

PANEL LP																	
3 PHASE			208Y/120 VOLT			MLO TYPE			4 WIRE			100 AMP			10,000 MIN AIC		
CKT	FOR	CKT BKR		LOAD		CKT	FOR	CKT BKR		P AMP	VOLT						
		P	A	KVA	Ø			KVA	P			A					
1	LIGHTING	1	20	120	0.84	a	1.30	2	LIGHTING	1	20	120					
3	LIGHTING	1	20	120	0.58	b	1.60	4	LIGHTING	1	20	120					
5	LIGHTING	1	20	120	1.66	c	1.33	6	LIGHTING	1	20	120					
7	MICROWAVE	1	20	120	1.00	d	1.00	8	APPLIANCE	1	20	120					
9	RECEPTACLES	1	20	120	0.36	b	0.72	10	RECEPTACLES	1	20	120					
11	RECEPTACLES	1	20	120	0.36	c	0.36	12	RECEPTACLES	1	20	120					
13	RECEPTACLES	1	20	120	1.44	a	1.17	14	SITE LIGHTING	2	20	208					
15	SITE LIGHTING	2	20	208	1.17	b	1.17	16	-	-	-	-					
17	-	-	-	-	1.17	c	0.73	18	SITE LIGHTING	2	20	208					
19	SITE LGT. CONT. PNL	1	20	120	0.50	d	0.73	20	-	-	-	-					
21	EF-6	1	15	120	0.10	b	0.54	22	WIRELESS ROUTERS	1	20	120					
23	DAMPERS	1	20	120	0.25	c	0.80	24	LIGHTING	1	20	120					
25	SPARE	1	20	120	-	-	-	26	SPARE	1	20	120					
27	SPARE	1	20	120	-	-	-	28	SPARE	1	20	120					
29	SPARE	1	20	120	-	-	-	30	SPARE	1	20	120					

NOTES:
 ① BECOMES SPARE IF ADD ALTERNATE #4 IS NOT ACCEPTED.
 a 8.0 =TOTAL PHASE LOAD
 b 6.2 =TOTAL PHASE LOAD
 c 6.7 =TOTAL PHASE LOAD
 d 20.9 =TOTAL PANEL CONNECTED LOAD

PANEL S (NEMA 3R ENCLOSURE)														
3 PHASE			208Y/120 VOLT			MLO TYPE			4 WIRE			10,000 MIN AIC		
CKT	FOR	CKT BKR		LOAD		CKT	FOR	CKT BKR		P AMP	VOLT			
		P	A	KVA	Ø			KVA	P			A		
1	RECEPTACLES	2	20	208	1.20	a	1.20	2	RECEPTACLES	2	20	208		
3	-	-	-	-	1.20	b	1.20	4	-	-	-	-		
5	RECEPTACLES	2	20	208	1.20	c	1.20	6	RECEPTACLES	2	20	208		
7	-	-	-	-	1.20	d	1.20	8	-	-	-	-		
9	RECEPTACLES	2	20	208	1.20	b	1.20	10	RECEPTACLES	1	20	120		
11	-	-	-	-	1.20	c	1.20	12	RECEPTACLES	1	20	120		
13	RECEPTACLES	1	20	120	1.20	d	1.20	14	RECEPTACLES	1	20	120		
15	RECEPTACLES	1	20	120	1.20	b	1.6	16	SPARE	1	20	120		
17	SPARE	1	20	120	-	-	-	18	SPARE	1	20	120		
19	SPARE	1	20	120	-	-	-	20	SPARE	1	20	120		
21	SPARE	1	20	120	-	-	-	22	SPARE	1	20	120		
23	SPACE	-	-	-	-	-	-	24	SPACE	-	-	-		
25	SPACE	-	-	-	-	-	-	26	SPACE	-	-	-		
27	SPACE	-	-	-	-	-	-	28	SPACE	-	-	-		
29	SPACE	-	-	-	-	-	-	30	SPACE	-	-	-		

a 7.2 =TOTAL PHASE LOAD
 b 6.0 =TOTAL PHASE LOAD
 c 4.8 =TOTAL PHASE LOAD
 d 18.0 =TOTAL PANEL CONNECTED LOAD

PANEL SB																	
3 PHASE			208Y/120 VOLT			MGB TYPE			4 WIRE			225 AMP			10,000 MIN AIC		
CKT	FOR	CKT BKR		LOAD		CKT	FOR	CKT BKR		P AMP	VOLT						
		P	A	KVA	Ø			KVA	P			A					
1	LIGHTING	1	20	120	1.48	a	0.70	2	LIGHTING	1	20	120					
3	LIGHTING	1	20	120	0.40	b	0.65	4	REFRIGERATOR	1	20	120					
5	GAS DETECT. CTRL.	1	20	120	0.50	c	0.36	6	RECEPTACLES	1	20	120					
7	GENERATOR HEATER	1	20	120	1.00	d	0.50	8	SITE LGT. CONT. PNL	1	20	120					
9	GEN. BATT. CHARGER	1	20	120	1.00	b	0.54	10	RECEPTACLES	1	20	120					
11	DUCT DETECTORS	1	20	120	0.50	c	0.80	12	RECEPTACLES	1	20	120					
13	RECEPTACLES	1	20	120	1.08	a	0.72	14	RECEPTACLES	1	20	120					
15	FRONT ACCESS GATE	1	20	120	0.82	b	0.82	16	BACK ACCESS GATE	1	20	120					
17	SITE LIGHTING	2	20	208	1.02	c	1.46	18	SITE LIGHTING	2	20	208					
19	-	-	-	-	1.02	d	1.46	20	-	-	-	-					
21	SITE LIGHTING	2	20	208	0.73	b	1.46	22	SITE LIGHTING	2	20	208					
23	-	-	-	-	0.73	c	1.46	24	-	-	-	-					
25	CANOPY LIGHTING	1	20	120	0.65	a	0.88	26	SITE LIGHTING	2	20	208					
27	SPACE	-	-	-	-	-	-	28	-	-	-	-					
29	GAS DETECT. ALARM	1	20	120	0.50	c	0.18	30	RECEPTACLES	1	20	120					
31	PANEL G	3	150	208	15.00	a	0.18	32	RECEPTACLES	1	20	120					
33	-	-	-	-	15.00	b	0.80	34	MOTORIZED DAMPERS	1	20	120					
35	-	-	-	-	15.00	c	-	36	SPARE	1	20	120					
37	SPARE	1	20	120	-	-	-	38	SPARE	1	20	120					
39	SPARE	1	20	120	-	-	-	40	SPARE	1	20	120					
41	SPARE	1	20	120	-	-	-	42	SPARE	1	20	120					

NOTES:
 ① BECOMES SPARE IF ADD ALTERNATE #5 IS NOT ACCEPTED.
 ② BECOMES SPARE IF ADD ALTERNATE #2 IS NOT ACCEPTED.
 ③ BECOMES 2P-20A CB IF ADD ALTERNATE #7 IS NOT ACCEPTED.
 a 24.7 =TOTAL PHASE LOAD
 b 23.1 =TOTAL PHASE LOAD
 c 22.6 =TOTAL PHASE LOAD
 d 70.4 =TOTAL PANEL CONNECTED LOAD

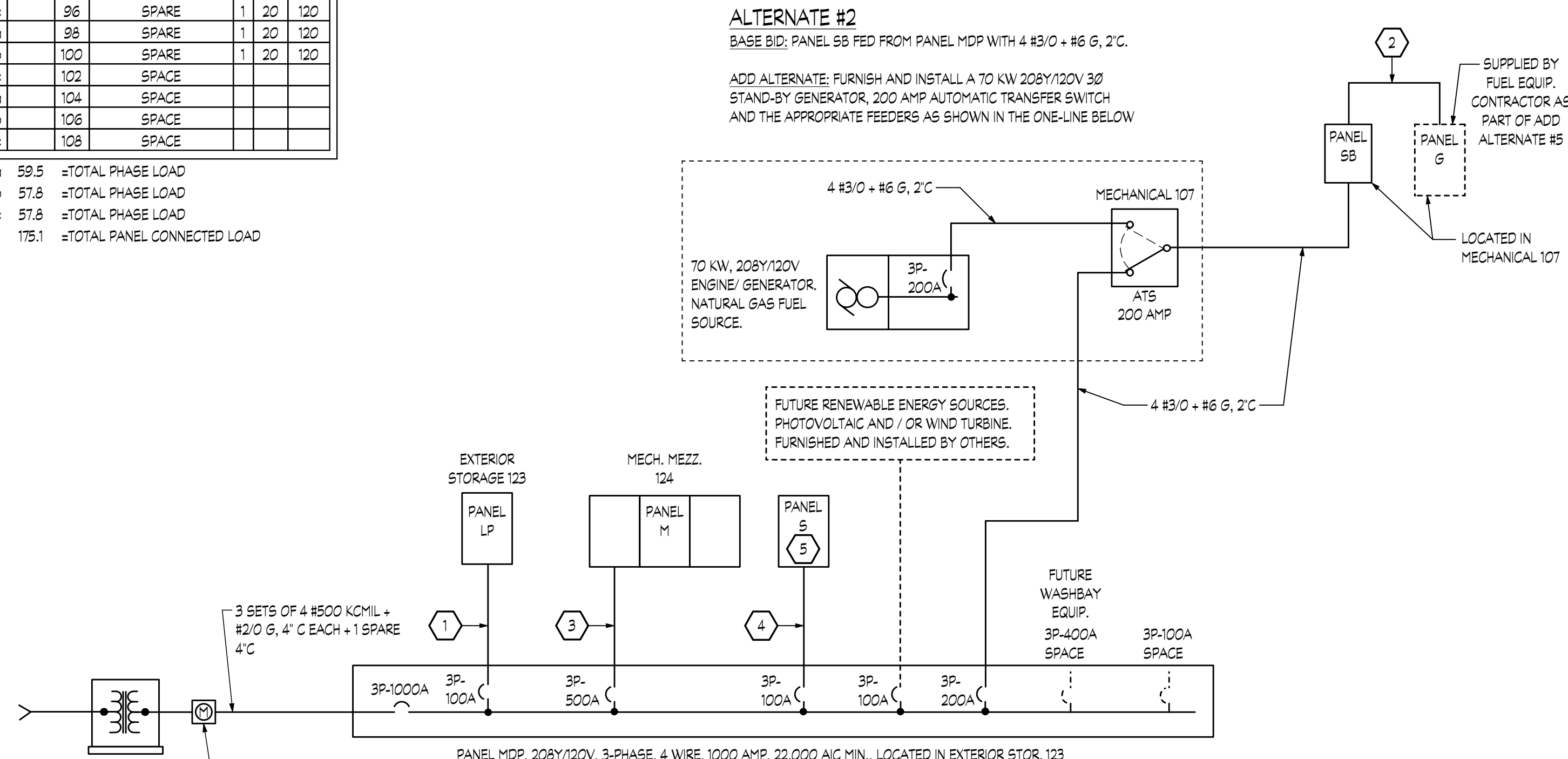
PANEL M 3 SECTION PANEL W/ 2 SETS OF FEED THRU LUGS																	
3 PHASE			208Y/120 VOLT			MLO TYPE			4 WIRE			600 AMP			10,000 MIN AIC		
CKT	FOR	CKT BKR		LOAD		CKT	FOR	CKT BKR		P AMP	VOLT						
		P	A	KVA	Ø			KVA	P			A					
1	RECEPTACLES	1	20	120	0.54	a	0.72	2	RECEPTACLES	1	20	120					
3	RECEPTACLES	1	20	120	0.80	b	0.54	4	RECEPTACLES	1	20	120					
5	RECEPTACLES	1	20	120	0.72	c	0.36	6	RECEPTACLES	1	20	120					
7	RECEPTACLES	1	20	120	0.90	d	0.36	8	RECEPTACLES	1	20	120					
9	RECEPTACLES	1	20	120	0.90	b	0.36	10	RECEPTACLES	1	20	120					
11	RECEPTACLES	1	20	120	0.36	c	1.12	12	OVERHEAD DOOR	1	20	120					
13	OVERHEAD DOOR	1	20	120	1.12	a	1.12	14	OVERHEAD DOOR	1	20	120					
15	OVERHEAD DOOR	1	20	120	1.12	b	1.12	16	OVERHEAD DOOR	1	20	120					
17	LIFT STATION	3	35	208	3.84	c	3.84	18	LIFT STATION	3	35	208					
19	-	-	-	-	3.84	d	3.84	20	-	-	-	-					
21	-	-	-	-	3.84	b	3.84	22	-	-	-	-					
23	LIFT STATION	3	35	208	3.84	c	3.84	24	LIFT STATION	3	35	208					
25	-	-	-	-	3.84	d	3.84	26	-	-	-	-					
27	-	-	-	-	3.84	b	3.84	28	-	-	-	-					
29	LIFT STATION	3	35	208	3.84	c	4.37	30	WELDER	2	50	208					
31	-	-	-	-	3.84	d	4.37	32	-	-	-	-					
33	-	-	-	-	3.84	b	4.37	34	WELDER	2	50	208					
35	WH-1	1	20	120	0.50	c	4.37	36	-	-	-	-					
37	AC-1	1	20	120	1.44	d	4.37	38	WELDER	2	50	208					
39	GUH-1	1	20	120	0.10	b	4.37	40	-	-	-	-					
41	GUH-2	1	20	120	0.10	c	1.68	42	WOH-1	1	20	120					
43	WOH-2	1	20	120	1.68	d	1.68	44	WOH-3	1	20	120					
45	EUH-1	2	20	208	1.18	b	1.18	46	EUH-2	2	20	208					
47	-	-	-	-	1.18	c	1.18	48	-	-	-	-					
49	EWH-1	2	20	208	0.80	d	2.10	50	VEF-1	3	35	208					
51	-	-	-	-	0.80	b	2.10	52	-	-	-	-					
53	EF-1	3	15	208	0.42	c	2.10	54	-	-	-	-					
55	-	-	-	-	0.42	d	0.30	56	EF-3	3	15	208					
57	-	-	-	-	0.42	b	0.30	58	-	-	-	-					
59	EF-2	3	15	208	0.42	c	0.30	60	-	-	-	-					
61	-	-	-	-	0.42	d	0.50	62	EF-4, -5	1	15	120					
63	-	-	-	-	0.42	b	0.20	64	MOTORIZED VALVE	1	20	120					
65	ERV-1	1	15	120	1.66	c	3.62	66	CU-1	2	60	208					
67	IRH-1, -2	1	20	120	0.25	d	3.62	68	-	-	-	-					
69	IRH-3, -4	1	20	120	0.25	b	4.37	70	WELDER	2	50	208					
71	HEAT TRACE	1	20	120	0.75	c	4.37	72	-	-	-	-					
73	OVERHEAD DOOR	1	20	120	1.12	d	2.00	74	GRINDER PUMP (NFM)	2	30	208					
75	OVERHEAD DOOR	1	20	120	1.12	b	2.00	76	-	-	-	-					
77	EF-7	1	15	120	0.26	c	0.66	78	WOP-1	1	20	120					
79	AIR DRYER	1	20	120	1.20	d	0.75	80	SPRINKLER SYSTEM	1	20	120					
81	AIR COMPRESSOR	3	50	208	2.90	b	2.90	82	AIR COMPRESSOR	3	50	208					
83	-	-	-	-	2.90	c	2.90	84	-	-	-	-					
85	-	-	-	-	2.90	d	2.90	86	-	-	-	-					
87	EUH-2	2	20	208	1.18	b	1.12	88	OVERHEAD DOOR	1	20	120					
89	-	-	-	-	1.18	c	1.12	90	OVERHEAD DOOR	1	20	120					
91	OVERHEAD DOOR	1	20	120	1.12	d	1.12	92	OVERHEAD DOOR	1	20	120					
93	OVERHEAD DOOR	1	20	120	1.12	b	1.12	94	OVERHEAD DOOR	1	20	120					
95	SPARE	1	20	120	-	-	-	96	SPARE	1	20	120					
97	SPARE	1	20	120	-	-	-	98	SPARE	1	20	120					
99	SPARE	1	20	120	-	-	-	100	SPARE	1	20	120					
101	SPACE	-	-	-	-	-	-	102	SPACE	-	-	-					
103	SPACE	-	-	-	-	-	-	104	SPACE	-	-	-					
105	SPACE	-	-	-	-	-	-	106	SPACE	-	-	-					
107	SPACE	-	-	-	-	-	-	108	SPACE	-	-	-					

NOTES:
 ① BECOMES SPARE IF ALTERNATE #3 IS ACCEPTED.
 ② 30 mA GFCI C/B
 ③ 5 mA GFCI C/B
 a 59.5 =TOTAL PHASE LOAD
 b 57.8 =TOTAL PHASE LOAD
 c 57.8 =TOTAL PHASE LOAD
 d 175.1 =TOTAL PANEL CONNECTED LOAD

ALTERNATE #2

BASE BID: PANEL SB FED FROM PANEL MDP WITH 4 #3/0 + #6 G, 2'C.

ADD ALTERNATE: FURNISH AND INSTALL A 10 KW 208Y/120V 3Ø STAND-BY GENERATOR, 200 AMP AUTOMATIC TRANSFER SWITCH AND THE APPROPRIATE FEEDERS AS SHOWN IN THE ONE-LINE BELOW



POWER ONE LINE DIAGRAM

SCALE: NONE

DRAWING NOTES

- FURNISH AND INSTALL 4-#3 + 1-#6 G, 1 1/4' C (100A).
- FURNISH AND INSTALL 4-#1/0 + 1-#6 G, 2' C (50A) AS PART OF ADD ALTERNATE #5. CONNECTION MADE BY EC. IF ADD ALTERNATE #5 IS NOT ACCEPTED, FURNISH AND INSTALL 2" CONDUIT WITH PULLCORD TO PROPOSED LOCATION OF PANEL 'G'.
- FURNISH AND INSTALL 2 SETS OF 4-#250 KCMIL + 1-#2 G, 2 1