

MAIN DISTRIBUTION SWITCHBOARD					
DESIGNATION: MDS VOLTAGE: 480 Y/277 3 PH 4 W MIN. AIC: 65,000			LOCATION: MAIN ELECTRICAL ROOM NOTES: (1), (2), (3) MAINS: 1,680A MCB		
CKT NO	SERVES	CIRCUIT BREAKER		LOAD (KVA)	COMMENTS
		P	TRIP		
1	PANEL LPG	3	60	2.97	
2	SPARE	3	100	0.00	
3	PANEL LP1	3	60	9.17	
4	PANEL LP2	3	60	8.21	
5	PANEL RDPG	3	600	113.97	
6	PANEL MRDPG	3	400	46.66	
7	ELEVATOR	3	80	43.00	
8	PANEL MPG	3	100	0.00	
9	SPARE	3	100	0.00	
10	PANEL MP2	3	500	228.87	
11	PANEL OSDPG	3	100	24.79	
12	SPACE	3			
13	SPACE	3			
14	SPACE	3			
15	SPACE	3			
16	SPACE	3			
TOTAL CONNECTED LOAD:					475.63 KVA 572.09 A

PANEL LPG													
AC: 35,000				MAIN: 60 A MCB				VOLTAGE: 480Y/ 277 3 PH 4 W					
LOCATION: MAIN ELECTRICAL ROOM				MOUNTING: SURFACE				NOTE: 1					
100% RATED NEUTRAL BUS													
CMT	EQUIPMENT SERVED	LOAD (KVA)			BREAKER P (AMPS)	BREAKER P (AMPS)			LOAD (KVA)			EQUIPMENT SERVED	CMT
		A	B	C		A	B	C	A	B	C		
1	GROUND FLOOR LIGHTING	0.69			1	20			1	20	0.14	ELEVATOR HOISTWAY	2
3	LIGHTING STAIRWELL 12	0.47			1	20			1	20		LIGHTING RA121A 12	4
5	LIGHTING STAIRWELL 13		0.47		1	20			1	20		SPARE	6
7	SITE PATHWAY LIGHTING	0.46			1	20			1	20		SPARE	8
9	EXTERIOR LIGHTS FIRST FLOOR			0.45	1	20			1	20		SPARE	10
11	GROUND FLOOR LIGHTING				1	20			1	20		SPARE	12
13	LIGHTING R.M. 12				1	20			1	20		SPACE	14
15	SPACE				1	20			1	20		SPACE	16
17	SPACE				1	20			1	20		SPACE	18
19	SPACE				1	20			1	20		SPACE	20
21	SPACE				1	20			1	20		SPACE	22
23	SPACE				1	20			1	20		SPACE	24
CONNECTED LOAD:		1.44 0.92 0.47			SUB-TOTALS			0.14 0.00 0.00					
A:		1.99 KVA =		5.73 A		2.97		TOTAL CONNECTED LOAD (KVA)					
B:		6.92 KVA =		9.32 A									
C:		0.47 KVA =		1.68 A									

PANEL LP1													
AC: 22,000				MAIN: 60 A MCB				VOLTAGE: 480Y/ 277 3 PH 4 W					
LOCATION: ELECTRIC ROOM 114				MOUNTING: SURFACE				NOTE: 1					
100% RATED NEUTRAL BUS													
CMT	EQUIPMENT SERVED	LOAD (KVA)			BREAKER P (AMPS)	BREAKER P (AMPS)			LOAD (KVA)			EQUIPMENT SERVED	CMT
		A	B	C		A	B	C	A	B	C		
1	LIGHTING	1.82			1	20			1	20	1.03	LIGHTING	2
3	LIGHTING		1.92		1	20			1	20	1.14	LIGHTING	4
5	LIGHTING			2.02	1	20			1	20	1.24	LIGHTING	6
7	SPARE				1	20			1	20		SPARE	8
9	SPARE				1	20			1	20		SPARE	10
11	SPARE				1	20			1	20		SPARE	12
13	SPARE				1	20			1	20		SPARE	14
15	SPACE				1	20			1	20		SPACE	16
17	SPACE				1	20			1	20		SPACE	18
19	SPACE				1	20			1	20		SPACE	20
21	SPACE				1	20			1	20		SPACE	22
23	SPACE				1	20			1	20		SPACE	24
CONNECTED LOAD:		1.82 1.92 2.02			SUB-TOTALS			1.03 1.14 1.24					
A:		2.85 KVA =		10.28 A		3.17		TOTAL CONNECTED LOAD (KVA)					
B:		3.08 KVA =		11.95 A									
C:		3.26 KVA =		11.76 A									

SWITCHBOARD MDS NOTES:

- (1) PROVIDE 100% FULL LOAD AMP RATED MAIN BUS MAIN CIRCUIT BREAKER.
- (2) PROVIDE INTEGRAL SURGE PROTECTIVE DEVICE(S).
- (3) FOR MAIN CIRCUIT BREAKER: PROVIDE ELECTRONIC TRIP UNIT WITH LSIG TRIP UNIT AND ARC-FLASH ENERGY-REDUCING MAINTENANCE SWITCH WITH A LOCAL STATUS INDICATOR.

PANEL LP2													
AC: 22,000				MAIN: 60 A MCB				VOLTAGE: 480Y/ 277 3 PH 4 W					
LOCATION: ELECTRIC ROOM 215				MOUNTING: SURFACE				NOTE: 1					
100% RATED NEUTRAL BUS													
CMT	EQUIPMENT SERVED	LOAD (KVA)			BREAKER P (AMPS)	BREAKER P (AMPS)			LOAD (KVA)			EQUIPMENT SERVED	CMT
		A	B	C		A	B	C	A	B	C		
1	LIGHTING	2.59			1	20			1	20		SPARE	2
3	CORRIDOR LIGHTING		2.68		1	20			1	20		SPARE	4
5	LIGHTING			2.95	1	20			1	20		SPARE	6
7	SPARE				1	20			1	20		SPARE	8
9	SPARE				1	20			1	20		SPARE	10
11	SPARE				1	20			1	20		SPARE	12
13	SPACE				1	20			1	20		SPACE	14
15	SPACE				1	20			1	20		SPACE	16
17	SPACE				1	20			1	20		SPACE	18
19	SPACE				1	20			1	20		SPACE	20
21	SPACE				1	20			1	20		SPACE	22
23	SPACE				1	20			1	20		SPACE	24
CONNECTED LOAD:		2.59 2.68 2.95			SUB-TOTALS			0.00 0.00 0.00					
A:		2.59 KVA =		9.34 A		6.21		TOTAL CONNECTED LOAD (KVA)					
B:		2.68 KVA =		9.68 A									
C:		2.95 KVA =		10.65 A									

PANEL MPG													
AC: 35,000				MAIN: 100 A MCB				VOLTAGE: 480Y/ 277 3 PH 4 W					
LOCATION: MAIN ELECTRICAL ROOM				MOUNTING: SURFACE				NOTE: 1					
100% RATED NEUTRAL BUS													
CMT	EQUIPMENT SERVED	LOAD (KVA)			BREAKER P (AMPS)	BREAKER P (AMPS)			LOAD (KVA)			EQUIPMENT SERVED	CMT
		A	B	C		A	B	C	A	B	C		
1	SPARE				3	20			3	20		SPARE	2
3	SPARE				3	20			3	20		SPARE	4
5	SPARE				3	20			3	20		SPARE	6
7	SPARE				1	20			1	20		SPARE	8
9	SPARE				1	20			1	20		SPARE	10
11	SPARE				1	20			1	20		SPARE	12
13	SPACE				1	20			1	20		SPACE	14
15	SPACE				1	20			1	20		SPACE	16
17	SPACE				1	20			1	20		SPACE	18
19	PUMP 1				3	20			3	20		PUMP 2	20
21	H				3	20			3	20		H	22
23	H				3	20			3	20		H	24
25	SPACE				1	20			1	20		SPACE	26
27	SPACE				1	20			1	20		SPACE	28
29	SPACE				1	20			1	20		SPACE	30
CONNECTED LOAD:		0.00 0.00 0.00			SUB-TOTALS			0.00 0.00 0.00					
A:		0.00 KVA =		0.00 A		0.00		TOTAL CONNECTED LOAD (KVA)					
B:		0.00 KVA =		0.00 A									
C:		0.00 KVA =		0.00 A									

PANEL MP2													
AC: 35,000				MAIN: 500 A MCB				VOLTAGE: 480Y/ 277 3 PH 4 W					
LOCATION: ELECTRIC ROOM 214				MOUNTING: SURFACE				NOTE: 1					
100% RATED NEUTRAL BUS													
CMT	EQUIPMENT SERVED	LOAD (KVA)			BREAKER P (AMPS)	BREAKER P (AMPS)			LOAD (KVA)			EQUIPMENT SERVED	CMT
		A	B	C		A	B	C	A	B	C		
1	DOAS-1	10.81			3	60			3	60	13.11	DOAS-2	2
3	SPARE		10.81								13.11	SPARE	4
5	SPARE			10.81							13.11	SPARE	6
7	VRF-2.1	4.16			3	25			3	40	8.59	VRF-1.1	8
9	SPARE		4.16								8.59	SPARE	10
11	SPARE			4.16							8.59	SPARE	12
13	VRF-2.2	4.16			3	25			3	40	8.59	VRF-1.2	14
15	SPACE		4.16								8.59	SPACE	16
17	SPACE			4.16							8.59	SPACE	18
19	EF-1	0.44			3	20			3	40	8.59	VRF-3.1	20
21	SPACE		0.44								8.59	SPACE	22
23	SPACE			0.44							8.59	SPACE	24
25	SPACE				1	20			3	40	8.59	VRF-3.2	26
27	SPACE				1	20					8.59	SPACE	28
29	SPACE				1	20					8.59	SPACE	30
31	SPACE				1	20			3	40	8.59	VRF-3.3	32
33	SPACE				1	20					8.59	SPACE	34
35	SPACE				1	20					8.59	SPACE	36
37	SPACE				1	20			1	20		SPACE	38
39	SPACE				1	20			1	20		SPACE	40
41	SPACE				1	20			1	20		SPACE	42
CONNECTED LOAD:		19.56 19.56 19.56			SUB-TOTALS			50.06 50.06 50.06					
A:		75.82 KVA =		273.00 A		228.87		TOTAL CONNECTED LOAD (KVA)					
B:		75.82 KVA =		273.00 A									
C:		75.82 KVA =		273.00 A									

PANEL RDPG													
AC: 22,000				MAIN: 600 A MCB				VOLTAGE: 208Y/ 120 3 PH 4 W					
LOCATION: MAIN ELECTRICAL ROOM				MOUNTING: SURFACE				NOTE: 1					
100% RATED NEUTRAL BUS													
CMT	EQUIPMENT SERVED	LOAD (KVA)			BREAKER P (AMPS)	BREAKER P (AMPS)			LOAD (KVA)			EQUIPMENT SERVED	CMT
		A	B	C		A	B	C	A	B	C		
1	PANEL RDPG	2.52			3	100			3	100	7.09	PANEL RDPG	2
3	SPARE		2.18								7.09	SPARE	4
5	SPARE			1.88							7.23	SPARE	6
7	SPARE		5.94		3	100			3	100	6.07	PANEL RDPG	8
9	SPARE			6.06							6.44	SPARE	10
11	SPACE			6.18							5.88	SPACE	12
13	SPACE		3.54		3	100			3	100	6.55	SPACE	14
15	SPACE			3.42							5.96	SPACE	16
17	SPACE			3.78							6.37	SPACE	18
19	SPACE		2.68		3	100			3	100	2.48	SPACE	20
21	SPACE			1.80							2.16	SPACE	22
23	SPACE			2.34							2.22	SPACE	24
25	SPACE		2.12		3	100			1	20		SPACE	26
27	SPACE			1.80									