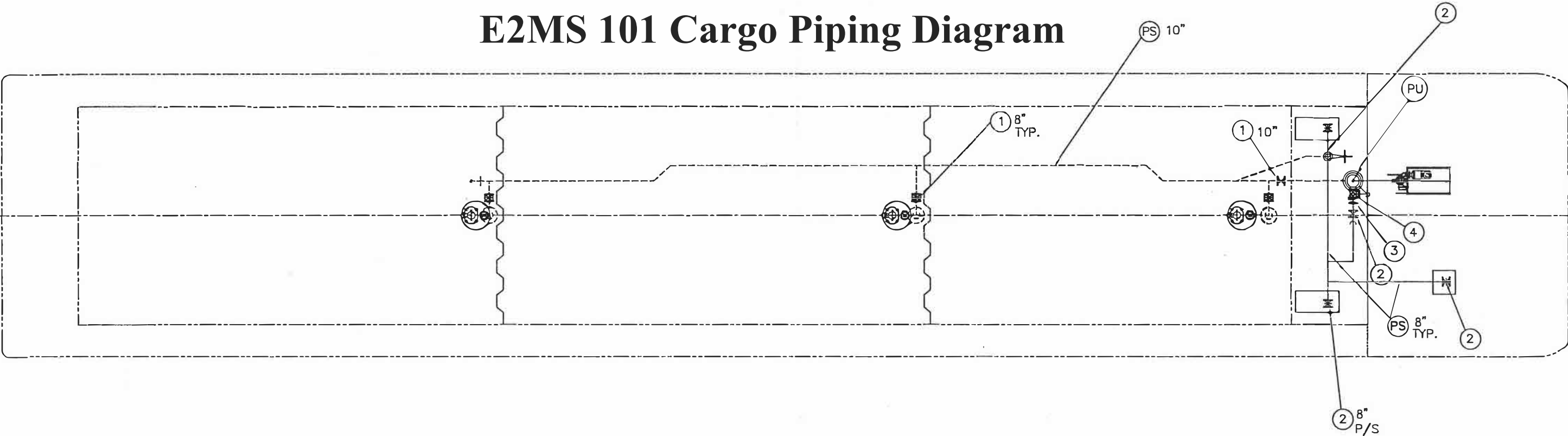


E2MS 101 Cargo Piping Diagram



- GENERAL NOTES
- 1. ALL PIPING TO MEET USCG 1 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. CARGO SYSTEM:
PRESSURE, WORKING 125 PSI
DESIGN 150 PSI
TEST 225 PSI
RELIEF VALVE 125 PSI
PUMP WELL TEST 15 PSI
 - 5. MATERIAL TO BE AS SPECIFIED OR EQUAL
 - 6. LABELS TO BE INSTALLED ON ALL VALVES WHERE REQUIRED TO IDENTIFY SERVICE.
 - 7. ENGINE SHUT DOWN SHALL BE INSTALLED INCLUDING SIGN (45 CFR 32.50-35)
 - 8. VALVES WHICH ARE LOCATED BELOW DECK WILL BE EQUIPPED WITH SOLID STN STEEL REACH RODS.
 - 9. BARGE IS DESIGNED FOR 6.0f SERVICE.

CARGO PIPING LIST OF MATERIALS

PC. NO.	PART	DESCRIPTION	MFG	NOMINAL SIZE	MATERIAL	RATING	ASTM NO.	ANSI NO.	
PU	CARGO PUMP	11X114GH 3 STAGE PUMP W/RIGHT ANGLE GEAR	BYRON JACKSON						
ENG	ENGINE	MEDO NEF 67 MODEL	LABORDE (OFM)						
1	GATE VALVE	FIG. 15021C, FLG'D NRS	SPACE	ALL	CAST STL/CR13 TRM	150f	A-216 WCB	B16.34	
2	GATE VALVE	FIG. 15011C, FLG'D OS&Y	SPACE	ALL	CAST STL/CR13 TRM	150f	A-216 WCB	B16.34	
3	RELIEF VALVE	FIG. 260PA10L120, SET @ 125 PSI	TELEDYNE/FARRIS	4XPK6	CAST IRON	150f	A-126 CL. 8	B16.34	
4	CHECK VALVE	WAFFER STYLE, 150f	DUO CHECK II	8"	CS.	150f	A-216 WCB	B16.34	
PS	PIPE	STD. WT., SEAMLESS		2" & ABOVE	STL.		A-53	B36.10	
	PIPE FLANGE	WN, SO, BLND & SW		ALL	STL.	150f	A-105	B16.5	
	JOINTS	UNION, COUPLING		2" & BLW	F.S.	3000f	A-105	B16.11	
	PIPE FITTINGS	BUTT WELD		ABV 2"	STL.	STD.WT.	A-234	B16.9	
	PIPE FITTINGS	SCRD, SW		2" & BLW	F.S.	3000f	A-105	B16.11	
	GASKETS	NON-ASBESTOS		ALL	GARLOCK				

gk

REVITEMDESCRIPTIONDATEBY

REVISIONS

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TRINITY MARINE PRODUCTS, INC.
P.O. BOX 700 - Indianola, Ia. 50457

E SQUARED MARINE
200'-0" X 35'-0" X 12'-6" DOUBLE SKIN TANK BARGE
CARGO PIPING DIAGRAM

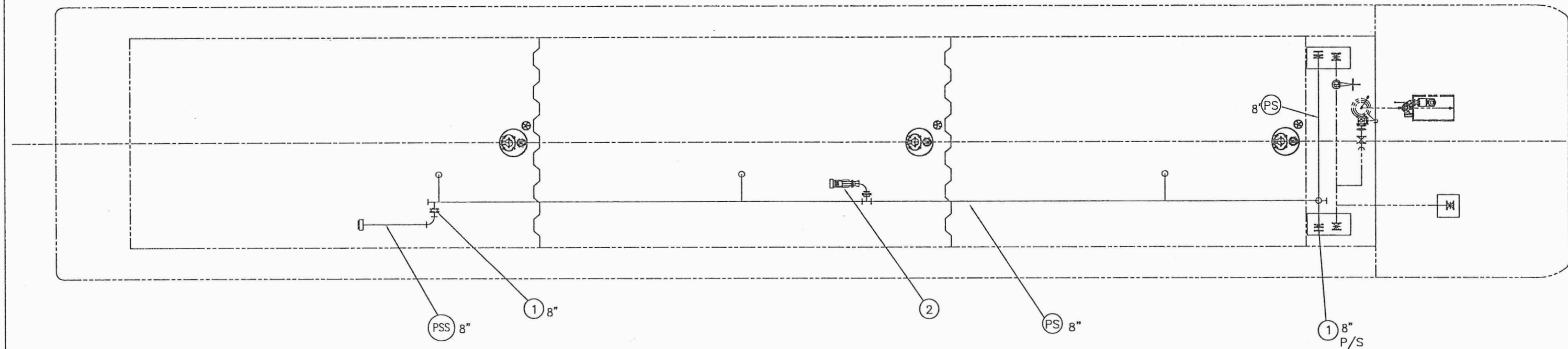
SCALE: NTS
DRAWN BY: BP
YARD:
HULL NO. E2MS 101

DATE: 12/15/16
CK'D BY:
TAG NO. 96273
SHOP ORDER

DWG NO.
CP-02
SHT 1 OF 1
REV. 0

PLOT: 04

E2MS 101 Vapor Piping Diagram



- 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. MATERIAL TO BE AS SPECIFIED OR EQUAL
 - 5. VAPOR HEADER EQUIPPED WITH DRAIN AT LOW POINT.
 - 6. BARGE IS DESIGNED FOR 6.0# SERVICE.

LIST OF MATERIALS

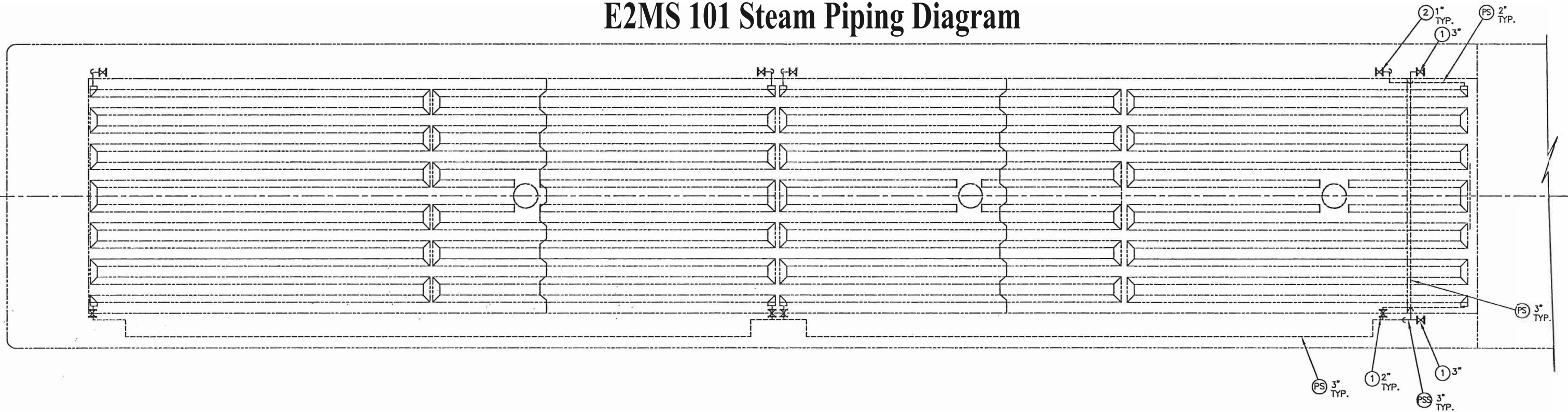
PC. NO.	PART	DESCRIPTION	MFG	NOMINAL SIZE	MATERIAL	RATING	ASTM NO.	ANSI NO.	COMMENT
1	GATE VALVE	FIG. 15011C, FLG'D OS&Y	SPACE	ALL	CAST STL/SS TRM	150#	A-216 WCB	B16.34	
2	PRESSURE-VAC. VALVE	SUPER-AC MODEL II	ERL	6"	STN. STL				
PS	PIPE	STD. WT., ERW		8"	STEEL		A-53	B36.10	
PSS	PIPE	SCHEDULE 10, SMLS		8"	STAINLESS		A-53	B36.10	
	PIPE FLANGE	W.N., S.O., BLIND		ALL	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" LONG		8"	STAINLESS STEEL	150#	A-304	B36.10	
	JOINT STUB	LAP JOINT STUB END, STD. WT., 4" LONG		8"	STEEL	150#	A-53	B36.10	
	JOINTS	UNION, CPLG, S.W.		ALL	STEEL	3000#	A-105	B16.11	
	PIPE FITTINGS	BUTT WELD,		ALL	STEEL	STD. WT.	A-234	B16.9	
	PIPE FITTINGS	BUTT WELD,		ALL	STAINLESS STEEL	SCH. 10	A-182-F304L	B16.9	
	GASKET	RING TYPE, X 1/8" THICK FOR 150# FLG.	GARLOCK	ALL		150#			
	PRESS GAUGE	4 1/2 DIAL, GLYCERIN FL'D 1/2" NPT LOWER CONN.	ASHCROFT MOD 1279		316 STN. STL.	0-200 PSI			# 45-1279-SSSL 04L-XXX-0/200 PSI

OK

REV	ITEM	DESCRIPTION	DATE	BY
REVISIONS				
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TRINITY MARINE PRODUCTS, INC.				
P.O. BOX 700 - Madisonville, La. 70447				
E SQUARED MARINE				
200'-0" X 35'-0" X 12'-6" DOUBLE SKIN TANK BARGE				
VAPOR PIPING DIAGRAM				
SCALE: NTS		DATE: 12/15/16		DWG NO.
DRAWN BY: BP		CK'D BY:		CP-06
YARD:		TAG NO. 96273		SHT 1 OF 1
HULL NO. 5271		SHOP ORDER:		REV. 0

PLD

E2MS 101 Steam Piping Diagram



- 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. CARGO SYSTEM:
PRESSURE, WORKING 125 PSI
DESIGN 150 PSI
TEST 188 PSI
RELIEF VALVE 125 PSI
MAXIMUM TEMPERATURE 375
 - 5. MATERIAL TO BE AS SPECIFIED OR EQUAL.

CARGO PIPING LIST OF MATERIALS

PC. NO.	PART	DESCRIPTION	MFG	NOMINAL SIZE	MATERIAL	RATING	ASTM NO.	ANSI NO.	
1	GATE VALVE	FIG. 15011C, FLG'D OS&Y	SPACE	ALL	CAST STL/CR13 TRM	150#	A-216 WC8	B16.34	
2	GATE VALVE	T-131, THREADED, RISING STEM	HERCO	1"	BRONZE	150#	B-62	B16.34	
3	RELIEF VALVE	FIG. 6283ED01, SET @ 125 PSI	KUMBLE	3/4"	BRONZE	125#	B-62	B16.34	
PS	PIPE	STD. WT., SEAMLESS		ALL	STL		A-53 GR. B	B36.10	
	PIPE FLANGE	WN, SQ, BLIND & SW		ALL	STL	150#	A-105	B16.5	
	JOINTS	UNION, COUPLING		2" & BLW	F.S.	3000#	A-105	B16.11	
	PIPE FITTINGS	BUTT WELD		ABW 2"	SIL	STD.WT.	A-234	B16.9	
	PIPE FITTINGS	SCRD, SW		2" & BLW	F.S.	3000#	A-105	B16.11	
PSS	PIPE	STD. WT., SEAMLESS		ALL	STN. STL		A-312	B36.19	
	PIPE FLANGE	WN, SQ, BLIND & SW		ALL	STN. STL	150#	A-182	B16.5	
	JOINTS	UNION, COUPLING		2" & BLW	STN. STL	3000#	A-182	B16.11	
	PIPE FITTINGS	SCRD, SW		2" & BLW	STN. STL	3000#	A-182	B16.11	
	GASKETS	NON-ASBESTOS		ALL	GARLOCK				

REV		ITEM	DESCRIPTION	DATE	BY
REVISIONS					
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TRINITY MARINE PRODUCTS, INC.					
P.O. BOX 796 - Madisonville, La. 70447					
E SQUARED MARINE					
DOUBLE SKIN TANK BARGE					
STEAM PIPING DIAGRAM					
SCALE: NTS		DATE: 12/15/16		DWG NO.	
DRAWN BY: BP		CK'D BY:		CP-23	
YARD:		TAG NO. 96273		SHT 1 OF 1	
HULL NO. E2MS 101		SHOP ORDER:		REV. 0	

PL07: