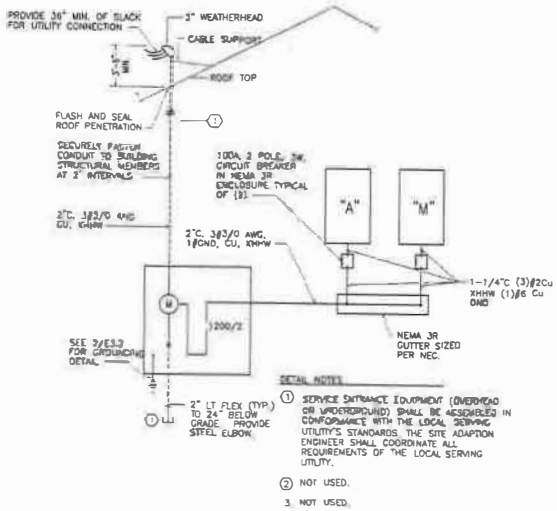
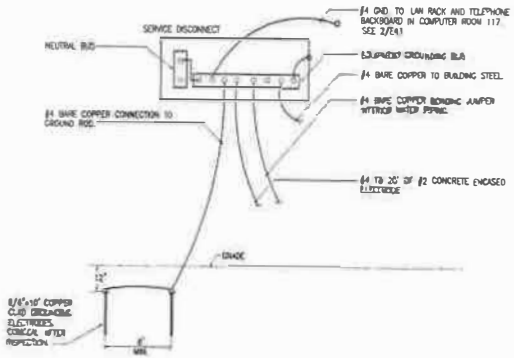


1 ELECTRICAL ONE-LINE DIAGRAM

E3.2 SCALE: NTS



2 ELECTRICAL GROUNDING DETAIL

E3.2 SCALE: NTS

PANEL 'A'

TYPE

SQUARE 'D' TYPE NQOD — 120/240V,1Φ,3W — RECESSED MTD. — 125 A

VOLT-AMPS

CIRC	POLE	AMPS	SERVICE	LOAD TYPE	A		B		LOAD TYPE	SERVICE	AMPS	POLE	CIRC
1	1	20	LTG-RM 108,109,112	LTG	300	1,050				LTG-101,103,105,110	20	1	2
3			LTG-RM 101-104,110-112,114-117	LTG			1,040	840		REC-EXTERIOR, RM 106			4
5			REC-RM 103	RECP	540	360			RECP	REC-RM 106			6
7			REC-RM 105	RECP			540	360	RECP	REC-RM 106			8
9			REC-RM 105	RECP	180	360			RECP	REC-RM 106			10
11			REC-RM 104	RECP			540	360					12
13			REC-RM 109	RECP	180	360			RECP	REC-RM 106			14
15			REC-RM 102,113	RECP			720	180	RECP	REC-RM 107			16
17			REC-RM 102	RECP	540	180			RECP	REC-RM 107			18
19			REC-RM 101,110,111,117, KSH-1	RECP			540	180	RECP	REC-RM 107			20
21			LTG-EXTERIOR	LTG	300					SPARE			22
23			REC-RM 108	RECP			360						24
25			SPARE	MISC									26
27				MISC				1,000	LTG	LTG-DENTAL OPERATING LIGHT			28
29				RECP		180			RECP	REC-RM 114 DENTAL CHAIR			30
31			SPACE	MISC						SPARE			32
33				MISC		180			RECP	REC-RM 114 RECPT FOR STERILIZER			34
35				MISC				540	MISC	MODEL-UTIL UNIT			36
37				MISC		540			RECP	REC-RM 114			38
39								180	RECP	REC-RM 114			40
41						720			MISC	REC-RM 114 X-RAY UNIT			42
			TOTAL V-A			6,170		3,960			13,486	VA	
			TOTAL AMPS			51		33			56	A	
			A.I.C. RATING: 10,000										

	LTG	REC	MOTR	MISC	LG MTR	SPECIAL	TOTAL	AMPS
CONNECTED LOAD IN KVA (PANEL 'A')	3.96	8.36	0.00	.28	0.00	0.00	13.5 KVA	56 A
CONNECTED LOAD IN KVA (BRANCH PANELS)							0.0 KVA	0 A
TOTAL CONNECTED LOAD IN KVA	3.96	8.36	0.00	.28	0.00	0.00	13.5 KVA	56 A
DEMAND LOAD IN KVA	4.88	8.36	0.00	.28	0.00	0.00	13.5 KVA	56 A

*PROVIDE ARC FAULT CIRCUIT BREAKER.

PANEL 'M'

SQUARE 'D' TYPE NQOD — 120/240V,1Φ,3W — RECESSED MTD. — 125 A

VOLT-AMPS

CIRC	POLE	AMPS	SERVICE	LOAD TYPE	A		B		LOAD TYPE	SERVICE	AMPS	POLE	CIRC
1	2	30	MISC RM 109 DRYER	RECP	2,500	360			RECP	REC-MECH RM	20	1	2
3				RECP			2,300	1,176	MISC	MISC-MORGUE UNIT			4
5	2	30	MISC DENTAL AIR COMP.	MISC	2500	528			MOTR	MOTR-RM 106 PMP-1,1A			6
7				MISC			2,500	1,176	LG MT	MOTR-RM 106 BP-1			8
9	2	30	MISC DENTAL VACUUM	MISC	1500	896			MOTR	MOTR-RM 106 B-1,VAC-1,PMP-2			10
11				MISC			1,500	896	MOTR	MOTR-RM 106 HRV-1			12
13	2	30	COOKTOP RANGE	RECP	2500	720			MISC	MISC-FIRE / SECURITY SYSTEM			14
15	2			RECP			2,500	1,500	RECP	REC-RM 113			16
17	1	-	SPACE			360			RECP	REC-RM 113			18
19								1,500	RECP	REC-RM 113			20
21						540			RECP	REC-RM 113			22
23								880	MISC	MISC-COWATER CONTROL PANEL			24
25						1000			MISC	MISC-COWATER PANEL HEAT TRACE			26
27								896	MISC	RECP RM 108 CT-1			28
29										SPARE			30
31													32
33													34
35													36
37													38
39													40
41													42
			TOTAL V-A			12,984		16,904			29,788	VA	
			TOTAL AMPS			108		140			124	A	
			A.I.C. RATING: 10,000										

	LTG	REC	MOTR	MISC	LG MTR	SPECIAL	TOTAL	AMPS
CONNECTED LOAD IN KVA (PANEL 'M')	0.00	14.29	3.40	12.13	0.29	0.00	29.8 KVA	124 A
CONNECTED LOAD IN KVA (BRANCH PANELS)							0.0 KVA	0 A
TOTAL CONNECTED LOAD IN KVA	0.00	14.29	3.40	12.13	0.29	0.00	29.8 KVA	124 A
DEMAND LOAD IN KVA	0.00	12.13	3.40	12.13	0.29	0.00	28.0 KVA	116 A

*PROVIDE GFCI TYPE 30mA EPD CIRCUIT BREAKER.
**PROVIDE ARC FAULT CIRCUIT BREAKER.
***PROVIDE HANDLE LOCK DEVICE MAKE BREAKER MSI.

RSA Engineering, Inc.
MECHANICAL AND ELECTRICAL CONSULTING ENGINEERS
1922 ARCTIC BLVD. SUITE 201 ANCHORAGE, AK 99503-2616 (907)276-6021

REVISIONS

DATE

LCMF LLC
ALASKA NATIVE TRIBAL HEALTH CONSORTIUM
1901 SOUTH BRAGAW STREET, SUITE 230
ANCHORAGE, ALASKA 99503
(907) 727-5500

HEALTH CLINIC – HUGHES, ALASKA
1,500 SF CLINIC

DATE: JUNE 17, 2005
SCALE: AS SHOWN
DRAWN BY: MAD
FILE NAME:
LAYOUT NAME:
PROJ ENG: SR. TEH

E3.2

SHEET 2 OF 6 TOTAL SHEETS