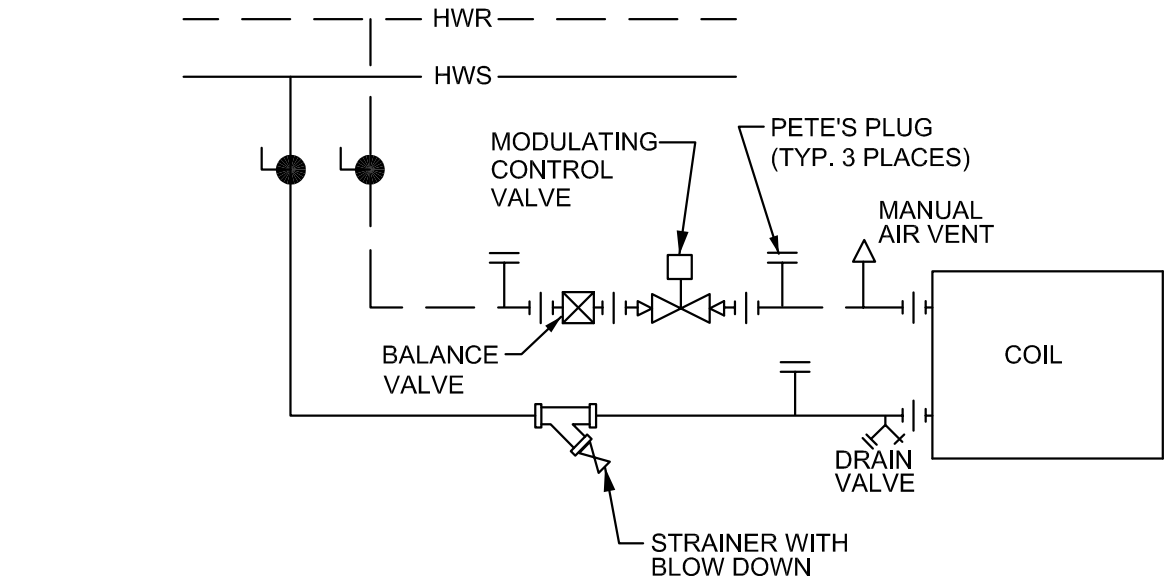
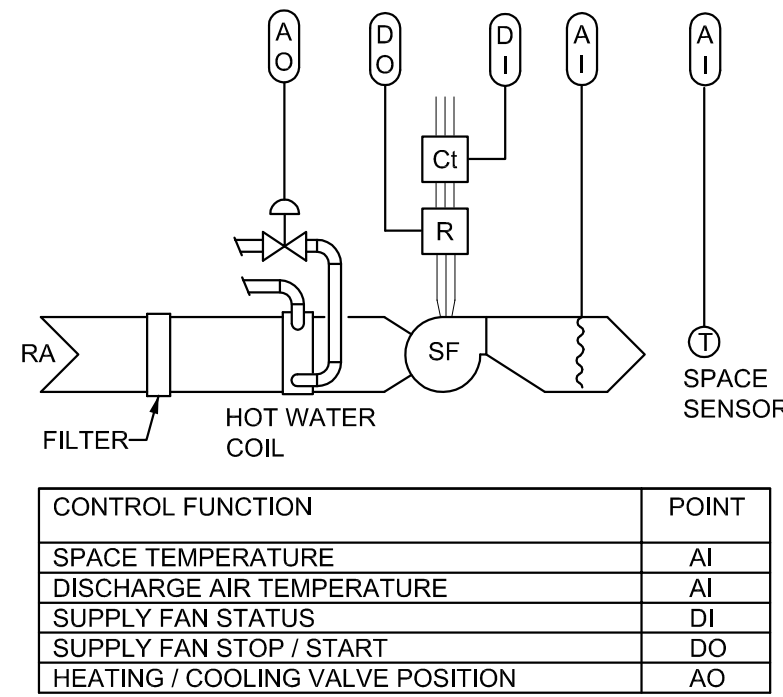
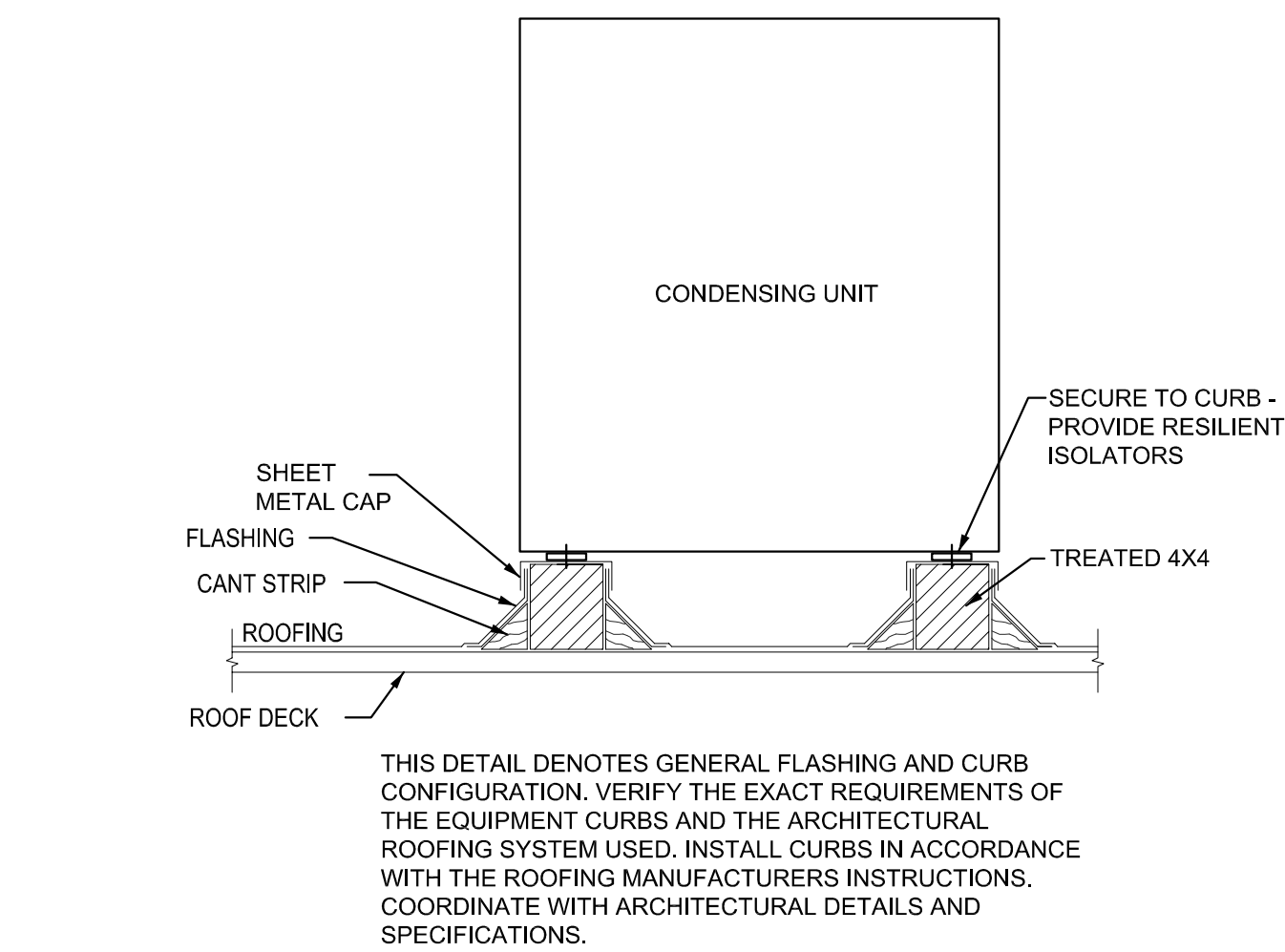




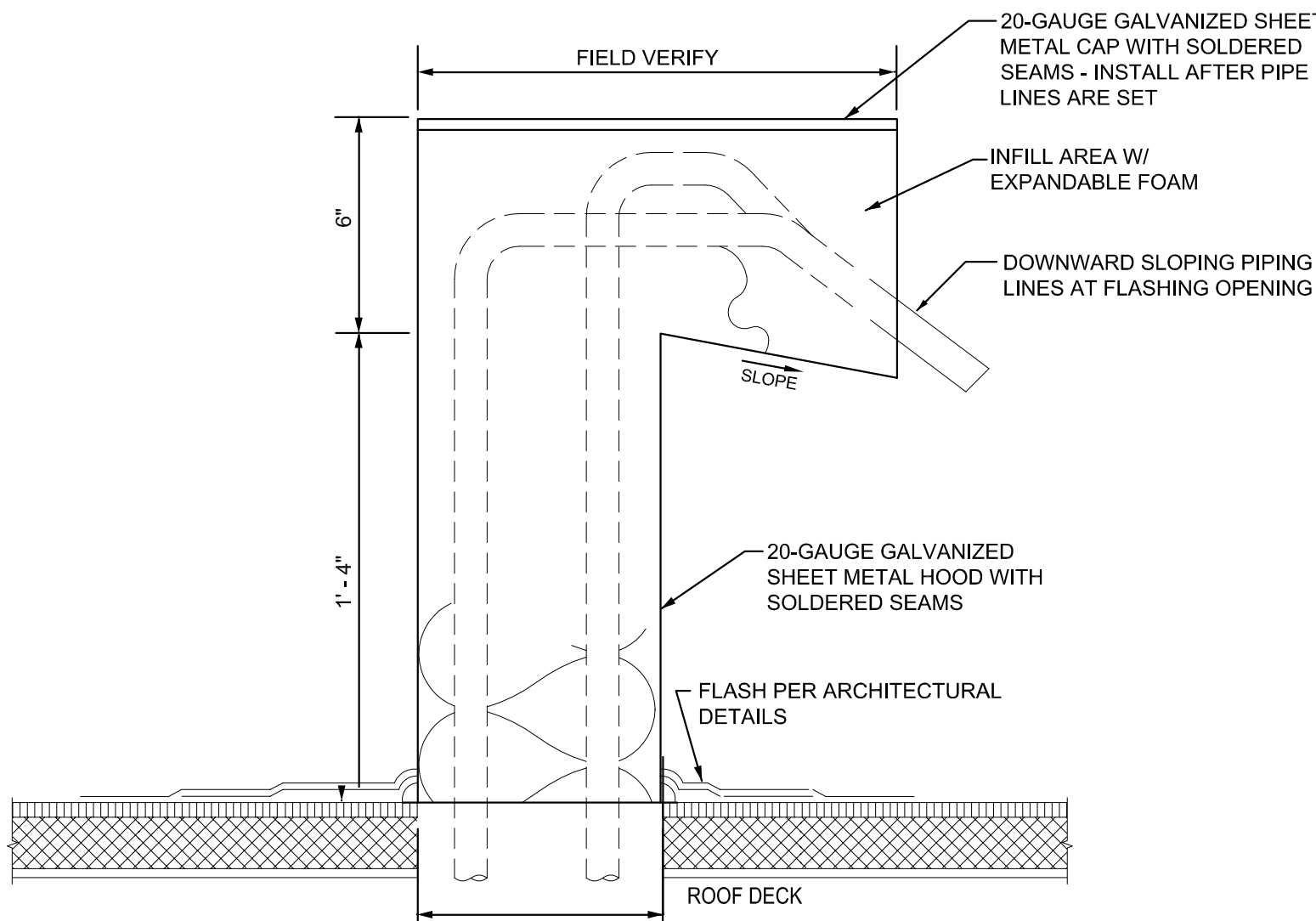
1
M1.00 2-WAY VALVE SCHEMATIC
DIAGRAMMATIC



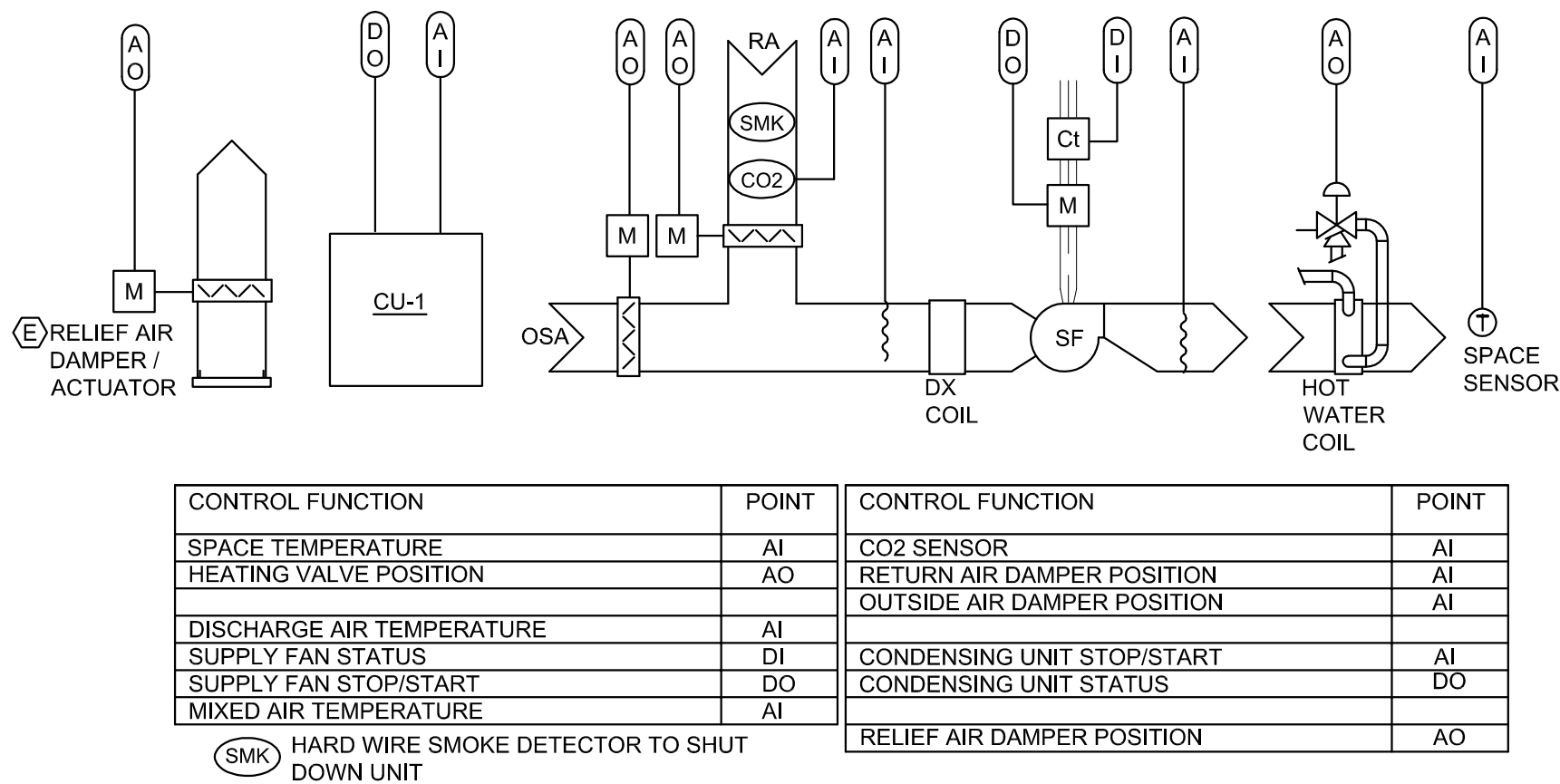
4
M1.00 UNIT VENTILATOR
CONTROL SCHEMATIC
DIAGRAMMATIC



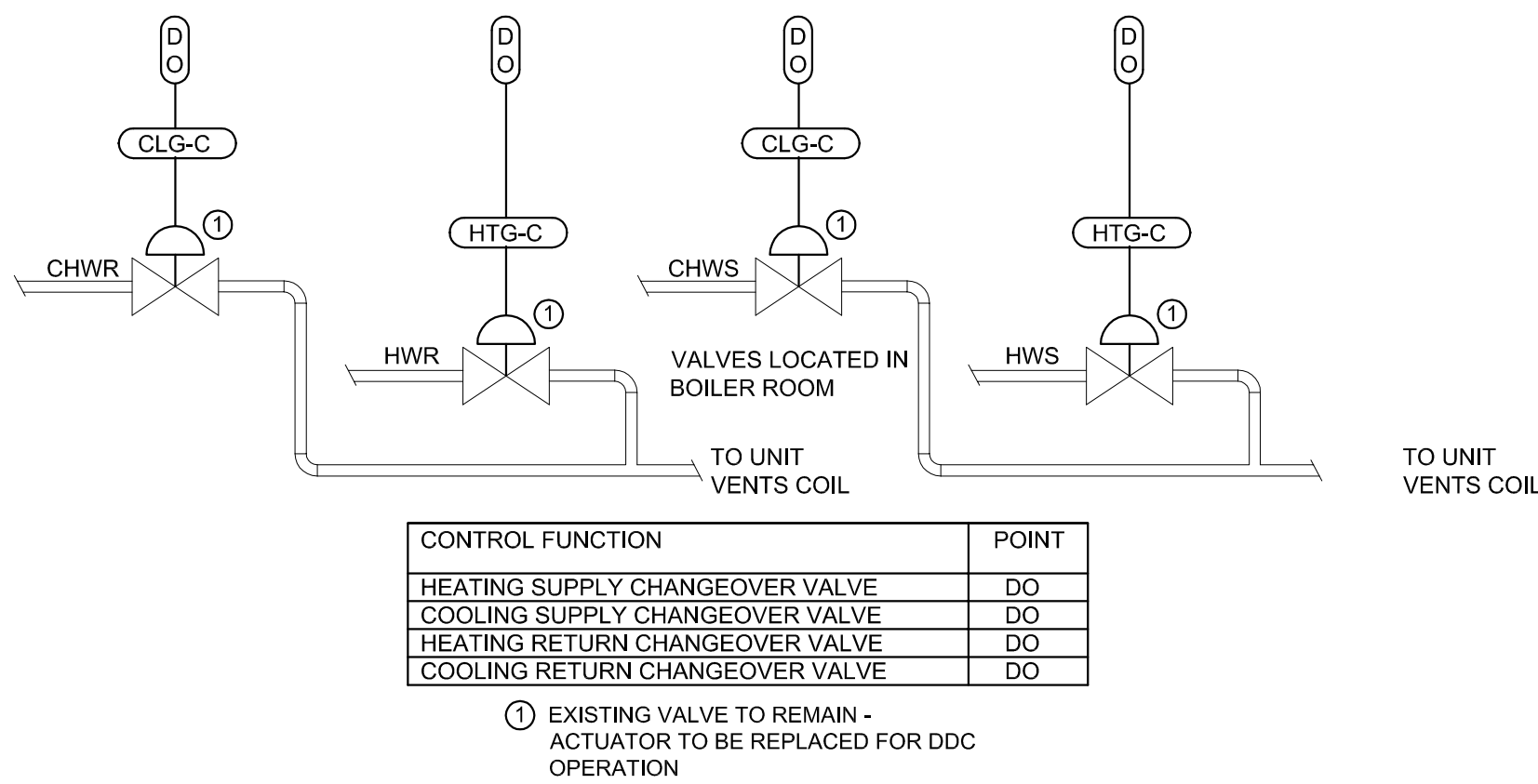
2
M1.00 CONDENSING UNIT MOUNTING DETAIL
DIAGRAMMATIC



3
M1.00 ROOF PIPING PENETRATION DETAIL
DIAGRAMMATIC



5
M1.00 FAN COIL CONTROL SCHEMATIC
DIAGRAMMATIC



6
M1.00 UNIT VENTILATOR HEATING /
COOLING CHANGEOVER SCHEMATIC
DIAGRAMMATIC

MECHANICAL EQUIPMENT SCHEDULE				
SYMBOL	DESCRIPTION	AREA SERVED	CONTROL	ELECTRICAL
UV-1 UV-2 UV-3 UV-4 UV-5	UNIT VENTILATOR, HORIZONTAL STYLE - 1000 CFM SUPPLY AIR, 435 CFM RETURN AIR, 315 CFM OUTSIDE AIR, CONNECTION TO EXISTING 32-INCH X 7-INCH OUTSIDE AIR SCOOP SLEEVE. DOUBLE DEFLECTION DISCHARGE AIR GRILLE. MANUAL RA / OSA DAMPER, FILTER, END CAPS HEATING - STEAM COIL: 40 MBH, 47 °F ENTERING AIR, 95 °F LEAVING AIR, 2 PSI STEAM, 1-INCH LPS. 3/4" CONDENSATE PIPING RUNOUTS (EXISTING - VERIFY AT SITE). 2-WAY VALVE - SEE DETAIL 3/CM1 BASIS OF DESIGN: MCQUAY AH07	CLASSROOMS (TYP)	DDC	1/3 HP 173 WATTS 120 V, 1 PH SINGLE PT. CONN.
FC-1	FAN COIL UNIT - VERTICAL STYLE. XXX CFM AT 1.25-INCHES EXTERNAL STATIC PRESSURE. XXX CFM RETURN AIR, XXX CFM OSA. VERTICAL DISCHARGE SUPPLY FAN, MERV 8 FILTER SECTION, RETURN AIR / OUTSIDE AIR MIXING BOX COOLING. DX COIL TO MATCH RESPECTIVE CONDENSING UNIT BASIS OF DESIGN: XXXXXXXXX OPERATING WEIGHT: XXX LBS			X HP 208 V, 3 PH
FC-2	FAN COIL UNIT - VERTICAL STYLE. XXX CFM AT 1.25-INCHES EXTERNAL STATIC PRESSURE. XXX CFM RETURN AIR, XXX CFM OSA. VERTICAL DISCHARGE SUPPLY FAN, MERV 8 FILTER SECTION, RETURN AIR / OUTSIDE AIR MIXING BOX COOLING. DX COIL TO MATCH RESPECTIVE CONDENSING UNIT BASIS OF DESIGN: XXXXXXXXX OPERATING WEIGHT: XXX LBS			X HP 208 V, 3 PH
CU-1	CONDENSING UNIT, AIR COOLED - 32 MBH SENSIBLE / 44 MBH TOTAL COOLING AT 95 °F ENTERING CONDENSING UNIT, 80 °F DB / 67 °F WB ENTERING INDOOR COIL, 1,450 CFM EVAPORATOR AIRFLOW, R-410A REFRIGERANT, 16 SEER BASIS OF DESIGN: 24ACC648 OPERATING WEIGHT = 300 LBS			26.1 MCA 40 MOCP 240 V, 1 PH
CU-2	CONDENSING UNIT, AIR COOLED - 32 MBH SENSIBLE / 44 MBH TOTAL COOLING AT 95 °F ENTERING CONDENSING UNIT, 80 °F DB / 67 °F WB ENTERING INDOOR COIL, 1,450 CFM EVAPORATOR AIRFLOW, R-410A REFRIGERANT, 16 SEER BASIS OF DESIGN: 24ACC648 OPERATING WEIGHT = 300 LBS			26.1 MCA 40 MOCP 240 V, 1 PH
UH-1	UNIT HEATER - ELECTRIC, FAN-FORCED WALL HEATER BASIS OF DESIGN: OMARK LFK204F	STORAGE	INTEGRAL T'STAT	1.5 KW 208, 1 PH

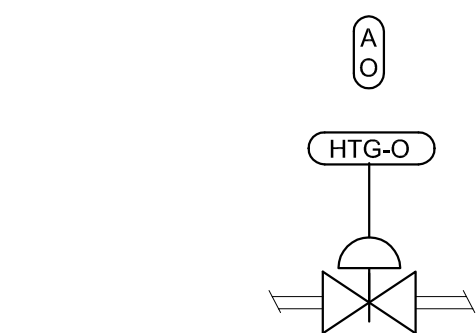
MECHANICAL SEISMIC DESIGN CRITERIA			
BUILDING SYSTEM	OCCUPANCY CLASSIFICATION	SEISMIC DESIGN CATEGORY	COMPONENT IMPORTANCE FACTOR (Ip)
OTHER HVAC COMPONENTS	II	D	1.0

STANDARD CASE: ASHRAE 62.1-2019/2016 MECHANICAL STATE ENERGY CODE											
OCCUPANCY CATEGORY	OCCUPANCY CATEGORY	ZONE POP	AREA SQ. FT.	PEOPLE	AREA OUTDOOR AIR RATE	OCCUPANT DENSITY	BREATHING ZONE OSA	ZONE AIR DISTR	ZONE	TABLE 6-3 SYSTEM VENT EFFICIENCY	DESIGN CASE FOR MINIMUM OUTDOOR AIR INTAKE FLOW (CFM)
		(P)	(A)	(P)	(A)	(P)	(A)	(P)	(A)		
CLASSROOM	CLASSROOM	27	750	5	0.12	35	225	0.8	281	0.8	352
CLASSROOM	UV-1	27	750	5	0.12	35	225	0.8	281	0.8	352
CLASSROOM	UV-2	27	750	5	0.12	35	225	0.8	281	0.8	352
CLASSROOM	UV-3	27	750	5	0.12	35	225	0.8	281	0.8	352
CLASSROOM	UV-4	27	750	5	0.12	35	225	0.8	281	0.8	352
CLASSROOM	UV-5	27	750	5	0.12	35	225	0.8	281	0.8	352

CONTROL SCHEMATIC LEGEND

GENERAL NOTE - PROVIDE ALL DEVICES AND POINTS REQUIRED IN ADDITION TO THOSE NOTED TO ACCOMPLISH THE SEQUENCE OF OPERATION NOTED IN THE SPECIFICATIONS

M	MOTORIZED DAMPER ACTUATOR	T	SENSOR / THERMOSTAT
O	A / D - ANALOG / DIGITAL I / O - INPUT / OUTPUT	CV	CONTROL VALVE
Ms	MOTOR STARTER	MD	MOTORIZED DAMPER
R	RELAY	TS	TEMPERATURE SENSOR
CT	CURRENT TRANSFORMER	SMK	DUCT MOUNTED SMOKE DETECTOR
SF	SUPPLY FAN	CO2	CARBON DIOXIDE SENSOR
RF	RETURN FAN		
EF	EXHAUST FAN		



7
M1.00 BOILER ROOM 2-WAY CONTROL
VALVE SCHEMATIC
DIAGRAMMATIC

MECHANICAL LEGEND

---	LPS	LOW PRESSURE STEAM
---	COND	CONDENSATE (STEAM) RETURN
---	CD	CONDENSATE (COOLING) DRAIN
●		BALL VALVE
□		STEAM TRAP
+		UNION
○		PIPE UP
○		PIPE DOWN
⌋		CAP OR PLUG
↑		SUPPLY AIR RISER
↓		RETURN, EXHAUST AIR RISER
30° MAX		TRANSITION
15° MAX		TRANSITION
□		SQUARE TO ROUND TRANSITION
T		WALL MOUNTED THERMOSTAT
A/P		ACCESS PANEL

WARNING: THIS TYPE OF FITTING IS NOT PERMITTED

FORBIDDEN ELBOW

RADIUS ELBOW

TURNING VANES

MITER ELBOW

0.25W & 4" MIN

ZERO INSIDE RADIUS

BRANCH TAP

5'-0" MAXIMUM

FLD

SD/FLD

VP

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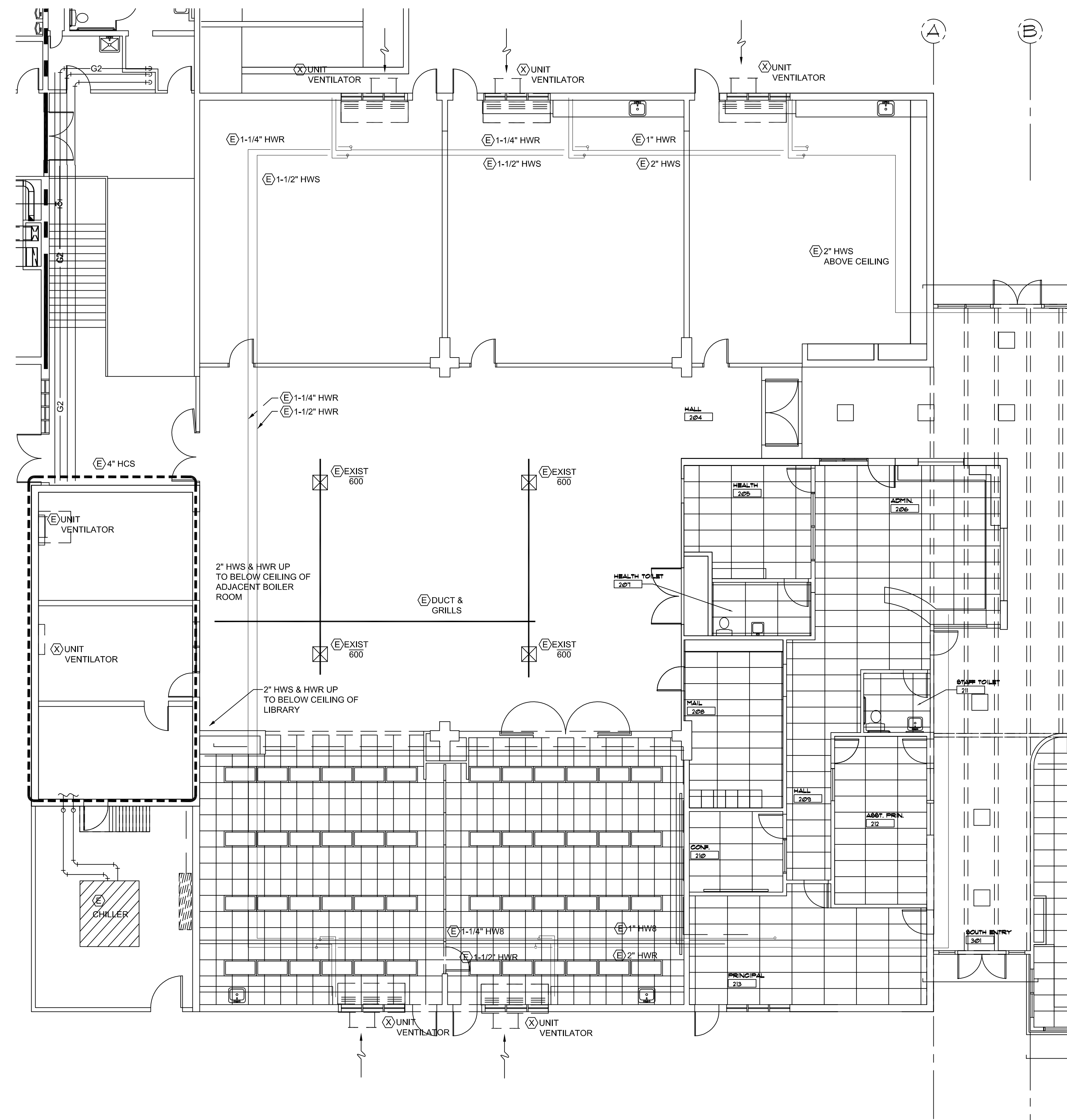
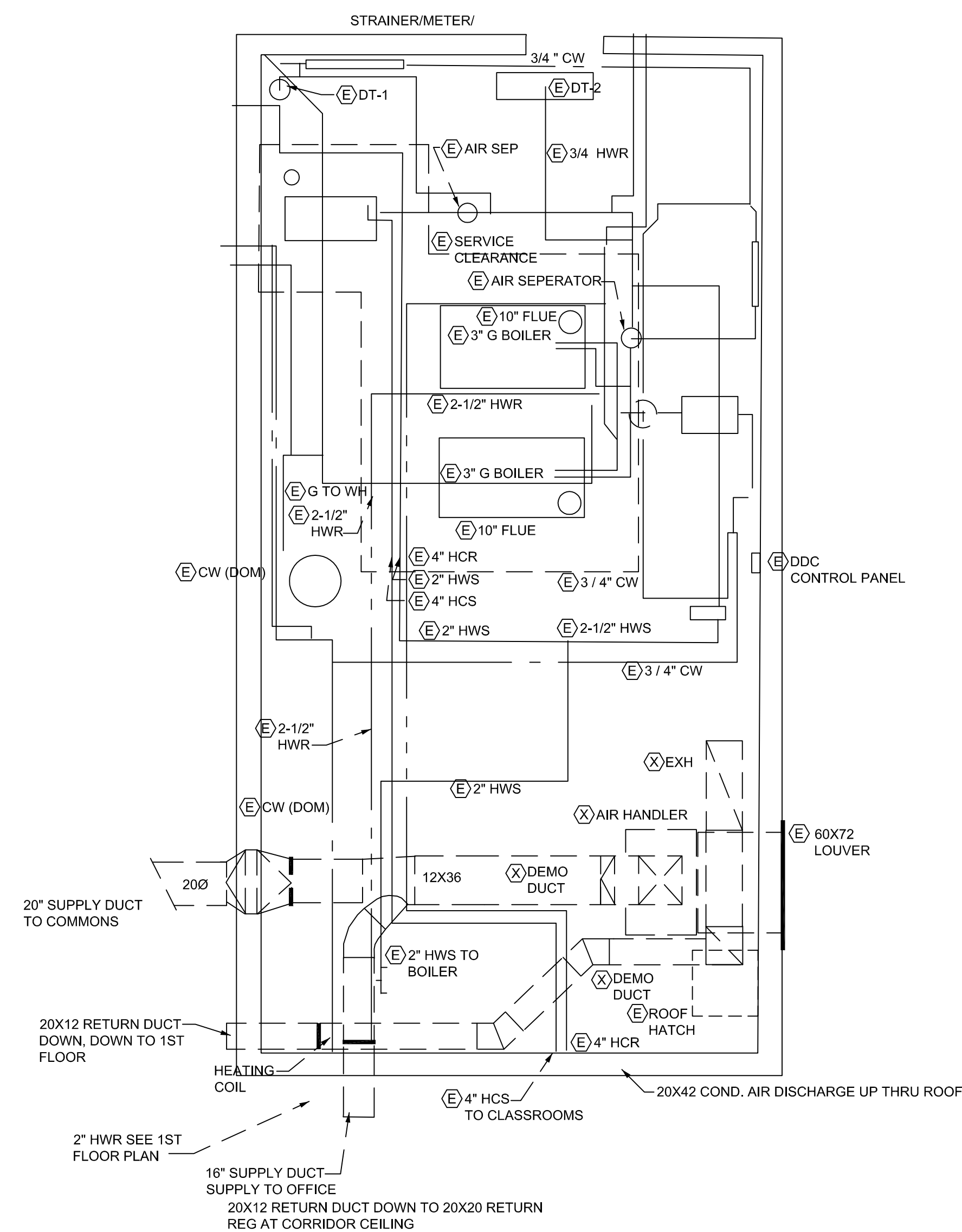
TURNING VANES

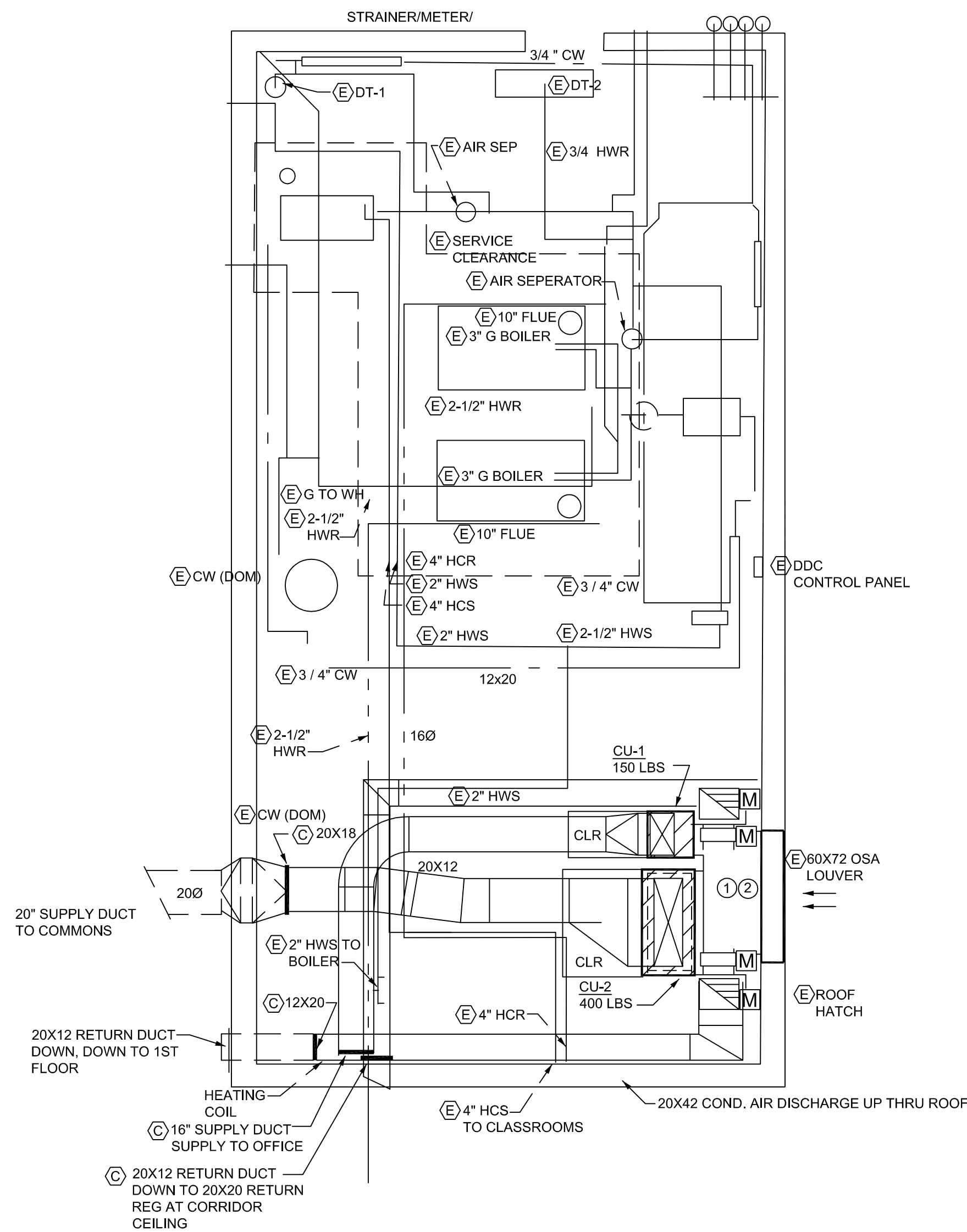
MITER TAKE-OFF

TURNING VANES

MITER TAKE-OFF

TURNING VANES

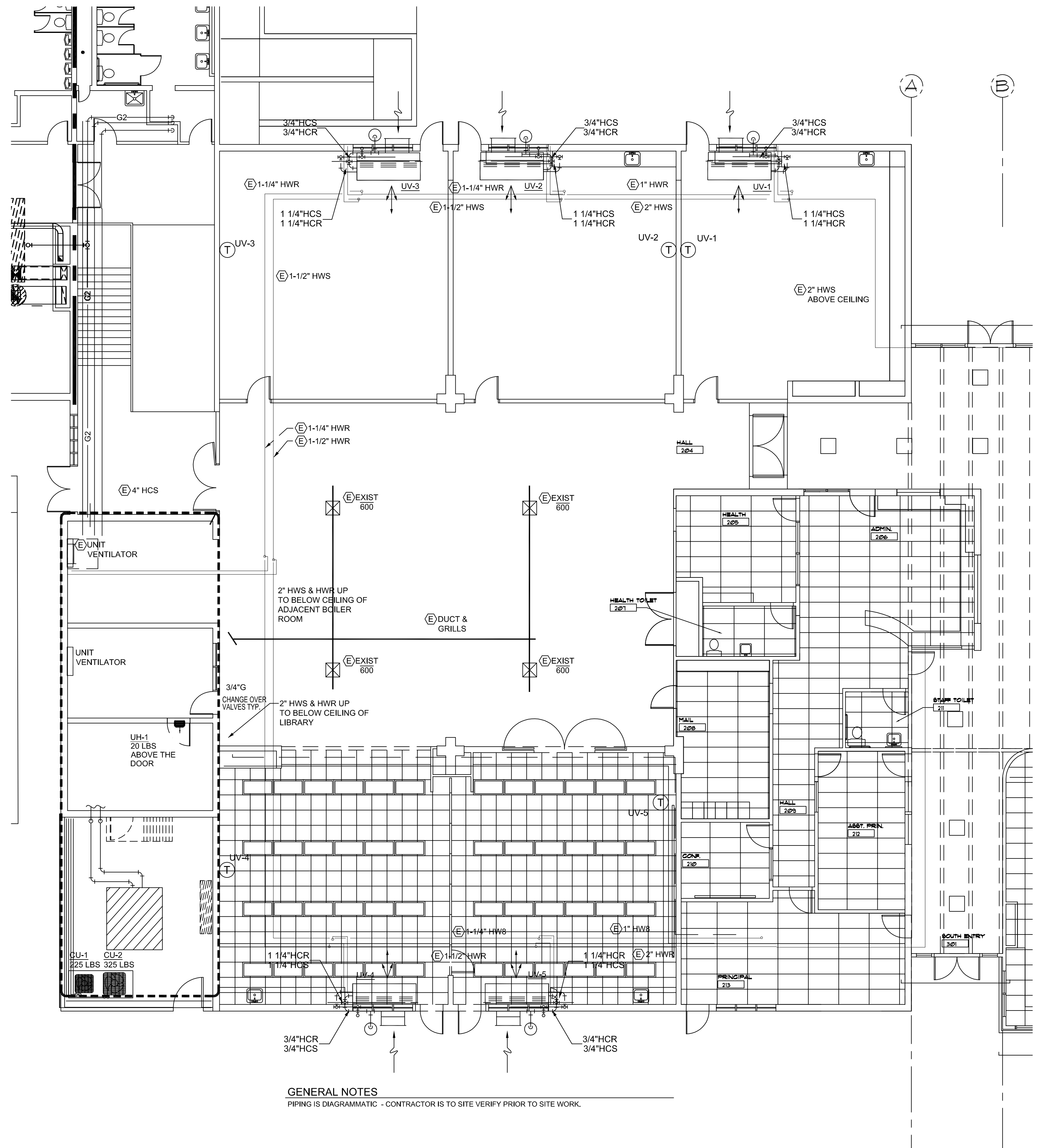




SHEET NOTES

- ① PROVIDE A LINED OUTSIDE AIR PLENUM - CONNECT TO EXISTING 60X72 OUTSIDE AIR LOUVER
- ② SEAL AROUND ALL PENETRATIONS

② MECHANICAL MEZZADINE NEW FLOOR PLAN
1/4" = 1'-0"

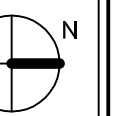


GENERAL NOTES

PIPING IS DIAGRAMMATIC - CONTRACTOR IS TO SITE VERIFY PRIOR TO SITE WORK.

① MAIN LEVEL - MECHANICAL NEW FLOOR PLAN
1/8" = 1'-0"

KEYPLAN



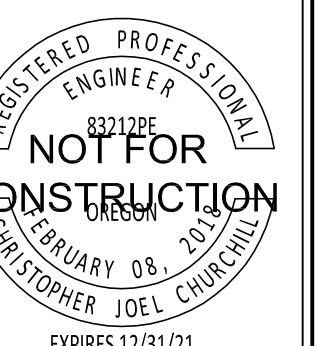
Drawn: GCB

Date: 02/21/2020

Check: CJC

REVISIONS		
NO.	DESCRIPTION	DATE
1	BSD REVIEW	02/21/20

Sheet Title
MECHANICAL
NEW FLOOR
PLANS



M1.11
Job No: BSD1901