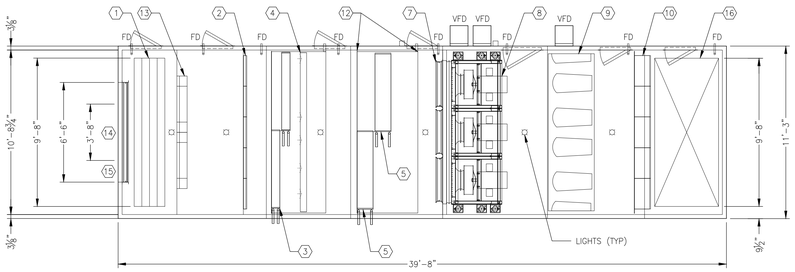
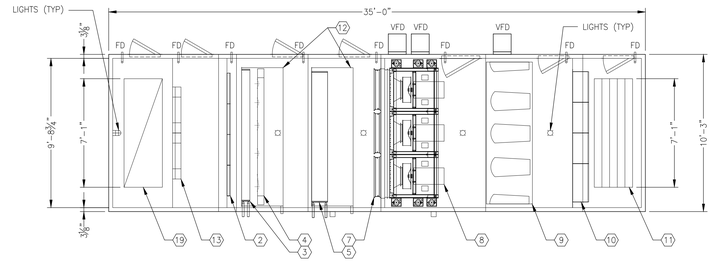


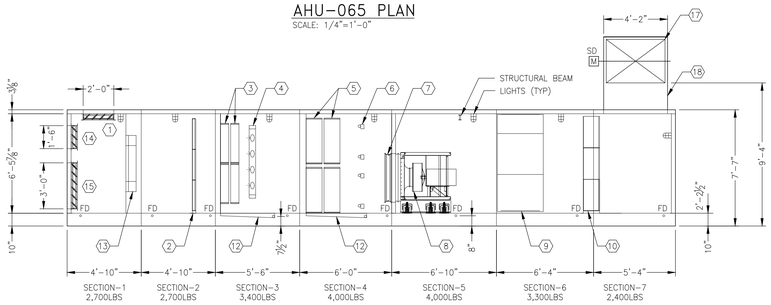
AHU-065 PLAN

SCALE: 1/4"=1'-0"



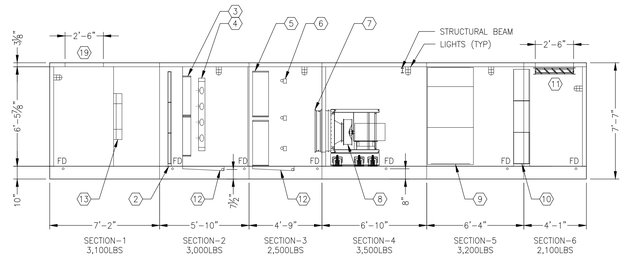
AHU-066 PLAN

SCALE: 1/4"=1'-0"



AHU-065 SECTION

SCALE: 1/4"=1'-0"



AHU-066 SECTION

SCALE: 1/4"=1'-0"

AHU-065 & 066 COMPONENTS:

(LAYOUT BASED ON TRANE CUSTOM)

1. RETURN AIR DAMPER
2. FILTER SECTION – 2" MERV-8 PREFILTER
3. HEATING COIL SECTION
4. HUMIDIFIER SECTION
5. COOLING COIL SECTION
6. UV LIGHTS
7. BACKDRAFT DAMPERS
8. SUPPLY FAN ARRAY SECTION
9. SOUND ATTENUATOR SECTION
10. FILTER SECTION – 12" MERV-16
11. SUPPLY AIR SMOKE DAMPER
12. CONDENSATE DRAIN PAN
13. AIR BLENDER SECTION
14. MIN. OUTDOOR AIR DAMPER WITH OUTDOOR AIR FLOWSTATION (AHU-065 ONLY)
15. MAX. OUTDOOR AIR DAMPER (AHU-065 ONLY)
16. SUPPLY AIR OPENING
17. 46x34 SUPPLY AIR OPENING WITH SD
18. SUPPLY AIR DISCHARGE AIR PLENUM
19. RETURN AIR OPENING

GENERAL NOTES:

1. SHIPPING SPLITS SHOWN ARE REQUIRED FOR RIGGING OF UNITS INTO MECHANICAL ROOM. MANUFACTURER TO COORDINATE WITH CONTRACTOR FOR FINAL SHIPPING SPLIT CONFIGURATION.

COOLING COIL SCHEDULE

COIL No.	PERFORMANCE DATA: TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	AIR: CFM	MIN O.A. (CFM)	SP (IN. W.G.)	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	WATER: GPM	PD (FT. H_2O)	EWT (°F)	LWT (°F)	VELOCITY (FPS)	CONSTRUCTION DATA: NOM. TUBE LENGTH (IN.)	FACE AREA EA. COIL (SQ. FT.)	ROWS DEEP	FINS PER INCH	No. OF SECTIONS	ARRANGEMENT: COILS HIGH	COILS WIDE	FACE VELOCITY (FPM)	DRY WEIGHT EACH COIL (LBS)	TOTAL COIL SYSTEM OPERATING WT. (LBS)	MANUF. MODEL #	REMARKS
CC-065	1107	792	26,000	6,500	0.96	77.8	64.6	49.95	49.8	182.8	17.4	45.0	57.0	4.3	60.0	57.5	8	12	4	2	2	452	453	2376	LUVATA 5WH1208B	1, 2
CC-066	835	603	20,150	4,030	0.78	77.2	64.2	49.9	49.7	137	19.6	45.0	57.0	4.5	101	48.4	8	11	2	2	1	416	709	1874	LUVATA 5WL1108B	1, 2

NOTES:
1. S.S. CASING
2. PROVIDE COOLING COILS WITH BOTTOM DRAIN TO ALLOW FULL DRAINING OF COILS.

HEATING COIL SCHEDULE (HOT WATER)

COIL No.	PERFORMANCE DATA: AIR: CFM	SENSIBLE MBH	EDB (°F)	LDB (°F)	AIR P.D. (IN W.G.)	WATER: TOTAL GPM	PD (FT.)	TUBE VEL.(FPS)	EWT (°F)	LWT (°F)	CONSTRUCTION DATA: TUBE LENGTH (IN.)	TOTAL COIL FACE AREA (SQ. FT.)	ROWS DEEP	MAX. No. OF FINS/INCH	No. OF SECTIONS	ARRANGEMENT: COILS HIGH	COILS WIDE	FACE VELOCITY (FPM)	DRY WEIGHT EACH COIL (LBS)	TOTAL COIL SYSTEM OPERATING WT. (LBS)	MANUF. MODEL #	REMARKS
HC-065	26,000	370	50.0	63	0.03	14.4	1.4	1.74	180	127.7	120	50	1	4	2	2	1	520	132	322	LUVATA 5MQ0401A	
HC-066	20,150	292	50.0	63	0.03	11.2	0.8	1.34	180	127	101	42	1	4	2	2	1	479	115	280	LUVATA 5MQ0401A	

FAN SCHEDULE

UNIT No.	SERVICE	FAN TYPE	FAN QUANTITY	PERFORMANCE DATA: CFM EACH	TOTAL SP (IN. W.G.)	EXT SP (IN. W.G.)	RPM	BHP EACH	MAX. OV (FPM)	CONSTRUCTION DATA: CLASS	ARRANG.	MOTOR DATA: MHP EACH	DRIVE TYPE	STARTER TYPE	ELECTRICAL DATA: VOLTS	PHASE	HZ	VIBRATION ISOLATION SPECIFICATIONS: MOUNTING TYPE	BASE TYPE	MIN. STATIC DEFLECTION (IN.)	MANUF. MODEL #	REMARKS
SF-065	SUPPLY	PLENUM	3	8,667	9.1	5.75	2832	19.3		III	4	25	DIRECT	VFD	480	3	60	SPRING		2	TRANE SDDP20SN	FAN ARRAY W/PIEZOMETER AIRFLOW RINGS
SF-066	SUPPLY	PLENUM	3	6,717	10.8	7.5	3039	17.7		III	4	20	DIRECT	VFD	480	3	60	SPRING		2	TRANE SDDP20SN	FAN ARRAY W/PIEZOMETER AIRFLOW RINGS

SOUND ATTENUATOR SCHEDULE

UNIT No.	LOCATION	SERVICE	CFM	UNIT SIZE (WxH)	LENGTH	FACE VELOCITY	MINIMUM REQUIRED ATTENUATION, DB: 63	125	250	500	1K	2K	4K	8K	MAX. PRESSURE DROP (IN W.G.)	MANUF. MODEL #	REMARKS
SAU-065	SUPPLY	AHU-065	26,000	129x78	3'-0"	372	10	10	13	18	26	34	27	11	0.07	VAW RSL	1
SAU-066	SUPPLY	AHU-066	20,150	105x92	3'-0"	300	10	10	13	18	26	34	27	11	0.05	VAW RSL	1

NOTES:
1. TEDLAR LINED.

STEAM HUMIDIFIER SCHEDULE

UNIT No.	CFM	MINIMUM O.A. CFM	No. OF MANIFOLDS	FLOW (LBS/HR)	STEAM PRESSURE (PSIG)	AIR DATA: VELOCITY (FPM)	AIR P.D. (IN WC)	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	FINAL % RH	MANUF. MODEL #	REMARKS
H-065	26,000	6,500	1	643	5	632		47.3	34	50.0	47	80	DRI-STEEM ULTRA-SORB XV	1, 2
H-066	20,150	4,030	1	499	5	568		47.3	34	50.0	47	80	DRI-STEEM ULTRA-SORB XV	1, 2

NOTES:
1. SIZED FOR AIRSIDE ECONOMIZER.
2. FLOW INCLUDES LOSSES.

AIR FILTER SCHEDULE

DESIGNATION	LOCATION	SERVICE	FILTER TYPE	CFM	FACE VELOCITY	PRESSURE DROP (IN W.C.): INITIAL	FINAL	No. OF CELLS	COIL DIMENSIONS: HIGH	WIDTH	DEPTH	REMARKS
PF-065	RETURN	MIXED AIR	MERV-8	26,000	433	0.23	0.7	15	3	5	2	FARR
FF-065	SUPPLY	SUPPLY AIR	MERV-16	26,000	433	0.6	1.5	15	3	5	12	FARR
PF-066	RETURN	MIXED AIR	MERV-8	20,150	420	0.21	0.7	12	3	4	2	FARR
FF-066	SUPPLY	SUPPLY AIR	MERV-16	20,150	420	0.55	1.5	12	3	4	12	FARR

VARIABLE FREQUENCY DRIVE SCHEDULE

UNIT No.	LOCATION	SERVICE	ELECTRICAL DATA: VOLTS	PHASE	HZ	MOTOR (HP)	RATED FULL LOAD AMPS	MOUTING TYPE (WALL OR FLOOR)	INTEGRAL DISCONNECT SWITCH	BYPASS TYPE	HARMONIC FILTER: 5% LINE REACTOR	2.5% D.C. CHOKE	ENCLOSURE (NEMA TYPE)	BMS GATEWAY REQUIRED/ BMS SYSTEM MANUFACTURER	VFD MOUNTED BY MANUF. AS PART OF EQUIPMENT	MANUF. MODEL #	REMARKS
VFD-065A	AHU-065	SUPPLY FAN	460	3	60	25	34	WALL	YES	YES	YES	NO	NEMA 1	YES	YES	TOSHIBA H9 SERIES	
VFD-065B	AHU-065	SUPPLY FAN	460	3	60	25	34	WALL	YES	YES	YES	NO	NEMA 1	YES	YES	TOSHIBA H9 SERIES	
VFD-065C	AHU-065	SUPPLY FAN	460	3	60	25	34	WALL	YES	YES	YES	NO	NEMA 1	YES	YES	TOSHIBA H9 SERIES	
VFD-066A	AHU-066	SUPPLY FAN	460	3	60	20	27	WALL	YES	YES	YES	NO	NEMA 1	YES	YES	TOSHIBA H9 SERIES	
VFD-066B	AHU-066	SUPPLY FAN	460	3	60	20	27	WALL	YES	YES	YES	NO	NEMA 1	YES	YES	TOSHIBA H9 SERIES	
VFD-066C	AHU-066	SUPPLY FAN	460	3	60	20	27	WALL	YES	YES	YES	NO	NEMA 1	YES	YES	TOSHIBA H9 SERIES	

NOTE:
1. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.

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No.	Date	Description
REVISION		
	02/27/2015	CONSTRUCTION DOCUMENTS
	01/14/2015	PRE-PURCHASE AHU - ISSUED FOR BID
	01/06/2015	PRE-PURCHASE AHU - OWNER REVIEW
	12/01/2014	DESIGN DEVELOPMENT
No.	Date	Description
ISSUE		

PROJECT

Maine Medical Center
Bean Building
AHU Replacement

DRAWING TITLE

MECHANICAL
AHU SCHEDULES

Drawn By	DAC
Checked By	DPR
Date	12/01/2014
Scale	1/4"=1'-0"
Project No.	B140263-000
Drawing No.	M-500

SAVE DATE: 2/27/2015 1:51 PM
PLOT DATE: 2/27/2015 2:40 PM
LOGIN: Usain, Antonina
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