

orientation

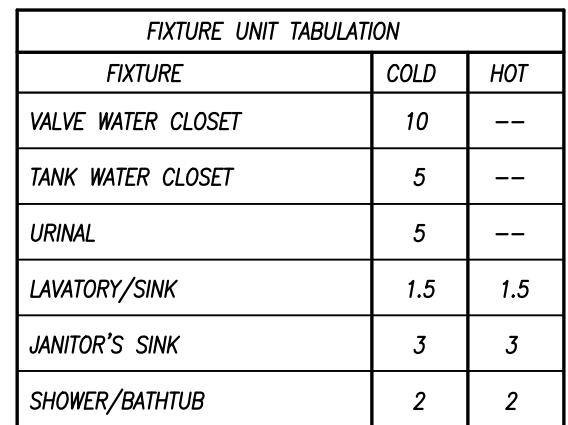
scale As Noted

sheet title Plumbing Plan

MT02

REMARKS:

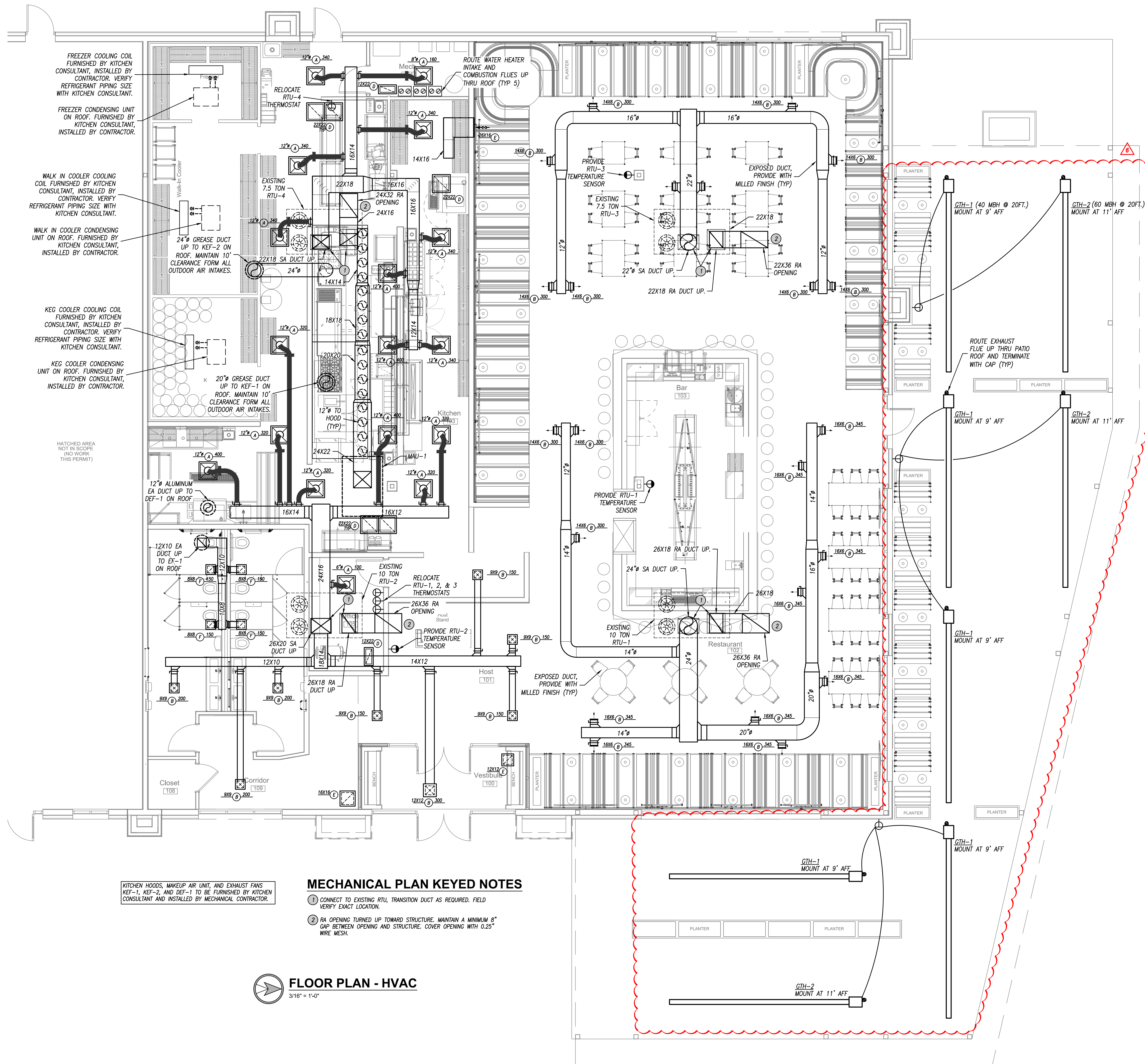
1. EQUIPMENT ON SCHEDULE FURNISHED BY OTHERS.
2. EQUIPMENT SUBJECT TO CHANGE, FIELD VERIFY EQUIPMENT W/ OWNER AND ARCHITECT.
3. FIELD VERIFY PLUMBING REQUIREMENTS FOR ALL EQUIPMENT.
4. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
5. COORDINATE EXACT LOCATION OF EQUIPMENT WITH OWNER.



WATER HAMMER ARRESTERS



orientation	
project number	232882
scale	As Noted
date	8/30/2024
sheet title	HVAC Plan
sheet number	



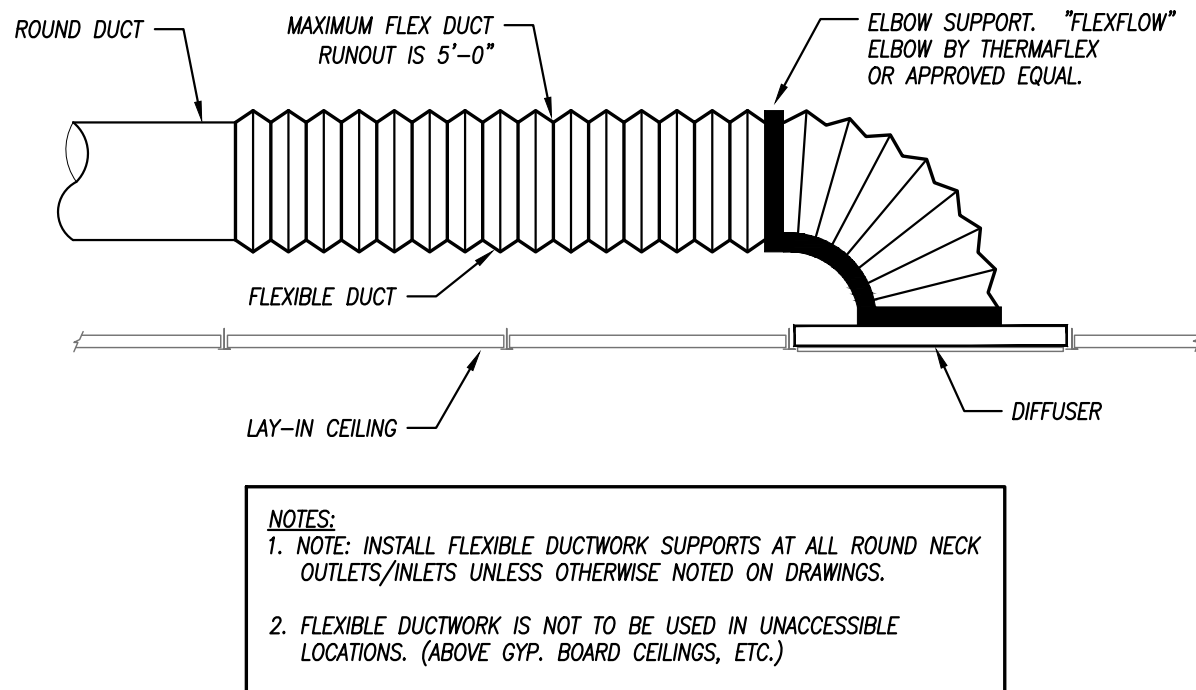
EXHAUST FAN SCHEDULE											
PLAN MARK	MANUFACTURER	MODEL NUMBER	MOUNTING	SERVICE	CFM	STATIC PRESSURE	ELECTRICAL	DRIVE	DISCONNECT	DAMPER	NOTES
EF-1	GREENHECK	GB-100	ROOF	EXHAUST	600	3/4"	1/4 HP, 120V, 1 PH.	BELT	YES	MOTORIZED	1,2

GRILLE, REGISTER & DIFFUSER SCHEDULE								
PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	MOUNT TYPE	VOLUME DAMPER	MATERIAL	MATERIAL COLOR	NOTES
A	PRICE	FPD	SUPPLY	GRID	NO	STEEL	WHITE	2
B	PRICE	SMD-1	SUPPLY	FLANGE	YES	STEEL	WHITE	1
C	PRICE	SDGE	SUPPLY	ROUND DUCT	YES	STEEL	GALVANIZED	
D	PRICE	PDR	RETURN	GRID	NO	STEEL	WHITE	
E	PRICE	S3S	RETURN	FLANGE	NO	STEEL	WHITE	
F	PRICE	S3S	EXHAUST	FLANGE	YES	STEEL	WHITE	

GAS UNIT HEATER SCHEDULE					
PLAN MARK	MANUFACTURER	MODEL NUMBER	CAPACITY (BTUH)	ELECTRICAL	NOTES
GTH-1	REZNOR	VZH-40-20"	40,000	120 V., 1 PH, 1 AMP	1,2
GTH-2	REZNOR	VZH-60-20"	60,000	120 V., 1 PH, 1 AMP	1,2

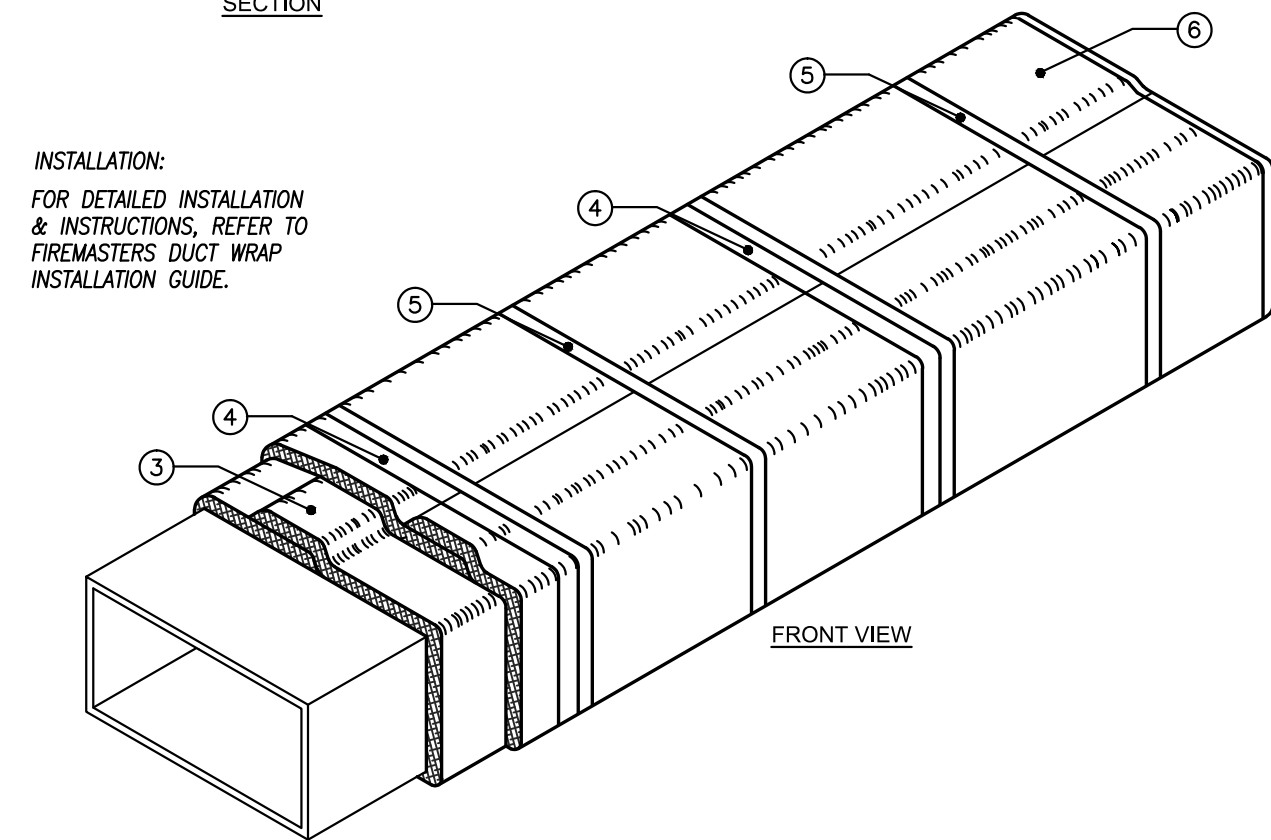
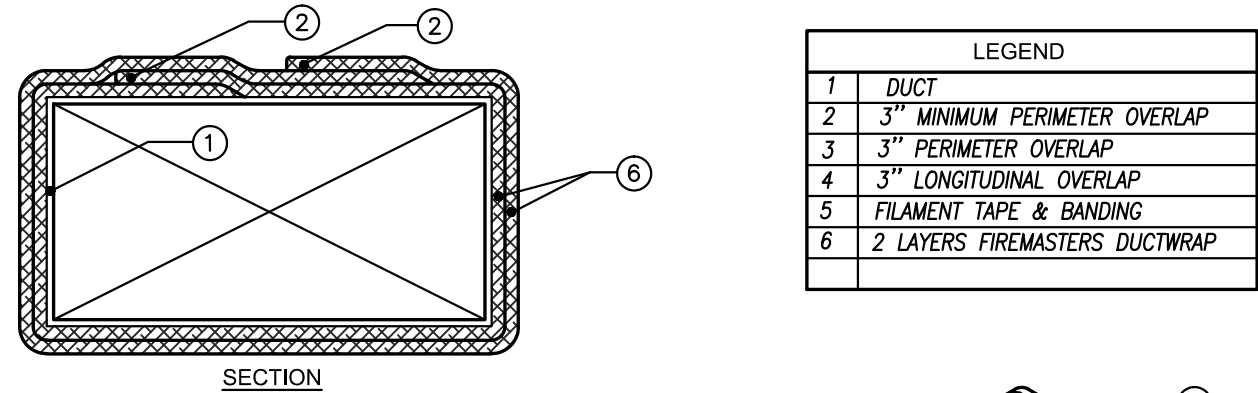
NOTES LEGEND

1. PROVIDE ADJUSTABLE THERMOSTAT WITH SUMMER/WINTER SWITCH. 2 TO 3 HEATERS PER THERMOSTAT. REFER TO SPECIFICATIONS FOR THERMOSTAT.
2. PROVIDE WITH DISCONNECT SWITCH



NOTES:

1. BANDING MATERIAL, 3/4" WIDE, MINIMUM 0.015" THICK, CARBON STEEL FOR CONSTRUCTION REQUIREMENTS OF ZERO CLEARANCE TO COMBUSTIBLES OR 1 HR. RATINGS. STAINLESS STEEL BANDING IS USED FOR 2 HR. REQUIREMENTS.
2. 3M FIREMASTER DUCT WRAP, 1-1/2" THICK, 24" OR 48" WIDE, 300' STANDARD LENGTH (2 LAYERS) 8 LBS PER CUBIC FT. TO BE UTILIZED.
3. HOLD INTERIOR WOOD INSULATION USING 11" WIDE FILAMENT TAPE (NO. 898) MANUFACTURED BY 3M COMPANY.
4. SEAL CUTE EDGES OF BLANKET WITH ALUMINUM FOIL TAPE.



EXHAUST FAN
 FLEXIBLE CONDUIT, PROVIDE SUFFICIENT SLACK TO ALLOW SERVING OF FAN
 ROOF INSULATION, CANT, FLASHING, AND ROOFING BY GENERAL CONTRACTOR
 ANCHOR WITH CADMIUM SCREWS AT 6" O.C.
 PREFABRICATED ROOF CURB BY MECHANICAL CONTRACTOR
 ROOF DECK STRUCTURE
 FLEXIBLE CONNECTION
 MOTORIZED DAMPER
 ACCESS DOOR
 SEE PLAN FOR DUCT SIZE
 5'-11 1/2"

Bryan Leinwetter - Engineer
MO# PE-2020020297

[illegible]

M202

30hop SOWP
1020 NW Pryor Road,
Lees Summit,MO 64081
30hop
owner

[illegible]

orientation

project number 232882

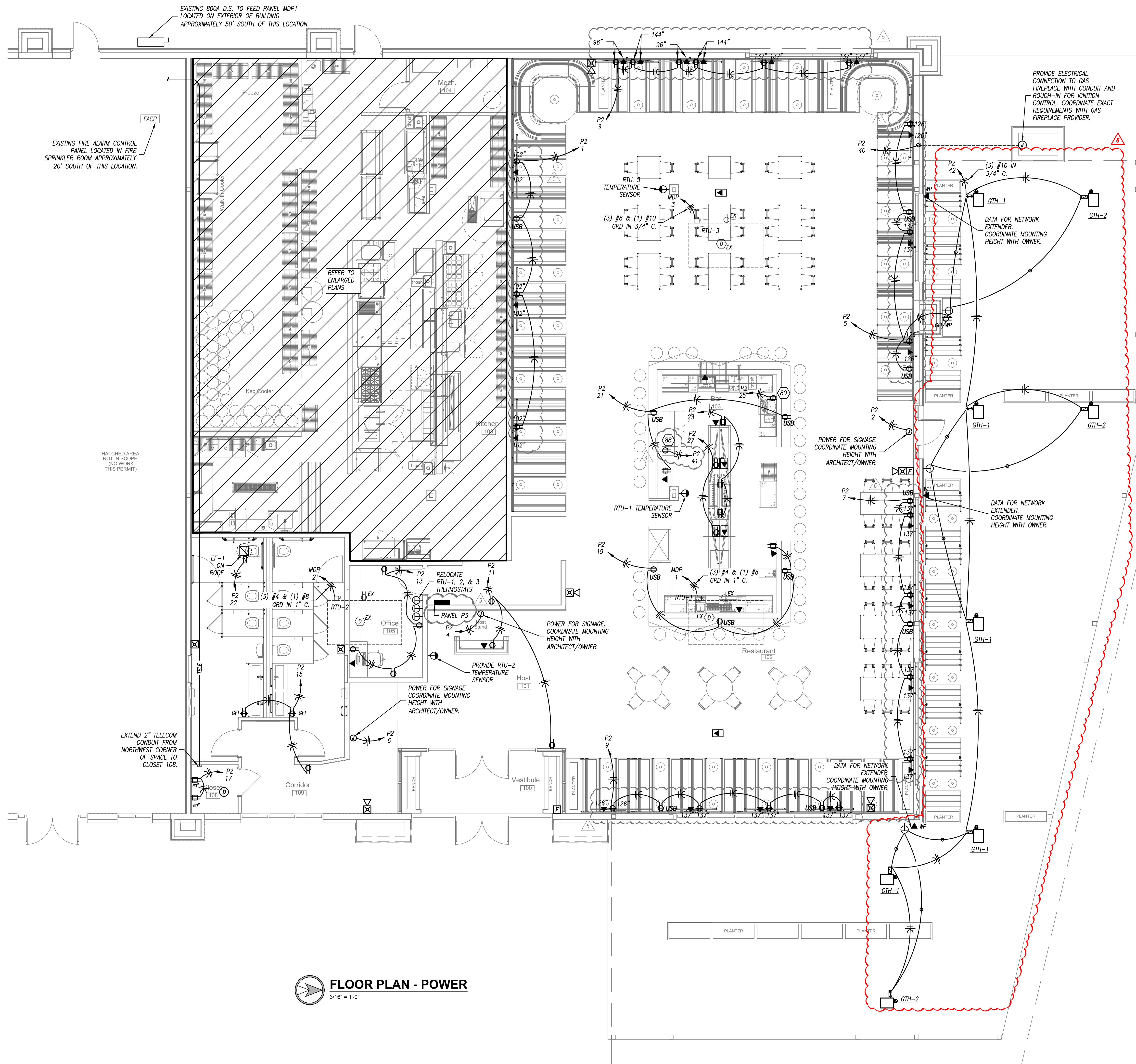
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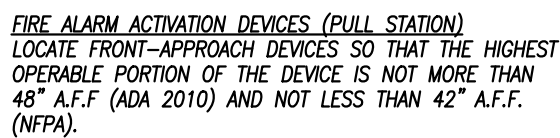
date 8/30/2024

sheet title	Power Plan
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sheet number

E101


FLOOR PLAN - POWER
 3/16" = 1'-0"



NOT TO SCALE



NOTES LEGEND

1. PROVIDE DIMMABLE LED DRIVER UNIVERSAL VOLTAGE.
2. PROVIDE WITH PHILIPS BW, A19 WARM GLOW LED DIMMABLE BULB.
3. PROVIDE WET LOCATION RATED FIXTURE.
4. PROVIDE COLD LOCATION RATED BALLAST.
5. PROVIDE 1 CIRCUIT SURFACE TRACK -- REFER TO PLANS FOR TRACK LENGTH AND CONFIGURATION. PROVIDE ALL NECESSARY POWER FEEDS AND ACCESSORIES FOR COMPLETE INSTALLATION TRACK AND COMPONENT FINISHES TO MATCH FIXTURE. PROVIDE EACH TRACK RUN WITH 3 AMP CURRENT LIMITER.
6. PROVIDE EMERGENCY BATTERY MINIMUM OF 1000 LUMENS FOR 90 MINUTES

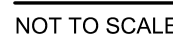


Diagram illustrating the wiring for a Room Controller (Typical) connected to a Junction Box (Not Shown on Plans for Clarity). The diagram shows the following components and connections:

- JUNCTION BOX (NOT SHOWN ON PLANS FOR CLARITY):** The source of power, providing Low Voltage Wiring to the switch(es) and sensor(s). Refer to details for wiring of same.
- ROOM CONTROLLER (TYPICAL):** The central control unit, labeled "RCZ".
- LIGHT FIXTURE(S):** The load being controlled by the room controller.
- SECOND RELAY (IF SHOWN):** An additional relay component.
- Wiring Connections:**
 - The Junction Box provides power to the Room Controller (RCZ) and the Light Fixture(s).
 - The Room Controller (RCZ) is connected to the Light Fixture(s) via a "HOT" conductor.
 - The Room Controller (RCZ) is also connected to the Second Relay (if shown).
 - The Light Fixture(s) are connected to the Second Relay (if shown).
 - The Second Relay (if shown) is connected back to the Junction Box.
- Labels:**
 - LOW VOLTAGE WIRING TO SWITCH(ES) AND SENSOR(S). REFER TO DETAILS FOR WIRING OF SAME.
 - TO OTHER ROOM CONTROLLERS (IF SHOWN ON PLANS)
 - PROVIDE 'HOT' CONDUCTOR WHERE FIXTURE IS SHOWN TO HAVE EM BATTERY/BALLAST (TYPICAL)

3. ALL CIRCUITING SHOWN ON THIS PLAN IS DIAGRAMMATIC.
- 3.1. ALL FIXTURES SHALL BE FED FROM JUNCTION BOXES WITH LIGHT FIXTURE WHIPS (<6'). DAISY-CHAINING OF FIXTURES IS NOT ALLOWED.
- 3.2. SWITCH BOX LOCATIONS SHALL BE WIRED SO THAT A NEUTRAL WIRE IS AVAILABLE AT THE SWITCH BOX LOCATION, EITHER IN THE BOX OR AVAILABLE TO BE ADDED VIA RACEWAY OR AN ACCESSIBLE WALL CAVITY.
- 3.3. WALL SWITCHES FOR SEPARATE LOAD TYPES (EM/NORMAL, 120/277V, ETC.) SHALL NOT BE IN A SINGLE BOX.
- 3.4. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

NOTES LEGEND

- ~~1. PROVIDE HOA SWITCH THROUGH FRONT COVER.~~
- ~~2. CONTRACTOR SHALL BE CONTROLLED VIA SCENE CONTROLLER. OPEN CONTRACTS SHALL TURN ELECTRIC HEAT OFF AND CLOSED CONTACTS SHALL TURN ELECTRIC HEAT ON.~~

NOTES LEGEND

- ~~1. PROVIDE WITH REMOTE CONTROLLER AND SERVICE DISCONNECT. CONTROLLER SHALL CONTROL MULTIPLE HEATERS ON THE SAME ZONE. SEE POWER PLANS AND CONTRACTOR SCHEDULE FOR ZONES. INSTALL PER MANUFACTURER'S INSTRUCTIONS~~
- ~~2. CONNECT EACH HEATER VIA (2) #12 & (1) #12 GRD IN 3/4" C. TROUGH LIGHTING CONTACTOR INDICATED ON PLANS~~

6

7

SINGLE-SECTION PANELBOARD SCHEDULE

PANEL DESIGNATION: P3

MOUNTING: SURFACE

LOCATION: CORRIDOR

CIRCUIT #

POLE

TRIP

A

B

C

MAIN LUG AMPS: 400

MAIN BREAKER: M.L.O.

VOLTAGE: 208/120

PHASE/WIRE: 3Ø, 4W

SCCR RATING (AIC): 22,000

DESCRIPTION	PHASE			C/B		POLE	TRIP	C/B		PHASE		DESCRIPTION	
	A	B	C	TRIP	POLE			POLE	TRIP	A	B		C
ELECTRIC HEATER	1730			20	2	1	2	2	20	1730		ELECTRIC HEATER	
-		1730		-	-	3	4	-	-		1730	-	
ELECTRIC HEATER			1730	20	2	5	6	2	20		1730	ELECTRIC HEATER	
-	1730			-	-	7	8	-	-	1730		-	
ELECTRIC HEATER		1730		20	2	9	10	2	20		1730	ELECTRIC HEATER	
-			1730	-	-	11	12	-	-		1730	-	
ELECTRIC HEATER	1730			20	2	13	14	2	20	1730		ELECTRIC HEATER	
-		1730		-	-	15	16	-	-		1730	-	
ELECTRIC HEATER			1730	20	2	17	18	2	20		1730	ELECTRIC HEATER	
-	1730			-	-	19	20	-	-	1730		-	
ELECTRIC HEATER		1730		20	2	21	22	2	20		1730	ELECTRIC HEATER	
-			1730	-	-	23	24	-	-		1730	-	
ELECTRIC HEATER	1730			20	2	25	26	2	20	1730		ELECTRIC HEATER	
-		1730		-	-	27	28	-	-		1730	-	
ELECTRIC HEATER			1730	20	2	29	30	2	20		1730	ELECTRIC HEATER	
-	1730			-	-	31	32	-	-	1730		-	
ELECTRIC HEATER		1730		20	2	33	34	2	20		1730	ELECTRIC HEATER	
-			1730	-	-	35	36	-	-		1730	-	
ELECTRIC HEATER	1730			20	2	37	38	2	20	1730		ELECTRIC HEATER	
-		1730		-	-	39	40	-	-		1730	-	
ELECTRIC HEATER			1730	20	2	41	42	2	20		1730	ELECTRIC HEATER	
-	1730			-	-	43	44	-	-	1730		-	
ELECTRIC HEATER		1730		20	2	45	46	2	20		1730	ELECTRIC HEATER	
-			1730	-	-	47	48	-	-		1730	-	
ELECTRIC HEATER	1730			20	2	49	50	2	20	1730		ELECTRIC HEATER	
-		1730		-	-	51	52	-	-		1730	-	
ELECTRIC HEATER			1730	20	2	53	54	2	20		1730	ELECTRIC HEATER	
-	1730			-	-	55	56	-	-	1730		-	
SPACE		-	-	-	1	57	58	1	-	-	-	SPACE	
SPACE		-	-	-	1	59	60	1	-	-	-	SPACE	
TOTALS	17300	15570	15570							17300	15570	15570	TOTALS

PANELBOARD SIZING LOAD

LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	0	1.25	0
RECEPTACLES	0	10KVA + 50% REST	0
MOTORS	0	(LARGEST - SUM OF REMAINING)	0
AIR CONDITIONING	0	0.00	0
SPACE HEATING	96,880	1.00	96,880
HEAT PUMP	0	1.00	0
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	0	1.00	0
MISC. LOADS 1	0	1.00	0
SIZING LOAD:			96,880
SIZING LOAD (AMPS):			269

CONNECTED PHASE LOADS

PHASE	VA	AMPS
A	34,600	288.1
B	31,140	259.3
C	31,140	259.3
TOTALS	96,880	268.9

REMARKS:
1. EATON POW-R-LINE 2X OR EQUAL