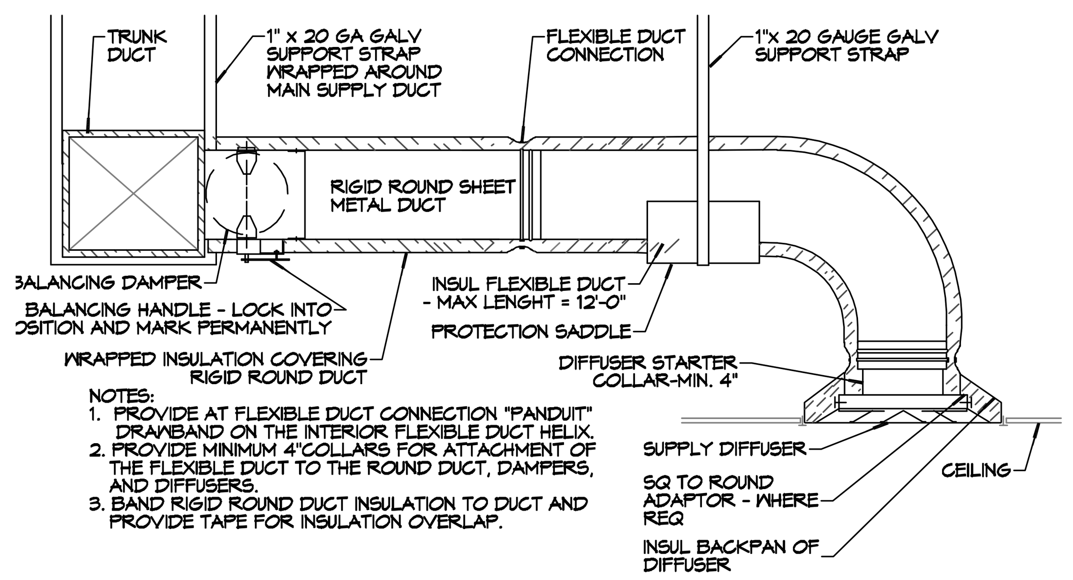
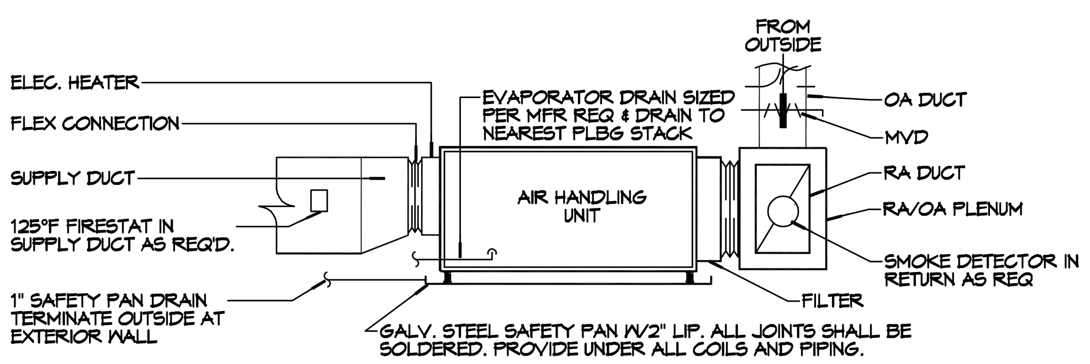
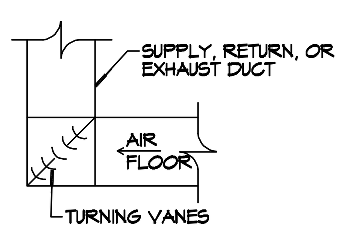


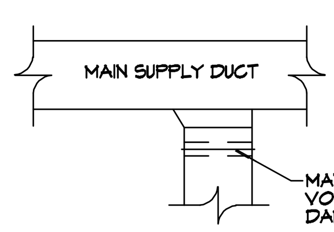
F DIFFUSER CONNECTION DETAIL - FLEX DUCT



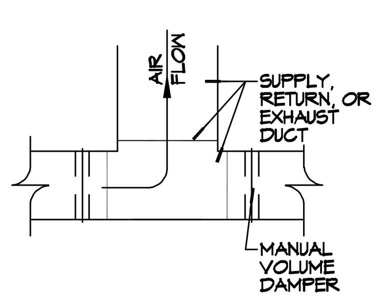
E TYPICAL HORIZONTAL AHU DETAIL



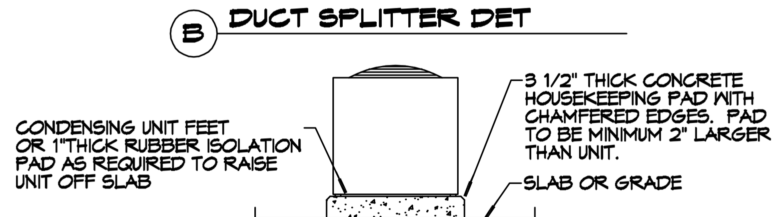
D SQUARE ELBOW DETAIL



C SUPPLY DUCT TAKE-OFF DETAIL



B DUCT SPLITTER DET



A CONDENSING UNIT MOUNT

DETAILS
SCALE: N.T.S.

A/C SCHEDULE

AIR HANDLER													HEAT PUMP					
TAG	TRANE MODEL NO.	NOMINAL TONS	TOTAL CFM	OA CFM	COOLING TMBH	COOLING SMBH	Motor HP	ESP (" WC)	HEAT KW	POWER VAC	POWER PH	POWER MCA	TAG	TRANE MODEL NO.	POWER VAC	POWER PH	POWER MCA	REMARKS
AHU-1	TWE09044A	7.5	3000	600	90	74.1	2	0.6	9.96	460	3	18	HP-1	TWA09044A	460	3	18	1, 2, 3, 4
AHU-2	TWE09044A	7.5	3040	600	90	75.1	2	0.5	9.96	460	3	18	HP-2	TWA09044A	460	3	18	1, 2, 3, 4

NOTES:

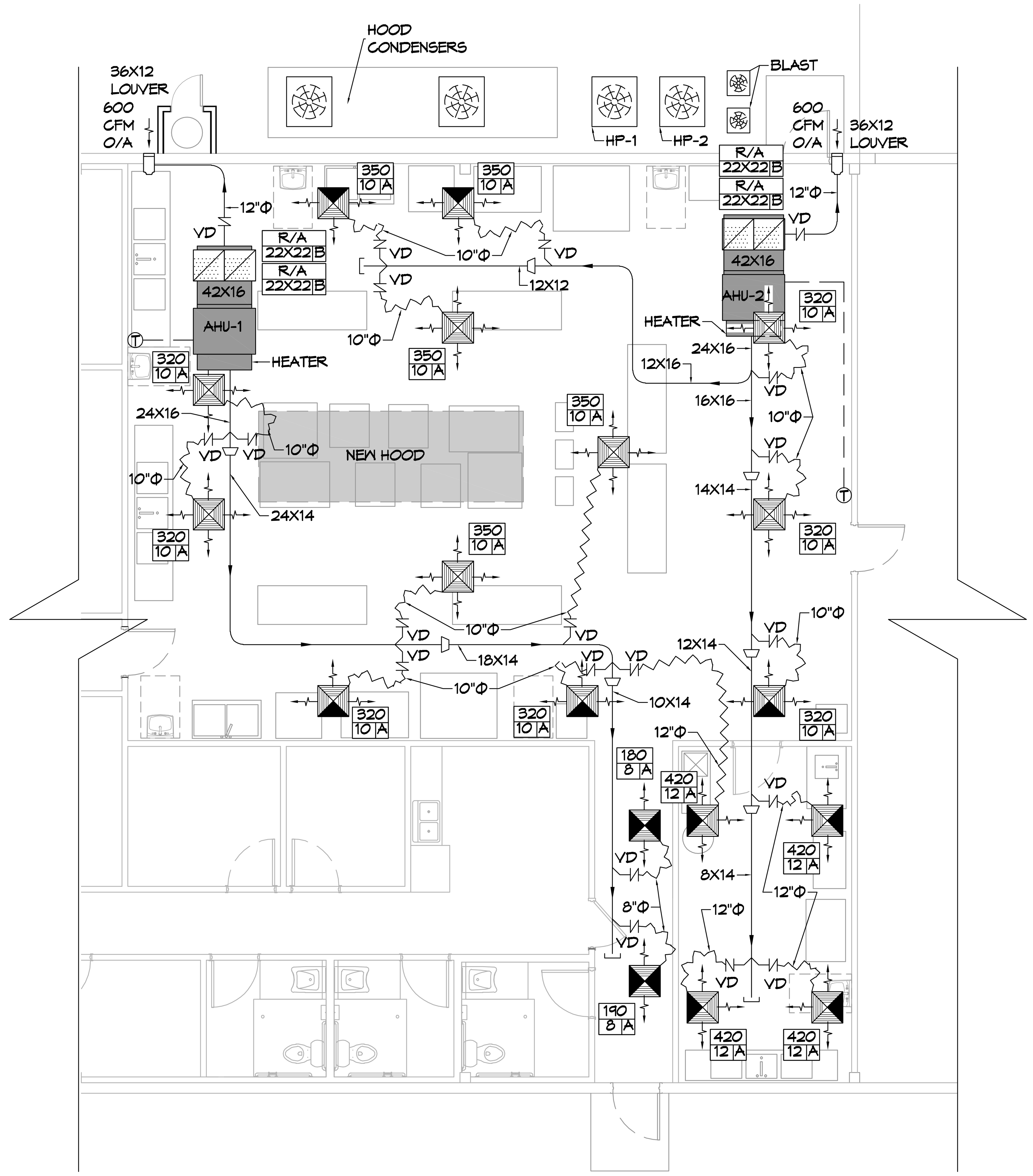
1. Provide inlet filter box, single point power connection, expansion valve, crankcase heat, time delay relay, condensate overflow switch & programmable 7/24 thermostat with lockable cover.
2. Cooling capacities to be rated in accordance with AHRI standard 210/290 for ASHRAE standard design weather conditions in New Orleans, LA.
3. Install units in accordance with manufacturer's recommendations.
4. Provide new filters after commissioning and final acceptance.

DIFFUSER SCHEDULE

TAG	SERVICE	NECK SIZE	DESCRIPTION	REMARKS
A	Supply Air	Ref. Plan	24"x 24" Perforated Ceiling Diffuser, Metalaire 7500	1, 2, 3
D	Return Air	Ref. Plan	24" X 24" Perforated Return, Metalaire 7500R	1, 2, 3

Notes:

1. Seal perimeter of diffusers/grilles to prevent moisture migration from attic space
2. Insulate backpanel to prevent condensation (R-6, minimum).
3. Coordinate with owner / architect for color and finish



MECHANICAL PLAN
SCALE: 3/16"= 1'-0"

GENERAL HVAC NOTES

1. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL WRAPED WITH FIBROUS GLASS DUCT WRAP WITH FSK VAPOR BARRIER, MIN R-6. INSTALLED PER SMACNA STANDARDS. DUCT WORK IMMEDIATELY DOWNSTREAM FROM RTU SHALL BE LINED FOR SOUND ATTENUATION.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
3. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
4. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
5. IN ALL SYSTEMS OVER 2000 CFM AND LESS THAN 15,000 CFM, SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72E IN THE RETURN DUCT DOWNSTREAM OF THE AIR HANDLING UNIT AND ALL FILTERS TO AUTOMATICALLY STOP THE FAN.
6. PROVIDE UL LISTED 125 'F' FIRESTAT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
7. PROVIDE UL RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES AND EXHAUST FANS.
8. CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
9. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
10. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
11. EXHAUST FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(S). PROVIDE BACK DRAFT DAMPER.
12. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
13. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS AT THE REGISTER.
14. LOCATE OUTDOOR UNITS AS SHOWN ON ARCHITECTURAL DRAWINGS.
15. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
16. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
17. ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CAULKED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E8-14).
18. ALL MECHANICAL SYMBOLS ARE DRAWN DIAGRAMMATICALLY, CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC.
19. FLEXIBLE DUCTWORK LENGTH NOT TO EXCEED 12'-0". SUPPORT FLEX DUCT TO PREVENT SAGGING
20. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
21. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
22. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL AHJ'S. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE, WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.
23. FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING.
24. PROVIDE BIRD SCREENS AT ALL EXTERIOR MECHANICAL PENETRATIONS.
25. COORDINATE WALL MOUNTED THERMOSTAT LOCATIONS WITH ALL OWNER FURNISHED ITEMS EITHER WALL MOUNTED OR FLOOR MOUNTED AGAINST PARTITIONS. REFER TO ARCHITECTURAL DRAWINGS.
26. SEE ROOF PLAN FOR ALL ROOF PENETRATIONS.
27. PROVIDE MIN 18 GA GALVANIZED SHEET METAL TO BLANK-OFF GABLE VENTS WHERE INTAKE/EXHAUST DUCTS OCCUR.

MECHANICAL LEGEND

24"X24" 4-WAY SUPPLY AIR GRILLE

24"X24" 3-WAY SUPPLY AIR GRILLE

24"X24" 2-WAY SUPPLY AIR GRILLE

24X24 RETURN AIR FILTER GRILLE

THERMOSTAT

DAMPER CONTROL (V.D)

ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN. R-6. DUCT SIZE AS FOLLOWS:
250 CFM TO 350 CFM = 9"
200 CFM TO 250 CFM = 8"
150 CFM TO 200 CFM = 7"
100 CFM TO 150 CFM = 6

CFM	
NECK SIZE	MARK

KEY PLAN
SCALE: 1/32"=1'-0"

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DESCRIPTION DATE

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HEALTHY SCHOOL FOOD COLLABORATIVE
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JOB No: 2449 DATE: 11-29-2021
DRAWN BY: CKD CHECKED BY: JMS

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SHEET TITLE:
MECHANICAL PLAN

DRAWING NUMBER:
M101

SHEET No: 6 of 9