREE AREA DIMENSIONS. ALL ROUND DUCT SIZES SHOWN ARE INSIDE DIAMETERS.
- G. PROVIDE BALANCING DAMPER AT EACH DUCT BRANCH, SERVING DIFFUSER, GRILLE AND REGISTER.
- H. INSTALL WALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTS, ETC. 4' ABOVE THE FINISH FLOOR IN ACCORDANCE WITH ADA REQUIREMENTS.
- I. COORDINATE ALL REQUIRED WALL, ROOF AND FLOOR OPENINGS (BOTH DIMENSIONS AND LOCATIONS) WITH ALL OTHER TRADES.
- J. COORDINATE MECHANICAL SYSTEM INSTALLATION WITH STRUCTURE, FIRE PROTECTION AND LIGHTING LAYOUT.
- K. PROVIDE ALL NECESSARY TRANSITIONS TO EQUIPMENT FROM SIZES SHOWN ON PLAN.
- L. ALL RETURN/EXHAUST AIR DUCT ABOVE LOCKERS/SHOWER AREAS SHALL BE MADE OF ALUMINUM IN ACCORDANCE WITH SMACNA REQUIREMENTS.
- M. HYDRONIC SUPPLY AND RETURN PIPING SHALL BE THE SAME SIZE UNLESS OTHERWISE NOTED.

MECHANICAL ROOM PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

- | NO. | DESCRIPTION |
|-----|--|
| M1 | INSTALL NEW AIR HANDLING UNIT IN SIMILAR LOCATION AS EXISTING AIR HANDLING UNIT. RECONNECT INTO EXISTING OUTSIDE AIR, RETURN AIR AND SUPPLY AIR DUCTWORK AS SHOWN. MODIFY EXISTING DUCTWORK AS REQUIRED TO CONNECT TO NEW AIR HANDLING UNIT. CONNECT INTO EXISTING HYDRONIC PIPING IN AREA. |
| M2 | ROUTE PIPING DOWN THRU CONCRETE SLAB. CONNECT TO EXISTING BRANCH PIPING THAT SERVED AHU IN THIS AREA. MAKE MODIFICATIONS AS NECESSARY. PROVIDE NEW ISOLATION VALVES AND CONTROL VALVE ABOVE CONCRETE. |
| M3 | UNIT MANUFACTURERS REQUIRED CLEARANCE AROUND AIR HANDLING UNIT. EXACT SIZE REQUIREMENTS MAY VARY BY UNIT MANUFACTURER AND IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE ALL REQUIREMENTS FOR PROVIDED EQUIPMENT AND EXISTING EQUIPMENT. |
| T1 | NEW AIR HANDLING UNIT CONTROL PANEL. MODIFY LOCATION AS NEEDED BASED ON FIELD CONDITIONS. MOUNT TO EXISTING RAIL. |
| T2 | OUTSIDE AIR CONTROL DAMPERS FACTORY MOUNTED IN AIR HANDLING UNIT. DAMPER OPERATORS PROVIDED AND INSTALLED BY TEMPERATURE CONTROL CONTRACTOR. |
| T3 | RETURN AIR CONTROL DAMPERS FACTORY MOUNTED IN AIR HANDLING UNIT. DAMPER OPERATORS PROVIDED AND INSTALLED BY TEMPERATURE CONTROL CONTRACTOR. |
| T4 | TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE INTERCONNECTING WIRING BETWEEN VARIABLE FREQUENCY CONTROLLERS AND EQUIPMENT. |
| T5 | EXISTING RELIEF AIR DAMPER TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. REPLACE EXISTING PNEUMATIC DAMPER OPERATOR WITH NEW ELECTRONIC DAMPER OPERATOR. DAMPER OPERATORS PROVIDED AND INSTALLED BY TEMPERATURE CONTROL CONTRACTOR. |
| T7 | TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE AND INSTALL DUCT MOUNTED CARBON DIOXIDE, HUMIDITY SENSOR AND TEMPERATURE SENSOR IN RETURN MAIN. TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE AND INSTALL DUCT MOUNTED HUMIDITY SENSOR AND TEMPERATURE SENSOR IN OUTSIDE AIR MAIN. |
| T13 | EXISTING PROPELLER UNIT HEATER TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS. REPLACE EXISTING PNEUMATIC VALVES WITH NEW ELECTRONIC VALVES. |
| V8 | EXISTING GRILLES/DIFFUSERS ARE TO BE CLEANED TO LIKE NEW CONDITION. (TYP OF 10) |



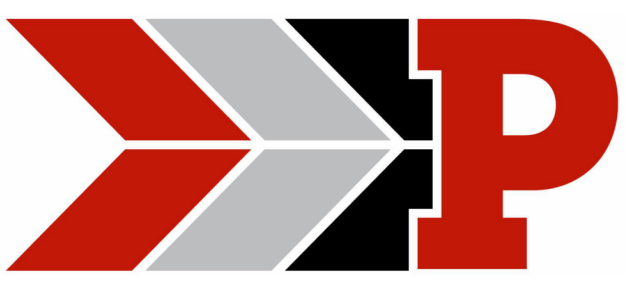
MECHANICAL MEZZANINE HVAC PLAN
SCALE: 1/4" = 1'-0"

VERIFICATION NOTE
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SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

JONES ELEMENTARY SCHOOL MECHANICAL UPGRADES

2374 MCCOOL ROAD
PORTAGE, IN 46368

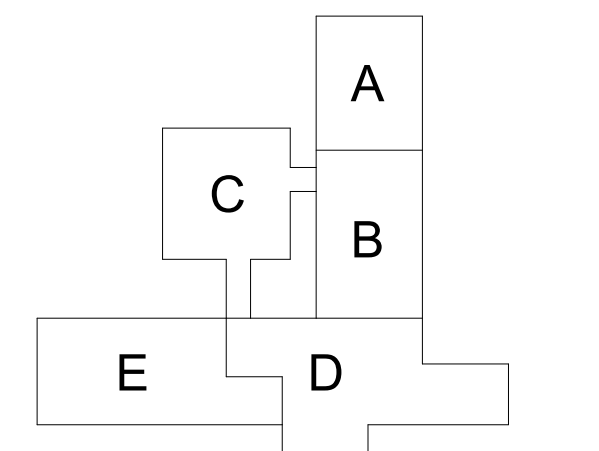
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KEY PLAN

CONSTRUCTION DOCUMENTS



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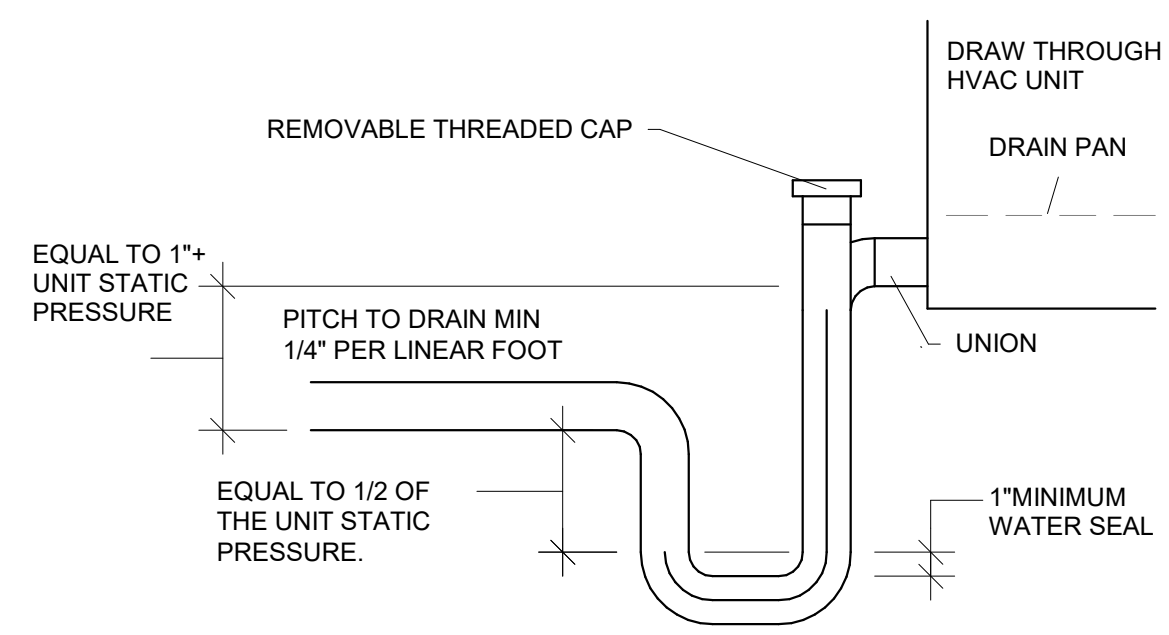
PROJECT NUMBER: 224070.00

PROJECT ISSUE DATE: 10-02-2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	10-30-2024

MECHANICAL DETAILS

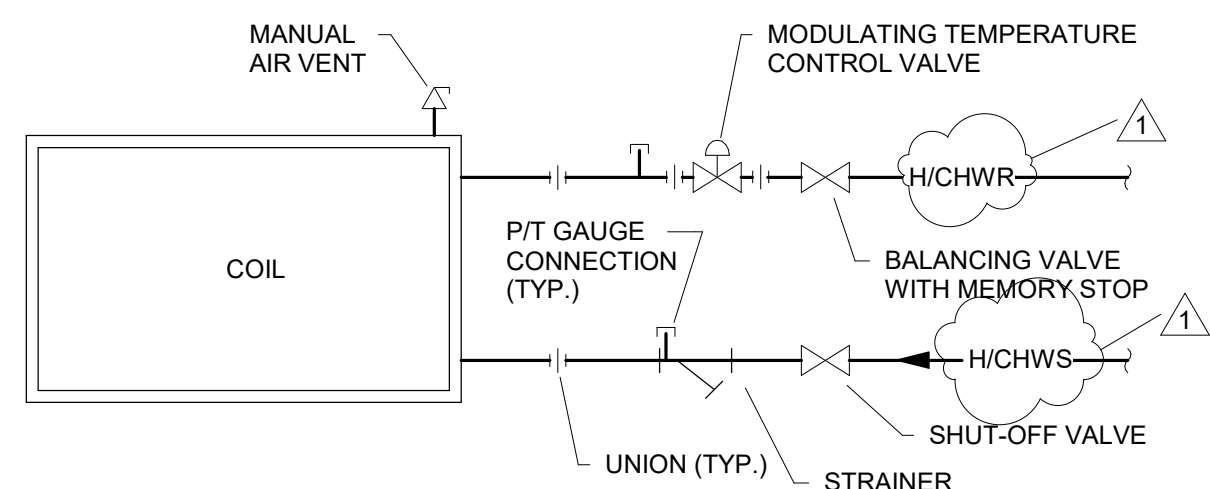
M-501



- NOTE:
- SEE PLANS FOR PIPE SIZES.
 - REFER TO SPECIFICATIONS FOR INSULATION REQUIRED.

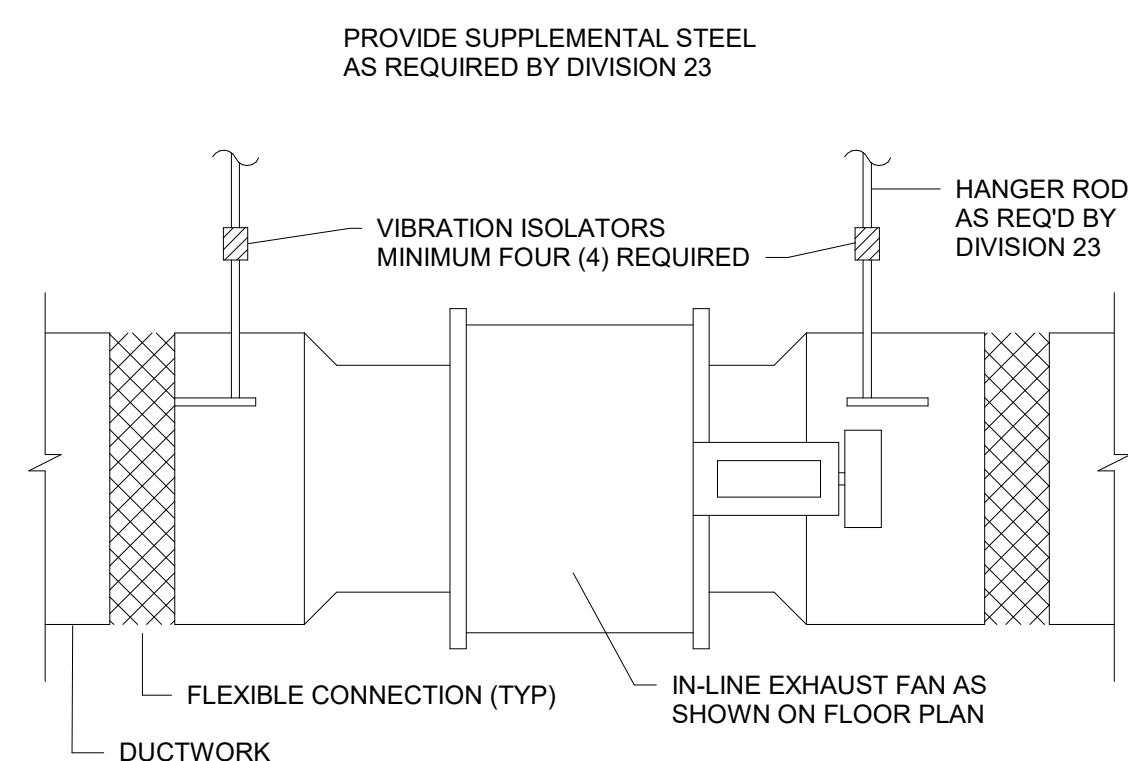
14 CONDENSATE TRAP PIPING DIAGRAM

NOT TO SCALE



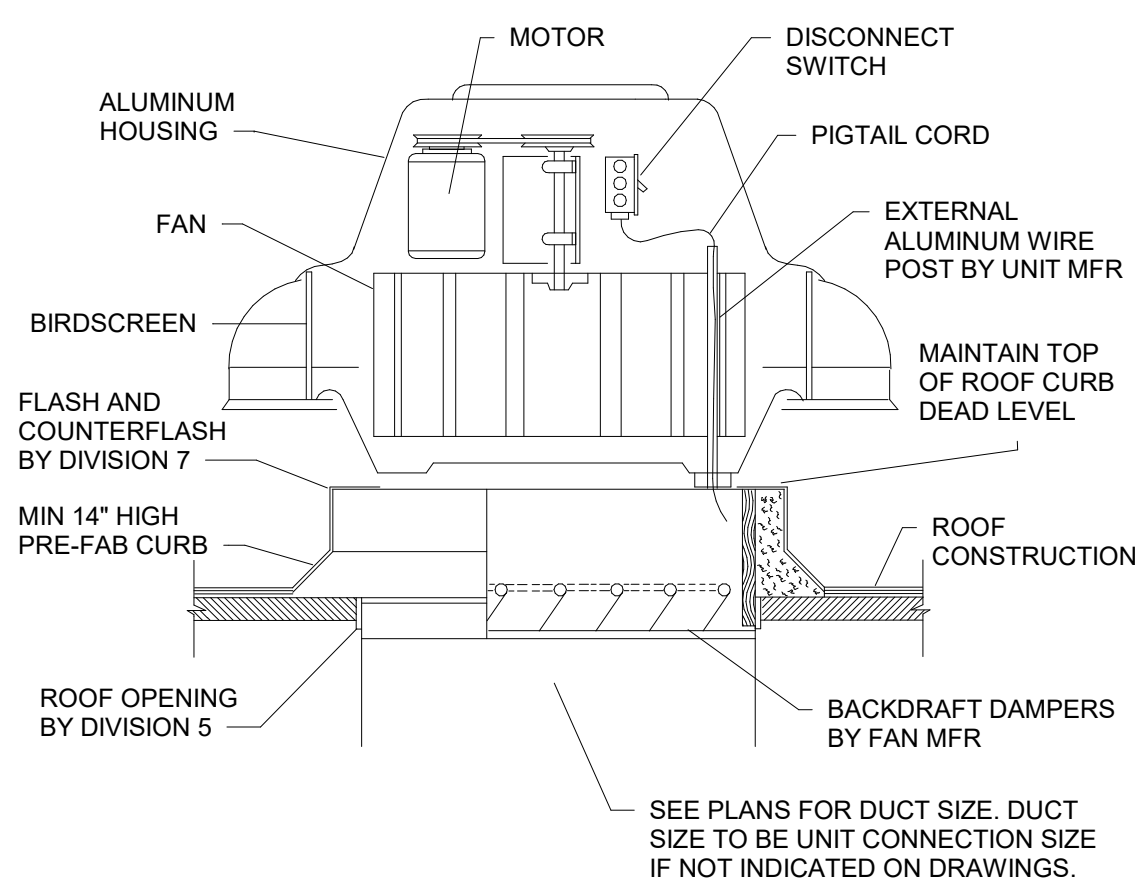
15 TERMINAL UNIT HOT WATER (TWO-WAY VALVE) PIPING DETAIL

NOT TO SCALE



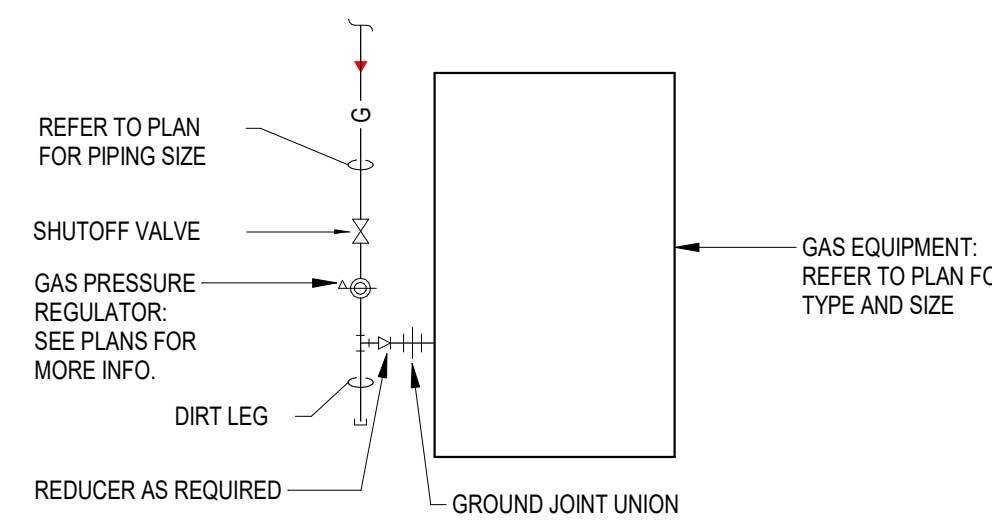
16 IN-LINE EXHAUST FAN MOUNTING DETAIL

NOT TO SCALE



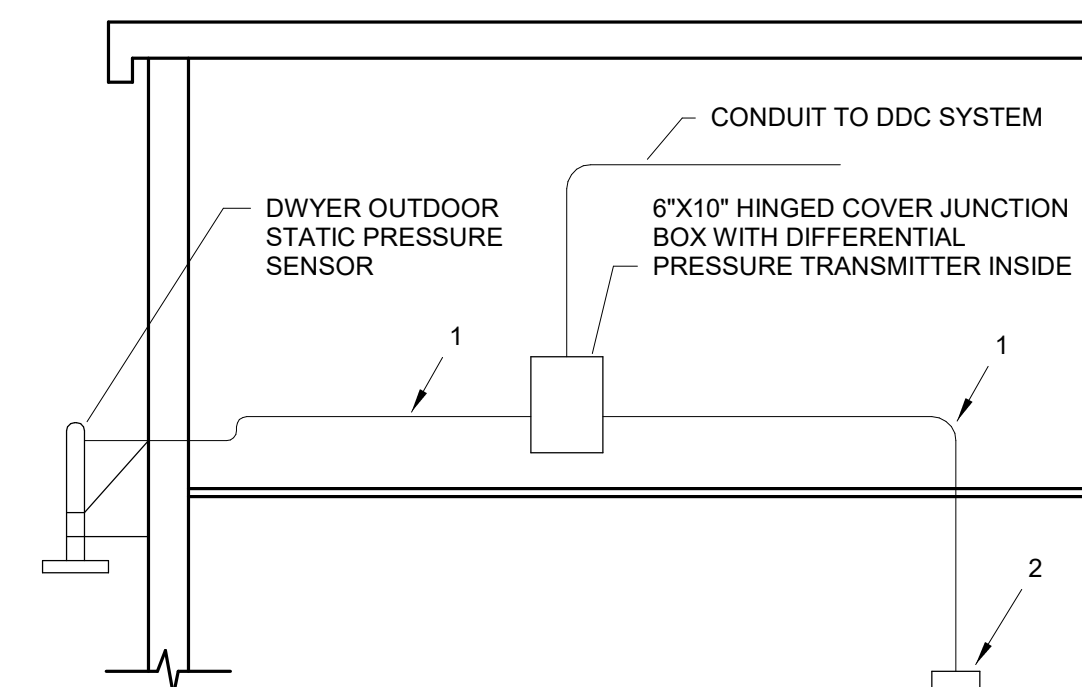
17 ROOF-MOUNTED EXHAUST FAN INSTALLATION DETAIL

NOT TO SCALE



18 GAS DIRT LEG PIPING DETAIL (WITH PRESSURE REGULATOR)

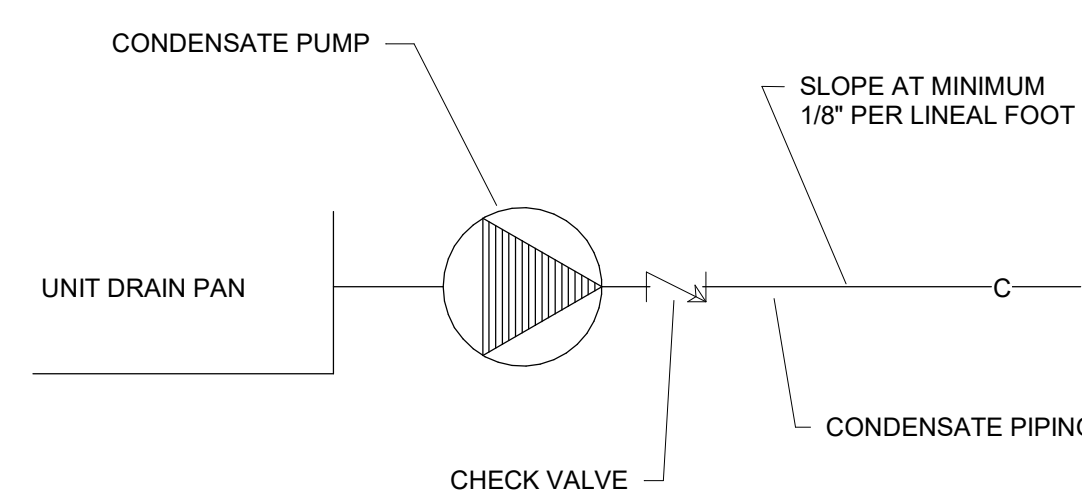
NOT TO SCALE



- NOTES:
- MINIMUM 3/8" O.D. TUBING. EQUALIZE LENGTH OF SENSOR TUBES.
 - TERMINATE TUBING IN AN EMPTY THERMOSTAT COVER, LOCATED AS SHOWN ON THE DRAWINGS.

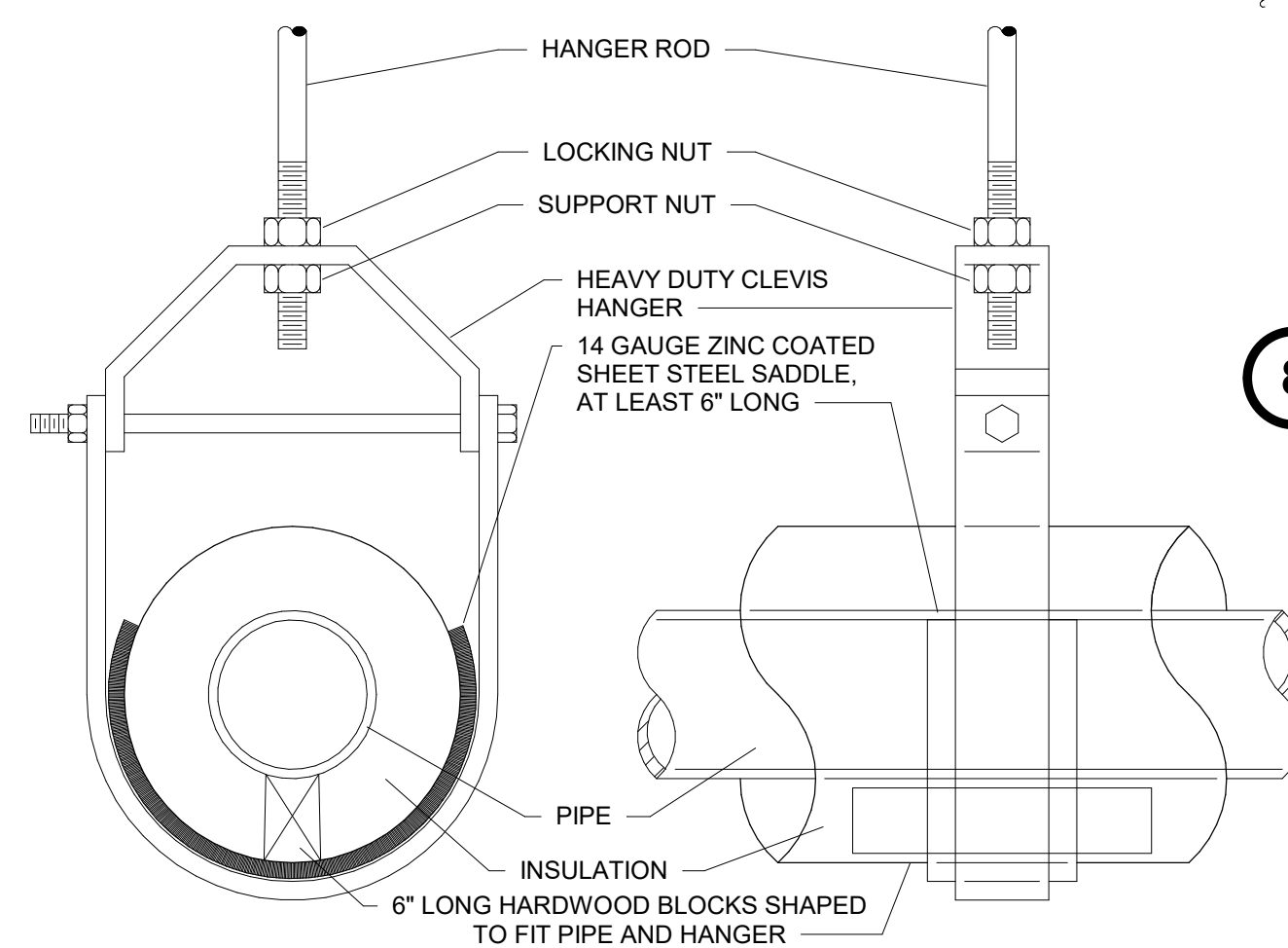
10 BUILDING STATIC PRESSURE SENSOR DETAIL

NOT TO SCALE



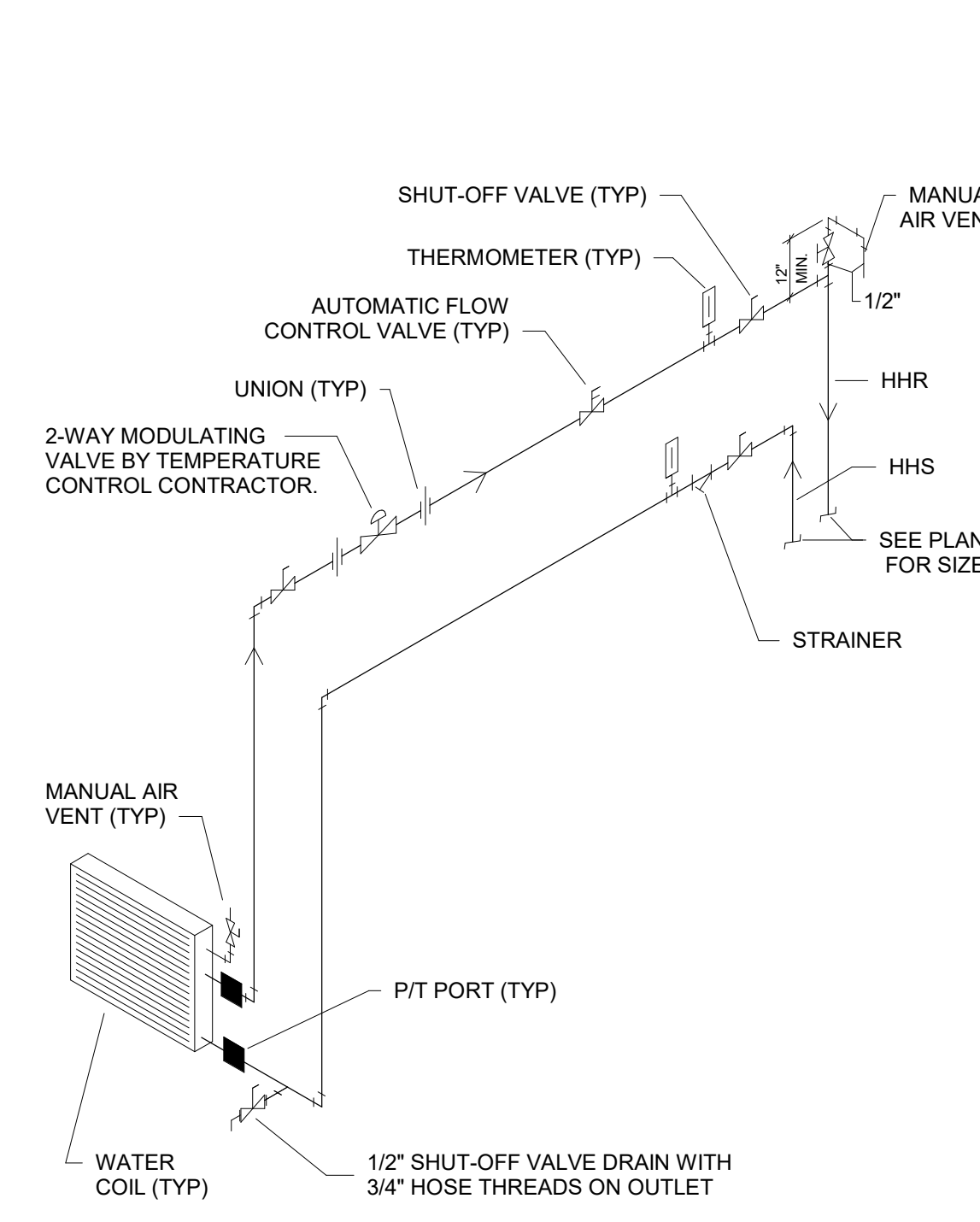
11 CONDENSATE PUMP/PIPE DETAIL

NOT TO SCALE



12 PIPE HANGERS (6" AND SMALLER)

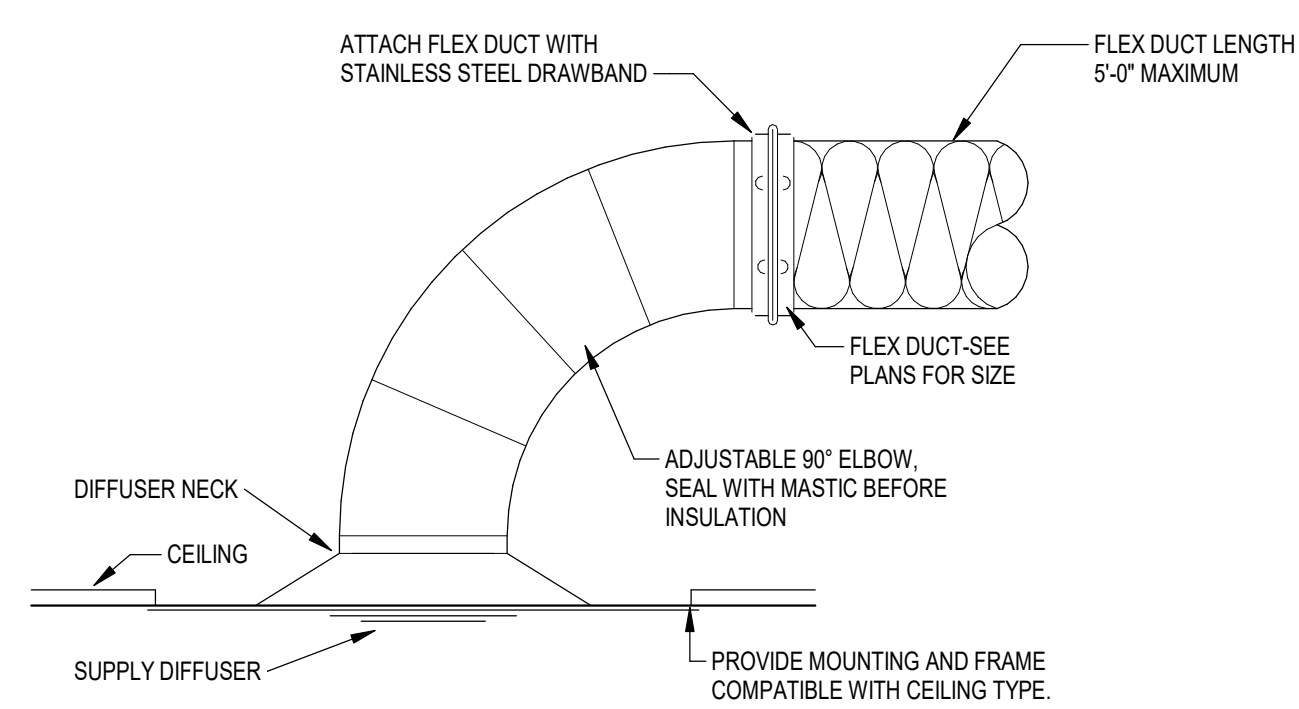
NOT TO SCALE



- NOTES:
- INSTALL ALL PIPING TO CLEAR FILTER ACCESS, DRIVE BELTS, AND ALL ACCESS POINTS.
 - COORDINATE NUMBER OF COILS WITH UNIT MANUFACTURER.

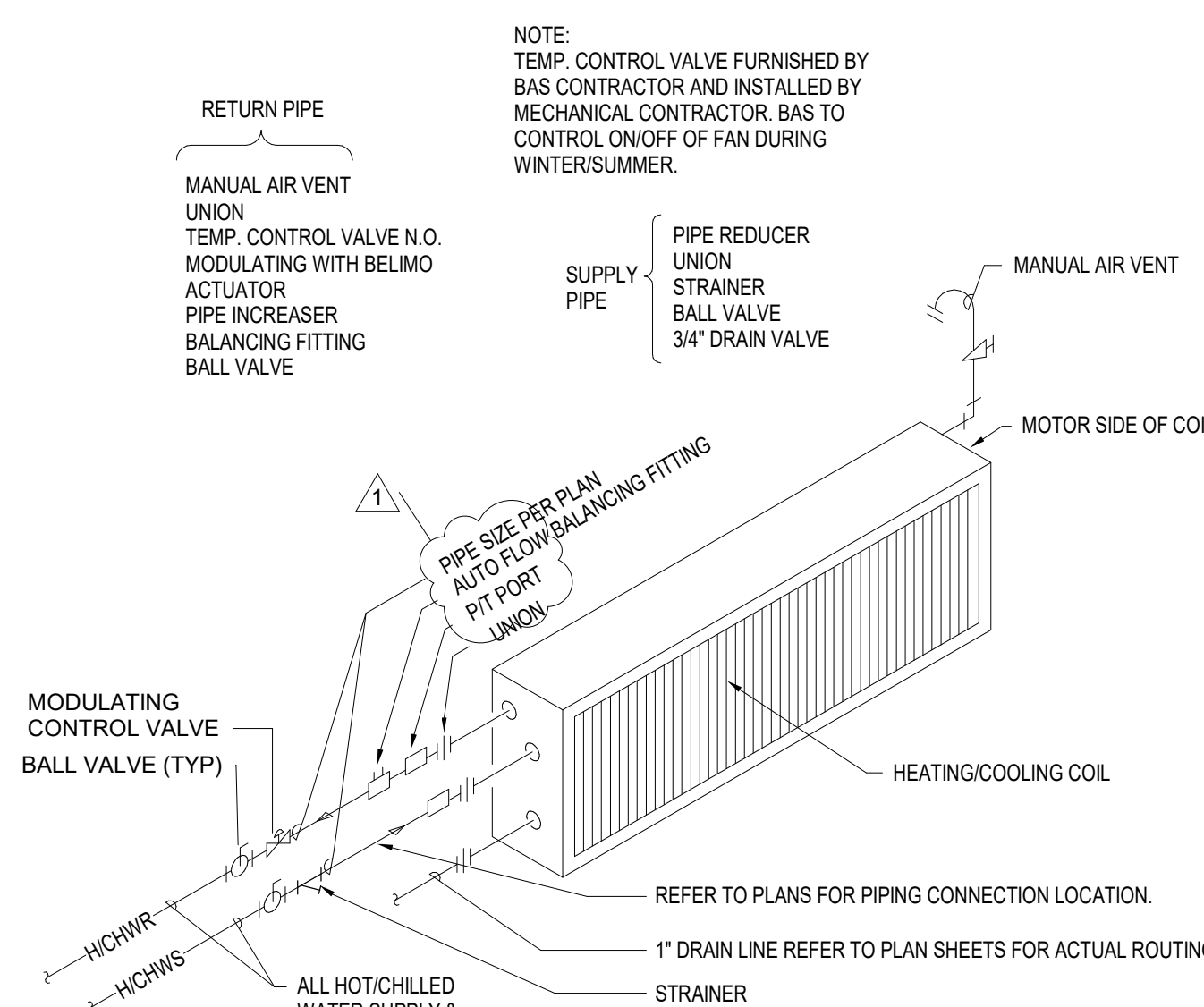
13 AHU H.W. COIL PIPING DIAGRAM

NOT TO SCALE



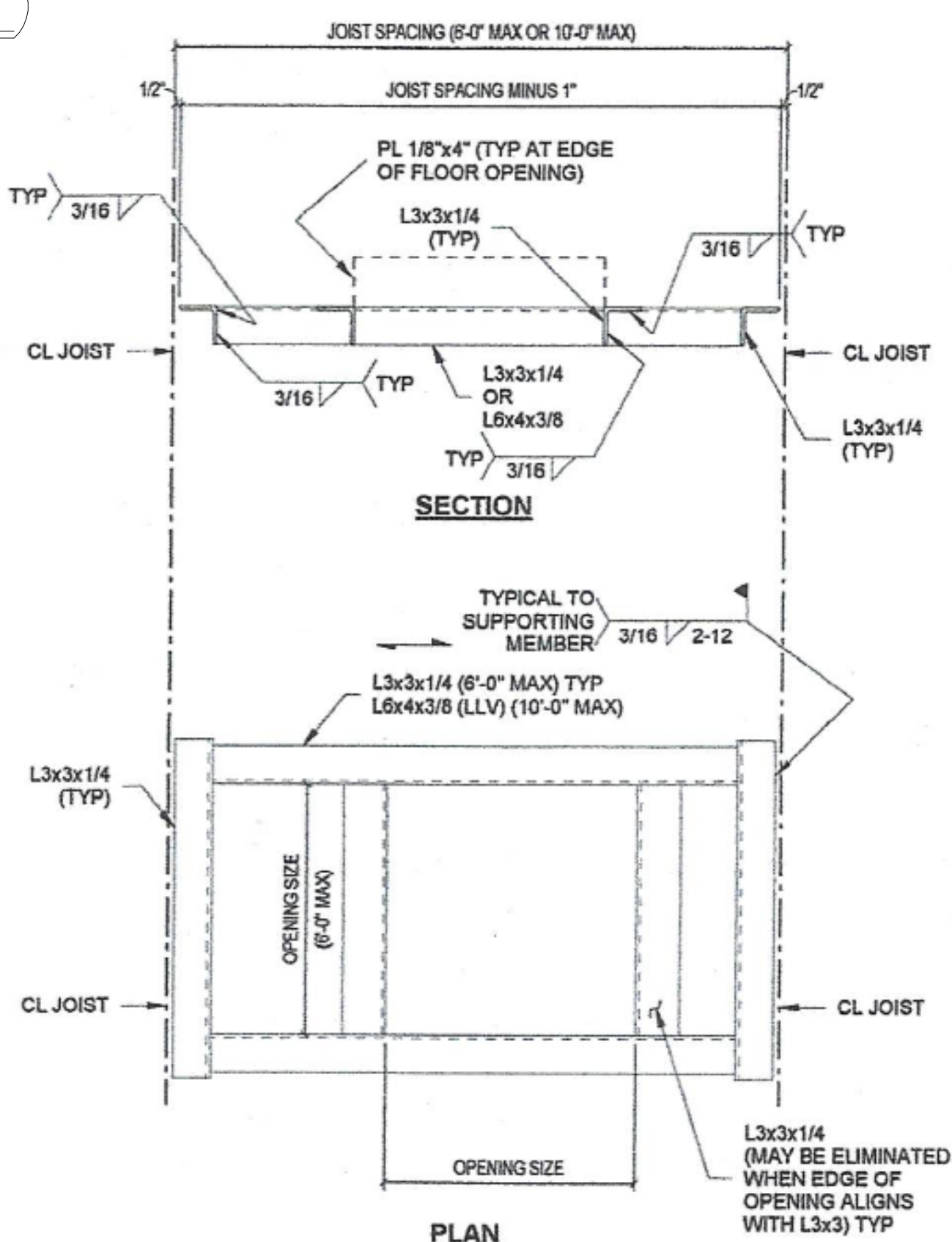
7 CEILING DIFFUSER CONNECTION DETAIL

NOT TO SCALE



8 FAN COIL & UNIT VENTILATOR HOT/CHILLED WATER COIL PIPING DETAIL

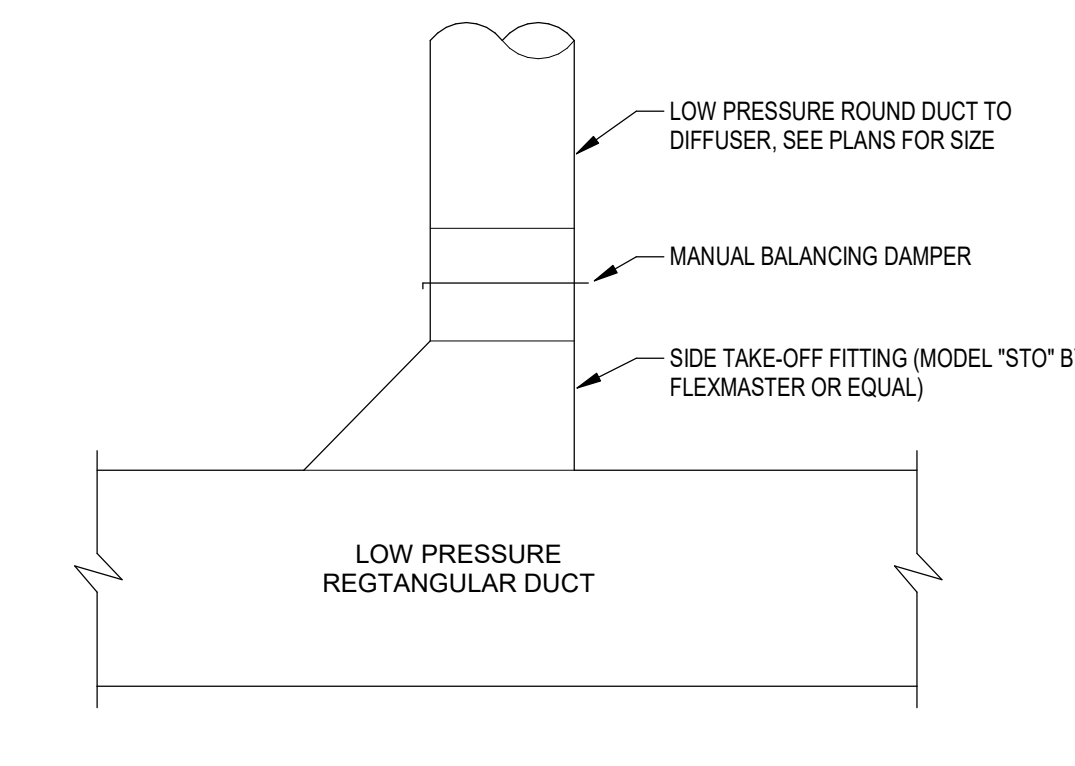
NOT TO SCALE



- NOTES:
- METAL ROOF DECK SHALL BE INSTALLED CONTINUOUSLY OVER OPENING AND SHALL NOT BE REMOVED UNTIL ABSOLUTELY NECESSARY.
 - INDICATES DIRECTION OF DECK SPAN.
 - FASTEN ROOF DECK TO FRAMING AT PERIMETER OF OPENING AT 6" o.c.
 - WOOD FORMS ANCHORED TO THE DECK SHALL BE USED AS FOUR STOPS DURING SLAB CONSTRUCTION. METAL DECK SHALL NOT BE REMOVED FROM OPENING AREA UNTIL ABSOLUTELY NECESSARY.
 - FRAMES REQUIRED FOR HVAC EQUIPMENT - FINAL OPENING SIZE AND LOCATION TO BE DETERMINED FROM THE HVAC APPROVED SHOP DRAWINGS AND VERIFIED IN THE FIELD. MAXIMUM LOAD 800 POUNDS.

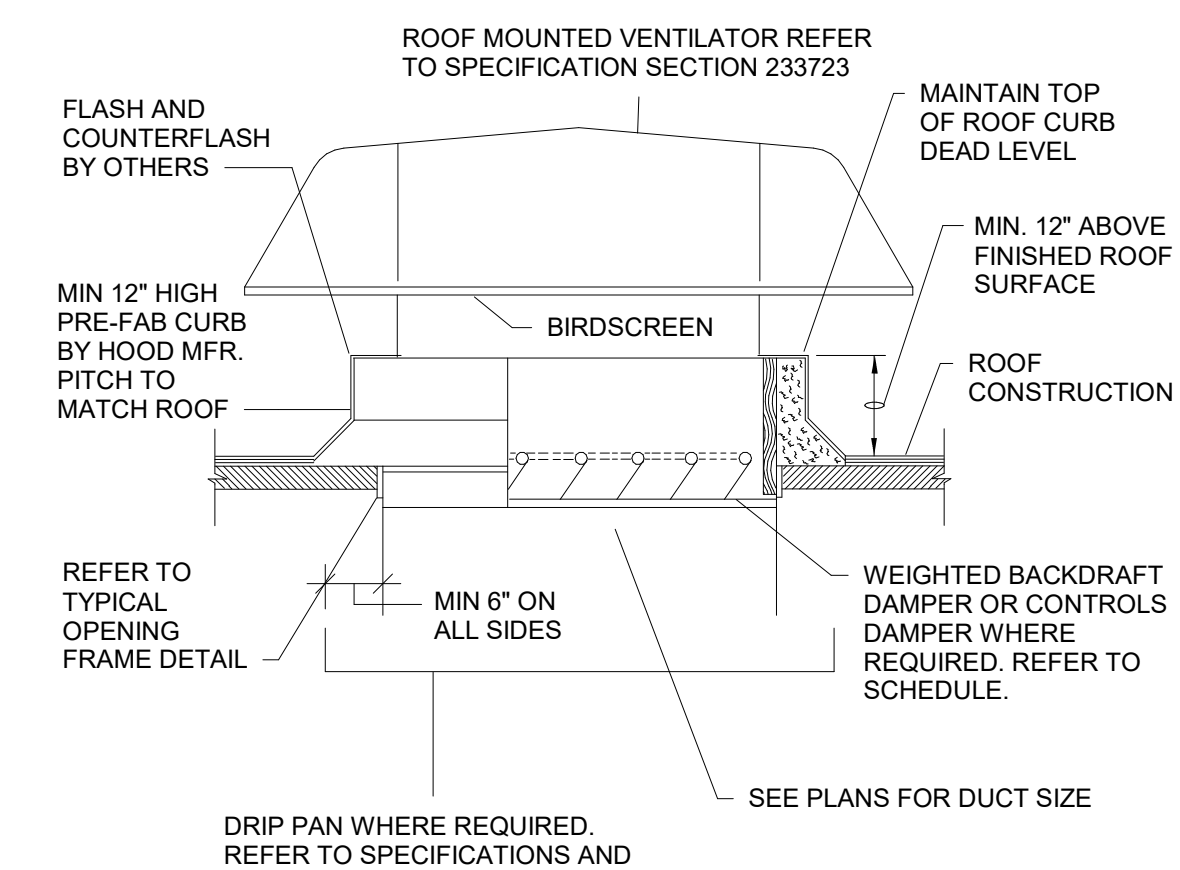
9 TYPICAL OPENING FRAME

NOT TO SCALE



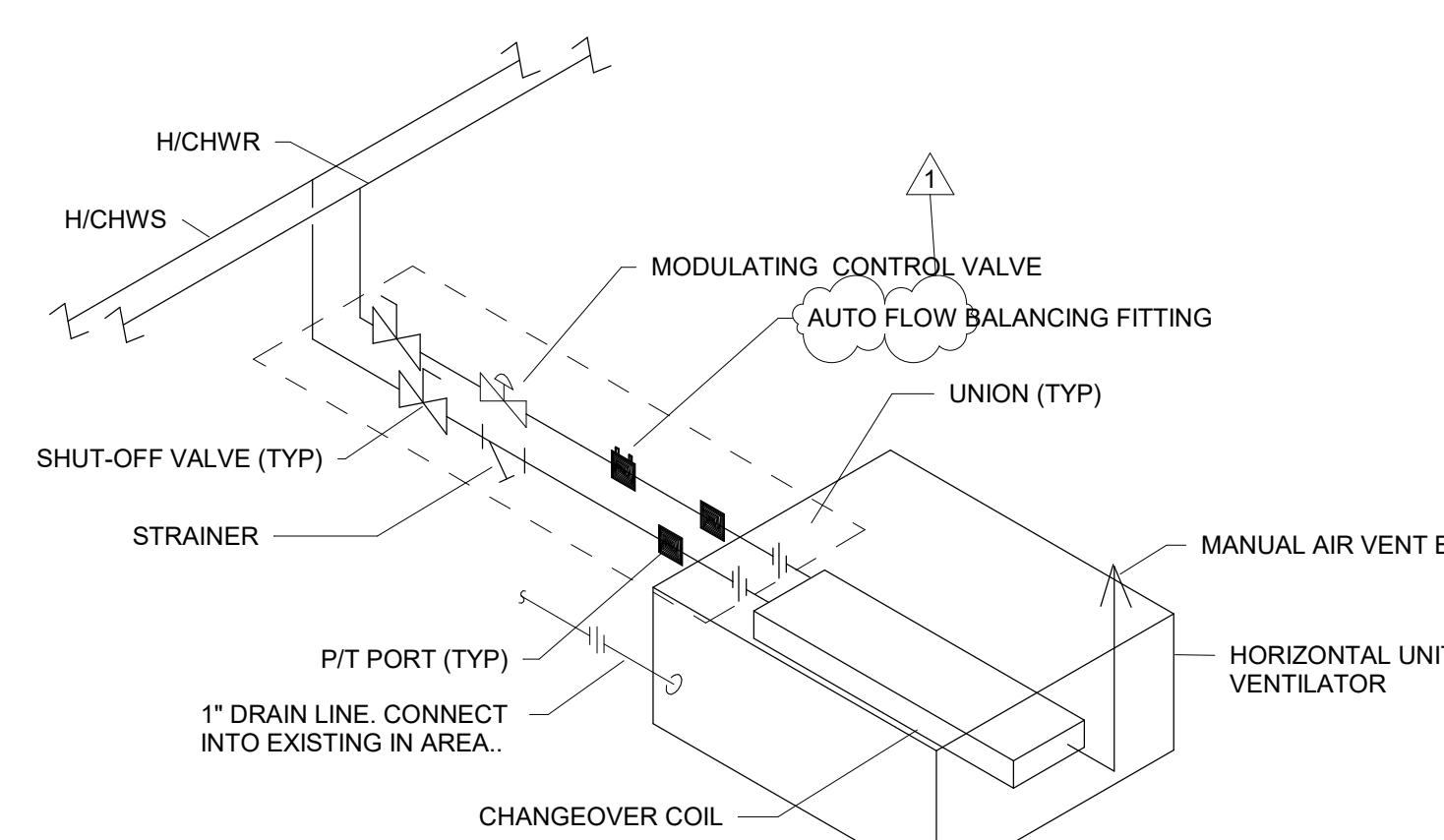
2 LOW PRESSURE ROUND DIFFUSER TAKE-OFF DETAIL

NOT TO SCALE



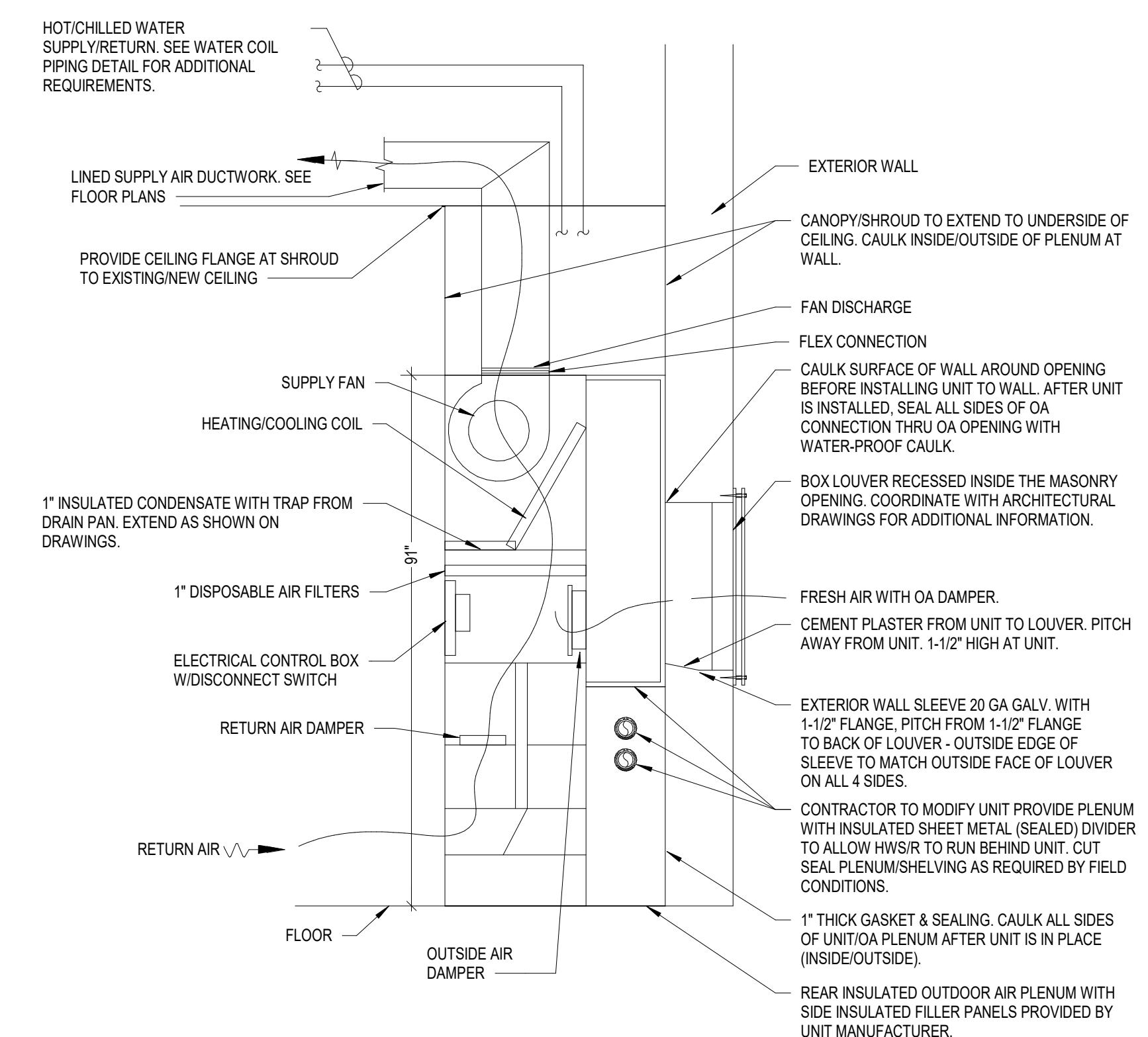
4 RELIEF AIR HOOD INSTALLATION DETAIL

NOT TO SCALE



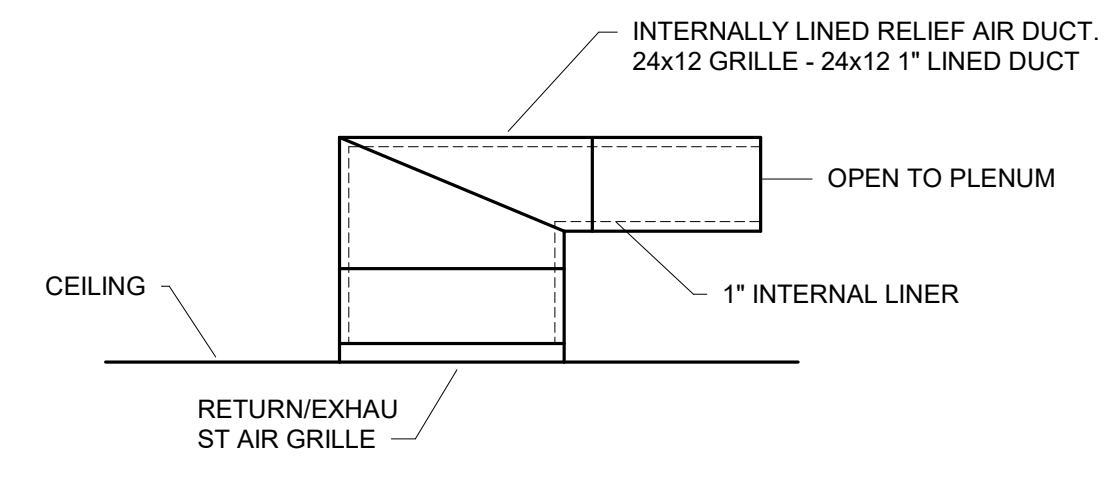
5 HORIZONTAL UNIT VENTILATOR PIPING DIAGRAM

NOT TO SCALE



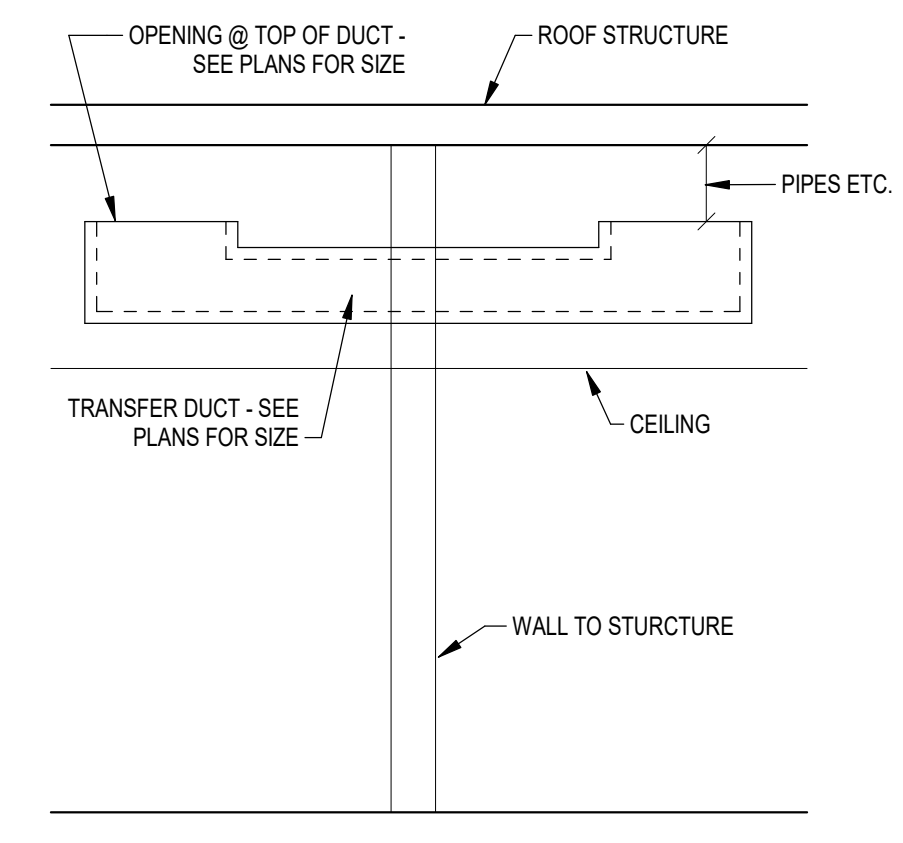
6 SECTION THRU VERTICAL UNIT VENTILATOR

NOT TO SCALE



1 RELIEF AIR GRILLE BOOT DETAIL

NOT TO SCALE



3 AIR TRANSFER DUCT DETAIL

NOT TO SCALE