

MECHANICAL SYMBOL LEGEND			
STEAM	GENERAL	SANITARY & DOMESTIC	HVAC
<p>BBD → BOILER BLOW DOWN</p> <p>CD → STEAM CONDENSATE DRAIN ABOVE GRADE</p> <p>CD → STEAM CONDENSATE DRAIN BELOW GRADE</p> <p>HPC → HIGH PRESSURE CONDENSATE</p> <p>HPS → HIGH PRESSURE STEAM</p> <p>LPC → LOW PRESSURE CONDENSATE</p> <p>LPS → LOW PRESSURE STEAM</p> <p>MPC → MEDIUM PRESSURE CONDENSATE</p> <p>MPS → MEDIUM PRESSURE STEAM</p> <p>STEAR TRAP</p>	<p>EXISTING DEMOLITION NEW NEW TO EXISTING SHEET KEYNOTE REVISION DELTA PIPE UP OR DUCT UP PIPE OR DUCT DOWN PIPE OR DUCT CAP PIPE ANCHOR PIPE GUIDE PIPE ROLLER SUPPORT FLOW DIRECTION ARROW PIPE EXPANSION JOINT FLEXIBLE CONNECTOR CONCENTRIC REDUCER ECCENTRIC REDUCER VALVES T&P RELIEF VALVE ISOLATION VALVE ISOLATION VALVE IN VERTICAL POSITION CHECK VALVE BALANCING VALVE AUTOMATIC 2-WAY VALVE AUTOMATIC 3-WAY VALVE PRESSURE REDUCING & REGULATING VALVE DIAPHRAGM VALVE ANGLE VALVE STRAINER UNION SPECIALTY SYSTEMS POST INDICATOR VALVE WITH TAMPER SWITCH BUILDING SPRINKLER FIRE MAIN STORM SEWER (SITE) STORM DRAIN THRUST BLOCK LAWN SPRINKLER WATER MAIN WELL YARD HYDRANT TREE WIRE FENCE GAS RISER GAS METER ELECTRICAL RISER SWITCH BOX PROPERTY CORNER CONTROL POINT BENCHMARK MAIL BOXES WOODEN POST TIE DOWN CONCRETE GRAVEL</p>	<p>SANITARY DRAIN BELOW GRADE (PLAN)</p> <p>SANITARY DRAIN ABOVE GRADE (PLAN)</p> <p>COLD WATER (CW)</p> <p>HOT WATER (HW)</p> <p>HOT WATER CIRCULATING (HWC)</p> <p>140 HW → 140°F DOMESTIC HOT WATER</p> <p>140 HWC → 140°F DOMESTIC HOT WATER CIRCULATING</p> <p>T → TEMPERED WATER</p> <p>TC → TEMPERED WATER CIRCULATING</p> <p>V → VENT</p> <p>VBF → VENT BELOW FLOOR</p> <p>AV → ACID VENT</p> <p>AW → ACID WASTE (ABOVE GRADE)</p> <p>AW → ACID WASTE (BELOW GRADE)</p> <p>CD → CONDENSATE DRAIN PIPING</p> <p>RD → ROOF DRAIN (ABOVE GRADE)</p> <p>RD → ROOF DRAIN (BELOW GRADE)</p> <p>OD → OVERFLOW DRAIN (ABOVE GRADE)</p> <p>OD → OVERFLOW DRAIN (BELOW GRADE)</p> <p>SCW → SOFT COLD WATER</p> <p>SHW → SOFT HOT WATER</p> <p>SS → SUB-SOIL DRAIN</p> <p>FM → FORCE MAIN (PUMP DISCHARGE)</p> <p>FIRE</p> <p>FIRE PROTECTION PIPING</p> <p>DUCT FIRE</p> <p>TS → TAMPER SWITCH</p> <p>FS → FLOW SWITCH</p> <p>SPRINKLER HEAD, PENDANT</p> <p>SPRINKLER HEAD, SIDE WALL</p> <p>ALARM VALVE, WET</p> <p>ALARM VALVE, DRY</p> <p>FIRE PROTECTION RISER</p> <p>FIXTURES</p> <p>WC-1 → WATER CLOSET AND TYPE</p> <p>U-1 → URINAL AND TYPE</p> <p>L-1/S-1 → LAVATORY OR SINK AND TYPE</p> <p>BT-1 → BATHTUB AND TYPE</p> <p>SH-1 → SHOWER AND TYPE</p> <p>MS-1/S-1 → SERVICE SINK OR MOP SINK AND TYPE</p> <p>EWC-1 → ELECTRIC WATER COOLER AND TYPE</p> <p>VTR → METER (GAS, WATER, ETC)</p> <p>VENT THRU ROOF</p> <p>RD-1 → ROOF DRAIN</p> <p>OD-1 → OVERFLOW DRAIN</p> <p>GC → GRADE CLEAN OUT</p> <p>FC → FLOOR CLEAN OUT</p> <p>WCO → WALL CLEAN OUT</p> <p>CO → HORIZ. CLEAN OUT</p> <p>FD-1/F-1 → FLOOR DRAIN OR SINK AND TYPE</p> <p>HB-1 → HOSE BIBB</p> <p>WH-1 → WALL HYDRANT</p> <p>YH-1 → YARD HYDRANT</p> <p>DS-1 → DOWNSPOUT NOZZLE</p>	<p>CEILING DIFFUSER LINEAR DIFFUSER SUPPLY REGISTER RETURN AIR GRILLE EXHAUST AIR GRILLE THERMOSTAT HUMIDISTAT CARBON DIOXIDE SENSOR RECTANGULAR DUCT (WxH) ROUND DUCT (DIA.) OVAL DUCT (WxH) FLEXIBLE DUCT SUPPLY AIR/OUTSIDE AIR UP AND DOWN RETURN AIR UP AND DOWN EXHAUST AIR UP AND DOWN MANUAL VOLUME DAMPER MOTORIZED DAMPER BACKDRAFT DAMPER FIRE DAMPER SMOKE DAMPER COMBINATION FIRE AND SMOKE DAMPER TURNING VANES HCG HARDWARE CLOTH GRILLE VOLUME EXTRACTOR</p>
			<p>GPM0.1 → GENERAL FIRE PROTECTION, PLUMBING, AND MECHANICAL INFORMATION</p> <p>FP1.1 → BASEMENT AND FIRST LEVEL FIRE PROTECTION PLANS</p> <p>FP1.2 → SECOND AND THIRD LEVEL FIRE PROTECTION PLANS</p> <p>P1.0A → BASEMENT PLUMBING PLAN - AREA A</p> <p>P1.1A → FIRST PLUMBING PLAN - AREA A</p> <p>P1.2A → SECOND PLUMBING PLAN - AREA A</p> <p>P1.2B → SECOND PLUMBING PLAN - AREA B</p> <p>P1.3A → THIRD PLUMBING PLAN - AREA A</p> <p>P1.3B → THIRD PLUMBING PLAN - AREA B</p> <p>P3.1 → ENLARGED PLUMBING PLANS</p> <p>P4.1 → SANITARY WASTE AND VENT RISER DIAGRAM - AREA A</p> <p>P4.2 → SANITARY WASTE AND VENT RISER DIAGRAM - AREA B</p> <p>P4.3 → PLUMBING DETAILS</p> <p>P6.1 → PLUMBING SCHEDULES</p> <p>M1.0A → BASEMENT HVAC PLAN - AREA A</p> <p>M1.1A → FIRST HVAC PLAN - AREA A</p> <p>M1.1B → FIRST HVAC PLAN - AREA B</p> <p>M1.2A → SECOND HVAC PLAN - AREA A</p> <p>M1.2B → SECOND HVAC PLAN - AREA B</p> <p>M1.3A → THIRD HVAC PLAN - AREA A</p> <p>M1.3B → THIRD HVAC PLAN - AREA B</p> <p>M1.5A → ROOF MECHANICAL AND PLUMBING PLAN - AREA A</p> <p>M1.5B → ROOF MECHANICAL AND PLUMBING PLAN - AREA B</p> <p>M2.0A → BASEMENT PIPING PLAN - AREA A</p> <p>M2.1A → FIRST PIPING PLAN - AREA A</p> <p>M2.1B → FIRST PIPING PLAN - AREA B</p> <p>M2.2A → SECOND PIPING PLAN - AREA A</p> <p>M2.2B → SECOND PIPING PLAN - AREA B</p> <p>M2.3A → THIRD PIPING PLAN - AREA A</p> <p>M2.3B → THIRD PIPING PLAN - AREA B</p> <p>M3.1 → ENLARGED PLANS</p> <p>M4.1 → PIPING SCHEMATIC DIAGRAM</p> <p>M5.1 → MECHANICAL P&D's</p> <p>M5.2 → MECHANICAL P&D's</p> <p>M6.1 → MECHANICAL DETAILS</p> <p>M7.1 → MECHANICAL SCHEDULES</p> <p>M7.2 → MECHANICAL SCHEDULES</p>

MECHANICAL SHEET LIST	
GPM0.1	GENERAL FIRE PROTECTION, PLUMBING, AND MECHANICAL INFORMATION
FP1.1	BASEMENT AND FIRST LEVEL FIRE PROTECTION PLANS
FP1.2	SECOND AND THIRD LEVEL FIRE PROTECTION PLANS
P1.0A	BASEMENT PLUMBING PLAN - AREA A
P1.1A	FIRST PLUMBING PLAN - AREA A
P1.2A	SECOND PLUMBING PLAN - AREA A
P1.2B	SECOND PLUMBING PLAN - AREA B
P1.3A	THIRD PLUMBING PLAN - AREA A
P1.3B	THIRD PLUMBING PLAN - AREA B
P3.1	ENLARGED PLUMBING PLANS
P4.1	SANITARY WASTE AND VENT RISER DIAGRAM - AREA A
P4.2	SANITARY WASTE AND VENT RISER DIAGRAM - AREA B
P4.3	PLUMBING DETAILS
P6.1	PLUMBING SCHEDULES
M1.0A	BASEMENT HVAC PLAN - AREA A
M1.1A	FIRST HVAC PLAN - AREA A
M1.1B	FIRST HVAC PLAN - AREA B
M1.2A	SECOND HVAC PLAN - AREA A
M1.2B	SECOND HVAC PLAN - AREA B
M1.3A	THIRD HVAC PLAN - AREA A
M1.3B	THIRD HVAC PLAN - AREA B
M1.5A	ROOF MECHANICAL AND PLUMBING PLAN - AREA A
M1.5B	ROOF MECHANICAL AND PLUMBING PLAN - AREA B
M2.0A	BASEMENT PIPING PLAN - AREA A
M2.1A	FIRST PIPING PLAN - AREA A
M2.1B	FIRST PIPING PLAN - AREA B
M2.2A	SECOND PIPING PLAN - AREA A
M2.2B	SECOND PIPING PLAN - AREA B
M2.3A	THIRD PIPING PLAN - AREA A
M2.3B	THIRD PIPING PLAN - AREA B
M3.1	ENLARGED PLANS
M4.1	PIPING SCHEMATIC DIAGRAM
M5.1	MECHANICAL P&D's
M5.2	MECHANICAL P&D's
M6.1	MECHANICAL DETAILS
M7.1	MECHANICAL SCHEDULES
M7.2	MECHANICAL SCHEDULES

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD

SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14



GENERAL FIRE
PROTECTION,
PLUMBING, AND
MECHANICAL
INFORMATION

GPM0.1

PLUMBING FIXTURE SCHEDULE - SITE PACKAGE

MARK	TYPE	MANUFACTURER	MODEL	DESCRIPTION	ACCESSORIES		CONNECTIONS			
							WASTE	VENT	CW	HW
FD-1		JAY R SMITH	2005	DUCO CAST IRON TWO PIECE BODY WITH NICKEL BRONZE ADJUSTABLE SPUD, WEEP HOLES, AND REVERSIBLE FLANGE. DRAINING PORT ON THE SIDE.			-	-	-	-
FS-1	SQUARE FLOOR SINK	JAY R SMITH	3161C	14X14X10 DEEP CAST IRON BODY FLANGED RECEPTOR WITH SEWER HOLE, ACID RESISTANT COATED, INTERIOR, NICKEL BRONZE RIM AND SECURED GRATE, AND WHITE ABS SEDIMENT BUCKET.	PROVIDE WITH 1/2 GRADE AND SECURITY SCREWS. VERIFY PIPE SIZES ON PLANS.		-	-	-	-
TD-1	TRENCH DRAIN	JAY R SMITH	9930	DUCO CAST IRON BODY WITH TAPER THREAD BRONZE PLUG AND ROUND NICKEL BRONZE SCRIERATED TOP.	PROVIDE WITH CLASS A, STAINLESS STEEL SLOT BAR GRATE. 8W X 14L X 4H IN LENGTH FOR MODULAR CHANNELS.	4"	2"	-	-	-
FCC	FLOOR CLEANOUT	JAY R SMITH	4023	DUCO CAST IRON BODY WITH NICKEL BRONZE SCRIERATED TOP, ADJUSTABLE TO FINISH FLOOR.	CLEANOUT SHALL BE THE SAME SIZE AS PIPING UP TO 4". 4" AND LARGER PIPING SHALL BE A 4" CLEANOUT.		-	-	-	-

REMARKS:
 1. VERIFY ALL CONNECTIONS & MOUNTING HEIGHTS WITH CODES, MANUFACTURERS, AND PLANS.
 2. SIZES LISTED INDICATE MIN. SIZE ONLY. SEE PLUMBING RISERS, AND FLOOR PLANS FOR LARGER SIZES.
 3. SEE SPECIFICATIONS FOR LISTS OF ALTERNATE MANUFACTURES.

DEDICATED OUTDOOR AIR UNITS WITH ENERGY RECOVERY

MARK	LOCATION	SERVES	OUTSIDE AIR			EXHAUST AIR			ELECTRICAL DATA			SENSIBLE EFFECTIVENESS	TOTAL EFF IN WINTER	TOTAL EFF IN SUMMER	MANUFACTURER	MODEL	REMARKS
			CFM	ESP IN. WG	HP	CFM	ESP IN. WG	HP	VOLTS	PH	MOP						
DOAS-1	ROOF	SOUTH CU	6000	2.0	7.5	4800	1.5	5.0	480	3	80.8%	80.8%	77.9%	DAIKIN	OAH017SGGM	1-11	
DOAS-2	ROOF	NORTH CU	6000	2.0	7.5	3200	1.5	5.0	480	3	94.16%	92.44%	89.42%	DAIKIN	OAH017GGGM	1-11	

REMARKS:
 1. R-410A REFRIGERANT.
 2. SIMPLY AIR FLOW CENTRIFUGAL PLENUM FANS.
 3. ENERGY RECOVERY WHEEL.
 4. NON-FUSED DISCONNECT SWITCH.
 5. BMS INTERFACE CARD WITH BACNET MS/TCP.
 6. PROVIDE 24" SOUND ATTENUATED ROOF CURB AND DUCT SMOKE DETECTOR.
 7. PROVIDE VIBRATION ISOLATION WITH 1" DEFLECTION.
 8. 30% PROPYLENE GLYCOL.
 9. PROVIDE WITH VFD'S ON SUPPLY AND EXHAUST FANS IN NEMA 3R ENCLOSURE AND FUSED DISCONNECTS.

HEAT RECOVERY AIR COOLED CHILLERS

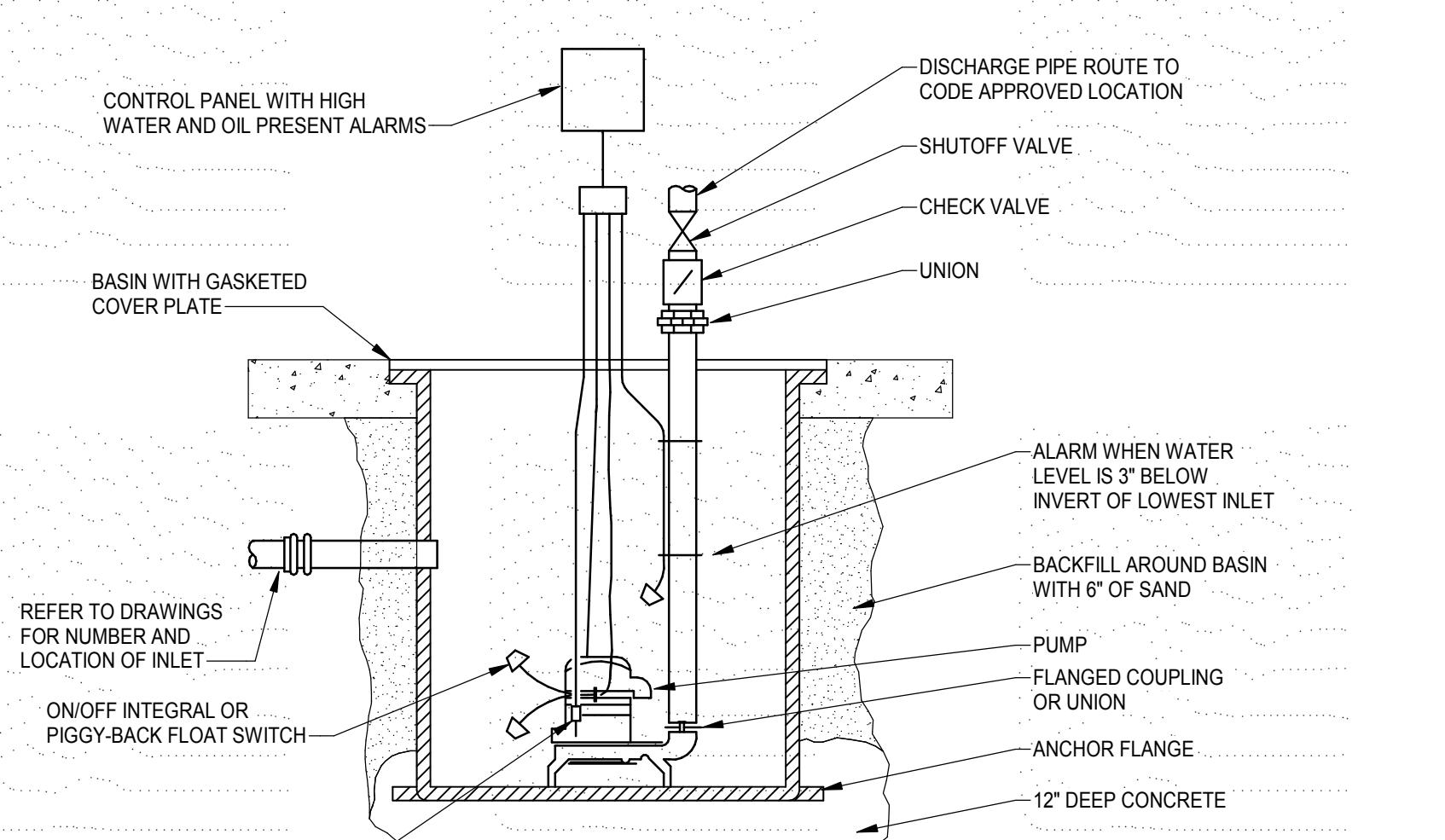
MARK	TONS	REFRIG. TYPE	COOLING MODE			HEAT RECOVERY			ELECTRICAL DATA			BASIN DATA	MANUFACTURER	MODEL	REMARKS		
			FLOW	EWT	LWT	PD	MAX EER	IPLV	KW	EWT	LW	GPM	WPD	V	PH	MCA	
ACC-1	172.4	410A	451.1	54	44	19.16	10.12	16.35	164.7	110	130	149.9	25.48	480	3	-	MULTISTACK ARA060X/ASP060X 1-2

REMARKS:
 1. HEAT RECOVERY AIR COOLED CHILLERS CONSISTS OF THREE (3) MODULES AT 60-TON PER MODULE, TWO (2) ARAB06X MODULES, ONE (1) ASP060X MODULE, AND ONE (1) PMM020 CHILLED WATER PUMP.
 2. THE ARA MODULES ARE RATED AT 15TA MCA, 225A MOP. THE ASP MODULE IS RATED AT 128A MCA, 175A MOP. THE CHILLED WATER PUMP IS RATED AT 451.1 GPM, 75 FT HEAD, 20 HP, 24.3A FLA.
 3. 30% PROPYLENE GLYCOL.
 4. PROVIDE 18" HIGH FULL ROOF CURB FILLED WITH SOUND ATTENUATING MATERIAL AND CURE MOUNTED SCREENWALL SYSTEM.
 5. THIS PACKAGE IS FOR EQUIPMENT PURCHASE ONLY. FULL SCHEDULE AND SPECIFICATION ARE PROVIDED FOR COORDINATION PURPOSES. ROOF CURB AND SCREENWALLS ARE INTENDED TO BE PURCHASED IN LATER PACKAGE.

SUMP PUMPS

MARK	LOCATION	SERVES	TYPE	GPM	HEAD (FT)	ELECTRICAL DATA	BASIN DATA	MANUFACTURER	MODEL	REMARKS
SP-1	TRASH 005	ELEVATOR	SUMP	100	35	1.5	208	1	FIBERGLASS 24D x 108H	MYERS WHR19H01 1-2,3
SP-2	TRASH 005	ELEVATOR	SUMP	20	32	0.5	208	1	FIBERGLASS 24D x 108H	MYERS WHRSH01 1-2,4

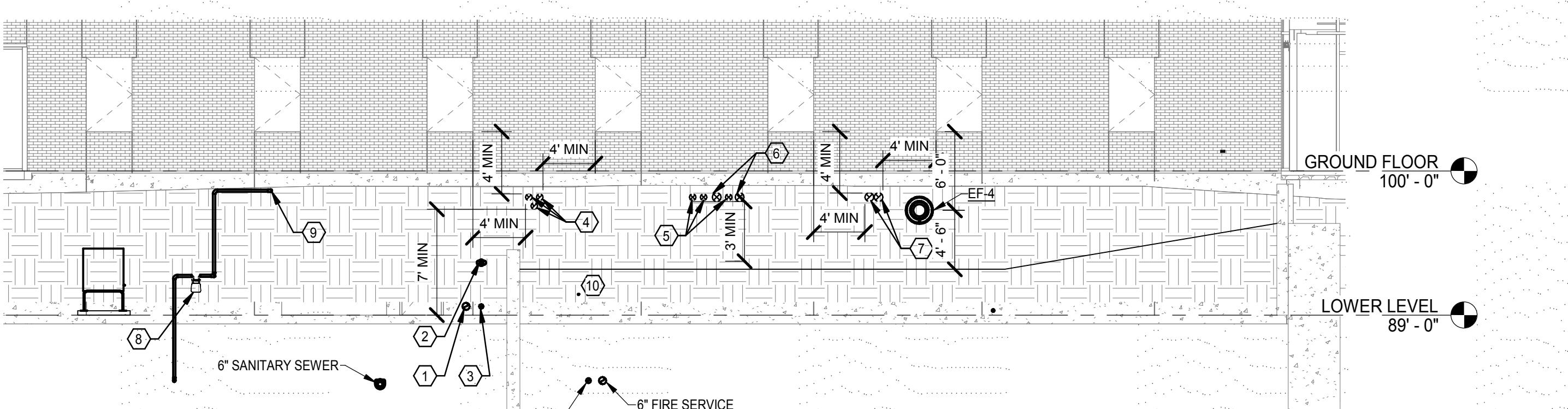
REMARKS:
 1. PROVIDE 120V HIGH LEVEL ALARM CONTROLLER INCLUDING NEMA 4X ENCLOSURE, FLOAT SWITCH, AUDIBLE ALARM WITH TEST/SILENCE BUTTON, AUTO RESET, AND DRY CONTACT FOR BMS & FIRE ALARM MONITORING. WALL CONTROLLER SHALL NOT ABOVE PUMP.
 2. PROVIDE 1/2" PVC PAGED PUMP SYSTEM FOR PUMP REMOVAL.
 3. VERIFY BASIN DEPTH WITH FINAL ELEVATOR PIT FLOOR ELEVATION.
 4. VERIFY BASIN DEPTH WITH FINAL DRILL TILE ELEVATION.



NOTES:
 1. INSTALL CONTROL PANEL PER MANUFACTURER INSTRUCTIONS. COMPONENTS AND WIRING ARRANGEMENT MAY DIFFER FROM THAT SHOWN.

5 SUMP PUMP DETAIL

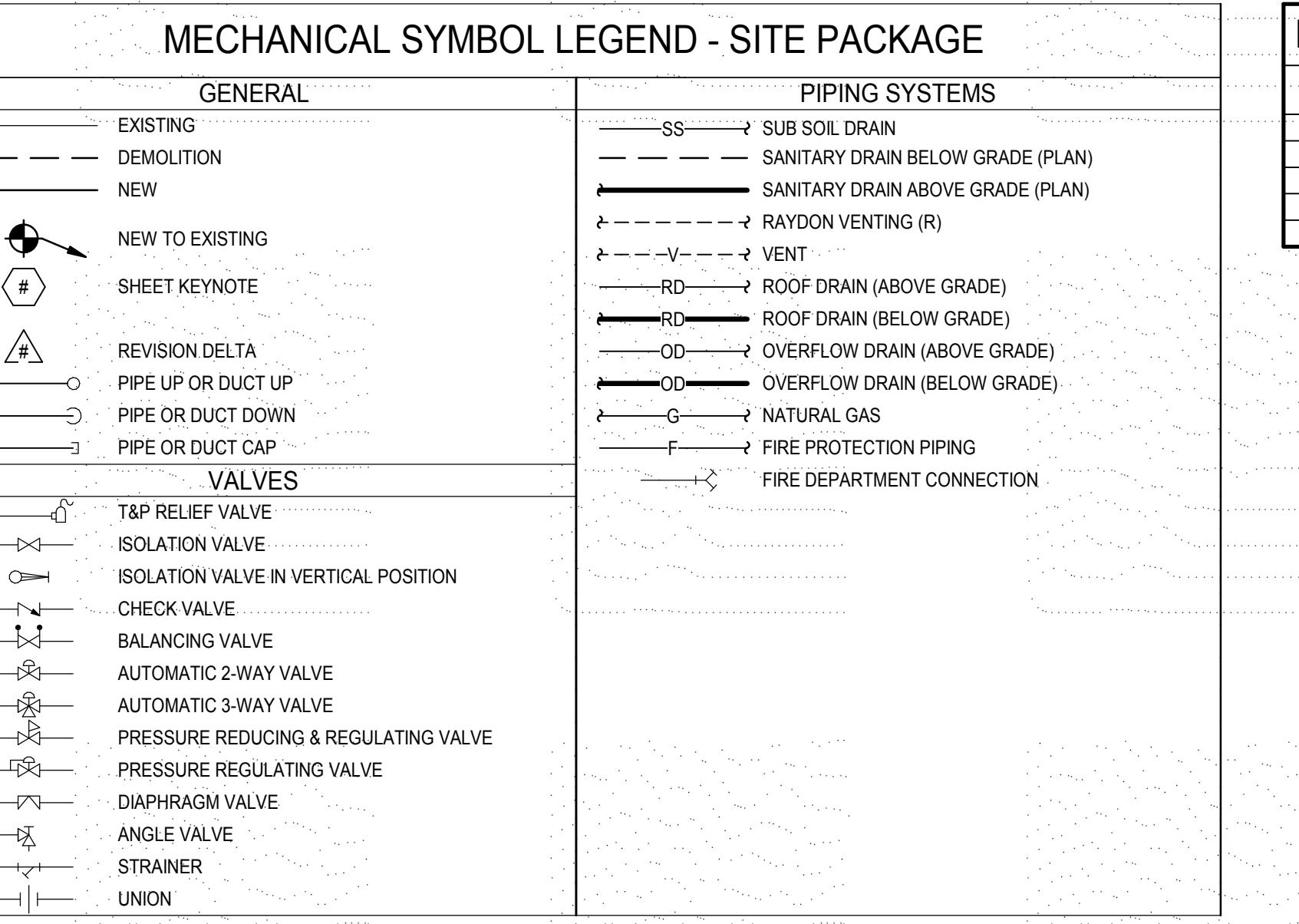
NONE



NOTES:
 1. PROVIDE SLEEVE FOR 6" OVERFLOW DRAIN. PIPING AND DOWNSPOUT NOZZLE SHALL BE PROVIDED UNDER FUTURE PACKAGE.
 2. PROVIDE SLEEVE FOR 4" FIRE PROTECTION DRAINS. DRAINS SHALL BE SPLASH PROOF AND DIVIDED BY A VERTICAL WALL.
 3. PROVIDE SLEEVE FOR 6" FIRE DEPARTMENT CONNECTION. FIRE DEPARTMENT CONNECTION VALVE SHALL BE PROVIDED UNDER FUTURE PACKAGE.
 4. PROVIDE SLEEVE FOR 6" BOILER COMBUSTION FLUE. FLUE PIPING AND TERMINATION SHALL BE PROVIDED UNDER FUTURE PACKAGE. TYPICAL OF 3.
 5. PROVIDE SLEEVE FOR 6" WATER HEATER COMBUSTION AIR INTAKE. PIPING AND TERMINATION SHALL BE PROVIDED UNDER FUTURE PACKAGE. TYPICAL OF 3.
 6. PROVIDE SLEEVE FOR 2" GAS SERVICE INTO BUILDING. ROUTE PIPE INTO BUILDING AND CAP ON INSIDE OF FOUNDATION WALL FOR EXTENSION IN FUTURE PACKAGE.
 7. PROVIDE SLEEVE FOR 1" IRRIGATION SERVICE INTO BUILDING.
 8. COORDINATE INSTALLATION LOCATION OF METER WITH BLACK HILLS ENERGY. MAINTAIN A MINIMUM OF 3' HORIZONTAL CLEARANCE FROM WINDOWS AND DOORS.
 10. PROVIDE SLEEVE FOR 2" GAS SERVICE INTO BUILDING. ROUTE PIPE INTO BUILDING AND CAP ON INSIDE OF FOUNDATION WALL FOR EXTENSION IN FUTURE PACKAGE.

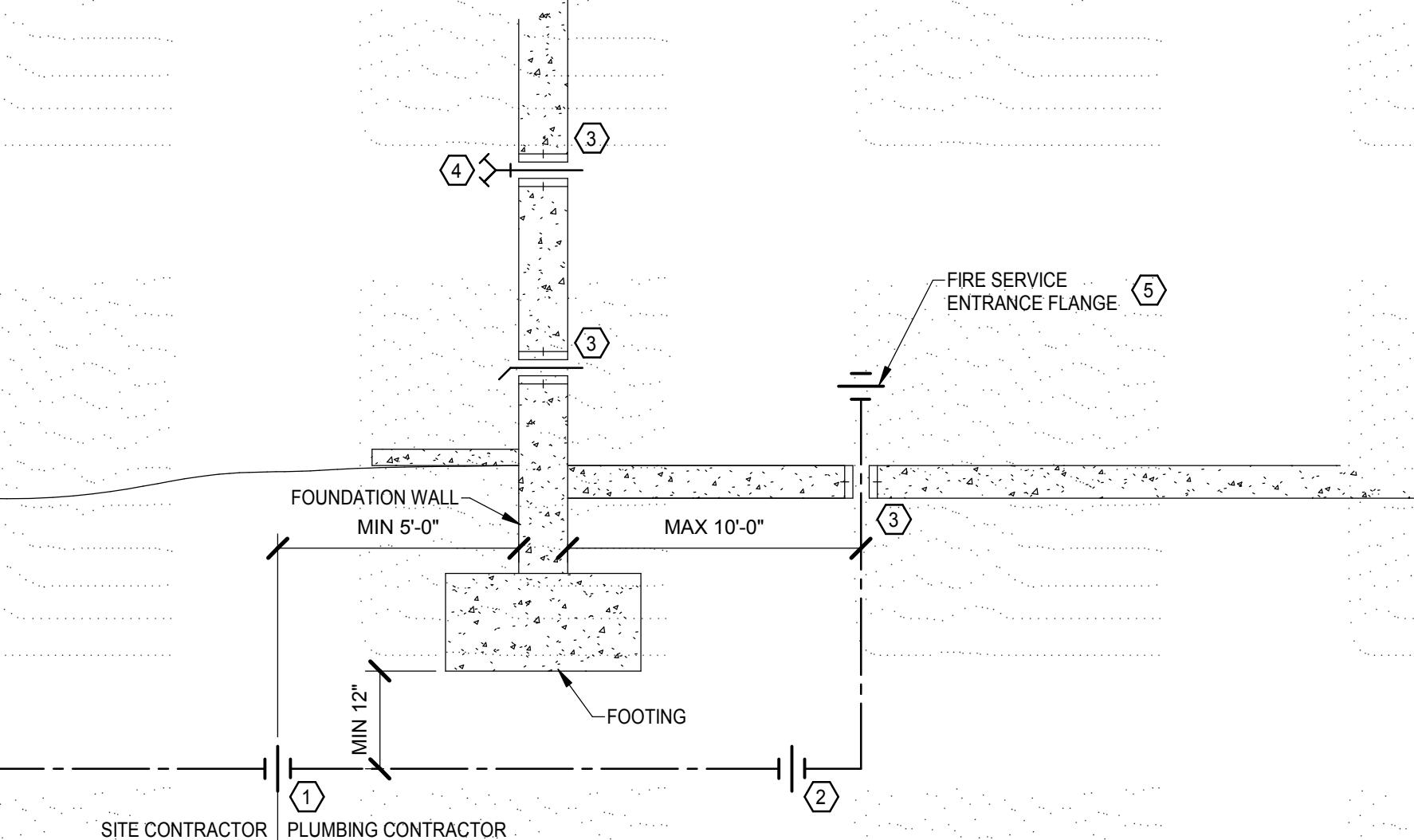
4 EXTERIOR SECTION

1/8" = 1'-0"



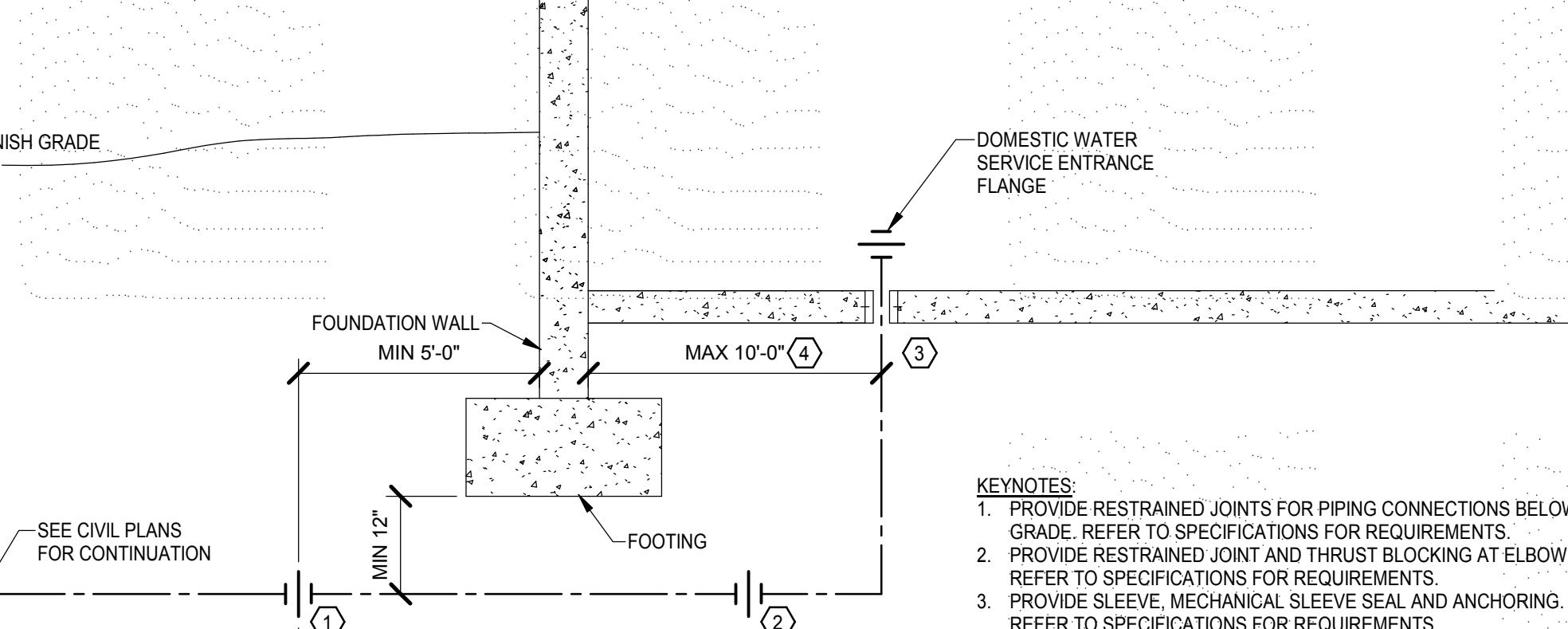
STRUCTURAL ENGINEER
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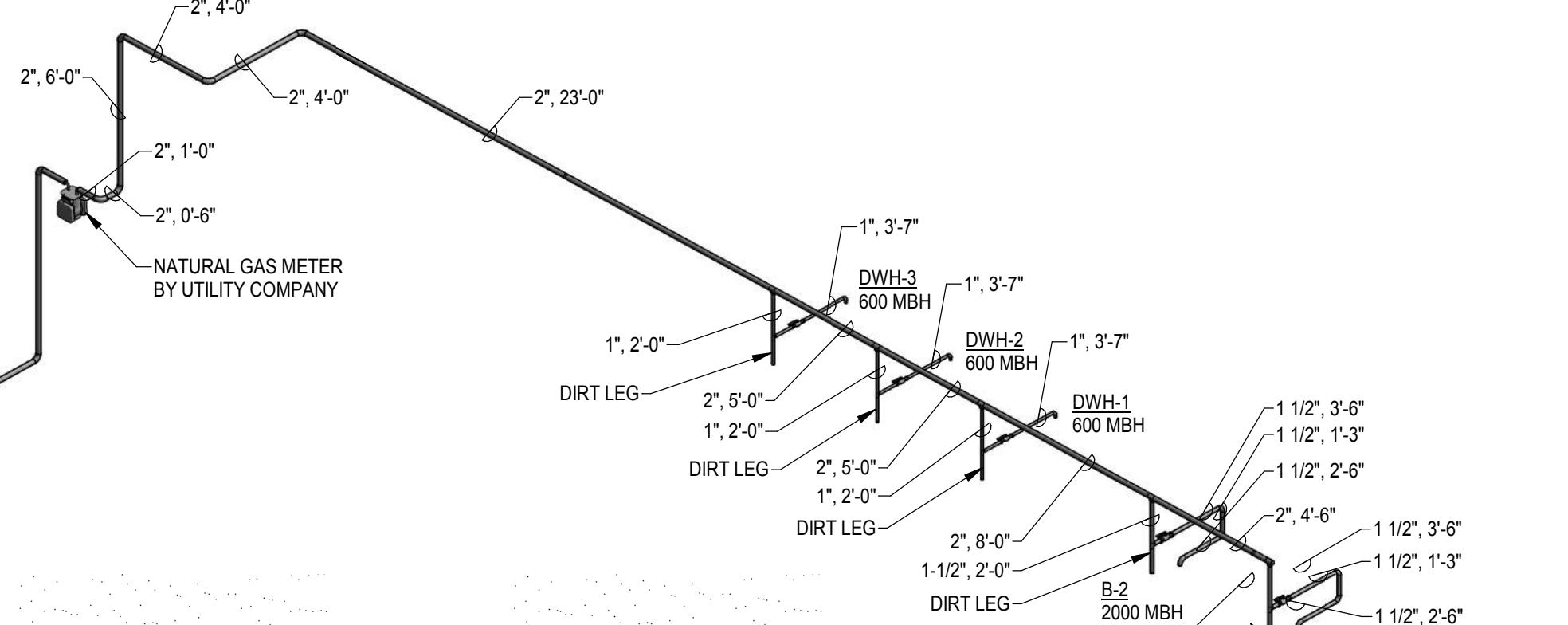
1 FIRE SERVICE INSTALLATION REQUIREMENTS

NONE



2 DOMESTIC SERVICE INSTALLATION REQUIREMENTS

NONE

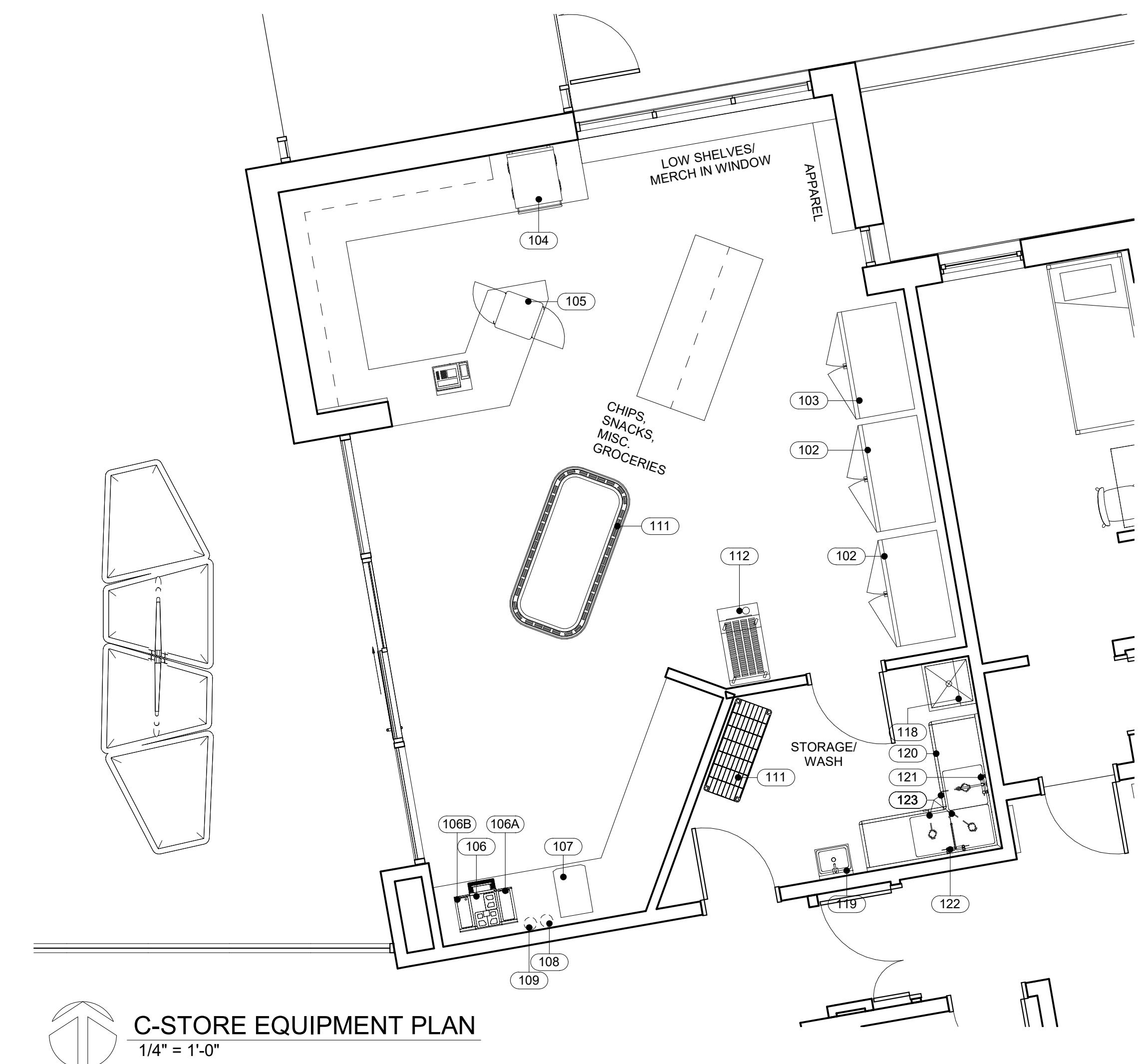
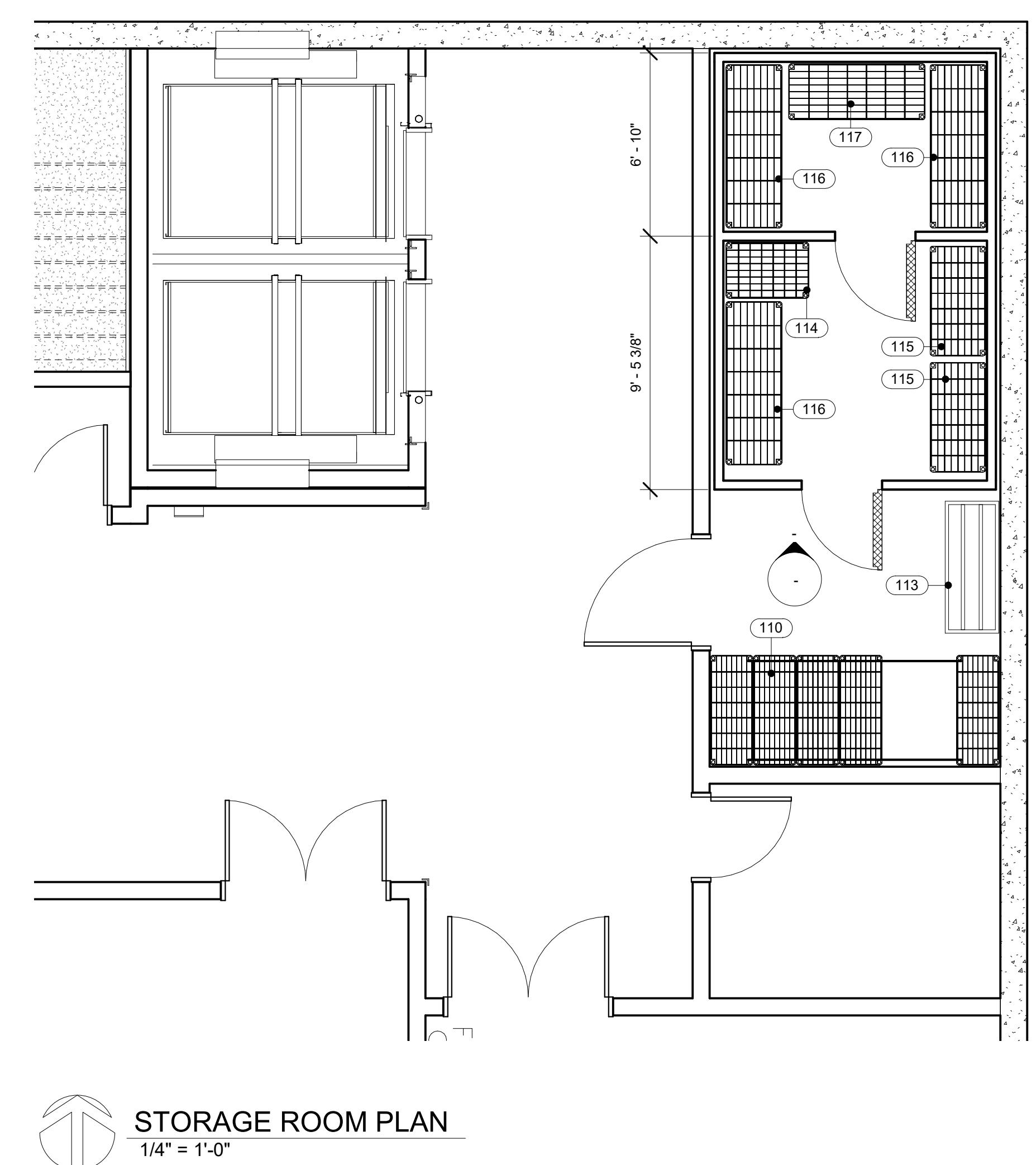


3 GAS RISER DIAGRAM



KITCHEN EQUIPMENT SCHEDULE																
MARK	DESCRIPTION	MANUFACTURER & MODEL	QTY	MECHANICAL CONNECTIONS			ELECTRICAL CONNECTIONS			CONNECTED BY			REMARKS	MARK		
				HOT WATER	COLD WATER	DRAIN	GAS	VOLTS	AMPS	MOTOR HP	TOTAL KW	CONN TYPE	EC	PC	HC	MARK
100	WALK-IN COOLER	NORLAKE	1	"	"	"	"	"	"	"	"	"	"	"	100	
100A	WALK-IN COOLER CONDENSING UNIT	NORLAKE MHM007AB	1	"	"	"	"	206-230/60/1	.8	"	"	HW	X	X	100A	
101	WALK-IN FREEZER EVAPORATOR	NORLAKE TMD007BA-TA2	1	"	"	"	"	11560/1	"	"	"	HW	X	X	100B	
101A	WALK-IN FREEZER CONDENSING UNIT	NORLAKE MSL015AB	1	"	"	"	"	206-230/60/1	4.9	"	"	HW	X	X	101A	
101B	WALK-IN FREEZER EVAPORATOR	NORLAKE EL01049B-TB2	1	"	"	"	"	206-230/60/1	4.9	"	"	HW	X	X	101B	
102	REFRIGERANT REFRIGERATOR	TRUE GDM-36F-PSL-1	2	"	"	"	"	11560/1	8.5	1/2	"	5-15P	X	"	102	
103	SPEED OVEN	TURBO CHEF TS-1000-1	1	"	"	"	"	11560/1	12.3	3/4	"	14-30P	X	"	103	
104	PIZZA MERCHANT	HATCO FWDV-2	1	"	"	"	"	206-240/60/1	40.0	"	96	6-50P	X	"	104	
105	COFFEE BREWING/STIRRING UNIT	FRANKE A600	1	"	3/8"	"	3/4" TO FS	206-60/1	30.0	"	"	6-30P	X	"	105	
106	COFFEE BREWING/STIRRING UNIT	FRANKE DSCM	1	"	"	"	"	12060/1	15.0	"	"	5-15P	X	"	106	
107	ICEWATER DISPENSER	SCOTSMAN HID312A-1	1	"	3/8"	"	3/4" TO FS	11560/1	15.0	"	"	5-15P	X	X	107	
108	WATER FILTER	3M ICE120-S	1	"	3/8"	"	"	"	"	"	"	5-15P	X	"	108	
109	WATER FILTER	3M BREW120-MS	1	"	3/8"	"	"	"	"	"	"	5-15P	X	"	109	
110	REFRIGERATED ISLAND-MERCHANDISER	METRO	1	"	"	"	"	"	"	"	"	5-15P	X	"	110	
111	FROZEN DRINK MACHINE WITH CABINET BASE	MULTIFLEX FB08BT-R-GEN1	-	"	3/8"	"	1 1/2" TO FS	206-240/60/1	30.0	1 3/4	"	CAP	X	"	111	
112	DUNNAGE RACK	JOHN BOOS J806	1	"	"	"	"	12060/1	16.0	"	"	5-20P	X	X	FURNISH WITH MANUFACTURERS RECOMMENDED FILTER	112
113	WALK-IN SHELVING	METRO	1	"	"	"	"	"	"	"	"	"	"	"	113	
114	WALK-IN SHELVING	METRO	2	"	"	"	"	"	"	"	"	"	"	"	114	
115	WALK-IN SHELVING	METRO	1	"	"	"	"	"	"	"	"	"	"	"	115	
116	WALK-IN SHELVING	METRO	3	"	"	"	"	"	"	"	"	"	"	"	116	
117	WALK-IN SHELVING	METRO	1	"	"	"	"	"	"	"	"	"	"	"	117	
118	UTENSIL SHELF	ADMETAL ABS014245	1	"	"	"	"	"	"	"	"	"	"	"	118	
119	HARD PLATE RACK	JOHN BOOS PBH15-H1410	1	1 1/2"	1 1/2"	1 1/2"	"	"	"	"	"	"	"	X	119	
120	THREE-COMPARTMENT SINK	JOHN BOOS 3PB1924-D18L	1	"	"	3 1/2"	"	"	"	"	"	"	"	X	120	
121	PRE-RINSE FAUCET	T85-B-0133-CR-808	1	1 1/2"	1 1/2"	"	"	"	"	"	"	"	"	X	121	
122	SWING SPOUT FAUCET	T85-B-0231-CR	1	1 1/2"	1 1/2"	"	"	"	"	"	"	"	"	X	122	
123	LEVER DRAIN	T85-B-0350	3	"	"	"	1 1/2"	"	"	"	"	"	"	X	123	
NOTES:																
1. GENERAL CONTRACTOR TO PROVIDE 18 GA. GALVANIZED STEEL BLOCKING AT ALL WALL SHELF, HAND SINK AND ALL OTHER WALL-HUNG EQUIPMENT LOCATIONS.																
2. SEE SPECIFICATIONS AND CUT SHEETS FOR ADDITIONAL INFORMATION, OPTIONS AND ACCESSORIES SPECIFIED FOR SCHEDULED EQUIPMENT.																
3. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL FAUCETS AND DRAINS REGARDLESS OF THE PARTY FURNISHING THE PLUMBING FIXTURES.																
4. PAPER TOWEL AND SOAP DISPENSERS BY OTHERS AT ALL HAND SINKS.																
5. WALK-IN COOLER AND FREEZER CONDENSING UNITS SHALL BE LOCATED TBD.																
6. GENERAL CONTRACTOR SHALL ENSURE A 2' MIN. GAP BETWEEN WALK-IN COOLER/FREEZER PANELS AND ADJACENT ARCHITECTURAL WALLS.																

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION



SCC RESIDENCE HALL C-STORE

PROJECT: 21045 DATE: 03.15.2023
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FOODSERVICE EQUIPMENT PLANS AND SCHEDULE

NORTH FS1.0

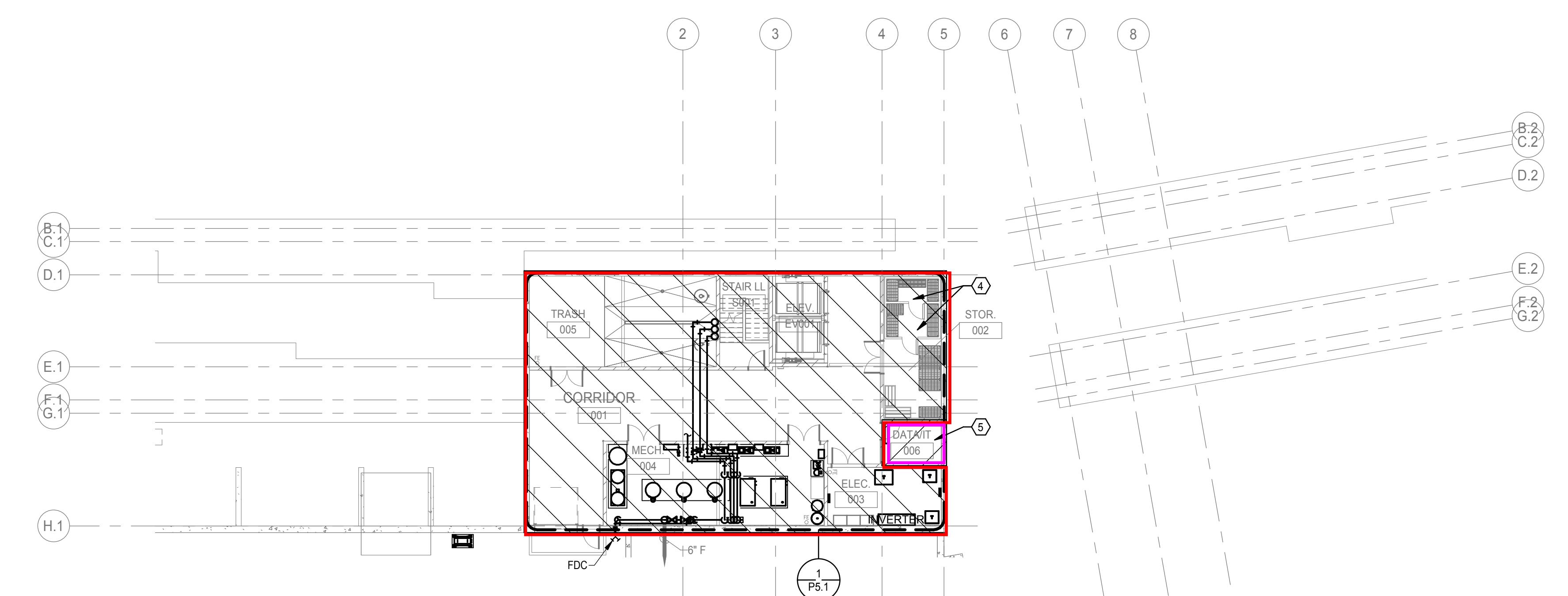
GENERAL SHEET NOTES

- A. ALL AREAS OF THE BUILDING INDICATED SHALL BE SPRINKLERED ACCORDING TO THE CURRENTLY ADOPTED EDITION OF NFPA STANDARDS. IF NOT SPECIFIED, NFPA 13 IS REQUIRED. ENTIRE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE FIRE MARSHAL OFFICE, OWNER'S INSURANCE COMPANY AND AUTHORITIES HAVING JURISDICTION.
- B. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- C. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.
- D. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- E. UNLESS NOTED OTHERWISE, ALL PIPING SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.
- F. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA ARE PROVIDED TO ALLOW EQUIPMENT TO BE MOVED OUT OF ROOMS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- G. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF PIPE INSULATION OR HANGERS TO FINISHED FLOOR OR AS HIGH AS POSSIBLE. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- H. FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED WALLS AND CEILINGS. PROVIDE SEPARATION LOCATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- I. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL, PLUMBING, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. HVAC CONTRACTOR'S DUCT AND EQUIPMENT LOCATIONS SHALL TAKE PRIORITY OVER FIRE SPRINKLER PIPING.
- J. PROVIDE PROTECTIVE CAGE OVER SPRINKLER HEADS LOCATED WITHIN 84" ABOVE FINISHED FLOOR AND IN ALL MECHANICAL ROOMS.
- K. SPRINKLER HEAD LOCATIONS SHALL BE COORDINATED WITH LIGHTS, DIFFUSERS, SOUND SYSTEM COMPONENTS AND OTHER ITEMS INSTALLED IN CEILING. LOCATION OF THESE DEVICES TAKES PRECEDENCE OVER SPRINKLER HEAD LOCATION. SHOW EARLY THE RELATIONSHIP OF ALL CEILING MOUNTED DEVICES WITH THE SPRINKLER HEAD LOCATIONS WHEN SPRINKLER SHOP DRAWINGS ARE SUBMITTED FOR APPROVAL.
- L. SPRINKLER HEADS SHALL BE LOCATED IN CENTER OF LAY-IN CEILING GRIDS. ASSUMING 2x2 GRID FORMAT, SPRINKLER HEADS IN EXPOSED OR HARD CEILINGS SHALL BE LAY OUT IN A UNIFORM AND SYMMETRICAL PATTERN ACCEPTABLE WITH ARCHITECT AND ENGINEER. SEE ARCHITECTURAL PLANS FOR TYPE OF CEILING INSTALLED.
- M. SPRINKLER DRAIN PIPING SHALL BE ROUTED IN CONCEALED SPACES TO OUTSIDE OR TO MOP SINKS ONLY. 2 TEST LINES MUST BE PIPED TO OUTSIDE. EXTERIOR DRAIN OUTLETS SHALL BE CHROME WITH MATCHING ESCUTCHEON AND THREADED HOSE FITTING, AND SHALL DISCHARGE ON SPLASH BLOCK AT 45-DEGREE ANGLE.
- N. POST INDICATOR VALVE (PIV) WITH SUPERVISORY SWITCH PROVIDED BY FIRE SPRINKLER SPRINKLER CONTRACTOR. INSTALLED BY CIVIL CONTRACTOR. SEE CIVIL PLANS FOR PIV LOCATION.
- O. FIRE PROTECTION PLANS, SPRINKLER DRAWINGS, & SPRINKLER LISTINGS MUST BE SIGNED BY A LICENSED REGISTERED FIRE PROTECTION CONTRACTOR ALLOWED TO WORK IN AREA OF JURISDICTION AND FOLLOW ALL LOCAL AND STATE CODES.



2 FIRST FIRE PROTECTION PLAN

1/16" = 1'-0"



1 BASEMENT FIRE PROTECTION PLAN

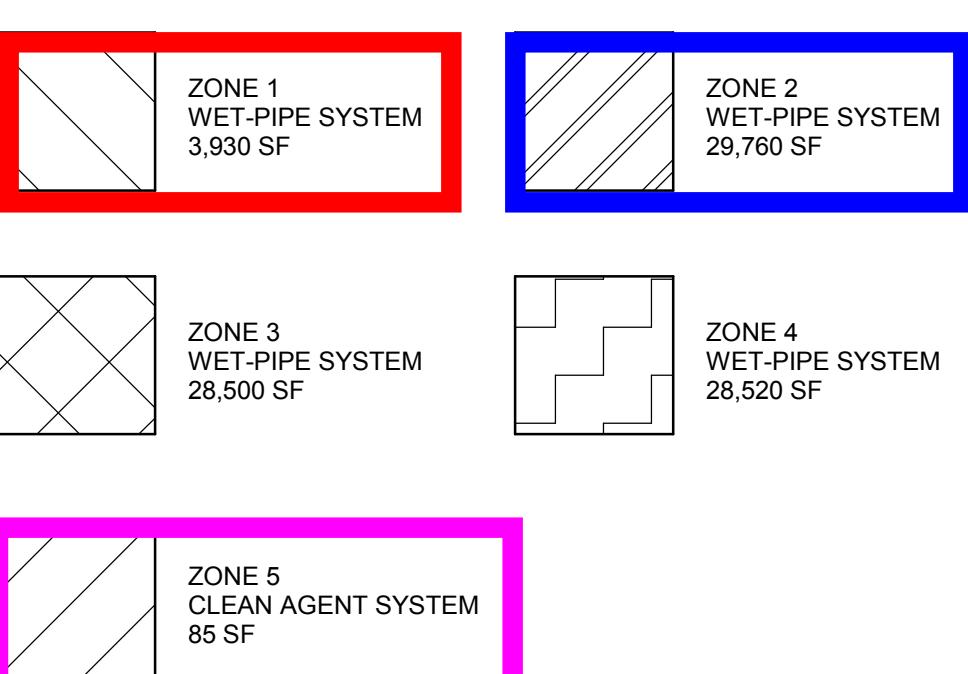
1/16" = 1'-0"

SHEET KEYNOTES

- WOOD SLAT CEILING IN THIS AREA. COORDINATE REQUIREMENTS AND PROVIDE OVERAGE ABOVE AND BELOW AS REQUIRED BY NFPA. COORDINATE SPRINKLER FINISH WITH WOOD CEILING AND PROVIDE BRONZE CONCEALED COVER OR CUSTOM COLOR SELECTED BY ARCHITECT.
- PROVIDE DRY SIDEWALL COVERAGE IN VESTIBULE FROM ADJACENT SPACE.
- PROVIDE DRY SIDEWALL COVERAGE OF ROOF OVERHANG FROM ADJACENT SPACE.
- PROVIDE DRY PENDANT SPRINKLER HEAD FOR COOLER/FREEZER.
- PROVIDE CLEAN-AGENT FIRE SUPPRESSION SYSTEM FOR MAIN IT/DEMARCATION ROOM.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD

SCC RESIDENCE HALL FIRE PROTECTION LEGEND

PROJECT: 21045 DATE: 2022.10.14
B-Compliant Rev

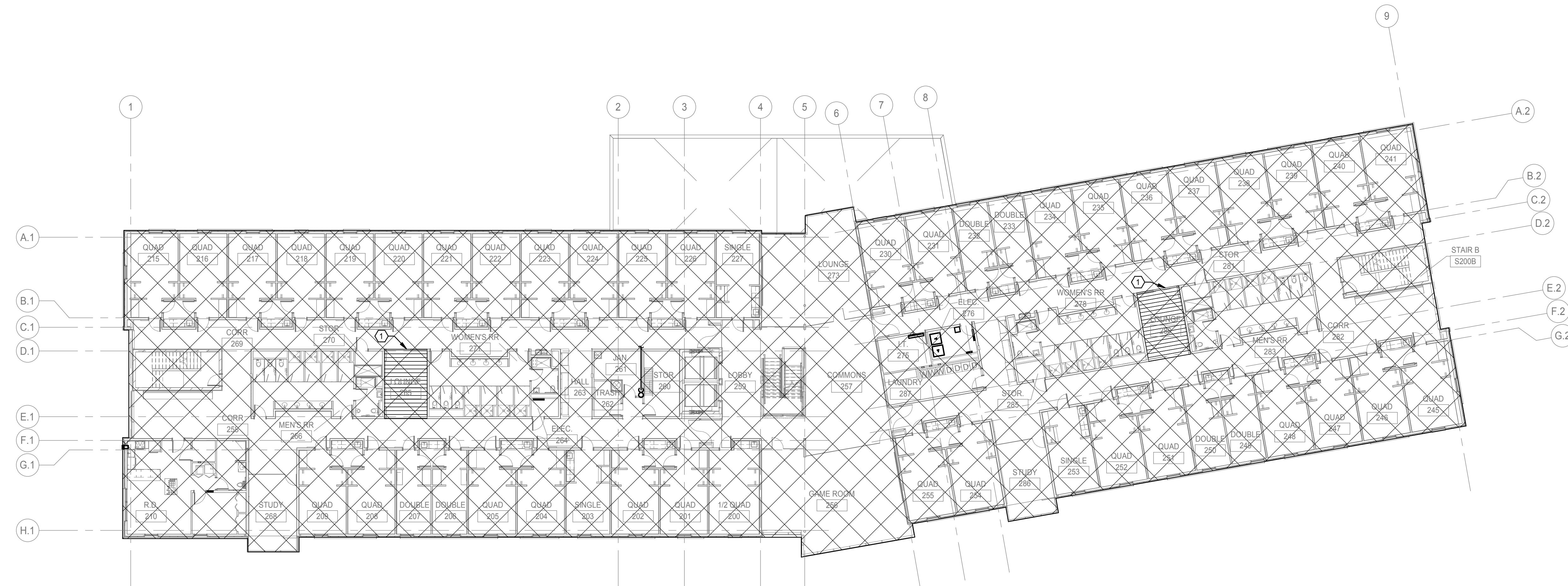
BASEMENT AND FIRST LEVEL FIRE PROTECTION PLANS



FP1.1

GENERAL SHEET NOTES

- A. ALL AREAS OF THE BUILDING INDICATED SHALL BE SPRINKLED ACCORDING TO THE CURRENTLY ADOPTED EDITION OF NFPA STANDARDS. IF NOT SPECIFIED, THE ENTIRE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE FIRE MARSHAL OFFICE, OWNER'S INSURANCE COMPANY AND AUTHORITIES HAVING JURISDICTION.
- B. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- C. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.
- D. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- E. UNLESS NOTED OTHERWISE, ALL PIPING SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.
- F. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AND EQUIPMENT ARE LOCATED AS CLOSE AS POSSIBLE TO CONNS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- G. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF PIPE INSULATION OR HANGERS TO FINISHED FLOOR OR AS HIGH AS POSSIBLE. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- H. FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED CONSTRUCTION. PROVIDE SEALS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- I. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL, PLUMBING, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. HVAC CONTRACTOR'S DUCT AND EQUIPMENT LOCATIONS SHALL TAKE PRIORITY OVER FIRE SPRINKLER PIPING.
- J. PROVIDE PROTECTIVE CAGE OVER SPRINKLER HEADS LOCATED WITHIN 8'4" ABOVE FINISHED FLOOR AND IN ALL MECHANICAL ROOMS.
- K. SPRINKLER HEAD LOCATIONS SHALL BE COORDINATED WITH LIGHTS, DIFFUSERS, SOUND SYSTEM COMPONENTS AND OTHER ITEMS INSTALLED IN CEILING. LOCATION OF THESE DEVICES TAKES PRECEDENCE OVER SPRINKLER HEAD LOCATION. SHOW CLEARLY THE RELATIONSHIP OF ALL CEILING MOUNTED DEVICES WITH THE SPRINKLER HEAD LOCATIONS WHEN SPRINKLER SHOP DRAWINGS ARE SUBMITTED FOR APPROVAL.
- L. SPRINKLER HEADS SHALL BE LOCATED IN CENTER OF LAY-IN CEILING GRIDS. ASSUMING 2x2 GRID FORMAT, SPRINKLER HEADS IN EXPOSED OR HARD CEILINGS SHALL BE LAID OUT IN A UNIFORM AND SYMMETRICAL PATTERN ACCEPTABLE WITH ARCHITECT AND ENGINEER. SEE ARCHITECTURAL PLANS FOR TYPE OF CEILING INSTALLED.
- M. SPRINKLER DRAIN PIPING SHALL BE ROUTED IN CONCEALED SPACES TO OUTSIDE OR TO MOP SINKS ONLY. 2 TEST LINES MUST BE PIPED TO OUTSIDE. EXTERIOR DRAIN OUTLETS SHALL BE CHROME WITH MATCHING ESCUTCHEON AND THREADED HOSE FITTING, AND SHALL DISCHARGE ON SPLASH BLOCK AT 45-DEGREE ANGLE.
- N. POST INDICATOR VALVE (PIV) WITH SUPERVISORY SWITCH PROVIDED BY FIRE SPRINKLER SPRINKLER CONTRACTOR. INSTALLED BY CIVIL CONTRACTOR. SEE CIVIL PLANS FOR PIV LOCATION.
- O. FIRE PROTECTION PLANS, SPRINKLER DRAWINGS, & SPRINKLER CONTRACTOR MUST BE SIGNED BY A LICENSED REGISTERED FIRE PROTECTION CONTRACTOR ALLOWED TO WORK IN AREA OF JURISDICTION AND FOLLOW ALL LOCAL AND STATE CODES.



2 SECOND FIRE PROTECTION PLAN

1/16" = 1'-0"

SHEET KEYNOTES

1. WOOD SLAT CEILING IN THIS AREA. COORDINATE REQUIREMENTS AND PROVIDE OVERAGE ABOVE AND BELOW AS REQUIRED BY NFPA. COORDINATE SPRINKLER FINISH WITH WOOD CEILING AND PROVIDE BRONZE CONCEALED COVER OR CUSTOM COLOR SELECTED BY ARCHITECT.

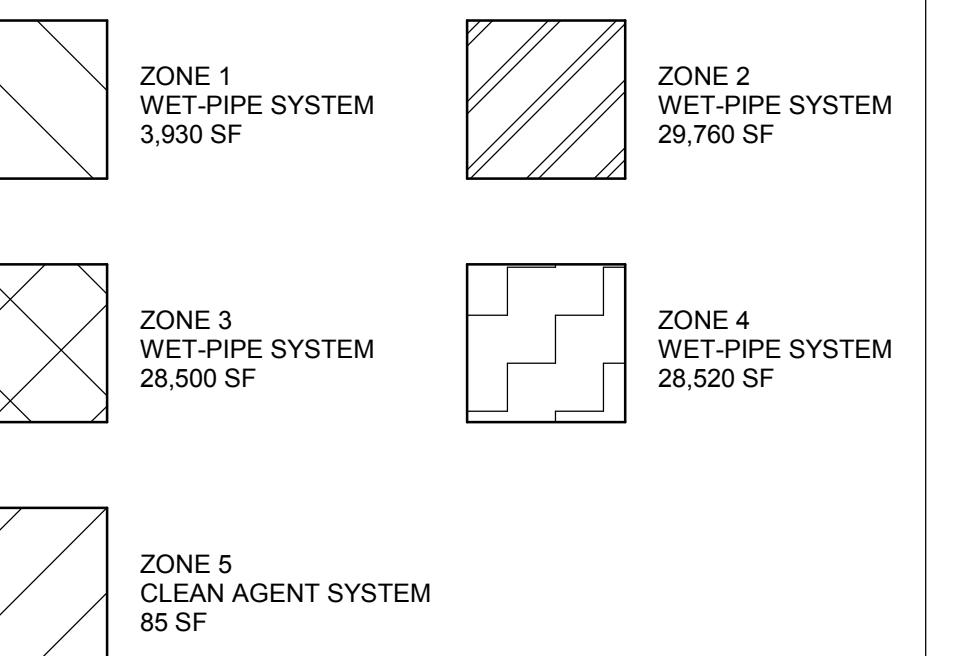
REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD



1 THIRD FIRE PROTECTION PLAN

1/16" = 1'-0"

SCC RESIDENCE HALL



SECOND AND THIRD LEVEL FIRE PROTECTION PLANS

PROJECT: 21045 DATE: 2022.10.14
2.0 Contract date

FREDERICK E. GROZOW
E-13534
09/23/2022
STATE OF NEBRASKA
Mechanical Engineering
Division of Fire Protection



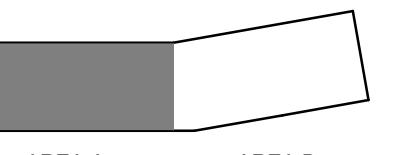
GENERAL SHEET NOTES

- A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- B. COORDINATE EXACT FIRE & OR SMOKE RATINGS WITH EXISTING CONDITIONS AND ARCHITECTURAL PLANS. MAINTAIN ALL EXISTING RATINGS.
- C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- D. UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL AND PLUMBING CONTRACTORS FOR INSTALLATION LOCATIONS. VAV AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.
- E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WHERE THE SAME SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND NOT FROM ABOVE. AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED WALLS AND FLOORS. PROVIDE SEALINGS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
- I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
- J. ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 90-DEGREES SHALL BE PROVIDED WITH TURNING VANES UNLESS NOTED OTHERWISE.
- K. PROVIDE A MASONRY WALL LINTEL AT ALL BLOCK OR BRICK WALL PENETRATIONS WIDER THAN 12". COORDINATE MASONRY WALL LINTEL LOCATIONS WITH STRUCTURAL PLANS.
- L. BALANCE MANUAL DAMPERS DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.
- M. ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL SWING IN QUADRANT COORDINATE WITH DUCT SIZE AND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.
- N. NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL WITH CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.
- O. ALL DUCT SEAMS SHALL BE SEALED.
- P. ALL CEILING DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.
- Q. KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.
- R. DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PROVIDE VOLUME DAMPER IN VERTICAL TAP OF DUCTWORK FOR EXHAUST GRILLE.
2. COORDINATE ROUTING AND SIZING OF VENT AND COMBUSTION AIR PIPING WITH MANUFACTURER'S RECOMMENDATIONS. MAINTAIN MINIMUM OF 10'-0" BETWEEN VENT AND COMBUSTION AIR PIPING PER MECHANICAL CODE.
3. PROVIDE WALL MOUNTS FOR EACH CONDENSER AND INSTALL MINIMUM 14' ABOVE FINISHED GRADE. MAINTAIN MINIMUM OF 4'-0" FROM TOP OF THE CONDENSERS AND THE BOTTOM OF THE WINDOWS ABOVE.
4. NOT USED
5. PROVIDE 8'x8" OPENING AT TOP OF DUCT WITH WIRE MESH SCREEN. WIRE MESH SCREEN SHALL BE MINIMUM 66% OPEN AREA INSECT SCREEN.

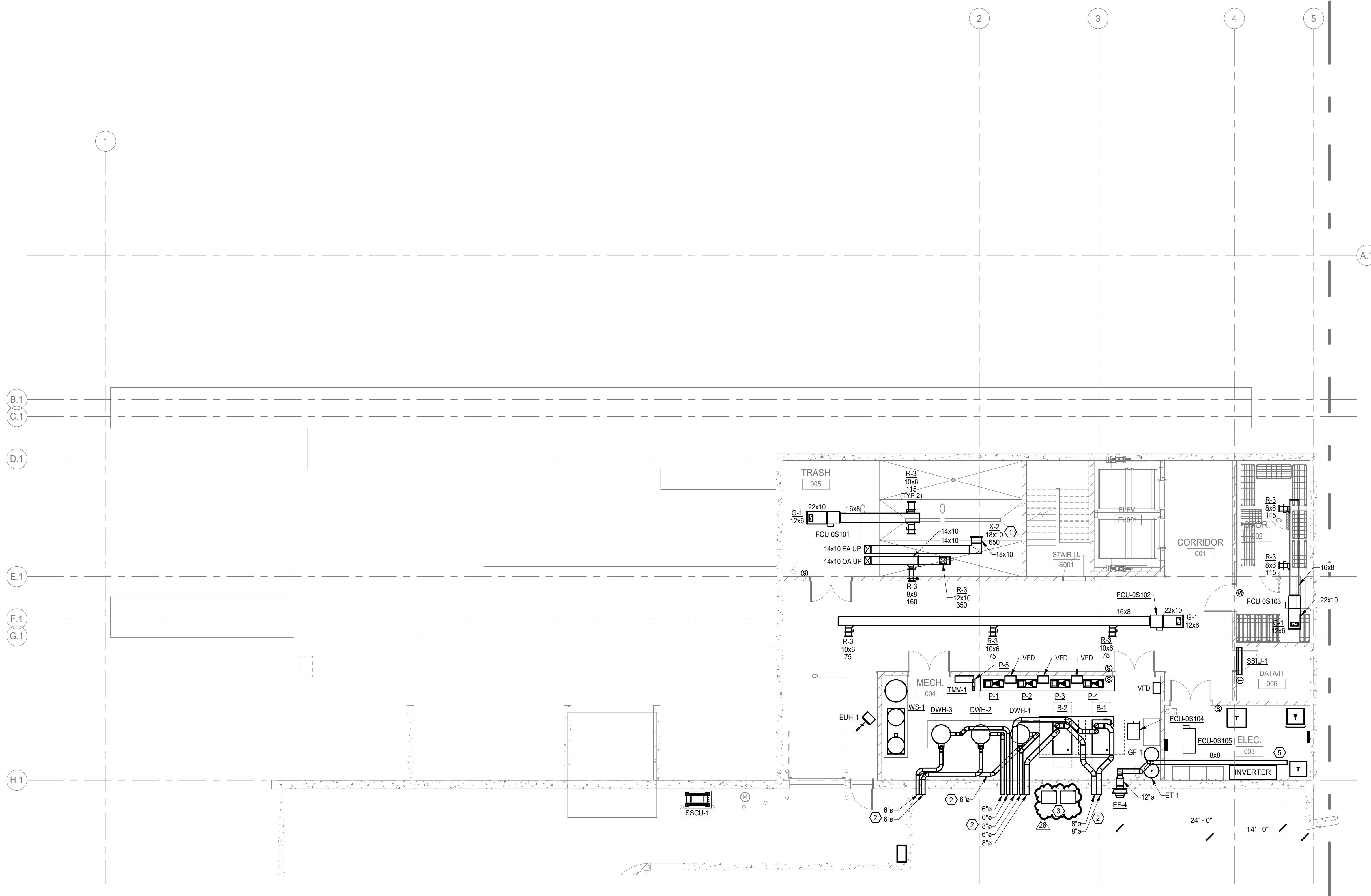
REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
5	2022.07.29	ADDENDUM CD-01
8	2022.09.23	PERMIT REVISION
14	2023.01.06	ASI 013
28	2023.06.29	PR-17



SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14

BASEMENT HVAC PLAN - AREA A



1 BASEMENT HVAC PLAN - AREA A

1/8" = 1'-0"



M1.0A

GENERAL SHEET NOTES

- DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
 - COORDINATE EXACT FIRE &/OR SMOKE RATINGS WITH EXISTING CONDITIONS AND ARCHITECTURAL PLANS. MAINTAIN ALL EXISTING RATINGS.
 - DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
 - UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL AND PLUMBING CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.
 - LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
 - ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
 - MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
 - DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
 - COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
 - ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 30-DEGREES SHALL BE PROVIDED WITH TURNING VANES UNLESS NOTED OTHERWISE.
 - PROVIDE A MASONRY WALL LINTEL AT ALL BLOCK OR BRICK WALL PENETRATIONS WIDER THAN 12". COORDINATE MASONRY WALL LINTEL LOCATIONS WITH STRUCTURAL PLANS.
 - BALANCE MANUAL DAMPERS DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.
 - ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL BE FITTED WITH QUADRANT CONTROL WITH STANDOFF TO EXTEND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.
 - NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL WITH CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.
 - ALL DUCT SEAMS SHALL BE SEALED.
 - ALL CEILING DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.
 - KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.
 - DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE

SHEET KEYNOTES

- 12x12 OA AND 12x12 EA DOWN TO BASEMENT. PROVIDE MANUAL BALANCING VOLUME DAMPERS AND FIRE DAMPERS FOR OUTDOOR AND EXHAUST AIR DUCTWORK IN VERTICAL AT 4'-0" ABOVE FINISHED FLOOR.

PROVIDE RECTANGULAR WALL CAPS FOR RD ROOM KITCHEN HOOD AND LAUNDRY DUCTWORK. INSTALL PER MANUFACTURERS INSTRUCTIONS AND SEAL AROUND WALL PENETRATIONS AIRTIGHT. COORDINATE COLOR WITH ARCHITECT. BASIS OF DESIGN: GREENHECK WC-10x3. ALTERNATE MANUFACTURERS OR STYLE SHALL BE REVIEWED BY ARCHITECT AND ENGINEER OF RECORD FOR APPROVAL.

PROVIDE R-19 DUCT WRAP AND DRAPE OVER DRYER EXHAUST DUCTWORK TO WALL CAP.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
5	2022.07.29	ADDENDUM CD-01
7	2022.08.04	ADDENDUM CD-02
8	2022.09.23	PERMIT REVISION

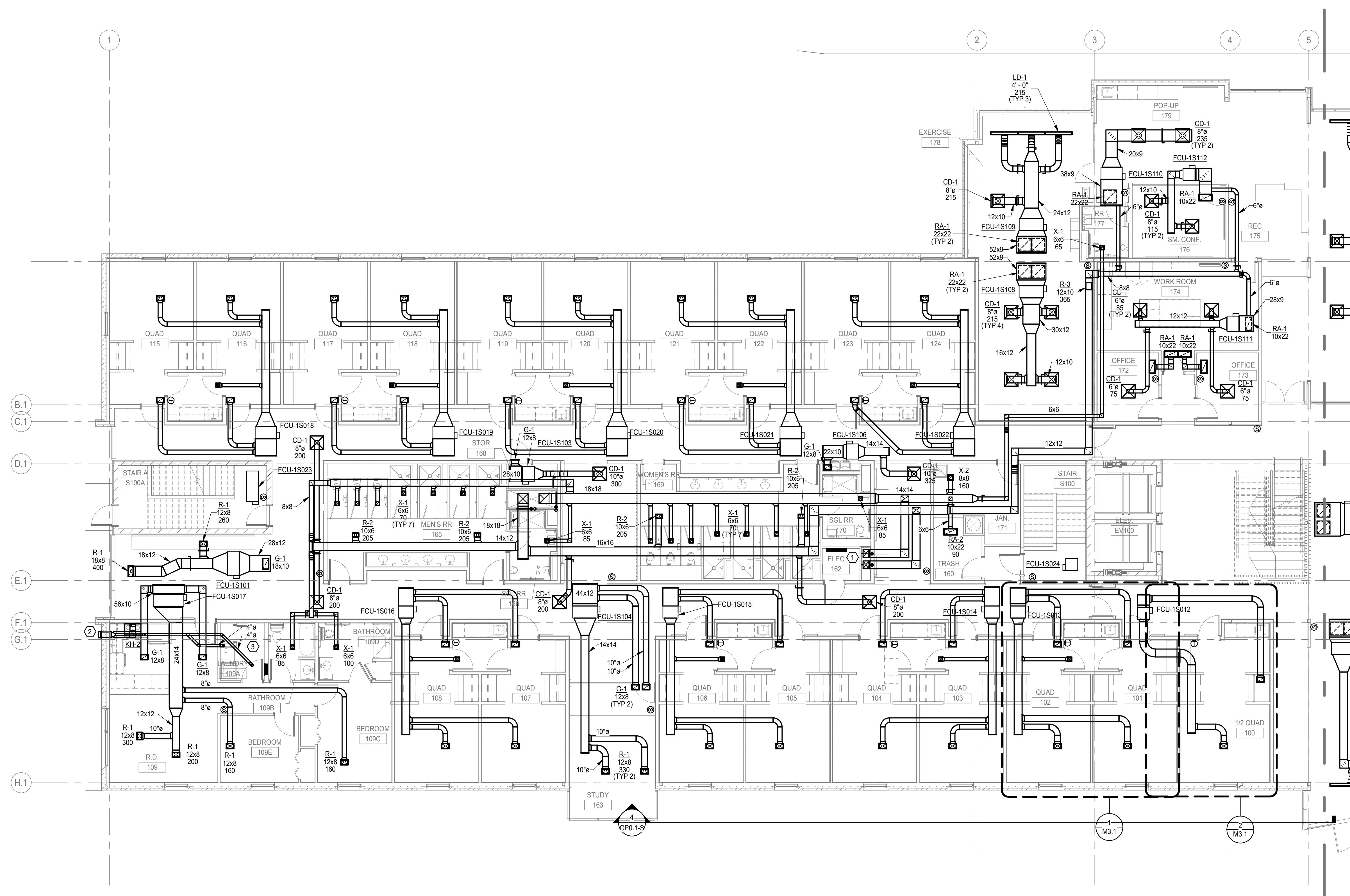
A diagram showing a large rectangle divided into two equal halves by a vertical line. The left half is filled with a solid gray color, while the right half is white with a black outline.

SCC RESIDENCE HALL

PROJECT:21045 DATE: 2022.10.14



FIRST HVAC PLAN - AREA A



1 FIRST HVAC PLAN - AREA A

1/8"

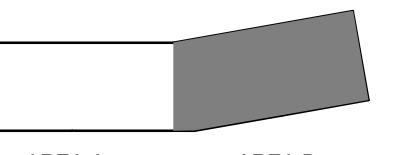
GENERAL SHEET NOTES

- A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- B. COORDINATE EXACT FIRE & OR SMOKE RATINGS WITH EXISTING CONDITIONS AND ARCHITECTURAL PLANS. MAINTAIN ALL EXISTING RATINGS.
- C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- D. UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL AND PLUMBING CONTRACTORS FOR INTEGRATION. VAV BOXES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.
- E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WHERE THE SAME SO THE MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND DO NOT HANG EQUIPMENT AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED WALLS AND FLOORS. PROVIDE SEALS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
- I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
- J. ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 90-DEGREES SHALL BE PROVIDED WITH TURNING VANES UNLESS NOTED OTHERWISE.
- K. PROVIDE A MASONRY WALL LINTEL AT ALL BLOCK OR BRICK WALL PENETRATIONS WIDER THAN 12". COORDINATE MASONRY WALL LINTEL LOCATIONS WITH STRUCTURAL PLANS.
- L. BALANCE MANUAL DAMPER DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.
- M. ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL SWING AND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.
- N. NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL WITH CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.
- O. ALL DUCT SEAMS SHALL BE SEALED.
- P. ALL CEILING DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.
- Q. KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.
- R. DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

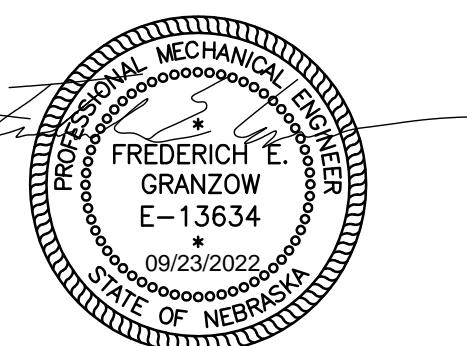
1. PROVIDE CLEANOUT AND INSTALL ACCESS PANEL AT BOTTOM OF DRYER DUCT STACK. ACCESS PANEL SHALL BE 28" WIDE BY 12" TALL.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
5	2022.07.29	ADDENDUM CD-01
7	2022.08.04	ADDENDUM CD-02
8	2022.09.23	PERMIT REVISION
22	2023.04.25	PR-15



SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14



FIRST HVAC PLAN - AREA B



1 FIRST HVAC PLAN - AREA B

1/8" = 1'-0"



M1.1B

GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. COORDINATE EXACT FIRE & OR SMOKE RATINGS WITH EXISTING CONDITIONS AND ARCHITECTURAL PLANS. MAINTAIN ALL EXISTING RATINGS.

C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.

D. UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL AND PLUMBING CONTRACTORS FOR INTEGRATION. VAV BOXES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WHERE THE SAME SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND THAT THE AREA AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.

G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED WALLS AND FLOORS. PROVIDE SEALS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.

I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.

J. ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 90-DEGREES SHALL BE PROVIDED WITH TURNING VANES UNLESS NOTED OTHERWISE.

K. PROVIDE A MASONRY WALL LINTEL AT ALL BLOCK OR BRICK WALL PENETRATIONS WIDER THAN 12". COORDINATE MASONRY WALL LINTEL LOCATIONS WITH STRUCTURAL PLANS.

L. BALANCE MANUAL DAMPERS DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.

M. ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL SWING AND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.

N. NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL WITH CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.

O. ALL DUCT SEAMS SHALL BE SEALED.

P. ALL CEILING DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.

Q. KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.

R. DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PROVIDE RECTANGULAR WALL CAPS FOR RD ROOM KITCHEN HOOD AND LAUNDRY DUCTWORK. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND SEAL AROUND WALL PENETRATIONS AIRTIGHT. COORDINATE COLOR AND MATERIAL WITH ARCHITECTURE. TYPE OF DESIGN: GREENHECK WC-103. ALTERNATE MANUFACTURER OR STYLE SHALL BE REVIEWED BY ARCHITECT AND ENGINEER OF RECORD FOR APPROVAL.

2. PROVIDE FIRE WRAP INSULATION AROUND DUCT IN CORRIDOR BETWEEN PENETRATIONS.

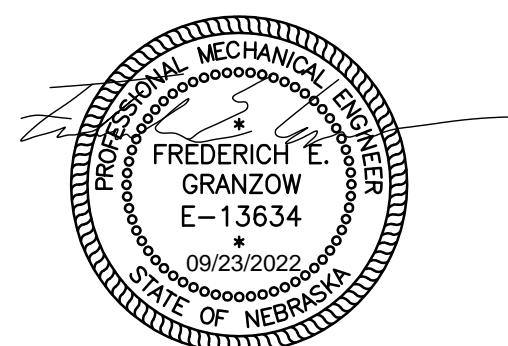
3. FIRE SEAL DUCT PENETRATION PER HILTI SYSTEM NO. F-C-7043 OR FIRESTOP MANUFACTURER EQUIVALENT.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
5	2022.07.29	ADDENDUM CD-01
7	2022.08.04	ADDENDUM CD-02
8	2022.09.23	PERMIT REVISION
20	2023.04.06	ASI 025

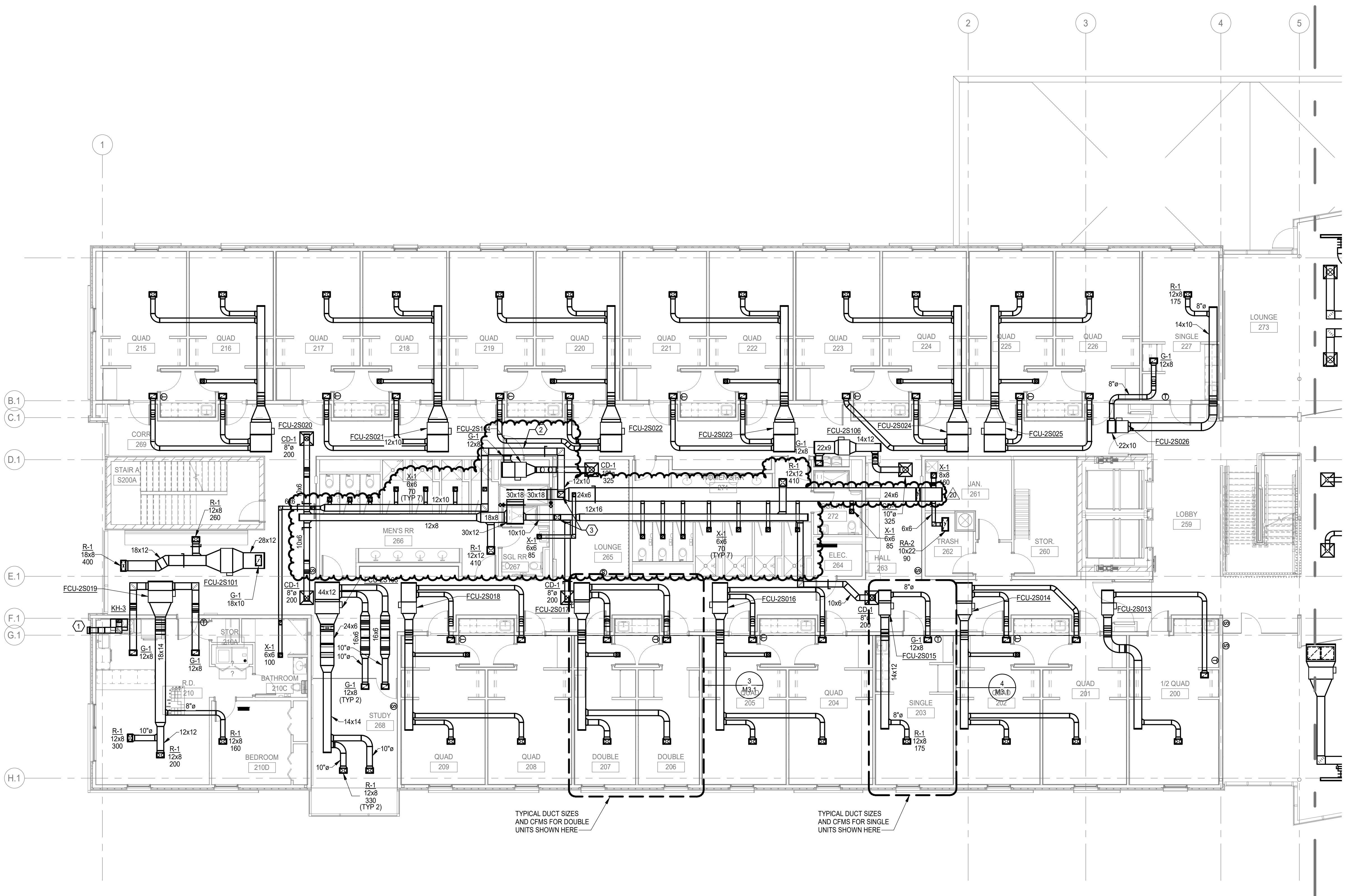


SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14
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SECOND HVAC PLAN - AREA A



1 SECOND HVAC PLAN - AREA A
1/8" = 1'-0"

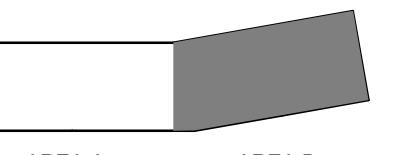
GENERAL SHEET NOTES

- A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- B. COORDINATE EXACT FIRE & OR SMOKE RATINGS WITH EXISTING CONDITIONS AND ARCHITECTURAL PLANS. MAINTAIN ALL EXISTING RATINGS.
- C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- D. UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL AND PLUMBING CONTRACTORS FOR INTEGRATION OF THESE SYSTEMS. AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS. LOCATE HANGING EQUIPMENT WHERE THE SAME SO THAT MAINTENANCE ACCESS IS PROVIDED FROM EASY AND SAFE AREA.
- F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED WALLS AND CEILINGS. PROVIDE SEALS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
- I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
- J. ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 30-DEGREES SHALL BE PROVIDED WITH TURNING VANES UNLESS NOTED OTHERWISE.
- K. PROVIDE A MASONRY WALL LINTEL AT ALL BLOCK OR BRICK WALL PENETRATIONS WIDER than 12". COORDINATE MASONRY WALL LINTEL LOCATIONS WITH STRUCTURAL PLANS.
- L. BALANCE MANUAL DAMPER DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.
- M. ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL SWING AND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.
- N. NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL WITH CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.
- O. ALL DUCT SEAMS SHALL BE SEALED.
- P. ALL CEILING DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.
- Q. KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.
- R. DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

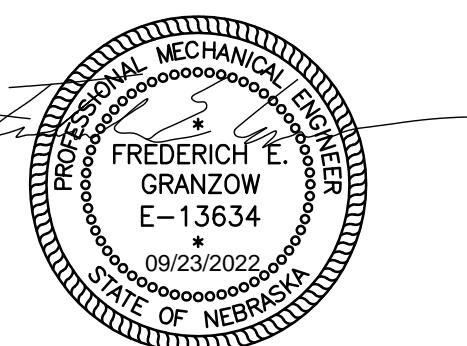
1. PROVIDE FIRE WRAP INSULATION AROUND DUCT IN CORRIDOR BETWEEN PENETRATIONS.
2. FIRE SEAL DUCT PENETRATION PER HILTI SYSTEM NO. F-C-7043 OR FIRESTOP MANUFACTURER EQUIVALENT.

REVISIONS SCHEDULE		
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7	2022.08.04	ADDENDUM CD-02
8	2022.09.23	PERMIT REVISION
20	2023.04.06	ASI 025

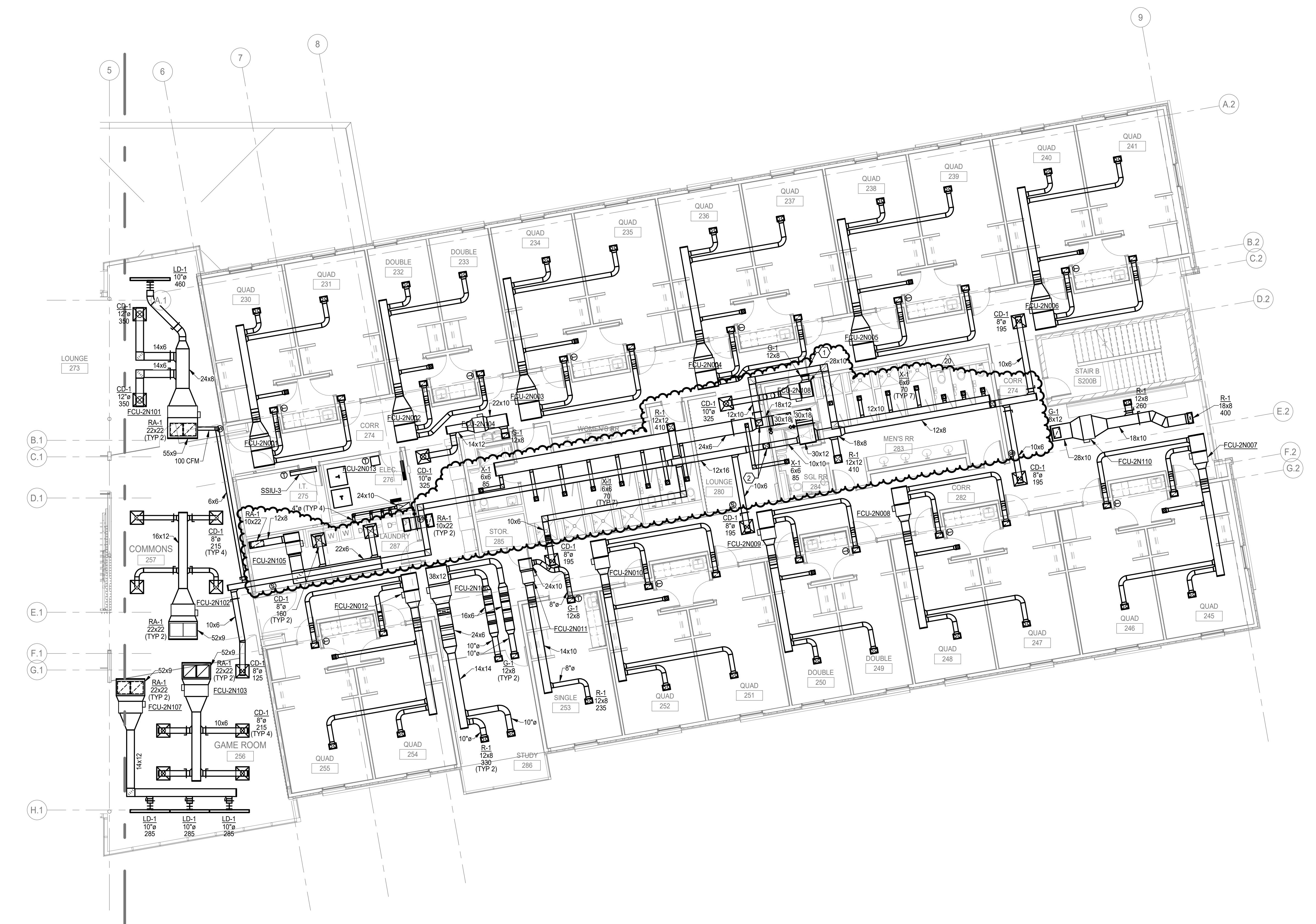


SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14



SECOND HVAC PLAN - AREA B



GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. COORDINATE EXACT FIRE & OR SMOKE RATINGS WITH EXISTING CONDITIONS AND ARCHITECTURAL PLANS. MAINTAIN ALL EXISTING RATINGS.

C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.

D. UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL AND PLUMBING CONTRACTORS FOR INSTALLATION OF DUCTS AND OTHER MAINTENANCE ITEMS. DUCTS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WHERE THE SAME SO THE MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND THE EQUIPMENT AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.

G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED WALLS AND FLOORS. PROVIDE SEALS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.

I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.

J. ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 90-DEGREES SHALL BE PROVIDED WITH TURNING VANES UNLESS NOTED OTHERWISE.

K. PROVIDE A MASONRY WALL LINTEL AT ALL BLOCK OR BRICK WALL PENETRATIONS WIDER than 12". COORDINATE MASONRY WALL LINTEL LOCATIONS WITH STRUCTURAL PLANS.

L. BALANCE MANUAL DAMPERS DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.

M. ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL SWING IN QUADRANT COORDINATE WITH DUCT SIZE AND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.

N. NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL WITH CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.

O. ALL DUCT SEAMS SHALL BE SEALED.

P. ALL CEILING DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.

Q. KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.

R. DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.

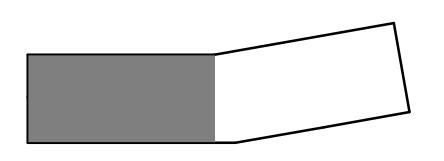
SHEET KEYNOTES

1. PROVIDE FIRE WRAP INSULATION AROUND DUCT IN CORRIDOR BETWEEN PENETRATIONS.

2. FIRE SEAL DUCT PENETRATION PER HILTI SYSTEM NO. F-C-7043 OR FIRESTOP MANUFACTURER EQUIVALENT.

3. MOUNT BOTTOM OF FAN COIL AND ASSOCIATED ACCESSORIES ABOVE THE TOP OF THE DOOR TO THE STAIRWELL. PROVIDE 3'-0" FROM EDGE OF FAN COIL TO STAIRWELL, 3'-0" FROM EDGE OF FAN COIL TO DOOR, AND MINIMUM 0'-6" FROM BACK OF FAN COIL TO WALL.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
5	2022.07.29	ADDENDUM CD-01
7	2022.08.04	ADDENDUM CD-02
8	2022.09.23	PERMIT REVISION
20	2023.04.06	ASI 025
30	2023.08.15	ASI 033

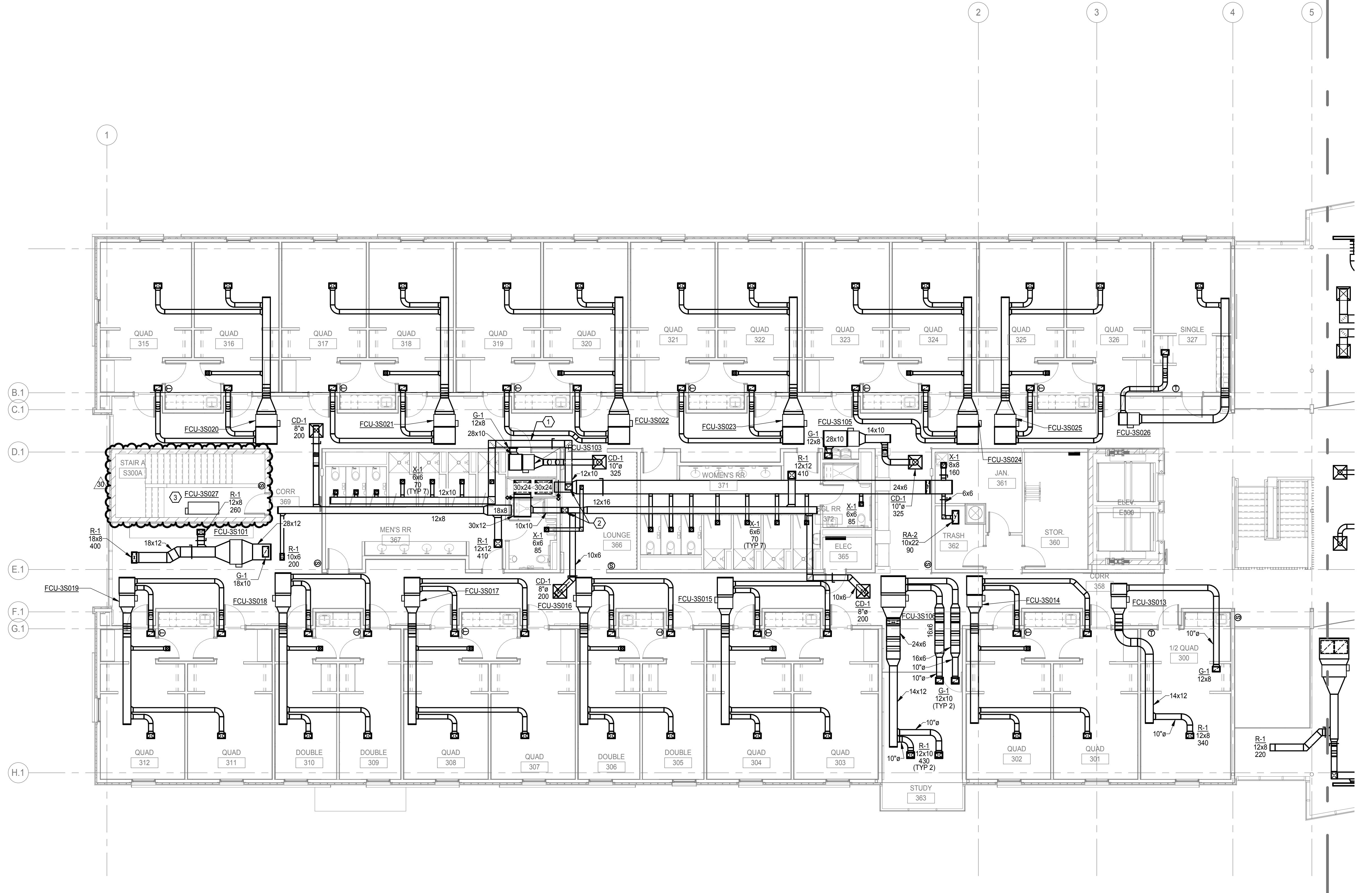


SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14
B-Compliant Rev



THIRD HVAC PLAN - AREA A



GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. COORDINATE EXACT FIRE & OR SMOKE RATINGS WITH EXISTING CONDITIONS AND ARCHITECTURAL PLANS. MAINTAIN ALL EXISTING RATINGS.

C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.

D. UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL AND PLUMBING CONTRACTORS FOR INSTRUMENTATION, VENTS, AND OTHER MAINTENANCE ITEMS THAT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WHERE THE SAME SO THE MAINTENANCE ACCESS IS PROVIDED FROM BELOW AND THE EQUIPMENT AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.

G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED WALLS AND FLOORS. PROVIDE SEALS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.

I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.

J. ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 90-DEGREES SHALL BE PROVIDED WITH TURNING VANES UNLESS NOTED OTHERWISE.

K. PROVIDE A MASONRY WALL LINTEL AT ALL BLOCK OR BRICK WALL PENETRATIONS WIDER than 12". COORDINATE MASONRY WALL LINTEL LOCATIONS WITH STRUCTURAL PLANS.

L. BALANCE MANUAL DAMPERS DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.

M. ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL SWING FREE AND QUADRANT CONTROLLED. DO NOT USE FLEX DUCTS AND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.

N. NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.

O. ALL DUCT SEAMS SHALL BE SEALED.

P. ALL CEILING DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.

Q. KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.

R. DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PROVIDE FIRE WRAP INSULATION AROUND DUCT IN CORRIDOR BETWEEN PENETRATIONS.

2. FIRE SEAL DUCT PENETRATION PER HILTI SYSTEM NO. F-C-7043 OR FIRESTOP MANUFACTURER EQUIVALENT.

3. MOUNT BOTTOM OF FAN COIL AND ASSOCIATED ACCESSORIES ABOVE THE TOP OF THE DOOR TO THE STANWELL. PROVIDE 3'-0" FROM EDGE OF FAN COIL TO STANWELL, 3'-0" FROM EDGE OF FAN COIL TO DOOR, AND MINIMUM 0'-6" FROM BACK OF FAN COIL TO WALL.

REVISIONS SCHEDULE		
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8	2022.09.23	PERMIT REVISION
20	2023.04.06	ASI 025
30	2023.08.15	ASI 033



GENERAL SHEET NOTES

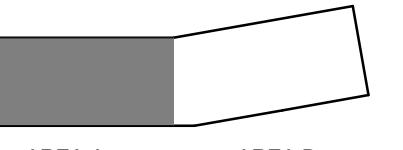
- A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- B. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.
- C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- D. LOCATE PIPING AS CLOSE AS POSSIBLE TO THE CEILING. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.
- E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AND WORK AREAS ARE BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
- I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL, FOUNDATION, CONCRETE, AND OTHER SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
- J. ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.
- K. BUILDING 4" OR LARGER SANITARY MAIN AND SEWER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT. 2" AND SMALLER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT SLOPE OR GREATER.
- L. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTION OF ARCHITECT AND ENGINEER FOR DIRECTION.
- M. ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.
- N. REFER TO PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.
- O. ALL DOWNSPOUT NOZZLES SHALL DISCHARGE 18" ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE.
- P. INSTALL SHUTOFF DUTY VALVES AT EACH BRANCH CONNECTION WITHIN 3 FEET OF THE MAINS.
- Q. PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.
- R. COORDINATE ALL FLOOR PENETRATIONS WITH ARCHITECTURAL FLOOR PLAN. PENETRATIONS SHALL BE WITHIN CHASE ENCLOSURES OR STUD WALLS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ROUGH-INS AND STUB UPS ARE FULLY COORDINATED.

SHEET KEYNOTES

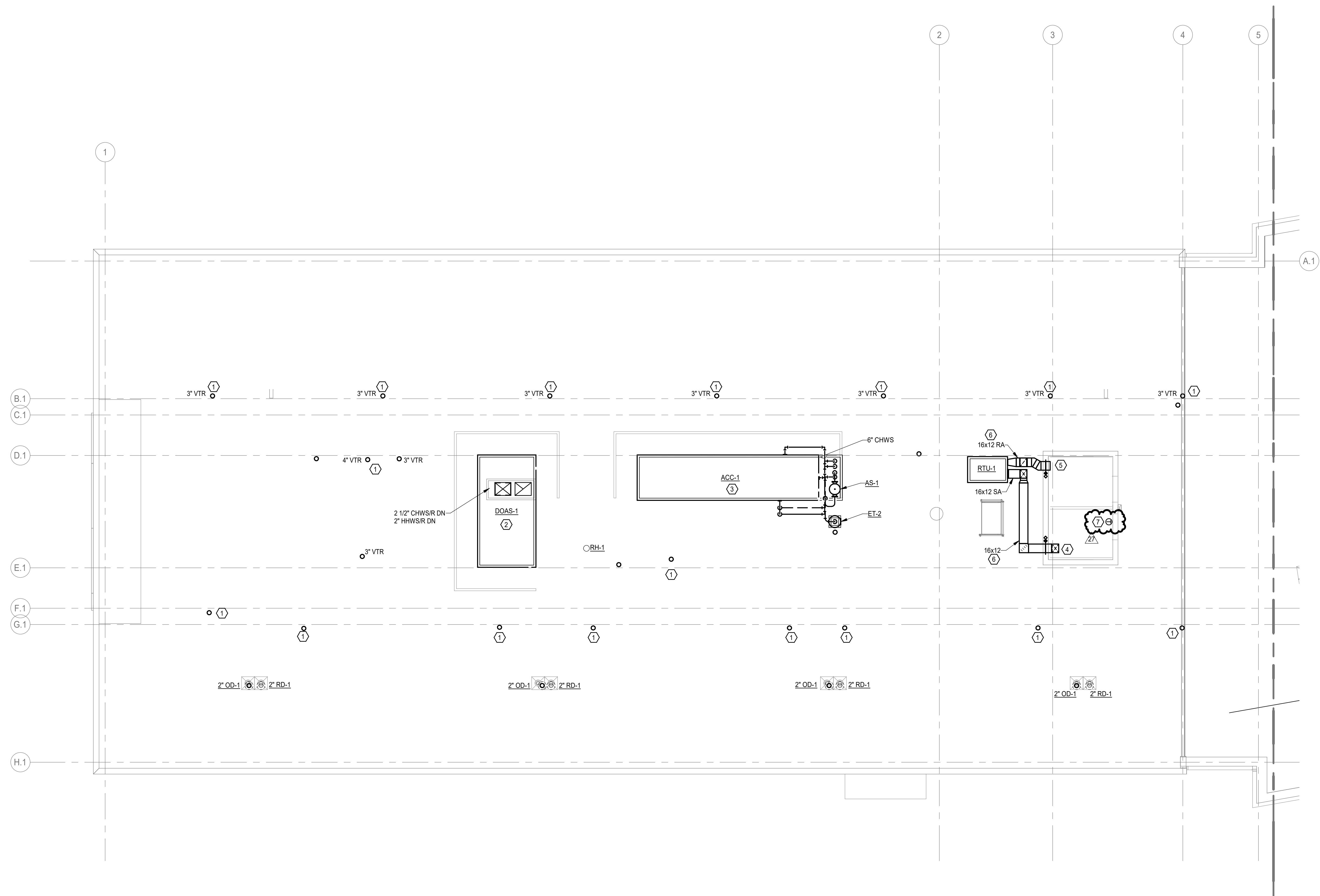
- Maintain a minimum of 10'-0" clear from air intakes.
- Provide with full perimeter, sloped, sound attenuating, plenum curb coordinate plenum curb and screenwall dimensions with architectural drawings. Provide insulation for plenum curb. Curb shall be capable of supporting screenwall system for equipment. See architectural drawings and specifications for more information related to screenwall system.
- Provide full perimeter, sloped, and sound attenuating equipment curb. Curb shall include sound attenuating insulation for protection of spaces below chiller. Coordinate plenum curb and screenwall dimensions with architectural drawings. Pipe penetrations through the roof, and equipment provided as part of this package. See architectural drawings and specifications for more information related to screenwall system.
- Install ductwork to supply air down elevator shaft. Coordinate fittings and ductwork with elevator equipment and car. Provide wire mesh screen at outlet of supply air duct. Seal around duct penetration through elevator shaft air-tight.
- Provide wire mesh screen at inlet of return air duct. Seal around duct penetration through elevator shaft air-tight.
- Provide supports for ductwork and secure to roof per manufacturer's recommendations. Manufacturer shall be Miro Industries or approved equivalent.

27. TEMPERATURE SENSOR FOR RTU-1 SHALL BE MOUNTED ON INTERIOR WALL IN ELEVATOR SHAFT WITHIN 12' OF BOTTOM OF ELEVATOR SHAFT ROOM. SENSOR SHALL BE MOUNTED ON A THERMAL ISOLATION BLOCK CONSISTING OF AN 8"X8" PIECE OF 1/2" FLOOR WOOD OVER 1" RIGID INSULATION. COORDINATE LOCATION WITH ELEVATOR EQUIPMENT AND OTHER INSTALLED EQUIPMENT.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
7	2022.08.04	ADDENDUM CD-02
27	2023.05.16	ASI 030



SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14
© Copyright 20221 ROOF PLUMBING AND MECHANICAL PLAN - AREA A
1/8" = 1'-0"

ROOF MECHANICAL AND PLUMBING PLAN - AREA A



M1.5A

GENERAL SHEET NOTES

- DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
 - COORDINATE EXACT FIRE &/OR SMOKE RATING WITH ARCHITECTURAL PLANS.
 - DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
 - UNLESS NOTED/SHOWN OTHERWISE, ALL PIPING SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.
 - LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
 - ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
 - MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
 - DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.

COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.

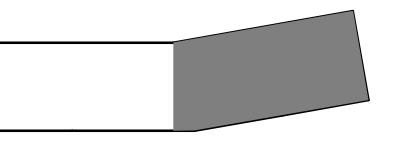
ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.

 - BUILDING 4" OR LARGER SANITARY MAIN AND SEWER PIPING SHALL SLOPE AT A MINIMUM 1/8" PER FOOT SLOPE OR GREATER. 3" AND SMALLER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT SLOPE OR GREATER.
 - FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTIONS OF ARCHITECT AND ENGINEER FOR DIRECTION.
 - ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.
 - REFER TO PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.
 - ALL DOWNSPOUT NOZZLES SHALL DISCHARGE 18" ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE
 - INSTALL SHUTOFF DUTY VALVES AT EACH BRANCH CONNECTION WITHIN 3 FEET OF THE MAINS.
 - PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.
 - COORDINATE ALL FLOOR PENETRATIONS WITH ARCHITECTURAL FLOOR PLAN. PENETRATIONS SHALL BE WITHIN CHASE ENCLOSURES OR STUD WALLS. CONTRACTOR SHALL BE RESPONSABLE FOR ENSURING ROUGH-INS AND STUB UPS ARE FULLY COORDINATED.

SHEET KEYNOTES

- MAINTAIN A MINIMUM OF 10'-0" CLEAR FROM AIR INTAKES.
 - PROVIDE WITH FULL PERIMETER, SLOPED, SOUND ATTENUATING, PLENUM CURB. COORDINATE PLENUM CURB AND SCREENWALL DIMENSIONS WITH REQUIREMENTS OF EQUIPMENT PROVIDED UNDER SITE PACKAGE. CURB SHALL BE CAPABLE OF SUPPORTING SCREENWALL SYSTEM FOR EQUIPMENT. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR INFORMATION RELATED TO SCREENWALL SYSTEM.
 - PROVIDE 18"Ø GOOSENECK AT OUTLET OF DRYER EXHAUST FAN. ORIENT GOOSENECK DOWN TOWARDS ROOF.
 - TRANSITION FROM 24"x10" DRYER EXHAUST DUCT TO 18"Ø DUCT AT INLET OF DRYER EXHAUST FAN.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
5	2022.07.29	ADDENDUM CD-01
7	2022.08.04	ADDENDUM CD-02
9	2022.10.10	PR-02
14	2023.01.06	ASI 013

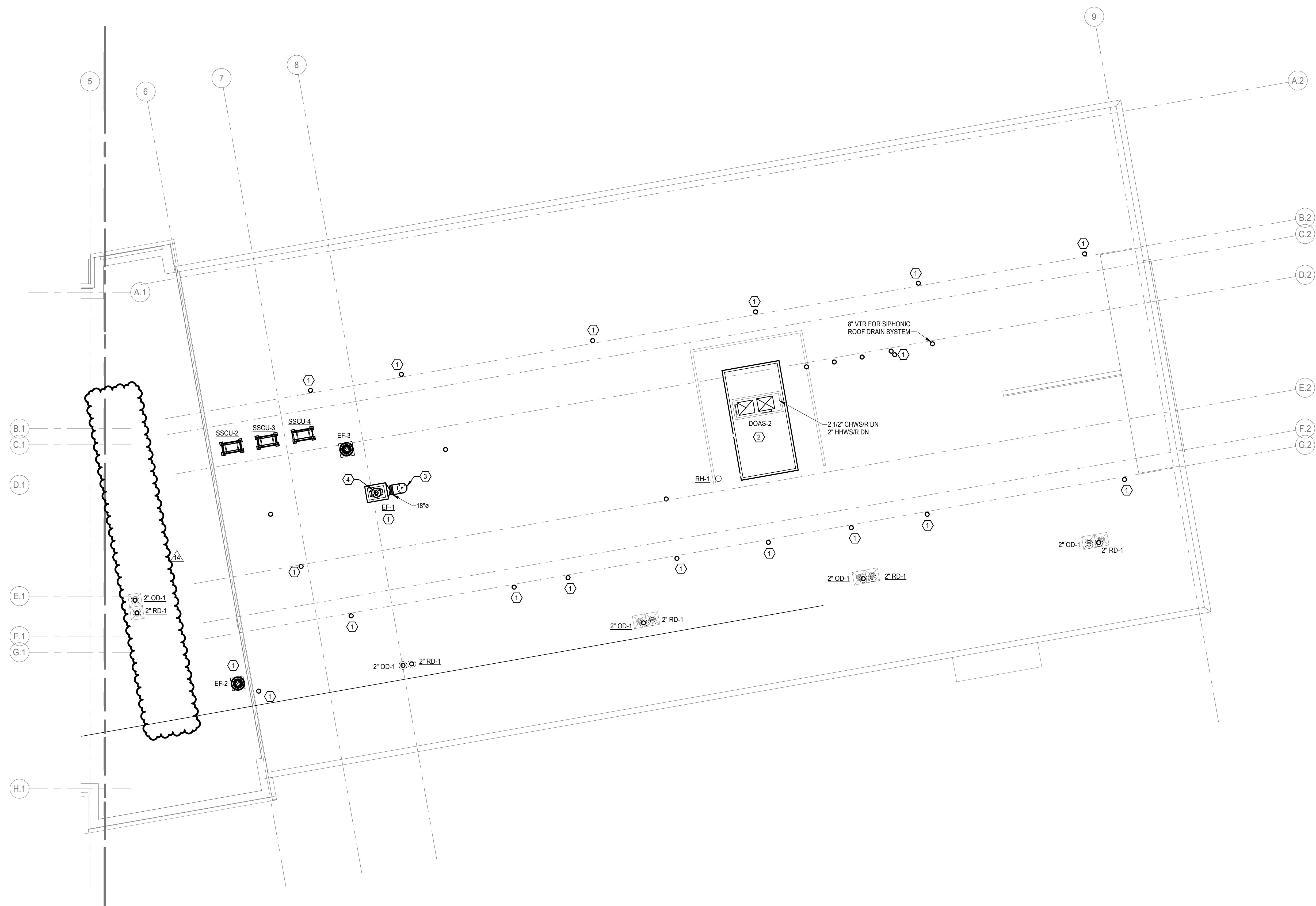


SCC RESIDENCE HALL

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ROOF MECHANICAL AND PLUMBING PLAN - AREA B



1 ROOF PLUMBING AND MECHANICAL PLAN - AREA B

1/8" = 1'

GENERAL SHEET NOTES

- A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- B. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.
- C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- D. LOCATE PIPING IN MECHANICAL ROOMS AS SHOWN. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.
- E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AND WORK AREAS ARE BELOW TO PREVENT OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
- I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL, FOUNDATION, AND OTHER TRADES AND UTILITIES/SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
- J. ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.
- K. BUILDING 4" OR LARGER SANITARY MAIN AND SEWER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT X 10' AND SMALLER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT SLOPE OR GREATER.
- L. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTION OF ARCHITECT AND ENGINEER FOR DIRECTION.
- M. ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.
- N. REFER TO PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.
- O. ALL DOWNSPOUT NOZZLES SHALL DISCHARGE 18" ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE.
- P. INSTALL SHUTOFF DUTY VALVES AT EACH BRANCH CONNECTION WITHIN 3 FEET OF THE MAINS.
- Q. PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.
- R. COORDINATE ALL FLOOR PENETRATIONS WITH ARCHITECTURAL FLOOR PLAN. PENETRATIONS SHALL BE WITHIN CHASE ENCLOSURES OR STUD WALLS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ROUGH-INS AND STUB UPS ARE FULLY COORDINATED.

SHEET KEYNOTES

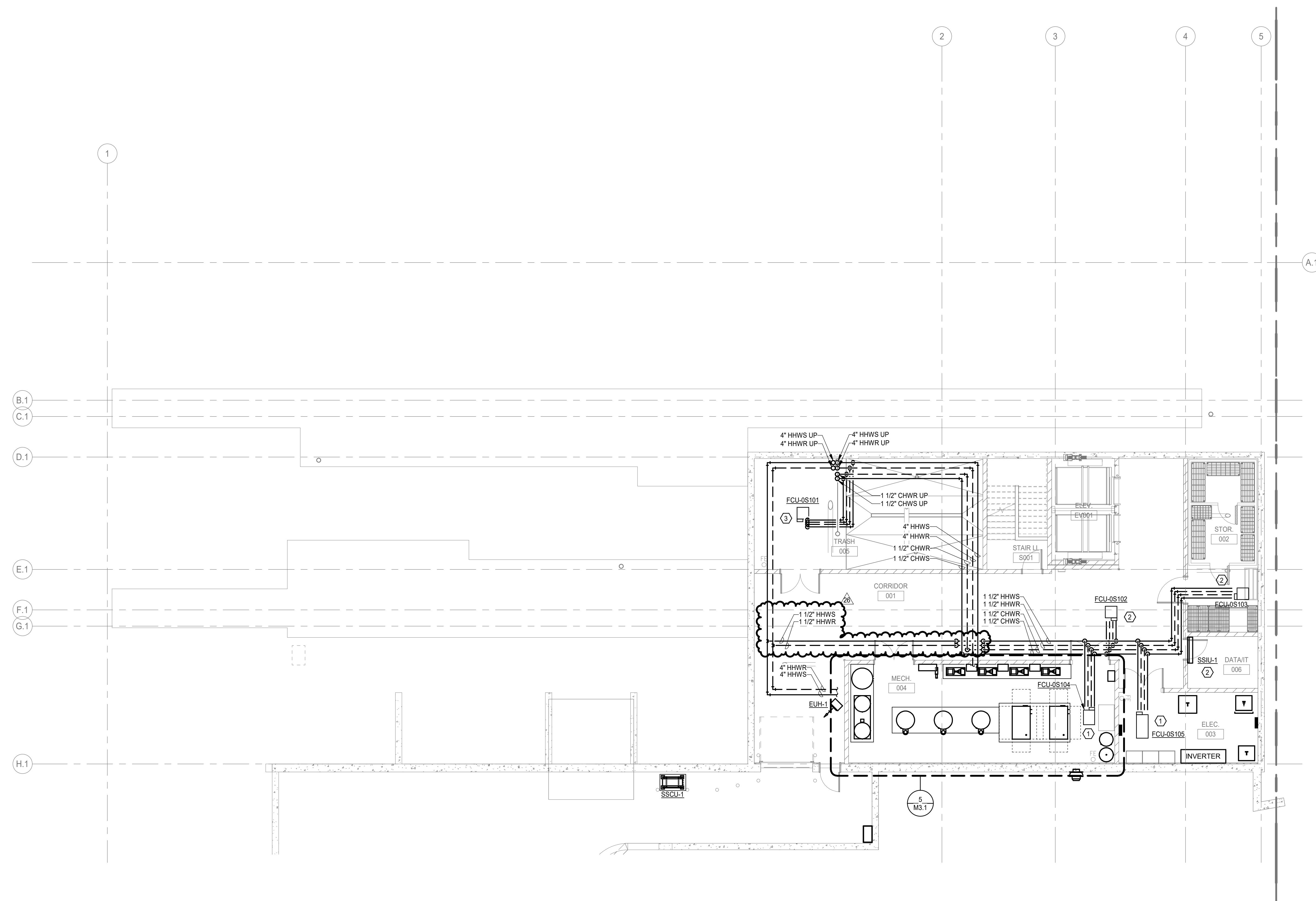
- ROUTE COOLING COIL CONDENSATE TO SINK TAILPIECE OF MECH 004.
- ROUTE COOLING COIL CONDENSATE TO TRENCH DRAIN LOCATED IN DRY STORAGE 002. PROVIDE CLEANOUTS PER CODE AS REQUIRED.
- ROUTE COOLING COIL CONDENSATE TO TRENCH OR FLOOR DRAIN LOCATED IN TRASH ROOM 005.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
5	2022.07.29	ADDITIONAL CD-01
14	2023.01.06	ASI 013
26	2023.04.26	ASI 027



SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14



1 BASEMENT PIPING PLAN

1/8" = 1'-0"

BASEMENT PIPING PLAN - AREA A



M2.0A



GENERAL SHEET NOTES

- DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

COORDINATE EXACT FIRE &/OR SMOKE RATING WITH ARCHITECTURAL PLANS.

DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.

UNLESS NOTED/SHOWN OTHERWISE, ALL PIPING SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.

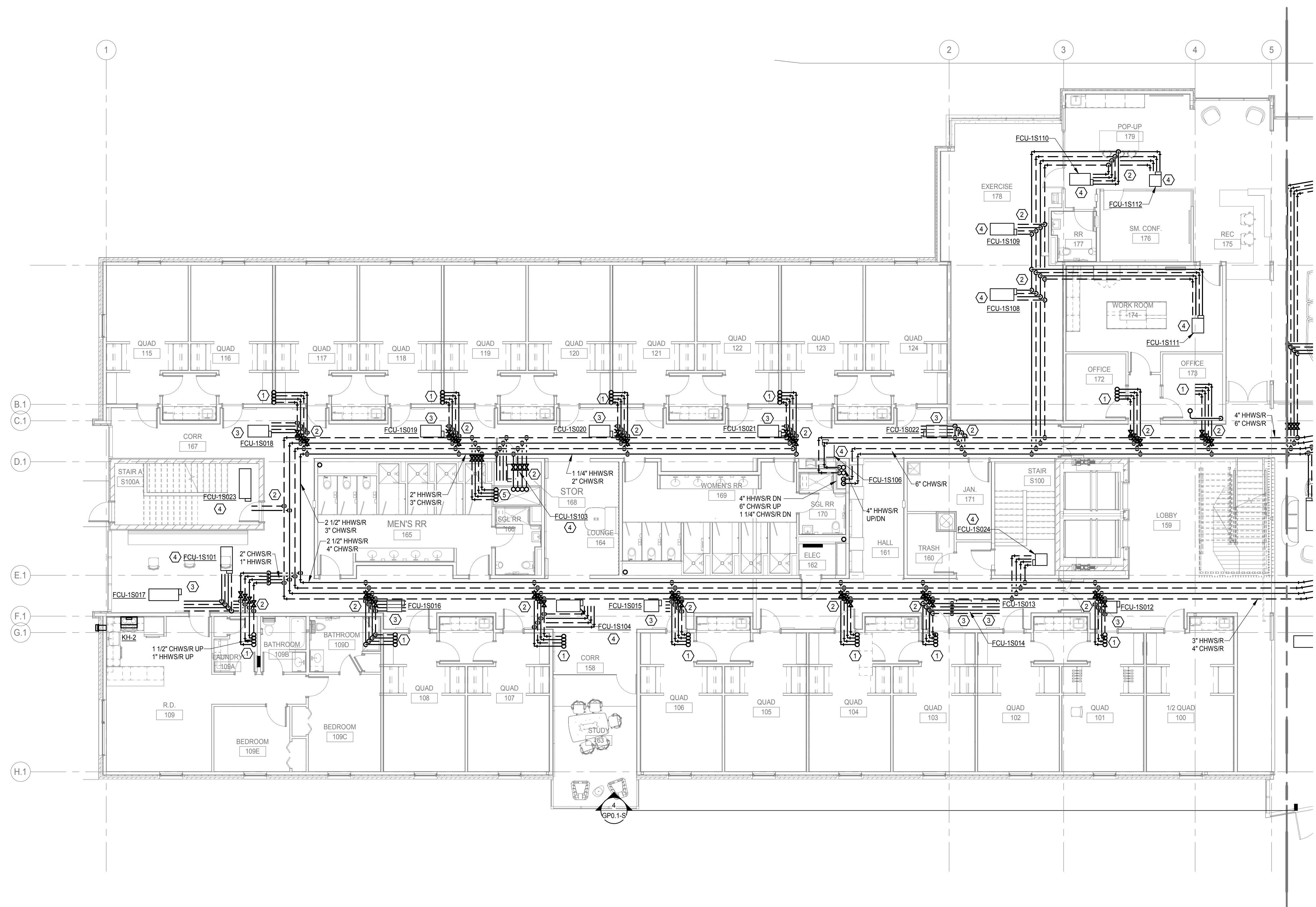
MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

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Olsson Project #21-01436

STRUCTURAL ENGINEER
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<http://olsson.com/>
Olsson Project #21-01436



1 FIRST PIPING PLAN

1/8" =

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
5	2022.07.29	ADDENDUM CD-01
7	2022.08.04	ADDENDUM CD-02
8	2022.09.23	PERMIT REVISION
14	2023.01.06	ASI 013

SCC RESIDENCE HALL

PROJECT:21045 DATE: 2022.10.14

PROJECT:21045 DATE: 2022.10.14

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MECHANICAL

NATIONAL MECHANICAL ENTHUSIAST

FREDERICK E.

GRANZOW
F-13634

* 09/23/2022

STATE OF NEBRASKA

—
—

FIRST PIPING PLAN

FIRST PIPING PLAN - AREA A

AREA A

 NORTH

M2.1

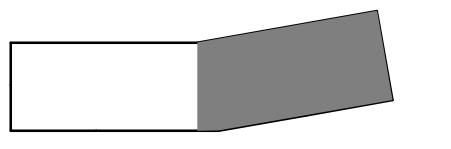
GENERAL SHEET NOTES

- A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- B. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.
- C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- D. LOCATE PIPING AS NECESSARY TO PROVIDE THE SHORTEST RUN AS HIGH AS POSSIBLE TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.
- E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AND WORK AREAS ARE BELOW OR FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
- I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL, FOUNDATION, CONCRETE, REINFORCING, AND OTHER SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
- J. ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.
- K. BUILDING 4" OR LARGER SANITARY MAIN AND SEWER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT. 2" AND SMALLER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT SLOPE OR GREATER.
- L. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTION OF ARCHITECT AND ENGINEER FOR DIRECTION.
- M. ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.
- N. REFER TO PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.
- O. ALL DOWNSPOUT NOZZLES SHALL DISCHARGE 18" ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE.
- P. INSTALL SHUTOFF DUTY VALVES AT EACH BRANCH CONNECTION WITHIN 3 FEET OF THE MAINS.
- Q. PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.
- R. COORDINATE ALL FLOOR PENETRATIONS WITH ARCHITECTURAL FLOOR PLAN. PENETRATIONS SHALL BE WITHIN CHASE ENCLOSURES OR STUD WALLS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ROUGH-INS AND STUB UPS ARE FULLY COORDINATED.

SHEET KEYNOTES

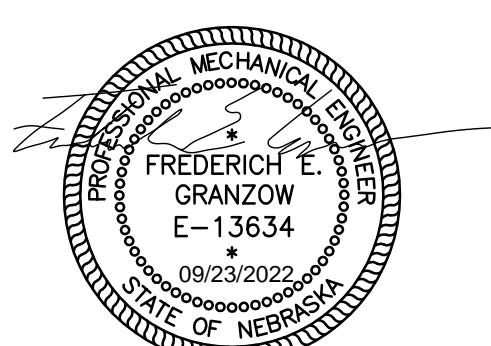
1. OFFSET PIPING AROUND STRUCTURAL JOIST/BEAM. PIPING OFFSET SHALL REMAIN WITHIN CABINET AND BE HELD AS TIGHT TO THE JOIST/BEAM AS POSSIBLE.
2. BRANCH PIPING SHALL BE AS FOLLOWS.
- PIPE MAY BE Routed TO EACH FAN COIL INDIVIDUALLY FROM THE MAIN OR GROUPED ON RISERS. REVIEW FLOORS ABOVE FOR INDIVIDUAL FAN COIL QUANTITIES AND GPM'S. RISER ARRANGEMENT IS SHOWN.
 - SHOULD NOT EXCEED A MAX OF 10' FROM FAN COIL OR GROUP OF FAN COILS TOTALING NOT MORE THAN 3.5 GPM.
 - 1" MAY BE Routed TO A SINGLE FAN COIL OR GROUP OF FAN COILS TOTALING NOT MORE THAN 7.5 GPM.
 - 1 1/2" MAY BE Routed TO A SINGLE FAN COIL OR GROUP OF FAN COILS TOTALING NOT MORE THAN 13 GPM.
 - 1/2" MAY BE Routed TO A SINGLE FAN COIL OR GROUP OF FAN COILS TOTALING NOT MORE THAN 20 GPM.
3. ROUTE COOLING COIL CONDENSATE TO SINK TALPIECE OF ROOM SERVED BY FAN COIL.
4. ROUTE COOLING COIL CONDENSATE TO 3/4" BRANCH CONNECTION OF TALPIECE OF NEAREST SINK. LABEL EACH CONDENSATE MAIN WITH APPLICABLE FAN COIL NUMBER. PROVIDE CONDENSATE PUMP FOR FAN COIL. COORDINATE LOCATION WITH ARCHITECTURAL FINISH PLAN AND PLUMBING DRAWINGS.
5. 2" HHWS/R AND 2 1/2" CHWS/R UP TO ROOF-MOUNTED DOAS. PROVIDE ISOLATION AND DRAIN VALVES IN AN ACCESSIBLE LOCATION.
6. ROUTE COOLING COIL CONDENSATE TO 3/4" BRANCH CONNECTION OF TALPIECE OF NEAREST SINK OR NEAREST MOP SINK. LABEL EACH CONDENSATE MAIN WITH APPLICABLE FAN COIL NUMBER. PROVIDE CONDENSATE PUMP FOR FAN COIL. COORDINATE LOCATION WITH ARCHITECTURAL FINISH PLAN AND PLUMBING DRAWINGS.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
5	2022.07.29	APPENDUM CD-0
7	2022.08.04	APPENDUM CD-02
8	2022.09.23	PERMIT
14	2023.01.06	REVISION ASI 013



SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14



FIRST PIPING PLAN - AREA B



1 FIRST PIPING PLAN

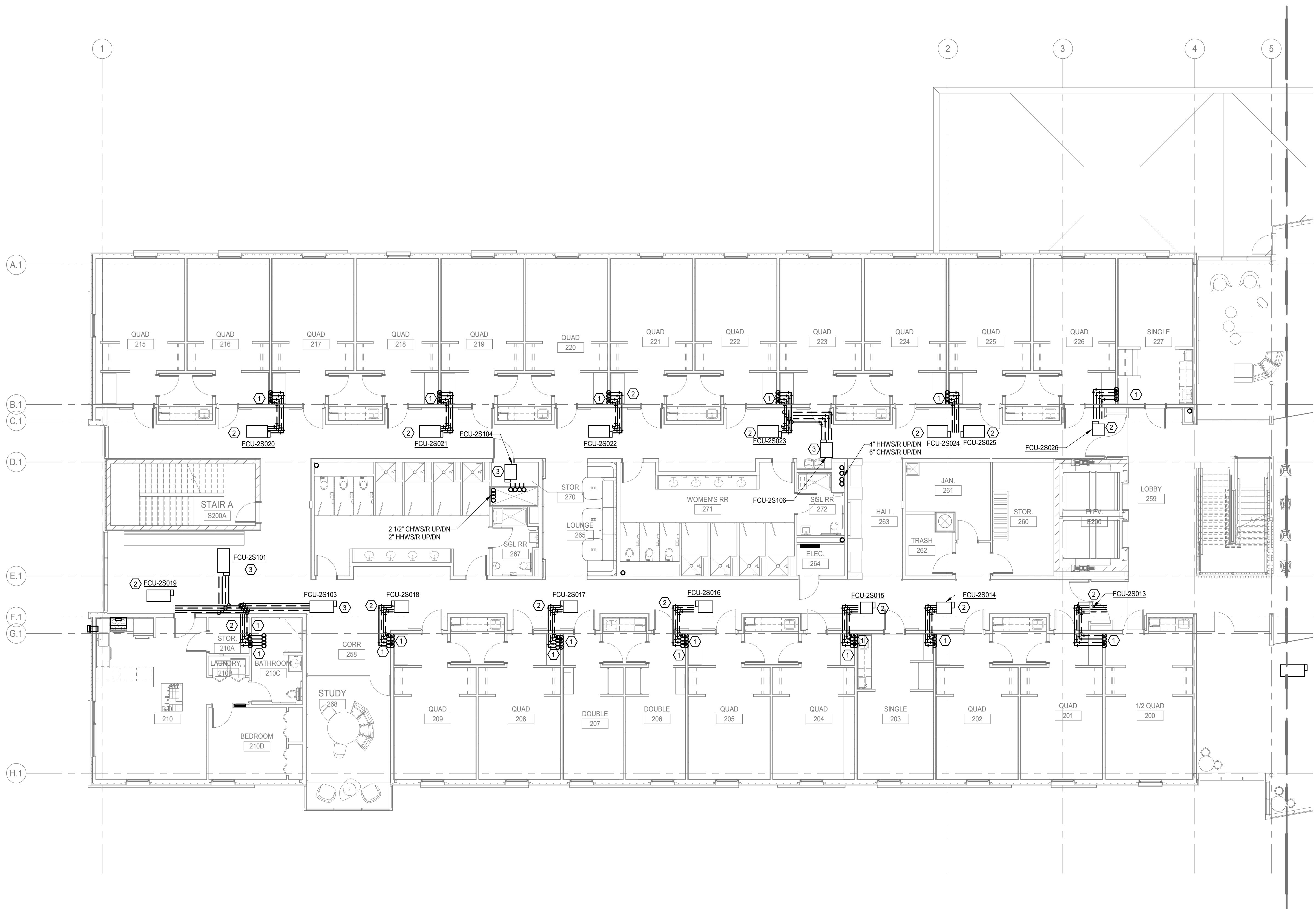
1/8" = 1'-0"



M2.1B

GENERAL SHEET NOTES

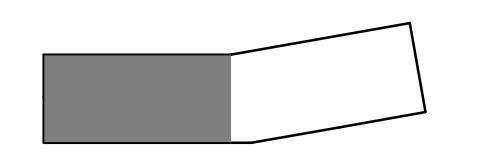
- A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- B. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.
- C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- D. PIPES AND FITTINGS SHALL BE ROUTED AS CLOSE AS POSSIBLE TO THE CEILING. PIPES SHALL BE RUN AS HIGH AS POSSIBLE TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.
- E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AND WORK AREAS ARE BELOW OR FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
- I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL, FOUNDATION, AND OTHER TRADES AND SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
- J. ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.
- K. BUILDING 4" OR LARGER SANITARY MAIN AND SEWER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT. 2" AND SMALLER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT SLOPE OR GREATER.
- L. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTION OF ARCHITECT AND ENGINEER FOR DIRECTION.
- M. ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.
- N. REFER TO PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.
- O. ALL DOWNSPOUT NOZZLES SHALL DISCHARGE 18" ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE.
- P. INSTALL SHUTOFF DUTY VALVES AT EACH BRANCH CONNECTION WITHIN 3 FEET OF THE MAINS.
- Q. PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.
- R. COORDINATE ALL FLOOR PENETRATIONS WITH ARCHITECTURAL FLOOR PLAN. PENETRATIONS SHALL BE WITHIN CHASE ENCLOSURES OR STUD WALLS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ROUGH-INS AND STUB UPS ARE FULLY COORDINATED.



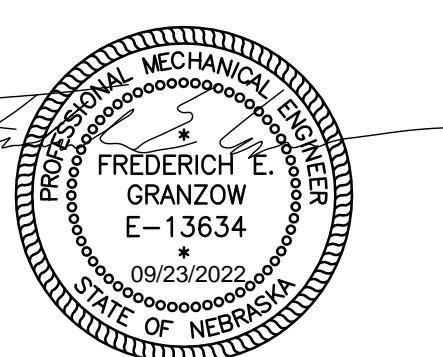
1 SECOND PIPING PLAN

1/8" = 1'-0"

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
5	2022.07.29	APPENDUM CD-01
7	2022.08.04	APPENDUM CD-02
14	2023.01.06	ASI 013



SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14
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SECOND PIPING PLAN - AREA A



M2.2A

GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.

C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.

D. LOCATE PIPING AS NECESSARY TO THE CEILING. PIPES SHOULD BE RUN AS HIGH AS POSSIBLE TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.

E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AND WORK AREAS ARE BELOW IF FREE OF OBSTRUCTIONS INCLUDING DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.

G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.

I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL, FOUNDATION, AND OTHER TRADES AND SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.

J. ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.

K. BUILDING 4" OR LARGER SANITARY MAIN AND SEWER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT. 2" AND SMALLER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT SLOPE OR GREATER.

L. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTION OF ARCHITECT AND ENGINEER FOR DIRECTION.

M. ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.

N. REFER TO PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.

O. ALL DOWNSPOUT NOZZLES SHALL DISCHARGE 18" ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE.

P. INSTALL SHUTOFF DUTY VALVES AT EACH BRANCH CONNECTION WITHIN 3 FEET OF THE MAINS.

Q. PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.

R. COORDINATE ALL FLOOR PENETRATIONS WITH ARCHITECTURAL FLOOR PLAN. PENETRATIONS SHALL BE WITHIN CHASE ENCLOSURES OR STUD WALLS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ROUGH-INS AND STUB UPS ARE FULLY COORDINATED.

SHEET KEYNOTES

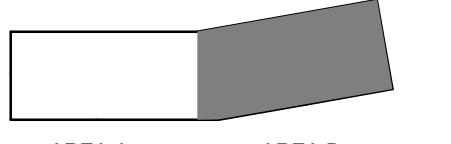
1. OFFSET PIPING AROUND STRUCTURAL JOIST/BEAM. PIPING OFFSET SHALL REMAIN WITHIN CABINET AND BE HELD AS TIGHT TO THE JOIST/BEAM AS POSSIBLE.

2. ROUTE COOLING COIL CONDENSATE TO SINK TAILPIECE OF ROOM SERVED BY FAN COIL.

3. ROUTE COOLING COIL CONDENSATE TO LAUNDRY 3/4" BRANCH CONNECTION. PROVIDE CONDENSATE LINE TO SINK LABEL WITH FAN COIL NUMBER. PROVIDE CONDENSATE MAIN WITH APPLICABLE FAN COIL NUMBER. PROVIDE CONDENSATE PUMP FOR FAN COIL. COORDINATE LOCATION WITH ARCHITECTURAL FINISH PLAN AND PLUMBING DRAWINGS.

4. ROUTE COOLING COIL CONDENSATE TO 3/4" BRANCH CONNECTION OF TALPIECE OF NEAREST SINK OR NEAREST MOP SINK. PROVIDE CONDENSATE MAIN WITH APPLICABLE FAN COIL NUMBER. PROVIDE CONDENSATE PUMP FOR FAN COIL. COORDINATE LOCATION WITH ARCHITECTURAL FINISH PLAN AND PLUMBING DRAWINGS.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
5	2022.07.29	APPENDUM CD-0
7	2022.08.04	APPENDUM CD-02
8	2022.09.23	PERMIT
14	2023.01.06	REVISION
		ASI 013

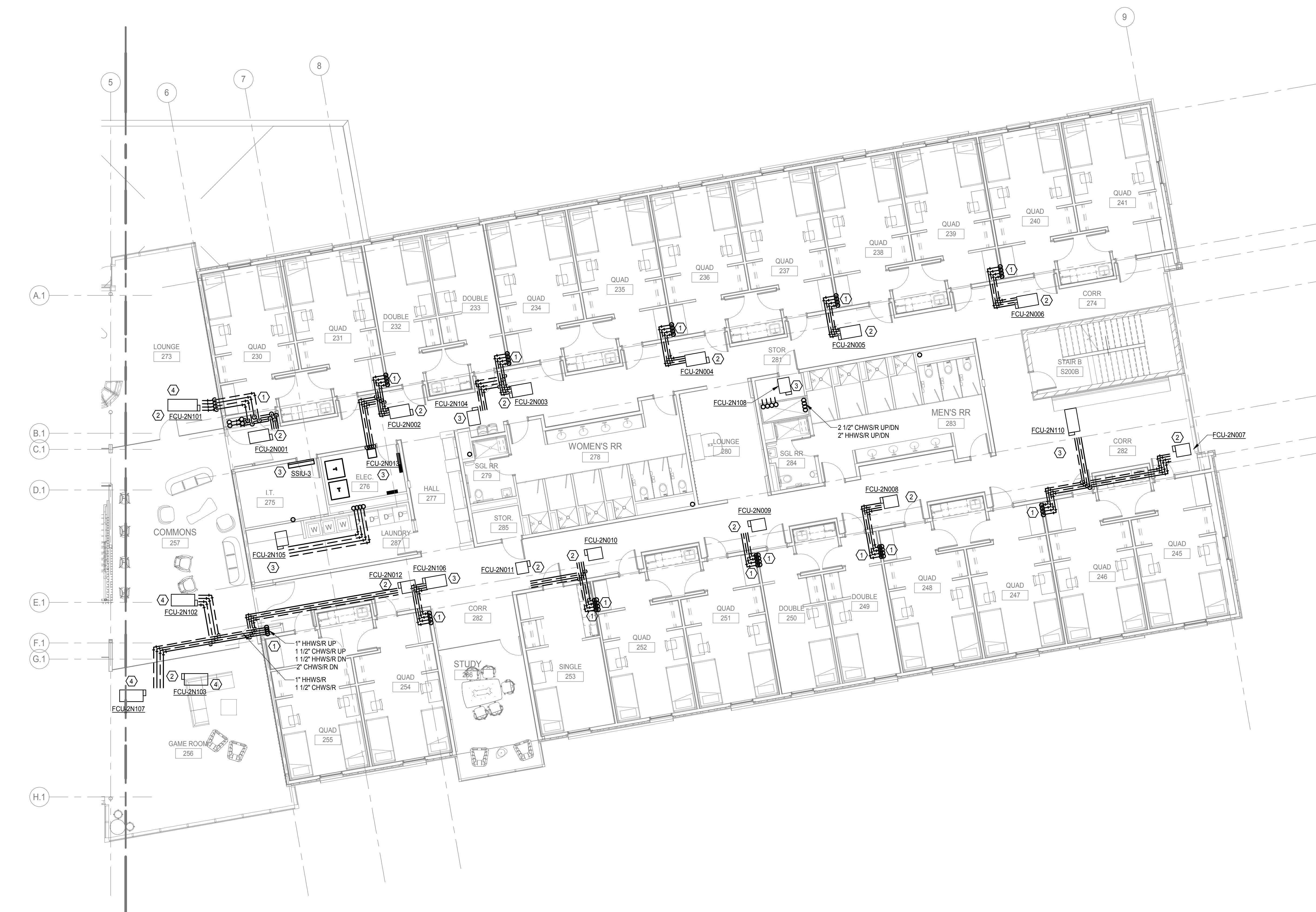


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SECOND PIPING PLAN - AREA B



SECOND PIPING PLAN

1/8" = 1'-0"



M2.2B

GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.

C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.

D. PIPES AND DUCTWORK SHALL BE RUN AS CLOSE AS POSSIBLE TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.

E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AND WORK AREA ACCESS ARE BELOW IF FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.

G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.

I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL, FOUNDATION, AND OTHER TRADES AND SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.

J. ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.

K. BUILDING 4' OR LARGER SANITARY MAIN AND SEWER PIPING SHALL BE SLOPED AT A MINIMUM OF 1/4" PER FOOT. 2" AND SMALLER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT SLOPE OR GREATER.

L. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTION OF ARCHITECT AND ENGINEER FOR DIRECTION.

M. ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.

N. REFER TO PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.

O. ALL DOWNSPOUT NOZZLES SHALL DISCHARGE 18" ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE.

P. INSTALL SHUTOFF DUTY VALVES AT EACH BRANCH CONNECTION WITHIN 3 FEET OF THE MAINS.

Q. PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.

R. COORDINATE ALL FLOOR PENETRATIONS WITH ARCHITECTURAL FLOOR PLAN. PENETRATIONS SHALL BE WITHIN CHASE ENCLOSURES OR STUD WALLS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ROUGH-INS AND STUB UPS ARE FULLY COORDINATED.

SHEET KEYNOTES

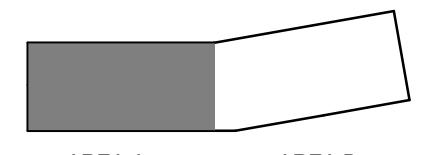
1. OFFSET PIPING AROUND STRUCTURAL JOIST/BEAM. PIPING OFFSET SHALL REMAIN WITHIN CABINET AND BE HELD AS TIGHT TO THE JOIST/BEAM AS POSSIBLE.

2. ROUTE COOLING COIL CONDENSATE TO SINK TAILPIECE OF ROOM SERVED BY FAN COIL.

3. ROUTE COOLING COIL CONDENSATE TO 3/4" BRANCH CONNECTION OF TAILPIECE OF NEAREST SINK OR NEAREST MOP-SINK. LABEL EACH CONDENSATE MAIN WITH APPLICABLE FAN COIL NUMBER. PROVIDE CONDENSATE PUMP FOR FAN COIL. COORDINATE LOCATION WITH ARCHITECTURE, FINISH PLAN AND PLUMBING DRAWINGS.

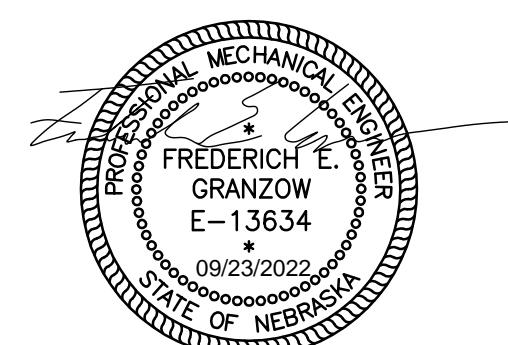
4. MOUNT BOTTOM OF FAN COIL AND ASSOCIATED ACCESSORIES ABOVE THE TOP OF THE DOOR TO THE STAIRWELL. PROVIDE 3'-0" FROM EDGE OF FAN COIL TO STAIRS, MINIMUM OF 1'-0" FROM EDGE OF FAN COIL TO DOOR, AND MINIMUM 0'-6" FROM BACK OF FAN COIL TO WALL.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
5	2022.07.29	APPENDUM CD-0
7	2022.08.04	APPENDUM CD-02
14	2023.01.06	ASI 013
30	2023.08.15	ASI 033

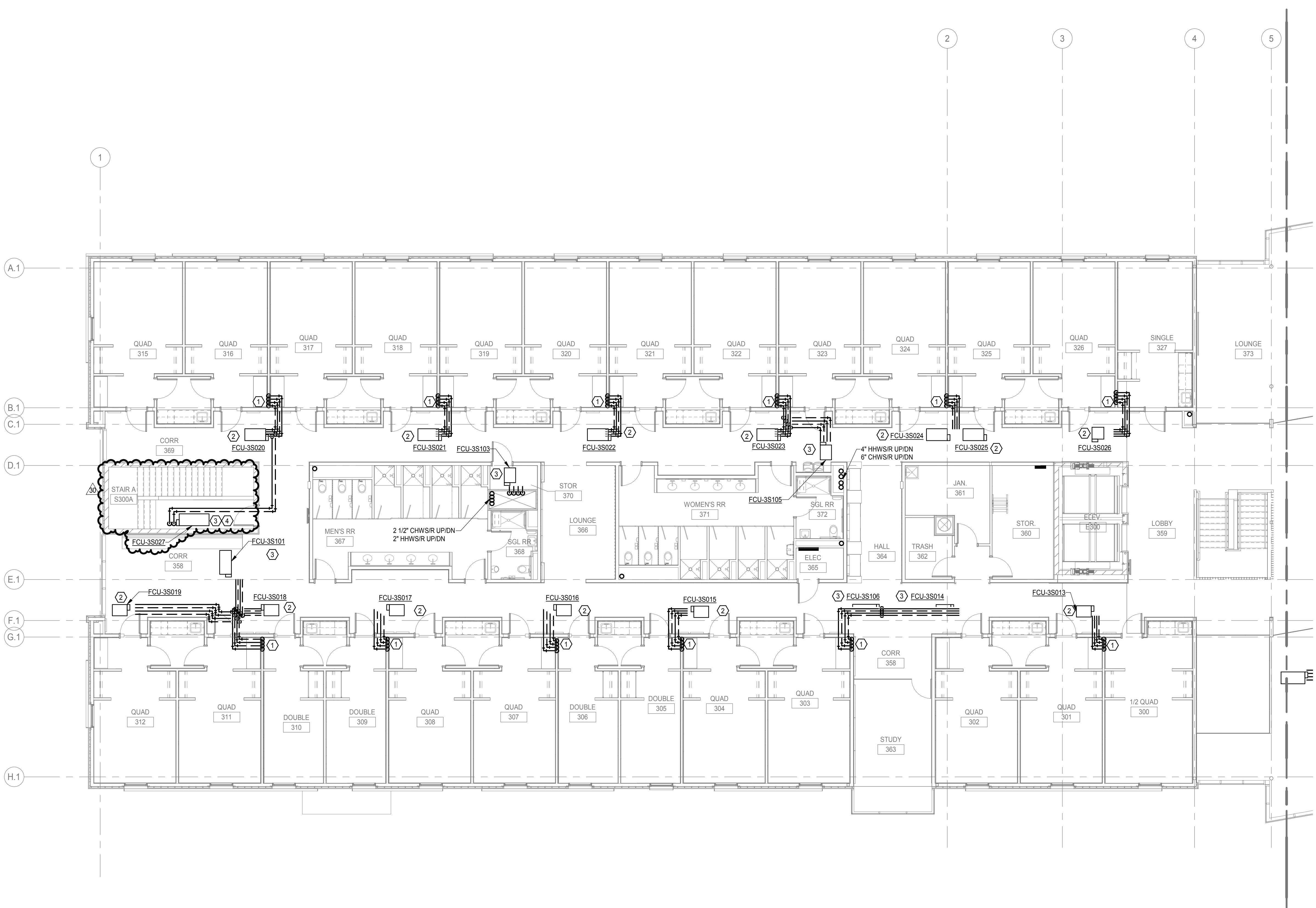


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PROJECT: 21045 DATE: 2022.10.14
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THIRD PIPING PLAN - AREA A



1 THIRD PIPING PLAN

1/8" = 1'-0"

GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. COORDINATE EXACT FIRE & OR SMOKE RATING WITH ARCHITECTURAL PLANS.

C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.

D. LOCATE PIPING AS NECESSARY TO PROVIDE THE SHORTEST RUN AS HIGH AS POSSIBLE TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILING.

E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND MAINTENANCE AREA AND WORK AREAS ARE BELOW OR FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.

G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.

I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL, FOUNDATION, CONCRETE, AND OTHER TRADE SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.

J. ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.

K. BUILDING 4' OR LARGER SANITARY MAIN AND SEWER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT. 2" AND SMALLER PIPING SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT SLOPE OR GREATER.

L. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTION OF ARCHITECT AND ENGINEER FOR DIRECTION.

M. ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.

N. REFER TO PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.

O. ALL DOWNSPOUT NOZZLES SHALL DISCHARGE 18" ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE.

P. INSTALL SHUT-OFF DUTY VALVES AT EACH BRANCH CONNECTION WITHIN 3 FEET OF THE MAINS.

Q. PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.

R. COORDINATE ALL FLOOR PENETRATIONS WITH ARCHITECTURAL FLOOR PLAN. PENETRATIONS SHALL BE WITHIN CHASE ENCLOSURES OR STUD WALLS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ROUGH-INS AND STUB UPS ARE FULLY COORDINATED.

SHEET KEYNOTES

1. OFFSET PIPING AROUND STRUCTURAL JOIST/BEAM. PIPING OFFSET SHALL REMAIN WITHIN CABINET AND BE HELD AS TIGHT TO THE JOIST/BEAM AS POSSIBLE.

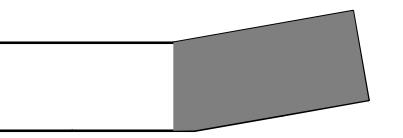
2. ROUTE COOLING COIL CONDENSATE TO SINK TAILPIECE OF ROOM SERVED BY FAN COIL.

3. ROUTE COOLING COIL CONDENSATE TO 3/4" BRANCH CONNECTION OF TALPIECE OF NEAREST SINK OR NEAREST MOP-SINK. LABEL EACH CONDENSATE MAIN WITH APPLICABLE FAN COIL NUMBER. PROVIDE CONDENSATE PUMP FOR FAN COIL. COORDINATE LOCATION WITH ARCHITECTURAL FINISH PLAN AND PLUMBING DRAWINGS.

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5. MOUNT BOTTOM OF FAN COIL AND ASSOCIATED ACCESSORIES ABOVE THE TOP OF STAIR. MINIMUM OF 1'-0" FROM EDGE OF FAN COIL TO STAIRS. MINIMUM OF 1'-0" FROM EDGE OF FAN COIL TO DOOR, AND MINIMUM 0'-6" FROM BACK OF FAN COIL TO WALL.

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
3	2022.06.03	REVISED DD
5	2022.07.29	APPENDUM C/D-0
8	2022.09.23	PERMIT
14	2023.01.06	REVISION
30	2023.08.15	ASI 033

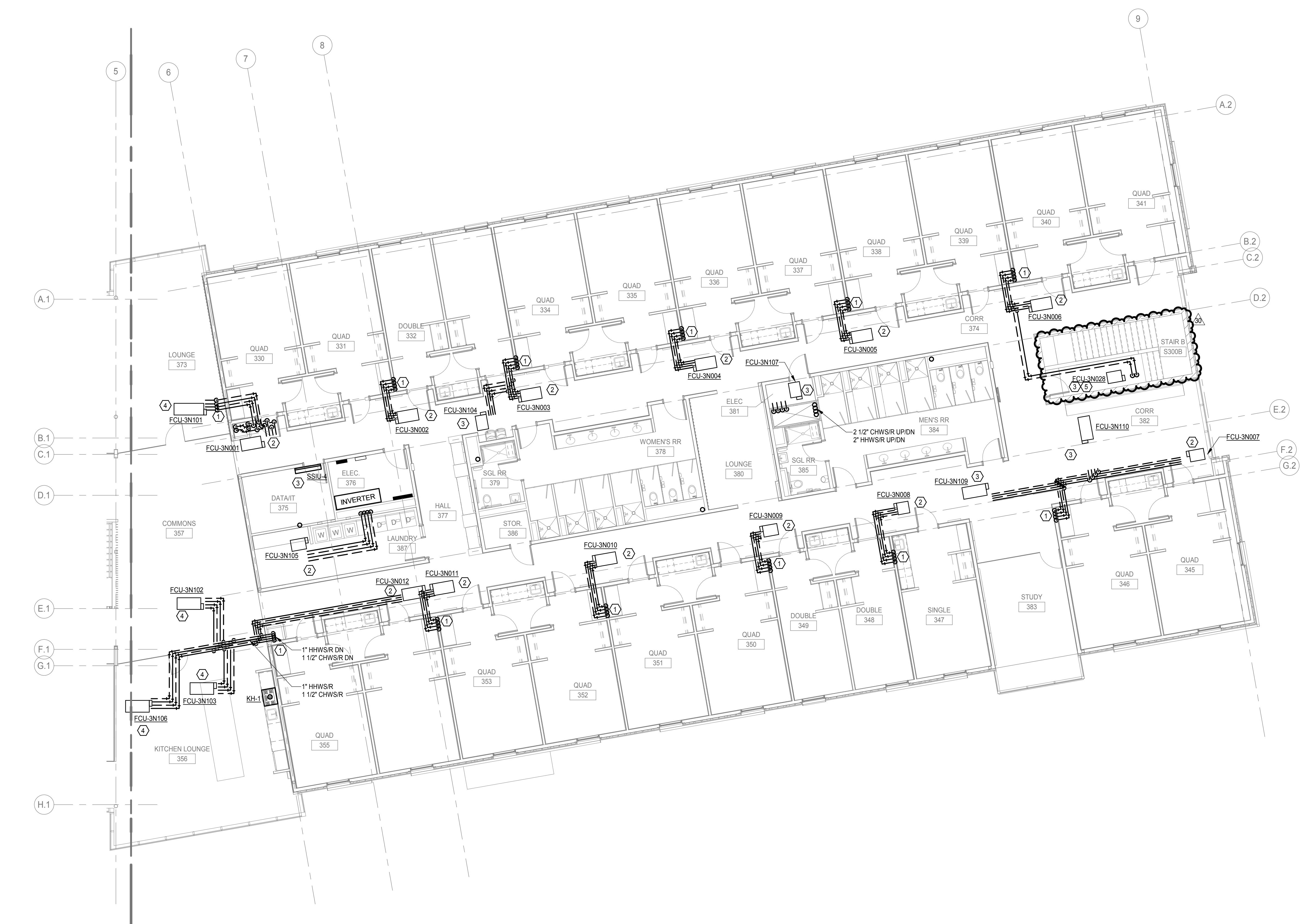


SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14
B-Compliant Sheet



THIRD PIPING PLAN - AREA B



1 THIRD PIPING PLAN

1/8" = 1'-0"

GENERAL SHEET NOTES

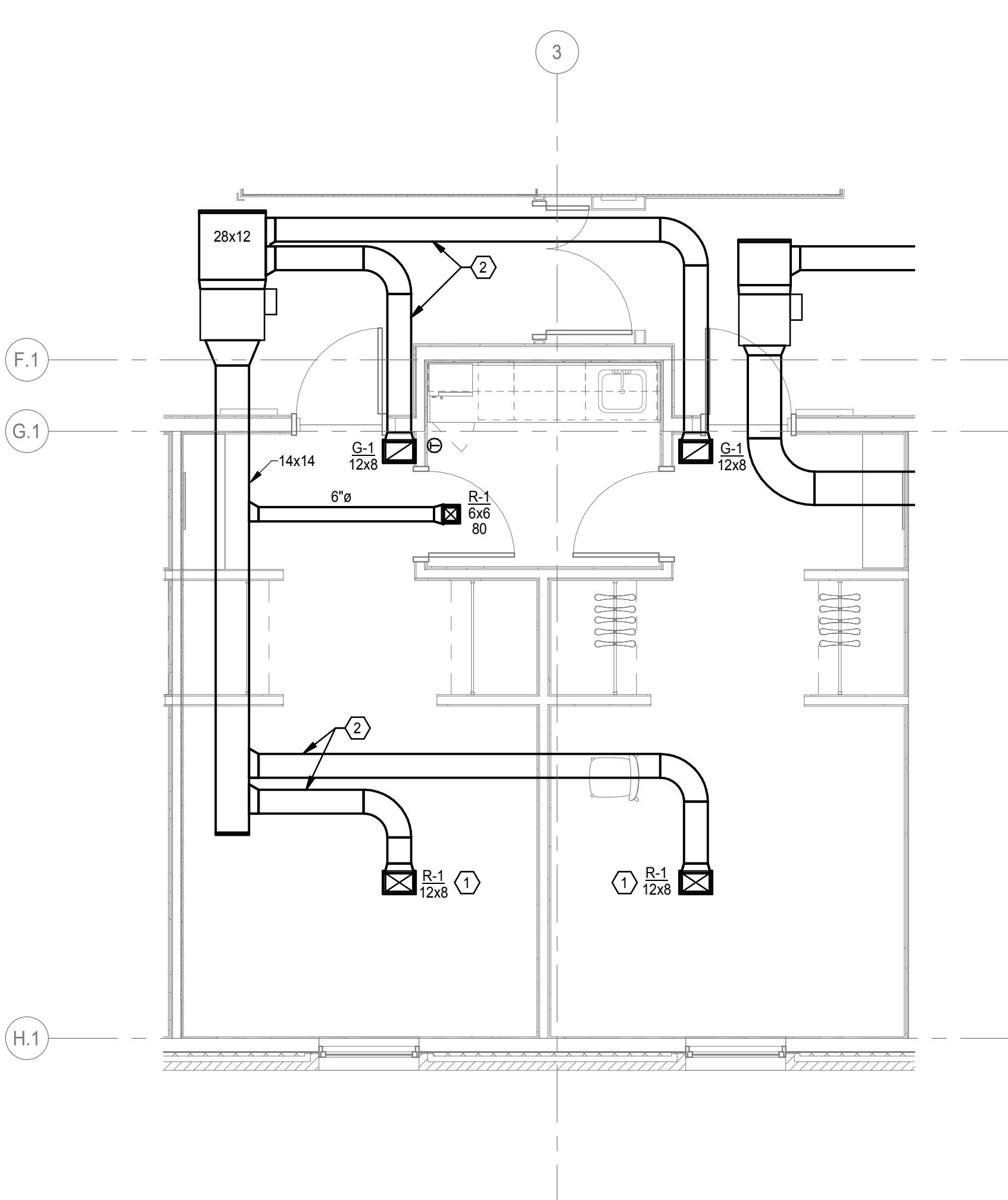
- A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.
- B. COORDINATE EXACT FIRE & SMOKE RATINGS WITH EXISTING CONDITIONS AND ARCHITECTURAL PLANS. MAINTAIN ALL EXISTING RATINGS.
- C. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR COMPLETE SYSTEM.
- D. UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL AND PLUMBING CONTRACTORS FOR CONSTRUCTION LEVEL AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.
- E. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WHERE THE SAME SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW, AND SO THAT CONTRACTOR AROUND EQUIPMENT AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.
- F. ROUTE ALL PIPING IN MECHANICAL ROOMS TO PROVIDE A MINIMUM OF 8'-0" CLEARANCE FROM BOTTOM OF DUCT, PIPE, INSULATION, OR HANGERS TO FINISHED FLOOR. DO NOT INSTALL PIPING IN THE SERVICE AREA FOR EQUIPMENT INSTALLED BY OTHERS.
- G. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED WALLS AND FLOORS. PROVIDE SEPARATION LOCATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.
- H. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.
- I. COORDINATE UNDERGROUND PIPING WITH STRUCTURAL FOOTINGS, SITE UTILITIES SERVICES, AND BUILDING SERVICES. FIELD VERIFY LOCATION OF ALL UTILITIES AND EXACT DIMENSIONS DURING BIDDING PORTION OF PROJECT. NOTIFY ANY DISCREPANCY OR INTERFERENCE TO ENGINEER.
- J. ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 90-DEGREES SHALL BE PROVIDED WITH TURNING VENES UNLESS NOTED OTHERWISE.
- K. PROVIDE A MASONRY WALL LINTEL AT ALL BLOCK OR BRICK WALL PENETRATIONS WIDER THAN 12". COORDINATE MASONRY WALL LINTEL LOCATIONS WITH STRUCTURAL PLANS.
- L. BALANCE MANUAL DAMPER DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.
- M. ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL SWING AND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.
- N. NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL WITH CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.
- O. ALL DUCT SEAMS SHALL BE SEALED.
- P. ALL CEILING DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.
- Q. KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.
- R. DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.

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BVH ARCHITECTURE
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Olsson Project #21-01436

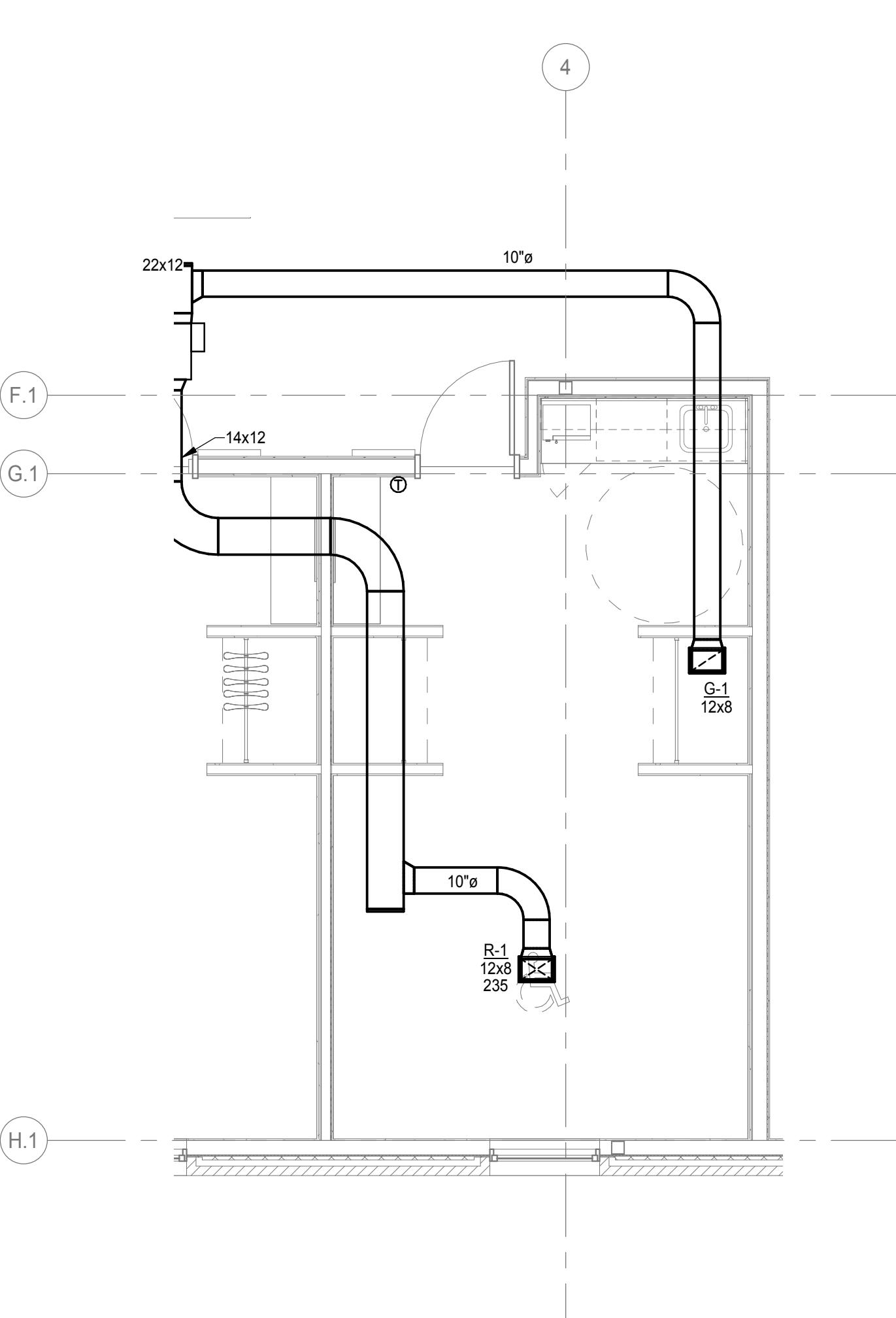
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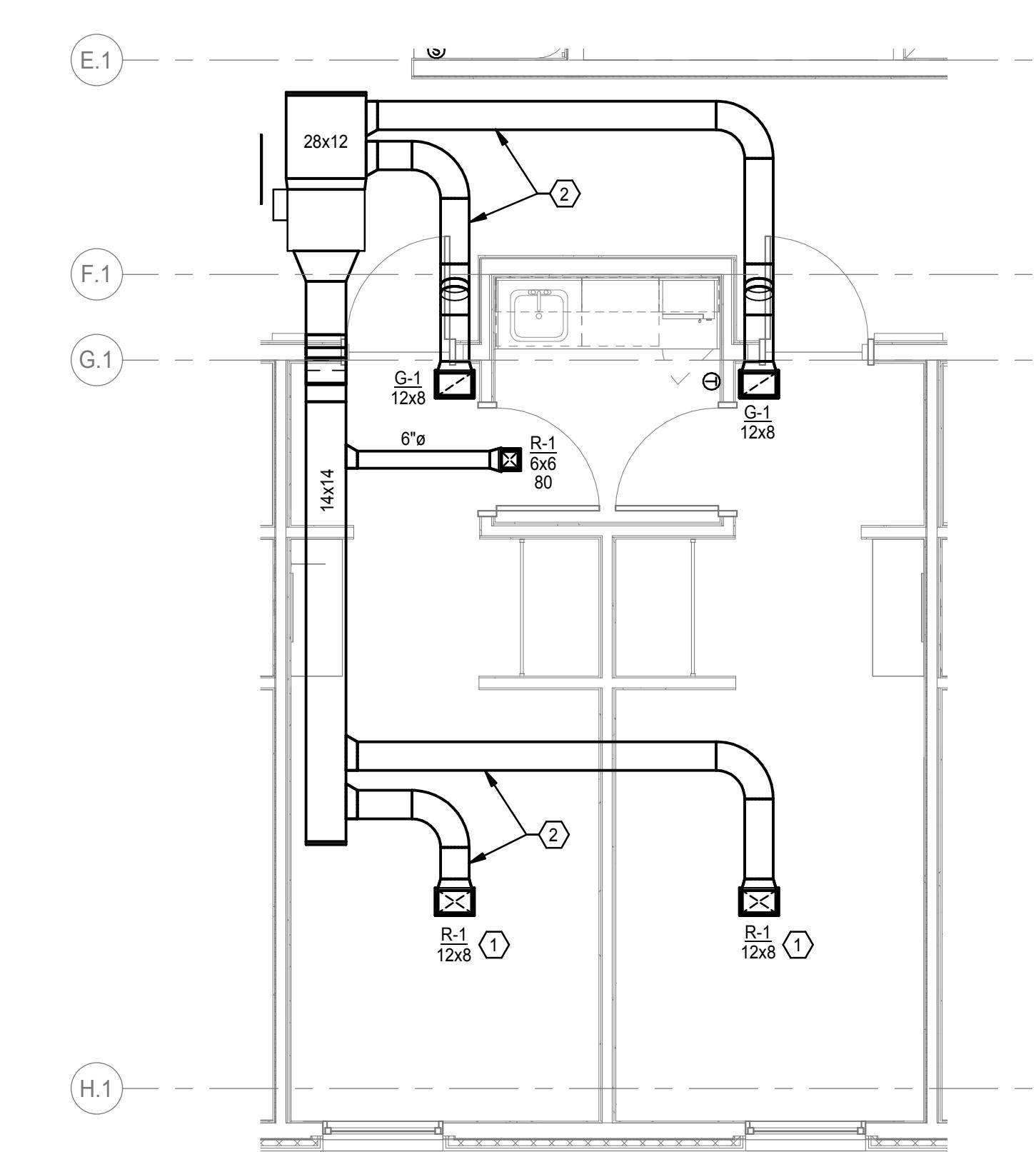
1 TYPICAL QUAD HVAC PLAN

1/4" = 1'-0"



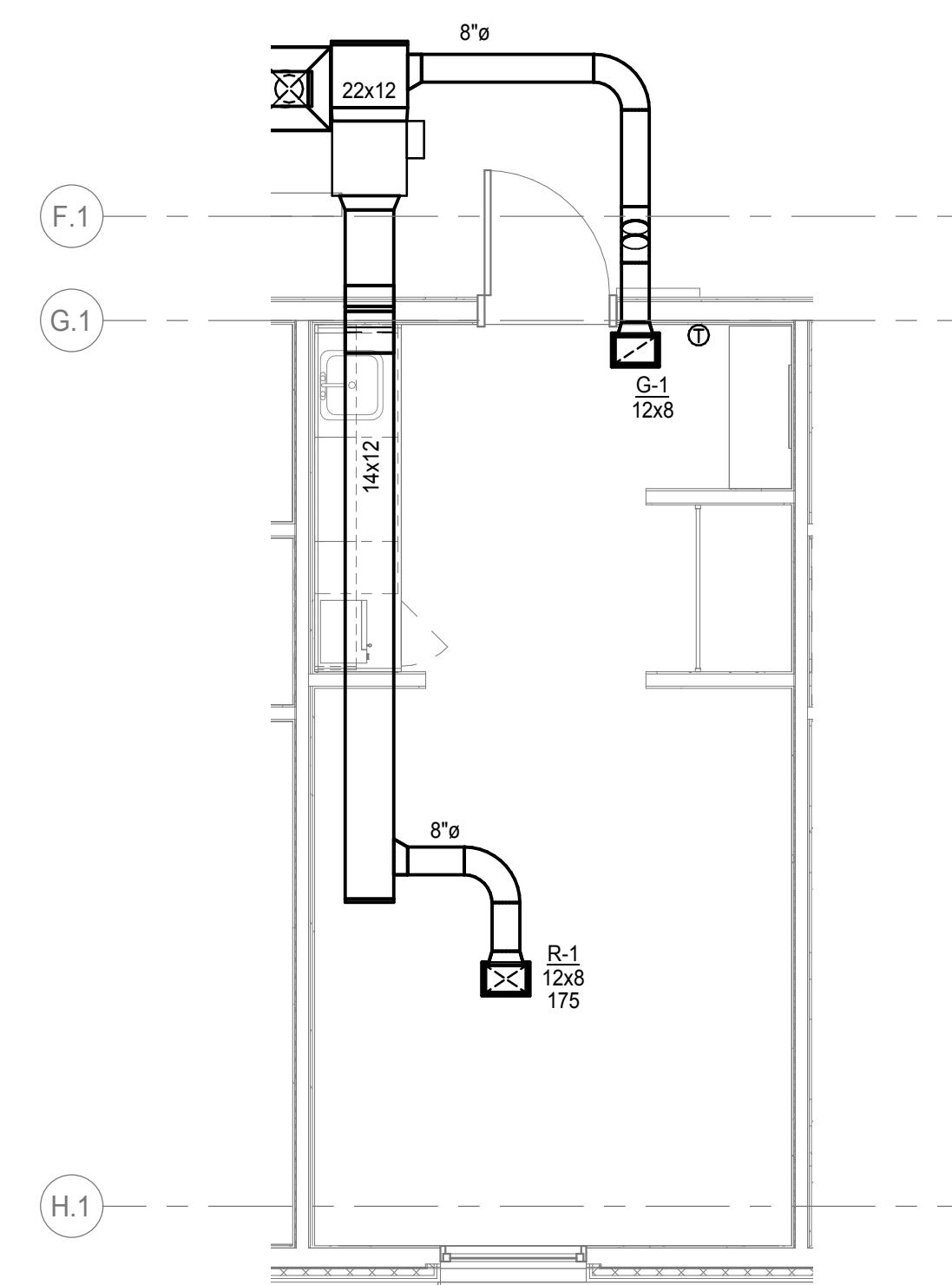
2 TYPICAL 1/2 QUAD HVAC PLAN

1/4" = 1'-0"



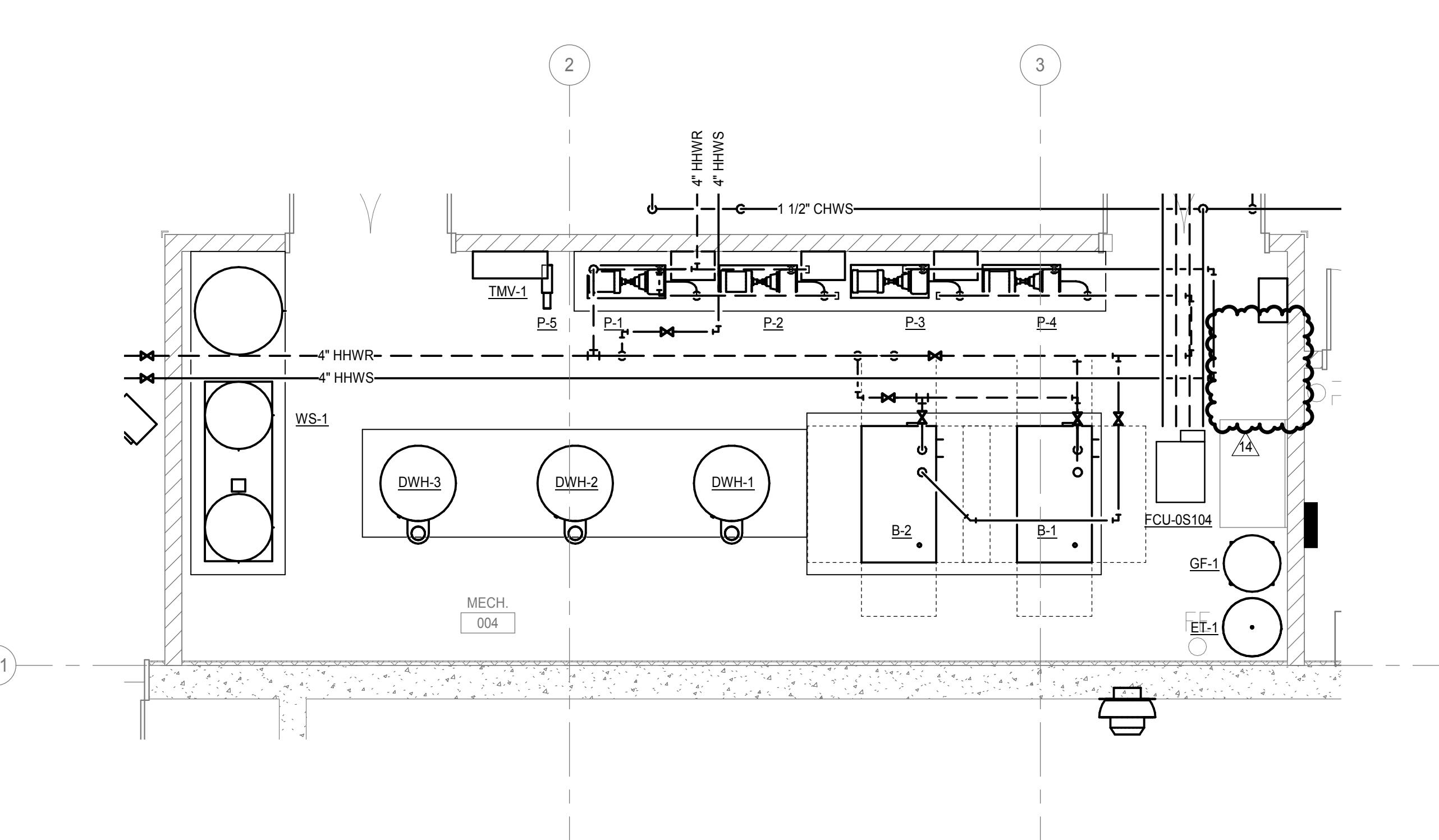
3 TYPICAL DOUBLE UNIT HVAC PLAN

1/4" = 1'-0"



4 TYPICAL SINGLE UNIT HVAC PLAN

1/4" = 1'-0"



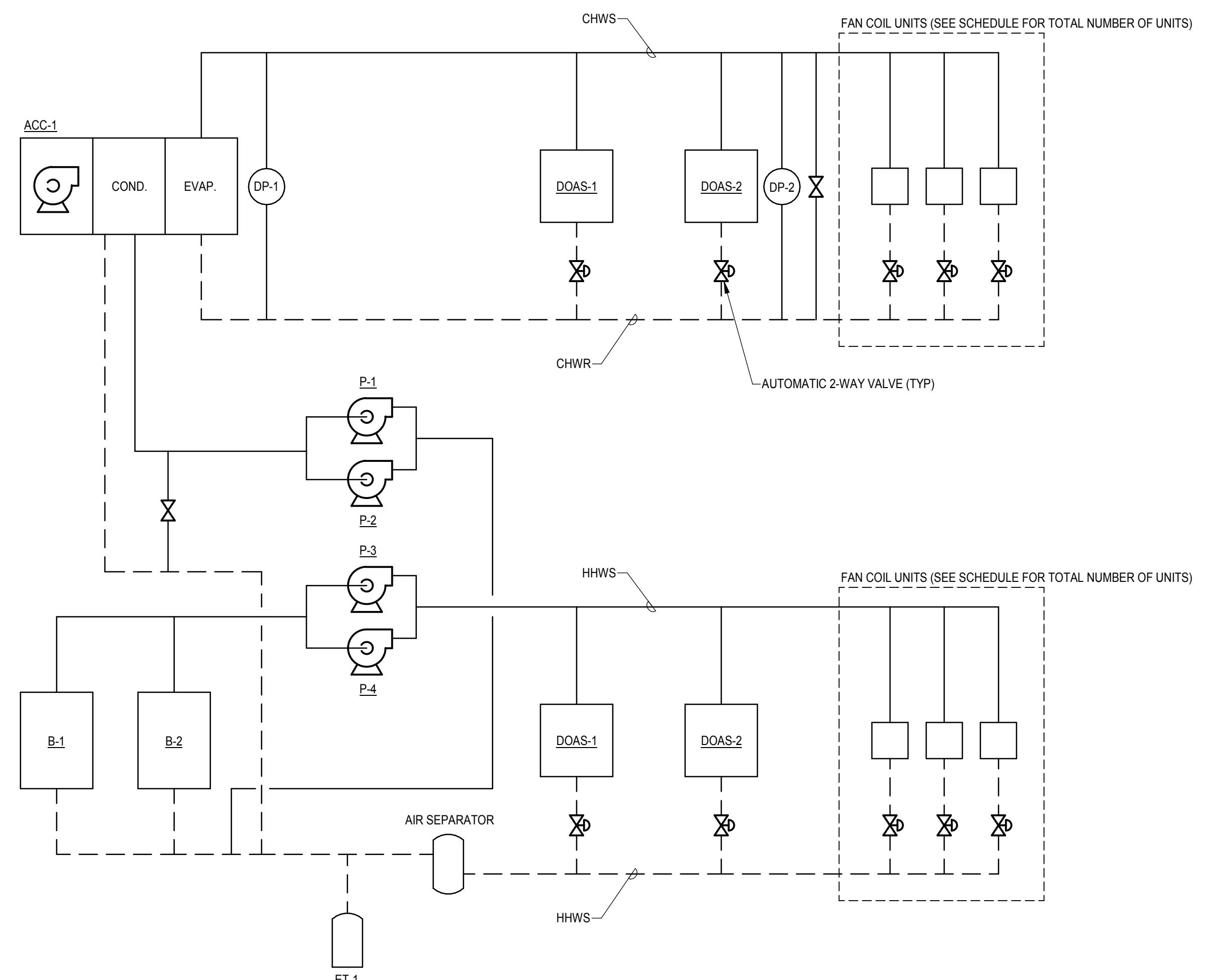
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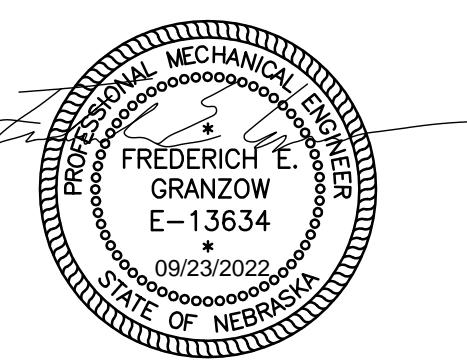
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OLSSON
601 P St. #200
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REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION



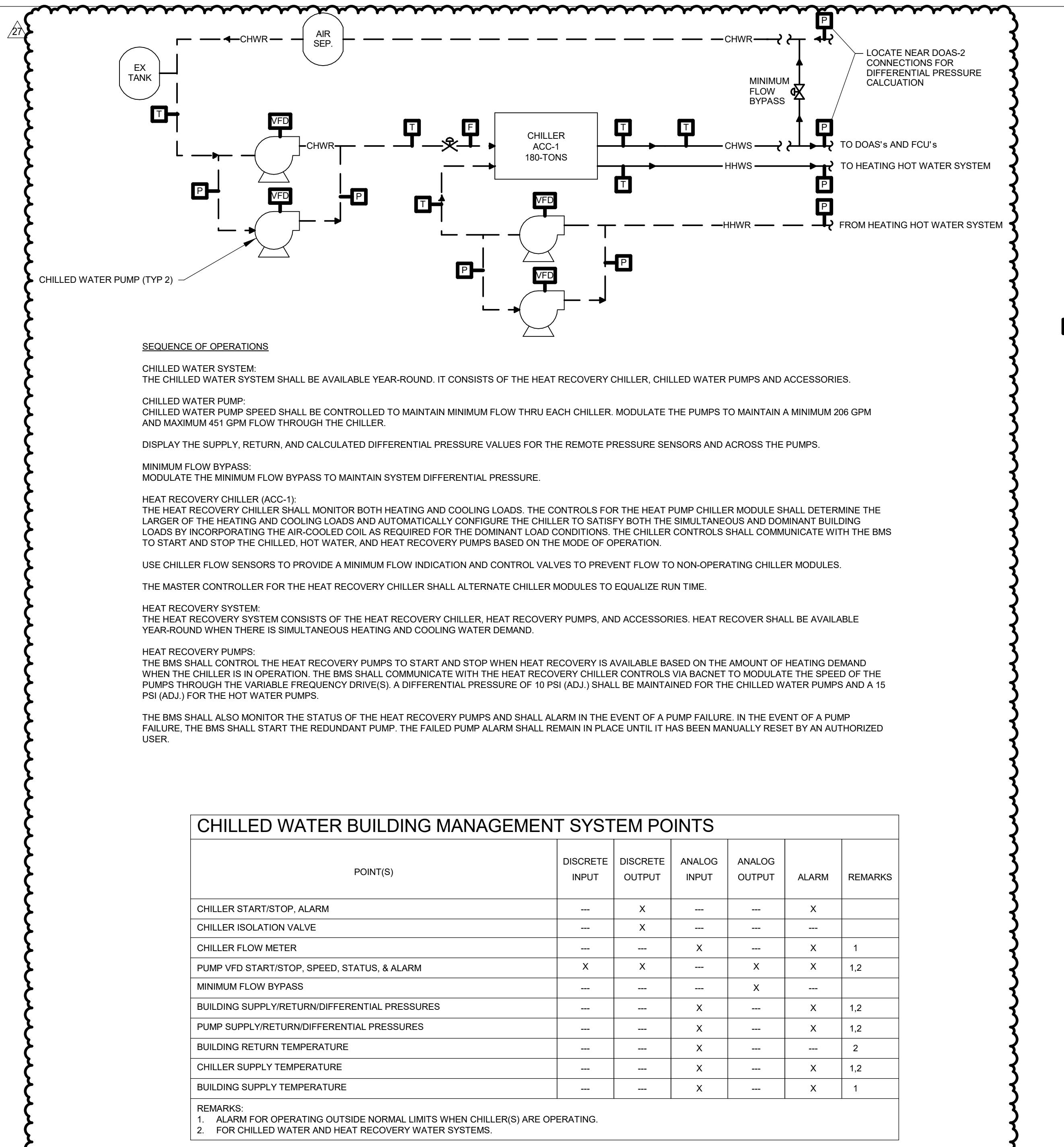
SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14
B-Compliant Rev.PIPING SCHEMATIC
DIAGRAM

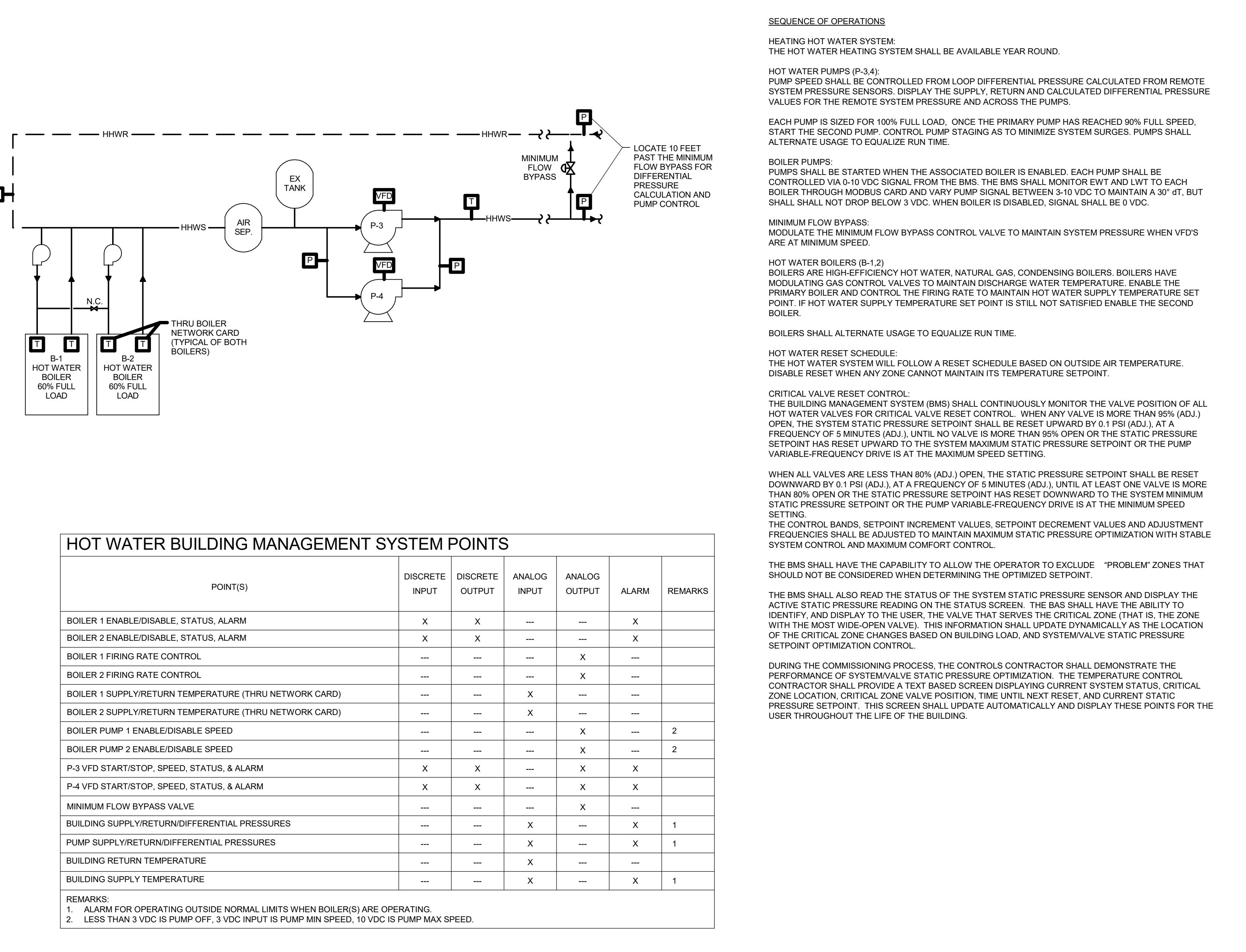
1 CHILLED AND HEATING HOT WATER SCHEMATIC DIAGRAM

1/8" = 1'-0"

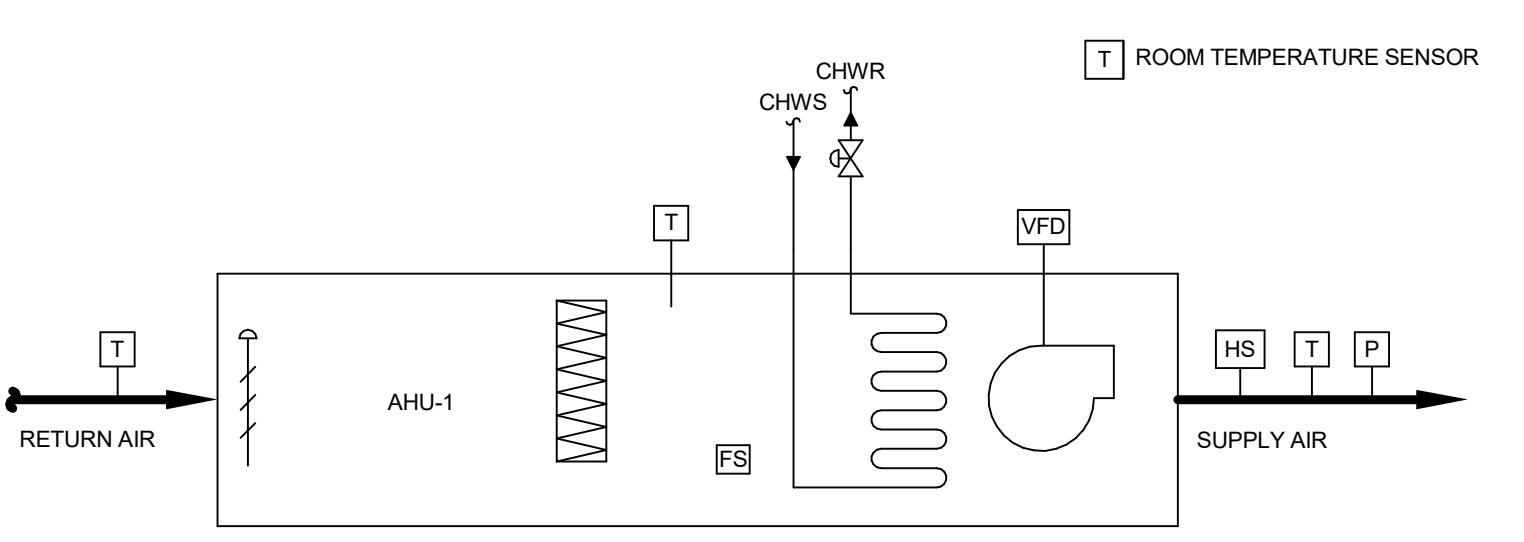
M4.1



1 CHILLED WATER LOOP P&ID
NOT TO SCALE



2 HOT WATER HEATING LOOP P&ID
NOT TO SCALE



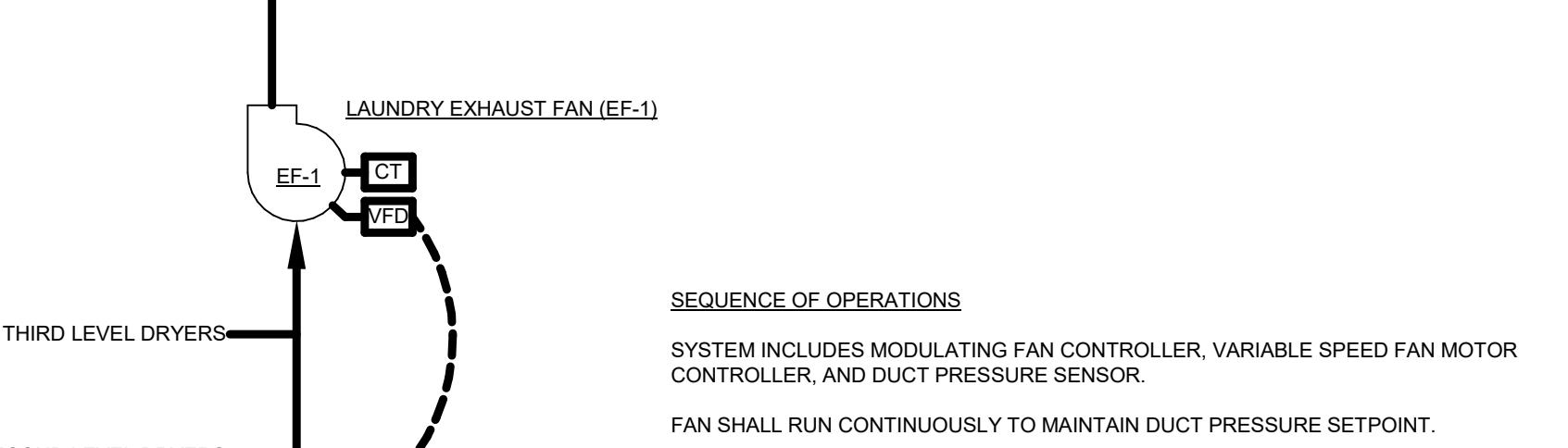
RTU-1 NEW EQUIPMENT SYSTEM POINTS

POINT(S)	DISCRETE INPUT	DISCRETE OUTPUT	ANALOG INPUT	ANALOG OUTPUT	ALARM	REMARKS
RETURN AIR TEMPERATURE	--	--	X	--	X	1
SUPPLY AIR TEMPERATURE	--	--	X	--	X	1
SUPPLY AIR PRESSURE	--	--	X	--	X	1
ROOM TEMPERATURE SETPOINT & OVERRIDE	X	--	X	X	X	1
*ALARMS	X	--	--	--	X	2

REMARKS:

1. ALARM FOR OPERATING OUTSIDE NORMAL LIMITS WHEN SYSTEM IS OPERATING
2. PACKAGED UNIT ALARMS FOR IGNITION FAILURE, SAFETY LOCKOUT, AND REPEATED SWITCH TRIPS.

3 RTU NEW EQUIPMENT SYSTEM POINTS
NOT TO SCALE



4 EXHAUST FAN EF-1 BMS POINTS

POINTS	DISCRETE INPUT	DISCRETE OUTPUT	ANALOG INPUT	ANALOG OUTPUT	ALARM	REMARKS
EXHAUST FAN START/STOP, SPEED & STATUS	X	X	--	X	X	-
DUCT STATUS PRESSURE	X	X	--	X	X	-

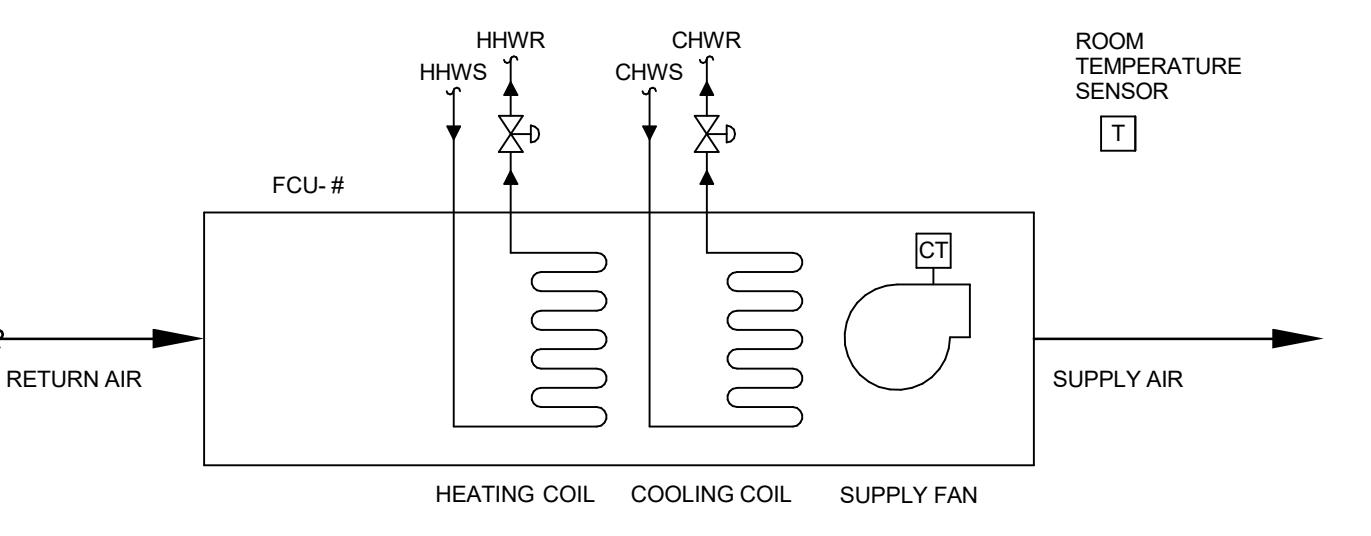
REMARKS:

1. N/A

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
7	2022.08.04	ADDENDUM CD-02
8	2022.09.23	PERMIT REVISION
27	2023.05.16	ASI 030

PROJECT: 21045 DATE: 2022.10.14
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MECHANICAL P&ID's



FOUR-PIPE FAN COIL UNITS

FAN COIL(S) PROVIDE HEATING AND/OR COOLING TO MAINTAIN TEMPERATURE IN CORRIDORS. UNITS WILL OPERATE IN OCCUPIED MODE 24/7.
A SENSOR MOUNTED ON THE WALL WILL READ TEMPERATURE WITH DISPLAY AND +/- 2°F ADJUSTMENT CONTROL.
COOLING MODE:
UPON A CALL FOR COOLING, ENERGIZE THE FAN AND MODULATE THE COOLING COIL CONTROL VALVE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
HEATING MODE:
UPON A CALL FOR HEATING, ENERGIZE THE FAN AND MODULATE THE HEATING COIL CONTROL VALVE TO MAINTAIN ROOM TEMPERATURE TO SETPOINT.
FAN OPERATION:
FAN HAS 0-10V SPEED CONTROL INPUT, COORDINATE SIGNAL REQUIRED WITH TEST AND BALANCE CONTRACTOR. SPEED RANGE IS 2-10V; FAN TURNS OFF AT <2 V.
OCCUPIED ROOM AIR TEMPERATURE SETPOINT: 72°F
UNOCCUPIED ROOM AIR TEMPERATURE SETPOINT WINDOW: 62°F HEATING AND 78°F COOLING.

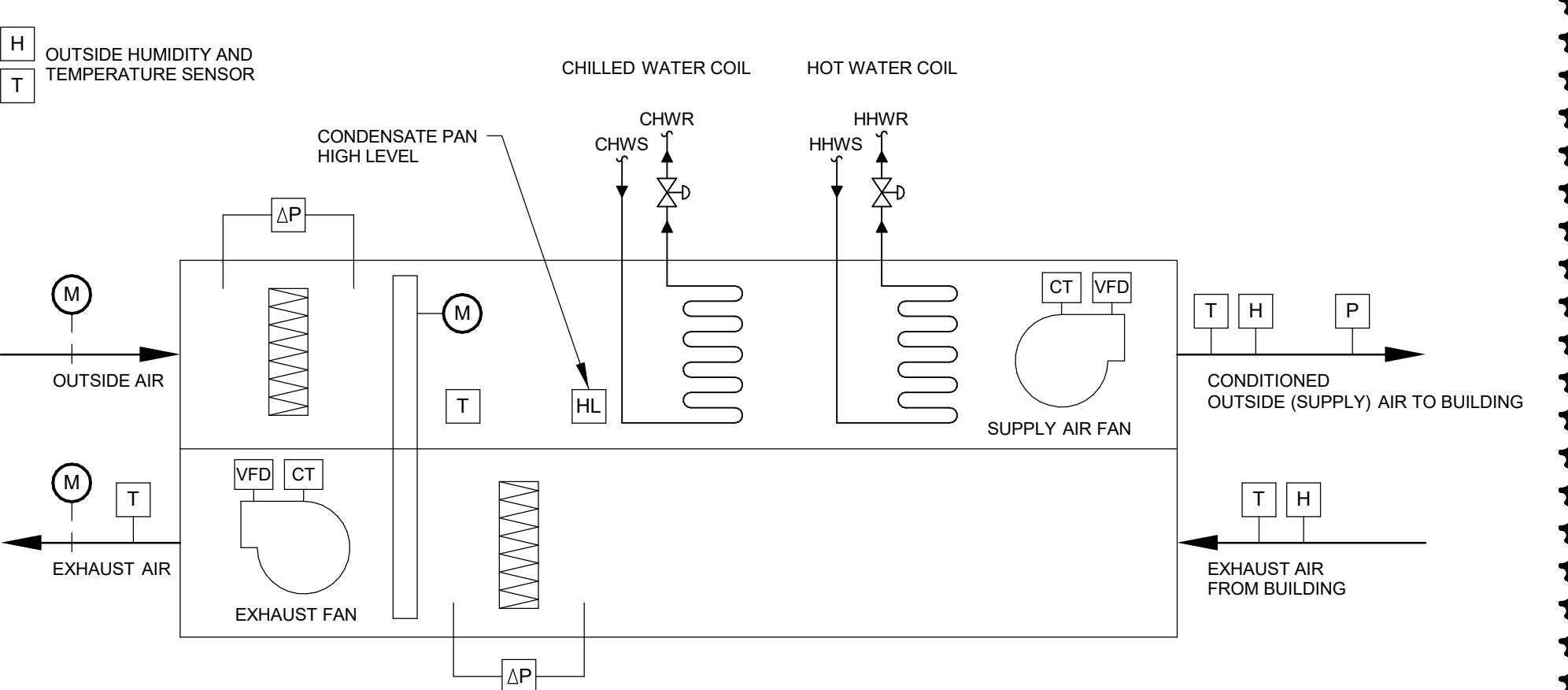
FOUR-PIPE FAN COIL UNIT NEW EQUIPMENT SYSTEM POINTS

POINT(S)	DISCRETE INPUT	DISCRETE OUTPUT	ANALOG INPUT	ANALOG OUTPUT	ALARM	REMARKS
ROOM TEMPERATURE	--	--	X	--	X	1
FAN START/STOP, STATUS	X	X	--	--	X	
MODULATING HEATING COIL CONTROL VALVE	--	--	--	X	--	
MODULATING COOLING COIL CONTROL VALVE	--	--	--	X	--	
REMARKS:						
1. ALARM FOR OPERATING OUTSIDE NORMAL LIMITS WHEN SYSTEM IS OPERATING.						

2 FOUR-PIPE FAN COIL UNIT (FCU-X) P&ID

NOT TO SCALE

27



DEDICATED OUTDOOR AIR SYSTEM WITH ENERGY RECOVERY - (DOAS-1,2)

THE DEDICATED OUTDOOR AIR SYSTEM (DOAS-1,2) DELIVERS CONDITIONED OUTSIDE AIR TO THE BUILDING SPACES IN OCCUPIED MODE. IT CONSISTS OF THE ENERGY RECOVERY WHEEL, HEATING COIL, COOLING COIL, EXHAUST FAN, AND SUPPLY FAN.

A DUCT TEMPERATURE SENSOR SHALL MONITOR THE OUTSIDE AIR TEMPERATURE AS IT DISCHARGES FROM THE UNIT. ANALOG DIFFERENTIAL PRESSURE TRANSMITTERS SHALL MONITOR THE ENERGY WHEEL MEDIA AND PROVIDE A "DIRTY" OR "PLUGGED MEDIA" ALARM WHEN THE DIFFERENTIAL PRESSURE THRESHOLD IS EXCEEDED. THE SUPPLY AIR FAN SPEED SHALL BE MODULATED BY THE VARIABLE FREQUENCY DRIVE TO MATCH THE DEMAND OF THE OUTDOOR AIR. DIFFERENTIAL PRESSURE TRANSMITTERS SHALL BE MODULATED TO THE OUTSIDE AIR FLOW. AN AIR FILTER DIFFERENTIAL PRESSURE TRANSMITTER SHALL PROVIDE A DUST FILTER ALARM WHEN THE DIFFERENTIAL PRESSURE EXCEEDS 1.0 INCH W.C. OUTSIDE AIR TEMPERATURE AND RELATIVE HUMIDITY SHALL BE PROVIDED AT THE BMS. THE OUTSIDE AIR INTAKE AND EXHAUST AIR DAMPERS SHALL BE EQUIPPED WITH SPRING RETURN (FAIL CLOSED) DAMPER MOTORS WITH END SWITCHES.

UNOCCUPIED MODE AND MORNING WARMUP MODE:

THE OUTSIDE AND EXHAUST AIR DAMPERS ARE CLOSED. THE EXHAUST AND SUPPLY FANS ARE OFF.

OCCUPIED MODE:

- OPEN THE OUTSIDE AIR AND EXHAUST AIR DAMPERS AND CONFIRM OPEN VIA DAMPER POSITION END SWITCHES. START THE OUTSIDE AND EXHAUST AIR FANS.
- IF THE ENERGY WHEEL LEAVING AIR TEMPERATURE IS LESS THAN 36°F, TURN OFF THE UNIT AND SEND AN ALARM TO THE BUILDING MANAGEMENT SYSTEM.
- IF THE EXHAUST OR SUPPLY FAN FAIL, SHUT DOWN THE UNIT. OPERATE THE ROOM FAN COILS NORMALLY.
- INSTALL AN AUTOMATED SYSTEMS ENGINEERING DS-2B RAIN/SNOW SENSOR CONTROLLER AT THE INTAKE LOUVER FOR DOAS-1 AND DOAS-2. THE CONTROLLER SHALL SEND A SIGNAL TO THE BMS TO SHUT DOWN BOTH UNITS ONCE SNOW HAS BEEN DETECTED.
- IF THE LEAVING AIR TEMPERATURE IS BELOW 50°F, TURN OFF THE UNIT AND SEND AN ALARM TO THE BUILDING MANAGEMENT SYSTEM.

FROST PROTECTION FOR ENERGY WHEEL:

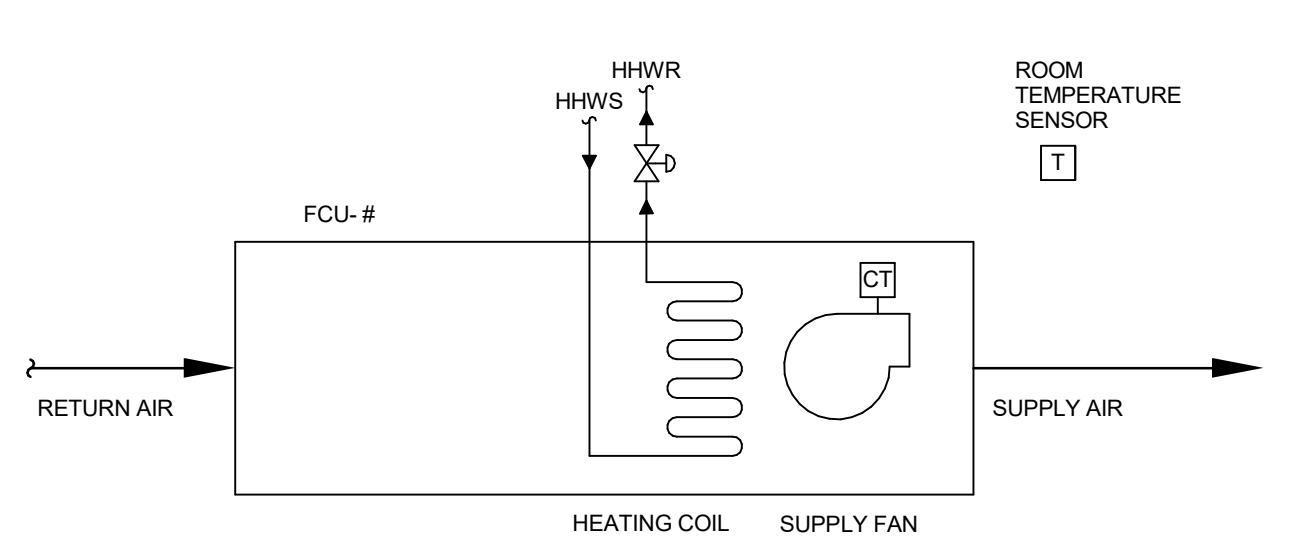
FROST PROTECTION SHALL BE ENABLED WHEN FROST IS DETECTED ON THE WHEEL, BASED ON THE OUTSIDE AIR TEMPERATURE AND DIFFERENTIAL PRESSURE ACROSS THE WHEEL. IF THE OUTDOOR AIR IS BELOW 5°F (ADJ.) AND THE DIFFERENTIAL PRESSURE ACROSS THE WHEEL IS 1.5 INCH W.C. (ADJ.), FROST PROTECTION SHALL BE ENABLED. WHEN FROST PROTECTION IS ENABLED, THE VFD ON THE ENERGY WHEEL SHALL MODULATE THE WHEEL TO A SLOW ROTATIONAL SPEED FOR DEFROST. THE WHEEL SHALL REMAIN IN FROST PROTECTION MODE UNTIL EITHER THE DIFFERENTIAL PRESSURE DECREASE BELOW THE SETPOINT, OR THE OUTDOOR AIR TEMPERATURE INCREASES ABOVE THE SETPOINT.

DEDICATED OUTDOOR AIR SYSTEM BMS POINTS (TYPICAL)

POINT(S)	DISCRETE INPUT	DISCRETE OUTPUT	ANALOG INPUT	ANALOG OUTPUT	ALARM	REMARKS
OA INTAKE RH & TEMPERATURE	--	--	X	--	--	
OA FAN	X	X	--	--	X	
OA DAMPER O/C, & END SWITCH	OP/CL	X	--	--	X	
OA DISCH. RH & TEMPERATURE	--	--	X	--	X	
OA DIFF. HIGH PRESS.	--	--	X	--	X	
EXH. DIFF. HIGH PRESS.	--	--	X	--	X	
EXH. TEMP. (INTAKE)	--	--	X	--	--	
EXH. TEMP. (DISCHARGE)	--	--	X	--	X	
EXH. RH (INTAKE)	--	--	X	--	--	
EXH. FAN	X	X	--	X	X	1.3
EXH. DAMPER O/C, & END SWITCH	OP/CL	X	--	--	X	
SPACE DIFFERENTIAL PRESSURE	--	--	X	--	--	2
DUCT STATIC PRESSURE	--	--	X	--	--	
RAIN/SNOW SENSOR CONTROLLER	--	--	X	--	--	
REMARKS:						
1. PROVIDE START, STATUS, AND SPEED IF USING A VFD.						
2. INSTALL DIFFERENTIAL PRESSURE SENSOR FOR UNIT, INSTALL SENSOR IN COMMONS 157.						
3. INCLUDE VFD MALFUNCTION ALARM.						

1 DEDICATED OUTDOOR AIR SYSTEM BMS POINTS (TYPICAL)

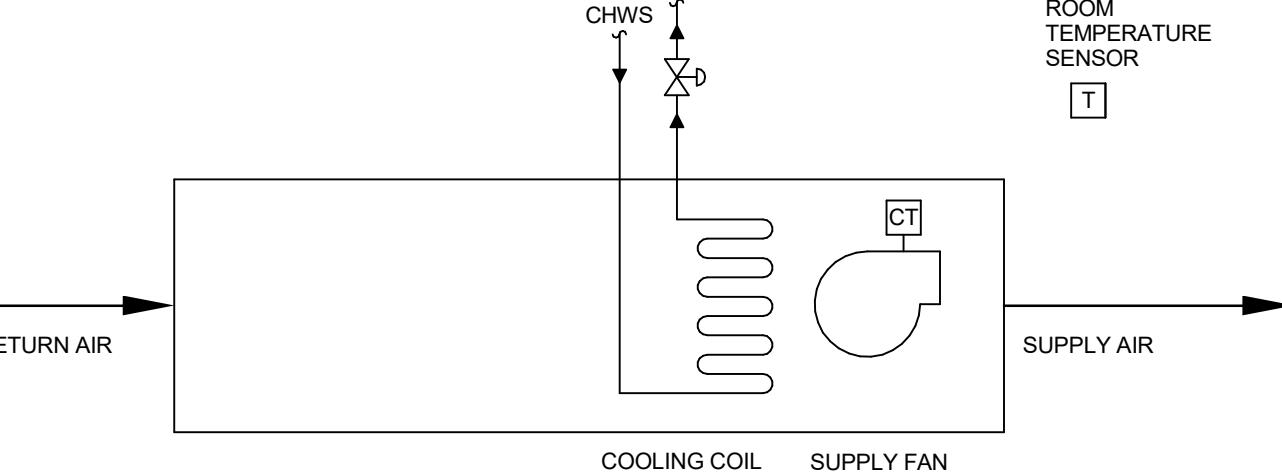
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HEATING-ONLY FAN COIL UNIT P&ID

FAN COIL(S) PROVIDE HEATING TO MAINTAIN TEMPERATURE IN STAIRWELLS OR NEAR EXTERIOR DOORS. UNITS WILL OPERATE IN OCCUPIED MODE 24/7.
A SENSOR MOUNTED ON THE WALL WILL READ TEMPERATURE WITH DISPLAY AND +/- 2°F ADJUSTMENT CONTROL.
HEATING MODE:
UPON A CALL FOR HEATING, ENERGIZE THE FAN AND MODULATE THE HEATING COIL CONTROL VALVE TO MAINTAIN ROOM TEMPERATURE TO SETPOINT.
FAN OPERATION:
FAN HAS 0-10V SPEED CONTROL INPUT, COORDINATE SIGNAL REQUIRED WITH TEST AND BALANCE CONTRACTOR. SPEED RANGE IS 2-10V; FAN TURNS OFF AT <2 V.
ROOM AIR TEMPERATURE SETPOINT: 70°F

ROOM AIR TEMPERATURE SETPOINT: 75°F



COOLING-ONLY FAN COIL UNIT P&ID

FAN COIL(S) PROVIDE COOLING TO MAINTAIN TEMPERATURE IN ELECTRICAL EQUIPMENT ROOMS AND STAIRWELLS. UNITS WILL OPERATE IN OCCUPIED MODE 24/7.
A SENSOR MOUNTED ON THE WALL WILL READ TEMPERATURE WITH DISPLAY AND +/- 2°F ADJUSTMENT CONTROL.
COOLING MODE:
UPON A CALL FOR COOLING, ENERGIZE THE FAN AND MODULATE THE COOLING COIL CONTROL VALVE TO MAINTAIN ROOM TEMPERATURE TO SETPOINT.
FAN OPERATION:
FAN HAS 0-10V SPEED CONTROL INPUT, COORDINATE SIGNAL REQUIRED WITH TEST AND BALANCE CONTRACTOR. SPEED RANGE IS 2-10V; FAN TURNS OFF AT <2 V.
ROOM AIR TEMPERATURE SETPOINT: 75°F

ROOM AIR TEMPERATURE SETPOINT: 78°F

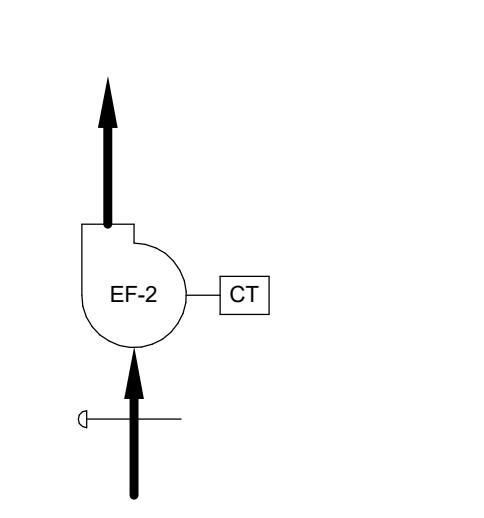
POINT(S)	DISCRETE INPUT	DISCRETE OUTPUT	ANALOG INPUT	ANALOG OUTPUT	ALARM	REMARKS
ROOM TEMPERATURE SENSOR (4 TOTAL)	--	--	X	--	X	1
FAN START/STOP, STATUS, SPEED, & ALARM (4 TOTAL)	X	X	--	--	X	2
FCU COOLING COIL MODULATING CONTROL VALVE (4 TOTAL)	--	--	--	X	--	

REMARKS:
1. ALARM FOR OPERATING OUTSIDE NORMAL LIMITS WHEN SYSTEM IS OPERATING.
2. CONTROLLER WITH 3 SPEED FAN CONTROL.

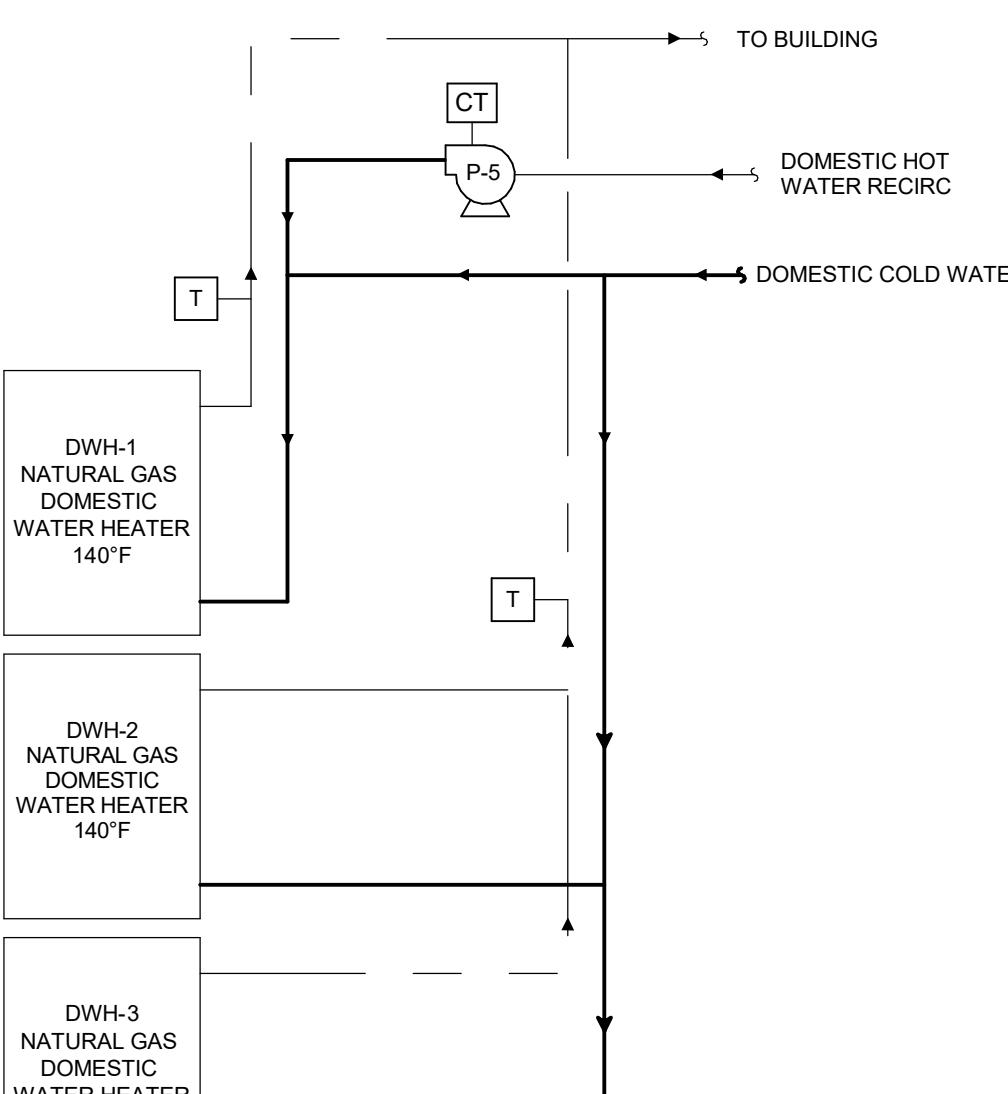
4 COOLING-ONLY FAN COIL UNIT (FCU-X) P&ID

NOT TO SCALE

4



KITCHEN EXHAUST FAN 2 (EF-2)
SEQUENCE OF OPERATIONS
FROM THE BUILDING MANAGEMENT SYSTEM OPERATOR INTERFACE, THE KITCHEN VENTILATION CAN BE ENABLED FROM A BUTTON ON SCREEN. WHEN ENABLED, OPEN THE EXHAUST, THEN START EXHAUST FAN EF-2. PROVIDE AN ADJUSTABLE TIME-OUT TO AUTOMATICALLY DISABLE THE SYSTEM.



DOMESTIC HOT WATER
THE BUILDING MANAGEMENT SYSTEM SHALL MONITOR THE SUPPLY WATER TEMPERATURE OF THE 110-DEGREE DOMESTIC HOT WATER HEATER AND THE 140-DEGREE KITCHEN HOT WATER HEATER. ALARM WHEN WATER TEMPERATURE EXCEED ALARM THRESHOLDS. BUILDING MANAGEMENT SYSTEM SHALL ALSO CONTROL BOTH THE 110-DEGREE AND 140-DEGREE EXISTING DOMESTIC WATER RECIRCULATION PUMPS.

POINT(S)	DISCRETE INPUT	DISCRETE OUTPUT	ANALOG INPUT	ANALOG OUTPUT	ALARM
RECIRC PUMP P-3 START AND STATUS	X	X	--	-	X
RECIRC PUMP P-4 START AND STATUS	X	X	--	-	X
110-DEG DOMESTIC WATER TEMPERATURE	--	--	X	--	X
140-DEG DOMESTIC WATER TEMPERATURE	--	--	X	--	X

SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14

MECHANICAL P&ID's

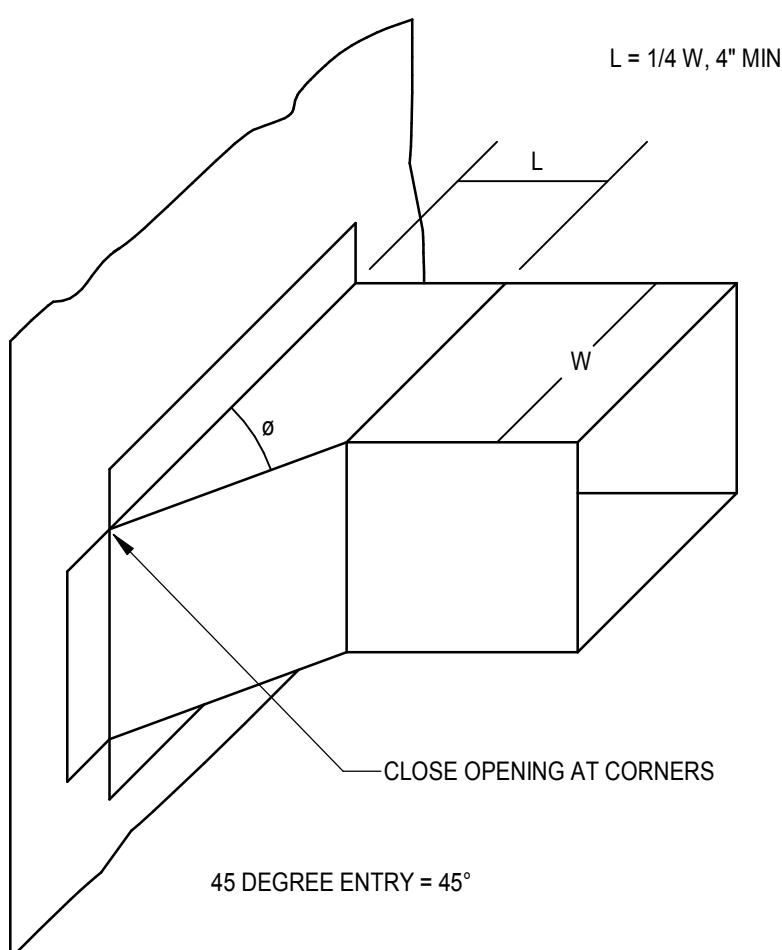
5 EXHAUST FAN BMS POINTS

NOT TO SCALE

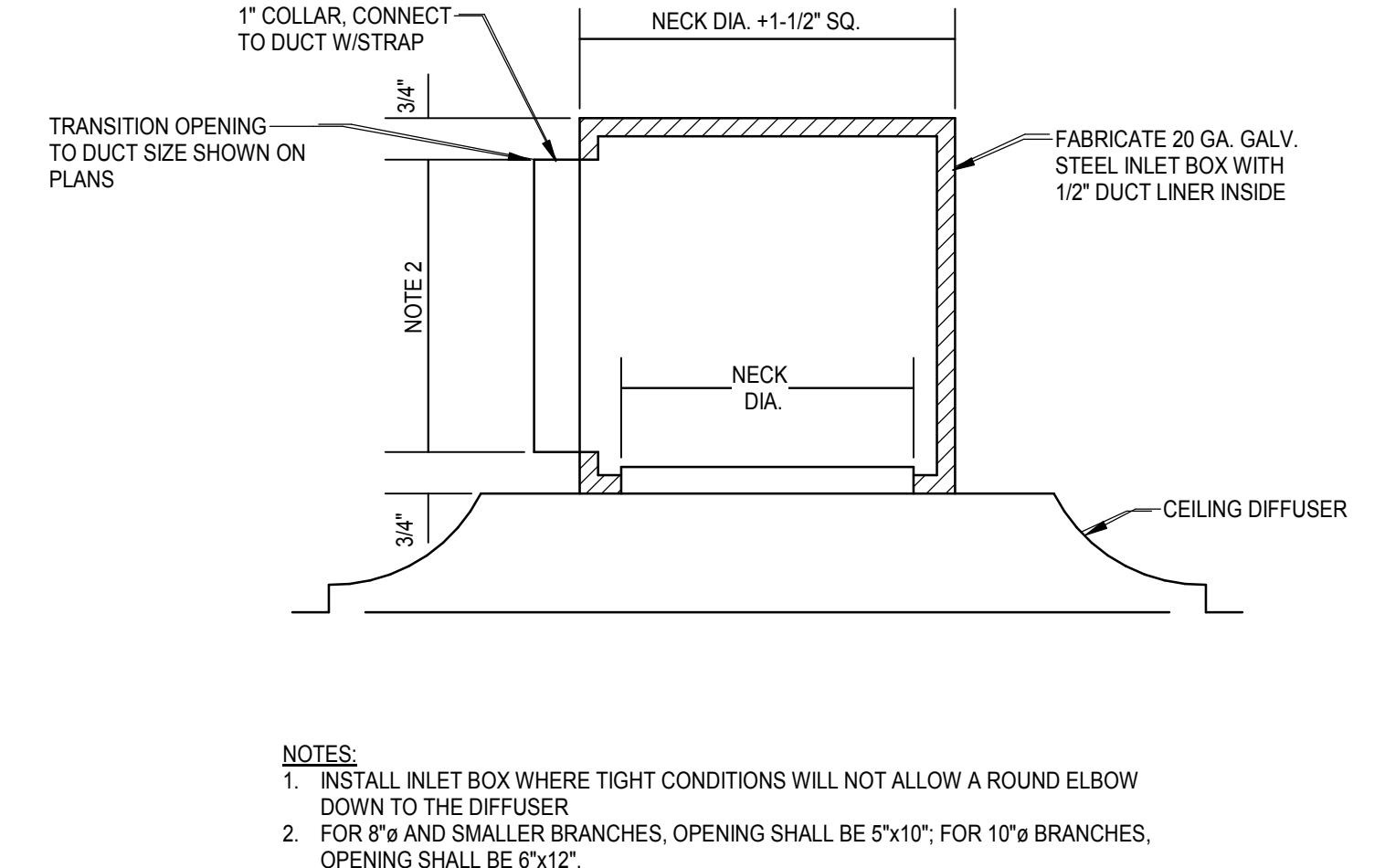
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6 DOMESTIC HOT WATER SYSTEM BMS POINTS

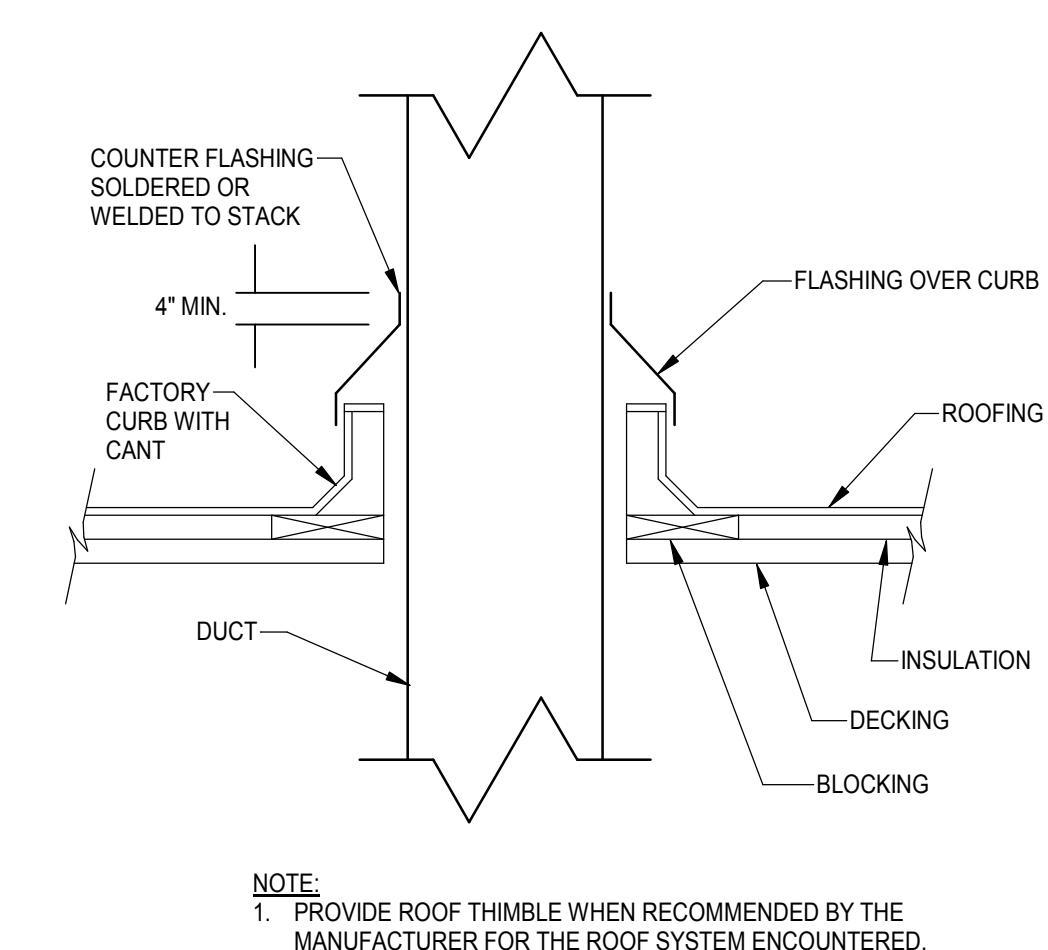
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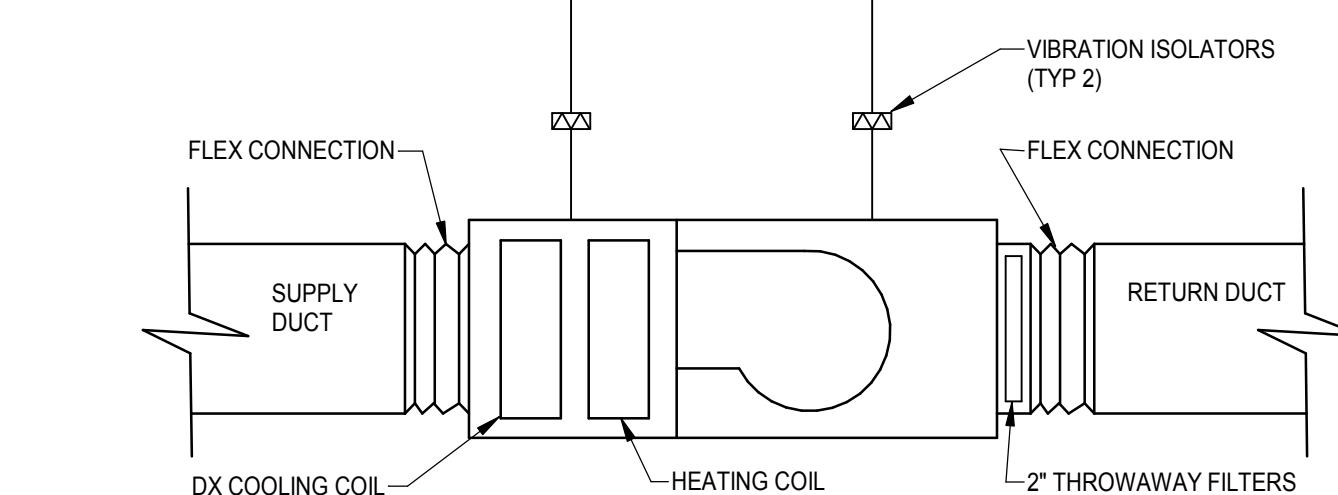
1 45° TAKE-OFF FITTING DETAIL



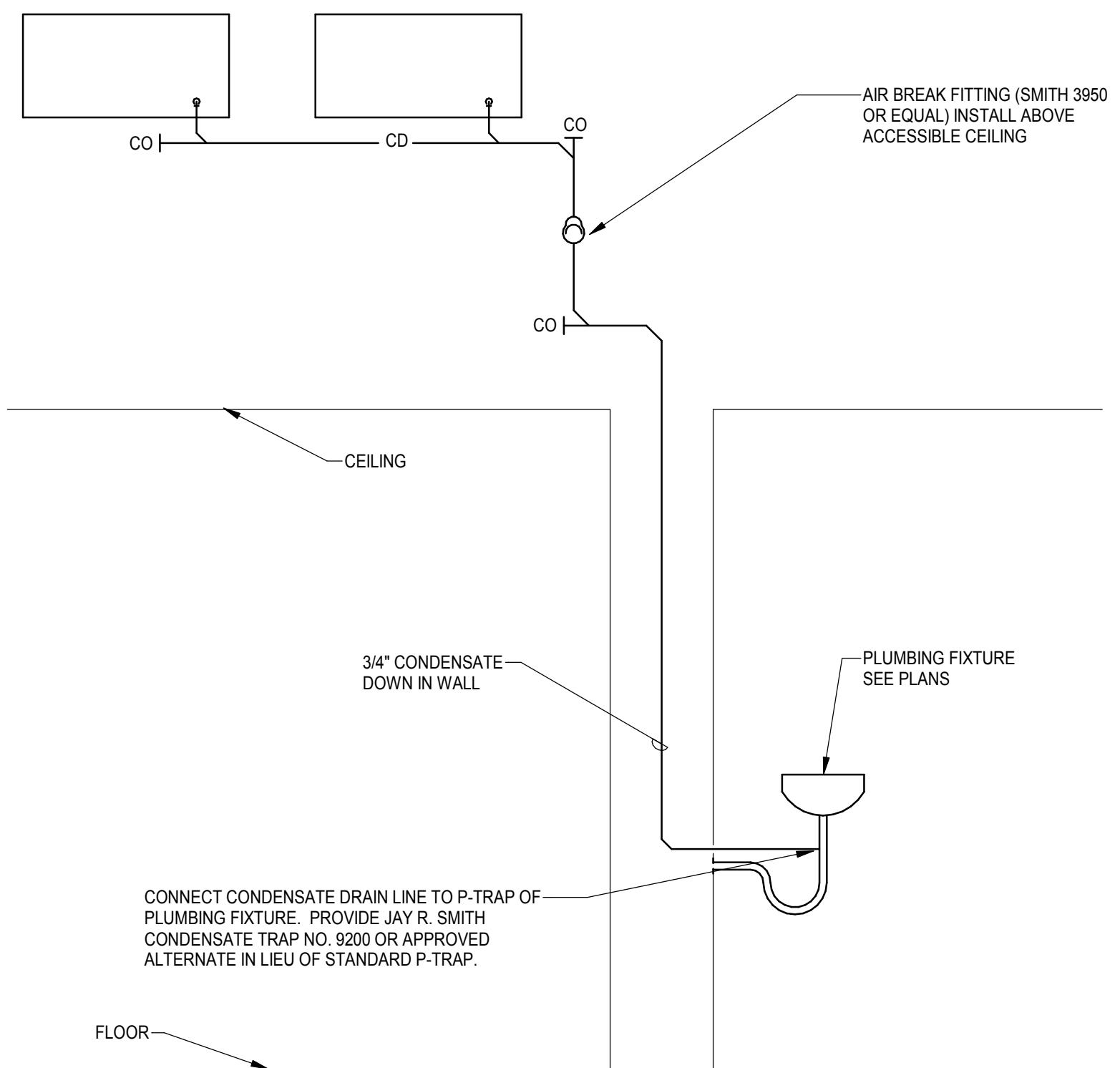
2 CEILING DIFFUSER INLET BOX DETAIL



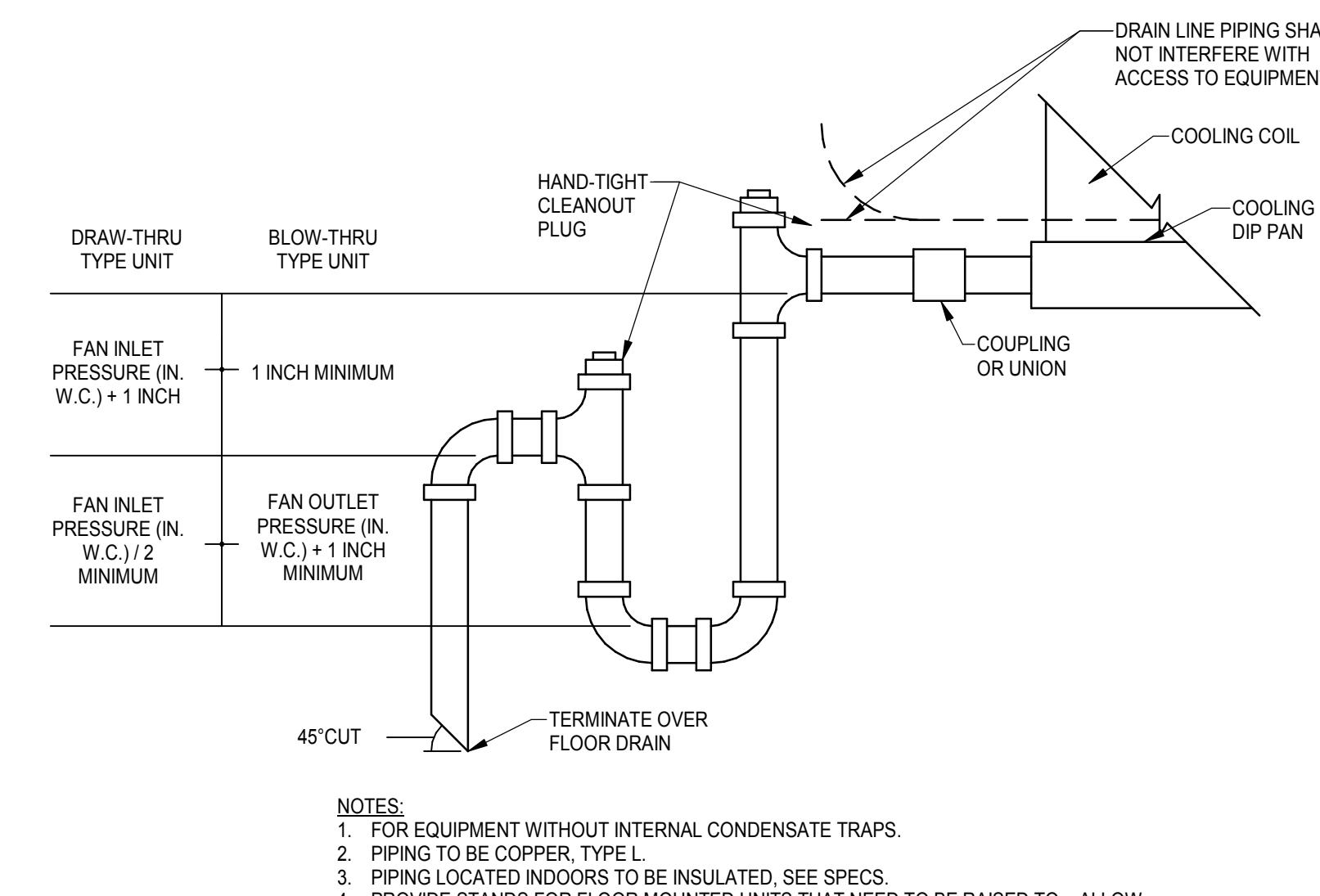
3 DUCT THROUGH ROOF DETAIL



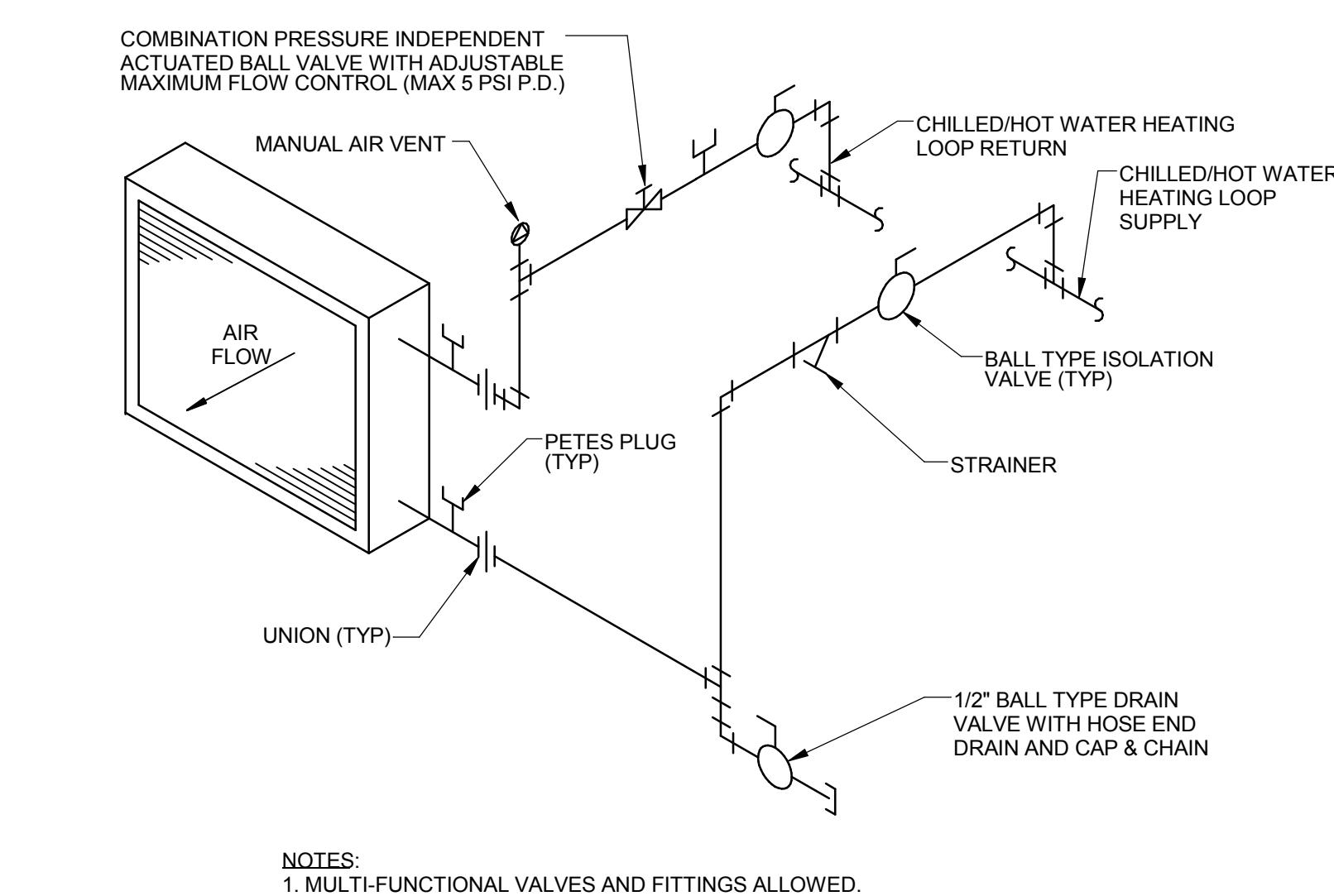
4 FAN COIL UNIT



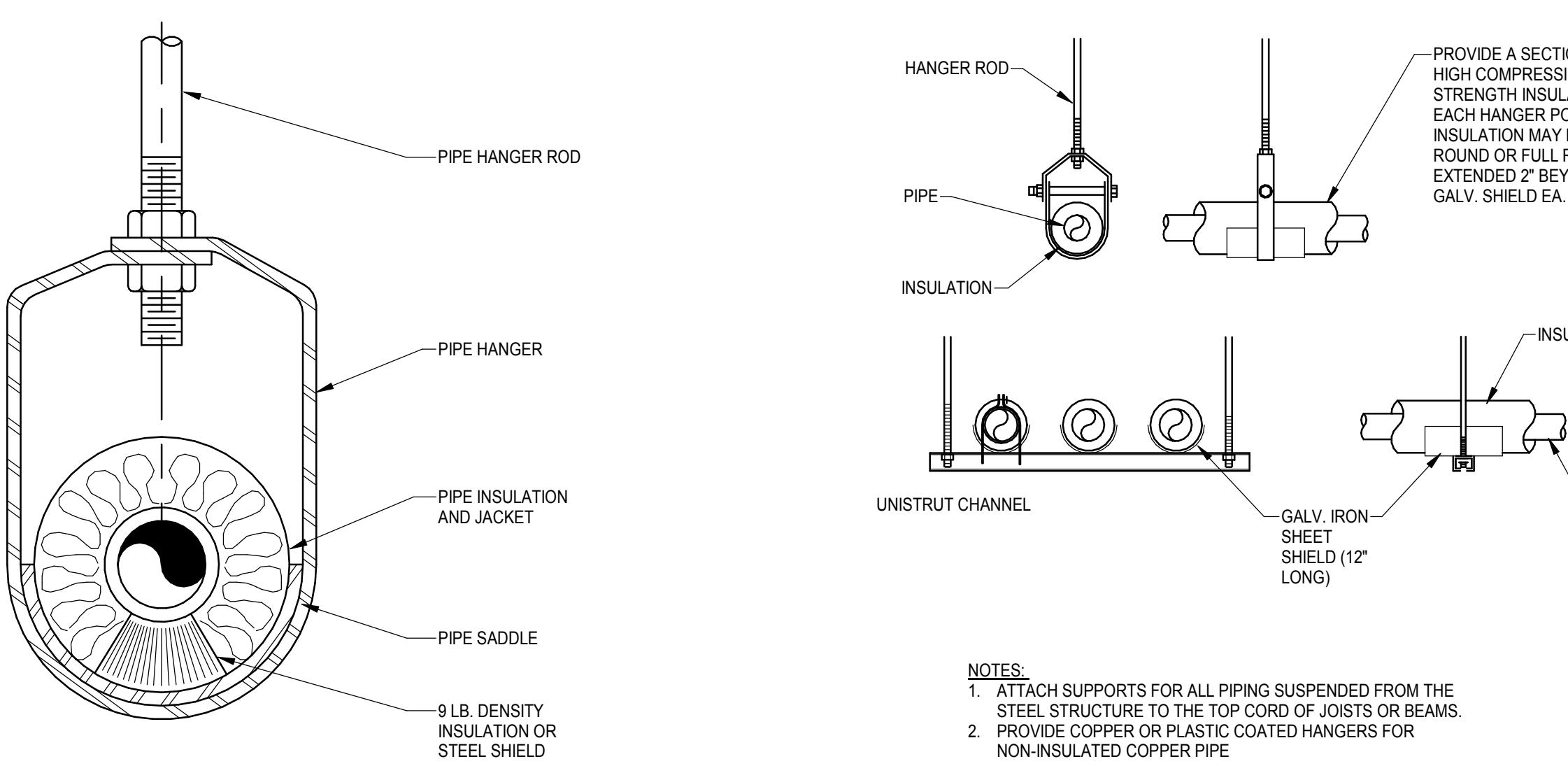
5 CONDENSATE DRAIN TO SINK DETAIL



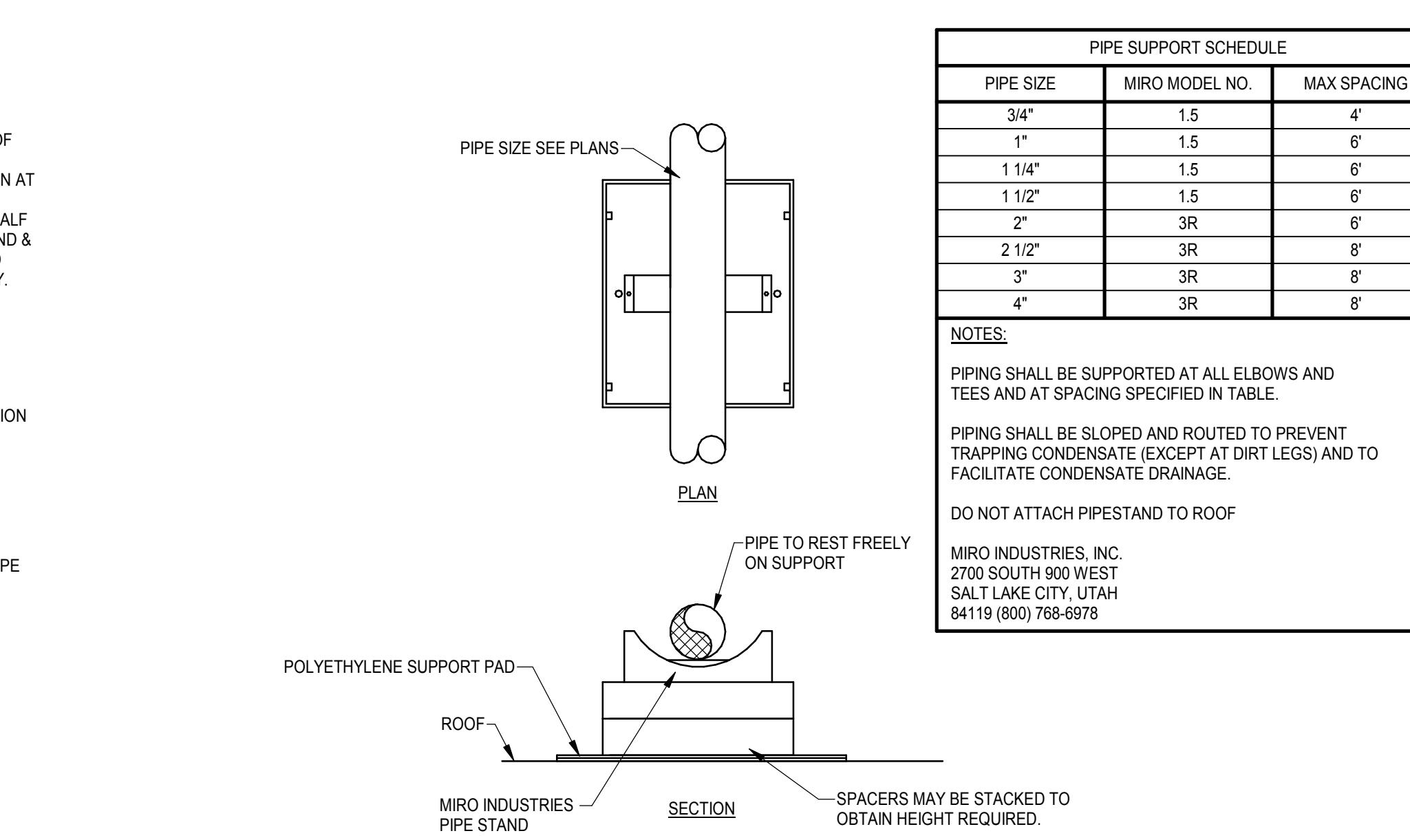
6 CONDENSATE TRAP DETAIL



7 FAN COIL PIPING DETAIL

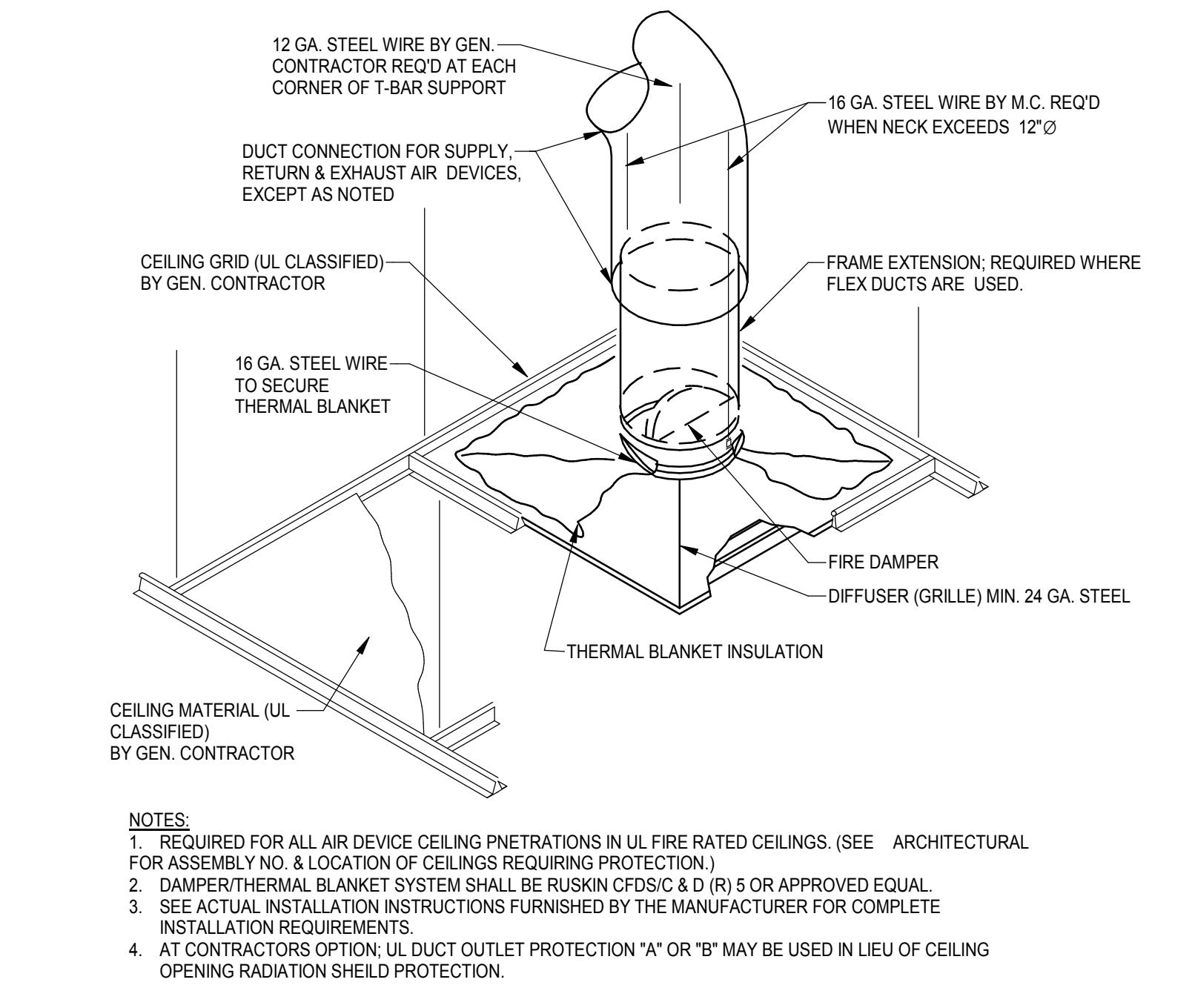


8 PIPE HANGER SUPPORT



9 PIPE INSULATION DETAIL

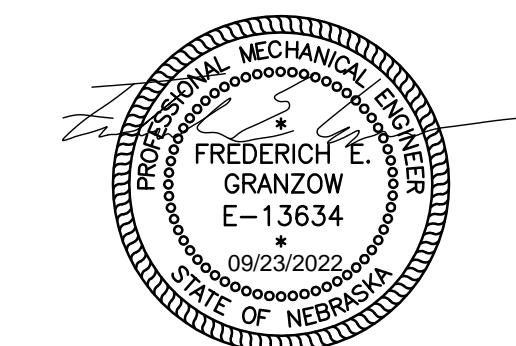
10 ROOF PIPE SUPPORT



11 U.L. RADIATION PROTECTION

SCC RESIDENCE HALL

PROJECT: 21045 DATE: 2022.10.14



MECHANICAL DETAILS

AIR DISTRIBUTION DEVICES

MARK	SERIES	COLOR	DAMPER	PATTERN	MAX NC	MAX PD (IN WC)	MANUFACTURER	MODEL	REMARKS
CD-1	SUPPLY	WHITE	-	360°	25	0.1	TITUS	OMNI (24x24 FACE)	12.4,10
RA-1	RETURN	WHITE	-	PERFORATED	25	0.1	TITUS	PAR (12x24 OR 24x24 FACE)	12.4,8.9,10
RA-2	EXHAUST	WHITE	-	PERFORATED	25	0.1	TITUS	PAR-AA (12x24 OR 24x24 FACE)	12.5,8.9,10
UD-1	SUPPLY	WHITE	-	360°	25	0.1	TITUS	TITUS	12.4,8.10,11
R-1	SUPPLY	WHITE	OBD	DOUBLE DEF.	25	0.1	TITUS	300 RS	12.4,8.10,11
R-2	SUPPLY	WHITE	OBD	DOUBLE DEF.	25	0.1	TITUS	300 FS	12.5,6.10,11
R-3	SUPPLY	WHITE	OBD	DOUBLE DEF.	25	0.1	TITUS	300 RS	12.4,6.10
G-1	RETURN	WHITE	-	35° FIXED DEF.	25	0.1	TITUS	350 RL	12.4,7.10,11
X-1	EXHAUST	WHITE	OBD	35° FIXED DEF.	25	0.1	TITUS	350 FL	12.5,7.10,11
X-2	EXHAUST	WHITE	OBD	35° FIXED DEF.	25	0.1	TITUS	350 FL	12.5,7.10

REMARKS:
 1. VERIFY BORDER TYPE REQUIRED
 2. PROVIDE DRAFTING ON PLANS
 3. FACE SIZE INDICATED ON PLANS
 4. STEEL CONSTRUCTION
 5. ALUMINUM CONSTRUCTION
 6. DUCTWORK DIMENSIONS WITH SHORT DIMENSION
 7. FRONT BLADES PARALLEL WITH LONG DIMENSION
 8. PERFORATED FACE TO BE FLUSH WITH CEILING
 9. FLAT BLACK PAINT SHALL BE PROVIDED TO DEVICES THAT SHOW DUCTWORK.
 10. COORDINATE COLOR WITH ARCHITECT
 11. PROVIDE WITH FACE DAMPER AND RUSKIN CFDTT-RS-DB RADIATION DAMPER.

FAN COIL UNITS

MARK	CFM	CABINET TYPE	ESP	HP	VOLTS	HEATING COIL CAPACITY				COOLING COIL CAPACITY				MANUFACTURER	MODEL	REMARKS		
						EWT	LWT	MWH	GRM	WPD	EWT	LWT	MWH	GRM				
FCL-U05101	236	HIDEAWAY	0.2	1/4	120	130	112.6	5.8	0.7	2.42	44	53	6.5	1.5	1.79	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05102	236	HIDEAWAY	0.2	1/4	120	130	112.6	5.8	0.7	2.42	44	53	6.5	1.5	1.79	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05103	176	HIDEAWAY	0.2	1/4	120	130	115.2	2.8	0.4	0.48	44	53.2	4.4	1.0	0.88	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05104	368	HIDEAWAY	0.2	1/4	120	130	116.0	14.7	2.2	8.28	44	55.4	8.2	1.5	1.87	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05105	364	HIDEAWAY	0.2	1/4	120	130	110.0	5.2	1.0	3.32	44	53.5	13.2	2.9	5.66	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05106	715	HIDEAWAY	0.2	1/4	120	130	110.0	9.2	1.0	3.32	44	53.5	13.2	2.9	5.66	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05107	715	HIDEAWAY	0.2	1/4	120	130	110.0	9.2	1.0	3.32	44	53.5	13.2	2.9	5.66	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05108	328	HIDEAWAY	0.2	1/4	120	130	109.8	8.1	0.8	2.79	44	53.6	8.3	1.8	2.4	DAIKIN	FCHH204	12.3,4,5,6,7
FCL-U05109	328	HIDEAWAY	0.2	1/4	120	130	109.8	8.1	0.8	2.79	44	53.6	8.3	1.8	2.4	DAIKIN	FCHH204	12.3,4,5,6,7
FCL-U05109	236	HIDEAWAY	0.2	1/4	120	130	112.6	5.8	0.7	2.42	44	53.0	6.5	1.5	1.79	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05110	236	HIDEAWAY	0.2	1/4	120	130	110.0	14.8	1.6	14.03	44	52.8	16.9	4.0	3.08	DAIKIN	FCHH210	12.3,4,5,6,7
FCL-U05112	822	HIDEAWAY	0.2	(2)1/4	120	130	110.0	14.8	1.6	14.03	44	52.8	16.9	4.0	3.08	DAIKIN	FCHH210	12.3,4,5,6,7
FCL-U05113	664	HIDEAWAY	0.2	1/4	120	130	110.0	10.3	1.1	4.49	44	52.9	14.1	3.3	7.94	DAIKIN	FCHH208	12.3,4,5,6,7
FCL-U05114	328	HIDEAWAY	0.2	1/4	120	130	109.8	8.1	0.8	2.79	44	53.6	8.3	1.8	2.4	DAIKIN	FCHH204	12.3,4,5,6,7
FCL-U05115	328	HIDEAWAY	0.2	1/4	120	130	109.8	8.1	0.8	2.79	44	53.6	8.3	1.8	2.4	DAIKIN	FCHH204	12.3,4,5,6,7
FCL-U05116	328	HIDEAWAY	0.2	1/4	120	130	109.8	8.1	0.8	2.79	44	53.6	8.3	1.8	2.4	DAIKIN	FCHH204	12.3,4,5,6,7
FCL-U05117	822	HIDEAWAY	0.2	(2)1/4	120	130	110.0	9.2	1.0	3.32	44	53.5	13.2	2.9	5.66	DAIKIN	FCHH206	12.3,4,5,6,7
FCL-U05118	715	HIDEAWAY	0.2	1/4	120	130	110.0	9.2	1.0	3.32	44	53.5	13.2	2.9	5.66	DAIKIN	FCHH206	12.3,4,5,6,7
FCL-U05119	715	HIDEAWAY	0.2	1/4	120	130	110.0	9.2	1.0	3.32	44	53.5	13.2	2.9	5.66	DAIKIN	FCHH206	12.3,4,5,6,7
FCL-U05120	715	HIDEAWAY	0.2	1/4	120	130	110.0	9.2	1.0	3.32	44	53.5	13.2	2.9	5.66	DAIKIN	FCHH206	12.3,4,5,6,7
FCL-U05121	715	HIDEAWAY	0.2	1/4	120	130	110.0	9.2	1.0	3.32	44	53.5	13.2	2.9	5.66	DAIKIN	FCHH206	12.3,4,5,6,7
FCL-U05122	1024	CABINET	0.2	(2)1/4	120	130	109.2	15.8	1.6	10.9	44	52.9	8.5	2.0	2.72	DAIKIN	FCHH210	12.3,4,5,6,7
FCL-U05124	246	HIDEAWAY	0.2	1/4	120	130	110.0	3.5	0.5	0.72	44	54.3	5.5	1.2	0.96	DAIKIN	FCHH202	12.3,4,5,6,7
FCL-U05125	664	HIDEAWAY	0.2	1/4	120	130	110.0	10.3	1.1	4.49	44	52.9	14.1	3.3	7.94	DAIKIN	FCHH208	12.3,4,5,6,7
FCL-U05126	328	HIDEAWAY	0.2	1/4	120	130	109.8	8.1	0.8	2.79	44	53.6	8.3	1.8	2.4	DAIKIN	FCHH204	12.3,4,5,6,7
FCL-U05127	328	HIDEAWAY	0.2	1/4	120	130	109.8	8.1	0.8	2.79	44	53.6	8.3	1.8	2.4	DAIKIN	FCHH204	12.3,4,5,6,7
FCL-U05128	328	HIDEAWAY	0.2	1/4	120	130	109.8	8.1	0.8	2.79	44	53.6	8.3	1.8	2.4	DAIKIN	FCHH204	12.3,4,5,6,7
FCL-U05129	822	HIDEAWAY	0.2	(2)1/4	120	130	110.0	14.8	1.6	14.03	44	52.8	16.9	4.0	3.08	DAIKIN	FCHH210	12.3,4,5,6,7
FCL-U05130	664	HIDEAW																