

LIGHTING FIXTURE SCHEDULE											
TYPE	DESCRIPTION	VOLTS	LAMP TYPE	WATTS	LUMENS	COLOR TEMP. (K)	CRI	MOUNTING	MANUFACTURER	MODEL SERIES	REMARKS
A	2 X 2 FLAT PANEL BACKLIT, SELECTABLE LUMENS AND COLOR TEMPERATURE, 0-10V DIMMING	MVOLT	LED	37 VA	4000 lm	3500 K	85	RECESSED	ORACLE LIGHTING METALUX HE WILLIAMS	22 FPL-BL SERIES	SET LUMEN OUTPUT AND COLOR TEMPERATURE TO VALUES INDICATED IN SCHEDULE
B	2 X 4 FLAT PANEL BACKLIT, SELECTABLE LUMENS AND COLOR TEMPERATURE, 0-10V DIMMING	MVOLT	LED	49 VA	5000 lm	3500 K	85	RECESSED	ORACLE LIGHTING METALUX HE WILLIAMS	24 FPL-BL SERIES	SET LUMEN OUTPUT AND COLOR TEMPERATURE TO VALUES INDICATED IN SCHEDULE
D	4 FOOT LINEAR STRIP, SELECTABLE LUMENS AND COLOR TEMPERATURE, 0-10 V DIMMING, DAMP LISTED	MVOLT	LED	39 VA	5000 lm	3500 K	85	SUSPENDED	ORACLE LIGHTING METALUX HE WILLIAMS	4-OC1 V3 SERIES	SET LUMEN OUTPUT AND COLOR TEMPERATURE TO VALUES INDICATED IN SCHEDULE
F	7" DIAMETER SLIM SURFACE FIXTURE, WHITE FINISH, DAMP LISTED	MVOLT	LED	15 VA	1000 lm	3500 K	80	SURFACE	LIGHTOLIER ELITE LIGHTING HALO	S7R SERIES RL791 SERIES SMD SERIES	
G	10" DIAMETER SLIM SURFACE FIXTURE, WHITE FINISH, DAMP LISTED	MVOLT	LED	24 VA	2200 lm	3500 K	80	SURFACE	LIGHTOLIER ELITE LIGHTING HALO	S10R SERIES RL791 SERIES SMD SERIES	

Branch Panel: HBBR

Location:  
Supply From: MDP  
Mounting:  
Enclosure:

Volts: 480Y/277  
Phases: 3  
Wires: 4

A.I.C. Rating:  
BUS OCP Type: MLO  
BUS Rating: 400 A  
MCB Rating: NONE

Notes: EXISTING PANEL

CKT	Circuit Description	Notes	Trip	Poles	Wire & Conduit Size	A	B	C	A	B	C	Wire & Conduit Size	Poles	Trip	Notes	Circuit Description	CKT
1	EX R1 HEATER		40 A	1		8.2 kVA				4.6 kVA			1	30 A		EX R8 HEATER	2
3	EX R2 HEATER		40 A	1		8.2 kVA				4.6 kVA			1	30 A		EX R7 HEATER	4
5	SPARE		30 A	1		0.0 kVA		0.0 kVA			0.0 kVA		1	20 A		SPARE	6
7	EX BMS PANEL		20 A	1		0.5 kVA			5.7 kVA	5.7 kVA			3	30 A	(1)	VAV 7-5	8
9	SPARE		20 A	1			0.0 kVA						--	--			10
11	SPARE		20 A	1				0.0 kVA			5.7 kVA		--	--			12
13	VAV 7-1		30 A	3	4#10, 1#10 G, 3/4" C & EX C	5.7 kVA			0.0 kVA				3	60 A		SPARE	14
15	--	--	--	--	--	5.7 kVA				0.0 kVA			--	--		--	16
17	--	--	--	--	--		5.7 kVA				0.0 kVA		--	--		--	18
19	VAV 7-2		30 A	3	4#10, 1#10 G, 3/4" C & EX C	5.2 kVA				2.2 kVA			3	20 A		EX UNIT HEATER 6	20
21	--	--	--	--	--	5.2 kVA				2.2 kVA			--	--		--	22
23	--	--	--	--	--		5.2 kVA				2.2 kVA		--	--		--	24
25	EX UNIT HEATER		30 A	3		5.0 kVA				2.2 kVA			3	20 A		EX UNIT HEATER 5	26
27	--	--	--	--	--		5.0 kVA				2.2 kVA		--	--		--	28
29	--	--	--	--	--			5.0 kVA				2.2 kVA	--	--		--	30
31	VAV 7-3		30 A	3	4#10, 1#10 G, 3/4" C & EX C	5.2 kVA				7.2 kVA			3	50 A		EX HVAC UNIT 11	32
33	--	--	--	--	--		5.2 kVA				7.2 kVA		--	--		--	34
35	--	--	--	--	--			5.2 kVA			7.2 kVA		--	--		--	36
37	VAV 7-4		30 A	3	4#10, 1#10 G, 3/4" C & EX C	5.2 kVA				6.7 kVA			3	40 A		EX UV LT POOL	38
39	--	--	--	--	--			5.2 kVA			6.7 kVA		--	--		--	40
41	--	--	--	--	--				5.2 kVA		6.7 kVA		--	--		--	42
Total Load:						63.4 kVA					62.9 kVA						
Total Amps:						236 A					234 A						

Load Classification	Connected Load	Demand Factor	Demand	Panel Totals
HVAC	80400 VA	100.00%	80400 VA	
Spare	96000 VA	100.00%	96000 VA	
				Total Conn. Load: 176400 VA
				Total Est. Demand: 176400 VA
				Total Conn. Current: 212 A
				Total Est. Demand Current: 212 A

Notes:  
(1) PROVIDE BREAKER. MATCH EXISTING STYLE AD AIC RATING.

MECHANICAL EQUIPMENT CONNECTION SCHEDULE											
ID TAG	VOLTS	PH	MCA	MOCP	SS POLES	SS RATED AMPS	FUSE AMPS	FUSE TYPE	MOTOR STARTER/SIZE	PANEL	CIRCUIT
CU-1	208 V	1	9.0 A	15 A	2	30 A	NF	--	--	A1C	36,38
CU-2	208 V	1	19.0 A	25 A	2	30 A	NF	--	--	A1C	40,42
CU-3	208 V	1	9.0 A	15 A	2	30 A	NF	--	--		
DOAS-1	480 V	3	144.0 A	150 A	3	200 A	NF	--	--	SWBD	
EF-1	277 V	1	1.5 A	15 A	1	RATED TOGGLE SWITCH	--	--	--		
FCU-1	208 V	1	2.2 A	15 A	2	RATED TOGGLE SWITCH	--	--	--		
FCU-2	208 V	1	2.3 A	15 A	2	RATED TOGGLE SWITCH	--	--	--		
FCU-3	208 V	1	2.2 A	15 A	2	RATED TOGGLE SWITCH	--	--	--		
RTU-1	480 V	3	170.0 A	175 A	3	200 A	NF	--	--	SWBD	EX 175AT/250AF BREAKER
RTU-2	480 V	3	170.0 A	175 A	3	200 A	NF	--	--	SWBD	EX 175AT/250AF BREAKER
RTU-3	480 V	3	170.0 A	175 A	3	200 A	NF	--	--	SWBD	EX 175AT/250AF BREAKER
RTU-4	480 V	3	170.0 A	175 A	3	200 A	NF	--	--	SWBD	EX 175AT/250AF BREAKER
RTU-6	480 V	3	49.0 A	50 A	3	60 A	NF	--	--	H1BL	25,27,29
RTU-7	480 V	3	142.0 A	150 A	3	200 A	NF	--	--	SWBD	
VAV 7-1	480 V	3	24.0 A	25 A	3	30 A	25 A	RK1	--	HBRR	13,15,17
VAV 7-2	480 V	3	22.0 A	25 A	3	30 A	25 A	RK1	--	HBRR	19,21,23
VAV 7-3	480 V	3	22.0 A	25 A	3	30 A	25 A	RK1	--	HBRR	31,33,35
VAV 7-4	480 V	3	22.0 A	25 A	3	30 A	25 A	RK1	--	HBRR	37,39,41
VAV 7-5	480 V	3	24.0 A	25 A	3	30 A	25 A	RK1	--	HBRR	8,10,12

- NOTES:  
1. CONNECT TO SPARE 150A-3P BREAKER IN EXISTING SQUARE D QED-2 SWITCHBOARD LOCATED IN BASEMENT WITH 3#3/0,1#3 G IN 2" CONDUIT.  
2. BASE BIDS NO. 1 AND 2: FURNISH A 50A-3P BREAKER AND INSTALL IN EXISTING SQUARE D NF PANELBOARD H1B LEFT. CONNECT WITH 3#6, 1#10 G IN 1" CONDUIT. BASE BID NO. 3: FURNISH A 30A-3P BREAKER AND INSTALL IN EXISTING SQUARE D NF PANELBOARD H1B LEFT. PROVIDE 3#6, 1#10 G, IN 1" CONDUIT TO FAN ROOM 1. PROVIDE JUNCTION BOX AND TAP WITH 3#6, 1#10 G, IN 3/4" CONDUIT TO HV6 CU EXISTING DISCONNECT SWITCH AND H&V UNIT 6 COMBINATION MOTOR STARTER.  
3. BASE BID NO. 1: CONNECT TO EXISTING CIRCUIT BREAKER INDICATED. REFER TO PANEL SCHEDULE.  
4. BASE BID NO. 1: FURNISH A 25A-3P BREAKER AND INSTALL IN EXISTING SQUARE D NF PANELBOARD HBRR IN BASEMENT. REMOVE 20A-1P BREAKER TO ALLOW INSTALLATION OF 3 POLE BREAKER.  
CONNECT TO BREAKER WITH 4#10,1#10 G IN 3/4" CONDUIT. BASE BIDS NO. 2 AND 3: FIRNISH A 45A-3P BREAKER AND INSTALL IN EXISTING PANELBOARD HBRR-8,10,12 IN BASEMENT. REMOVE 20A-1P BREAKER TO ALLOW INSTALLATION OF 3 POLE BREAKER. USE BREAKER TO POWER EXISTING HV#7 CU ON ROOF. PROVIDE 3#6,1#6 G, IN 1" CONDUIT AND CONNECT TO CONDUCTORS DISCONNECTED ON DEMOLITION PLAN.  
5. FURNISH A 150A-3P CIRCUIT BREAKER AND INSTALL IN EXISTING SQUARE D QED 2 SWITCHBOARD. BREAKER TYPE AND AIC TO MATCH EXISTING BREAKERS. CONNECT WITH 3#1/0,1#6 G IN 1-1/2" CONDUIT.  
6. EXTEND EXISTING FEEDER (3#2/0, 1#6 G, IN 2" C) FROM WIREWAY IN FAN ROOM BELOW RTU TO DISCONNECT SWITCH.  
7. UNIT FED FROM OUTDOOR UNIT. PROVIDE 3#12, 1#12 G, IN 3/4" CONDUIT.  
8. FURNISH A 20A-2P BREAKER AND INSTALL IN EXISTING SQUARE D NQOD PANEL A1D. BREAKER TYPE AND AIC RATING TO MATCH EXISTING. REARRANGE EXISTING BREAKERS TO ALLOW BREAKER TO BE INSTALLED. CONNECT WITH 2#10, 1#10 G, IN 3/4" CONDUIT.  
9. FURNISH A 30A-2P BREAKER AND INSTALL IN EXISTING SQUARE D NQOD PANEL A1C. BREAKER TYPE AND AIC RATING TO MATCH EXISTING. CONNECT WITH 2#10, 1#10 G, IN 3/4" CONDUIT.  
10. FURNISH A 20A-2P BREAKER AND INSTALL IN EXISTING SQUARE D NQOD PANEL A1C. BREAKER TYPE AND AIC RATING TO MATCH EXISTING. CONNECT WITH 2#10, 1#10 G, IN 3/4" CONDUIT.  
11. FURNISH A 15A-1P BREAKER AND INSTALL IN EXISTING SQUARE D PANEL H1BR. REMOVE AN EXISTING SINGLE POLE BREAKER FEEDING A REMOVED REHEAT COIL. CONNECT WITH 2#12, 1#12 G, IN 3/4" CONDUIT.

This drawing is the property of Century Engineering and is prepared for the exclusive use of it's clients at the location indicated. No other use is authorized or intended.



SEAL

NO.	DESCRIPTION	DATE
REVISIONS		

MILLERSVILLE UNIVERSITY  
MI-1213 PUCILLO HVAC RENOVATION  
126 PUCILLO DRIVE MILLERSVILLE, PA. 17551

SHEET TITLE

PANEL  
SCHEDULES

ISSUE DATE: 11.17.2023  
DRAWN: SP DESIGNED: SGH CHECKED: SGH  
SCALE: SHEET NO.  
AS NOTED  
PROJECT NO. E-701  
240000543.001A

###	###
###	###
###	###