COMPUTER ROOM AIR CONDITIONING UNIT SCHEDULE (SEE HPE SCHEDULE FOR ELECTRICAL SERVICE)

SYMBOL	TYPE	SERVICE	LOCATION	TOTAL CFM	FAN DATA			EAT °F		LAT °F		MBH		COOLING COIL						REHEAT			HUMIDIFIER		REMARKS	BASIS OF DESIGN
														GPM	NOM. TONS	CONTROL VALVE			BRANCH PIPE SIZE			ELECTRIC	CAPACITY		(NOTES 1, 2, 3)	
					ESP IN. WG	MAX KW	HP	DB	WB	DB	WB	TOT.	SENS.			TYPE	MAX. PD (FT.)	FAIL POS.		MBH	KW	STEPS	LBS/HR	TYPE		
CRU B1-1	WALL-MOUNTED	TELECOM	TELECOM	1,200	0.0	0.398	0.75	72	58.7	55.0	52.2	22.4	21.9	5.3	3	2W MOD.	7 FT.	NO	1"	20.4	5.5	2	3	STM	-	LIEBERT DME044C
CRU B1-2	WALL-MOUNTED	TELECOM	TELECOM	1,200	0.0	0.398	0.75	72	58.7	55.0	52.9\2	22.4	21.9	5.3	3	2W MOD.	7 FT.	NO	1"	20.4	5.5	2	3	STM	-	LIEBERT DME044C

NOTES:
1. PROVIDE UNIT WITH REMOTE WALL MOUNTED MICROPROCESSOR CONTROL KEYPAD.
2. PROVIDE INTEGRAL CONDENSATE PUMP.
3. PROVIDE SPARE SET OF ALL FILTERS.

CABINET UNIT HEATER SCHEDULE (SEE HPE SCHEDULE FOR ELECTRICAL SERVICE)

SYMBOL	TYPE	LOCATION	FAN (NOTE 1)			HEATING CAPACITY										REMARKS	BASIS OF DESIGN
											CONTROL VALVE						
	(NOTE 2)		CFM	HP / WATTS	RPM	MBH	EAT °F	GPM	PD/ FT. WG	EWT °F	TYPE	MAX. PD (FT.)	FAIL POS.	BRANCH PIPE SIZE	ROWS	(SEE NOTES) 3, 6, 9, 10	
CUH 1-1	HCAB	CH-103 - WOMEN	350	0.25	MEDIUM	7.2	65	0.9	3.2	180	2W MOD.	7 FT.	NO	3/4"	2	5	TRANE B04
CUH 1-2	HCAB	CH-105 - MEN	300	0.25	MEDIUM	8.2	65	1.1	3.3	180	2W MOD.	7 FT.	NO	3/4"	2	5	TRANE B04
CUH B2-1	VCAB	B205 - VEST	350	58 WATTS	MEDIUM	16	65	2	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04
CUH B2-2	VCAB	B217 - VEST	350	58 WATTS	MEDIUM	16	65	2	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04
CUH B1-1	VCAB	B100 - VEST	350	58 WATTS	MEDIUM	16	65	2	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04
CUH B1-2	VCAB	B122 - VEST	350	58 WATTS	MEDIUM	16	65	2	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04
CUH B1-3	VCAB	NW STAIR	350	58 WATTS	MEDIUM	21	65	2.7	5.5	180	-	-	-	3/4"	3	4, 7, 8	TRANE FF-B04

NOTES:
1. AIR FLOW INCLUDES ALLOWANCES FOR ALL INTEGRAL PRESSURE DROPS (INCLUDING INTAKE AND DISCHARGE GRILLES, COILS AND FILTERS.
2. TYPES - VCAB = VERTICAL CABINET, HCAB = HORIZONTAL CABINET.
3. PROVIDE UNIT WITH HINGED VANDAL-PROOF ACCESS DOORS
4. PROVIDE UNIT HEATER WITH INTEGRAL FAN ON-OFF AUTO SWITCH & THERMOSTAT. ON A CALL FOR HEAT THE UNIT CONTROLS MUST OPEN A SOLENOID VALVE LOCATED UNDER UNIT COVER IN AN ACCESSIBLE LOCATION. ALL CONTROL DEVICES, TRANSFORMERS, ETC. MUST COME PRE-WIRED WITH UNIT.
5. UNIT HEATER MUST BE CONTROLLED THRU DDC SYSTEM.
6. PROVIDE 1" THROWAWAY FILTER FOR RETURN AIR.
7. COORDINATE WITH DOR FOR FINISHES COLOR.
8. PROVIDE ACCESSIBLE EXTENDED CABINET TO ENCLOSE ALL CUH TRIM AND ACCESSORIES.
9. PROVIDE SPARE SET OF ALL FILTERS.
10. PROVIDE UNIT MOUNTED DISCONNECT SWITCH.

UNIT HEATER SCHEDULE (SEE HPE SCHEDULE FOR ELECTRICAL SERVICE)

SYMBOL	TYPE	LOCATION	FAN			HEATING CAPACITY								REMARKS	BASIS OF DESIGN
											CONTROL VALVE				
			CFM	HP / WATTS	RPM	MBH	EAT °F	GPM	PD/ FT. WG	EWT °F	TYPE	MAX. PD (FT.)	FAIL POS.	BRANCH PIPE SIZE	(SEE NOTES 1,2,3,4,5)	
UH B2-1	EX	MECHANICAL B216	420	16W	1350	15.7	65	1.9	2.2	180	2W MOD.	7 FT.	NO	3/4"	-	TRANE S-A18
UH B1-1	EX	AHU-2 VESTIBULE	420	16W	1350	15.7	65	1.9	2.2	180	2W MOD.	7 FT.	NO	3/4"	-	TRANE S-A18

NOTES:
1. AIR FLOW INCLUDES ALLOWANCES FOR ALL INTEGRAL PRESSURE DROPS (INCLUDING INTAKE AND DISCHARGE GRILLES, COILS AND FILTERS).
2. TYPES - EX = EXPOSED, VCAB = VERTICAL RECESSED CABINET, HCAB = HORIZONTAL CABINET.
3. ALL UNITS MUST BE HORIZONTAL DISCHARGE WITH INTEGRAL FAN GUARDS.
4. UNIT HEATER MUST BE CONTROLLED THROUGH THE BAS.
5. PROVIDE UNIT MOUNTED DISCONNECT SWITCH.

STEAM PRESSURE REDUCING STATION SCHEDULE

SYMBOL	LOCATION	PRESSURE REDUCING VALVE				RELIEF VALVE				REMARKS	BASIS OF DESIGN
		SIZE (IN.)	FLOW LBS/HR.	INIT. PSIG	FIN. PSIG	FLOW LBS/HR.	SET PSIG	MIN. SIZE (IN.)	ORIFICE (SQ. IN.)		
PRV-1	TUNNEL	1.5	1,500	50	5	1,500	20	2	-	CULLUM; SEE NOTE 1 & 2	SPIRAX SARCO 25P (YELLOW)
PRV-2	TUNNEL	1.5	1,500	50	10	1,500	20	2	-	LINCOLN; SEE NOTE 1 & 2	SPIRAX SARCO 25P (YELLOW)

NOTES
1. SOUND VALUES INCLUDE THE EFFECTS OF ACOUSTIC PLATES AS WELL AS ACOUSTIC BLANKETS
2. RELIEF VALVE - BASIS OF DESIGN - SPRIAX SARCO SV5708J, PROVIDE WITH DRIP PAN ELBOW AND 3-1/2" VENT ROUTED TO ATMOSPHERE.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: WMF
DRAWN BY: RKG
CHECKED BY: WCJ
SUBMITTED BY: SK
SIZE: ANSI D
ISSUE DATE: 2/11/2021
SOLICITATION NO.: W912DS-19-R-0014
CONTRACT NO.: W912DS-19-C-0031
PROJECT NO: 20190494

US ARMY CORPS OF ENGINEERS

JACOBS / EWING COLE A Joint Venture

WEST POINT, NY
USMA BUILDING 605 CULLUM HALL RENOVATION

SCHEDULES - HVAC

SHEET ID
M605

RTA SUBMISSION 2/11/2021