



GRIT CLASSIFIER BUILDING HVAC ROOF PLAN
SCALE: 3/8"=1'-0"

GENERAL HVAC NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT APPLICABLE EDITION OF THE INTERNATIONAL BUILDING CODE AS ADOPTED AND IMPLEMENTED BY THE STATE OF NEW JERSEY UNIFORM CONSTRUCTION CODE. ALSO ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST CURRENT EDITION OF THE INTERNATIONAL MECHANICAL CODE AS ADOPTED AND IMPLEMENTED BY THE STATE OF NEW JERSEY UNIFORM CONSTRUCTION CODE.
2. OBTAIN ALL REQUIRED APPROVALS BEFORE STARTING INSTALLATION.
3. ALL PENETRATIONS IN SLABS AND WALLS SHALL BE SEALED AND MADE WATERTIGHT.
4. REFER TO STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS FOR DETAILS ON OPENINGS IN WALLS AND ROOF.
5. PROVIDE ALL NECESSARY CONTROL COMPONENTS, RELAYS, TRANSFORMERS AND WIRING TO MEET SEQUENCE OF OPERATIONS INDICATED ON DRAWING.
6. CONTRACTOR TO PROVIDE ALL PIPING AND EQUIPMENT SUPPORTS.

NOTES:

1. PROVIDE SPECIFIED MANUFACTURER OR EQUIVALENT.
2. PROVIDE AND INSTALL ROOF CURB IN ACCORDANCE WITH STRUCTURAL/ARCHITECTURAL DETAILS.
3. PROVIDE AND INSTALL MOUNTING BRACKET AS REQUIRED TO INSTALL FRAMING.
4. PROVIDE BIRD SCREEN IN REMOVABLE FRAME.
5. CONTRACTOR TO INSTALL DUCT, SCREENS, ROOF CURB AND REQUIRED FITTINGS FOR EF-1 AND SF-1.
6. PROVIDE AND INSTALL WALL MOUNTED THERMOSTAT, WHERE INDICATED IN THE PLANS.
7. CONTRACTOR TO PROVIDE WALL MOUNTING BRACKETS AND MISCELLANEOUS STRUCTURE STEEL AS REQUIRED TO SUPPORT UNIT HEATERS. PROVIDE CLEARANCES AS RECOMMENDED BY THE MANUFACTURER.
8. ALL SUPPLY DIFFUSERS SHALL HAVE INTEGRAL ADJUSTABLE DAMPER.
9. ALL EXHAUST GRILL/REGISTER SHALL HAVE INTEGRAL ADJUSTABLE DAMPER.
10. ALL HVAC DUCT, DAMPERS, GRILLS DIFFUSERS, AND REGISTERS SHALL BE ALUMINUM CONSTRUCTION.
11. ALL SUPPLY AIR DIFFUSERS SHALL BE ALUMINUM CONSTRUCTION WITH INTEGRAL DAMPER, 3-WAY PATTERN. DIFFUSERS SHALL BE MODEL 250-AA OR EQUAL.
12. ALL RETURN GRILLS SHALL BE ALUMINUM CONSTRUCTION WITH INTEGRAL DAMPER. RETURN GRILLES SHALL BE TITUS 350 SERIES.
13. CONTRACTOR SHALL DESIGN, PROVIDE AND INSTALL ALL PIPE/DUCT SUPPORTS TO SUPPORT THE PIPES/DUCT AND EQUIPMENT SHOWN. THE DESIGN OF ALL PIPE SUPPORTS SHALL BE BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY, WHERE A PIPE/DUCT SUPPORT IS SHOWN ON THE PLAN, THE CONTRACTOR SHALL DESIGN, PROVIDE AND INSTALL A PIPE/DUCT SUPPORT AT THE LOCATION SHOWN AND IN THE ORIENTATION SHOWN. SEE PLANS AND SPECIFICATION FOR DESIGN AND OTHER PIPE/DUCT SUPPORT REQUIREMENTS. CONTRACTOR SHALL SUBMIT FOR REVIEW, PIPE SUPPORTS CALCULATIONS AND SHOP DRAWINGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY. MATERIALS SHALL NOT BE FABRICATED UNTIL THE ENGINEER'S APPROVAL HAS BEEN OBTAINED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS PRIOR TO ORDERING ANY EQUIPMENT. NO ALLOWANCES WILL BE MADE BY THE OWNER FOR ERRORS RELATED TO THE CONTRACTOR NOT VERIFYING AND CHECKING THE DIMENSIONS AND ELEVATIONS IN THE FIELD.

SEQUENCE OF OPERATIONS:

1. OPERATION OF SUPPLY FANS (SF-1) AND EXHAUST FANS (EF-1) SHALL BE USER SELECTABLE BETWEEN HAND/OFF/AUTO SELECTOR SWITCH AND START, STOP PUSH BUTTONS. SWITCHES, PUSHBUTTONS, RUN LIGHTS SHALL BE INSTALLED ON WALL MOUNTED, NEMA 4, LOCAL CONTROL PANEL.
2. OPERATION OF UNIT HEATERS (EUH-1), (EUH-2), (EUH-3) SHALL EACH BE USER SELECTABLE BETWEEN HAND/OFF/AUTO. IN AUTO, THE HEATERS (EUH-1), (EUH-2), AND (EUH-3) SHALL BE SET TO MAINTAIN USER ADJUSTABLE TEMPERATURE OF 50°F. EACH UNIT HEATER SHALL INCLUDE INTEGRAL THERMOSTAT.
3. SUPPLY FAN (SF-1) AND EXHAUST FAN (EF-1) SHALL OPERATE CONTINUOUSLY.
4. OPERATION OF INFRARED HEATERS EUH-4 AND EUH-5 SHALL BE USER SELECTABLE HAND/OFF SELECTOR SWITCH WITH GREEN "ON" LIGHT INDICATION FOR EACH HEATER.
5. LOCAL VISUAL AND AUDIBLE ALARMS SHALL BE PROVIDED UPON EF-1 OR SF-1 FAILURE. ALARM STATUS CONDITION SHALL ABE SENT TO SCADA.
6. THERMOSTAT SHALL BE SIZED FOR 120VAC AND BE CONNECTED TO THE STARTER CONTROL CIRCUITS FOR AUTO-MANUAL.
7. CONTRACTOR TO PROVIDE AND INSTALL ALL CONTROLS AND WIRING AS REQUIRED FOR OPERATION OF HVAC/VENTILATION SYSTEM.

EXHAUST FAN SCHEDULE EF #											
EQUIPMENT TAG	CAPACITY	HP	FAN RPM	DRIVE	SERVICE	MOTOR RPM	V/ø/HZ	MODEL MANUFACTURER	MOUNTING	EXHAUST DAMPER MANUFACTURER-MODEL/SIZE/ACTUATOR TYPE	NOTES
EF-1	1210 CFM @ 0.40" W.C.	1/2	936	BELT	CLASSIFIER ROOM	1725	460/3/60 EXPLOSION PROOF-SE	150C4B ACE-B COOK	ROOF CURB COOK RCG 22	COOK - BD-18 GRAVITY DAMPER	1,2,3,4,5,7

SUPPLY FAN SCHEDULE EF #											
EQUIPMENT TAG	CAPACITY	HP	FAN RPM	DRIVE	SERVICE	MOTOR RPM	V/ø/HZ	MODEL MANUFACTURER	MOUNTING	SUPPLY DAMPER/WEATHER HOOD MANUFACTURER-MODEL/SIZE/ACTUATOR TYPE	NOTES
SF-1	1100 SCFM @ 0.25" W.C.	3/4	1278	BELT ARRANGEMENT 9	CLASSIFIER ROOM	1725	460/3/60 EXPLOSION PROOF-SE 1.5 SF	120 QMXS COOK CLASS 1, DIV. 1	ROOF CURB RCG 22-13.5H		1,2,3,4,5

<p>APPROVED: <i>[Signature]</i> Richard A. Alaimo PROFESSIONAL ENGINEER NEW JERSEY LICENSE NO. 13195</p>	<table border="1"> <tr><th>REVISIONS</th><th>DATE</th><th>BY</th></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	REVISIONS	DATE	BY													 RICHARD A. ALAIMO ENGINEERING COMPANY Consulting Engineers NJDCA 24GA27988800 200 HIGH STREET MOUNT HOLLY, N.J. 2 MARKET STREET PATERSON, N.J.	GRIT CHAMBER UPGRADE GRIT CLASSIFIER BUILDING HVAC ROOF PLAN SCALE: AS NOTED	CLIENT: WOODBIDGE TOWNSHIP PROJECT LOCATION: WOODBIDGE TOWNSHIP MIDDLESEX COUNTY NEW JERSEY PROJECT NO.: B-0726-0023-000 CONTRACT NO.: 1230	DATE: APRIL 2017 DESIGNED BY: LMG DRAWN BY: LMG CHECKED BY: DEPT. HEAD: 	SHEET H2 FILE NO.:
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