

THIS DRAWING IS PROVIDED FOR REFERENCE ONLY TO IDENTIFY EXISTING EQUIPMENT AND SHOW GENERAL EXISTING CONDITIONS.

UNIT REPLACEMENT SCOPE:

FIVE CARRIER ELECTRIC HEAT ROOFTOP UNITS INSTALLED IN 2013. REPLACE LIKE FOR LIKE AND UPDATE OUTSIDE AIR CFM PER SCHEDULE.

ROOF CURBS AND ALL DUCTWORK CONNECTIONS ARE EXISTING TO REMAIN.

RETAIN EXISTING MAINTENANCE RECEPTACLE CIRCUIT AND RECONNECT AND EXTEND AS NECESSARY TO NEW UNIT MAINTENANCE RECEPTACLE.

RTU-1: RE-USE EXISTING 70A CIRCUIT BREAKER AND #4 CONDUCTORS SERVING RTU-1. RE-USE EXISTING 100A/3P/70A/NEMA 3R FUSED LOCAL DISCONNECT.

RTU-2: RE-USE EXISTING 80A CIRCUIT BREAKER AND #4 CONDUCTORS SERVING RTU-2. RE-USE EXISTING 100A/3P/80A/NEMA 3R FUSED LOCAL DISCONNECT.

RTU-3: RE-USE EXISTING 80A CIRCUIT BREAKER AND #4 CONDUCTORS SERVING RTU-3. RE-USE EXISTING 100A/3P/80A/NEMA 3R FUSED LOCAL DISCONNECT.

RTU-4: RE-USE EXISTING 20A CIRCUIT BREAKER AND #12 CONDUCTORS SERVING RTU-4. RE-USE EXISTING 30A/3P/20A/NEMA 3R FUSED LOCAL DISCONNECT.

RTU-5: RE-USE EXISTING 40A CIRCUIT BREAKER AND #8 CONDUCTORS SERVING RTU-4. RE-USE EXISTING 60A/3P/40A/NEMA 3R FUSED LOCAL DISCONNECT.

GENERAL NEW NOTES:

- PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND SITE VISITS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. COORDINATE NEW WORK AND DEMOLITION WITH OTHER DISCIPLINES AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- COORDINATE THE INSTALLATION OF THE MECHANICAL SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC. ANY MODIFICATIONS REQUIRED DUE TO LACK OF COORDINATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.
- WHERE SHUTDOWN OF EXISTING SYSTEMS IS REQUIRED DURING NEW WORK, COORDINATE SHUTDOWN TIME AND DURATION WITH THE OWNER TO MINIMIZE DOWNTIME. NOTIFY OWNER SEVEN (7) DAYS PRIOR TO INTERRUPTION OF SERVICE.
- DURING INSTALLATION OF NEW WORK, AVOID DAMAGING EXISTING SURFACES AND EQUIPMENT TO REMAIN. REPAIR DAMAGE CAUSED DURING CONSTRUCTION AT NO EXTRA COST TO THE OWNER.
- ALL MECHANICAL EQUIPMENT SHOWN ON THE MECHANICAL PLANS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED.
- NEW MECHANICAL EQUIPMENT, DUCTWORK AND PIPING ARE SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK AND PIPING LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AROUND EQUIPMENT.
- REFER TO ARCHITECTURAL DRAWINGS FOR RELATED CONSTRUCTION DETAILS AS APPLICABLE TO THE HVAC SYSTEM. VERIFY CHANGES AND PENETRATIONS SHOWN ON ARCHITECTURAL DRAWINGS THAT ARE INTENDED FOR DUCTWORK AND PIPING MEET REQUIREMENTS.
- COORDINATE LOCATION OF ROOF MOUNTED HVAC EQUIPMENT AND ROOF PENETRATIONS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- INDOOR AIR QUALITY MEASURES: PROTECT INSIDE OF (INSTALLED AND DELIVERED) DUCTWORK AND HVAC UNITS FROM EXPOSURE TO DUST, DIRT, PAINT AND MOISTURE. REPLACE INSULATION THAT HAS GOTTEN WET AT ANY TIME DURING CONSTRUCTION. DRYING THE INSULATION IS NOT ACCEPTABLE. SEAL ANY TEARS OR JOINTS OF INTERNAL FIBERGLASS INSULATION. REMOVE DEBRIS FROM CEILING/RETURN AIR PLENUM INCLUDING DUST. AN INDEPENDENT, PROFESSIONAL DUCT CLEANING COMPANY SHALL VACUUM CLEAN ANY DUCTWORK CONNECTED TO HVAC UNITS THAT WERE OPERATED DURING THE CONSTRUCTION PERIOD AFTER NEW FILTERS ARE INSTALLED AND PRIOR TO TURNING SYSTEM OVER TO THE OWNER.
- INSTALL DUCTWORK AND PIPING PARALLEL TO BUILDING COLUMN LINES UNLESS OTHERWISE SHOWN OR NOTED.
- OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF EXCEPT WHERE CONCRETE INSERTS IN CONCRETE SLABS ARE ALLOWED BY THE SPECIFICATIONS.
- COORDINATE LOCATION OF EQUIPMENT SUPPORTS WITH LOCATION OF EQUIPMENT ACCESS PANEL DOORS TO ENABLE SERVICE OF EQUIPMENT AND/OR FILTER REPLACEMENT.
- SEAL PENETRATIONS THROUGH THE BUILDING COMPONENTS IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. FIREPROOF PENETRATIONS THROUGH FIRE RATED COMPONENTS IN ACCORDANCE WITH U.L. REQUIREMENTS.
- COORDINATE THE EXACT MOUNTING SIZE AND FRAME TYPE OF DIFFUSERS, REGISTERS AND GRILLES WITH THE SUPPLIER TO MEET THE CEILING, WALL AND DUCT INSTALLATION REQUIREMENTS.
- ADJUST LOCATION OF CEILING DIFFUSERS, REGISTERS AND GRILLES AS REQUIRED TO ACCOMMODATE FINAL CEILING GRID AND LIGHTING LOCATIONS.
- LOCATE AND SET THERMOSTATS AND HUMIDISTATS AT LOCATIONS SHOWN ON PLANS. VERIFY EXACT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION. INSTALL DEVICES WITH TOP OF DEVICE AT MAXIMUM 48" AFF TO MEET ADA REQUIREMENTS UNLESS NOTED OTHERWISE ON PLANS. PROVIDE INSULATED BACKING FOR THERMOSTATS MOUNTED ON EXTERIOR BUILDING WALLS. INSTALL WIRING IN CONDUIT PROVIDED BY DIVISION 16. AT A MINIMUM, PROVIDE CONDUIT IN THE WALL FROM THE JUNCTION BOX TO 6" ABOVE THE CEILING.
- COORDINATE THE LOCATION AND ELEVATION OF WALL-MOUNTED DEVICES WITH PRESENTATION BOARDS, DISPLAY CABINETS, SHELVES OR OTHER COMPONENTS SHOWN ON THE ARCHITECTURAL DRAWINGS THAT ARE TO BE INSTALLED UNDER OTHER DIVISIONS. CONTRACTOR WILL NOT BE REIMBURSED FOR RELOCATION OF WALL-MOUNTED DEVICES CAUSED BY A LACK OF COORDINATION.
- PROVIDE A MANUAL BALANCING DAMPER IN EACH BRANCH DUCT TAKEOFF FROM MAIN SUPPLY, RETURN, OUTDOOR AND EXHAUST AIR DUCTS.
- PROVIDE A PREFABRICATED AS DESIRED, HIGH EFFICIENCY, RECTANGULAR/ROUND BRANCH DUCT TAKEOFF FITTING WITH MANUAL BALANCING DAMPER AND LOCKING QUADRANT FOR BRANCH DUCT CONNECTIONS AND TAKE-OFFS TO INDIVIDUAL DIFFUSERS, REGISTERS AND GRILLES.
- BRANCH DUCTWORK TO AIR OUTLETS SHALL BE SAME SIZE AS OUTLET NECK SIZE UNLESS OTHERWISE NOTED.
- RIGID DUCTWORK INSULATION: PROVIDE 3/4 LB DENSITY, 1-1/2" (R-4) THICK INSULATION WRAP ON RIGID ROUND AND UNLINED RECTANGULAR, CONCEALED, SUPPLY AND RETURN AIR DUCTS AND ON OUTSIDE AIR DUCTS. PROVIDE 1" (R-4) 1-1/2 LB DENSITY, INTERNAL DUCT LINER ON RECTANGULAR SUPPLY AND RETURN AIR DUCTS. DUCT SIZES ON MECHANICAL PLANS INDICATE CLEAR INSIDE AIRFLOW DIMENSIONS. INCREASE SHEET METAL SIZES ACCORDINGLY.

MECHANICAL PLAN NOTES:

- INSTALL THERMOSTAT/TEMPERATURE SENSOR IN INDICATED LOCATION MOUNTED AT 48" AFF MAXIMUM. COORDINATE FINAL LOCATION OF SENSOR WITH ARCHITECT PRIOR TO INSTALLATION OF THERMOSTAT BACKING OR WIRING.
- INSTALL CO2 SENSOR IN INDICATED LOCATION MOUNTED AT 54" AFF AND DIRECTLY ABOVE ADJACENT TEMPERATURE SENSOR. COORDINATE FINAL LOCATION OF SENSOR WITH ARCHITECT PRIOR TO INSTALLATION OF WIRING OR BACKING.
- HUMIDITY SENSOR FOR ENTHALPY CALCULATION AND DEHUMIDIFICATION CONTROL SEQUENCE. MOUNT AT 48" AFF MAXIMUM. COORDINATE FINAL LOCATION WITH ARCHITECT PRIOR TO INSTALLATION OF WIRING OR BACKING.
- THERMOSTAT FOR CONTROL OF VAV DIFFUSER IN CORRESPONDING ROOM ONLY. MOUNT AT 48" AFF MAXIMUM. COORDINATE FINAL LOCATION WITH ARCHITECT PRIOR TO INSTALLATION OF WIRING OR BACKING.
- INSTALL THERMOSTAT FOR CONTROL OF AV ROOM EXHAUST FAN. MOUNT AT 48" AFF MAXIMUM. COORDINATE FINAL LOCATION WITH ARCHITECT PRIOR TO INSTALLATION OF WIRING OR BACKING.
- PROVIDE NEW DX ROOFTOP UNIT AND CURB AS SCHEDULED ON SHEET M3.0 COORDINATE FINAL LOCATION WITH LANDLORD AND STRUCTURAL ENGINEER PRIOR TO PLACING UNIT.
- INSTALL DUCTSOX ABOVE LIGHTING ELECTRICAL BUS STRUT. COORDINATE ALL DUCTSOX INSTALLATION WITH ARCHITECTURAL AND ELECTRICAL CONTRACTORS. GC SHALL VERIFY THAT DUCTSOX IS INSTALLED SO AS TO NOT COME INTO CONTACT WITH BUS STRUT OR OTHER SUSPENDED FIXTURES WHEN DEFLATED.
- ROUTE SHEET METAL RETURN AIR DUCT AS SHOWN. PLENUM SHALL BE SIZED FULL SIZE OF RETURN AIR INLET. PROVIDE DUCT LINER IN RETURN AIR DUCTWORK FOR SOUND ATTENUATION. COVER INLET WITH 1/2"x1/2" BIRD SCREEN.
- EXTEND AND TIGHTEN HANGING CABLE TO WALL. GC TO PROVIDE 2X WOOD BACKING. COORDINATE WITH DUCTSOX MANUFACTURER AND REFER TO THE SHELL DRAWINGS PRIOR TO INSTALLATION.
- VENTS ORIENTATION TO BE DETERMINED BY DUCTSOX MANUFACTURER.
- PRIOR TO STORE OPENING, MECHANICAL CONTRACTOR SHALL PROVIDE NEW MERV 9 FILTERS FOR UNIT.
- ROUTE EXHAUST AIR DUCTWORK TO NEW ROOF MOUNTED EXHAUST FAN. COORDINATE EXACT ROUTING WITH STRUCTURE AND OTHER OBSTACLES. ADJUST ROUTING TO MATCH.
- EXTEND AND TIGHTEN HANGING CABLE NEAREST STRUCTURE. COORDINATE WITH DUCTSOX MANUFACTURER AND REFER TO THE SHELL DRAWINGS PRIOR TO INSTALLATION.
- LANDLORD APPROVED ROOFING CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL CUTS THROUGH THE EXISTING ROOF OR TO MAKE ALTERATIONS TO EXISTING OPENINGS, OR CURB FLASHING AT GENERAL CONTRACTOR'S EXPENSE. COORDINATE WITH GENERAL CONTRACTOR.
- CEILING MOUNTED EXHAUST FAN SHALL BE INTERLOCKED WITH WALL MOUNTED THERMOSTAT. EXHAUST FAN SHALL BE ENERGIZED WHEN SPACE TEMPERATURE EXCEEDS 80 DEGREES FAHRENHEIT. FAN SERVES TO PROVIDE TRANSFER AIR ONLY AND SHALL DISCHARGE INTO STOCK ROOM AS INDICATED ON PLANS.

DUCTSOX NOTE:
CONTRACTOR SHALL PROVIDE "DUCTSOX" FABRIC DUCTWORK THROUGHOUT THE SPACE AS SHOWN ON PLAN. (DUCTSOX WILL NOT REPLACE RECTANGULAR DUCT DROPS OR EXHAUST DUCTS). BASIS OF DESIGN SHALL BE "DUCTSOX" BRAND "TUFLEX" SILVER - COMFORT FIBERGLASS NONPOROUS FABRIC WITH "L-VENTS" (AIR OPENINGS) WITH ADJUSTABLE FLOW DEVICES (I.E. AFD'S) AT OPENINGS, AND SKELECORE IHS (INTERNAL HOOP SYSTEM) WITH CABLE SUPPORT. SKELECORE IHS ONLY REQUIRED AS INDICATED WITH PLAN NOTE OR MECHANICAL PLAN. INCLUDE ALL COMPONENTS REQUIRED TO MAKE A COMPLETE SYSTEM AS RECOMMENDED BY DUCTSOX DURING BID PHASE, INCLUDING HANGING STRAPS AND CLIPS, END-CAPS, CONNECTIONS TO METAL DUCTS, ETC. DUCTSOX SHALL BE SIZED PER FACTORY RECOMMENDATIONS TO PROVIDE MINIMUM ARIEL VOLS IN BRANCH DUCTS AS SHOWN HERE. CONFIRM COLOR (SILVER AS BASIS) WITH NIKE PRIOR TO ORDERING. SEE VENDOR LIST ON THIS PROJECT'S TITLE SHEET(S).1) FOR DUCTSOX CONTACT INFORMATION.

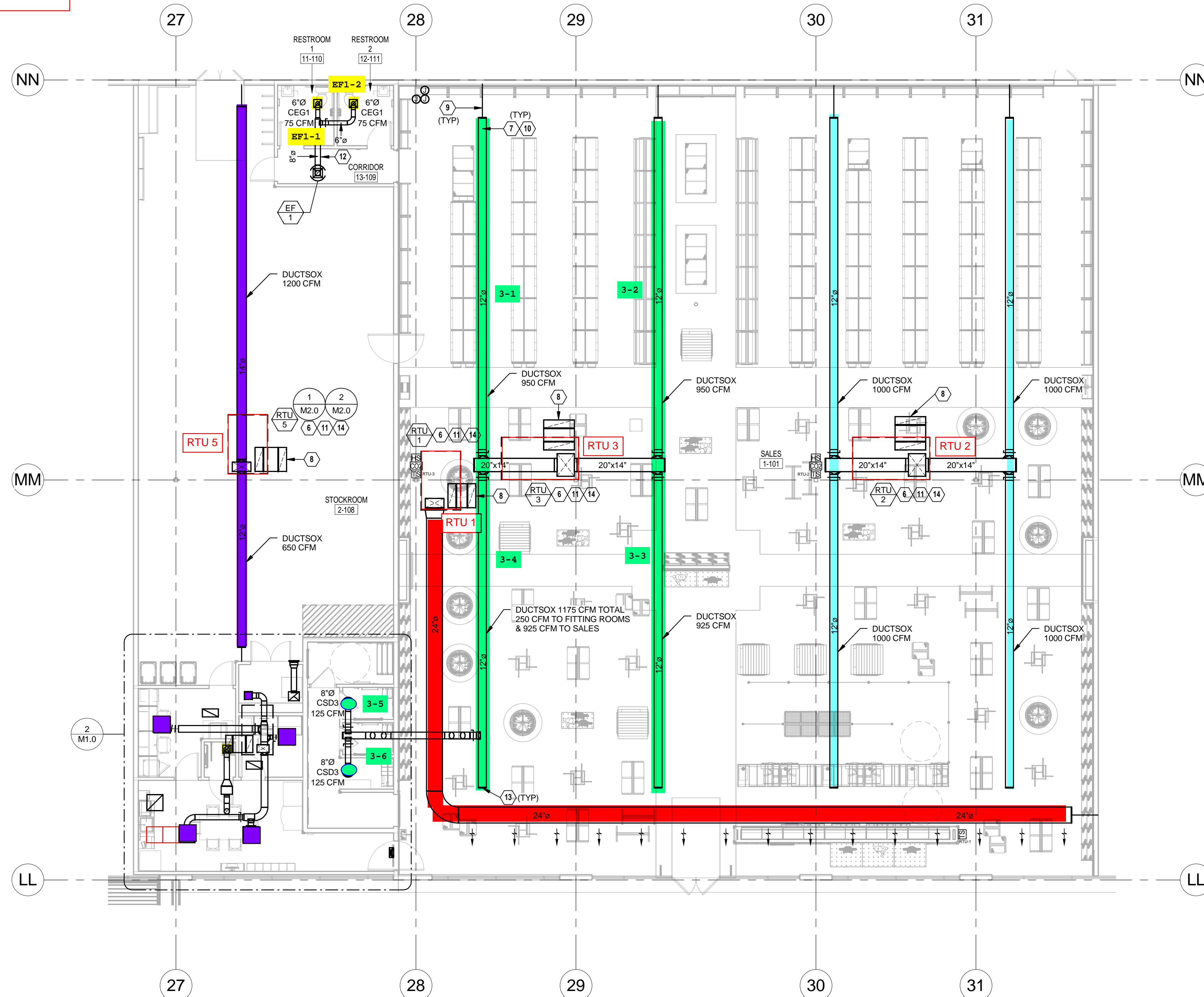
DUCTSOX COORDINATION NOTE:
DURING THE FIRST WEEK OF THE PROJECT, THE GENERAL CONTRACTOR'S SUPERINTENDENT, MECHANICAL SUB-CONTRACTOR, AND A REPRESENTATIVE FROM "DUCTSOX" SHALL MEET AT THE PROJECT SITE FOR A CONFIRMATION OF ALL FIELD DIMENSIONS AND POTENTIAL OBSTRUCTIONS. THIS EVENT MUST PRECEDE THE ORDERING OF ANY MATERIALS FROM "DUCTSOX". CHANGE ORDERS AND EXPEDITING FEES WILL NOT BE APPROVED DUE TO LACK OF ON-SITE COLLABORATION/MEASUREMENT DURING SITE MEETING AT PROJECT COMMENCEMENT.

CHECK AND VERIFY ALL DIMENSIONS IN THE FIELD AND COORDINATE WORK WITH ALL OTHER TRADES. CONTRACTOR SHALL COORDINATE LOCATIONS OF AIR OUTLETS WITH ARCHITECTURAL DRAWINGS. THE DUCTWORK LAYOUT INDICATED ON THESE DRAWINGS IS SCHEMATIC AND SHOWS DESIGNED INTENT ONLY. PRIOR TO FABRICATION AND INSTALLATION OF ANY DUCTWORK THE HVAC CONTRACTOR SHALL HAVE A QUALIFIED EXPERIENCED SKETCHER PREPARE AND SUBMIT SHEET METAL SHOP DRAWINGS. THE SHOP DRAWINGS SHALL TAKE INTO ACCOUNT ALL EXISTING CONDITIONS INCLUDING STRUCTURAL MEMBERS, CONDUITS AND PIPING TO REMAIN. SHOP DRAWINGS SHALL ALSO TAKE INTO ACCOUNT ALL NEW DESIGN CONDITIONS INCLUDING NEW STRUCTURAL MEMBERS, NEW CEILING AND SOFFIT HEIGHTS AND LIGHTING FIXTURES. THE SHEET METAL SHOP DRAWINGS SHALL INDICATE ANY REVISIONS TO THE LAYOUT REQUIRED TO ACCOMMODATE THE EXISTING CONDITIONS AND MAINTAIN THE CEILING HEIGHTS AND CLEARANCES REQUIRED. NOTIFY THE ARCHITECT AND ENGINEER OF ANY LOCATION WHERE THE DESIGN INTENT CAN NOT BE MET PRIOR TO FABRICATION AND INSTALLATION OF DUCTWORK. ANY REVISIONS TO DUCTWORK, EQUIPMENT, CONDUIT OR PIPING REQUIRED BY CONTRACTOR'S FAILURE TO SUBMIT PROPERLY PREPARED SHOP DRAWINGS FOR COORDINATION SHALL BE THE RESPONSIBILITY OF THE HVAC CONTRACTOR AT NO ADDITIONAL COST TO THE CLIENT AND DELAY TO THE PROJECT SCHEDULE.

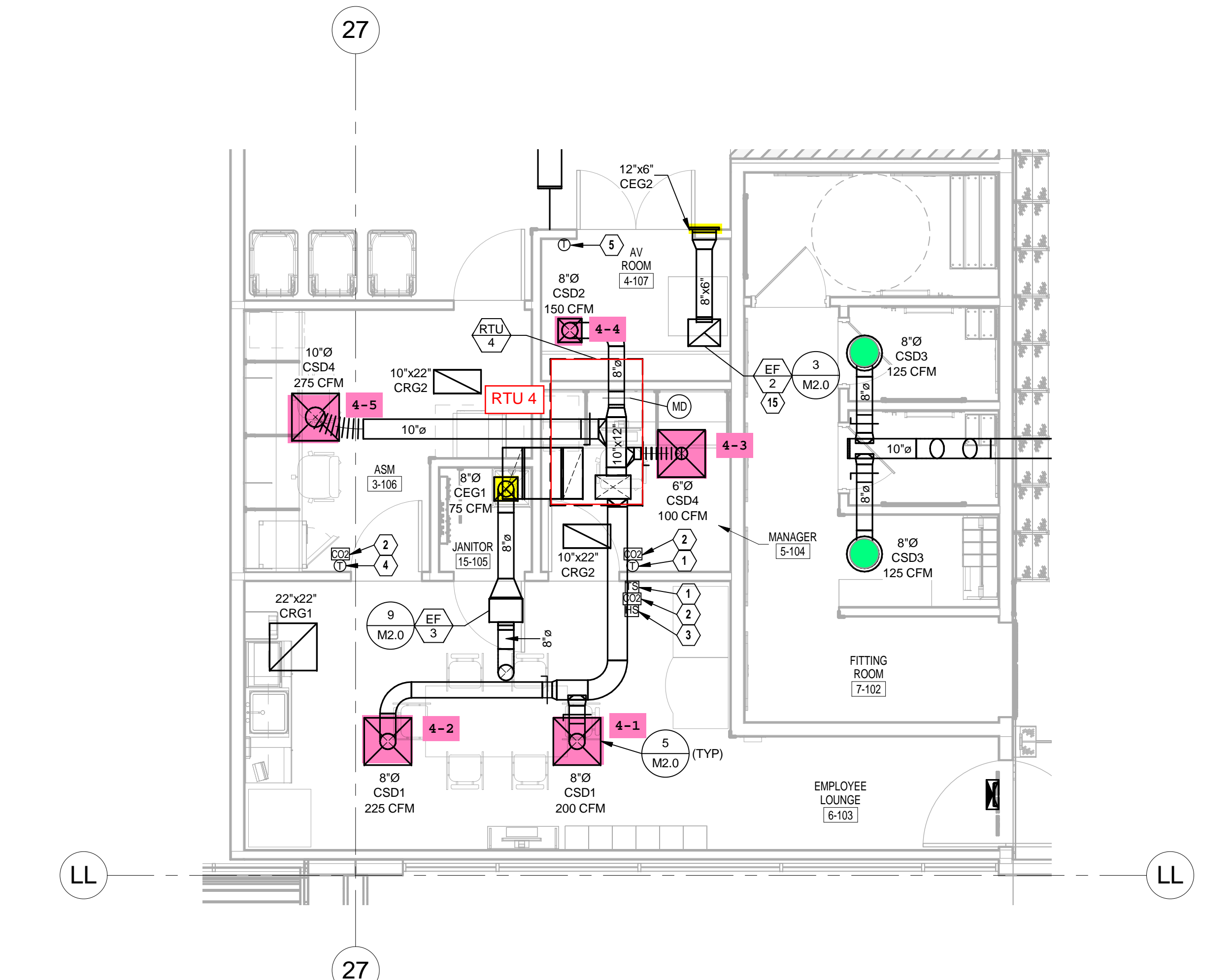
GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PRODUCTION OF COORDINATION DRAWINGS. COORDINATION DRAWINGS SHALL INDICATE PROPOSED LOCATIONS OF PIPING, DUCTWORK, SPRINKLER PIPING, AND LIGHTING, AS WELL AS LOCATIONS OF STRUCTURAL BEAMS AND OTHER RELEVANT STRUCTURAL FEATURES. COORDINATION DRAWINGS SHALL INDICATE HEIGHTS OF ALL DUCTWORK, PIPING, STRUCTURAL BEAMS, AND CEILINGS TO ENSURE INSTALLED EQUIPMENT WILL FIT ABOVE CEILING. GENERAL CONTRACTOR SHALL SUBMIT COORDINATION DRAWINGS TO ARCHITECT AND ENGINEER FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION.

GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING TO ARCHITECT, ENGINEER, LANDLORD, AND BUILDING OFFICIAL/INSPECTOR A FINAL TEST AND BALANCE REPORT PER MECHANICAL SPECIFICATIONS. TEST AND BALANCE REPORT SHALL BE PROVIDED TO ARCHITECT AND ENGINEER PRIOR TO ENGINEER'S FINAL PUNCH AND FINAL BUILDING INSPECTION.

TEMPERATURE CONTROL SYSTEMS USA TO PROVIDE SENSORS AND CONTROLS COMPONENTS AS INDICATED ON PLANS AND NECESSARY TO ACCOMPLISH THE INTENT OF THE DRAWINGS. SEE M3.0 FOR CARRIER CONTACT INFORMATION.



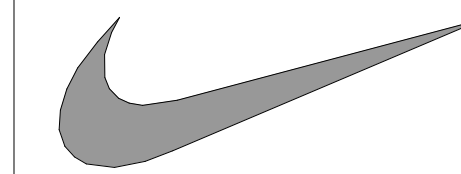
1 MECHANICAL HVAC FLOOR PLAN
1/8" = 1'-0"



2 ENLARGED MECHANICAL HVAC FLOOR PLAN
1/4" = 1'-0"

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NIKE FACTORY STORE HVAC REPLACEMENT.

PEARL, MS

HENDERSON ENGINEERS

ISSUE DATE:
11/26/2024

FOR REFERENCE ONLY

MECHANICAL PLANS

Sheet Number:

M1.0

EXISTING ROOFTOP UNIT SCHEDULE (ELECTRIC HEAT)

MARK	MANUFACTURER	MODEL	HEATING COIL		ELECTRICAL		WEIGHT (LBS)	NOTES
			MIN OUT (MBH)	NOM (KW)	V/PH	M/OC		
RTU-1	CARRIER	50HC-12	117.6	38.2	480/3	70	1500	A-B
RTU-2	CARRIER	50HC-14	133.7	45.9	480/3	80	1910	A-B
RTU-3	CARRIER	50HC-14	133.7	45.9	480/3	80	1910	A-B
RTU-4	CARRIER	50HC-04	27.3	10.6	480/3	20	750	A-B
RTU-5	CARRIER	50HC-07	57.1	19.7	480/3	40	1125	A-B

MODEL NUMBERS AND NOMINAL TONS LISTED SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER, MODEL NUMBERS, OR NOMINAL TONS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND

NOTES:

- A. SCHEDULE IS PROVIDED FOR REFERENCE ONLY. INFORMATION SHOWN IS BASED ON AS-BUILT DRAWINGS AND/OR SITE OBSERVATIONS. CONTRACTORS SHALL BE RESPONSIBLE TO FIELD VERIFY INFORMATION SHOWN AS IT RELATES TO PROVIDING NEW CURBS OR ADAPTER CURBS, STRUCTURAL REINFORCEMENT, ELECTRICAL SYSTEM MODIFICATIONS, OR OTHER SYSTEMS THAT MAY REQUIRE MODIFICATION DUE TO REPLACEMENT OF THE EXISTING EQUIPMENT.
- B. CONTRACTOR TO REMOVE EXISTING CURB ADAPTER AND VERIFY EXISTING ROOF CURB BEFORE ORDERING CURB ADAPTER FOR NEW UNIT IF NEEDED.

ROOFTOP UNIT SCHEDULE (DX COOLING, ELECTRIC HEATING)

MARK	MANUFACTURER	MODEL	NOMINAL TONS	SUPPLY FAN				COOLING COIL						HEATING COIL				MIN O/A CFM	ABS MIN O/A	ELECTRICAL			WEIGHT (LBS)	NOTES					
				CFM	ESP (IN)	BHP	VFO (V/N)	TH (MBH)	SH (MBH)	EAT (°F DB)	LAT (°F WB)	REFR TYPE	MIN EFF (EER)	MIN STAGES	MIN OUT (MBH)	NOM (KW)	EAT (°F DB)			LAT (°F DB)	MIN NO STAGES	V/PH			MCA	MCCP			
RTU-1	CARRIER	50FE-N14B3M6-3WVCO	10	3,500	0.9	2.26	N	119	87	77.4	64.4	54.8	52.8	R-454B	11.2	15.2	2	117.6	38.3	57.8	90	2	900	435	480/3	70	70	965	A-Y
RTU-2	CARRIER	50FE-N14B3M6-3WVCO	12.5	4,000	0.9	3.21	N	145	98	77.4	64.4	55.0	52.0	R-454B	11	15.2	2	133.7	45.9	57.9	90	2	900	435	480/3	80	80	1120	A-Y
RTU-3	CARRIER	50FE-N14B3M6-3WVCO	12.5	4,000	0.9	3.21	N	145	98	77.4	64.4	55.0	52.0	R-454B	11	15.2	2	133.7	45.9	57.9	90	2	900	435	480/3	80	80	1120	A-Y
RTU-4	CARRIER	50FE-B04B3M6-3WVCO	3	950	0.9	0.50	N	34	26	79.9	64.4	55.0	52.2	R-454B	13.4	14	2	27.3	10.6	62.1	90	2	125	40	480/3	20	20	540	A-Y
RTU-5	CARRIER	50FE-N07B3M6-3WVCO	6	1,850	0.9	1.17	N	57	43	46.2	64.4	55.0	43.0	R-454B	11.2	15.5	2	57.1	19.7	60.1	90	2	325	325	480/3	37	40	580	A-Y

MODEL NUMBERS AND NOMINAL TONS LISTED SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER, MODEL NUMBERS, OR NOMINAL TONS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

NOTES:

- A. ROOFTOP UNIT REPLACEMENT IS "LIKE FOR LIKE" UNLESS NOTED OTHERWISE.
- B. EQUIPMENT SIZED FOR 100°F AMBIENT TEMPERATURE.
- C. PROVIDE 2 INCH MERV 13, EFFICIENT FLEATED THROWAWAY AIR FILTERS.
- D. EXISTING FUSED LOCAL DISCONNECT TO REMAIN AND BE REUSED.
- E. STARTERS FOR ALL MOTORS SHALL BE FURNISHED INTEGRAL WITH UNIT.
- F. PROVIDE CONSTANT VOLUME SUPPLY FAN.
- G. PROVIDE FACTORY MOUNTED VARIABLE FREQUENCY DRIVE OR 2-SPEED MOTOR TO FACILITATE STAGED FAN SPEED CONTROL.
- H. PROVIDE SINGLE POINT POWER CONNECTION.
- I. PROVIDE DIFFERENTIAL ENTHALPY TEMPERATURE ECONOMIZER WITH POWERED EXHAUST FAN.
- J. COORDINATE SIZE OF CONDUCTOR TERMINATION LUGS WITH CONDUCTOR SIZES SHOWN ON ELECTRICAL DRAWINGS.
- K. PROVIDE 125 VAC, 20 AMP DUPLEX CONVENIENCE RECEPTACLE MOUNTED TO UNIT READY FOR FIELD WIRING WITH A COVER UL LISTED FOR WET AND DAMPER LOCATIONS WHEN IN USE.
- L. SPECIFIED FAN ESP ACCOUNTS FOR DUCT LOSSES EXTERNAL TO UNIT.
- M. PROVIDE MOTOR HORSEPOWER TO OVERCOME INTERNAL UNIT STATIC PRESSURE DROP PLUS SPECIFIED EXTERNAL STATIC PRESSURE DROP. NOMINAL MOTOR HP SHALL BE NO LARGER THAN THE FIRST AVAILABLE NOMINAL MOTOR SIZE GREATER THAN THE REQUIRED BHP.
- N. ROOF CURB IS EXISTING TO REMAIN.
- O. PROVIDE HOT GAS REHEAT DEHUMIDIFICATION COIL.
- P. SCHEDULED WEIGHT IS THE MAXIMUM ALLOWABLE OPERATING WEIGHT OF THE EQUIPMENT.
- R. COOLING COIL LAT IS LEAVING AIR TEMPERATURE OF COIL.
- S. PROVIDE GUARDS TO PROTECT CONDENSER COIL FROM HAIL OR OTHER DAMAGE.
- T. PROVIDE HEATER TO MEET OR EXCEED SCHEDULED MINIMUM MBH OUTPUT. NOMINAL KW IS BASED ON LISTED MANUFACTURER'S STANDARD PRODUCT. COORDINATE EQUIPMENT POWER SUPPLY WITH ELECTRICAL CONTRACTOR IF DIFFERENT FROM THAT SCHEDULED.
- V. ABS. MIN. O/A IS THE ABSOLUTE MINIMUM OUTSIDE AIR CFM USING VENTILATION RESET OR DEMAND CONTROL VENTILATION.
- X. PROVIDE UNIT WITH FACTORY INSTALLED CARRIER SYSTEM/CONTROLLER WITH SUPPLY AND OUTSIDE AIR TEMPERATURE SENSORS. COORDINATE ALL CONTROLS WITH EMS VENDOR PRIOR TO PURCHASE.
- Y. PROVIDE WITH DUCT SMOKE DETECTOR WIRE HARNESS KIT FOR EMS INTERFACE FOR SYSTEM/UNITS. SMOKE DETECTORS ARE EXISTING TO REMAIN AND SHALL SHUT DOWN UNIT UPON ALARM.

OUTSIDE AIR REQUIREMENTS, IMC-2018 (IP)

SYSTEM DESIGNATION	SYSTEM TAB NAME OR LIST 'SINGLE'	SINGLE ZONE SYSTEMS ONLY		MULTI-ZONE SYSTEMS ONLY		FLOOR AREA SERVED BY SYSTEM (sq ft)	SYSTEM AVERAGED AREABASED OUTDOOR AIR RATE (CFM/SF)	SYSTEM POPULATION (PEOPLE)	SYSTEM AVERAGED PEOPLE-BASED OUTDOOR AIR RATE (CFM/PE)	REQUIRED FLOW (cfm)	REQUIRED DCV (cfm)	DESIGN OR INTAKE FLOW (cfm)	NOTES
		SINGLE ZONE SYSTEM ASSOCIATED VENTILATION ZONE	SINGLE ZONE WORST CASE ZONE AIR DISTRIBUTION EFFECTIVENESS [E]	SYSTEM VENTILATION EFFICIENCY [E]	SYSTEM VENTILATION EFFICIENCY [E]								
RTU 1-3	RTU 1-3	-	-	0.90	0.90	8,683	0.120	130,245	7.50	2,231	N/A	2,250	ALL
RTU 4	RTU 4	-	-	0.81	0.81	527	0.053	14	5.00	121	N/A	125	ALL
RTU 5	RTU 5	-	-	0.98	0.98	2,110	0.120	9	0.00	259	N/A	275	ALL
TOTALS										2,611	0	2,650	

GENERAL NOTES:

- 1. VENTILATION CALCULATIONS BASED ON IMC-2018.
- 2. SYSTEM POPULATIONS BASED ON MAX SEATING AND/OR CODE MAXIMUM VALUES.
- 3. SINGLE ZONE SYSTEMS (Vot = Voz). SYSTEM VENTILATION EFFICIENCY CALCULATION IS NOT REQUIRED FOR SINGLE ZONE SYSTEMS. WORST CASE AIR DISTRIBUTION EFFECTIVENESS BETWEEN HEATING AND COOLING MODES OF OPERATION IS SHOWN IN TABLE.

NIKE FY25 HVAC REPLACEMENT
PEARL, MS
 200 BASS PRO DRIVE #225
 PEARL, MS 39208

FOR REFERENCE ONLY

HENDERSON ENGINEERS
 8345 LENEXA DRIVE, SUITE 300
 LENEXA, KS 66214
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MECHANICAL SCHEDULES

DATE: 11/26/2024
 SCALE: NO SCALE

M

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