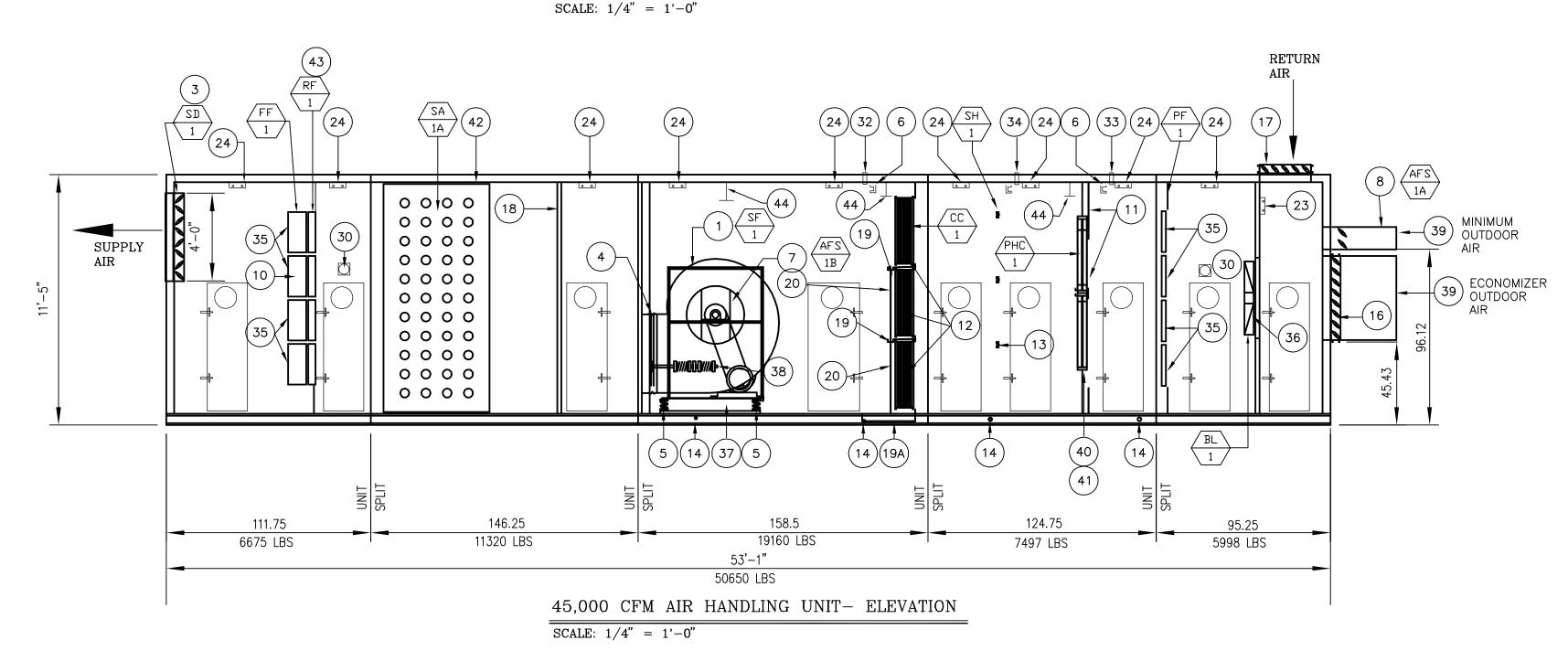


## 45,000 CFM AIR HANDLING UNIT- PLAN



## AIR HANDLING UNIT AHU- KEYED NOTES:

- 1. SUPPLY FAN (SF-1); DOUBLE WIDTH, DOUBLE INLET, AIRFOIL CENTRIFUGAL FAN.
- SEE FAN SCHÈDULE. 2. FAN INLET GUARD (BY FAN MFR.).
- 3. SUPPLY AIR OPENING; 132X48 WITH OPPOSED BLADE SMOKE AND CONTROL DAMPER.
- 4. FLEXIBLE CONNECTION (BY FAN MFR.). 5. FAN SPRING-TYPE VIBRATION ISOLATORS.
- 6. STRUCTURAL PROVISIONS INSIDE OF UNIT FOR FIELD PIPE HANGING. REFER TO SPECIFICATIONS.
- 7. SUPPLY FAN AIR FLOW STATION; SEE AIR FLOW STATION SCHEDULE. 8. MINIMUM O.A. DAMPER WITH INTEGRAL AIR FLOW STATION (AFS-1A); 108×18. SEE AIR FLOW STATION SCHEDULE.
- 9. PRE-FILTER (PF-1); (24) 24"x 24", 4" DEEP, MERV-8 CARTRIDGE-TYPE FILTER SECTIONS REQUIRED. SEE FILTER SCHEDULE.
- 10. FINAL FILTER (FF-1): (24) 24"x24", 12" DEEP, HEPA MERV-17 FILTER MODULES REQUIRED. SEE FILTER SCHEDULE.
- 11. STEAM PREHEAT COIL (PHC-1); (4) COILS REQUIRED. SEE STEAM COIL SCHEDULE. SEE STEAM PIPING SCHEMATIC FOR STEAM COIL PIPING. DOWN STREAM COIL PULL.
- 12. COOLING COIL (CC-1); (6) COILS REQUIRED. SEE COOLING COIL SCHEDULE. SEE CHILLED WATER PIPING SCHEMATIC FOR COOLING COIL PIPING. DOWN STREAM COIL PULL.
- 13. HUMIDIFIER (SH-1); SEE STEAM HUMIDIFIER SCHEDULE. SEE STEAM PIPING SCHEMATIC FOR HUMIDIFIER PIPING.
- 14. CASING DRAIN. PIPE THROUGH BASE—RAIL OF UNIT AND PROVIDE THREADED CAPS. TRAP AND DRAIN PIPE FOR COOLING COIL DRAIN PAN ONLY BY MECH. CONTRACTOR, SEE DETAILS. 15. REMOVABLE PANELS FOR FAN AND COIL REMOVAL.
- 16. 100% ECONOMIZER OPENING AND PARALLEL BLADE CONTROL DAMPER; 144"x48". 17. RETURN AIR DAMPER, OPPOSED BLADE 144X30
- 18. AIR FLOW DIFFUSER BAFFLE DESIGNED AND SIZED TO MAINTAIN EQUAL FLOW ACROSS FINAL FILTERS.
- 19. INTERMEDIATE COOLING COIL DRAIN PAN. 19A. MAIN COOLING COIL DRAIN PAN. DRAIN PAN SHALL EXTEND A MINIMUM OF 18" DOWN STREAM OF
- DISCHARGE FACE OF COOLING COIL.
- 20. 1" DRAIN PAN DOWN-SPOUT. MINIMUM (1) PER STACKED COOLING COIL. (4) REQUIRED TOTAL. 21. ACCESS DOOR, DISCHARGE SECTION (SWING IN); 24"W x 72"H x 4"THK INSULATED ACCESS DOOR WITH 10"x10" DOUBLE PANE WINDOW AND STATIC PRESSURE PROBE PORT.
- 22. ACCESS DOOR, INTAKE SECTION (SWING OUT); 24"W x 72"H x 4"THK INSULATED ACCESS DOOR WITH 10"x10" DOUBLE PANE WINDOW AND STATIC PRESSURE PROBE PORT.

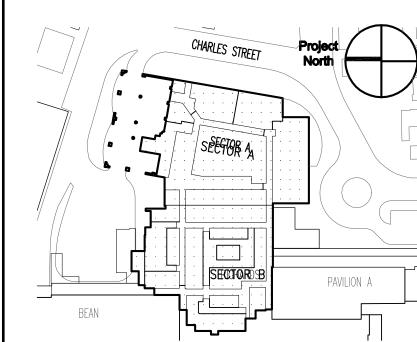
- 23. WEATHER-PROOF FLUORESCENT LIGHT FIXTURE; 12"W x 24"L, DOUBLE LAMP. 24. WEATHER-PROOF FLUORESCENT LIGHT FIXTURE; 12"W x 48"L, DOUBLE LAMP.
- 25. WEATHERPROOF LIGHT SWITCH WIRED TO FLUORESCENT LIGHT FIXTURES (SEE #23 AND #24).
- (1) LIGHT SWITCH TO CONTROL ALL LIGHT FIXTURES IN AHU UNIT. 26. 120 VOLT ELECTRICAL POWER DUPLEX RECEPTACLE. (TYPICAL FOR 3)
- 27. ATC JUNCTION BOX.
- 28. JUNCTION BOX, NEMA 1 ENCLOSURE; 120 VOLT POWER AND LIGHTING CONNECTION.
- 29. SUPPLY FAN MOTOR DISCONNECT; WIRE FAN POWER TO DISCONNECT SWITCH ON EXTERIOR OF UNIT. WIRING TO REMOTE VFD BY DIVISION 16.
- 30. MAGNAHELIC FILTER GAUGE FLUSH MOUNTED ABOVE DOOR
- 31. AIR FLOW STATION GUAGE CABINET; (1) CABINET TO HOUSE (3) AIRFLOW STATION GUAGES (FOR AFS-1A, AFS-1B AND AFS-1C).
- 32. PIPING CONNECTIONS FOR COOLING COILS. PROVIDE A PAIR OF OPENINGS FOR LINES TO FEED COILS THROUGH ROOF OF AIR HANDLER IN ADDITION TO WALL PENETRATIONS SHOWN. SEE CHILLED WATER PIPING SCHEMATIC FOR SIZES AND PIPING LAYOUT.
- 33. PIPING CONNECTIONS FOR STEAM COILS. PROVIDE AN OPENING FOR LPS TO FEED COILS THROUGH ROOF OF AIR HANDLER IN ADDITION TO WALL PENETRATIONS SHOWN. SEE STEAM PIPING SCHEMATIC FOR SIZES AND PIPING LAYOUT.
- 34. PIPING CONNECTIONS FOR HUMIDIFIER. SEE STEAM PIPING SCHEMATIC FOR SIZES.
  PROVIDE OPENING FOR LPS THROUGH ROOF OF AIR HANDLER IN ADDITION TO WALL PENETRATIONS SHOWN.
  SEE STEAM PIPING SCHEMATIC FOR SIZES AND PIPING LAYOUT.
- 35. FILTER SECTION STIFFENERS.
- 36. AIR BLENDERS. 2 @ 56" DIA.
- 37. CONCRETE INERTIA BASE 38. FAN SPRING-TYPE THRUST RESTRAINTS.
- 39. SHEETMETAL DUCT, 3'-0" MINIMUM LENGTH TO PLENUM WALL, THEN ADDITIONAL SHEETMETAL TO ELBOW SOUND ATTENUATORS BY SHEETMETAL CONTRACTOR. SEE SECTIONS FOR MORE DETAILS.
- 40. MAINTAIN 24" MIN. CLEARANCE FROM FLOOR TO BOTTOM OF EQUIPMENT PROVIDING ADEQUATE CLEARANCE FOR STEAM TRAPS AND CONNECTION TO CONDENSATE RECEIVER.
- 41. PROVIDE PIPE PENETRATIONS FOR LPR APPROXIMATELY 24" ABOVE AHU FLOOR. COORDINATE WITH NOTE 40 ABOVE.
- 42. SEE SCHEDULE FOR SOUND ATTENUATOR.
- 43. ROUGHING-FILTER (RF-1); (24) 24"x 24", 4" DEEP, MERV-8 CARTRIDGE-TYPE FILTER SECTIONS REQUIRED. SEE FILTER SCHEDULE.
- 44. STRUCTURAL BEAM FOR MOUNTING A TROLLEY SYSTEM FOR REMOVAL OF FAN, MOTOR AND COILS.

## General Notes:

1.THIS DRAWING H600 INCLUDED HEREIN FOR REFERENCE BY THIS CONTRACTOR. THIS CONTRACTOR SHALL PROVIDE THE COMPLETE INSTALLATION AND ALL REQUIRED WORK FOR INSTALLING THE PRE-PURCHASE AHU-6ED. THE UNIT AHU-6ED IS TO BE PRE-PURCHASED UNDER A SEPERATE CONTRACT BY THE CONSTRUCTION MANAGER (W. A. BERRY)FOR THE OWNER (MAINE MEDICAL CENTER)

2.THE AHU-6ED UNIT SHALL NOT EXCEED THE FOLLOWING DIMENSIONS; 53'-1" LENGHT X 14'-1" WIDTH X 11'-5" HIGH

MARK	ISSUE DATE	DESCRIPTION
	-	
BID	12/14/07	BID SET



Key Plan



ARCHITECTURE INTERIOR DESIGN ENGINEERING MASTER PLANNING

22 Boston Wharf Road, Boston, Massachusetts 02210

Tel 617.502.9400 Fax 617.502.3402 www.trojungbrannen.com



ED Expansion and Renovation Portland, Maine MMC Project No. 21843

**Drawing Title** PRE-PURCHASE AIR HANDLING **UNIT DETAIL DRAWING** 

MJC **Commission No.** Drawn By MJC **Date Issued** 12/14/07

Phase / Package Number | Sheet Number

**H600**