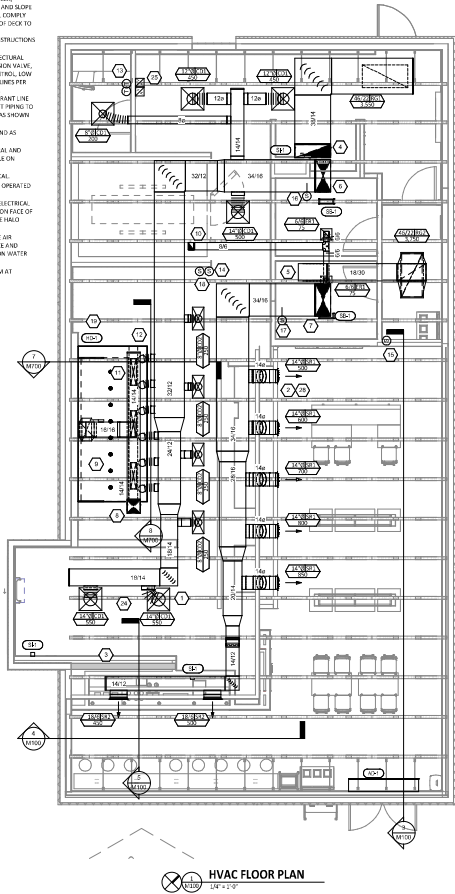
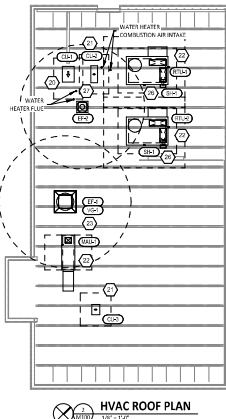
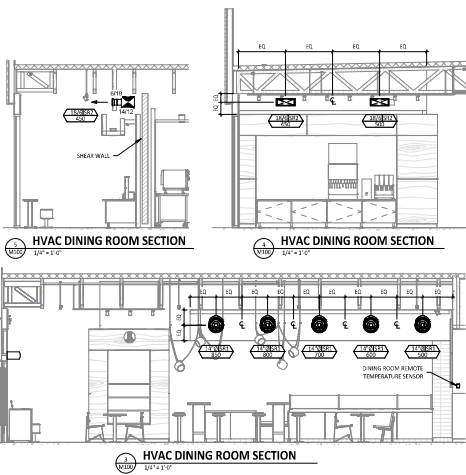


HVAC PLAN NOTES

1. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING MOUNTED EQUIPMENT LOCATION. TYPICAL.
2. PAINT DUCTWORK VISIBLE THROUGH DINING ROOM SUPPLY REGISTERS BLACK. TYPICAL.
3. PENETRATIONS THROUGH SHEAR WALLS SHALL BE LIMITED TO 10" DIAMETER IN A GROUP OF PENETRATIONS ALL CONTAINED WITHIN 2' DIAMETER. IF LARGER PENETRATIONS OR GROUPS OF PENETRATIONS ARE REQUIRED, COORDINATE WITH STRUCTURAL ENGINEER FOR APPROPRIATE BRACING. SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATION.
4. 36" DIA DUCT UP FOR TRANSITION TO RTU-1 RETURN CONNECTION IN ROOF CURB.
5. 36" DIA DUCT UP FOR TRANSITION TO RTU-2 RETURN CONNECTION IN ROOF CURB.
6. 36" DIA DUCT UP FROM BUILDING SUPPLY THROUGH ROOF TRANSITION TO RTU-1 SUPPLY CONNECTION IN ROOF CURB. RTU-1 SHALL HAVE AN INTEGRAL SMOKE DETECTOR MOUNTED IN THE SUPPLY AIR STREAM, INTERLOCK SMOKE DETECTOR TO RTU-1 OPERATION.
7. 36" DIA DUCT UP FROM BUILDING SUPPLY THROUGH 2 SUPPLY CONNECTION, TRANSITION IN ROOF CURB. RTU-2 SHALL HAVE AN INTEGRAL SMOKE DETECTOR MOUNTED IN THE SUPPLY AIR STREAM, INTERLOCK SMOKE DETECTOR TO RTU-2 OPERATION.
8. 36" DIA DUCT UP THROUGH ROOF TRANSITION TO WALL-SUPPLY CONNECTION IN ROOF CURB. PROVIDE SMOKE DETECTOR TO RTU-2 OPERATION.
9. 36" DIA DUCT UP FROM HOOD THROUGH ROOF TO AT A COMPLIANT WITH NFPA 96, PROVIDE BUSHING ABOVE WITH AN INTEGRAL SMOKE DETECTOR ABOVE OR GREASE DUCT.
10. 36" DIA DUCT UP THROUGH ROOF TO RTU-2.
11. 36" DIA DUCT DOWN TO MAKEUP AIR SUPPLY CONNECTION, TRANSITION ON TO SUPPLY PLenum OPENING SEE TYPICAL CAP UNLESS DUCT CONNECTIONS.
12. 24" DIA DUCT DOWN TO MAKEUP AIR SUPPLY CONNECTION, TRANSITION TO SUPPLY PLenum OPENING SEE TYPICAL CAP UNLESS DUCT CONNECTIONS.
13. INSTALL EXHAUST THERMOSTATS FURNISHED BY TRANE FOR RTU-1 AND RTU-2 AT THIS LOCATION (SEE REF. COORDINATE WITH ELECTRICAL ENGINEERING IN THIS AREA, PROVIDE WIRING AS SHOWN).
14. INSTALL EXHAUST FAN ON ROOF MOUNTED BY TRANE FOR RTU-1 AT THIS LOCATION (SEE REF. COORDINATE WITH ELECTRICAL ENGINEERING IN THIS AREA, PROVIDE WIRING AS SHOWN).
15. INSTALL EXHAUST FAN ON ROOF MOUNTED BY TRANE FOR RTU-2 AT THIS LOCATION (SEE REF. COORDINATE WITH ELECTRICAL ENGINEERING IN THIS AREA, PROVIDE WIRING AS SHOWN).
16. INSTALL EXHAUST SUPPLY FAN FURNISHED BY TRANE FOR RTU-1 IN THE SUPPLY DUCTWORK (UPSTREAM FROM THE FIRST BRANCH CONNECTION, PROVIDE WIRING AS SHOWN IN DETAIL REF 17).
17. INSTALL EXHAUST SUPPLY FAN FURNISHED BY TRANE FOR RTU-2 IN THE SUPPLY DUCTWORK (UPSTREAM FROM THE FIRST BRANCH CONNECTION, PROVIDE WIRING AS SHOWN IN DETAIL REF 17).
18. INSTALL REMOTE TEMPERATURE SENSORS FOR HOODS AT THIS LOCATION (SEE REF. COORDINATE LOCATION WITH EQUIPMENT, PROVIDE CABLE TO TEMPERATURE SENSORS THROUGH CEILING).
19. HOOD EXHAUST CONTROL FAN: PROVIDE INSTRUCTIONS AND AS DETAIL IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL HOODS ACCORDING TO THE REQUIREMENTS OF THIS STATE, IN COMPLIANCE WITH THE BUILDING CODE, AND ALL APPLICABLE HAVING JURISDICTION. HOOD SHALL HAVE AN INTEGRAL DUCT CLEANING TEMPERATURE SENSORS TO AUTOMATICALLY SHUTTER THE HOODS AND MARKER AIR FANS IF COOKING TEMPERATURES ARE DETECTED. EXHAUST DUCT SYSTEM TO BE VALUED OR FACTORY MANUFACTURED WATER AND AIR TIGHT. INSTALL CLEANERS FOR COOK AND GAS SHOWING INSTALL HOOD PER DETAILS 2, 4, AND 5 AND 700. CONTRACTOR SHALL PROVIDE AN INDEPENDENT TESTING AGENCY FOR TESTING THE INTEGRITY OF THE GREASE DUCT SYSTEM.

HVAC PLAN NOTES

20. INSTALL REMOTE CONDENSING UNIT FOR WALK-IN COOLER ON ROOF AS DETAIL IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SAFETY VALVE, TEMPERATURE CONTROL, SAFETY GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROL, AND WATERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. INSTALL ON SLOPE, COMPLY WITH APPLICABLE STANDARDS. INSTALL THE REFRIGERANT LINE SET UNDER THE ROOF DECK TO WITHIN 2' OF THE CONDENSING UNIT. CUT A 1/2" HOLE IN WALK-IN COOLER ROOF FOR REFRIGERANT LINE SET AND 3/4" FOR THE CONDENSATE PIPING. INSTALLATION INSTRUCTIONS AFTER LINES SET IS INSTALLED.
21. INSTALL REMOTE CONDENSING UNIT FOR MACHINE ON ROOF AS DETAIL IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SAFETY VALVE, TEMPERATURE CONTROL, SAFETY GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROL, AND WATERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. INSTALL ON SLOPE, COMPLY WITH APPLICABLE STANDARDS. INSTALL THE REFRIGERANT LINE SET UNDER THE ROOF DECK TO WITHIN 2' OF THE REMOTE CONDENSER. IF REFRIGERANT PIPING TO ICE MAKER IS REQUIRED TO PENETRATE CONCRETE WITH A FINISHED FLOOR FINISH AS SHOWN IN THE ARCHITECTURAL DRAWINGS.
22. INSTALL ROOFER FOR EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAIL IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
23. INSTALL EXHAUST FAN FOR 1" FIRE RATED S/W ROOF AS DETAIL IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL GREASE VERGULAND SYSTEM FURNISHED BY CAPITOLE ON EXHAUST FAN IS.
24. PROVIDE SUPPLY OF FUSE CONNECTION TO SUPPLY SYSTEM PER DETAIL (UNLESS TYPICAL).
25. PROVIDE AUDIO VISUAL REMOTE SMOKE DETECTOR (AVR) IN UNIONS ON WITH REMOTE KEY OPERATED RESET. WIRE A LINE BACK TO THE SMOKE DETECTOR, MOUNT AND SET. SEE TYPICAL.
26. INSTALL REFRIGERANT AIR PURIFIER FURNISHED BY TUV IN RTU PER DETAIL (UNLESS TYPICAL). SEE ELECTRICAL DRAWINGS FOR POWER CONNECTION INFORMATION. INSTALL BY WARNING STRIPES ON FACE OF ENCLOSURE PER DETAIL AND ON ANY RTU ACCESS DOORS THROUGH WHICH THE REFRIGERANT WOULD BE VISIBLE IF OPENED.
27. MAINTAIN 12" CLEARANCE BETWEEN WATER HEATER RILE TERMINATION ON OUTSIDE AIR ROOFDECK. MAINTAIN 12" CLEARANCE BETWEEN WATER HEATER CONNECTION, AIR INTAKE AND EXHAUST PANEL. SEE PLUMBING DRAWINGS FOR MORE INFORMATION ON WATER HEATER USE AND COMBUSTION AIR TERMINATIONS.
28. INSTALL SUPPLY REGISTERS SO THAT SUPPLY AIR NETS WALL ON OPPOSITE SIDE OF ROOM AT APPROXIMATE 7' AFF WITH NO DRAPES FIT IN THE DRIVING ROOM.



4635 Trueman Blvd, Suite 250
Hilliard, Ohio 43026
Phone: (614) 751-8810
Fax: (614) 552-5240
Contact: DENNIS AIT
(614) 555-0599
D.A.T@nationengineering.com

**BID DOCUMENTS
ONLY NOT FOR
CONSTRUCTION**

OWNER: M100
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND IS TO BE USED ONLY FOR THE PROJECT OF: SOUTH RIDING COLLEGE OFFICE BUILDING
NO OTHER REUSE OR REPRODUCTION OF THIS DRAWING IS PERMITTED WITHOUT THE WRITTEN CONSENT OF NATION ENGINEERING, INC.

OWNER: M100
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND IS TO BE USED ONLY FOR THE PROJECT OF: SOUTH RIDING COLLEGE OFFICE BUILDING
NO OTHER REUSE OR REPRODUCTION OF THIS DRAWING IS PERMITTED WITHOUT THE WRITTEN CONSENT OF NATION ENGINEERING, INC.

STORE NO.: 4336
SOUTH RIDING
24575 DULLES LANDING DR
STERLING, VA 20166

DATE	DESCRIPTION
02/10/2020	ISSUE FOR PERMIT
02/10/2020	ISSUE FOR BID

DATE	DESCRIPTION
02/10/2020	ISSUE FOR BID

PROJECT: HVAC PLAN

M100

