

ELECTRICAL EQUIPMENT BILL OF MATERIALS				
NO.	ITEM	DESCRIPTION	MANUFACTURER/CAT NO.	QUANTITY
1	EMERGENCY AC GEAR MOTOR	5HP, 240VAC, 3PHASE MOTOR RPM: 1725RPM OUTPUT RPM: 213 RPM, OUTPUT TORQUE: 1478 IN-LBF SERVICE FACTOR: 1.1, AGMA CLASS: 1, GEAR RATIO: 8.09	NORD CAT NO. SK 9012.1-100LA/4 BRE40 HL RG OR ENGINEER APPROVED EQUAL	2
2	EMERGENCY GEAR MOTOR DISCONNECT SWITCH	600VAC, 30AMP, NEM 4X STAINLESS STEEL	EATON CAT NO. DH361UWK OR ENGINEER APPROVED EQUAL	2
3	MAIN SPAN MOTOR SPEED TACHOMETER	DC TACHOMETER GENERATOR	BALDOR TYPE XPY CAT NO. DTG100XP OR ENGINEER APPROVED EQUAL	2
4	MOTOR BRAKE	MAGNETEK 200S SERIES TYPE 8" MST/E-ED 30 AC HY-THYRUST, SUPPLY VOLTAGE=240V, SHAFT RPM=900, SHAFT HP=20HP, SET FOR 185FT-LBF	MAGNETEK OR ENGINEER APPROVED EQUAL	2
5	MACHINERY BRAKE THRUSTER	THRUSTER SIZED FOR 10000FT-LBF (BRAKING TORQUE)	ELDRO OR ENGINEER APPROVED EQUAL	2 (ONE SPARE)
6	ROTARY CAM LIMIT SWITCH	12 CIRCUITS (INDIVIDUALLY MICRO ADJUSTABLE) IN A NEMA 4X ENCLOSURE	GEMCO SERIES 1980 OR ENGINEER APPROVED EQUAL	2
7	LEVER ARM TYPE LIMIT SWITCH	HEAVY DUTY LEVER-OPERATED SPRING RETURN, TWO-CIRCUIT SNAP ACTION LIMIT SWITCH IN NEMA 4 ENCLOSURE	EATON SERIES E84 OR ENGINEER APPROVED EQUAL	3
8	BRAKE LIMIT SWITCHES	HEAVY DUTY LEVER-OPERATED SPRING RETURN IN SUBMERSIBLE, NEMA 6 ENCLOSURE	EATON CAT NO. E50SA6P OR ENGINEER APPROVED EQUAL	16
9	SPAN LOCK LIMIT SWITCH	SEE NOTE 2	SEE NOTE 2	SEE NOTE 2
10	CONTROLLER CABINET	CONTINUOUS HINGE, 36"H X 30"W X 10"D NEMA 4X STAINLESS STEEL, TYPE 316L LOCKABLE CABINET TO BE FURNISHED WITH BACK PANEL, SWING OUT PANEL, FLUORESCENT LIGHTING, AND HEAVY DUTY STAINLESS STEEL LIFTING EYES AS DESCRIBED IN THE SPECIFICATION	HOFFMAN OR ENGINEER APPROVED EQUAL	2
11	TERMINAL BLOCKS	600V/45A PANEL MOUNT TERMINAL BLOCK, 12 POLES	COOPER BUSSMAN TB345 OR ENGINEER APPROVED EQUAL	2
12	PORTABLE GENERATOR PLUG CABINET	CONTINUOUS HINGE, NEMA 4X STAINLESS STEEL, TYPE 316L LOCKABLE CABINET TO BE FURNISHED WITH BACK PANEL & SWING OUT PANEL AS DESCRIBED IN THE SPECIFICATION 24"H X 20"W X 10"D	HOFFMAN OR ENGINEER APPROVED EQUAL	2
13	GENERATOR	40KW, 60HZ, 3PHASE, 240VAC PORTABLE GENERATOR	KOHLER MODEL 45REOZT4 OR ENGINEER APPROVED EQUAL	2
14	PORTABLE GENERATOR CONNECTOR	600VAC, 30AMP, NEMA 4X RECEPTACLE WITH MATING PLUG	RUSSELL STOLL MAXGARD CAT NO. DBRS3307030KZ & DS3307MPO30 OR ENGINEER APPROVED EQUAL	2
15	CONTROL COMPONENTS			
	"RAISE" PUSH BUTTON	MOMENTARY PUSH BUTTON	EATON SERIES E34 OR ENGINEER APPROVED EQUAL	2
	"LOWER" PUSH BUTTON	MOMENTARY PUSH BUTTON	EATON SERIES E34 OR ENGINEER APPROVED EQUAL	2
	"STOP" PUSH BUTTON	TWO POSITION MAINTAINED PUSH-PULL PUSH BUTTON	EATON SERIES E34 OR ENGINEER APPROVED EQUAL	2
	SELECTOR SWITCH	2 POSITION MAINTAINED KEY SELECTOR SWITCH	EATON SERIES E34 OR ENGINEER APPROVED EQUAL	1
	INTERLOCKING RELAY	120VAC CONTROL RELAY	SQUARE D TYPE 8501 OR ENGINEER APPROVED EQUAL	2
	CONTROL TRANSFORMER	150VA, 1PHASE CONTROL TRANSFORMER PRIMARY 240 X 480, SECONDARY 120V	SQUARE D CAT NO. 9070T250D1 OR ENGINEER APPROVED EQUAL	2
	AC GEAR MOTOR STARTER	NEMA 1, FULL VOLTAGE REVERSING STARTER WITH OVERLOAD	SQUARE D TYPE S OR ENGINEER APPROVED EQUAL	2
	FUSES	(2) - 1AMP FUSE FOR EACH TRANSFORMER PRIMARY (1) - 2AMP FUSE FOR EACH TRANSFORMER SECONDARY	LITTELFUSE CLASS CC KLDR SERIES	6
16	CONDUITS AND WIRING			
	CONDUIT	3/4" RGS	ALLIED TUBE & CONDUIT OR ENGINEER APPROVED EQUAL	250LF
	CONDUIT	1" RGS	ALLIED TUBE & CONDUIT OR ENGINEER APPROVED EQUAL	500LF
	CONDUIT	1-1/2" RGS	ALLIED TUBE & CONDUIT OR ENGINEER APPROVED EQUAL	100LF
	CONDUIT	3/4" LFMC	ALLIED TUBE & CONDUIT OR ENGINEER APPROVED EQUAL	100LF
	CONDUIT	1" LFMC	ALLIED TUBE & CONDUIT OR ENGINEER APPROVED EQUAL	20LF
	CONDUIT	2" LFMC	ALLIED TUBE & CONDUIT OR ENGINEER APPROVED EQUAL	50LF
	MULTI-CONDUCTOR CABLE	4-#10AWG TYPE SOW CABLE	GENERAL CABLE OR ENGINEER APPROVED EQUAL	200LF
	MULTI-CONDUCTOR CABLE	10-#10AWG GND TYPE SOW CABLE	GENERAL CABLE OR ENGINEER APPROVED EQUAL	50LF
	MULTI-CONDUCTOR CABLE	10-#16 AWG INDIVIDUALLY TWISTED SHIELDED TSP	BELDEN OR ENGINEER APPROVED EQUAL	120LF
	SINGLE-CONDUCTOR CABLE	#10 AWG RHW-2	GENERAL CABLE OR ENGINEER APPROVED EQUAL	3000LF
	SINGLE-CONDUCTOR CABLE	#8 AWG RHW-2	GENERAL CABLE OR ENGINEER APPROVED EQUAL	1500LF
	SINGLE-CONDUCTOR CABLE	#2 AWG RHW-2	GENERAL CABLE OR ENGINEER APPROVED EQUAL	80LF
	SINGLE-CONDUCTOR CABLE	#1 AWG RHW-2	GENERAL CABLE OR ENGINEER APPROVED EQUAL	80LF

- NOTES:  
1. FOR LEGEND, ABBREVIATION, AND NOTES SEE SHEET NO. 6  
2. VERIFY SPAN LOCK LIMIT SWITCH TYPE AND QUANTITY AND REPLACE IN KIND OR AS APPROVED BY THE ENGINEER.  
3. MATERIALS ON THIS SHEET TO BE FURNISHED UNDER PAY ITEM 900.645 SPECIAL PROVISION (ELECTRICAL EQUIPMENT REHABILITATION).

PROJECT NAME: NORTH HERO GRAND ISLE  
PROJECT NUMBER: BF EWP1(2)

FILE NAME: z12b142bdr\_ebillmat.dgn PLOT DATE: 03/03/2016  
PROJECT LEADER: T. FRENCH DRAWN BY: S. YEARWOOD  
DESIGNED BY: Y. ADELEKAN CHECKED BY: K. HAJJEH  
ELECTRICAL EQUIPMENT BILL OF MATERIALS SHEET 7 OF 8