



KLS
ARCHITECT

Restaurant Depot / BREWSTER, NY

BREWSTER NY 10509

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DANBURY ROAD (LOT 48) BLOCK 0002)

REVISIONS

#	DATE	TYPE
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FLOOR PLAN -
MECHANICAL

DATE: 9/10/2020

JOB NO. 19230

M1.1
SHEET NO.

1 FLOOR PLAN - MECHANICAL

M1.1 3/32" = 1'-0"

RTU-2, 3, 4, AND 5 SHALL UTILIZE OUTSIDE AIR DEMAND VENTILATION PER ASHRAE 62.1-2007. THE OUTSIDE AIR SHALL MODULATE BASED ON THE CO2 LEVELS IN THE SPACE. THE OUTSIDE AIR DAMPER SHALL MODULATE FROM A MINIMUM OUTSIDE AIRFLOW SETPOINT TO A MAXIMUM OUTSIDE AIRFLOW SETPOINT. REFER TO THE RTU SCHEDULE FOR THESE SETPOINTS. AT THE AMBIENT CO2 LEVEL (400 PPM) THE OUTSIDE AIRFLOW SHALL BE AT THE MINIMUM LISTED IN THE SCHEDULE. WHEN THE CO2 SENSOR READS 1,340 PPM OF CO2 (ADD), THE OUTSIDE AIR DAMPER SHALL BE AT ITS MAXIMUM AIRFLOW SETTING LISTED IN THE RTU SCHEDULE. THE OUTSIDE AIR DAMPER SHALL MODULATE PROPORTIONALLY WHEN THE CO2 LEVEL IS BETWEEN THESE 2 SETPOINTS. THE OUTSIDE AIR DAMPER SHALL NOT FULLY OPEN DUE TO CO2 LEVELS AND SHALL ONLY FULLY OPEN DURING ECONOMIZER CYCLES. CO2 SENSORS SHALL BE PROVIDED AND INSTALLED BY THE HVAC CONTRACTOR.

COMMERCIAL BUILDING APPLICATION NOTES:

- MECHANICAL DESIGN CRITERIA OUTLINED ON MECHANICAL FLOORPLANS, SCHEDULES, AND DETAILS.
- REFER TO WATER HEATER SCHEDULE ON SHEET P7.1 FOR WATER HEATER TYPES, SIZES, AND EFFICIENCIES.
- RTUS ARE PROVIDED WITH AIR-SIDE ECONOMIZERS. REFER TO RTU SCHEDULE ON M7.1. REFER TO SPECIFICATION SECTION 237740-2.9.
- A BUILDING AUTOMATION SYSTEM IS BEING PROVIDED THAT WILL RUN EQUIPMENT BASED ON THE TIME OF DAY, BUILDING OWNER INPUT, ETC.
- REFER TO FAN SCHEDULE ON SHEET M7.1 FOR FAN HORSEPOWER INFORMATION. FAN CONTROLS PROVIDED WITH THE BUILDING AUTOMATION SYSTEM.
- DUCT SEALING, DUCT INSULATION, AND PIPE INSULATION SPECIFICATIONS MAY BE FOUND IN SPECIFICATION SECTIONS 238400 AND 224000. DUCT AND PIPE LOCATIONS MAY BE FOUND ON DRAWING FLOORPLANS.
- ALL PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE APPLICABLE ENERGY CODES.

GENERAL NOTES
(APPLIES TO ALL SHEETS)

- EXACT LOCATION OF ALL AIR DISTRIBUTION DEVICES SHALL BE COORDINATED WITH THE ARCHITECTURAL RCP.
- COORDINATE THE EXACT LOCATION OF ALL THERMOSTATS WITH FINAL FURNITURE LAYOUT, EQUIPMENT LAYOUT, ARCH AND OWNERS REPRESENTATIVE. NEW T'STATS SHALL MATCH BASE BUILDING T'STATS IN EVERY RESPECT. CONTRACTOR SHALL TIE NEW T'STATS INTO BUILDING EMS AND UPDATE IT ACCORDINGLY.
- PROVIDE ALL MANUFACTURER AND NEC REQUIRED CLEARANCE FOR ALL EQUIPMENT.
- ALL THERMOSTATS LOCATED ON EXTERIOR WALLS SHALL BE PROVIDED WITH INSULATED BACKING.
- PROVIDE WHITE STICKERS WITH 4" RED LETTERS NOTING EACH EQUIPMENT TAG NAME (RTU-1, EF-1, ETC) ON EQUIPMENT AT ROOF AND ON DUCTWORK BELOW ROOF. LABELS ON DUCTWORK SHALL BE PLACED TO THEY ARE VISIBLE FROM THE FRONT OFFICE AREA. LABELS ON ROOF TOP EQUIPMENT SHALL BE PLACED SO THEY ARE VISIBLE FROM THE ROOF HATCH LOCATION.
- REMOVE ALL STICKERS FROM ALL EXPOSED DUCTWORK.
- CLOSELY COORDINATE ROUTING OF ALL DUCTWORK WITH ESFR SPRINKLER LAYOUT.
- ALL CONTROLS SHALL BE INSTALLED BY A RESTAURANT DEPOT APPROVED CONTROLS CONTRACTOR.

KEY NOTES
(APPLIES THIS SHEET ONLY)

- CARBON MONOXIDE SENSOR SHALL BE FIRST ALERT CO615 OR APPROVED EQUAL. SENSOR SHALL COMPLY WITH UL 2034 AND HAVE BATTERY BACKUP. PROVIDE WITH POWER OUTLET. ENSURE THE INSTALLATION DATE OF EACH SENSOR IS CLEARLY MARKED.
- MOUNT DUCTWORK TIGHT TO STRUCTURE AND ROUTE TO THE EXTERIOR WALL.
- ROUTE DUCT DOWN TO OWNER PROVIDED DRUM LOUVER SUPPLY BOX. PROVIDE ALL REQUIRED TRANSITIONS FOR A COMPLETE INSTALLATION. DRUM LOUVER BOX SHALL BE 4 WAY THROW AND SHALL RATED FOR 7,000 CFM.
- ALL DUCT FROM RTU-1 SHALL BE INTERNALLY LINED.
- DUCTS TO RUN BELOW DUST CAP UNTIL REACHING 8X8 UP
- REFER TO 6/M7.2 FOR SLAB VENT FAN INSTALLATION DETAILS.
- PROVIDE AND INSTALL EXHAUST FAN IN RESTROOM AND JANITOR CLOSET CEILING. ROUTE 8" EXHAUST DUCT FROM EACH FAN UP FROM CEILING, AND TIE BOTH INTO 8X8 DUCT THROUGH ROOF. PROVIDE CURB BACK DRAFT DAMPER AND ROOF CAP GREENCHECK RCC-7 OR APPROVED EQUAL. REFER TO 2/M7.2.
- INSTALL AS HIGH AS POSSIBLE. ROUTE RS&L LINES TO CONDENSING UNIT LOCATED ON OFFICE CAP. SIZE PER MANUFACTURERS RECOMMENDATIONS. PROVIDE UNIT WITH A CONDENSATE PUMP AND ROUTE 1" CONDENSATE TO HUB DRAIN IN THE COOLER. MOUNT CU-1 ON TOP OF OFFICE CAP.
- PROVIDE EXHAUST DUCT FROM FAN DOWN TO THE ROOF LEVEL. THE EDGE OF THE DUCT SHALL BE EVEN WITH THE ROOF. REFER TO 7/M7.2.
- THERMOSTATS, DEWPOINT SENSOR, ETC SHALL BE PROVIDED BY THE REFRIGERATION EQUIPMENT MANUFACTURER AND INSTALLED AND WIRED BY THE EMS CONTRACTOR. CO2 SENSORS INSTALLED BY HVAC CONTRACTOR.
- INSTALL ADDRESSABLE SMOKE DETECTORS IN SUPPLY AND RETURN DUCTWORK SUPPLIED BY FIRE ALARM CO.
- COORDINATE THE FINAL LOCATION OF ALL FANS, DUCTS, LOUVERS, ETC IN THE ELECTRIC ROOM WITH DIV 16. DO NOT VIOLATE ANY REQUIRED NEC CLEARANCES.
- INSTALL FAN PER MANUFACTURERS RECOMMENDATIONS. COORDINATE FINAL LOCATIONS OF FANS WITH OWNERS REPRESENTATIVE AND ARCHITECT. FAN TO BE CENTERED BETWEEN 4 SPRINKLER HEADS. PROVIDE CONTROL SUCH THAT FAN IS SHUTDOWN WITH ENGAGEMENT OF FIRE ALARM.
- PROVIDE A FIXED BLADE STORM PROOF LOUVER WITH BIRD SCREEN WITH DIMENSIONS AS INDICATED. COORDINATE FINAL SIZING AND LOCATION WITH ARCHITECT AND ELECTRICAL. COORDINATE FINISH WITH ARCHITECT. INTERLOCK MOD WITH FAN SUCH THAT MOD IS FULLY OPEN PRIOR TO FAN ENERGIZING.
- BASEBOARD HEATER SHALL BE LOCATED UNDER THE COUNTER. COORDINATE FINAL LOCATION WITH ARCH. MAINTAIN ALL REQUIRED CLEARANCES.
- PROVIDE UNIT HEATER WITH COMBUSTION AIR INTAKE AND VENT PIPE. ROUTE FROM THE UNIT UP TO THE CONCENTRIC ADAPTER BOX AND THEN ROUTE THE CONCENTRIC PIPE UP THROUGH ROOF. SIZE PER MANUFACTURER'S RECOMMENDATIONS. REFER TO 10/M7.2.
- PROVIDE A 12X12 TAP WITH A MANUAL DAMPER OPEN TO THE STORE TO RETURN THE AIR FROM THE NORTH OFFICES.
- PROVIDE RTU WITH ROOF SCREENS ON THE SIDES OF THE RTUS INDICATED. REFER TO RTU SCHEDULE FOR MORE INFORMATION.