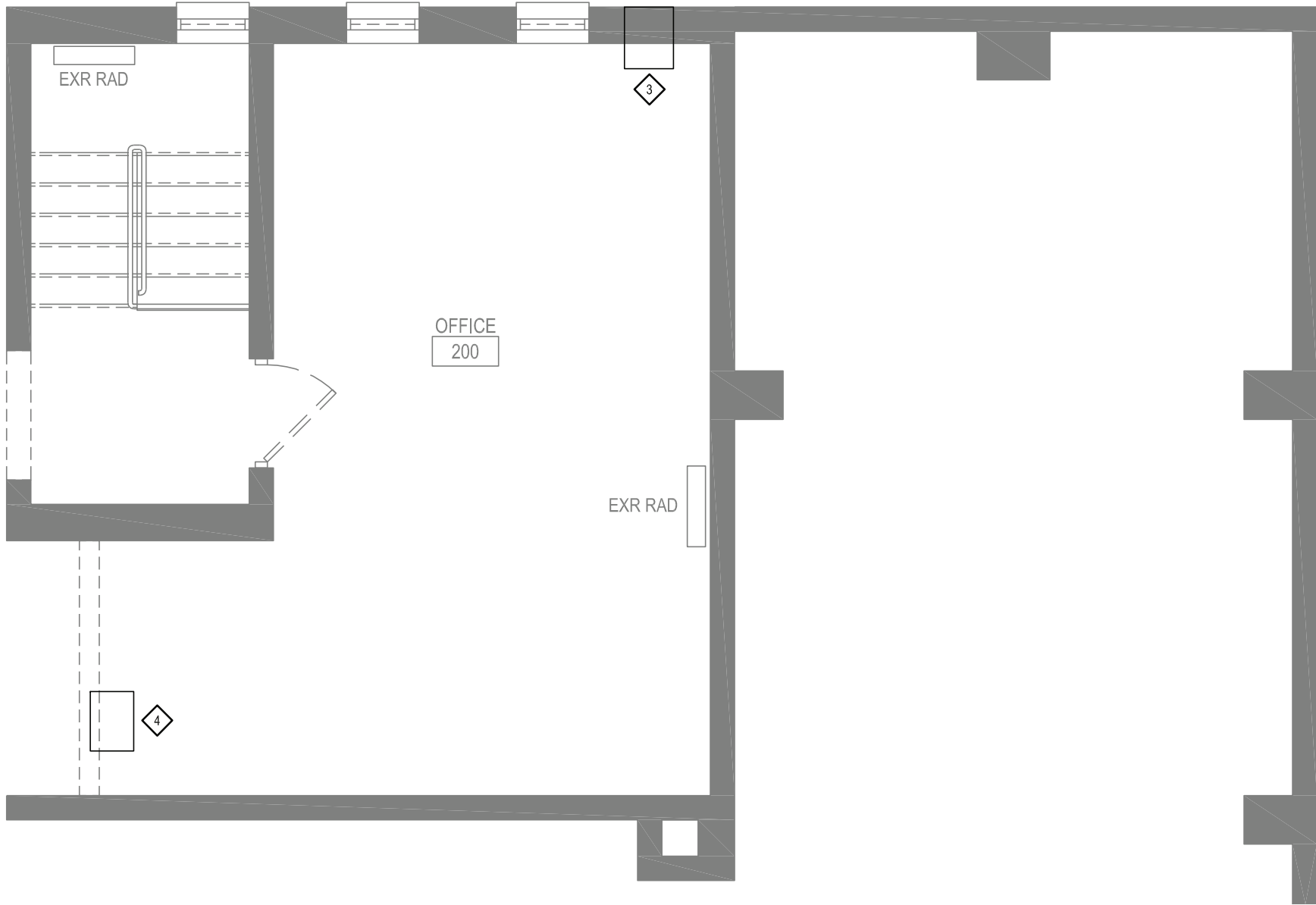


FIRST FLOOR MECHANICAL DEMO PLAN
1/4" = 1'-0" 1



SECOND FLOOR MECHANICAL DEMO PLAN
1/4" = 1'-0" 2

REMOVAL NOTES

- ◇ REMOVE SUSPENDED GAS-FIRED UNIT HEATER AND ASSOCIATED SUPPORTS, ATTACHMENTS, VENTING AND CONTROLS. PATCH WALL OPENINGS.
- ◇ REMOVE WALL MOUNTED STEEL RADIATOR AND ASSOCIATED BRANCH PIPING.
- ◇ REMOVE THRU-WALL A/C UNIT. WALL PATCH BY G.C.
- ◇ REMOVE WINDOW A/C UNIT. WINDOW REPAIR BY G.C.

VILLAGE/TOWN OF MOUNT KISCO
WATER DEPARTMENT BUILDING ADDITION
43 COLUMBUS AVE, MOUNT KISCO, NY 10549

Consultant
**SCHAEFER
ENGINEERING**
P.O. BOX 319
NEWTONVILLE, NY 12128
518.555.8893

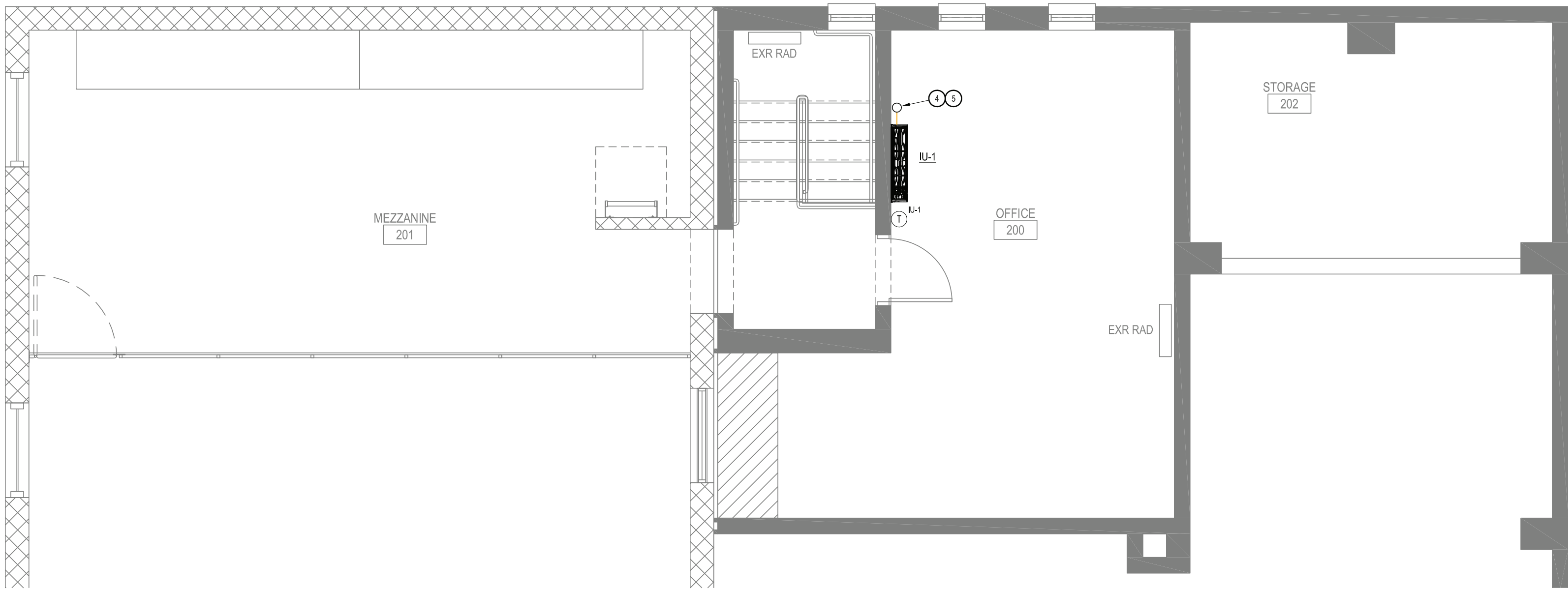
**BAR
DOWN
STUDIO**
BAR DOWN STUDIO
PO Box 721, Beacon NY 12508
845.559.3187

4			
3			
2			
1			
No	Date	Revision	By

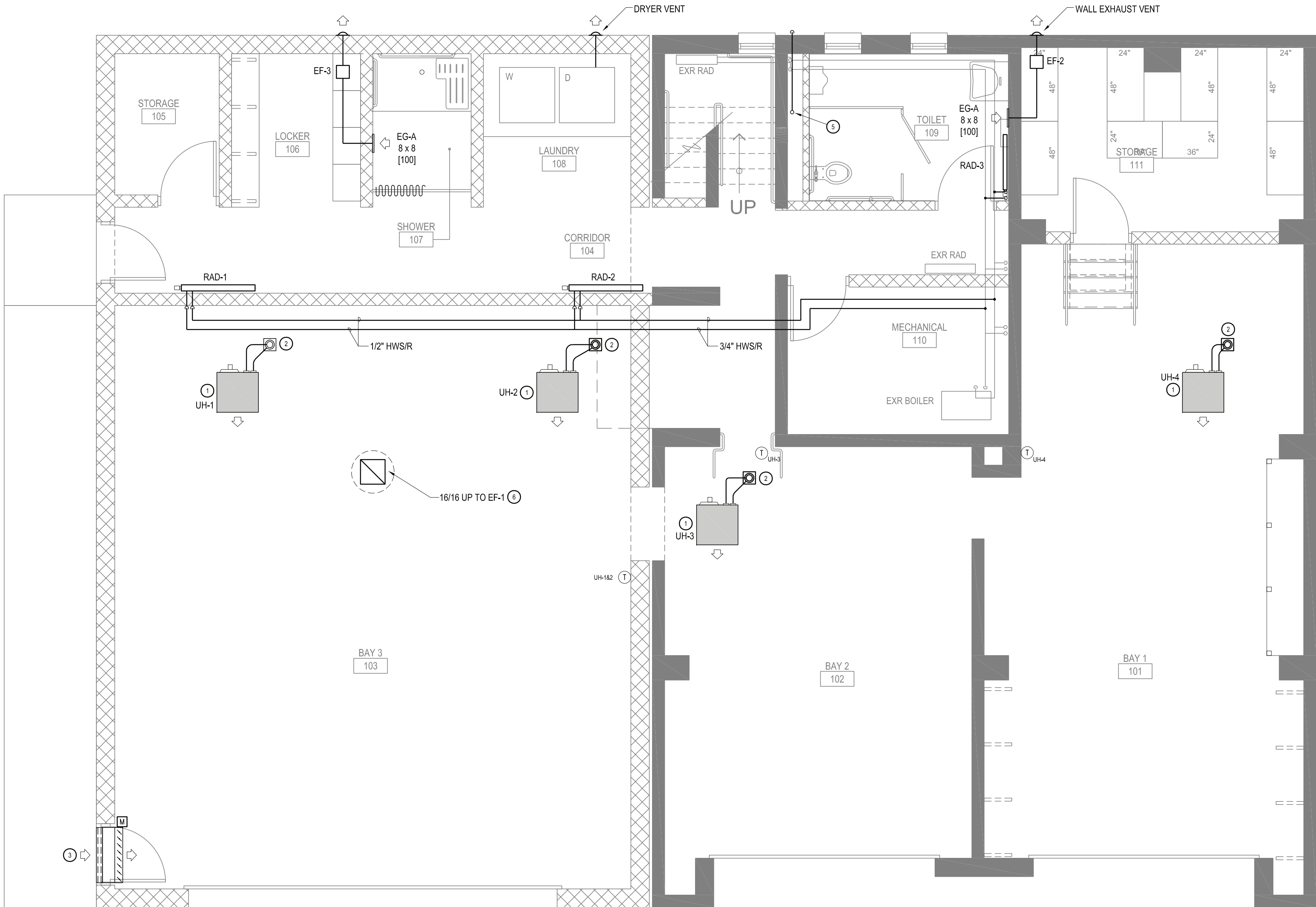
Drawn By: ks
Checked By: ks
BDS Proj. #: 21-01
Date: June 3, 2022

Sheet Title
**MECHANICAL
DEMO PLANS**

Sheet No.
M-1
CONSTRUCTION DOCUMENTS



MEZZANINE PLAN 2
1/4" = 1'-0"



GRAPHIC SCALE: 1/4" = 1'-0"
FIRST FLOOR PLAN 1
1/4" = 1'-0"

GENERAL NOTES

- REMOVAL AND RELOCATION OF CERTAIN EXISTING WORK SHALL BE NECESSARY FOR THE PERFORMANCE OF GENERAL WORK. ALL EXISTING CONDITIONS ARE NOT COMPLETELY DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE AND MAKE ALL NECESSARY CHANGES REQUIRED BASED ON EXISTING CONDITIONS. FOR PROPER DEMOLITION OF EXISTING WORK AND INCLUDE ALL MATERIALS AND LABOR IN HIS BID PRICE. NO ALLOWANCE WILL BE MADE FOR FAILURE TO DO SO.
- PRIOR TO BIDDING, THE CONTRACTOR SHALL VISIT THE SITE AND INSPECT ALL AREAS OF PROPOSED WORK, AND EXAMINE ALL CONTRACT DOCUMENTS. VERIFY LOCATIONS WHERE THE NEW WORK IS BE ROUTED. COORDINATE WITH NEW AND EXISTING WORK AND PROVIDE CLEARANCES FROM STRUCTURE AND WORK OF OTHER TRADES. THE CONTRACTOR SHALL INCLUDE ALL COSTS INCURRED THROUGH LIMITATIONS OF THE EXISTING AND NEW CONDITIONS. CLAIMS FOR ADDITIONAL LABOR, EQUIPMENT OR MATERIALS REQUIRED DUE TO DIFFICULTIES WHICH COULD HAVE BEEN FORESEEN WILL NOT BE CONSIDERED AS ADDITIONAL WORK.
- THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF THE WORK AND INDICATE THE REQUIRED SIZE AND POINTS OF TERMINATION AND SUGGEST PROPER ROUTING OF THE WORK. IT IS NOT THE INTENTION OF THE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, OBSTRUCTIONS OR STRUCTURAL CONDITIONS. THE WORK SHALL BE COORDINATED WITH WORK OF OTHER TRADES TO PROVIDE NECESSARY CLEARANCES, AVOID OBSTRUCTIONS, MAXIMIZE HEADROOM, AND MAINTAIN EXISTING OPENINGS AND PASSAGEWAYS CLEAR.
- MAINTAIN CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE AND REPAIR. MINOR ADJUSTMENTS MAY BE MADE TO ACCOMPLISH THIS. OBTAIN APPROVAL PRIOR TO MAKING ANY CHANGES THAT IMPACT CONTRACT COST.
- INVESTIGATE EACH SPACE THROUGH WHICH EQUIPMENT MUST BE MOVED. WHEN NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN CRATED SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH AREAS AVAILABLE. ASCERTAIN FROM BUILDING OWNER AT WHAT TIMES OF DAY EQUIPMENT COULD BE MOVED THROUGH THE BUILDING.
- COORDINATE THE EXACT SIZE AND LOCATION OF THE NEW OPENINGS WITH EXISTING STRUCTURE. PATCH AND INSULATE AS REQUIRED. THE CONTRACTOR SHALL FIRESTOP ALL PENETRATIONS OF NEW PIPING, CONDUIT, DUCTWORK, ETC. THROUGH EXISTING FIRE/ SMOKE BARRIERS. FIRE/SMOKE STOPPING SHALL BE 3M FIRE BARRIER CP 25 NIS CAULK UNLESS OTHERWISE NOTED.
- IT IS THE INTENT OF THIS CONTRACT TO KEEP REMAINING SYSTEMS LEFT IN GOOD WORKING ORDER, READY FOR OPERATION, INCLUDING NECESSARY LABOR AND MATERIALS.
- THE CONTRACTOR SHALL TAKE PRECAUTIONS AGAINST DAMAGING OR DISRUPTING BUILDING SYSTEMS, WIRING, PIPING OR CONTROL TUBING, ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED AT THE CONTRACTOR'S COST, WITHIN COST, WITHIN THIS CONTRACT PERIOD FOR SUBSTANTIAL COMPLETION.
- THE CONTRACTOR SHALL REPAIR AND RESTORE TO ORIGINAL CONDITION ANY EXISTING EQUIPMENT OR MATERIALS DAMAGED IN THE PROCESS OF INSTALLATION, AND DEMOLITION TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL MAKE REPAIRS USING THE SAME MATERIALS, AT THE CONTRACTOR'S COST.
- THE CONTRACTOR SHALL INCUR ALL COSTS AND BURDENS ASSOCIATED WITH LOST OR STOLEN EQUIPMENT AND MATERIALS.
- DAILY, DURING DEMOLITION AND DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL REMOVE ALL RUBBISH AND EXCESS MATERIAL ACCUMULATED AS A RESULT OF HIS OPERATIONS. ALL AREAS AND EQUIPMENT AFFECTED UNDER THIS CONTRACT SHALL BE CLEAN OF DUST AND DEBRIS BEFORE FINAL ACCEPTANCE BY THE OWNER.
- PROVIDE FOR LEGAL REMOVAL AND DISPOSAL OF ALL RUBBISH AND DEBRIS FROM THE BUILDING AND SITE. PROTECT ALL WORK NOT SLATED FOR DEMOLITION.
- THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.
- OBTAIN ALL PERMITS, PAY ALL FEES, CONNECTION CHARGES, ETC.
- PAINT AND TOUCH-UP ALL SURFACES MARRED BY PERFORMANCE OF THE WORK.
- ALL WORK DESCRIBED ON THE M-SERIES DRAWING SHEETS SHALL BE PERFORMED / FURNISHED & INSTALLED BY THE MECHANICAL CONTRACTOR UNLESS OTHER WISED NOTED.
- THE MECHANICAL CONTRACTOR SHALL REFER TO ALL OTHER DRAWINGS IN THE BID PACKAGE AND PERFORM THE WORK (INCLUDE IN HIS BID) INDICATED AS (M.C.) MECHANICAL WORK.
- MECHANICAL CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL NEW WALL/ FLOOR PENETRATIONS FOR PIPING REQUIRED FOR CONNECTION TO NEW EQUIPMENT.
- ALL NEW PIPING PENETRATIONS SHALL INCLUDE PENETRATION SLEEVES LARGE ENOUGH TO INCLUDE PIPING INSULATION. REFER TO SPECIFICATIONS FOR SLEEVE TYPE.
- ALL NEW ROOF TOP EQUIPMENT SHALL MAINTAIN A (10) TEN FOOT MINIMUM CLEARANCE DISTANCE FROM ROOF END.
- M.C. IS RESPONSIBLE FOR ALL NECESSARY CONTROL WIRING FOR ALL EQUIPMENT LISTED.

DRAWING NOTES

- NATURAL GAS-FIRED UNIT HEATER, SEPARATED COMBUSTION, 45 MBH INPUT CAPACITY, AXIAL FAN, 120 VAC, 2.4 FLA, 4" VENT, 4" COMBUSTION AIR INLET; REZNOR UD245 OR EQUAL.
- PROVIDE CONCENTRIC ADAPTER BOX FOR VERTICAL VENT/INTAKE ASSEMBLY. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 36 x 30 LOUVER ABOVE DOOR WITH LOW LEAKAGE DAMPER AND 120VAC ACTUATOR.
- REFRIGERANT LINE SET, POWER AND CONTROL WIRING UP THROUGH ROOF TO OUTDOOR UNIT. SEE ROOF PLAN FOR CONTINUATION.
- 3/4" SCHEDULE 80 PVC CONDENSATE DRAIN, OFFSET THROUGH EXTERIOR WALL 12" A.F.G. SPILL TO GRADE.
- TRANSITION TO 24/24 HEMMED EDGE WITH BIRD SCREEN.

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE

INDOOR UNIT DATA								OUTDOOR UNIT DATA										SYSTEM DATA				
TAG	LOCATION	TYPE	MCA	FLA	WEIGHT (LBS)	COOLING AIRFLOW DRY COIL (CFM)	DESIGN BASIS	TAG	LOCATION	WEIGHT (LBS)	REFRIGERANT	HEATING MODE OPERATING RANGE (°F)	COOLING MODE OPERATING RANGE (°F)	ELECTRICAL	MCA	MOCp	DESIGN BASIS	RATED COOLING CAPACITY AT 95°F (BTUH)	HEATING AT 47°F	HEATING AT 17°F	SEER	NOTES
IU-1	OFFICE 200	WALL MOUNT	1	0.19	28	265-310-385-455	TRANE TPKA0A0181LA00A	OU-1	ROOF	100	R410A	12 - 70	0 - 115	208/1	11	25	TRANE TRUZA0181KA70A	18,000	19,000	13,600	19.8	(1) (2)

1. PROVIDE QUICK-SLING MINI-SPLIT STAND FOR ROOF MOUNTED OUTDOOR UNIT.
2. PROVIDE TAR-CT01MAU-SB TOUCH MA CONTROLLER.

PANEL RADIATOR SCHEDULE

TAG	DIMENSIONS			BTU OUTPUT			DESIGN BASIS		NOTES
	HEIGHT	LENGTH	DEPTH	180°F	160°F	140°F	BUDERUS MODEL 21 (PART NUMBER)	BUDERUS MODEL 22 (PART NUMBER)	
RAD-1	24	48	4	8139	6092	4218	-	7-750-103-612	(1) (2)
RAD-2	24	48	4	8139	6092	4218	-	7-750-103-612	(1) (2)
RAD-3	24	36	2.5	4706	3526	2443	7-750-103-309	-	(1) (2)

1. PROVIDE ISOLATION VALVES AT RADIATOR SUPPLY AND RETURN CONNECTION.
2. PROVIDE DANFOSS THERMOSTATIC RADIATOR VALVE.

FAN SCHEDULE

TAG	SERVICE	TYPE	CFM	S.P. (IN. W.C.)	RPM	BHP	DRIVE	SONES	ELECTRICAL			MOTOR CONTROL	DESIGN BASIS	NOTES
									HP	WATTS	VOLTAGE	TYPE		
EF-1	BAY 3	ROOF DOWNBLAST	1792	0.375	1140	0.31	DIRECT	10.4	1/3	—	115	WALL SWITCH BY E.C.	GREENHECK G-140	(1)
EF-2	TOILET 109	REMOTE INLINE	108	0.30	1596	—	DIRECT	—	—	25.6	115	WALL SWITCH BY E.C.	PANASONIC FV-10NLF1E	
EF-3	SHOWER 107	REMOTE INLINE	108	0.30	1596	—	DIRECT	—	—	25.6	115	WALL SWITCH BY E.C.	PANASONIC FV-10NLF1E	

1. PROVIDE 14" ROOF CURB WITH BACKDRAFT DAMPER.

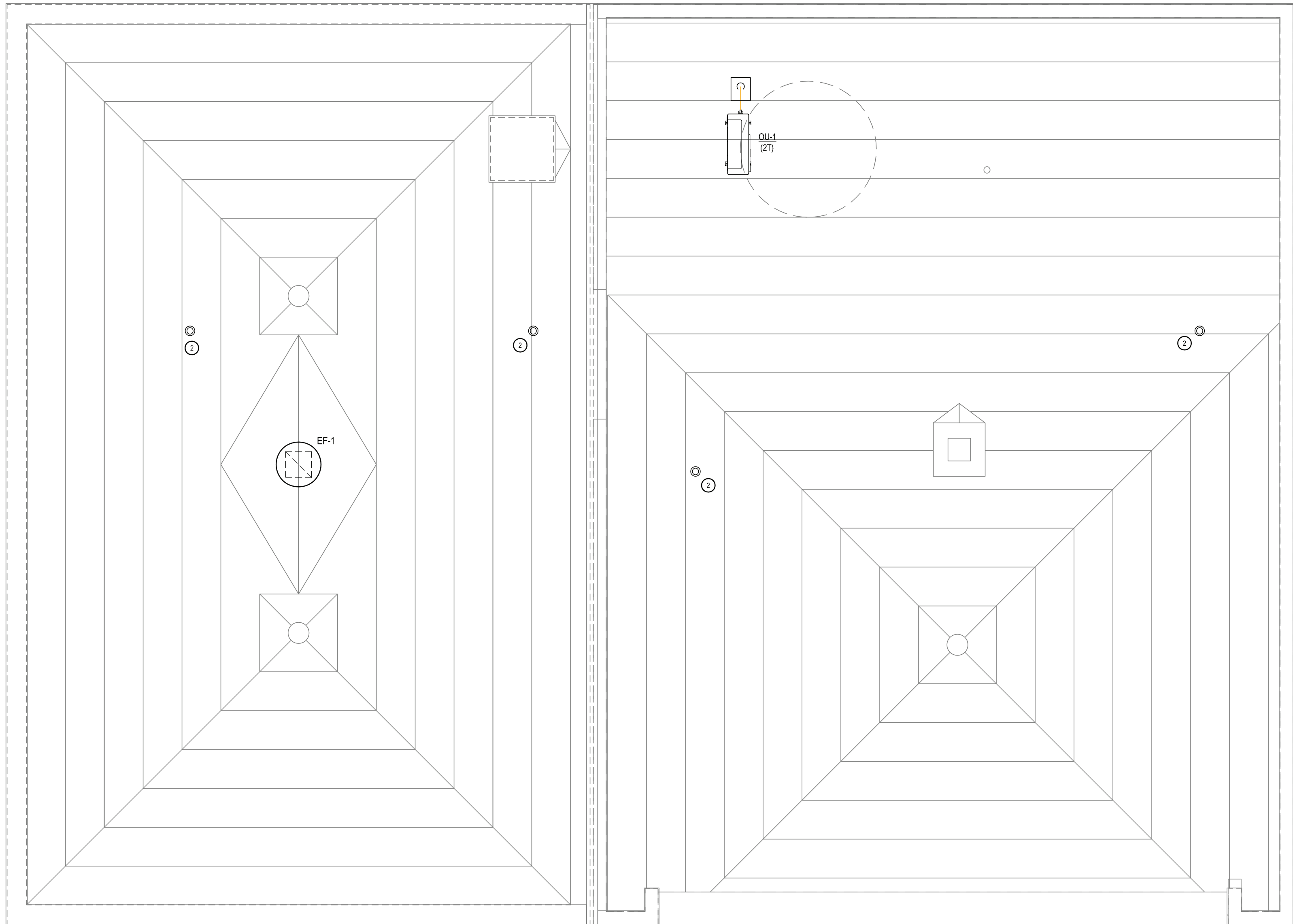
GAS-FIRED UNIT HEATER SCHEDULE

TAG	HEATING CAPACITY			VENT DIA. (IN)	COMBUSTION INLET DIA. (IN)	WEIGHT	FAN DATA					ELECTRICAL DATA			DESIGN BASIS	NOTES
	FUEL	INPUT (MBH)	OUTPUT (MBH)				TYPE	SIZE	HP	AIRFLOW (CFM)		VOLTAGE	MOCP	UNIT FLA		
										MAX	MIN					
UH-1	NATURAL GAS	60	49.2	4	4	103	BLOWER	9x6	1/3	1012	607	115	15	7.1	REZNOR UBZ-60	(1) (2) (3) (4) (5)
UH-2	NATURAL GAS	60	49.2	4	4	103	BLOWER	9x6	1/3	1012	607	115	15	7.1	REZNOR UBZ-60	(1) (2) (3) (4) (5)
UH-3	NATURAL GAS	60	49.2	4	4	103	BLOWER	9x6	1/3	1012	607	115	15	7.1	REZNOR UBZ-60	(1) (2) (3) (4) (5)
UH-4	NATURAL GAS	60	49.2	4	4	103	BLOWER	9x6	1/3	1012	607	115	15	7.1	REZNOR UBZ-60	(1) (2) (3) (4) (5)

1. PROVIDE TYPE 409 STAINLESS STEEL HEAT EXCHANGERS.
2. VERTICAL COMBUSTION VENT KIT WITH CONCENTRIC ADAPTER.
3. INTEGRATED 60" DOWNTURN NOZZLES.
4. FACTORY DISCONNECT SWITCH.
5. 24VAC CONTROL TRANSFORMER AND SPACE THERMOSTAT.

GRILLE SCHEDULE

TAG	TYPE	DUCT SIZE	BLADE SPACING	BLADE TYPE	MOUNTING	BORDER STYLE	FASTENING	MATERIAL	FINISH	BLADE ORIENTATION	DESIGN BASIS
EG-A	EXHAUST GRILLE	8 x 8	1/2	45° FIXED	SURFACE	FILTER FRAME	CONCEALED BRACKET	ALUMINUM	WHITE	NA	PRICE 635



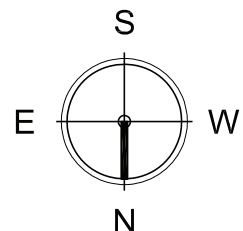
MECHANICAL ROOF PLAN

1/4" = 1'-0"

1

DRAWING NOTES

1. NATURAL GAS-FIRED UNIT HEATER, SEPARATED COMBUSTION, 45 MBH INPUT CAPACITY, AXIAL FAN, 120 VAC, 2.4 FLA, 4" VENT, 4" COMBUSTION AIR INLET; REZNOR UDZ45 OR EQUAL.
2. PROVIDE CONCENTRIC ADAPTER BOX FOR VERTICAL VENT/INTAKE ASSEMBLY. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
3. 36 x 30 LOUVER ABOVE DOOR WITH LOW LEAKAGE DAMPER AND 120VAC ACTUATOR.
4. REFRIGERANT LINE SET, POWER AND CONTROL WIRING UP THROUGH ROOF TO OUTDOOR UNIT. SEE ROOF PLAN FOR CONTINUATION.
5. 3/4" SCHEDULE 80 PVC CONDENSATE DRAIN. OFFSET THROUGH EXTERIOR WALL 12" AFG. SPILL TO GRADE.
6. TRANSITION TO 24/24 HEMMED EDGE WITH BIRD SCREEN.



GRAPHIC SCALE: 1/4" = 1'-0"

COPYRIGHT© ALL RIGHTS RESERVED