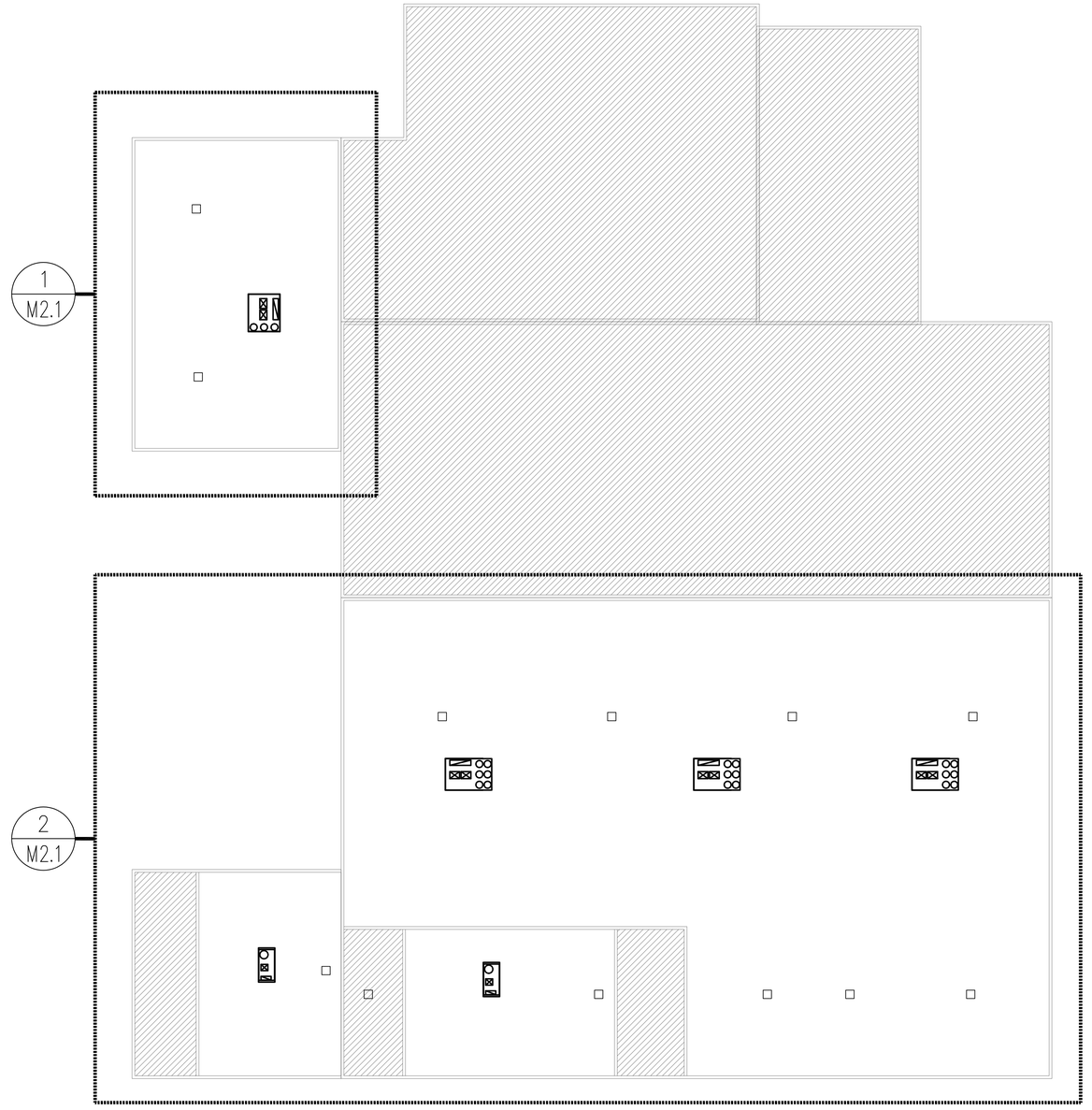

OVERALL FIRST FLOOR PLAN

SCALE: ⅛"=1'-0"

north

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25430
PROFESSIONAL ENGINEER
08.21.2023

LHM CDJ
8528 Lomas Blvd NE
Albuquerque, NM 87110

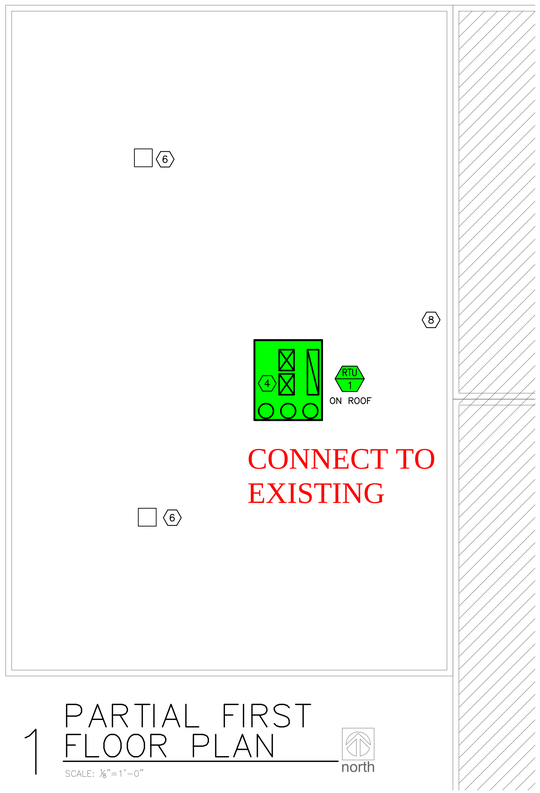
DATE
5.18.23
DRAWN BY
ewh
CHECKED BY
jdg
REVISIONS

SHEET NUMBER
M1.1

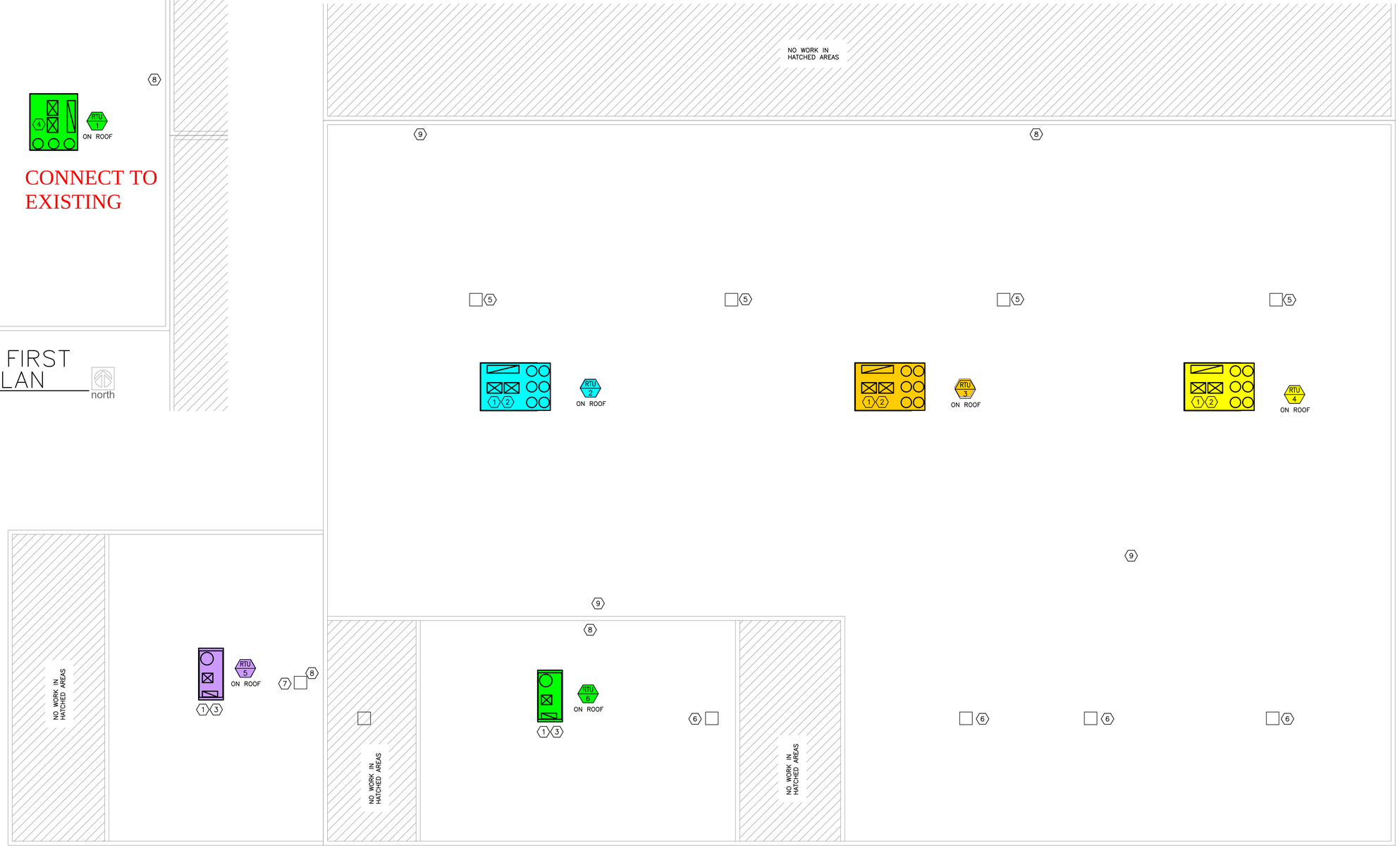
PROJECT NUMBER
23-xxxxx

MECHANICAL PLAN NOTES:

1. DISCONNECT AND REMOVE EXISTING MAU AND EVAP COOLER. REMOVE PIPE AND CAP ABOVE ROOF. REMOVE ALL ASSOCIATED DUCT. COORDINATE LOCATION OF RTU WITH FIRE SUPPRESSION PIPING AND STRUCTURE. PROVIDE INTERNALLY LINED RETURN AIR DUCT DROP WITH MESH SCREEN.
2. PROVIDE SUPPLY AIR DISCHARGE DROP BOX DIFFUSER SIMILAR TO CURBS PLUS DLPD. NC TO BE UNDER 35 AT 8,000 CFM 4-WAY THROW. PROVIDE SUPPLY AIR TRANSITION FROM RTU OPENING TO DROPBOX DIFFUSER AS REQUIRED. MOUNT THERMOSTAT AT EXISTING LOCATION.
3. PROVIDE SUPPLY AIR DISCHARGE DROP BOX DIFFUSER SIMILAR TO CURBS PLUS DLPD. NC TO BE UNDER 35 AT 3,000 CFM 4-WAY THROW. PROVIDE SUPPLY AIR TRANSITION FROM RTU OPENING TO DROPBOX DIFFUSER AS REQUIRED. MOUNT THERMOSTAT AT EXISTING LOCATION.
4. DISCONNECT AND REMOVE EXISTING MAU AND EVAP COOLER. REMOVE PIPE AND CAP ABOVE ROOF. DUCT IS EXISTING TO REMAIN. REWORK DUCT FOR NEW UNIT CONNECTION. COORDINATE LOCATION OF RTU WITH FIRE SUPPRESSION PIPING AND STRUCTURE. PROVIDE INTERNALLY LINED RETURN AIR DUCT DROP WITH MESH SCREEN.
5. EXISTING 3/4 HP EXHAUST FAN. FURNISH AND INSTALL NEW CO/NO2 SENSOR, AND STARTER. AT SETPOINT SENSOR SHALL START ALL EF IN AREA ALONG WITH ENERGIZING RTU'S IN ECONOMIZER. ONE CONTROLLER SHALL BE INSTALLED PER ZONE. PROVIDE SENSORS AS REQUIRED FOR COVERAGE.
6. EXISTING 1/3 HP EXHAUST FAN. FURNISH AND INSTALL NEW CO/NO2 SENSOR, AND STARTER. AT SETPOINT SENSOR SHALL START ALL EF IN AREA ALONG WITH ENERGIZING RTU'S IN ECONOMIZER. ONE CONTROLLER SHALL BE INSTALLED PER ZONE. PROVIDE SENSORS AS REQUIRED FOR COVERAGE.
7. EXISTING 1/2 HP EXHAUST FAN. FURNISH AND INSTALL NEW CO/NO2 SENSOR, AND STARTER. AT SETPOINT SENSOR SHALL START ALL EF IN AREA ALONG WITH ENERGIZING RTU'S IN ECONOMIZER. ONE CONTROLLER SHALL BE INSTALLED PER ZONE. PROVIDE SENSORS AS REQUIRED FOR COVERAGE.
8. LOCATION OF CO/NO2 CONTROLLER
9. LOCATION OF CO/NO2 SENSOR



1 PARTIAL FIRST FLOOR PLAN
SCALE: ⅛"=1'-0"



2 PARTIAL FIRST FLOOR PLAN
SCALE: ⅛"=1'-0"

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PACKAGED ROOFTOP UNIT (DX COOLING/GAS HEAT)

OA CFM

MARK	MANUFACTURER	MODEL	NOMINAL TONNAGE	SERVICE	UNIT TYPE	SUPPLY FAN				COOLING COIL						GAS HEATING			DESIGN/MAX VENTILATION (CFM)	ELECTRICAL				NEW WEIGHT (LBS)	DEMO WEIGHT (LBS)	ARI EER
						CFM	ESP (IN)	HP	VFD (Y/N)	EAT		LAT		TH (MBH)	SH (MBH)	INPUT (MBH)	OUTPUT (MBH)	STAGES		MCA	MOCP	V/PH	DISC. TYPE			
										DB	WB	DB	WB													
RTU-1	LENNOX	KGC180S4M	15	SERVICE	CV	6,000	0.75	3.0	N	77.1	62.8	55	54	168.7	123.4	260	210	2	800	30	35	460/3	NF	2,233	2,325	10.8
RTU-2	LENNOX	KGC240S4M	20	SERVICE	CV	8,000	0.75	7.5	N	77.1	62.8	55	54	232.1	167.2	260	210	2	800	53	60	460/3	NF	2,558	3,070	10.8
RTU-3	LENNOX	KGC240S4M	20	SERVICE	CV	8,000	0.75	7.5	N	77.1	62.8	55	54	232.1	167.2	260	210	2	800	53	60	460/3	NF	2,558	3,070	10.8
RTU-4	LENNOX	KGC240S4M	20	SERVICE	CV	8,000	0.75	7.5	N	77.1	62.8	55	54	232.1	167.2	260	210	2	800	53	60	460/3	NF	2,558	3,070	10.8
RTU-5	LENNOX	KCC092S4M	7.5	SERVICE	CV	3,000	0.50	2.0	N	77.1	62.8	55	54	84.5	57.5	—	—	—	300	20	25	460/3	NF	1,152	N/A	11.2
RTU-6	LENNOX	KCC092S4M	7.5	SERVICE	CV	3,000	0.50	2.0	N	77.1	62.8	55	54	84.5	57.5	—	—	—	300	20	25	460/3	NF	1,152	N/A	11.2

NOTES:
A. EQUIPMENT SIZED FOR 96 DEGREE F AMBIENT TEMPERATURE.
B. PROVIDE WITH 2", 30% EFFICIENT PLEATED THROWAWAY AIR FILTERS.
C. PROVIDE WITH FACTORY ADJUSTABLE PITCH ROOF CURB
D. PROVIDE WITH FIELD INSTALLED NON-FUSED DISCONNECT SWITCH, PLEATED FILTERS AND HAIL GUARDS.
E. PROVIDE WITH FACTORY MOUNTED ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF DAMPER.

SECTION 15100 - HEATING, VENTILATION AND AIR CONDITIONING

1.1 SCOPE:

A. The work included under this contract consists of providing all labor, materials, tools, transportation, services, etc., necessary to complete the installation of the heating, ventilating, and air conditioning systems and other items herein listed and as described in these specifications, as illustrated in the accompanying drawings or as directed by the Architect.

1.2 SHEET METAL:

A. Provide ductwork shown with necessary dampers. Construction of new galvanized prime grade steel sheets per ASHRAE and SMACNA Standards. Provide round or rectangular duct as indicated. Fabricate for the pressure and SMACNA seal class required.

B. Flexible duct shall be Wiremold WCK or acceptable equal maximum length shall be 8'- 0" or as noted/detailed.

C. All duct sizes shown are actual size and include liner, where required.

1.3 GRILLES, REGISTERS, INLETS AND OUTLETS:

A. All supply grilles, registers and diffusers shall be as scheduled on the drawings and shall be ADC rated.

1.4 DUCTWORK ACCESSORIES:

A. Provide single thickness turning vanes in all supply duct turns.

B. Provide duct access doors for all internal mounted equipment.

C. Provide 45° take-off fittings with volume damper for all round takeoffs to diffusers.

D. Provide dampers where shown and required. Balance and control dampers shall be opposed blade except air mixing dampers shall be parallel blade.

1.5 AIR CONDITIONING UNITS:

A. Air conditioning units shall be as scheduled. Units shall be standard catalogued products with the appropriate approval or certification by AGA, ARI and UL. Efficiencies shall conform to ASHRAE 90.1 standards.

1.6 FANS:

A. Fans with accessories shall be as scheduled and shall be AMCA rated.

1.7 VIBRATION ISOLATION:

A. Duct flexible connection shall be non-combustible, 16 ounce canvas. Piping flexible connection shall be Flexonics 401H or acceptable equal.

1.8 MISCELLANEOUS MECHANICAL EQUIPMENT:

A. Provide constant, variable volume and/or fan powered boxes and accessories as scheduled. Acceptable manufacturers are E.H. Price or acceptable equal.

1.9 CLEANING:

A. Clean system by operating at least three hours prior to final acceptance with temporary filters. Remove all filters and replace with clean.

B. Use precleaned precharged refrigerant tube. Clean per manufacturers recommendations.

1.10 TESTING AND ADJUSTING:

A. Contractor shall operate and test the air conditioning and ventilation systems and instruct the Owner in its operation. Perform a series of general capacity and operating tests. The tests shall demonstrate the specified capacities of various pieces of equipment.

END OF SECTION

LEGEND

SG–1 SUPPLY AIR GRILLE – AS SCHEDULED
SG–2 SUPPLY AIR GRILLE – AS SCHEDULED

RETURN AIR GRILLE – AS SCHEDULED

(T) VAV 1–3 THERMOSTAT WITH ZONE/UNIT DESIGNATION. MOUNT AT 48" A.F.F.

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