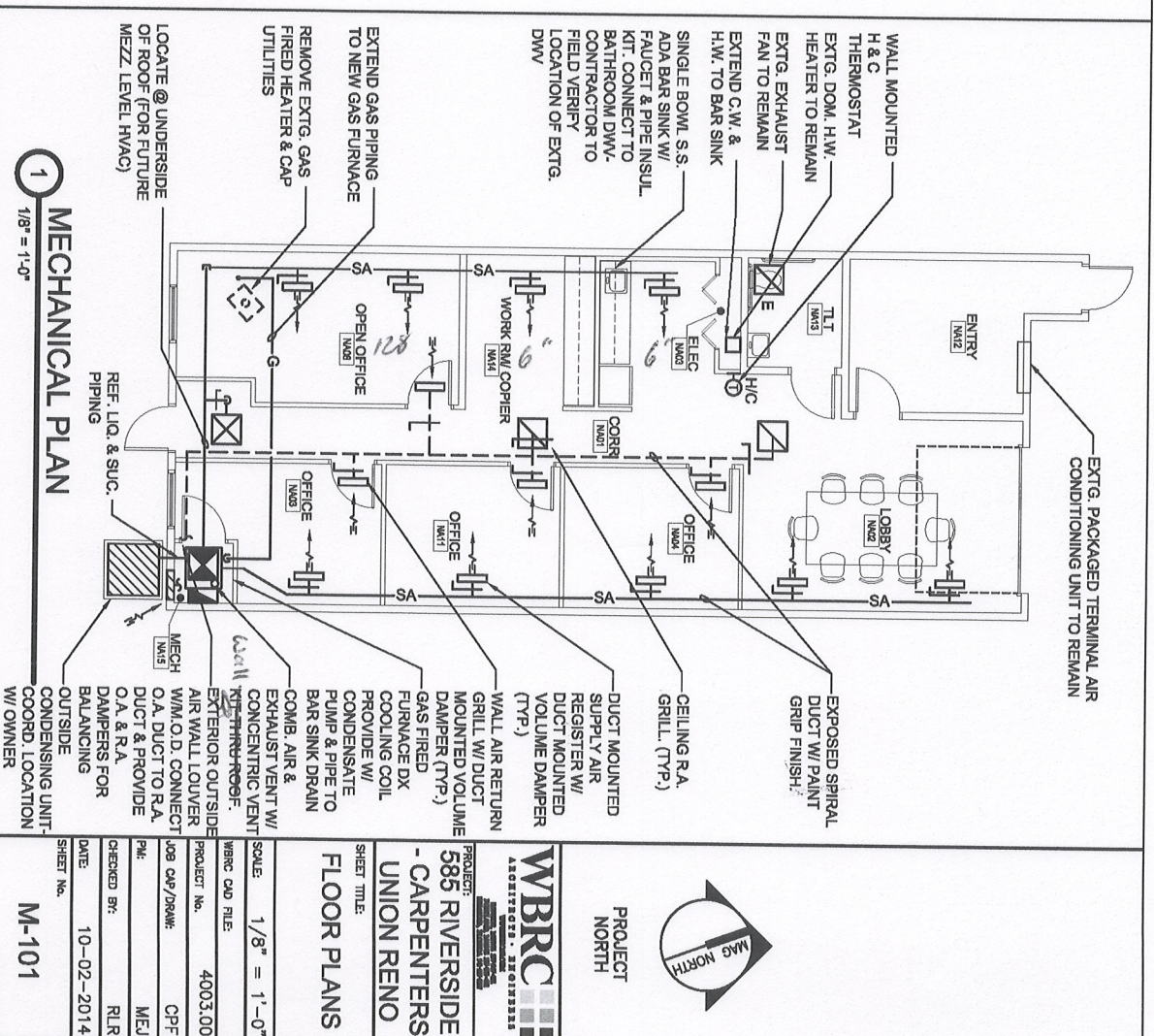


## HVAC SYSTEM PERFORMANCE SPECIFICATIONS:

- 1. CODES & GENERAL REQUIREMENTS:** DESIGN AND CONSTRUCT ALL HVAC & PLUMBING SYSTEMS IN ACCORDANCE WITH NEPA STANDARDS 54, 90A, ASHRAE 62 & 90.1, ADA, STATE OF MAINE PLUMBING CODE (LAPMO) CITY OF PORTLAND, MAINE, AND STATE OF MAINE REGULATORY REQUIREMENTS. HVAC DUCTWORK AND PIPING SHOWN ON DRAWINGS IS GENERALLY SCHEMATIC AND ACTUAL LOCATIONS OF DUCTWORK AND PIPING SHALL BE FULLY COORDINATED WITH ALL TRADES. ALL DUCTWORK AND PIPING SHALL BE CONCEALED UNLESS NOTED OTHERWISE. ALL PIPING SHALL BE INSTALLED TO ALLOW FOR EXPANSION USING OFFSETS, SWING JOINTS, EXPANSION FITTINGS OR JOINTS, TO PREVENT UNDUE STRAIN ON PIPING AND EQUIPMENT. DESIGN AND INSTALL SYSTEMS TO MAINTAIN HEATING SET POINT OF 70°F WITH OUTDOOR CONDITIONS AT -10°F AND COOLING SYSTEM SET POINT OF 74°F.
- 2. AIR DISTRIBUTION:** PROVIDE DUCTED SUPPLY AIR, RETURN AIR, AND EXHAUST AIR AND OUTSIDE AIR SYSTEMS. SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK SHALL BE GALVANIZED STEEL CONSTRUCTION AND BE FABRICATED AND INSTALLED PER SMACNA STANDARDS. DUCTWORK LAYOUT SHALL BE AS DIRECT AS POSSIBLE. MINIMIZE DUCT LENGTHS, ELBOWS, TRANSITIONS, AND OFFSETS TO MINIMIZE DUCT AIR PRESSURE DROP. PROVIDE DAMPERS ON ALL DUCT BRANCHES FOR SYSTEM BALANCING. INSULATE ALL DUCTWORK FOR CONDENSATE AND ENERGY CONSERVATION, AND IN ACCORDANCE WITH ASHRAE 90.1.
- 3. GAS FIRED FURNACE:** VERTICAL UPFLOW, HIGH EFFICIENCY, MODULATING GAS FIRED CONDENSING FURNACE WITH ECM VARIABLE SPEED DRIVE SUPPLY AIR FAN MOTOR, CONCENTRIC ROOF TERMINATION VENT KIT, CONDENSATE NEUTRALIZATION KIT, RETURN AIR FILTER PACKS WITH DISPOSABLE FILTERS, AND WALL MOUNTED DIGITAL PROGRAMMABLE HEATING/COOLING THERMOSTAT. FURNACE SHALL PROVIDE 1600 CFM @ 0.50" ESP, 80/28 MBH INPUT, 78/27 MBH OUTPUT, 97.7 AFUE, 115V-1-60. FURNACE EQUAL TO YORK 793C SERIES. PROVIDE WITH CONDENSATE PUMP KIT.
- 4. OUTDOOR CONDENSING UNIT AND DIRECT EXPANSION COOLING COIL:** DIRECT EXPANSION COOLING COIL TO BE PAIRED WITH FURNACE AND OUTDOOR CONDENSING UNIT UTILIZING R-410A REFRIGERANT. COOLING SYSTEM CAPACITY SHALL PROVIDE 47.2 MBH TOTAL, 34.6 MBH SENSIBLE, AND AIR RATED COOLING CAPACITY OF 45.5 MBH WITH 16.30 SEER AT 1600 CFM. COIL EQUAL TO YORK MC98C3X01. SYSTEM SHALL PROVIDE NOMINAL 4-TONS OF COOLING. CONDENSING UNIT EQUAL TO YORK CZH0811C SERIES, 208230V-1-60.
- 5. ALL COLD WATER & HOT WATER PIPING TO BE INSULATED WITH 1/2" THICK ARMAFLEX OR EQUAL.**

## MECHANICAL NOTES

2  
NTS



## MECHANICAL PLAN

1  
1/8" = 1'-0"

PROJECT  
NORTH



**WBRC**  
ARCHITECTS • 20012222

PROJECT:  
**585 RIVERSIDE**  
- CARPENTERS  
UNION RENO

SHEET TITLE:  
**FLOOR PLANS**

SCALE: 1/8" = 1'-0"

WBRC CAD FILE: 4003.00  
PROJECT No.: 4003.00  
JOB CAP/DRW: CPF  
PK: MEJ  
CHECKED BY: RLR  
DATE: 10-02-2014  
SHEET No.: M-101

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