

ICELAND ELECTRICAL MATERIAL LIST

ITEM	USE	SIZE	NUMBER OF CONDUTORS (Cu)	TYPE	LENGTH (ft) or quantity	Rob's notes
1/2/2011	supersedes 12/29/10					
1	Drop for SMUD to metered fused Main disconnect (item 2a)		4	THHN/THWN	12	I don't know if we supply this or if SMUD does.
2a	Meter Socket, 3 phase	200 Amp	NEMA 3R	Smud type with test bypass	1	Does this need to be nema 4 or nema 3R?
2b	combined with item 2a & 2c	n/a	n/a	n/a	n/a	
2c	Switch, Main power disconnect switch (200A, 240VAC, 3phase)	NEMA 3R	5 feed	200A,240vac3phase	1	
2d	wire, Ground wire for main disconnect	#2	1	Solid bare	50 ft	
2e	Conduit, Ground conduit for main disconnect	3/4 in	1	EMT	50 ft	
2f	wire, SMUD connection point to meter socket	3/0 awg	4	THHN/THWN	20' ea	guessing on the length
2g	wire, meter socket to disconnect switch to SE panel	3/0 awg	4	THHN/THWN	15'	guessing on the length
2h	wire, ground between iceland and american ice	#2 awg	1	bare	100'	guessing on the length
3	Conduit, Connect Main power distrubution pnl to distrubution pnl "SW"	2 in		EMT	1	
4	Panel, Main power distrubution panel "SE" (200A, 240VAC, 3phase,4wire)	NEMA 3R	42 circ	200A,240vac3phase	1	
4a	Bkrs for panel "SE"	60A		60A, 3P	2	
4b	Bkrs for panel "SW", GFI	20A		20A, 1P	11	I think we only need 5 for SW, but we need 4 on SE and 4 on NE
5	Conduit from existing 2in rigid conduit to new 2in EMT	2in		PVC	60 ft	
5a	Conduit from new 2in PVC up to new panel "NE"	2in		EMT	10 ft	can this be 2" or does it have to match the 1-1/2" that it connects to?
6	Wire from pnl "SE" to pnl "SW"	#6 AWG	5	THHN/THWN	150 ft	I think we only need #6 for 60 amp
7	Panel "SW" Located inside back of rink nr. Rear exit (125A, 240VAC,3phase)	NEMA 3R	42 Circuit	125A,240VAC,3phase	1	
7a	Bkrs for panel "SW", GFI	20A		20A, 1P	5	
8	Wire from pnl "SE" to pnl "NE"	#6 AWG	5	THHN/THWN	160 ft	
9	Conduit from existing 1-1/2in rigid conduit to new 1-1/2in EMT	1-1/2in	5 #6AWG	PVC	40 ft	
10	Panel "NE" Located inside front of rink nr. Front exit (125A, 240VAC,3phase)	NEMA 3R	42 Circuit	125A,240VAC,3phase	1	
10a	Bkrs for panel "NE", GFI	20A		20A, 1P	7	
11	Conduit from new 1-1/2in 1-1/2 PVC up to new panel "NE"	1-1/2in	5 #6AWG	EMT	10 ft	
12	wire, Gas pipe ground wire	#6AWG	1	solid bare	20 ft	
13	Conduit, Gas pipe conduit from pnl "NE" to gas pipe	3/4 in	1	EMT	20 ft	
13a	wire, Gas pipe ground wire pipe connector	3/4 in	1	pipe to wire connector	1	
14	wire, Water pipe ground	#6	1	solid bare	180 ft	
15a	Conduit, Water pipe ground wire conduit from 3/4 in EMT to water pipe	3/4 in	1	PVC	30 ft	
15	Conduit, Water pipe ground wire conduit from pnl "SW" to 3/4 in PVC (item 16)	3/4 in	1	EMT	30 ft	
16	Wire, Water pipe ground wire pipe connector	3/4 in	1	pipe to wire connector	1	
17	Anchors for power panels "SW", "SE", "NE"	1/2 in		"red heads"	16	
18	Anchors for 2" EMT (conduit clamps for concrete)	2 in		std 2" EMT	1 doz	
19	Anchors for 1-1/2" EMT (for conduit clamps for concrete)	1-1/2 in		std 1-1/2 EMT	1 doz	
20	Anchors for 3/4 " EMT (for conduit clamps for concrete)	3/4 in		std 3/4 EMT	4 doz	
21	Lighting, Exit "XL" , Greentorch XWLC			Greentorch XWLC	2	in-stock
22	Lighting, Exit "EL" , Greentorch WVHEL			Greentorch WVHEL	3	ordered

ICELAND ELECTRICAL MATERIAL LIST

23	Lighting, Outdoor light "OL", wall pack-e-conolight E-WP1F421Z			Econolight E-WP1F421Z	8	in-stock
24	Lighting, Flood light "FL" pole mount, item 46 for poles			Econolight E-HR4P25QZ	5	in-stock
25	Junction box "j", 4x4 or 8x8?	4x4		?	14	
26	Lighting, switch box , 3 gang, rink perimeter lighting inside.	3 gang		3 gang, weathertight, 3/4"	1	
27	Lighting, switch box, 1 gang, rink perimeter lighting outside.	duplex		1 gang, weathertight, 3/4"	1	
28	Lighting, switch box, 2 gang, "ICELAND" lighting and pagoda control box.	quad		2 gang, weathertight, 3/4"	1	
29	Conduit, 3/4" EMT, 40 ft from panel "NE" to sign switch (item 28)	3/4"		EMT	40 ft	
30	Wire, #12AWG Cu, THHN/THWN, black, sign power from pnl "NE".	#12 AWG	1	#12AWG THHN/THWN	40 ft	
31	Wire, #12AWG Cu, THHN/THWN,white, sign power from pnl "NE".	#12 AWG	1	#12AWG THHN/THWN	40 ft	
32	Wire, #12AWG Cu, THHN/THWN, green, sign power from pnl "NE".	#12 AWG	1	#12AWG THHN/THWN	40 ft	
33	Receptical box, 4x4, weather tight, power from pnl "SW". See item 52	#12 AWG		4X4, weathertight, 3/4"	2	
34	Receptical box, 2x2, weather tight, power from pnl "SW".	#12 AWG		2x2, weathertight, 3/4"	1	
35	Conduit, 3/4" SCH40 PVC, to item 34	3/4"		SCH40, PVC	40 ft	
36	Wire, #12AWG Cu, THHN/THWN, black, sign power from pnl "SW".	#12 AWG	1	#12AWG THHN/THWN	40 ft	
37	Wire, #12AWG Cu, THHN/THWN,white, sign power from pnl "SW".	#12 AWG	1	#12AWG THHN/THWN	40 ft	
38	Wire, #12AWG Cu, THHN/THWN, green, sign power from pnl "SW".	#12 AWG	1	#12AWG THHN/THWN	40 ft	
39	Conduit, 3/4" EMT, power from 4x4 box switch to all "FL", NE side, 2 runs of 120 ft.	#12 AWG		EMT	240 ft	
40	Conduit, 3/4" EMT, power from 4x4 box switch to all "FL", SW side, 2 runs of 80 ft.	#12 AWG		EMT	160 ft	
41	Wire, #12AWG Cu, THHN/THWN, black, power for "FL", 2 runs of 200 ft.	#12 AWG	1	#12AWG THHN/THWN	400 ft	
42	Wire, #12AWG Cu, THHN/THWN, white, power for "FL", 2 runs of 200 ft.	#12 AWG	1	#12AWG THHN/THWN	400 ft	
43	Wire, #12AWG Cu, THHN/THWN, green, power for "FL", 2 runs of 200 ft.	#12 AWG	1	#12AWG THHN/THWN	400 ft	
44	Nipples, 2", for box entry items 2c,47	3/4 in		3/4" EMT compression type	12	
45	Couplers, 3/4" for connection of 3/4"conduit, items 29,35,39 & 40	3/4 in		3/4" EMT compression type	50	
46	Lighting, poles for "FL" (item 24)	2" dia		2" dia steel, 20 ft long (water pipe)	5	These can be rigid conduit or water pipe. The actual OD is 2-3/8", I think. Water is probably easier.
47	Lighting, pole bracing kits	2"			5	These are the brace kits that normally go on periscope service inlets.
48	Nipples, 1-1/2", for box entry on items 10 &4	1-1/2 in		1-1/2 compression type	2	
49	Nipples, 3/4" for box entry items 7,10,4,29,34,35,36,37,38,39,40,41,42,43	3/4"		3/4" compression type	100	
50	Conduit, 1" EMT, from LED sign switch to sign	1"		EMT	10 ft	
51	Receptical box, weathertight, 3/4" entry. See item 33			2x2, weathertight, 3/4"	12	
52	Receptical box, weathertight, 3/4" entry. Outside 4x4 nr "SVC"			4X4, weathertight, 3/4"	1	
53	Unistrut for attaching panels "SVC", "SE", "SW", & "NE"			20 ft unistrut	20 ft	
54	Flex, 3/4 weathertight, for connection frm "J" to "FL"s, "XL"s & "EL"s			30 feet	30 ft	
55	Conduit " Jakes" for flex fittings, item54			EMT	4 doz	
56	Conduit, 1/2", EMT, connction from "J" to "FL"			EMT	50 ft	
57	6" x 6" x 48" or 60" NEMA 3R gutter for SE wall between SE panel and conduits					
58	copper ground bus for american ice, approx. 12 - 16" long					
59	box for ground bus at american ice					