

MDP									
LOCATION: MECHANICAL ROOM 142		480/277 VOLTS, 3Ø 4 WIRE		NEMA 1		NEMA 3R		22,000 A SYM. SHORT CIRCUIT CURRENT RATING @ 480V, 3Ø	
FED FROM: UTILITY TRANSFORMER		600 AMPS		MAIN BREAKER		MAIN LUGS ONLY			
		GND FAULT		SHUNT-TRIP		TOP FED		BOT. FED	
CKT	DESCRIPTION OF LOAD	OP. DEVICE	POLES	FRAME	TRIP	SETS	FEEDER SIZE WIRE AND CONDUIT	KVA	
1	AHU-1	3	60	50	1	3#8, #10G, 3/4"		33.2	
2	CU-1	3	60	25	1	3#10, #10G, 3/4"		15.7	
3	AHU-3	3	60	60	1	3#6, #10G, 3/4"		39.8	
4	CU-3	3	60	30	1	3#10, #10G, 3/4"		19.9	
5	AHU-4	3	100	90	1	3#3, #8G, 1 1/4"		59.8	
6	CU-4	3	60	50	1	3#6, #10G, 3/4"		33.2	
7	AHU-5	3	100	90	1	3#3, #8G, 1 1/4"		59.8	
8	CU-5	3	60	50	1	3#6, #10G, 3/4"		33.2	
9	PREPARED SPACE	3	200	-	-	-			
10	PREPARED SPACE	3	200	-	-	-			
11	HP INDIGO 5000	1 2	3	60	-	-	3#8, #10G, 3/4"	12.0	
12	PREPARED SPACE FOR FUTURE HP INDIGO 5000	1 2	3	60	-	-	-		
13	PREPARED SPACE FOR FUTURE HP INDIGO 5000	1 2	3	60	-	-	-		
14	PANEL H	3	100	100	1	REFERENCE RISER DIAGRAM, THIS SHEET		16.2	
15	PANELS L1 AND L3 VIA 112.5 KVA XFMR T1	3	200	175	1	REFERENCE RISER DIAGRAM, THIS SHEET		92.2	
16	PANEL L2 VIA 75 KVA XFMR T2	3	150	125	1	REFERENCE RISER DIAGRAM, THIS SHEET		74.8	
17	DUCT HEATER	3	60	40	1	3#8, #10G, 1"		24.0	
TOTAL CONNECTED KVA:								513.8	

PANEL H				480/277 VOLTS, 3ø 4 WIRE				☐ NEMA 1	☐ NEMA 3R	10,000 A SYM. SHORT CIRCUIT CURRENT RATING @ 240V, 3ø
LOCATION: MECHANICAL ROOM 142				100 AMPS		☐ MAIN BREAKER	☐ MAIN LUGS ONLY			
FED FROM: MDP				☐ FLUSH	☐ SURFACE MOUNTED	☐ TOP FED		☐ BOT. FED		
CKT	DESCRIPTION OF LOAD	TRIP	6A	KVA	øB	øC	TRIP	DESCRIPTION OF LOAD	CKT	
1	LIGHTING	20	4.2	-	-	-	20	SPARE	2	
3	LIGHTING	20	-	4.2	-	-	20	SPARE	4	
5	LIGHTING	20	-	-	2.7	-	20	SPARE	6	
7	LIGHTING	20	3.3	-	-	-	-	SPACE	8	
9	SPARE	20	-	-	-	-	-	SPACE	10	
11	EXISTING EXTERIOR LIGHTING	20	-	-	2.0	-	-	SPACE	12	
			7.3	4.2	4.7	TOTAL CONNECTED KVA: 16.2				

PANEL L1			208/120 VOLTS, 3Ø 4 WIRE			☐ NEMA 1 ☐ NEMA 3R		10,000 A SYM. SHORT CIRCUIT CURRENT RATING @ 240V, 3Ø	
LOCATION: MECHANICAL ROOM 142			300 AMPS		☐ MAIN BREAKER	☐ MAIN LUGS ONLY			
FED FROM: MDP VIA 112.5 KVA XFMR T1			☐ FLUSH		☐ SURFACE MOUNTED		☐ TOP FED ☐ BOT. FED		
CKT	DESCRIPTION OF LOAD	TRIP	KVA ØA ØB ØC			TRIP	DESCRIPTION OF LOAD	CKT	
1	120V CIRCUIT FOR HP INDIGO 5000 SHUNT TRIP BREAKER	20	-	1.2	-	20	RECEPTACLES	2	
3	120V CIRCUIT FOR HP INDIGO 5000 SHUNT TRIP BREAKER	20	-	-	1.2	20	RECEPTACLES	4	
5	EXHAUST FAN, EF-1	20	-	-	0.4	20	RECEPTACLES	6	
7	RECEPTACLES	20	1.2	1.2	-	20	RECEPTACLES	8	
9	RECEPTACLE - MICROWAVE BREAK ROOM 116 (2)	20	-	1.2	1.2	20	RECEPTACLES	10	
11	RECEPTACLE - COFFEE BREAK ROOM 116 (2)	20	-	-	1.2	20	RECEPTACLES	12	
13	RECEPTACLE - REFRIGERATOR BREAK ROOM 116 (2)	20	1.5	1.2	-	20	RECEPTACLES	14	
15	DISHWASHER BREAK ROOM 116 (2)	20	-	1.0	1.2	20	RECEPTACLES	16	
17	RECEPTACLE - VENDING BREAK ROOM 116 (2)	20	1.2	-	1.2	20	RECEPTACLES	18	
19	RECEPTACLE - COFFEE ROOM 115 (2)	20	1.2	1.2	-	20	RECEPTACLES	20	
21	RECEPTACLE - UC REFRIGERATOR COFFEE ROOM 106 (2)	20	-	1.5	1.2	20	RECEPTACLES	22	
23	RECEPTACLE - COFFEE ROOM 106 (2)	20	-	-	1.2	20	RECEPTACLES	24	
25	SPARE	20	-	1.2	-	20	SPARE	26	
27	SPARE	20	-	-	1.5	20	SPARE	28	
29	SPARE	20	-	-	-	20	SPARE	30	
31	WATER HEATER (2)	30	2.3	-	-	-	SPACE	32	
33	↓	↓	↓	↓	↓	-	SPACE	34	
35	AHU-2	60	-	-	4.9	-	SPACE	36	
37	↓	↓	↓	↓	↓	150	PANEL L3	38	
39	CU-2	40	4.9	11.1	2.7	15.6	↓	40	
41	↓	↓	↓	↓	↓	2.7	15.6	42	
			28.2	30.5	33.5	TOTAL CONNECTED KVA: 92.2			

PANEL L2			208/120 VOLTS, 3Ø 4 WIRE			☐ NEMA 1 ☐ NEMA 3R		10,000 A SYM. SHORT CIRCUIT CURRENT RATING @ 240V, 3Ø	
LOCATION: WAREHOUSE ROOM 117			200 AMPS			☒ MAIN BREAKER		☐ MAIN LUGS ONLY	
FED FROM: MDP VIA 75 KVA XFMR T2			☐ FLUSH			☒ SURFACE MOUNTED		☒ TOP FED ☐ BOT. FED	
CKT	DESCRIPTION OF LOAD	TRIP	6A	KVA	ØB	ØC	TRIP	DESCRIPTION OF LOAD	CKT
1	CEILING MOUNTED J-BX FOR FUTURE USE	20	1.0				20	SPARE	2
3	CEILING MOUNTED J-BX FOR FUTURE USE	20		1.0			20	SPARE	4
5	CEILING MOUNTED J-BX FOR FUTURE USE	20			1.0		20	SPARE	6
7	POWER POLES WAREHOUSE ROOM 117	20	1.2				20	SPARE	8
9	POWER POLES WAREHOUSE ROOM 117	20		1.2	2.4		30	FUJI FRONTIER	10
11	RECEPTACLES	20			1.2	2.4	↓	↓	12
13	RECEPTACLES	20	0.5	2.4			30	FUJI FRONTIER	14
15	RECEPTACLES	20		0.5	2.4		↓	↓	16
17	RECEPTACLES	20			0.5	2.4	30	FUJI FRONTIER	18
19	RECEPTACLES	20	0.5	2.4			↓	↓	20
21	RECEPTACLES	20		0.5	2.4		30	FUJI FRONTIER	22
23	RECEPTACLES	20			0.5	2.4	↓	↓	24
25	RECEPTACLES	20	0.5	2.4			30	FUJI FRONTIER	26
27	RECEPTACLES	20		0.5	2.4		↓	↓	28
29	RECEPTACLES	20			0.5	2.4	30	FUJI FRONTIER	30
31	RECEPTACLES	20	0.5	2.4			↓	↓	32
33	AHU-6	60		4.9	2.7		40	CU-6	34
35	↓	↓			4.9	2.7	↓	↓	36
37	HP INDIGO CHILLER UNIT, CH-1	40	3.2				-	SPACE	38
39	↓	↓		3.2			-	SPACE	40
41	↓	↓			3.2		-	SPACE	42
			17.0	24.1	24.1	TOTAL CONNECTED KVA: 65.2			

PANEL L3				208/120 VOLTS, 3Ø 4 WIRE				☐ NEMA 1 ☐ NEMA 3R		10,000 A SYM. SHORT CIRCUIT CURRENT RATING @ 240V, 3Ø		
LOCATION: SERVER ROOM 112				150 AMPS ☐ MAIN BREAKER		☐ MAIN LUGS ONLY						
FED FROM: PANEL L1				☐ FLUSH ☒ SURFACE MOUNTED		☐ TOP FED ☐ BOT. FED						
CKT	DESCRIPTION OF LOAD			TRIP	ØA	KVA ØB	ØC	TRIP	DESCRIPTION OF LOAD			CKT
1	SPACE			-	-	1.2	-	20	RECEPTACIES			2
3	SPACE			-	-	-	1.2	20	RECEPTACIES			4
5	SPACE			-	-	-	-	20	RECEPTACIES			6
7	SPACE			-	-	1.2	-	20	RECEPTACIES			8
9	SPACE			-	-	-	1.2	20	RECEPTACIES			10
11	SPACE			-	-	-	-	20	RECEPTACIES			12
13	SPACE			-	-	1.2	-	20	RECEPTACIES			14
15	SPACE			-	-	-	1.2	20	RECEPTACIES			16
17	SPACE			-	-	-	-	20	RECEPTACIES			18
19	SPACE			-	-	1.2	-	20	RECEPTACIES			20
21	SPACE			-	-	-	1.2	20	RECEPTACIES			22
23	SPACE			-	-	-	-	20	RECEPTACIES			24
25	SPACE			-	-	-	1.2	20	RECEPTACIES			26
27	RECEPTACLE - TELEPHONE BACKBOARD			20	-	0.4	1.0	20	SPARE			28
29	RECEPTACLE - COMPUTER EQUIPMENT	(2)		20	-	-	1.0	20	SPARE			30
31	RECEPTACLE - COMPUTER EQUIPMENT	(2)		20	1.0	-	-	20	SPARE			32
33	RECEPTACLE - COMPUTER EQUIPMENT	(2)		20	-	4.9	-	20	SPARE			34
35	COMPUTER EQUIPMENT	(2)		60	-	-	4.9	20	SPARE			36
37	↓	↓	↓	↓	↓	4.9	-	-	SPACE			38
39	COMPUTER EQUIPMENT	(2)		60	-	4.9	-	-	SPACE			40
41	↓	↓	↓	↓	↓	-	4.9	-	SPACE			42
				11.1	15.6	15.6	TOTAL CONNECTED KVA: 42.3					

PANEL SCHEDULE NOTES:

- SHUNT TRIP CIRCUIT BREAKER.
- COORDINATE ALL REQUIREMENTS, INCLUDING EXACT LOCATION, WITH MANUFACTURER'S NAMEPLATE DATA ON OWNER PROVIDED EQUIPMENT OR PER INTERIOR DESIGN SPECIFICATIONS (REFERENCE ID PLANS).
- PROVIDE NEW CONNECTION TO EXISTING EXTERIOR LIGHTING AND NEW CONTROL VIA PHOTOCELL (ON) / TIMECLOCK (OFF).
- UTILIZE SPARE CIRCUIT BREAKERS AND PREPARED SPACES FOR ANY UNIDENTIFIED ELECTRICAL FIXTURES/EQUIPMENT AS REQUIRED BY THE OWNER - FIELD COORDINATE PRIOR TO COMMENCEMENT OF ANY ELECTRICAL WORK.

LOAD CALCULATION

Commercial X Large Residential Number of Meters 1
 Overhead Underground X Underground Up Pole
 Square Footage of Space 19,000 Unmetered Main

Lighting Load @ 100% 16,200 VA
 Receptacle Load @ ((100%KVA - 10KVA)*.5) + 10KVA 46,800 VA
 HVAC & Misc Load @ 100% 334,600 VA
 Total 397,600 VA
 Total 478 Amps

Voltage 480 Phase 3

