

GENERAL NOTES:
 1. THIS SHEET IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THERE IS NO WORK ON THIS LEVEL.

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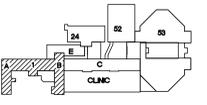


1 ATTIC, A-B WING: HVAC PLAN
 1/8"=1'-0"

ASBESTOS NOTE:
 IF THE EXECUTION OF THIS WORK REQUIRES THE DISTURBING OF ANY SUBSTANCE WHICH APPEARS TO BE ASBESTOS OR WHICH MAY CONTAIN ASBESTOS FIBER, NOTIFY THE OWNER BEFORE CONTINUING WORK AT THE SUSPECT LOCATION. ANY MATERIAL TESTING POSITIVE SHALL BE REMOVED BY THE OWNER BEFORE WORK CONTINUES.

NOTE: EXISTING CONDITIONS SHOWN WERE DERIVED FROM OWNER FURNISHED DRAWINGS AND FIELD OBSERVATIONS. SOME BUILDING FEATURES AND MEP SYSTEMS ARE NOT SHOWN FOR CLARITY. FIELD VERIFY BUILDING CONSTRUCTION. FIELD VERIFY THE LOCATION, SIZE AND QUANTITY OF ALL EQUIPMENT.

NOTE: REFER TO DETAILS AND SCHEMATICS FOR PIPING, VALVES, FITTINGS AND OTHER APPURTENANCES REQUIRED, BUT NOT SHOWN FOR CLARITY.



KEY PLAN
 SCALE: NO SCALE

REVISIONS	DESCRIPTION	DATE



Dept. of Veterans Affairs
 Jack C. Montgomery
 Medical Center
 1011 Honor Heights Drive
 Muskogee, Oklahoma 74401

ENGINEER:
 RMD CONSULTING, LLC
 2815 VALLEY VIEW LANE, STE. 214
 DALLAS, TX 75234
 P: 972-488-8077 F: 972-488-8174
 PROJECT NUMBER: 11-5801
 OK REG. ENGINEERING FIRM: 5183

CONSULTANTS:
 ARCHITECT:
 ARCHITECTURAL CONCEPTS, INC.
 669 AIRPORT FREEWAY, STE. 300
 HURST, TX 76053
 P: 817-285-8885 F: 817-285-8021

APPROVED:	APPROVED: Interior Designer	APPROVED: Safety Manager	APPROVED: Medical Center Director
APPROVED:	APPROVED:	APPROVED: Infection Control Nurse	APPROVED: Associate Director
APPROVED:	APPROVED:	APPROVED: Industrial Hygienist	APPROVED: Chief of Staff
APPROVED:	APPROVED:	APPROVED: President A.F.G.E. 2250	APPROVED: Chief of Engineering Service

DRAWING TITLE
 ATTIC, A-B WING:
 HVAC PLAN

PROJECT NO.
 623-10-104

BUILDING NO.
 01

CONTRACT NO.
 VA256-P-1355

AUTOCAD FILE NAME

PROJECT TITLE
 REPLACE INDUCTION
 UNITS IN BLDG. #1

DESIGNED BY: **DRAWN BY:** **CHECKED BY:**

LOCATION
 Jack C. Montgomery VA Medical Center

DATE
 5/28/2013

SCALE
 AS NOTED

DRAWING NO.
 1-MH6.0

DWG. 43 OF 97

DEPARTMENT OF
 VETERANS AFFAIRS

FAN COIL UNITS (2 PIPE SYSTEM)										COOLING										DESIGNATION XXXXX ← AIR FLOW: SUPPLY/OA			DESIGNATION XXXXX ← GPM		
DESIGNATION	REFERENCE PRODUCT	TYPE	AIR FLOW RATE	EXT. STATIC PRESSURE	FILTER	SENSIBLE HEAT	TOTAL HEAT	AIR TEMP. EDR/DB	AIR TEMP. LOB/LWB	WATER FLOW RATE	WATER PRESSURE DROP	WATER TEMP. EWT/LWT	ROWS/CIRC.	ELECTRICAL DATA			REMARKS:								
			CFM	IN. OF H ₂ O		MBH	MBH	°F	°F	GPM	FT. OF H ₂ O	°F	VOLTS	PHASE	FLA										
FCU-1 (1)	ENVIROTEC MODEL "HLE-20"	HOR. CAB.	230	0.0	1"	4.80	5.31	76/63	56.1/55	1.0	0.71	45/55.6	4/2	120	1	0.80	DBL DEFLECTION ALUM. SUPPLY GRILLE, SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, HINGED RETURN GRILLE, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.								
FCU-2 (1)	MODEL "HLE-20"	HOR. CAB.	230	0.0	1"	5.38	6.64	76/63	53.7/52.8	1.0	4.47	45/58.2	4/1	120	1	0.80	DBL DEFLECTION ALUM. SUPPLY GRILLE, SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, HINGED RETURN GRILLE, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.								
FCU-3 (1)	MODEL "HLE-20"	HOR. CAB.	230	0.0	1"	5.97	7.97	76/63	51.3/50.5	1.7	8.78	45/54.3	4/2	120	1	0.80	DBL DEFLECTION ALUM. SUPPLY GRILLE, SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, HINGED RETURN GRILLE, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.								
FCU-4 (1)	MODEL "HLE-30"	HOR. CAB.	470	0.0	1"	9.08	10.51	76/63	57.5/55.2	2.0	2.08	45/55.5	3/2	120	1	1.90	DBL DEFLECTION ALUM. SUPPLY GRILLE, SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, HINGED RETURN GRILLE, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.								
FCU-5 (1)	MODEL "HLE-40"	HOR. CAB.	515	0.0	1"	11.03	12.91	76/63	55.5/54.2	1.7	2.48	45/60.1	4/2	120	1	2.50	DBL DEFLECTION ALUM. SUPPLY GRILLE, SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, HINGED RETURN GRILLE, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.								
FCU-6 (1)	MODEL "HLE-40"	HOR. CAB.	515	0.0	1"	13.33	17.97	76/63	51.3/50.3	4.4	12.52	45/53.0	4/2	120	1	2.50	DBL DEFLECTION ALUM. SUPPLY GRILLE, SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, HINGED RETURN GRILLE, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.								
FCU-7 (1)	MODEL "HLP-20"	HOR. PLEN.	163	0.15	1"	3.91	4.97	76/63	53.1/52.1	1.0	3.3	45/55.0	3/1	120	1	0.80	SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVE BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.								

(1) UNITS ARE SCHEDULED AT MEDIUM FAN SPEED, 1000 FEET ELEVATION.

FAN COIL UNITS (4 PIPE SYSTEM, HOT WATER)										COOLING										HEATING										DESIGNATION XXXXX ← AIR FLOW: SUPPLY/OA			DESIGNATION XXXXX ← GPM		
DESIGNATION	REFERENCE PRODUCT	TYPE	AIR FLOW RATE	EXT. STATIC PRESSURE	FILTER	SENSIBLE HEAT	TOTAL HEAT	AIR TEMP. EDR/DB	AIR TEMP. LOB/LWB	WATER FLOW RATE	WATER PRESSURE DROP	WATER TEMP. EWT/LWT	ROWS/CIRC.	TOTAL HEAT	AIR TEMP. EDR/DB	WATER FLOW RATE	WATER PRESSURE DROP	WATER TEMP. EWT/LWT	ROWS/CIRC.	ELECTRICAL DATA			REMARKS:												
			CFM	IN. OF H ₂ O		MBH	MBH	°F	°F	GPM	FT. OF H ₂ O	°F	VOLTS	PHASE	FLA																				
FCU-8 (1)	ENVIROTEC MODEL "HLP-40"	HOR. PLEN.	440	0.15	1"	11.21	14.79	76/63	51.6/50.8	2.9	6.03	45/55.1	4/2	7.18	68/96.7	0.5	0.35	180/125.6	1/1	120	1	2.50	SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.												
FCU-9 (1)	MODEL "HLP-50"	HOR. PLEN.	780	0.15	1"	16.70	20.96	76/63	55.9/53.7	4.2	10.26	45/55	3/2	12.80	68/93.6	1.0	0.22	180/136.2	1/1	120	1	4.20	SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.												
FCU-10 (1)	MODEL "HLE-20"	HOR. CAB.	230	0.0	1"	5.18	6.51	76/63	54.6/53	1.3	4.84	45/55	3/1	8.08	68/100	0.5	0.2	180/147.8	1/1	120	1	0.80	(2)												
FCU-11 (1)	MODEL "HLE-20"	HOR. CAB.	220	0.0	1"	5.74	7.60	76/63	51.5/50.7	1.5	7.61	45/54.9	4/1	8.23	68/101	0.5	0.2	180/148.2	1/1	120	1	0.80	(2)												
FCU-12 (1)	MODEL "HLP-25"	HOR. TELE.	230	0.15	1"	5.85	7.63	76/63	51.5/50.9	1.2	6.67	45/57.7	4/1	9.05	68/104	0.5	0.25	180/144.4	1/1	120	1	1.10	(3)												
FCU-13 (1)	MODEL "VFSC-03"	VERT. FLR.	270	0.0	1"	6.18	7.96	76/63	53.8/52.3	1.6	7.40	45/55.0	3/1	8.05	68/100	0.5	0.25	180/143.1	1/1	120	1	0.50	SLOPED TOP, DBL DEFLECTION STEEL SUPPLY GRILLE, SS DRAIN PAN, SERVICE SWITCH, COND. SWITCH, AIR VENT, O/HM/L FAN SWITCH, CONTROL VALVES BY CONTROL CONTRACTOR. REFER TO DRAWINGS FOR UNIT HAND.												
FCU-14 (1)	MODEL "VFSC-10"	VERT. FLR.	710	0.0	1"	16.20	20.61	76/63	54.2/52.7	3.4	9.44	45/57.0	3/2	16.20	68/100	1.0	1.93	180/130.4	1/1	120	1	1.10	SLOPED TOP, DBL DEFLECTION STEEL SUPPLY GRILLE, SS DRAIN PAN, SERVICE SWITCH, COND. SWITCH, AIR VENT, O/HM/L FAN SWITCH, CONTROL VALVES BY CONTROL CONTRACTOR. REFER TO DRAWINGS FOR UNIT HAND.												
FCU-16 (1)	MODEL "HLP-20"	HOR. PLEN.	157	0.15	1"	3.79	4.81	76/63	53/52	1.0	3.15	45/55.0	3/2	9.95	68/108	0.5	0.2	180/153.0	1/1	120	1	0.8	SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.												

(1) UNITS ARE SCHEDULED AT MEDIUM FAN SPEED, 1000 FEET ELEVATION.
 (2) DBL DEFLECTION ALUM. SUPPLY GRILLE, SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, HINGED RETURN GRILLE, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.
 (3) SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, AIR VENT, RET. AIR PNL. W/ TELE. DUCT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH, CONTROL VALVES BY CONT. CONTRACTOR. PROVIDE UNIT HAND TO MAXIMIZE ACCESSIBILITY, REFER TO DRAWINGS.

FAN COIL UNITS (4 PIPE SYSTEM, STEAM)										COOLING										HEATING										DESIGNATION XXXXX ← AIR FLOW: SUPPLY/OA			DESIGNATION XXXXX ← CAPACITY: GPM OR MBH/CONDENSATE		
DESIGNATION	REFERENCE PRODUCT	TYPE	AIR FLOW RATE	EXT. STATIC PRESSURE	FILTER	SENSIBLE HEAT	TOTAL HEAT	AIR TEMP. EDR/DB	AIR TEMP. LOB/LWB	WATER FLOW RATE	WATER PRESSURE DROP	WATER TEMP. EWT/LWT	ROWS/CIRC.	TOTAL HEAT	AIR TEMP. EDR/DB	CONDENSATE	STEAM PRESSURE	ROWS/CIRC.	ELECTRICAL DATA			REMARKS:													
			CFM	IN. OF H ₂ O		MBH	MBH	°F	°F	GPM	FT. OF H ₂ O	°F	VOLTS	PHASE	FLA																				
FCU-15 (1)	ENVIROTEC MODEL "HLP-30"	HOR. PLEN.	370/460	0.15	1"	8.96	11.43	76/63	52.9/52.0	2.3	3.42	45/55	4/2	24.70	68/119.0	25.54	2.0	1/3	120	1	1.90	SS DRAIN PAN, SS AUX. DRAIN PAN, SERVICE SWITCH, COND. SWITCH, AIR VENT. 2-WAY MOD. CONTROL VALVE, O/HM/L FAN SWITCH & SERVICE VALVES BY CONT. CONTRACTOR. OPPOSITE HAND, REFER TO DRAWINGS.													

(1) UNIT COOLING IS SCHEDULED AT MEDIUM FAN SPEED. UNIT HEATING IS SCHEDULED AT HIGH FAN SPEED, 1000 FEET ELEVATION.

AIR HANDLING UNITS																	
DESIGNATION	REFERENCE PRODUCT	SERVES	TYPE	AIR FLOW RATE	TOT. STAT. PRESSURE	ROTATION	MOTOR POWER		ELECTRICAL DATA		PRE-HEAT COIL	COOLING COIL	HUMIDIFIER	PRE-FILTER	FINAL FILTER	HUMIDIFIER	REMARKS:
				CFM	IN. OF H ₂ O		REV/MIN.	BHP	HP	VOLTS							
AHU-AB	TECHROL MODEL "WF-RDH36"	BLDG. 1, WINGS A&B	HDT	15,110/18,100	7.58/3.50	3,500	6.3/25.22	10/40	460	3	PHC-AB	CC-AB	H-AB	PF-AB	PFF-AB/FF-AB	H-AB	ROOFTOP UNIT, 18"INSULATED ROOF CURB, 2X2 FAN WALL - 36HX36W - DESIGN CFM/SP W/ 1 FAILED FAN, VFD - ABB MODEL ACH550 WITH BYPASS AND LONWORKS.

(1) TOTAL EXTERNAL AT 15,110 CFM, 8.825/06 AT 18,100 CFM. FILTERS AT MDLIFE PRESSURE DROP, 1000 FEET ELEVATION.

COOLING COILS (CHILLED WATER)																
DESIGNATION	REFERENCE PRODUCT	SERVES	CAPACITY	SENSIBLE	AIR FLOW RATE	AIR PRESS. DROP	AIR TEMP. EDR/DB	AIR TEMP. LOB/LWB	WATER FLOW RATE	WATER PRESS. DROP	WATER TEMP. EWT/LWT	ROWS/FPI	ELECTRICAL DATA			REMARKS:
			MBH	MBH	CFM	IN. OF H ₂ O	°F	°F	GPM	FT. OF H ₂ O	°F	VOLTS	PHASE	FLA		
CC-AB (DESIGN)	TECHROL MODEL "5WC-6-x-8-6AL"	AHU-AB	1,244	701	15,110	0.48	101/79	53.9/53.3	248	6.93	44/54	8/6				(2) 39H X 66L INTERTWINED COILS, 2 CONTROLS VALVES, COIL SIZED FOR FUTURE CAPACITY, 1000 FEET ELEVATION.
CC-AB (FUTURE)	TECHROL MODEL "5WC-6-x-8-6AL"	AHU-AB	1,442	839	18,100	0.64	101/79	55.7/54.8	287	12.44	44/54	8/6				

PRE-HEAT COILS (STEAM)														
DESIGNATION	REFERENCE PRODUCT	SERVES	CAPACITY	AIR FLOW RATE	AIR PRESS. DROP	AIR TEMP. EDR/DB	STEAM FLOW RATE	STMI PRESS. SUP/OPER	ROWS	NOM. SIZE	REMARKS:			
			MBH	CFM	IN. OF H ₂ O	°F	LB/HR	PSI	(FPI)	IN. X IN.				
PHC-AB (DESIGN)	LJ WING MODEL "VC-8TX"	AHU-AB	1,378	15,110	0.33	1097.3	1,435	15/5	3/10	90Lx68H	1000 FEET ELEVATION, ANTI-STRATIFICATION BAFFLES, 3" FLEXIBLE CONNECTORS W/ THREADED FITTINGS, CONFIGURED FOR FACE MOUNTED ACTUATOR BY CONT. CONTRACTOR. CONTROL VALVE BY CONTROL CONT. SIZE FOR FUTURE LOAD.			
PHC-AB (FUTURE)	LJ WING MODEL "VC-8TX"	AHU-AB	1,591	18,100	0.43	10/94.0	1,656	15/5	3/10	90Lx68H				

AIR FILTERS														
DESIGNATION	REFERENCE PRODUCT	SERVES	TYPE	MAX. AIR FLOW	UNIT SIZE	OVERALL DIMENSIONS	MAX. FACE VELOCITY	EFFICIENCY	AIR PRESS. DROP	ACCESS	REMARKS:			
				CFM	INCHES	IN. X IN. X IN.	FT./MIN.	PERCENT	IN. OF H ₂ O	IN. X IN. X IN.				
PF-AB	FARR MODEL "30/30"	AHU-AB	PNL	18,100	-	72H x 108W	350	8	0.08/0.50	FACE	DWYER MODEL 2001 FILTER GAUGE			
PFF-AB	FARR MODEL "30/30"	AHU-AB	PNL	18,100	-	72H x 72W	510	8	0.08/0.50	FACE	DWYER MODEL 2003 FILTER GAUGE			
FF-AB	FARR MODEL "DURAFIL ESB"	AHU-AB	PNL	18,100	-	72H x 72W	510	14	0.34/1.50	FACE				

BASEBOARD HEATING UNIT (STEAM)														
DESIGNATION	REFERENCE PRODUCT	TYPE	HEIGHT	CAPACITY	STEAM FLOW RATE	STEAM PRESS.	TUBE DIA./LENGTH	FIN SIZE	FINS PER INCH	COLOR	REMARKS:			
				MBH	LB/HR	PSI	IN. X IN.	IN. X IN.	IN. X IN.					
SR-A	STERLING MODEL "JVB-S14"	CONV.	14"	6.6	6.8	2	3/4" x 4' CPR	4.25" x 3.625"	40	BY VA	SLOPED TOP, PENCIL PROOF, KNOB DAMPER, 14 GA CRS. BAKED ENAMEL, END PLATES W/ ACCESS PNL, FULL HT BACKPLATE, BRACKETS.			
SR-B	STERLING MODEL "JVB-S14"	CONV.	14"	4.9	5.2	2	3/4" x 3' CPR	4.25" x 3.625"	40	BY VA	SLOPED TOP, PENCIL PROOF, KNOB DAMPER, 14 GA CRS. BAKED ENAMEL, END PLATES W/ ACCESS PNL, FULL HT BACKPLATE, BRACKETS.			

HUMIDIFIERS														
DESIGNATION	REFERENCE PRODUCT	SERVES	STEAM FLOW RATE	SUPPLY STEAM PRESS.	ROOM CONDITIONS	DUCT TEMP.	MAX. DISP. DIST.	DUCT SIZE	AIR FLOW RATE	OUTSIDE AIR FLOW RATE	VELOCITY	REMARKS:		
			LB/HR	PSI	TEMP. REL. HUM.	°F	IN. DIA.	CFM	CFM	FT./MIN.				
H-AB	NORTEC MODEL "LIVESTEAM"	AHU-AB	500.37	15	72	50	80	0.34	866Hx54W	15,110	-	REFER TO DETAIL, STEAM SEPARATOR MODEL 200, MODULATING ACTUATOR, SAM-E 48" HEADER ON 3" CENTERS, 304SS TUBES, MOUNTING FRAME, INLET ADAPTER, TRAP, STRAINER		

REVISIONS	DESCRIPTION	DATE



Dept. of Veterans Affairs
 Jack C. Montgomery
 Medical Center
 1011 Honor Heights Drive
 Muskogee, Oklahoma 74401

ENGINEER:
 RMD CONSULTING, LLC
 2815 VALLEY VIEW LANE, STE. 214
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 P: 972-488-8077 F: 972-488-8174
 PROJECT NUMBER: 11-5801
 OK REG. ENGINEERING FIRM: 5183

CONSULTANTS:
 ARCHITECT:
 ARCHITECTURAL CONCEPTS, INC.
 669 AIRPORT FREEWAY, STE. 300
 HURST, TX 76053
 P: 817-285-8885 F: 817-285-8021

APPROVED:	APPROVED: Interior Designer	APPROVED: Safety Manager	APPROVED: Medical Center Director
APPROVED:	APPROVED:	APPROVED: Infection Control Nurse	APPROVED: Associate Director
APPROVED:	APPROVED:	APPROVED: Industrial Hygienist	APPROVED: Chief of Staff
APPROVED:	APPROVED:	APPROVED: President A.F.G.E. 2250	APPROVED: Chief of Engineering Service

DRAWING TITLE
 HVAC SCHEDULES

PROJECT TITLE
 REPLACE INDUCTION UNITS IN BLDG. #1

DATE
 5/28/2013

SCALE
 AS NOTED

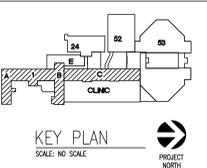
DRAWING NO.
 1-MH7.0

DWG. 44 of 97

PROJECT NO. 623-10-104
CONTRACT NO. VA256-P-1355

DESIGNED BY: **DRAWN BY:** **CHECKED BY:**

BUILDING NO. 01 **AUTOCAD FILE NAME:** **LOCATION** Jack C. Montgomery VA Medical Center



DEPARTMENT OF VETERANS AFFAIRS

AIR DISTRIBUTION DEVICES													
DESIGNATION	REFERENCE PRODUCT	TYPE	MAX. AIR FLOW CFM	STATIC PRESS. IN. OF H ₂ O	NECK SIZE INCHES	PANEL SIZE INCHES	MAX. NOISE CRITERIA	FINISH	REMARKS :	SUPPLY	THROW	RETURN OR EXHAUST	DESIGNATION
										DESIGNATION	CFM	CFM	CFM
A	TITUS	TYPE "TMS"	100	.02	6"Ø	12x12	35	WHITE	LOUVER FACE W/ O.B.D				
B			120	.03	6"Ø	24x24							
C			300	.03	8"Ø								
D			400	.03	10"Ø								
E			500	.04	12"Ø								
F			600	.05	14"Ø								
G			750	.06	16"Ø								
H		TYPE "PAR"	120	.02	6"Ø	12x12			PERFORATED FACE W/ O.B.D.				
J			120	.02	6"Ø	24x24							
K			200	.03	8"Ø								
L			300	.03	10"Ø								
M			420	.03	12"Ø								
N			550	.03	14x14								
P			750	.04	16x16								
Q			1400	.08	22x22								
R			2800	.04	22x46	24x48							
S		TYPE "SOFF"	1570	.04	22x22	24x24			FILTER GRILLE, EGGRATE, LAY-IN, 1" MERV 8 FILTER				
T		TYPE "301RS"	300	.03	10x10	12x12			LOUVER SUPPLY, SINGLE DEFLECTION				

REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES AND MOUNTING REQUIRED.

EXISTING EXHAUST FANS													
DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	TYPE	DRIVE	AIR FLOW RATE CFM	TOT. STAT. PRESSURE IN. OF H ₂ O	ROTATION REV./MIN.	MOTOR POWER		ELECTRICAL DATA		REMARKS :
									BHP	HP	VOLTS	PHASE	
EF-1	-	LEVEL 1, "A" WING	CORRIDOR	CAB	BELT	1276	1.0"	1000	0.66	1.0	208	3	INSTALL 1.5 HP VFD - ABB MODEL ACH550 WITH BACNET
EF-3	-	LEVEL 2, "A" WING	"A" WING	CAB	BELT	1306	1.0"	1000	0.66	1.0	208	3	INSTALL 1.5 HP VFD - ABB MODEL ACH550 WITH BACNET
EF-5	-	LEVEL 3, "A" WING	"A" WING	CAB	BELT	1534	1.0"	1070	0.95	1.5	208	3	INSTALL 1.5 HP VFD - ABB MODEL ACH550 WITH BACNET
EF-8	-	LEVEL 4, "A" WING	"A" WING	CAB	BELT	1471	1.0"	1070	0.95	1.5	208	3	INSTALL 1.5 HP VFD - ABB MODEL ACH550 WITH BACNET
EF-11	-	LEVEL 5, "A" WING	"A" WING	CAB	BELT	1540	1.0"	1160	0.95	1.5	208	3	INSTALL 1.5 HP VFD - ABB MODEL ACH550 WITH BACNET

EXHAUST FANS													
DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	TYPE	DRIVE	AIR FLOW RATE CFM	TOT. STAT. PRESSURE IN. OF H ₂ O	ROTATION REV./MIN.	MOTOR POWER		ELECTRICAL DATA		REMARKS :
									BHP	HP	VOLTS	PHASE	
EF-8P	GREENHECK MODEL "SE1-24"	4C02-1, "C" WING	AC02-1	PROP	DIRECT	4,847	0.25	860	0.55	0.50	120	1	SHORT WALL HOUSING-FLUSH EXT., OSHA GUARD, GRAVITY DAMPER, 120V T'STAT, CLOSURE ANGLES, BAKED ENAMEL FINISH-COLOR BY OWNER, 12.5 SONES, PROVIDE STARTER WITH RELAY.

PUMPS													
DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	TYPE	WATER FLOW RATE GPM	TOTAL HEAD FT. OF H ₂ O	ROTATION REV./MIN.	EFFICIENCY %	MOTOR POWER		ELECTRICAL DATA		REMARKS :
									BHP	HP	VOLTS	PHASE	
P-6E	BELL & GOSSETT SERIES 80 - 3 x 3 x 7B	WING "C" PENTHOUSE	WING "AB"	CENT	270	126	3525	74	11.93	15.0	460	3	BRONZE FITTED, 125# ANSI FLANGE DRILLING, STD SEAL, VFD - ABB MODEL ACH550 W/ BACNET AND BYPASS
P-7E	BELL & GOSSETT SERIES 80 - 3 x 3 x 7B	WING "C" PENTHOUSE	WING "AB"	CENT	270	126	3525	74	11.93	15.0	460	3	BRONZE FITTED, 125# ANSI FLANGE DRILLING, STD SEAL, VFD - ABB MODEL ACH550 W/ BACNET AND BYPASS

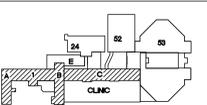
EQUIPMENT:

AS-1 BELL & GOSSETT SEDIMENT REMOVAL SEPARATOR, MODEL "SRS-4F", 4" INLET/OUTLET, FLANGED, 300 GPM, 1.7 FT WPD. PROVIDE MODEL "107X" AIR VENT & MODEL "18V-1" MANUAL BLOWDOWN VALVE.

TERMINAL AIR BOXES										
DESIGNATION	REFERENCE PRODUCT	TYPE	INLET SIZE IN.	MAX. AIR FLOW CFM	MIN. AIR FLOW CFM	MIN. INLET S.P. IN. WG	AIR PRESSURE DROP IN. WG	DESIGNATION		REMARKS:
								AIR FLOW: MAX/MIN	AIR FLOW: MAX/MIN	
A	TITUS	VAV	6	400	100	0.38	0.13			W/ CROSS FLOW SENSOR, DDC CONTROLS
B	MODEL "DES1"		7	600	140	0.37	0.12			
C			4	100	45	0.27	0.02			

TERMINAL AIR BOXES												
DESIGNATION	REFERENCE PRODUCT	TYPE	INLET SIZE IN.	MAX. AIR FLOW CFM	MIN. AIR FLOW CFM	MIN. INLET S.P. IN. WG	AIR PRESSURE DROP IN. WG	DESIGNATION		REMARKS:		
								AIR FLOW: MAX/MIN	AIR FLOW: MAX/MIN			
AA	TITUS	VAV	5	300	0.41	0.11	100	5.4	0.50	0.20	1	W/ CROSS FLOW SENSOR, DDC CONTROLS
BB			6	400	0.55	0.25	150	6.20	0.50	0.20	1	
CC			6	400	0.65	0.35	200	11.7	0.70	0.10	2	
DD			7	540	0.52	0.22	200	8.3	0.60	0.30	1	
EE			7	540	0.63	0.33	240	14.3	0.70	0.20	2	
FF			8	600	0.68	0.16	200	8.0	0.50	0.20	1	
GG			8	600	0.59	0.29	240	14.3	0.70	0.20	2	
HH			10	900	0.46	0.16	240	9.5	0.50	0.10	1	
JJ			10	900	0.60	0.30	330	20.1	1.00	0.20	2	
KK			12	1200	0.45	0.15	400	15.6	0.90	0.20	1	
LL			12	1200	0.58	0.28	400	23.9	0.90	0.20	2	
MM			14	1700	0.46	0.16	500	20.7	1.10	0.20	1	
NN			14	1700	0.58	0.28	600	35.6	1.30	0.30	2	
PP			16	2200	0.47	0.17	660	26.5	1.40	0.30	1	
RR			16	2200	0.61	0.31	720	42.7	1.70	0.20	2	

The seal appearing on this document was authorized by Robert M. Davies, 20879 on 05/28/2013. Alteration of a sealed document without proper notation to the responsible engineer is an offense under the Oklahoma Engineering Practice Act.



REVISIONS	DESCRIPTION	DATE

Dept. of Veterans Affairs
Jack C. Montgomery
Medical Center
1011 Honor Heights Drive
Muskogee, Oklahoma 74401

ENGINEER:
RMD CONSULTING, LLC
2815 VALLEY VIEW LANE, STE. 214
DALLAS, TX 75234
P: 972-488-8077 F: 972-488-8174
PROJECT NUMBER: 11-5801
OK REG. ENGINEERING FIRM: 5183

CONSULTANTS:
ARCHITECT:
ARCHITECTURAL CONCEPTS, INC.
669 AIRPORT FREEWAY, STE. 300
HURST, TX 76053
P: 817-285-8885 F: 817-285-8021

APPROVED:	APPROVED: Interior Designer	APPROVED: Safety Manager	APPROVED: Medical Center Director
APPROVED:	APPROVED:	APPROVED: Infection Control Nurse	APPROVED: Associate Director
APPROVED:	APPROVED:	APPROVED: Industrial Hygienist	APPROVED: Chief of Staff
APPROVED:	APPROVED:	APPROVED: President A.F.G.E. 2250	APPROVED: Chief of Engineering Service

DRAWING TITLE HVAC SCHEDULES		PROJECT TITLE REPLACE INDUCTION UNITS IN BLDG. #1	
PROJECT NO. 623-10-104	CONTRACT NO. VA256-P-1355	DESIGNED BY:	DRAWN BY:
BUILDING NO. 01	AUTOCAD FILE NAME:	CHECKED BY:	DRAWING NO. 1-MH7.1
LOCATION Jack C. Montgomery VA Medical Center		DATE 5/28/2013	

SCALE: AS NOTED
 DWG. 45 OF 97
DEPARTMENT OF VETERANS AFFAIRS