



- NOTES:
- REFER TO DRAWING E-000 FOR LEGEND, SYMBOLS AND GENERAL NOTES THAT MAY PERTAIN TO THIS DRAWING.
 - THIS DRAWING IS INTENDED TO ILLUSTRATE MAJOR EQUIPMENT AND REQUIRED INTERCONNECTIONS. REFER TO THE FLOOR PLANS FOR EXACT LOCATIONS AND THE SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS.

PARTIAL ELECTRICAL RISER DIAGRAM

NTS

EXISTING PANELBOARD SCHEDULE																				
PANEL: R21A (SECTION 1)					VOLTS: 208Y120					MOUNT: SURFACE					GROUND BUS: Y					
MAIN: 200 AMP MCB					AMPS: 250 AMP BUS					AIC: 22K					ISOLATED GROUND BUS: N					
PH/WIRE: 3/4					LOC: ELEC ROOM					200% NEUTRAL: N										
CIR	AMPS/POLES	DESCRIPTION OF LOAD	CONNECTED LOAD (KVA)					LOAD BY PHASE, KVA					CONNECTED LOAD (KVA)					AMPS/POLES	CIR	
			LTG	HVAC HEAT	HVAC COOL	CONT. ON LOAD	REC	A	B	C	LTG	HVAC HEAT	HVAC COOL	CONT. ON LOAD	REC	DESCRIPTION OF LOAD				
1	20/1	LTG	0.22					1.07												2
3	20/1	LTG	0.60						1.50											4
5	20/1	KIOSK						1.00												6
7	20/1	CORRIDOR LTG CONTROL	0.19					1.63												8
9	20/1	GP REC - LOBBY						1.00												10
11	20/1	LTG 136 CLOSET	0.64																	12
13	20/1	COPY RM REC.						0.36	0.72											14
15	20/1	COPY RM REC.						0.36		0.72										16
17	20/1	COPY RM REC.						0.36			1.08									18
19	20/1	COPY RM REC.						0.36	1.36											20
21	20/1	BREAK RM REC.						1.00			1.36									22
23	20/1	CONF. RM QUAD OFFICE						0.90			1.26									24
25	20/1	KIOSK						0.18	0.54											26
27	20/1	TRAN. TV						1.00			1.00									28
29	20/1	NITE LTG	0.50								1.50									30
31	20/1	128 REC.						0.36	0.72											32
33	20/1	CONF. LTG WATER CHILLER						1.00			1.36									34
35	20/1	SHADES						1.00			1.36									36
37	20/1	LIGHT CONTROL PWR						1.00	4.50				0.00	0.00	0.00	3.50	0.00			38
39	20/2	SPARE									3.50		0.00	0.00	0.00	3.50	0.00			40
41	20/2	SPARE									1.00		0.00	0.00	0.00	1.00	0.00			42
TOTAL CONNECTED KVA			0.0	9.9	0.0	0.0	0.4	16.9			17.3		0.0	1.5	4.2	0.0	1.0			47.5
TOTAL DEMAND KVA			2.2	29.6	0.0	0.0	11.7	27.4	28.1	21.7			2.2	4.5	8.4	8.0	10.8			131.9
TOTAL DEMAND FACTOR			0.81																	
TOTAL DEMAND AMPERES			173.7																	
MCB MAX AMPERES			160.0																	

PANEL BOARD DEMAND LOAD TABULATIONS			
PANEL:	R21A	@	208 VOLTS 3Ø
TOTAL CONNECTED LOAD =	77.11 KVA	OR	173.74 AMPS
TOTAL CONNECTED RECEPTACLE LOAD =	22.32 KVA		
TOTAL NON-RECEPTACLE LOAD =	46.43 KVA		
TOTAL LOAD TO BE DEMANDED =	22.32 KVA		
FIRST 10KVA @ 100% =	10.00 KVA		
REMAINDER @ 50% =	6.16 KVA + 10 KVA =	16.16 KVA	OR 44.85 AMPS
TOTAL DEMANDED LOAD =	16.16 KVA + 46.43 KVA (non rec.) =	62.59 KVA	OR 173.73 AMPS

EXISTING PANELBOARD SCHEDULE																				
PANEL: R21A (SECTION 2)					VOLTS: 208Y120					MOUNT: SURFACE					GROUND BUS: Y					
MAIN: MLO					AMPS: 250 AMP BUS					AIC: 22K					ISOLATED GROUND BUS: N					
PH/WIRE: 3/4					LOC: ELEC ROOM					200% NEUTRAL: N										
CIR	AMPS/POLES	DESCRIPTION OF LOAD	CONNECTED LOAD (KVA)					LOAD BY PHASE, KVA					CONNECTED LOAD (KVA)					AMPS/POLES	CIR	
			LTG	HVAC HEAT	HVAC COOL	CONT. ON LOAD	REC	A	B	C	LTG	HVAC HEAT	HVAC COOL	CONT. ON LOAD	REC	DESCRIPTION OF LOAD				
1	20/1	TV REC.																		2
3	20/3	FB1																		4
5	20/1	OPS EQUIP. REC.																		6
7	20/1	OPS EQUIP. REC.																		8
9	30/3	FB3																		10
11	20/1	FB4																		12
13	20/1	FB5																		14
15	30/3	FB6																		16
17	20/1	RECPT. COUNTER REC.																		18
19	20/1	F.F.																		20
21	30/3	FB7																		22
23	20/1	F.F.																		24
25	20/1	F.F.																		26
27	35/3	AC1 SHUNT																		28
29	20/1	ACCU1																		30
31	20/1	FB8																		32
33	20/3	PWR SHADE - PROJECTOR																		34
35	20/1	RECPT. COUNTER REC.																		36
37	20/1	COUNTER REC.																		38
39	20/1	COUNTER REC.																		40
41	20/1	COUNTER REC.																		42
TOTAL CONNECTED KVA			0.0	29.6	0.0	0.0	1.8	16.9	17.3	13.4			0.0	4.5	8.4	0.0	3.2			47.5
TOTAL DEMAND FACTOR			1.00																	
TOTAL DEMAND KVA			47.5																	
TOTAL DEMAND AMPERES			131.9																	
MCB MAX AMPERES			250																	

EXISTING PANELBOARD SCHEDULE																				
PANEL: CP1A					VOLTS: 208Y120					MOUNT: SURFACE					GROUND BUS: Y					
MAIN: 60 AMP MCB					AMPS: 125 AMP BUS					AIC: 22K					ISOLATED GROUND BUS: N					
PH/WIRE: 3/4					LOC: LAN ROOM					200% NEUTRAL: N										
CIR	AMPS/POLES	DESCRIPTION OF LOAD	CONNECTED LOAD (KVA)					LOAD BY PHASE, KVA					CONNECTED LOAD (KVA)					AMPS/POLES	CIR	
			LTG	HVAC HEAT	HVAC COOL	CONT. ON LOAD	REC	A	B	C	LTG	HVAC HEAT	HVAC COOL	CONT. ON LOAD	REC	DESCRIPTION OF LOAD				
1	20/1	LAN ROOM																		2
3	20/1	LAN ROOM																		4
5	20/1	LAN ROOM																		6
7	30/2	UPS																		8
9	20/1	SPARE																		10
11	20/1	LAN ROOM																		12
13	20/1	LAN ROOM																		14
15	20/1	SPARE																		16
TOTAL CONNECTED KVA			0.0	0.0	0.0	6.0	0.0	3.5	3.5	1.0			0.0	0.0	0.0	2.0	0.0			8.0
TOTAL DEMAND FACTOR			1.00																	
TOTAL DEMAND KVA			8.0																	
TOTAL DEMAND AMPERES			22.2																	
MCB MAX AMPERES			48.0																	



Number	Description	Date
1	ISSUED FOR PERMIT & CONSTR	03 OCT 14

