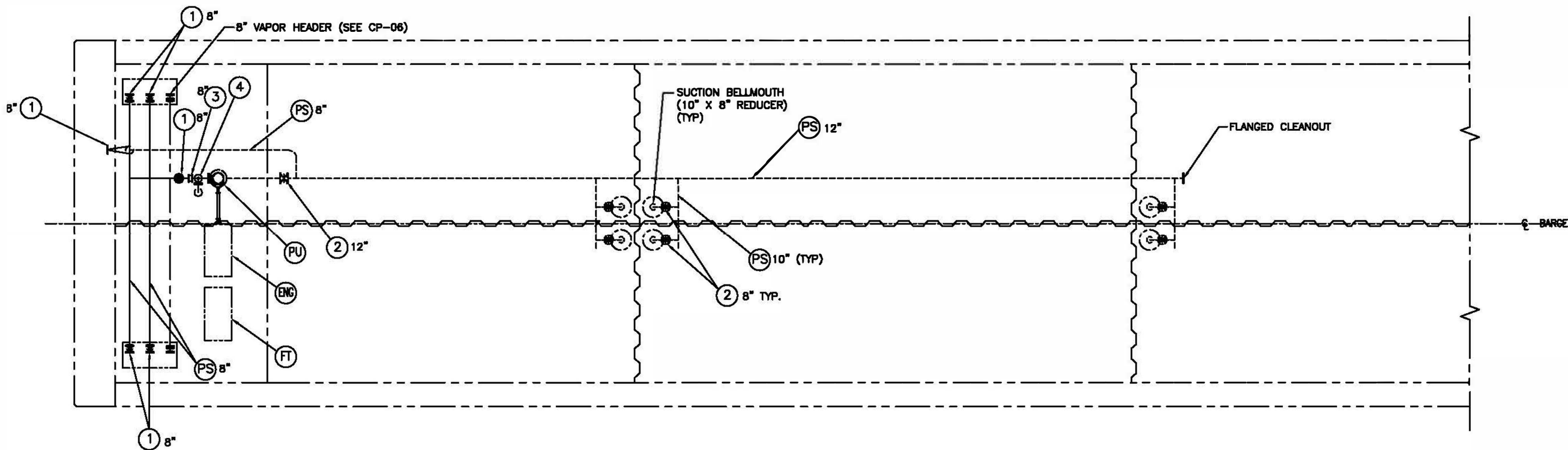


E2MS 311 - Cargo Pipeline Diagram

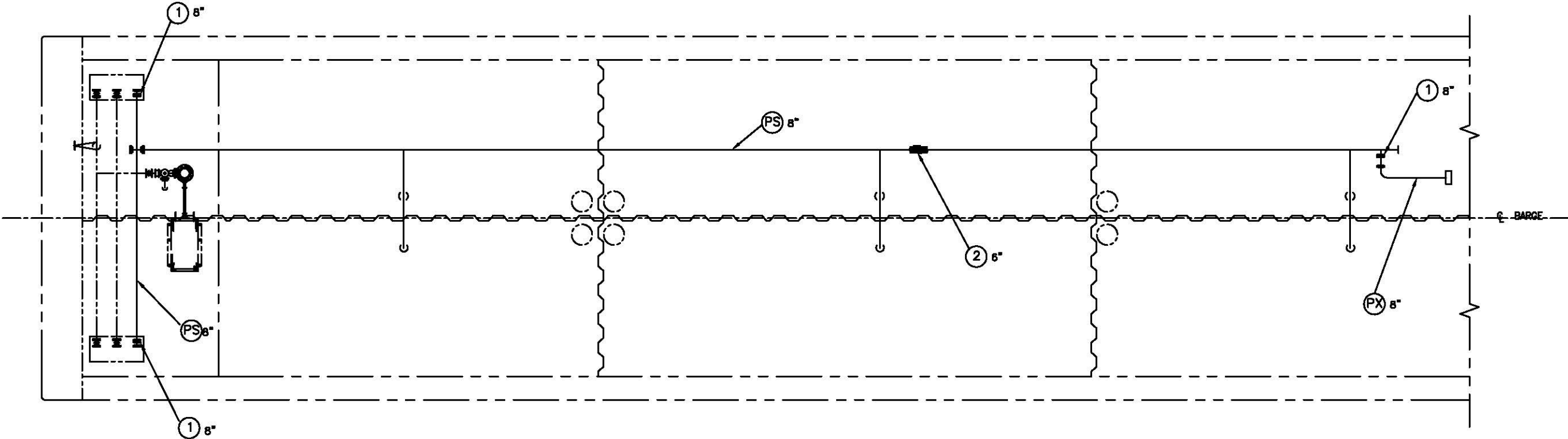


LIST OF MATERIALS

PC. NO.	PART	DESCRIPTION	MFG	NOMINAL SIZE	MATERIAL	RATING	ASTM NO.	ANSI NO.	COMMENT
PU	CARGO PUMP	12LS 3-STAGE	BYRON JACKSON						
ENG	ENGINE	TIER II MECHANICAL DIESEL 270 HP	CUMMINGS						AIR START
1	GATE VALVE	FLG'D, OS&Y	SPACE	8"	C.S. CR 13 TRIM	150#	A-216 WCB	B16.34	FIG # 15011C
2	GATE VALVE	FLG'D, NRS	SPACE	8" & 12"	C.S. CR 13 TRIM	150#	A-216 WCB	B16.34	FIG # 15021C
3	CHECK VALVE	WAFFER CHECK,	KEYSTONE	8"	C.S. BODY 316SS TRIM	150#	A-216 WCB	B16.34	FIG # 810
4	RELIEF VALVE	2600 SERIES SET @ 125 PSI	FARRIS	8x2x8	C.S.	125 PSI 3000 GPM	SA-216 GR. WCB	B16.34	
	BALL VALVE	FLANGED,	WARREN	1"	STNLS. STEEL BODY & TRIM	150#		B16.34	NOT SHOWN
PS	PIPE	STD. WT., ERW		2" & ABOVE	STL		A-53	B36.10	
	PIPE FLANGE	W.N., S.O., BLIND		2" & ABOVE	STL	150#	A-181	B16.5	
	JOINTS	UNION, CPLG, S.W.		BELOW 2"	F.S.	3000#	A-105	B16.11	
	PIPE FITTINGS	BUTT WELD		2" & ABOVE	STL	STD WT	A-234	B16.8	
	PIPE FITTINGS	SCR'D, S.W.		BELOW 2"	F.S.	3000#	A-105	B16.11	
	GASKET	RING TYPE, X 1/8" THICK FOR 150# FLG.	KLINGERSIL	1"-12"	NON-ASBESTOS	150#			
DP	DRIP PAN	6 BBL CAPACITY			STL				
FT	FUEL TANK	500 GAL. CAPACITY			STL				

REV	ITEM	DESCRIPTION	DATE	BY
REVISIONS				
THURTY MARINE PRODUCTS, INC.				
Provides these drawings and specifications as a confidential basis with an approved engineering firm. They will not be copied in any manner, used for construction, sold, transferred, nor used in the delivery of any other product without permission. The recipient further agrees not to disclose these contents hereof to any other parties except for those specific purposes for which this drawing was issued.				
THURTY MARINE PRODUCTS, INC. TANK BARGE DIVISION 1800 Tully Road - Atlanta City, Ga. 30316				
E-SQUARED MARINE SERVICES, LLC.				
297'-6 X 54' X 12'-0 DOUBLE-SKIN TANK BARGE				
CARGO PIPING DIAGRAM				
SCALE: NTS		DATE: 12/15/16		DWG NO.
DRAWN BY: BP		CHK'D BY:		CP-02
YARD:		TAG NO. 96274		SHT 1 OF 1
HULL NO. E2MS 311		SHOP ORDER:		REV. 0

E2MS 311 Vapor Piping Diagram



LIST OF MATERIALS

PC. NO.	PART	DESCRIPTION	MFG	NOMINAL SIZE	MATERIAL	RATING	ASTM NO.	ANSI NO.	COMMENT
1	BUTTERFLY VALVE	LEVER OPERATED WAFER TYPE	FLOWSEAL	8"	C.S. STN. STL. TRIM	200#	A-216 WCB	B16.34	
PV	PRESSURE-VAC. VALVE	SET @ 1.5 PSI PRESSURE, 0.5 PSI VAC., "SUPERAM"	ERL	6"	S.S. BODY, STN. STL. TRIM				
PS	PIPE	STD. WT.		8"	STEEL		A-53	B36.10	
PX	PIPE	SCHEDULE 10		8"	STAINLESS		A-312	B36.10	
	PIPE FLANGE	W.N., S.O., BLIND		8"	STEEL	150#	A-181	B16.5	
	PIPE FLANGE	LAP JOINT FLANGE (SWIVEL FLANGE)		8"	STEEL	150#	A-105	B16.5	
	JOINT STUB	LAP JOINT STUB END, SCHEDULE 10,		8"	STAINLESS STEEL	150#	A-304	B36.10	
	JOINTS	UNION, CPLG, S.W.		6" & 8"	STEEL	3000#	A-105	B16.11	
	PIPE FITTINGS	BUTT WELD, SCHEDULE 40		6" & 8"	STEEL	SCH. 40	A-234	B16.9	
	PIPE FITTINGS	BUTT WELD, SCHEDULE 10		8"	STAINLESS STEEL	SCH. 10	A-182-F304L	B16.9	
	GASKET	RING TYPE, X 1/8" THICK FOR 150# FLG.	KLINGERSIL	6" & 8"	NON-ASBESTOS	150#			

GENERAL NOTES

1. ALL PIPING TO MEET USCG II REGULATIONS.
2. BACKING RINGS SHALL BE USED AT BUTT WELD JOINTS 2" AND LARGER
3. PIPES PASSING THROUGH WATER/OIL TIGHT BOUNDARIES TO BE WELDED BOTH SIDES.
4. VAPOR SYSTEM:

PRESSURE, WORKING

DESIGN

TEST

RELIEF VALVE

100 PSI

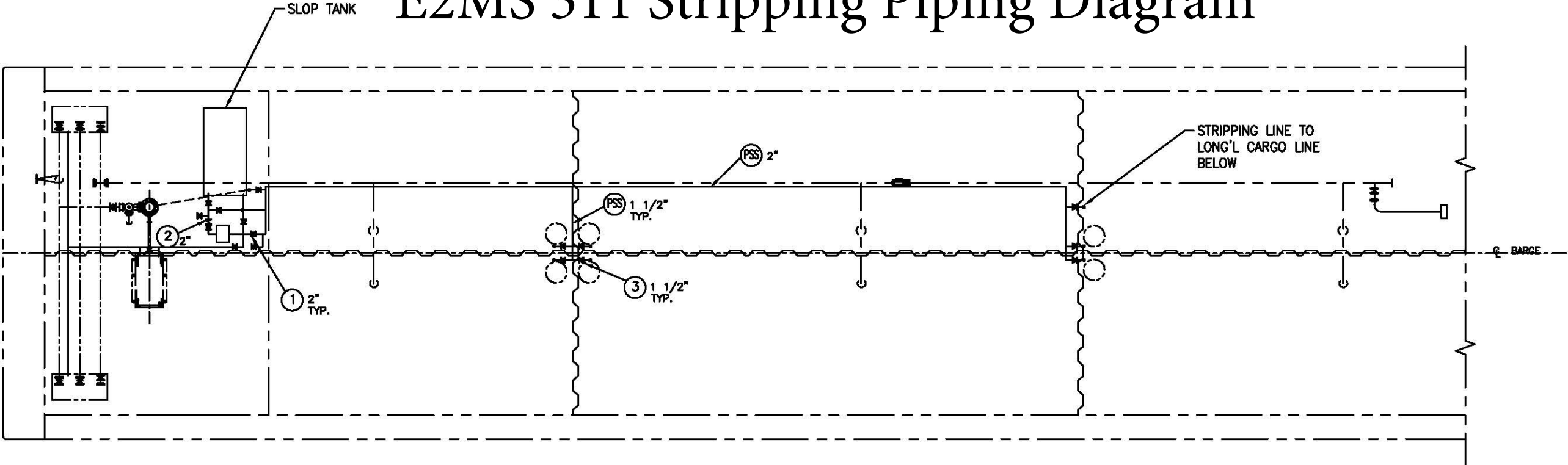
125 PSI

187.5 PSI

1.5 PSI
5. MATERIAL TO BE AS SPECIFIED OR EQUAL.
6. LABELS TO BE INSTALLED ON ALL VALVES WHERE REQUIRED TO IDENTIFY SERVICE.

REV	ITEM	DESCRIPTION	DATE	BY
REVISIONS				
TRINITY MARINE PRODUCTS, INC.				
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E-SQUARED MARINE SERVICES, LLC.				
297'-6 X 54' X 12'-0 DOUBLE-SKIN TANK BARGE				
VAPOR PIPING DIAGRAM				
SCALE: NTS		DATE: 12/15/18		DWG NO.
DRAWN BY: BP	CHK'D BY:	APPR BY:		CP-06
YARD:		TAG NO.	98274	SHT 1 OF 1
HULL NO. E2MS 311		SHOP ORDER:		REV. 0

E2MS 311 Stripping Piping Diagram



LIST OF MATERIALS

[illegible]

GENERAL NOTES

1. ALL PIPING TO MEET USCG II REGULATIONS.
2. BACKING RINGS SHALL BE USED AT BUTT WELD JOINTS 2" AND LARGER
3. PIPES PASSING THROUGH WATER/OIL TIGHT BOUNDARIES TO BE WELDED BOTH SIDES.
4. STRIPPING SYSTEM:

PRESSURE,	100 PSI
WORKING	
DESIGN	125 PSI
TEST	187.5 PSI
5. MATERIAL TO BE AS SPECIFIED OR EQUAL
6. LABELS TO BE INSTALLED ON ALL VALVES WHERE REQUIRED TO IDENTIFY SERVICE.

REV	ITEM	DESCRIPTION	DATE	BY
		REVISIONS		
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E-SQUARED MARINE, LLC. <u>297'-6 X 54' X 12'-0 DOUBLE-SKIN TANK BARGE</u> STRIPPING PIPING DIAGRAM				
SCALE: NTS		DATE: 12/15/18		DWG NO.
DRAWN BY: BP		CHK'D BY:		CP-11
YARD: ASHLAND CITY		TAG NO. 96274		SHT 1 OF 1
HULL NO. E2MS 311		SHOP ORDER:		REV. 0

A