

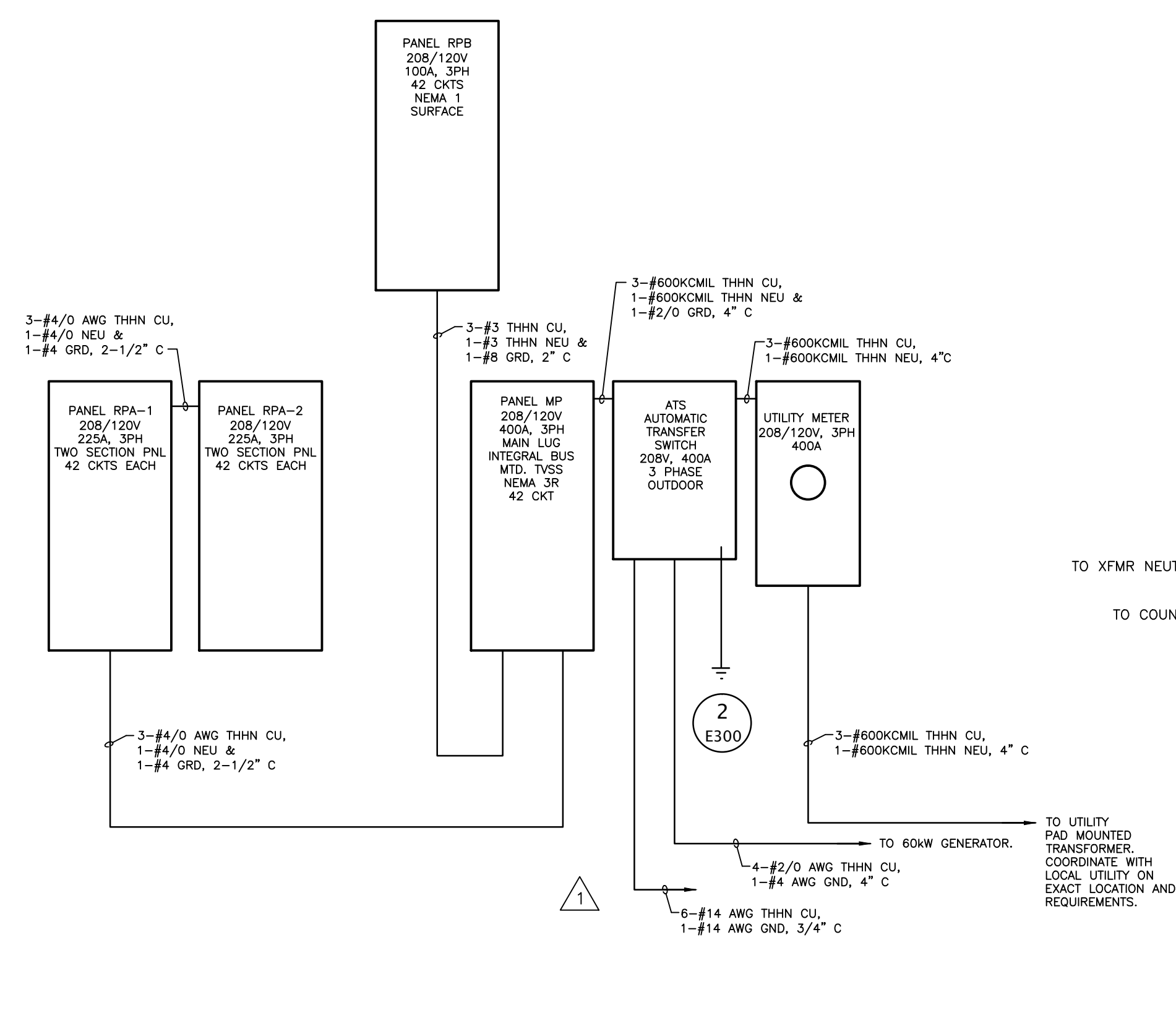
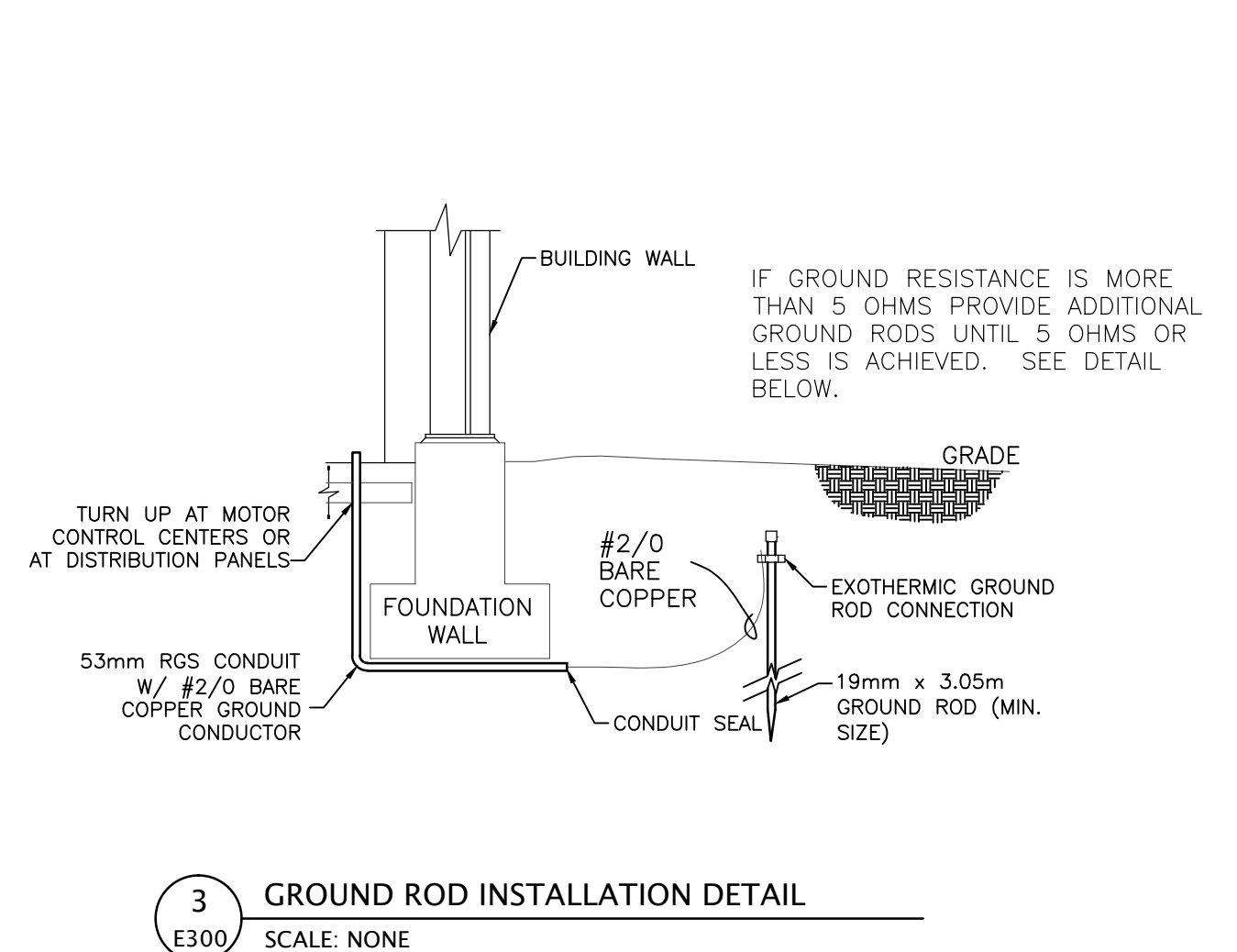
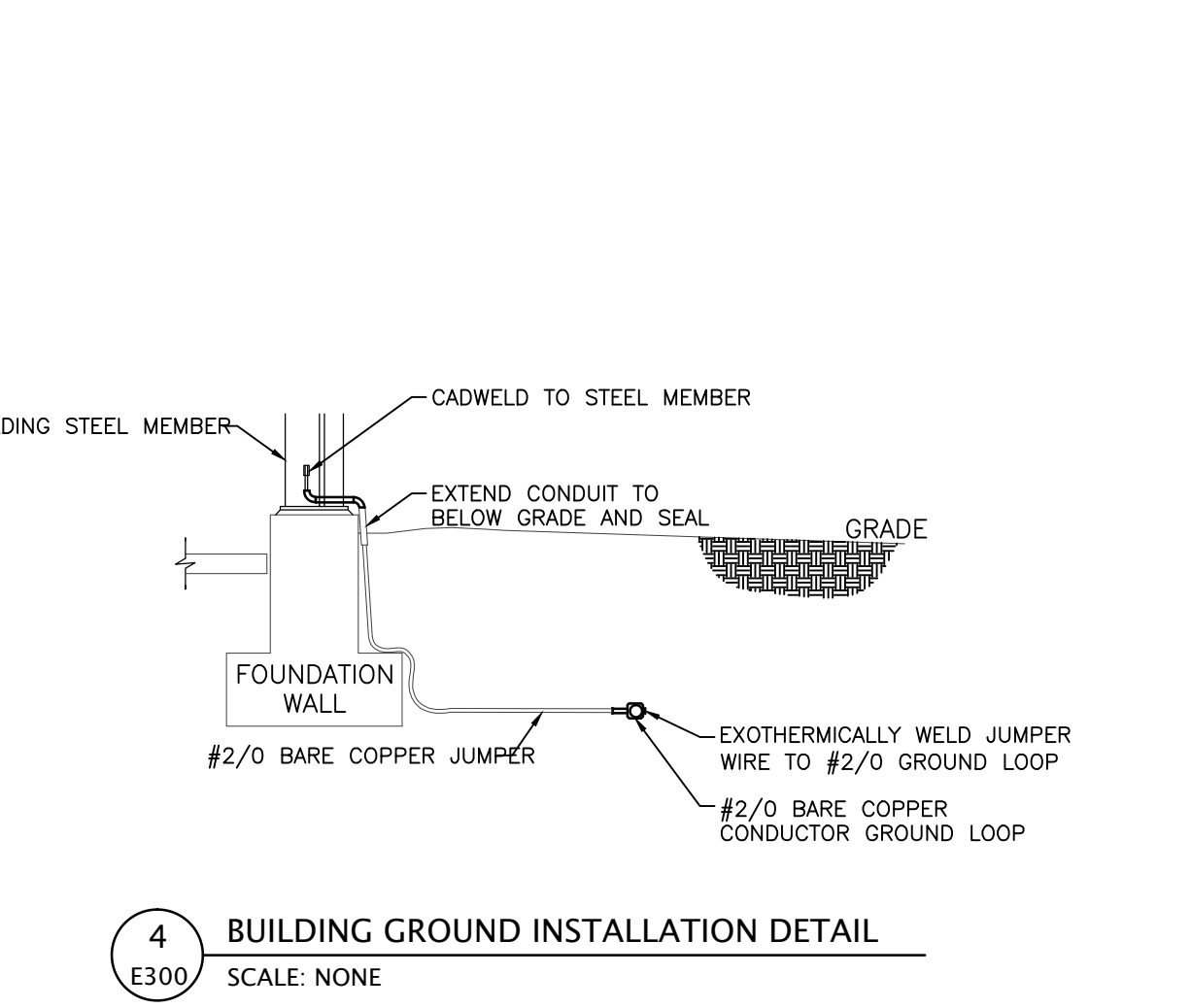


ISSUE	DATE	DESCRIPTION
1.	01/19/12	ISSUE FOR BID
2.	02/07/12	REVISION ONE
3.	02/14/12	REVISION TWO

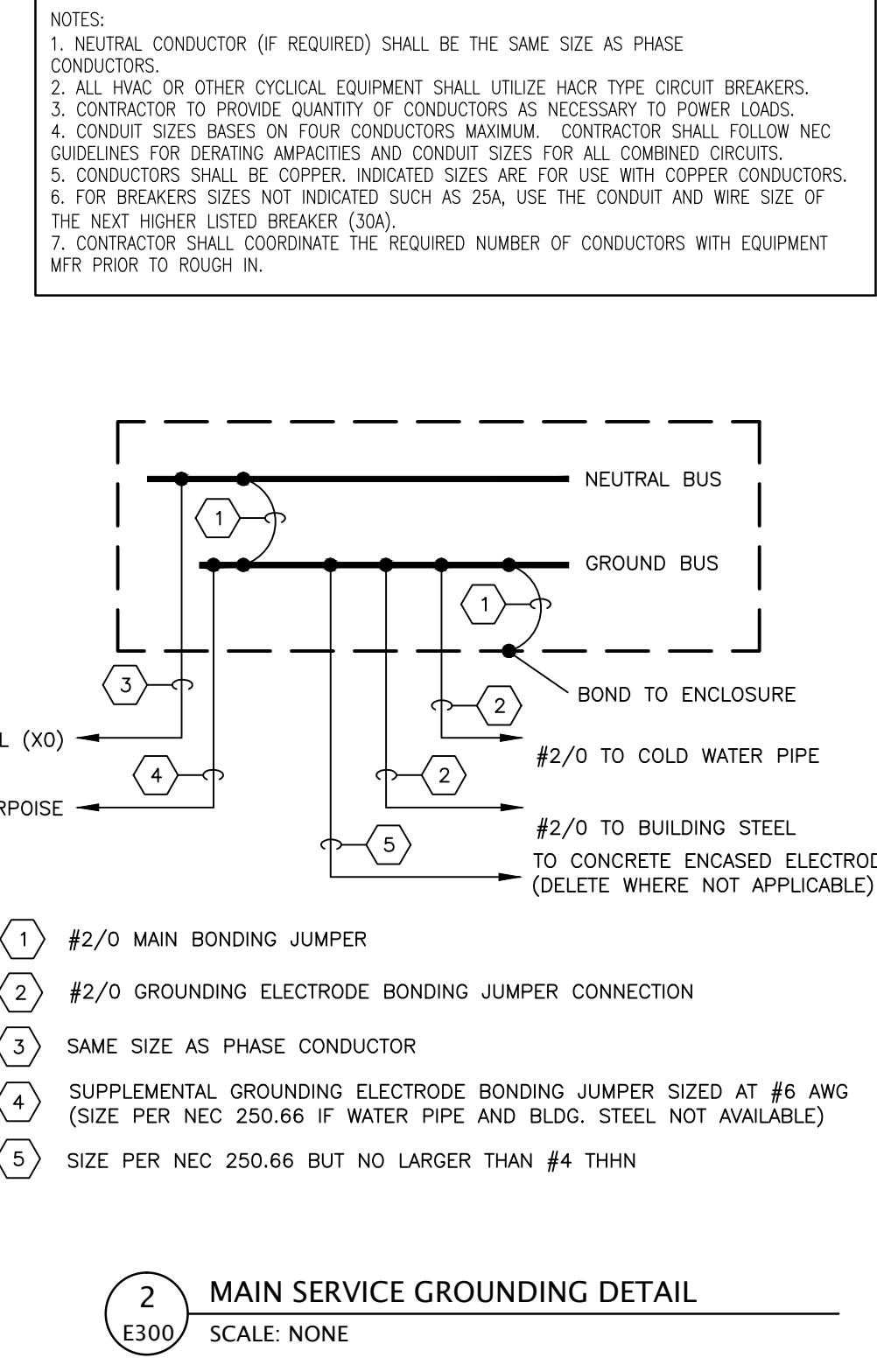
PANEL MP		ENCLOSURE TYPE:		NEMA 3R					
VOLTAGE (L-N):		MOUNTING:		SURFACE					
VOLTAGE (L-L):		PHASES, WIRES:		3 φ 4 W					
MINIMUM BUS CAPACITY (A):		AIC RATING (A):		42000					
MAIN O.C. DEVICE (A):		NOTES:		BUSS MTD TVSS					
CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA)	POLE	TRIP AMPS	DESCRIPTION	CKT NO	
1,3,5	PANEL RPA	225	3	20659 6642	3	100	PANEL RPB	2,4,6	
1,3,5	PANEL RPA	225	3	26973 5684	3	100	PANEL RPB	2,4,6	
1,3,5	PANEL RPA	225	3	22394 3820	3	100	PANEL RPB	2,4,6	
7,9,11	DAU-1	125	3	9780 0	3	30	TVSS	8,10,12	
7,9,11	DAU-1	125	3	9780 0	3	30	TVSS	8,10,12	
7,9,11	DAU-1	125	3	9780 0	3	30	TVSS	8,10,12	
13,15,17	EF-12	20	3	300 300	3	20	EF-13	14,16,18	
13,15,17	EF-12	20	3	300 300	3	20	EF-13	14,16,18	
13,15,17	EF-12	20	3	300 300	3	20	EF-13	14,16,18	
19,21,23	ELEVATOR	50	3	4749 2100	2	30	HP-1	20,22	
19,21,23	ELEVATOR	50	3	4749 2100	2	30	HP-1	20,22	
19,21,23	ELEVATOR	50	3	4749 2100	2	30	HP-1	20,22	
25	SHUNT	20	1	0 2300	2	40	HP-2	24,26	
27,29	HP-3	40	2	2300 2300	2	40	HP-4	28,30	
27,29	HP-3	40	2	2300 2300	2	40	HP-4	28,30	
31,33	HP-5	40	2	2300 2300	2	40	HP-6	32,34	
31,33	HP-5	40	2	2300 2300	2	40	HP-6	32,34	
35	SPARE	20	1	0 0	1	20	SPARE	36	
37,39	GEN BLOCK HEATER	20	2	500 150	1	20	ELEV CAB LIGHT "LOCKED ON"	38	
37,39	GEN BLOCK HEATER	20	2	500 150	1	20	ELEV PIT POWER	40	
41	GEN BATTERY CHARGER	20	1	250 350	1	20	RECEPTACLE	42	
CONNECTED LOAD (KVA)		DEMAND FACTOR		DEMAND LOAD (KVA)		DEMAND LOAD		58.7 KVA	
161.0		1.00		145.5		SPARE CAPACITY		22.4 KVA	
LOAD (AMPS):		447.0		403.8		SPARE CAPACITY		62.1 AMPS	
						PHASE BALANCE		28%	
						A TO B		73%	
						B TO C		79%	
						C TO A		92%	

PANEL RPB		ENCLOSURE TYPE:		NEMA 1					
VOLTAGE (L-N):		MOUNTING:		SURFACE					
VOLTAGE (L-L):		PHASES, WIRES:		3 φ 4 W					
MINIMUM BUS CAPACITY (A):		AIC RATING (A):		22000					
MAIN O.C. DEVICE (A):		NOTES:		100 A					
CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA)	POLE	TRIP AMPS	DESCRIPTION	CKT NO	
1	LGTS, 2ND FLR TRAN.	20	1	1426 876	1	20	LGTS, 2ND FLR STOR.	2	
3	LGTS, FITNESS	20	1	1354 0	1	20	SPARE	4	
5	REC, TRAINING	20	1	360 720	1	20	REC, TRAINING	6	
7	REC, TRAINING	20	1	360 720	1	20	REC, TRAINING	8	
9	REC, STORAGE & HALL	20	1	360 350	1	20	DRINKING FOUNTAIN	10	
11	REC, FITNESS	20	1	680 500	1	20	REC, FITNESS	12	
13	REC, FITNESS	20	1	500 500	1	20	REC, FITNESS	14	
15	REC, FITNESS	20	1	500 500	1	20	REC, FITNESS	16	
17	REC, FITNESS	20	1	500 500	1	20	REC, MECH RM	18	
19	GWH-1 CONTROLS	20	1	300 0	1	20	SPARE	20	
21	CP-1 CIRC. PUMP	20	1	300 0	1	20	SPARE	22	
23	SPARE	20	1	0 0	1	20	SPARE	24	
25	SPARE	20	1	0 0	1	20	SPARE	26	
27	SPARE	20	1	0 0	1	20	SPARE	28	
29	SPARE	20	1	0 0	1	20	SPARE	30	
31	SPARE	20	1	0 0	1	20	SPARE	32	
33	SPARE	20	1	0 0	1	20	SPARE	34	
35	SPARE	20	1	0 0	1	20	SPARE	36	
37	SPARE	20	1	0 700	1	15	OAHU-1	38,40,42	
39	SPARE	20	1	0 700	1	15	OAHU-1	38,40,42	
41	SPARE	20	1	0 700	1	15	OAHU-1	38,40,42	
CONNECTED LOAD (KVA)		DEMAND FACTOR		DEMAND LOAD (KVA)		DEMAND LOAD		14.7 KVA	
13.3		1.00		14.7		SPARE CAPACITY		21.3 KVA	
LOAD (AMPS):		36.8		40.8		SPARE CAPACITY		59.2 AMPS	
						PHASE BALANCE		59%	
						A TO B		76%	
						B TO C		94%	
						C TO A		71%	

PANEL RPA - TWO SECTION PANELBOARD		ENCLOSURE TYPE:		NEMA 1					
VOLTAGE (L-N):		MOUNTING:		SURFACE					
VOLTAGE (L-L):		PHASES, WIRES:		3 φ 4 W					
MINIMUM BUS CAPACITY (A):		AIC RATING (A):		22000					
MAIN O.C. DEVICE (A):		NOTES:		225 A					
CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA)	POLE	TRIP AMPS	DESCRIPTION	CKT NO	
1	LGTS, ENTRANCE	20	1	934 1500	1	20	LGTS, EMERG. FLOOD	2	
3	LGTS, OFFICE 1 & RECEPT.	20	1	1246 1500	1	20	LGTS, EMERG. FLOOD	4	
5	LGTS, TRIAGE & RESTROOMS	20	1	1225 1308	1	20	LGTS, SHOWERS	6	
7	LGTS, BUNKS & LOCKER	20	1	618 1068	1	20	LGTS, DAY ROOM	8	
9	LGTS, APP BAY	20	1	1851 1536	1	20	LGTS, APP BAY DOWNLITES	10	
11	LGTS, APP BAY	20	1	1851 1152	1	20	LGTS, REAR WALL PACKS	12	
13	LGTS, APP BAY	20	1	1851 1097	1	20	LGTS, EXTERIOR	14	
15	LGTS, FLAGPOLE	20	1	1260 0	1	20	SPARE	16	
17	SPARE	20	1	0 0	1	20	SPARE	18	
19	SPARE	20	1	0 0	1	20	SPARE	20	
21	REC, RECEPTION	20	1	1440 2700	1	20	REC, OFFICE 1	22	
23	REC, STORAGE	20	1	1620 1080	1	20	REC, CONF/TRIAGE	24	
25	REC, OFFICE 4	20	1	700 700	1	20	REC, OFFICE 4	26	
27	REC, OFFICE 2	20	1	1260 1260	1	20	REC, OFFICE 3	28	
29	DRINKING FOUNTAIN	20	1	350 720	1	20	REC, RESTROOMS	30	
31	REC, I.T.	20	1	1500 500	1	20	FIRE ALARM "LOCKED ON"	32	
33	REC, I.T.	20	1	1500 720	1	20	REC, TRAINING	34	
35	REC, COUNTER	20	1	360 500	1	20	REFRIGERATOR, TRAINING	36	
37	REC, TRAINING MEDIA	20	1	360 360	1	20	REC, SHOWERS	38	
39	REC, LAUNDRY	20	1	180 180	1	20	REC, CLOTHES WASHER	40	
41	REC, LOCKER	20	1	360 2000	2	30	REC, DRYER	42,44	
43	REC, LOCKER	20	1	900 2000	2	30	REC, DRYER	42,44	
45	REC, SMALL BUNKS	20	1	1800 1920	1	20	REC, LARGE BUNK	46	
47	REC, LARGE BUNK	20	1	1800 1500	1	20	REC, MEDIA	48	
49	REC, LIVING ROOM	20	1	540 1500	1	20	REC, APPLIANCE	50	
51	REC, REFRIGERATOR	20	1	500 500	1	20	REC, REFRIGERATOR	52	
53	REC, REFRIGERATOR	20	1	500 1500	1	20	REC, APPLIANCE	54	
55	REC, ISLAND	20	1	1000 350	1	20	REC, DISHWASHER	56	
57	REC, FRONT EXT.	20	1	1620 1260	1	20	REC, FRONT EXT.	58	
59	REC, REAR APP BAY	20	1	1870 180	1	20	REC, PANEL RPA	60	
61	GARAGE DOOR	20	1	1000 1000	1	20	GARAGE DOOR	62	
63	GARAGE DOOR	20	1	1000 1000	1	20	GARAGE DOOR	64	
65	GARAGE DOOR	20	1	1000 1000	1	20	GARAGE DOOR	66	
67	GUH-1	20	1	500 500	1	20	GUH-2	68	
69	GUH-3	20	1	500 1500	1	20	REC, ICE MAKER	70	
71	DRINKING FOUNTAIN	20	1	350 0	1	20	SPARE	72	
73	SPARE	20	1	0 0	1	20	SPARE	74	
75	SPARE	20	1	0 0	1	20	SPARE	76	
77	SPARE	20	1	0 0	1	20	SPARE	78	
79	SPARE	20	1	0 0	1	20	SPARE	80	
81	SPARE	20	1	0 0	1	20	SPARE	82	
83	SPARE	20	1	0 0	1	20	SPARE	84	
CONNECTED LOAD (KVA)		DEMAND FACTOR		DEMAND LOAD (KVA)		DEMAND LOAD		58.7 KVA	
70.9		1.00		58.7		SPARE CAPACITY		22.4 KVA	
LOAD (AMPS):		196.9		162.9		SPARE CAPACITY		62.1 AMPS	
						PHASE BALANCE		28%	
						A TO B		73%	
						B TO C		79%	
						C TO A		92%	



CONDUCTOR SCHEDULE			
CONDUCTORS / CONDUITS SHALL BE SIZED ACCORDING TO THE FOLLOWING CHART UNLESS OTHERWISE NOTED.			
CKT BKR	WIRE (AWG)	EQUIP. GND	CONDUIT
15	12	#12	3/4"
20	12	#12	3/4"
30	10	#10	3/4"
40	8	#10	1"
50	8	#10	1"
60	6	#10	1"
70	6	#8	1-1/4"
80	4	#8	1-1/4"
90	4	#8	1-1/4"
100	3	#8	1-1/4"
125	1	#6	1-1/2"
150	#1/0	#6	2"
175	#2/0	#6	2"
200	#3/0	#6	2"
225	#4/0	#4	2-1/2"
250	250KCMIL	#4	3"
400	600KCMIL	#2	4"



2 MAIN SERVICE GROUNDING DETAIL
 SCALE: NONE

1 ELECTRICAL RISER DIAGRAM
 SCALE: NONE

3 GROUND ROD INSTALLATION DETAIL
 SCALE: NONE