

ELECTRICAL LEGEND

LIGHTING	
	WALL MOUNT H.L.D.
	EMERGENCY LIGHTING BATTERY PACK C/W HEADS
	PHOTO-ELECTRIC CELL
	DOUBLE REMOTE HEAD
	SURFACE FLUORESCENT
	WALL MOUNT EXIT
SWITCHES	
	MAGNETIC STARTER
	COMBINATION MAGNETIC STARTER
	SINGLE POLE SWITCH
	DISCONNECT SWITCH
	RELAY CONTACT
	MOTOR
	SURFACE MOUNT ELECTRICAL PANEL

RECEPTACLES

	DUPLEX RECEPTACLE
	WP - INDICATES WEATHERPROOF
	GFR - GROUND FAULT RECEPT.

MISCELLANEOUS

	JUNCTION BOX
	MOTOR
	SURFACE MOUNT ELECTRICAL PANEL

ABBREVIATION

AFF	ABOVE FINISH FLOOR
CEC	CANADIAN ELECTRICAL CODE
QEC	QULLIQU ENERGY CORPORATION
AFG	ABOVE FINISH GRADE
CON	CONDUCTOR
CU	COPPER
GRS	GALVANIZED RIGID STEEL
C	CONDUIT
GND	GROUND
GBPG	GOOD BUILDING PRACTICE GUIDELINES (NUNAVUT)
MTG	MOUNTING
ATS	AUTO TRANSFER SWITCH
BLDG	BUILDING

DRAWING LIST

E101	LEGEND, SITE PLAN AND DETAIL
E102	SINGLE LINE DIAGRAM, GENERATOR RM DETAIL AND MOTOR SCHEDULE
E103	LIGHTING PLAN AND LUMINAIRE SCHEDULE
E104	POWER FLOOR PLAN
E105	HEAT TRACE DETAILS

SERVICE MAST ELEVATION

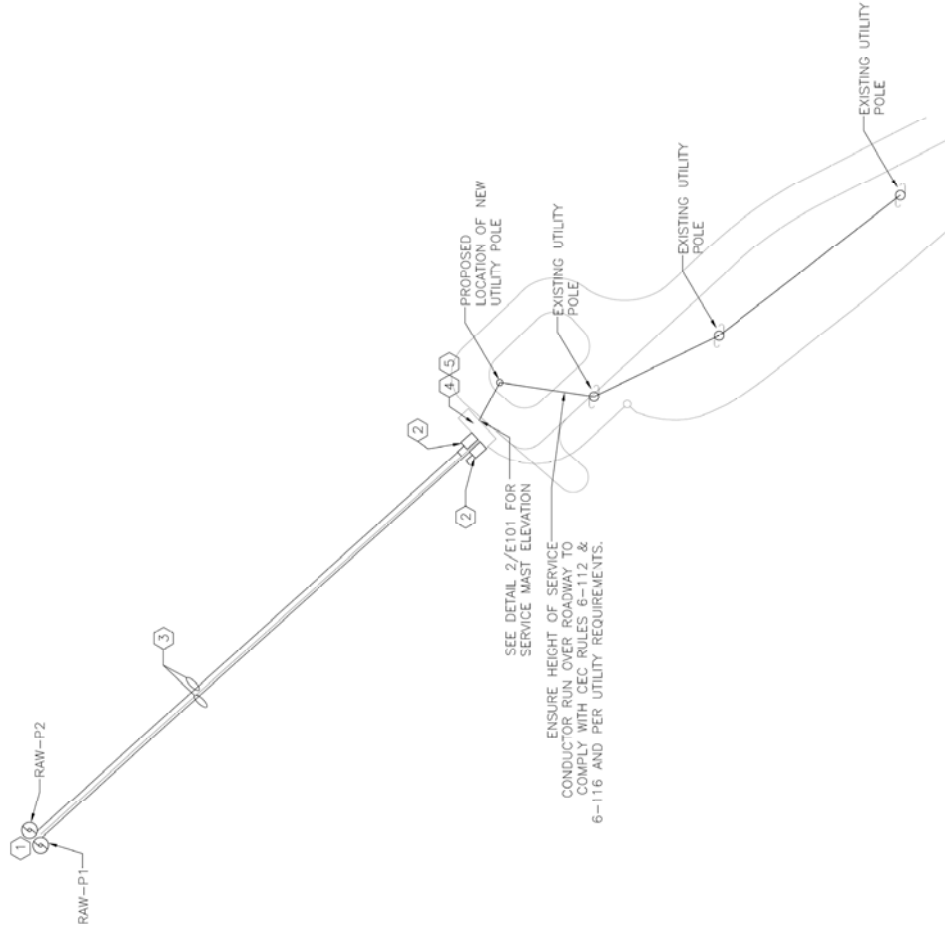
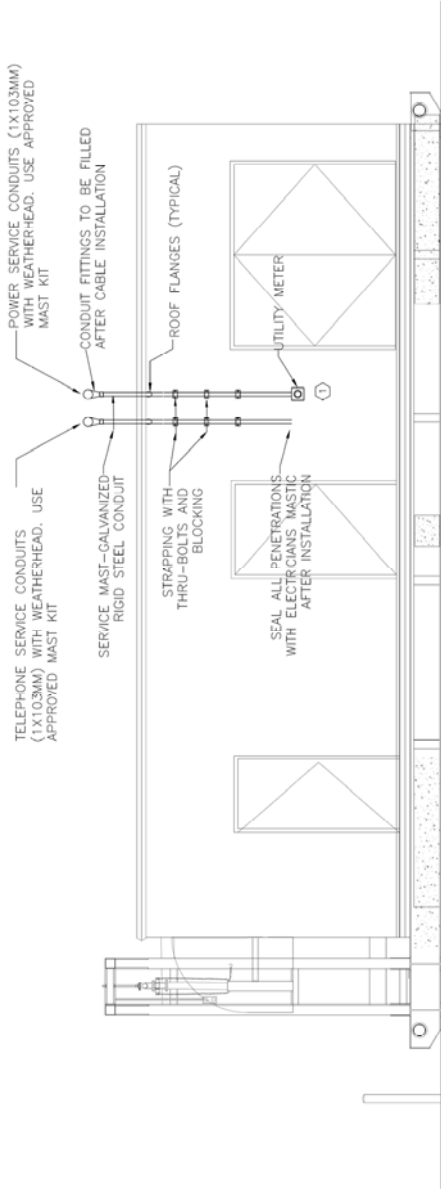
SCALE : 1:50

GENERAL NOTES FOR DETAIL 2/E101:

- LOCATE AND SUPPORT SERVICE MASTS PER CEC & QEC REQUIREMENTS.
- ADJUST FINAL MOUNTING HEIGHT OF SERVICE MASTS TO ENSURE COMPLIANCE WITH CEC RULES 6-112 & 6-116.

KEYNOTE FOR DETAIL 2/E101:

- UTILITY METER SHALL BE INSTALLED AT 1.7M ABOVE FINISHED GRADE FROM CENTRE OF THE METER FACE AS REQUIRED PER UTILITY.



ELECTRICAL SITE PLAN

SCALE : 1:1000

KEYNOTES FOR DETAIL 2/E101:

- PUMPS ARE TO BE LOCATED 16CM FROM SHORE. REFER TO CIVIL DRAWINGS FOR EXACT LOCATION.
- PROVIDE WEATHERPROOF DISCONNECTS FOR EACH SUBMERSIBLE PUMP (2 TOTAL) AT EXTERIOR OF BUILDING WHERE WATER INTAKE LINES ENTER THE BUILDING. DISCONNECTS ARE TO BE CLEARLY AND PERMANENTLY LABELED WITH EQUIPMENT NAME, HORSEPOWER AND VOLTAGE AND COMPLIANCE WITH CEC RULES 6-112 & 6-116. REFER TO SINGLE LINE ON SHEET E102 FOR SIZES.
- REFER TO SINGLE LINE DIAGRAM FOR CABLE AND CONDUIT SIZE AND TYPE. INSTALLATION TO COMPLY WITH CEC 26-956-1(c).
- BUILDING TO BE BUILT IN SECTIONS FOR SHIPPING AND ASSEMBLED ON SITE. REFER TO ARCHITECTURAL DOCUMENTS FOR SHIPPING SPLIT LOCATIONS. PROVIDE JUNCTION BOXES AT EACH LOCATION WHERE CONDUIT AND WIRING ENTER/EXIT A SHIPPING SECTION. ONCE ON SITE, CONNECT AND MAKE OPERATIONAL ALL ELECTRICAL SYSTEMS.
- BUILDING STRUCTURES BUILT OUTSIDE THE TERRITORY SHALL BE IN COMPLIANCE OF NUNAVUT TERRITORY ELECTRICAL SAFETY BULLETIN # 28.1.00, DATED: NOVEMBER 18, 2010.
- EXISTING POWER SERVICE IS SINGLE PHASE ONLY. NEW FACILITY REQUIRES THREE PHASE POWER TO BE BROUGHT TO SITE FROM THE COMMUNITY. COSTS FOR UPGRADING THE POWER AND TELEPHONE SERVICES TO BE CARRIED BY THE CONTRACTOR.

GENERAL KEYNOTES FOR ALL ELECTRICAL DRAWINGS

PERFORM COMPLETE INSTALLATION AND EQUIPMENT IN STRICT ACCORDANCE SHALL MEET THE MOST STRINGENT REQUIREMENTS OF THE FOLLOWING:

- CSA C22.1-12-22ND EDITION OF THE CANADIAN ELECTRICAL CODE 2009
- NATIONAL ENERGY CODE FOR BUILDINGS 2011
- GN'S STRUCTURED CABLING GUIDELINES VERSION 1.4 MARCH, 2011
- GN'S GOOD BUILDING PRACTICE GUIDELINES
- GN'S ELECTRICAL/MECHANICAL SAFETY SECTION ELECTRICAL BULLETINS AND FIRE MARSHALL TECHNICAL BULLETINS
- THE CONTRACTOR TO VERIFY WITH THE ELECTRICAL INSPECTION DEPARTMENT THE ACCEPTABILITY OF ANY PRE-WIRING DONE WITHIN THE NEW POTABLE WATER SYSTEM BUILDING IF THE WIRING IS DONE OUTSIDE OF NUNAVUT AND, TO ENSURE THAT A PERMIT IS ACQUIRED FROM THE NUNAVUT INSPECTION DEPARTMENT FOR ANY PRE-WIRING THAT MAY BE DONE.

PHOTOCELL CONTROL SCHEMATIC

N.T.S.



The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. Stantec does not warrant the accuracy of the design and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

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Legend



Notes

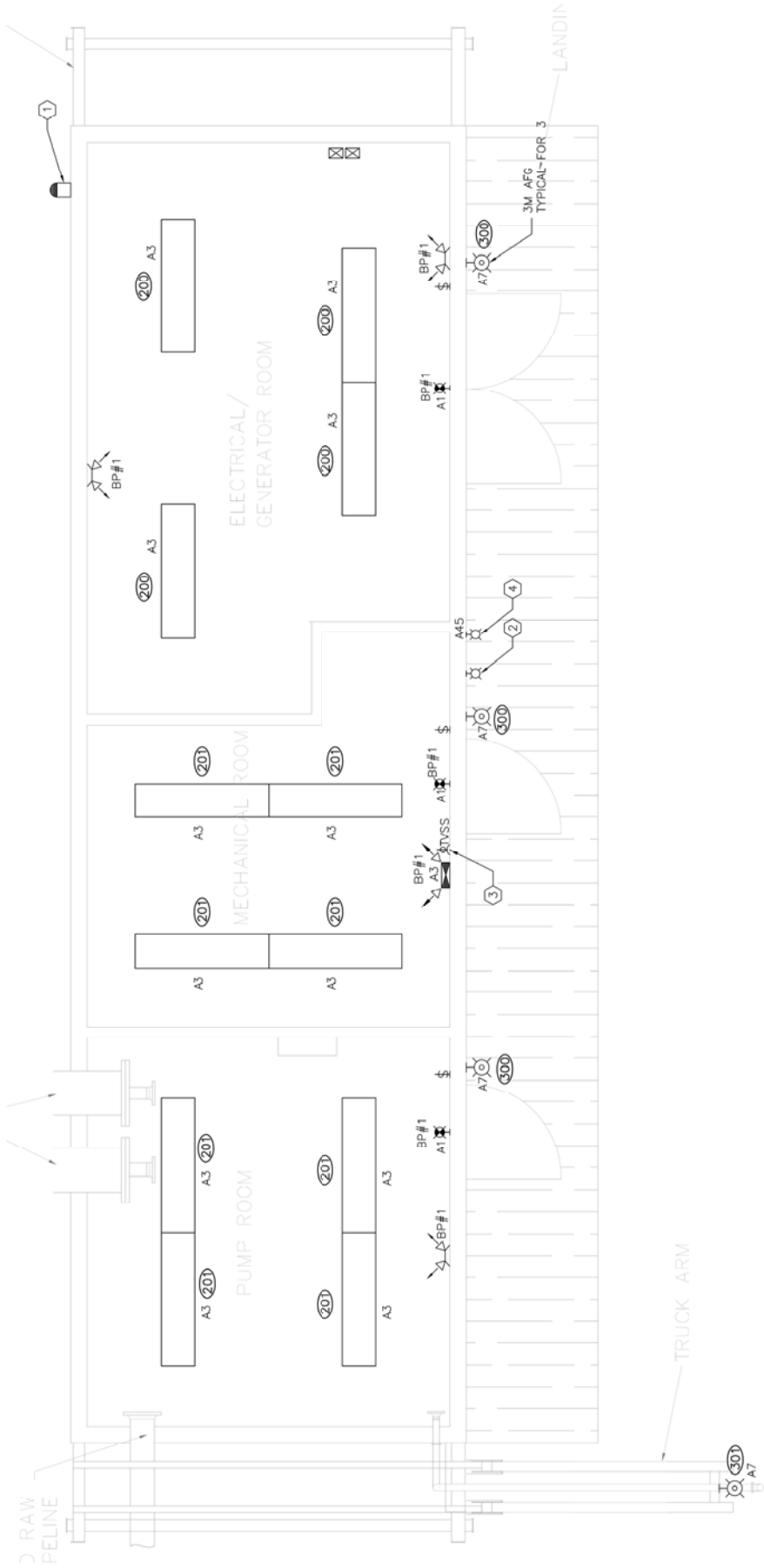
- KEYNOTES:
- 1

EXTERIOR LIGHTING PHOTOCELL INSTIALL HIGHER ABOVE BUILDING, AWAY FROM OBSTRUCTION AND ARTIFICIAL LIGHT SOURCES, FACING NORTH.
- 2

AMBER STROBE FOR MECHANICAL ALARM TO BE RIGIDLY MOUNTED WITH RIGID CONDUIT AND INSTALL ABOVE BUILDING AND TO BE VISIBLE FROM ROADSIDE. REFER SPECIFICATION SECTION 28 32 00 FOR DETAIL.
- 3

EMERGENCY BATTERY PACK ON TVSS RECEPTACLE.
- 4

FUEL TANK FULL LIGHT



1

E103

1:30

LIGHTING AND EMERGENCY PLAN

PANEL: A											
VOLTS: 120/208			LOCATION: ELECTRICAL/GENERATOR ROOM			BUSS: 250A					
PHASE: 3			FEEDER: REFER TO SINGLE LINE			MTG: SURFACE					
WIRE: 4											
CIRC	BRKR	WATTS			DESCRIPTION	WATTS			CIRC	BRKR	C
		A	B	C		A	B	C			
* 1	1P15	50			EXIT SIGNS						
3	1P15	1000			RECEPTACLES & EMERGENCY LGTHS	375			1P15	2	
5	1P15				SPARE				1P15	4	
7	1P15	400			EXTERIOR LIGHTS	250		250	1P15	6	
9	1P15	176			B-1				1P15	8	
11	1P15		176		B-2				1P15	10	
13	1P25	335			HRV-1	187			1P15	12	
15	1P15		60		UH-1				1P30	14	
17	1P15		60		UH-2			478	1P30	16	
19	1P15	60			UH-3				1P30	18	
21	1P15	100			MAS	100			1P15	20	
23	1P15		100		TBS		125			22	
25	1P15	100			TPS	125			3P15	24	
27	1P15	150			MISC. LOADS-GEN RM			40	1P15	26	
29	1P15		50		CF-1				1P15	28	
31		5000				5000			1P15	30	
33	3P110		5000		RWP-1		5000			32	
35			5000						3P110	34	
37	1667		1667							36	
39	3P40				AB	2250			2P40	38	
41			1667				2250			40	
43	1P15	100			PROCESS PANEL				2250	42	
45	1P15				FUEL TANK FULL LIGHT	2250			2P40	44	
47	1P15				BATTERY CHARGER	100			1P15	46	
49	1P15				GENERATOR BLOCK HEATER				1P15	48	
51	1P15				SPACE					50	
53	1P15				SPACE					52	
55					SPACE					54	
57					SPACE					56	
59					SPACE					58	
					SPACE					60	
TOTAL		7712	8153	7053		10537	8368	8440	TOTAL		
PHASE A TOTAL = 18249											
PHASE B TOTAL = 16521											
PHASE C TOTAL = 15493											
PANEL TOTAL = 50263											
REMARKS											
* PROVIDE LOCK-ON DEVICE ON BREAKER.											
PROVIDE INTEGRAL TVSS, BREAKERS FOR HEAT TRACE #1 AND #2 ARE TO BE GFCI											
PANEL TOTAL = 50263				139.5				AMPS			



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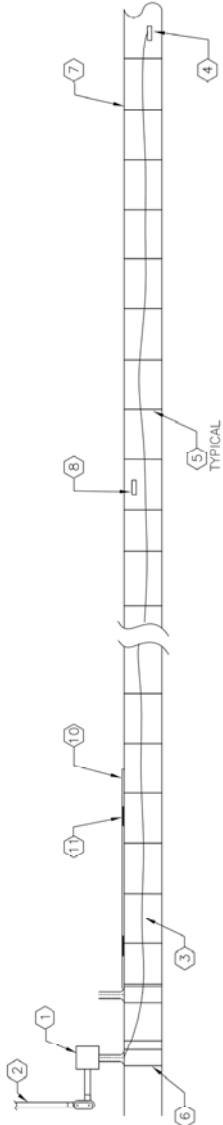
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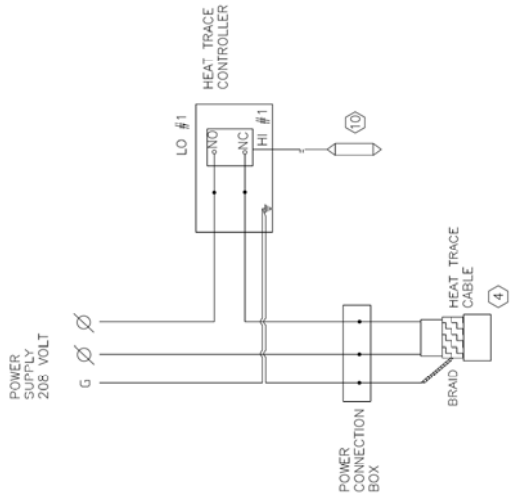


Notes

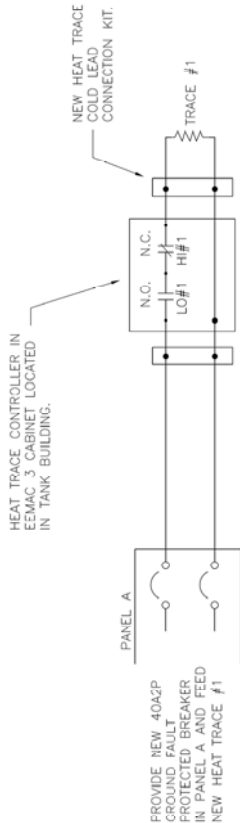


1 HEAT TRACE INSTALLATION
E105 N.T.S.

- ① FOWER CONNECTION BOX FOR ONE HEATING CABLE
- ② 21 MM CONDUIT AND WIRING TO ELECTRICAL PANEL BOARD
- ③ HEAT TRACE CABLE. SEE SPECIFICATION. TOTAL LENGTH OF THE PIPE IS EXPECTED TO BE 160 METERS PLUS/MINUS 5%. SITE VERIFY THE LENGTH AND INFORM THE ENGINEER IMMEDIATELY IF THE ACTUAL LENGTH IS DIFFERENT.
- ④ END SEAL
- ⑤ GLASS INSULATION TAPE.
- ⑥ PIPE STRAP; PROVIDE AS AND WHERE NECESSARY AS PER MANUFACTURER INSTRUCTIONS.
- ⑦ FRESH WATER PIPE 100MM (4").
- ⑧ ELECTRICALLY TRACED LABEL SEE SPECIFICATION
- ⑨ NOT USED
- ⑩ THERMOSTAT BULB. SEE SPECIFICATION
- ⑪ POSITION THERMOSTAT BULB AND LINE AWAY FROM HEATER CABLE AND EFFECTIVELY INSULATE PER MANUFACTURER INSTRUCTIONS
- ⑫ HEAT TRACE IS NOT TO ENTER BUILDING ENVELOPE.



2 HEAT TRACE WIRING
E105 N.T.S.



3	HEAT TRACE INSTALLATION
E105	N.T.S.

Title _____

Project No. 1449-01252	Scale AS SHOWN
Drawing No.	Sheet
	Revision

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