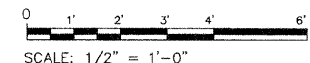
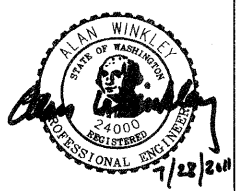


**PLAN AT MAIN DECK**  
SCALE: 1/2" = 1'-0"

**PLAN BELOW DECK**  
SCALE: 1/2" = 1'-0"

MACHINERY LIST

PC NO.	QTY	EQUIPMENT	MAKE	MODEL	APPROX SIZE	REMARK	PC NO.	QTY	EQUIPMENT	MAKE	MODEL	APPROX SIZE	REMARK
1	2 EA	STUFFING BOX	DURAMAX	1790-0400	4"x5"x16"L	P/N886014201; BRONZE. GREASE LUBE; USE W/PACKING UX0500-03	22	1 EA	FIRE/BILGE PUMP	BARNES	25ICU-1	25"x13"x16"H	BELT DRIVE FROM PIECE NO 4 (PORT ONLY)
2	2 EA	SHAFT COUPLING	TWIN DISC	XA698BA		COMPANION FLANGE ASSEMBLY TO REDUCTION GEAR	23	2 EA	STUFFING BOX SUMP PUMP	LOVETT	1200		
3	2 EA	MARINE REVERSE/REDUCTION GEAR	TWIN DISC	MG5091-DC		4.5:1 RATIO	24	2 EA	BILGE SUCTION BELLMOUTH (ENGINE ROOM)			1 1/2"	(LOCATE AS SHOWN, 1/2" ABOVE BOTTOM SHELL, SEE DWG NO 529-101)
4	2 EA	MAIN ENGINE	JOHN DEERE	6090AFM75		KEEL COOLING	25	1 EA	EXHAUST AIR TERMINAL (LOUVERED)	YARD FURNISHED			SEE BID ALT 1 DWG 512-102
5	2 EA	MAIN ENGINE MUFLER	MAXIM	M-4	6"		26	1 EA	D-G SET COOLANT REMOTE EXPANSION TANK	NORTHERN LIGHTS	10-11205		STEEL
6	2 EA	ENGINE GAUGE BOARD					27	1 EA	D-G SET CONTROL PANEL	NORTHERN LIGHTS	S-3C		REMOTE MOUNT IN E.R. (20' HARNESS INCLUDED)
7	1 EA	INTAKE AIR DUCT	YARD BUILD			SEE BID ALT 1 DWG 512-102	28	1 EA	REACH ROD CONTROL FOR FIRE PUMP CLUTCH	ELLIOTT OR EQUAL			SEE BID ALT 1 DWG NO 233-102
8	1 EA	SUPPLY FAN	HARTZELL	SERIES 53C	29"	SEE BID ALT 1 DWG 512-102	29	1 EA	REACH ROD CONTROL FOR FIRE PUMP INTAKE VALVE	ELLIOTT OR EQUAL			SEE BID ALT 1 DWG NO 233-102
9	2 EA	MAIN ENGINE COOLANT EXPANSION TANK	YARD BUILD		10 TO 12 GAL	STEEL	30	2 EA	MAIN ENGINE KEELCOOLER	FERNSTRUM	BN1675B-E1	82 3/8"x11 1/2"H	
10	1 EA	CO2 SEMI-PORTABLE FIRE EXTINGUISHING GEAR	ANSUL	433541	19"x15"x66"H	100-POUND CAPACITY; WITH 40' HOSE	31	1 EA	D-G SET KEELCOOLER	FERNSTRUM	BN845B-E1	52"x5 3/8"H	
11	1 EA	BATTERY CHARGER	NEWMAR	PT80		SEE DWG 321-102	32	1 EA	AC DISTRIBUTION PANEL (NO 1)				SEE DWG 321-103
12	1 EA	SHIP SERVICE BATTERY					33	1 EA	FIRE & BILGE MANIFOLD	YARD BUILD			
13	1 EA	DC ELECTRICAL PANEL (NO 3)				SEE DWG 321-102	34	1 EA	LUBE OIL STORAGE TANK	YARD BUILD		66 GAL APPROX	SEE DWG 543-101
14	1 EA	DIESEL-GENERATOR SET	NORTHERN LIGHTS	M30CW	52"x24"x31"H	30kW	35	1 EA	AIR COMPRESSOR	JOHN DEERE			(BACKUP UNIT)
15	1 EA	STARTING BATTERY FOR D-G SET				SEE DWG 321-102	36	1 EA	BILGE OVERBOARD DISCHARGE			2"	LOCATE 5'-6" ABOVE BASELINE
16	1 EA	MUFLER FOR D-G SET	MAXIM	MUL	3"		37	2 EA	SUMP PUMP OVERBOARD DISCHARGE			1 1/4"	LOCATE 4'-6" ABOVE BASELINE
17	1 EA	MAIN DISTRIBUTION PANEL				SEE DWG 321-103	38	6 EA	HIGH BILGE ALARM FLOAT SWITCH	RULE	33ALA		VISUAL AND 85DB AUDIBLE ALARM IN PILOT HOUSE (LOCATE 2 FLOAT SWITCHES IN ENGINE ROOM)
18	2 EA	HYDRAULIC STEERING PUMP	EATON VICKERS	70423		PTO DRIVE FROM PC NO. 3 (FURNISH WITH KOBELT SYSTEM)	39	1 EA	FIREMAIN RAW WATER INTAKE STRAINER	TATE ANDALE, OR EQUAL	F	3"	304S.S. BASKET; 3/16" PERFORATIONS
19	1 EA	HYDRAULIC STEERING RESERVOIR	VECOR	10050	50 GAL	(FURNISH WITH KOBELT SYSTEM)	40	1 EA	PORTABLE FIRE EXTINGUISHER	AMEREX	B456		
20	1 EA	AIR COMPRESSOR (PRIMARY)	INGERSOLL RAND	2475N5-P		W/AIR TANK (APPROX 80-GAL CAPACITY). SEE DWG 551-101	41	1 EA	AIR RECEIVER, 200 GAL, HORIZONTAL	HANSON	30-HA-200-W		SEE DWG 551-101
21	2 EA	REDUCTION GEAR OIL COOLER	POWER SYSTEM SPECIALISTS	SB-1202-A6-0	6"x25"L	FURNISH W/PC NO.3 BY PJ POWER (DISTRIBUTOR)	42	1 EA	DESICCANT AIR DRYER	INGERSOLL RAND	D-341M		SEE DWG 551-101



**ART ANDERSON**  
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FILE NAME =	USER NAME =	DESIGNED -- A. WINKLEY	REVISED --
		DRAWN -- J. WALKER	REVISED --
	PLOT SCALE =	CHECKED -- P. MARTIN	REVISED --
	PLOT DATE =	DATE -- 7/26/2011	REVISED --

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BID ALT 1**  
**IDOT BRUSSELS FERRY - BID ALTERNATE**  
**MACHINERY ARRANGEMENT - PLANS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	21-3	JERSEY	47	19
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
		CONTRACT NO. 76D29		