PANEL "4A1"

480/277 VOLTS, 3 PHASE, 4 WIRE
3P100 AMP MAIN BREAKER
MIN AIC: 65K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	LIGHTS - ASSEMBLY, ENTRY	1	20	1.2 | 1.6			20	1	LIGHTS	2	10
12	3	LIGHTS	1	20		1.2 | 1.6		20	1	LIGHTS - EXTERIOR	4	6
12	5	LIGHTS	1	20			1.8 | 1.8	20	1	LIGHTS - EXTERIOR	6	6
12	7	LIGHTS	1	20	1.6 | 1.6			20	1	LIGHTS - ROADWAY	8	6
12	9	LIGHTS	1	20		1.6 | 1.3			3		10	12
12	11	LIGHTS	1	20			1.6 | 1.3			ROLL-UP DOOR	12	12
10	13	LIGHTS - ASSEMBLY	1	20	3.2 | 1.3			15			14	12
10	15	LIGHTS - ASSEMBLY	1	20		1.6 | 1.0		20	1	SPARE	16	-
10	17	LIGHTS - ASSEMBLY	1	20			3.2 | 1.0	20	1	SPARE	18	-
2	19		3		6.4 | -			-	-	PFB	20	-
2	21	PANEL "2A1"				6.4 | -		-	-	PFB	22	-
2	23			100			6.4 | -	-	-	PFB	24	-
-	25	PFB	-	-	- | -			-	-	PFB	26	-
-	27	PFB	-	-		- | -		-	-	PFB	28	-
-	29	PFB	-	-			- | -	-	-	PFB	30	-

CONNECTED LOAD/PHASE	16.9	14.7	17.1
TOTAL CONNECTED LOAD	48.7 KVA		
DEMAND FACTOR	1.0		
TOTAL DEMAND LOAD	48.7 KVA= 59		

PANEL "4A2"

480/277 VOLTS, 3 PHASE, 4 WIRE
3P100 AMP MAIN BREAKER
MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	LIGHTS	1	20	2.2 | -			-	-	PFB	2	-
12	3	LIGHTS	1	20		2.2 | -		-	-	PFB	4	-
12	5	LIGHTS	1	20			1.5 | -	-	-	PFB	6	-
12	7	LIGHTS	1	20	2.0 | -			-	-	PFB	8	-
-	9	SPARE	1	20		- | -		-	-	PFB	10	-
-	11	SPARE	1	20			- | -	-	-	PFB	12	-
-	13	PFB	-	-	- | -			-	-	PFB	14	-
-	15	PFB	-	-		- | -		-	-	PFB	16	-
-	17	PFB	-	-			- | -	-	-	PFB	18	-
2	19		3		4.5 | -			-	-	PFB	20	-
2	21	PANEL "2A2"				4.5 | -		-	-	PFB	22	-
2	23			100			4.5 | -	-	-	PFB	24	-

CONNECTED LOAD/PHASE	8.7	6.7	6.0
TOTAL CONNECTED LOAD	21.4 KVA		
DEMAND FACTOR	1.0		
TOTAL DEMAND LOAD	21.4 KVA= 26 AMPS		

PANEL "4B"

480/277 VOLTS, 3 PHASE, 4 WIRE
3P100 AMP MAIN BREAKER
MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	LTS - WORKBAY	1	20	1.9 | 3.0				3		2	10
10	3	LTS - WORKBAY	1	20		1.9 | 3.0				BRIDGE CRANE	4	10
10	5	LIGHTS	1	20			2.1 | 3.0	20			6	10
10	7	LIGHTS	1	20	1.9 | 3.9				3		8	10
10	9	NIGHT LIGHTS	1	20		1.9 | 3.9				COMPRESSOR	10	10
12	11		3				0.8 | 3.9	25			12	10
12	13	ROLL-UP DOOR			0.8 | -			-	-	PFB	14	-
12	15			15		0.8 | 11.1			2	RECEPT - WELDER	16	6
-	17	PFB	-	-			- | 11.1	50			18	6
-	19	PFB	-	-	- | 5.1				3		20	4
-	21	PFB	-	-		- | 5.1				PANEL "2B"	22	4
-	23	PFB	-	-			- | 5.1	70			24	4
-	25	PFB	-	-	- | -			-	-	PFB	26	-
-	27	PFB	-	-		- | -		-	-	PFB	28	-
-	29	PFB	-	-			- | -	-	-	PFB	30	-

CONNECTED LOAD/PHASE	15.8	15.8	14.1
TOTAL CONNECTED LOAD	45.7 KVA		
DEMAND FACTOR	1.0		
TOTAL DEMAND LOAD	45.7 KVA= 55 AMPS		

PANEL "4E2"

480/277 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN BREAKER
MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	LIGHTS	1	20	0.6 | 0.8				3		2	12
10	3	FUEL DISP - LTS	1	20		0.6 | 0.8				EF-04	4	12
10	5	NIGHT LIGHTS	1	20			0.6 | 0.8	15			6	12
4	7		3		8.5 | -			-	-	PFB	8	-
4	9	PANEL "2E2"				8.5 | -		-	-	PFB	10	-
4	11			70			8.5 | -	-	-	PFB	12	-
10	13	FIELD LIGHTS	1	20	2.0 | -			-	-	PFB	14	-
10	15	FIELD LIGHTS	1	20		2.0 | -		-	-	PFB	16	-
10	17	FIELD LIGHTS	1	20			2.0 | -	-	-	PFB	18	-
-	19	PFB	-	-	- | -			-	-	PFB	20	-
-	21	PFB	-	-		- | -		-	-	PFB	22	-
-	23	PFB	-	-			- | -	-	-	PFB	24	-

CONNECTED LOAD/PHASE	9.9	9.3	9.3
TOTAL CONNECTED LOAD	28.5 KVA		
DEMAND FACTOR	1.0		
TOTAL DEMAND LOAD	28.5 KVA= 35 AMPS		

PANEL "4E1"

480/277 VOLTS, 3 PHASE, 4 WIRE
3P225 AMP MAIN BREAKER
MIN AIC: 65K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	LIGHTS	1	20	1.6 | 12.6				3		2	2
12	3	LIGHTS	1	20		2.2 | 12.6				PANEL "4E1A"	4	2
-	5	PFB	-	-			- | 12.6	100			6	2
10	7		3		1.3 | 11.2				3		8	2
10	9	CHWP-2				1.3 | 11.2				PANEL "4E2"	10	2
10	11			15			1.3 | 11.2	100			12	2
10	13		3		1.3 | 13.8				3		14	2
10	15	CHWP-1				1.3 | 13.8				PANEL "2E1"	16	2
10	17			15			1.3 | 13.8	100			18	2
8	19		3		9.6 | -			-	-	PFB	20	-
8	21	ACC-1				9.6 | -		-	-	PFB	22	-
8	23			30			9.6 | -	-	-	PFB	24	-
8	25		3		9.6 | -			-	-	PFB	26	-
8	27	ACC-2				9.6 | -		-	-	PFB	28	-
8	29			30			9.6 | -	-	-	PFB	30	-

CONNECTED LOAD/PHASE	61.0	61.6	59.4
TOTAL CONNECTED LOAD	182.0 KVA		
DEMAND FACTOR	0.8		
TOTAL DEMAND LOAD	145.6 KVA= 175 AMPS		

PANEL "4E1A"

480/277 VOLTS, 3 PHASE, 4 WIRE
3P100 AMP MAIN LUGS
MIN AIC: 65K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1		3		2.1 | 2.1				3		2	10
12	3	SF-A3				2.1 | 2.1				AHU-A1	4	10
12	5			15			2.1 | 2.1	15			6	10
8	7	AEROBIC CTRL PNL	2		3.0 | 0.9				3		8	10
8	9			20		3.0 | 0.9				SF-1	10	10
-	11	PFB	-	-			- | 0.9	15			12	10
-	13	PFB	-	-	- | 0.9				3		14	10
-	15	PFB	-	-		- | 0.9				SF-1	16	10
-	17	PFB	-	-			- | 0.9	15			18	10
-	19	PFB	-	-	- | 3.1				3		20	10
-	21	PFB	-	-		- | 3.1				SF-A4	22	10
-	23	PFB	-	-			- | 3.1	15			24	10
-	25	PFB	-	-	- | 1.3				3		26	10
-	27	PFB	-	-		- | 1.3				EF-A9	28	10
-	29	PFB	-	-			- | 1.3	15			30	10
-	31	PFB	-	-	- | 1.3				3		32	12
-	33	PFB	-	-		- | 1.3				EF-A3	34	12
-	35	PFB	-	-			- | 1.3	15			36	12
-	37	PFB	-	-	- | 0.9				3		38	12
-	39	PFB	-	-		- | 0.9				EF-A8	40	12
-	41	PFB	-	-			- | 0.9	15			42	12

CONNECTED LOAD/PHASE	12.6	12.6	12.6
TOTAL CONNECTED LOAD	37.8 KVA		
DEMAND FACTOR	0.8		
TOTAL DEMAND LOAD	30.2 KVA= 36 AMPS		

REVISION NO	SYM	DESCRIPTION	SHT OF	DATE	APPROVED PUBLIC WORKS ADMINISTRATOR
	AB	AS-BUILT		07/09	
PCD-5	5	REVISED CKTS	14/15	7/29/04	
PAD		POST ADDENDUM	40/41	11/26/02	
ADD-4	4	ADE-010 ADDENDUM NO. 4		8/13/02	

AS-BUILT DRAWING

VINCENT K. MIYAGAWA — LICENSED PROFESSIONAL ENGINEER — No. 4534-E — HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

MAUI ARMY NATIONAL GUARD
PUUNENE ARMORY
PUUNENE, MAUI, HAWAII

PANEL SCHEDULE

ECS, Inc.

DESIGNED BY	DRAWN BY	DATE	JOB NO.	DRAWING NO
DT	JAI	15-14-7103		E-21