

**Addendum No. 4
September 2, 2022**

Project: **St. Mary Catholic School Addition & Remodel**
812 N. State Avenue
Dell Rapids, South Dakota 57022
Architecture Incorporated Project #2788

Architect: Architecture Incorporated

Letting: September 8, 2022
2:00 PM
St. Mary Catholic Church
Parish Hall
608 East 8th Street
Dell Rapids, South Dakota 57022

Scope of this Addendum:

To all bidders and all others to whom drawings and specifications have been issued by Architecture Incorporated, this Addendum forms a part of the Contract Documents. Acknowledge receipt of this addendum by listing its number and date in the bidder's Form of Proposal. Failure to do so may subject bidder to disqualification. This addendum modifies the drawings and specifications as follows:

STRUCTURAL ITEMS:

a) **Structural Item for Mechanical Sheet 8.54: Second Floor Plan – Area A – Vent. & A/C**

- i) At all new openings in existing steel roof deck, provide a new welded angle frame around the new opening in the steel deck and under mechanical equipment per detail 6/3.7.3. Install L1 1/2x1 1/2x3/16 reinforcing angles as required on each side of the existing steel roof joists per details 2/3.7.2 and 8/3.7.2.

ARCHITECTURAL ITEMS:

SECTION 102113:

- a. 2.2 HIGH-DENSITY POLYETHYLENE (HDPE) TOILET COMPARTMENTS:
i. Door Panel and Height: 55" in lieu of 72:

MECHANICAL ITEMS:

Add the following to Section 220100:

Cooling coil condensate drains and louver drains in buildings above ground shall be Copper, as follows:

Type L, hard drawn copper tubing, ASTM B88 and Federal Specification WW-T-799. Fittings shall be wrought copper solder type, ANSI B16.22. Joints for pipe and fittings shall be made with No. 95-5 (tin-antimony) solder and No. 50 non-corrosive flux.

Add the following to Section 220700:

Insulation thickness for the dual water piping system shall meet the more stringent requirement required by the specification. The dual water piping system shall be treated as a cold water piping system.

The following equipment shall be insulated with thickness as noted of rigid, 6 pound density, glass unfaced fiberboard such as OCF Type 705 or equal:

	<u>Pipe Sizes</u>	
	2" & under	2-1/2" & larger
Roof drain bodies		1"
Dual water pumps	1 1/2"	1 1/2"
Dual water air separator	1-1/2"	1-1/2"
Dual water Filter/Feeder		1-1/2"

Add the following to section 230900 SOO:

Provide 3-way valve on AHU-2 heating/cooling coil.

Heating Coil Control Valves:

Whenever the chiller is enabled, the control valves on all VAV terminal units, radiant panels, cabinet unit heaters, fin-tube, etc. shall not be allowed to open and shall remain closed.

EF-A201, EF-A202, RF-1 and RF-2:

Modulate fans to maintain a +0.04"W.C(adj) with relation to the outdoors.

Provide Occupied/unoccupied zone signals for all Unit Ventilators and Fan Coil units.

Dual Water Pumps:

During cooling season, the dual water system pumps shall operate per the "Secondary Chilled Water Pumps" sequence. During heating season, the dual water system pumps shall operate per the "Hot Water Heating Pumps" sequence.

Chiller and Boiler Control Valves:

When in Cooling mode, close the 3-way control valve on each boiler to stop flow through the boiler. When in heating mode, close the 2-way control valve on the chiller to stop flow through the boiler.

Switching between heating and cooling modes of operation:

When switching between heating and cooling mode of operation, allow the secondary pumps to run until the water has reached 85 degrees (adj) before enabling the chiller.

Hot Water Reset Control:

The BAS shall reset the hot water supply temperature at an inverse ratio to the outside air temperature by modulating the 3-way valves. The BAS shall override the three-way control valve to maintain 140 degree HWR to the boilers. Monitor temperatures for all 3 ports of 3-way valves and show on graphic. The reset

schedule shall be fully adjustable from the operator's workstation but shall originally be set to maintain the hot water supply temperature as follows:

-10F OAT = 180F HWS

60F OAT = 150F HWS

Provide a temperature sensor in each boiler and system hot water supply and hot water return temperature sensors with remote temperature indication at the operator's workstation.

DRAWING ITEMS:

GENERAL DRAWING ITEMS:

1. Add the following note to all sheets: "Review sheet 1.21 for project phasing and plan mechanical installation accordingly."

DRAWING SHEET 8.10 – SCHEDULES

1. BOILER PIPING DETAIL:
 - a. Add 3-way control valve and modify check valve location. Refer to revised drawings sheet 8.31, HEATING/COOLING SYSTEM DIAGRAM, ADDENDUM 3, dated 9/2/22.

DRAWING SHEET 8.31 – ENLARGED GROUND FLOOR PLAN – AREA B – PLUMBING & HEATING

1. HEATING/COOLING SYSTEM DIAGRAM
 - a. Modify piping diagram for 3-way control valve and revised check valve location. Refer to revised drawings sheet 8.31, HEATING/COOLING SYSTEM DIAGRAM, ADDENDUM 3, dated 9/2/22.
2. Plumbing note #18
 - a. Modify note as shown on revised drawings sheet 8.31, ADDENDUM #3, dated 9/2/22.

DRAWING SHEET 8.32, 8.33 and 8.44

1. Add the following general note: ALL UNIT VENTILATORS CONDENSATE DRAINS ARE TO BE EXTENDED OUT THRU THE WALL TO THE EXTERIOR TO DRAIN.

DRAWING SHEET 8.54 – SECOND FLOOR PLAN – AREA A – VENT & A/C

1. Add relief hood to existing gym as shown on revised drawings sheet 8.54, ADDENDUM 3, dated 9/2/22.

ELECTRICAL ITEMS:

DRAWING ITEMS:

DRAWING SHEET 9.20 – BASEMENT FLOOR PLAN – DEMO – ELECTRICAL

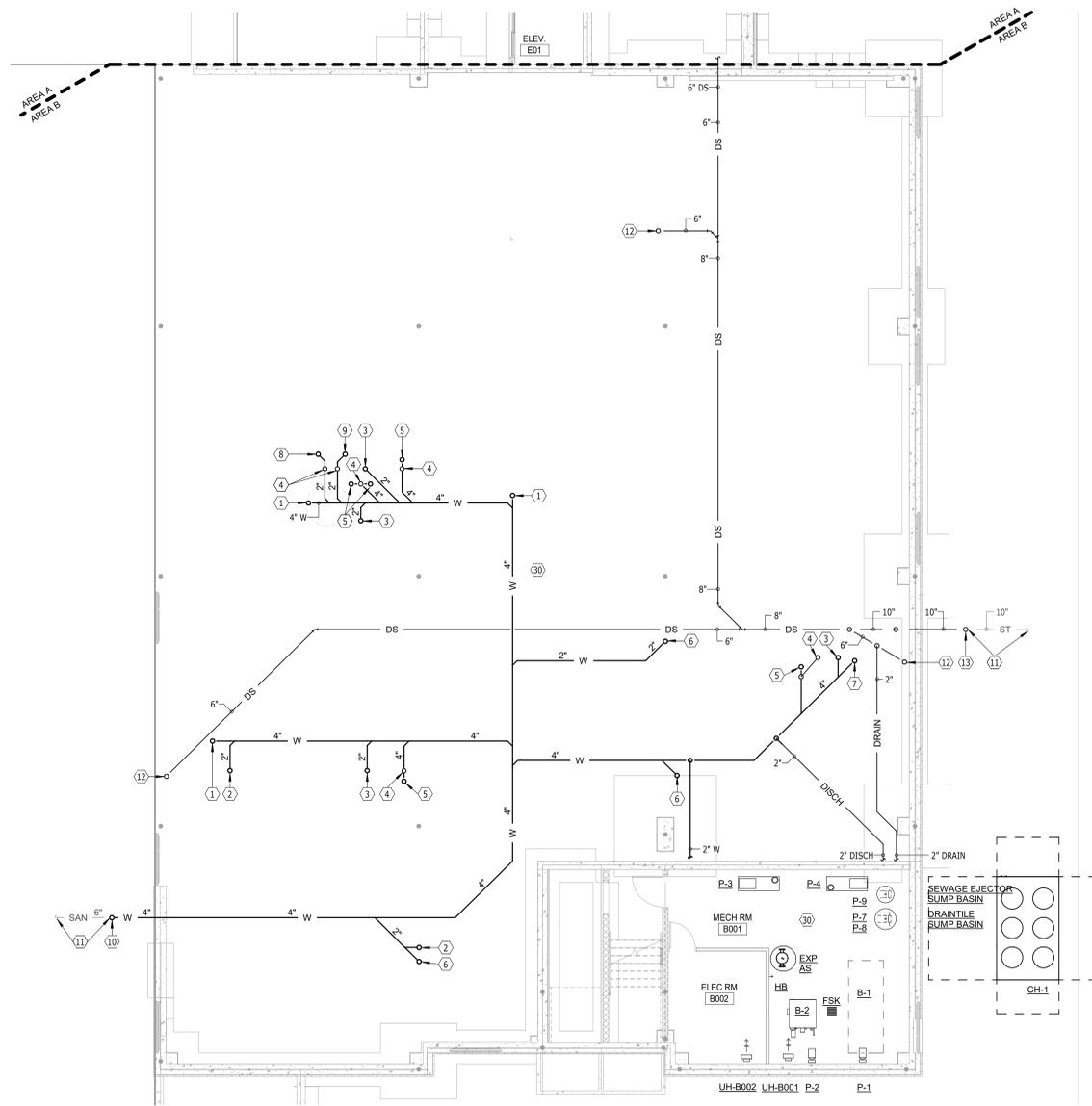
1. Delete electrical note #5 (the ceiling fans shall be new in lieu of existing).

GENERAL APPROVALS:

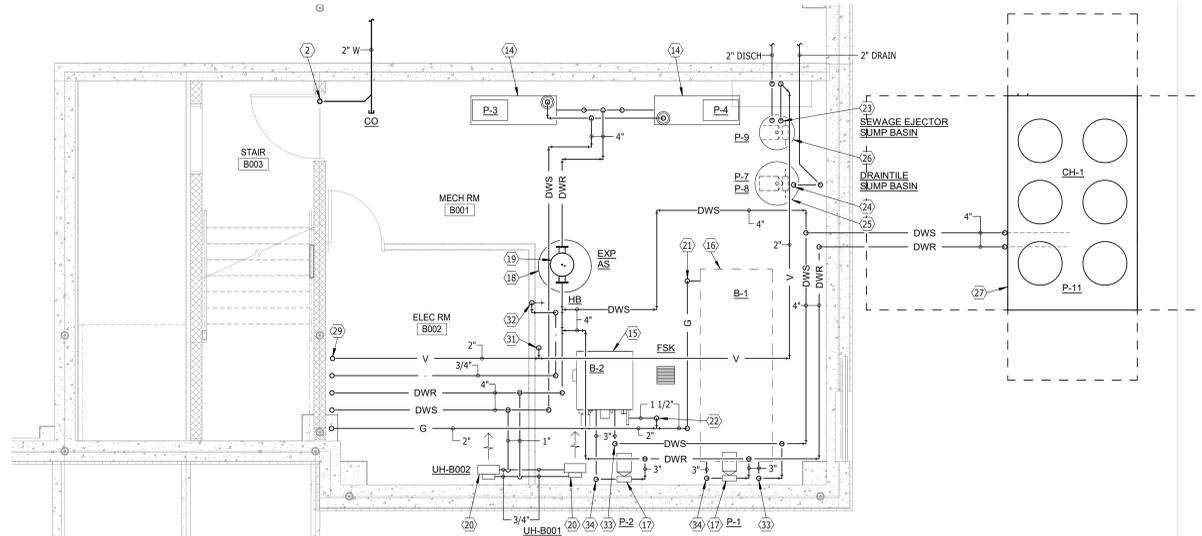
The following material or equipment furnished by the manufacturers listed may be substituted as equal, providing that each item, material, and piece of equipment conforms to the design and requirements of the Drawings and Project Manual.

<u>SECTION</u>	<u>ITEM</u>	<u>MANUFACTURER</u>
220400	Sump Pumps	Little Giant
220400	Gas Fired Water Heater	Camus
220400	Circulator Pumps	Pentair
220600	Inline Pumps	Pentair
220600	Base Mounted Pumps	Pentair
230800	Gas Vent Systems	Z-Vent
265110/265210	Interior Lighting/Exterior Lighting	
	Type F, FE	Litecontrol
	Type M	Coronet
	Type N	Kelvix

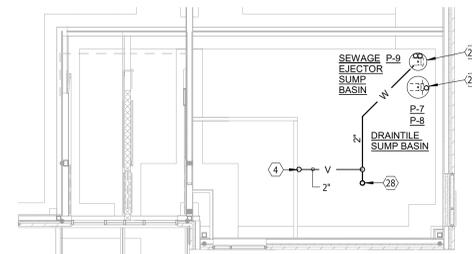
END OF ADDENDUM



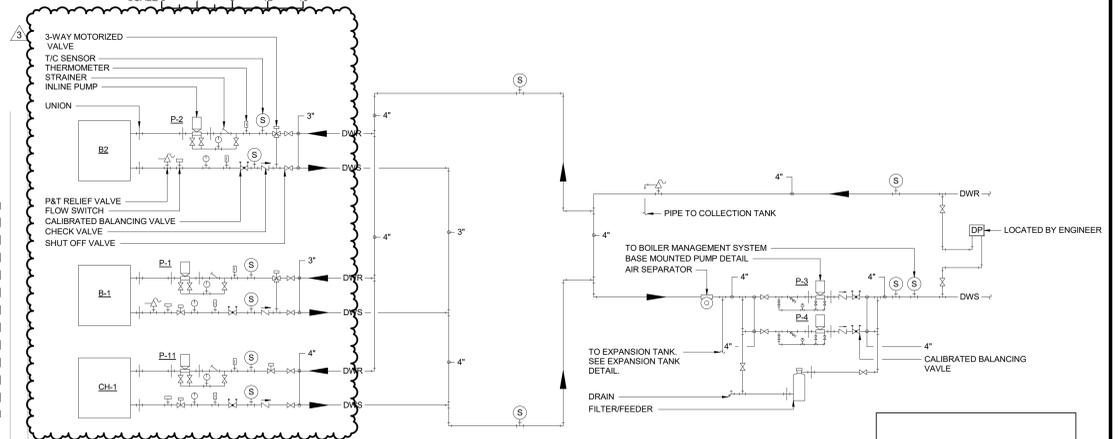
GROUND FLOOR PLAN - AREA B - PLUMBING & HEATING
SCALE 0 4 8 12 16



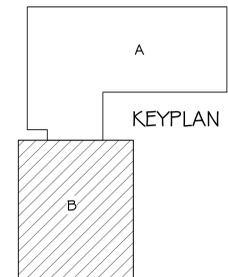
ENLARGED GROUND FLOOR PLAN - AREA B - PLUMBING & HEATING
SCALE 0 2 4 6 8



UNDERFLOOR PLAN - AREA B - PLUMBING & HEATING
SCALE 0 4 8 12 16



HEATING/COOLING SYSTEM DIAGRAM

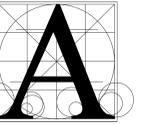


GENERAL SHEET NOTES

- A. THE CEILING SPACE AVAILABLE REQUIRES COORDINATION WITH OTHER TRADES. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.
- B. ON DEMO DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN, ITEMS SHOWN BOLD ARE EXISTING TO BE REMOVED.
- C. ON NEW CONSTRUCTION DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN, ITEMS SHOWN BOLD ARE NEW WORK.

PLUMBING & HEATING NOTES

- 1 4" W UP TO CO
- 2 2" W UP TO SK
- 3 2" W UP TO LAV
- 4 2" V UP
- 5 4" W UP TO WC
- 6 2" W STACK UP
- 7 4" W STACK UP
- 8 2" W UP TO SH
- 9 2" W UP TO FD
- 10 4" W UP TO GRADE CO
- 11 CONNECT TO PIPING PROVIDED BY SITE UTILITY CONTRACTOR. SEE SITE UTILITY DRAWINGS FOR CONTINUATION
- 12 6" DS UP
- 13 4" DS UP TO GRADE CO
- 14 BASE MOUNTED DUAL WATER SYSTEM PUMPS. SEE BASE MOUNTED PUMP PIPING DETAIL.
- 15 GAS FIRED BOILER. SEE BOILER PIPING DETAIL.
- 16 RELOCATED GAS FIRED BOILER. SEE BOILER PIPING DETAIL. CONTRACTOR SHALL CONVERT EXISTING STEAM BOILER TO A HOT WATER BOILER, PROVIDE NEW DATA PLATE, RELIEF VALVE, BOILER OPERATOR CONTROL, HIGH LIMIT WITH MANUAL RESET, LOW WATER CUTOFF & MODULATION CONTROL.
- 17 INLINE BOILER CIRC PUMP. SEE BOILER PIPING DETAIL.
- 18 DUAL WATER SYSTEM VERTICAL EXPANSION TANK. SEE EXPANSION TANK PIPING DETAIL.
- 19 DUAL WATER SYSTEM AIR SEPARATOR. SEE AIR SEPARATOR PIPING DETAIL.
- 20 HYDRONIC PROP TYPE UNIT HEATER HUNG FROM STRUCTURE. SEE UNIT HEATER PIPING DETAIL.
- 21 1 1/2" G DN WITH GAS COCK, PRESSURE REDUCING VALVE & UNION TO BOILER
- 22 1 1/2" G DN WITH GAS COCK, PRESSURE REDUCING VALVE & UNION TO BOILER
- 23 2" DISCH & 2" V DN TO SEWAGE EJECTOR SUMP BASIN
- 24 2" DRAIN DN TO DRAINTILE SUMP BASIN
- 25 30" DIA X 9'-6" DEEP DRAINTILE SUMP BASIN WITH SUMP PUMPS P-7 & P-8
- 26 24" DIA X 5'-0" DEEP SEWAGE EJECTOR SUMP BASIN WITH SEWAGE EJECTOR PUMP P-9
- 27 AIR COOLED CHILLER WITH BASE MOUNTED PUMP. SEE CHILLER PIPING DETAIL.
- 28 2" W UP TO FSK
- 29 2" V UP, 3/4" CW UP, 4" DWR UP, 4" DWS UP, 2" G UP
- 30 SEE ENLARGED PLAN ON THIS SHEET FOR CONTINUATION
- 31 2" V DN
- 32 3/4" CW DN TO HB MTD 24" AFF
- 33 3" DWS DN TO BOILER
- 34 3" DWR DN TO BOILER



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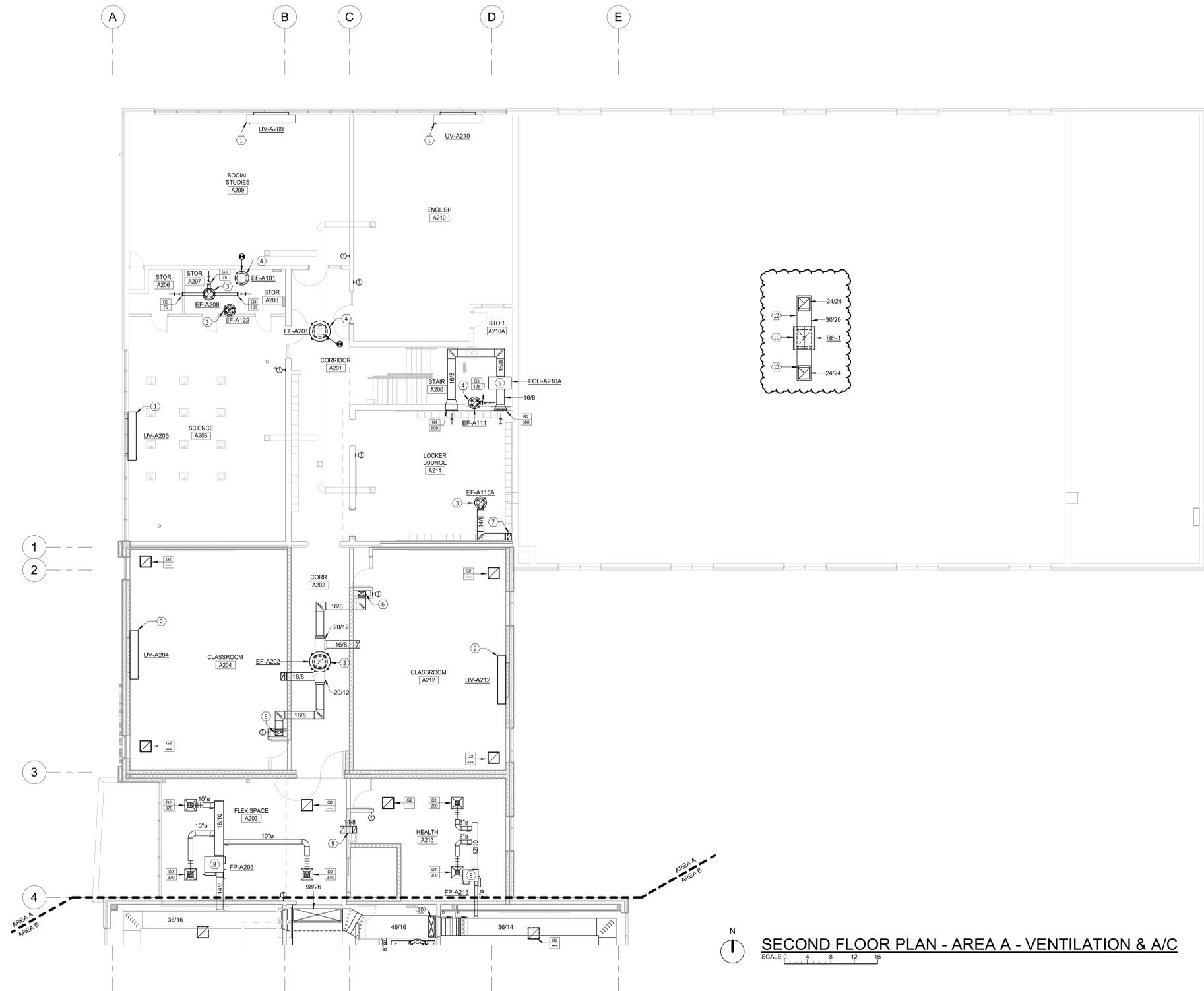
ST. MARY'S CATHOLIC SCHOOL

UNDERFLOOR PLAN - AREA B - PLUMBING & HEATING

Project	number	0413.2786.18
	date	7-31-2022
	revision	
drawn	DWM	checked Td
NO.	DATE	DESCRIPTION
1	6/23/22	ADDENDUM 1
2	6/30/22	ADDENDUM 2
3	9/2/22	ADDENDUM 3

8.31

9/11/2022 4:59:27 PM



SECOND FLOOR PLAN - AREA A - VENTILATION & A/C
 SCALE: 1" = 16'

- GENERAL SHEET NOTES**
- A. THE CEILING SPACE AVAILABLE REQUIRES COORDINATION WITH OTHER TRADES. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.
 - B. ON DEMO DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN, ITEMS SHOWN BOLD ARE EXISTING TO BE REMOVED.
 - C. ON NEW CONSTRUCTION DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN, ITEMS SHOWN BOLD ARE NEW WORK.
- VENTILATION NOTES**
- 1. NEW UNIT VENTILATOR INSTALLED IN SAME LOCATION AS PREVIOUS UNIT. UTILIZE EXISTING OIA LOUVER.
 - 2. UNIT VENTILATOR WITH OIA LOUVER. COORDINATE EXACT LOCATION WITH CASWORK.
 - 3. PRV INSTALLED ON ROOF WITH FULLY INSULATED ROOF CURB. PROVIDE BACKDRAFT DAMPER AND INSULATED DROP. MAINTAIN MINIMUM 10' FROM ROOF EDGE.
 - 4. PRV INSTALLED ON EXISTING ROOF CURB. PROVIDE CURB ADAPTER AS NECESSARY. PROVIDE BACKDRAFT DAMPER AND INSULATED DROP. MAINTAIN MINIMUM 10' FROM ROOF EDGE.
 - 5. FAN COIL UNIT HUNG FROM STRUCTURE.
 - 6. 16/8 E/A DOWN INTO CHASE AND THRU FLOOR BELOW.
 - 7. 14/8 E/A DOWN INTO CHASE AND THRU FLOOR BELOW.
 - 8. LOW PROFILE FAN POWERED VAV TERMINAL WITH HOT WATER RE-HEAT COIL INSTALLED ABOVE CEILING. PROVIDE INLET SOUND ATTENUATOR (TYP).
 - 9. AIR TRANSFER DUCT WITH OPENINGS ON BOTH SIDES OF WALL. BOTH OPENINGS SHALL BE IN THE TOP OR ON THE SAME SIDED - NO TURN VANES - SIZE AS SHOWN OR AT 600 FPM. (TYP).
 - 10. 24/24 DOWN THROUGH FLOOR.
 - 11. RELIEF HOOD SIMILAR TO GREENHECK MODEL FGR-30036. PROVIDE WITH COUNTER BALANCE BACKDRAFT DAMPER AND MOUNT ON INSULATED ROOF CURB. PROVIDE INSULATED DROP AND DRIP PAN.
 - 12. 30/20 INSULATED DUCT WITH 24/24 OPENINGS IN TOP. PROVIDE EXPANDED METAL OVER OPENINGS.

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ST. MARY'S CATHOLIC SCHOOL
 Project: **SECOND FLOOR PLAN - AREA A - VENT. & A/C**

Project number: 0413.2788.18
 date: 7-31-2022
 revision:
 drawn: NJH checked: Td
 NO. DATE DESCRIPTION
 1 9/2/22 ADDENDUM 3