

REV.	DATE	DESCRIPTION
A	2017-11-03	10% CONCEPT DESIGN
B	2017-12-22	65% SUBMITTAL
C	2018-02-23	90% SUBMITTAL
D	2018-04-13	FOR CONSTRUCTION
E	2018-06-01	FOR CONSTRUCTION

SPLIT SYSTEM UNIT SCHEDULE

TONS	ENERGY CODE (SEE SHEET M-001 FOR APPLICABLE CODES)			MFR	HEAT PUMP (HP)	HP MARK	HP WT. (LBS)	AIR HANDLER UNIT (AHU)	AHU MARK	AHU WT. (LBS)	FC FAN (HP)	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	COOLING TOTAL BTUH	HEATING (KW)		HEAT PUMP ELECTRICAL				FAN COIL ELECTRICAL				NOTES	
	MIN. EFF. (SEER)	UNIT EFF. (SEER)	% MIN. REQ.												INPUT	OUTPUT	VOLTS	PH	MCA	MOC	VOLTS	PH	MCA	MOC		VOLTS
3.0	14.0	20	143%	DAIKIN	DZ20VC036	HP-1	173	DV37PVC	AHU-1	186	0.75	1,200	105	36,000	ELEC	9.6	9.6	208	1	29.8	30	208	1	50	60	1-9
2.0	14.0	20	143%	DAIKIN	DZ20VC024	HP-2	173	DV25PVC	AHU-2	150	0.50	800	130	24,000	ELEC	4.5	4.5	208	1	15.2	20	208	1	27	30	1-9
2.0	14.0	20	143%	DAIKIN	DZ20VC024	HP-3	173	DV25PVC	AHU-3	150	0.50	800	110	24,000	ELEC	4.5	4.5	208	1	15.2	20	208	1	27	30	1-9
3.0	14.0	20	143%	DAIKIN	DZ20VC036	HP-4	173	DV37PVC	AHU-4	186	0.75	1,200	105	36,000	ELEC	9.6	9.6	208	1	29.8	30	208	1	50	60	1-9

GENERAL NOTES:

- A) UNIT EFFICIENCIES SHOWN ARE MINIMUM REQUIRED.
- B) ALL UNITS SHALL BE CONTROLLED BY LONMARK-CERTIFIED THERMOSTATS WITH OCCUPANCY SENSORS. THERMOSTATS SHALL BE CONNECTED TO THE EXISTING NIAGARA JACE PANEL / TRIDIUM EMCS. CONTROLS PROGRAMMER SHALL INCORPORATE THE NEW POINTS INTO THE EXISTING JACE, COPY THE EXISTING THERMOSTAT PROGRAMMING AND GRAPHICS USED FOR OTHER UNITARY SYSTEMS, CONNECT POINTS INTO EXISTING SCHEDULE, AND ADD NEW FLOORPLAN GRAPHICS. EXISTING JACE USES ZIGBEE WIRELESS, HOWEVER LON CABLE MAY BE USED.

BASIS OF DESIGN IS AS SHOWN; APPROVED EQUALS: CARRIER, TRANE, YORK, LENNOX

NOTES:

- 1) PROVIDE ANTI-SHORT-CYCLE KIT FROM FACTORY
- 2) PROVIDE ACTUATED OPPOSED-BLADE DAMPER IN OUTSIDE AIR DUCT. DAMPER SHALL OPEN ON FAN START, AND CLOSE ON FAN STOP
- 3) INSTALL AUXILIARY DRIP PAN WITH KILL SWITCH FOR AIR HANDLING UNIT
- 4) INCLUDE FACTORY-PROVIDED INTERNAL DRAIN PAN KIT FOR ALL COOLING COIL SECTIONS
- 5) PROVIDE LONWORKS TEMPERATURE SENSOR. SEE CONTROLS NOTE B.
- 6) PROVIDE RECTORSEAL OR APPROVED EQUAL LINESET PROTECTORS FOR ALL EXTERIOR REFRIGERANT LINES
- 7) PROVIDE FILTER DRYER KIT
- 8) PROVIDE BIPOLAR IONIZATION DEVICE, SUCH AS GLOBAL PLASMA SOLUTIONS (GPS) GPS-FC-3-BAS COLD PLASMA AIR PURIFICATION DEVICE. DEVICE SHALL BE LONWORKS-ENABLED, AND SHALL BE ADDRESSABLE BY THE BUILDING BAS SYSTEM
- 9) CONTRACTOR SHALL ADJUST FAN SPEED TO MATCH SUPPLY AIR REQUIREMENTS AS CLOSELY AS POSSIBLE. SUPPLY AIR VOLUMES ARE A MINIMUM VALUE THE AIR HANDLER UNITS MUST PROVIDE.

DIFFUSER AND AIR TERMINAL SCHEDULE

MARK	FACE SIZE (IN.)	NECK SIZE (IN.)	MFR	MODEL	DESCRIPTION	MAX AIRFLOW (CFM)	N.C. RATING AT MAX FLOW	NOTES
R08	24x24	8	TITUS	PAR	PERFORATED LAY-IN CEILING RETURN/EXHAUST	244	2.1	1
R10	24x24	10	TITUS	PAR	PERFORATED LAY-IN CEILING RETURN/EXHAUST	436	2.7	1
R12	24x24	12	TITUS	PAR	PERFORATED LAY-IN CEILING RETURN/EXHAUST	550	2.3	1
R14	24x24	14	TITUS	PAR	PERFORATED LAY-IN CEILING RETURN/EXHAUST	855	3.2	1
RG	14x12	12x10	TITUS	350RL	RECTANGULAR RETURN GRILL, BLADE PARALLEL TO LONG DIM.	504	2.5	-
S06	24x24	6	TITUS	TMSA	SQUARE CONE LAY-IN CEILING DIFFUSER	196	2.5	1
S08	24x24	8	TITUS	TMSA	SQUARE CONE LAY-IN CEILING DIFFUSER	279	2.1	1
S10	22-1/2"ø	10	TITUS	TMRA	ROUND ADJUSTABLE FACE DIFFUSER	400	3.0	1

GENERAL NOTES:

DIFFUSERS SHALL HAVE FACTORY FINISH
 COORDINATE AIR TERMINAL AND DIFFUSER LOCATIONS WITH ARCHITECTURAL CEILING PLANS AND ELECTRICAL LIGHTING PLAN
 DUCT RUNOUTS TO AIR TERMINALS AND DIFFUSERS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK, UNLESS OTHERWISE NOTED
 AIR TERMINALS AND DIFFUSERS SHALL NOT HAVE A NOISE CRITERION (NC) RATING GREATER THAN 28 AT THE CFM INDICATED ON THE FLOORPLANS
 STATIC PRESSURE DROP THROUGH ANY AIR TERMINAL OR DIFFUSER SHALL NOT BE GREATER THAN 0.10" W.C. AT THE CFM INDICATED ON THE FLOORPLANS

EQUIPMENT NOTES:

- 1) INCLUDE FACTORY-INSTALLED MOLDED DIFFUSER-TOP INSULATION BLANKET (MIN. R-6 INSULATING VALUE)

BASIS OF DESIGN IS AS SHOWN; APPROVED EQUALS: PRICE, METALAIR, KREUGER, NAILOR

EXTERIOR AIR LOUVER SCHEDULE

MARK	MFR	MODEL	LOUVER SIZE (IN.)	BLADE ANGLE	BLADE CENTERS (NOM.)	BIRD SCREEN	FREE AREA (SQ.FT.)	AIRFLOW (CFM)	FACE VELOCITY (FPM)	SERVICE	NOTES	DESCRIPTION
L-1	RUSKIN	ELF6375DX	18X30	35°	6"	5/8"x0.040" (16x1)	1.63	450	276	OUTSIDE AIR	-	EXTRUDED ALUMINUM DRAINABLE STORMWATER LOUVER

GENERAL NOTES:

LOUVERS SHALL BE MANUFACTURED IN AN ISO9001-CERTIFIED FACTORY
 LOUVERS SHALL HAVE FACTORY FINISH WITH MIN. 20-YEAR FINISH WARRANTY.
 LOUVERS SHALL HAVE STRUCTURAL SUPPORTS REQUIRED TO WITHSTAND A MIN. WIND LOAD OF 20 LBS/SQFT
 LOUVERS SHALL BE CONSTRUCTED OF 6063T6 HIGH YIELD STRENGTH ALUMINUM ALLOY
 INCLUDE FACTORY-INSTALLED BIRD SCREEN INSTALLED IN CONFIGURATION COINCIDENT TO LOUVER SERVICE TYPE
 COORDINATE FINAL LOCATION OF LOUVERS WITH C.O.R.
 BEGINNING POINT OF WATER PENETRATION AT 0.01 OZ/SQFT SHALL BE MIN. 1023 FPM

BASIS OF DESIGN IS AS SHOWN; APPROVED EQUALS: PRICE, GREENHECK, NAILOR, UNITED ENERTECH

HVAC LEGEND-SYMBOL

SYMBOL	ITEM
A.D.	ACCESS DOOR
A.F.F.	ABOVE FINISHED FLOOR
B.E.	BOTTOM ELEVATION
C.D.	CONDENSATE DRAIN
F.C.	FLEXIBLE CONNECTION
F.D.	FIRE DAMPER
N.T.S.	NOT TO SCALE
O.A.	OUTSIDE AIR
R.A.	RETURN AIR
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
TYP.	TYPICAL
D	DRAIN PAN
CO	CONDENSATE DRAIN
FC	FLEXIBLE CONNECTION
TS	TEMPERATURE SENSOR
SS	SPLIT SYSTEM UNIT SCHEDULE
RD	RETURN AIR DIFFUSER
SA	SUPPLY AIR DIFFUSER
FD	FLEXIBLE DUCTWORK
#	KEYED NOTE TAG

VENTILATION AIR BALANCE REPORT

ZONE	SUPPLY AIRFLOW (CFM)	OUTSIDE AIR RATIO (%)	AREA (FT.²)	OCCUPANTS	REQ'D VENTILATION (CFM)	VENTILATION PROVIDED (CFM)	SAFETY FACTOR (%)	MEETS REQ'S? (Y/N)
206 - CLASSROOM	800	8.8%	524	17	85	105	24%	Y
213 - CLOSET	400		49	0				Y
205 - CLASSROOM	800	16.3%	600	21	105	130	24%	Y
202 - CORRIDOR	160		455	0				Y
203 - CLASSROOM	320	13.8%	255	9	90	110	22%	Y
204 - CLASSROOM	320		344	9				Y
207 - LAB	1,200	8.8%	650	17	85	105	24%	Y

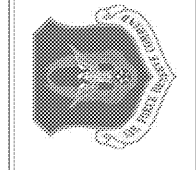
ZONE	O.A. (CFM)	SUPPLY (CFM)	O.A. RATIO (%)	AREA (FT.²)	OCCUPANTS
AHU-1	105	1,200	8.8%	573	17
AHU-2	130	800	16.3%	600	21
AHU-3	110	800	13.8%	1,054	18
AHU-4	105	1,200	8.8%	650	17

GENERAL NOTES:

- 1) SEE BIPOLAR IONIZATION CALCULATION SPREADSHEET INCLUDED IN DESIGN ANALYSIS DOCUMENTS FOR REQUIRED VENTILATION RATES IN EACH ROOM
- 2) NO MECHANICAL EXHAUST IS PROVIDED FOR THIS PROJECT. BUILDING VENTILATION RELIEF IS ACCOMPLISHED BY MEANS OF A BAROMETRIC RELIEF DAMPER AS SHOWN ON THE FLOOR PLAN.



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REPAIR FACILITY & ADDITION
 BUILDING 747
 FGWB 08-0027
 DOBBINS AIR RESERVE BASE, GEORGIA
 MECHANICAL SCHEDULES

PROJECT	LOCATION	DRAWING	CONTRACT
PROJECT No:	2017-238		
PROJ. OFFICER:	J. MORGAN		
DESIGNED:	A. BENWAY		
CHECKED:	M. JOHNSON		
DATE:	2018-02-23		
DRAWINGS:	40 OF 45		

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