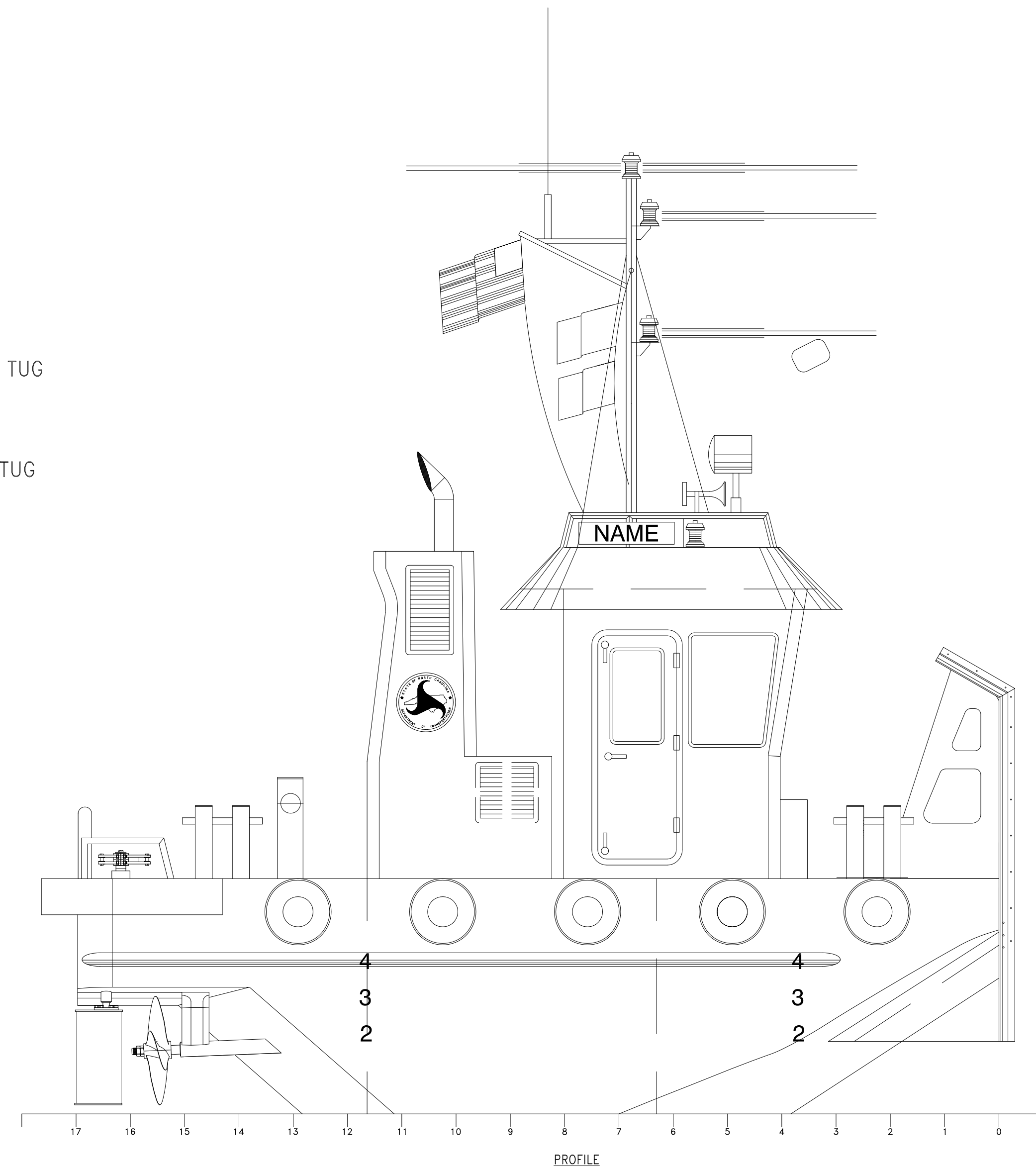


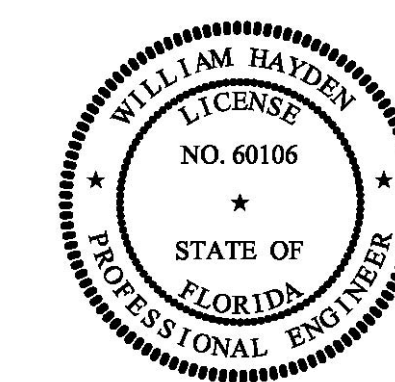
VESSEL NAME: 25.5 FT SUPPORT TUG
 CONTRACT NO.:
 TIP NUMBER: F-5703B
 WBS NUMBER: 47256.3.2
 PROJECT: 25'-6" SUPPORT TUG

VESSEL PARTICULARS
 LENGTH OVERALL HULL 25'-6"
 BEAM - MOLDED 18'-0"
 DEPTH AT SIDE 6'-6"
 LIGHTSHIP DISPLACEMENT 20.50 LT
 FULL LOAD DISPLACEMENT 22.25 LT



LIST OF DRAWINGS:

	DRAWING NUMBER:	DRAWING TITLE:
1.	1393B-100	LINESPLAN
2.	1393-101	GENERAL ARRANGEMENTS & OUTBOARD PROFILE
3.	1393-110	BOTTOM & SIDESHELL STRUCTURAL DETAILS
4.	1393-120	LONGITUDINAL STRUCTURAL SECTIONS
5.	1393-130	MAIN DECK STRUCTURAL DETAILS
6.	1393-152-1	ALUMINUM PILOTHOUSE STRUCTURAL DETAILS
7.	1393-152-2	ALUMINUM STACK STRUCTURAL DETAILS
8.	1393-182-1	SHAFTING DETAILS
9.	1393-263-1	BILGE SYSTEM DETAILS
10.	1393-422-1	NAVIGATION LIGHTS
11.	1393-423-1	ELECTRONICS WIRING DIAGRAM
12.	1393-680-1	SAFETY PLAN



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Title: 25.5'x18'x6.5' NCDOT TOWBOAT

COVER PAGE

Dwg. No. **17-1393B-001** Alt. No. 0
 Sht. 1 of 1

Drawn By: JACOB CONNALLY Date: DECEMBER 31, 2018
 Checked By: _____ Date: _____
 App'd By: _____ Scale: NONE
 ABS App'l: _____ USCG App'l: _____

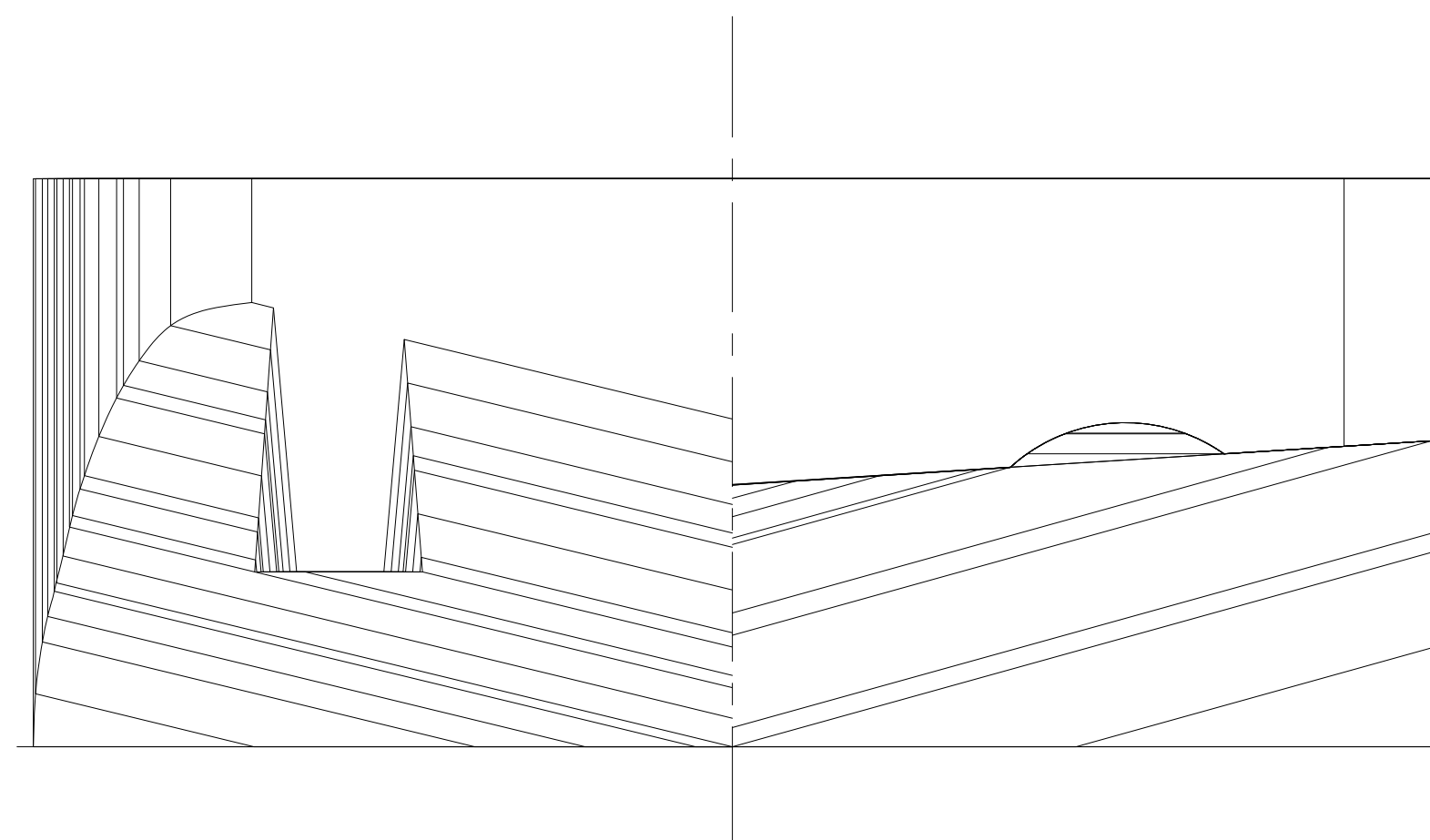
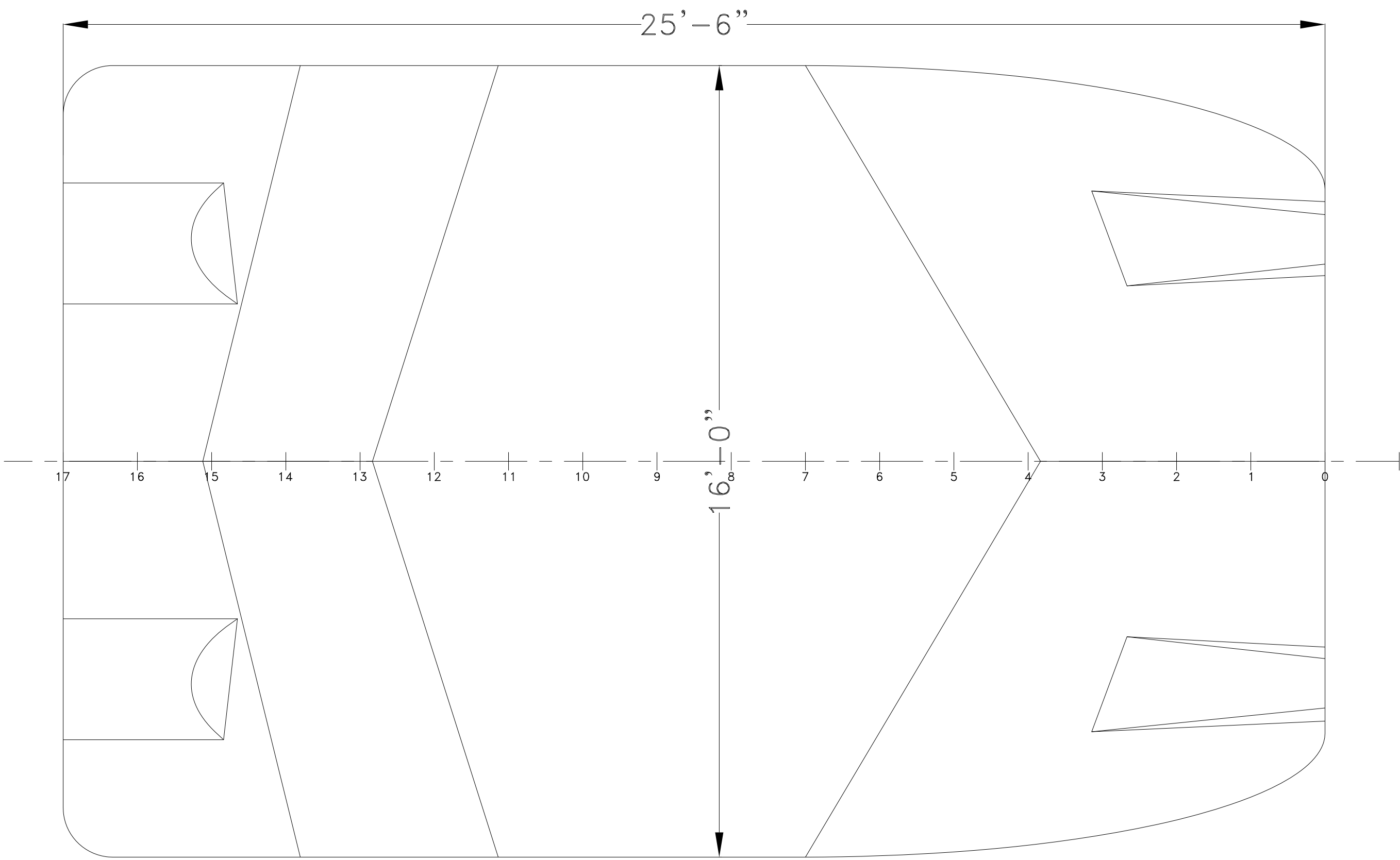
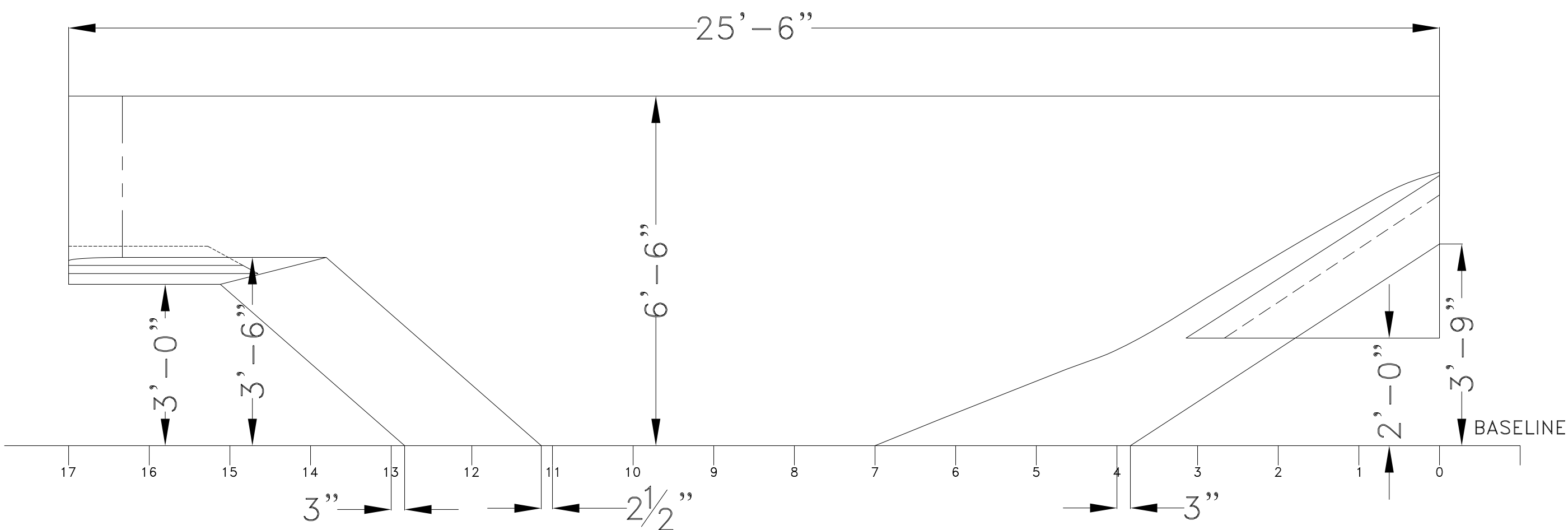


TABLE OF OFFSETS (FEET-INCHES-EIGHTHS)	POINT 1		POINT 2		POINT 3		POINT 4		POINT 5		POINT 6		POINT 7		POINT 8		POINT 9		POINT 10		POINT 11	
	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT
FRAME 0	0-0-0	3-9-0	3-9-0+	4-7-7+	3-11-7	2-0-0	4-11-6+	2-0-0	5-3-0	5-0-2	5-6-0	5-1-0	5-6-0	6-6-0	0-0-0	6-6-0						
FRAME 1	0-0-0	2-9-2	3-8-1	3-7-7+	3-9-7	2-0-0	5-1-5+	2-0-0	5-3-6+	4-0-6	6-9-3+	4-5-0	6-9-3+	6-6-0	0-0-0	6-6-0						
FRAME 2	0-0-0	1-9-4	3-7-1+	2-8-0	3-7-7	2-0-0	5-3-4	2-0-0	5-4-5	3-1-1+	7-3-0	3-6-5	7-3-0	6-6-0	0-0-0	6-6-0						
FRAME 3	0-0-0	0-9-6+	4-10-5	2-0-0	5-5-2+	2-0-0	5-5-3+	2-1-5	7-6-5	2-7-6	7-6-5	6-6-0	0-0-0	6-6-0								
FRAME 4	0-0-0	0-0-0	0-5-0+	0-0-0	7-9-1	1-9-3	7-9-1	6-6-0	0-0-0	6-6-0												
FRAME 5	0-0-0	0-0-0	2-11-3	0-0-0	7-10-6	1-2-3	7-10-6	6-6-0	0-0-0	6-6-0												
FRAME 6	0-0-0	0-0-0	5-5-5+	0-0-0	7-10-5+	0-7-2	7-11-5+	6-6-0	0-0-0	6-6-0												
FRAME 7	0-0-0	0-0-0	8-0-0	0-0-0	8-0-0	6-6-0	8-0-0	0-0-0	6-6-0													
FRAME 8	0-0-0	0-0-0	8-0-0	0-0-0	8-0-0	6-6-0	8-0-0	0-0-0	6-6-0													
FRAME 9	0-0-0	0-0-0	8-0-0	0-0-0	8-0-0	6-6-0	8-0-0	0-0-0	6-6-0													
FRAME 10	0-0-0	0-0-0	8-0-0	0-0-0	8-0-0	6-6-0	8-0-0	0-0-0	6-6-0													
FRAME 11	0-0-0	0-0-0	8-0-0	0-0-0	8-0-0	6-6-0	8-0-0	0-0-0	6-6-0													
FRAME 12	0-0-0	0-0-0	3-11-1+	0-0-0	8-0-0	1-1-4+	8-0-0	6-6-0	0-0-0	6-6-0												
FRAME 13	0-0-0	0-2-5	8-0-0	2-5-2+	8-0-0	6-6-0	8-0-0	0-0-0	6-6-0													
FRAME 14	0-0-0	1-6-1+	6-9-6+	3-5-1	8-0-0	3-6-0	8-0-0	6-6-0	0-0-0	6-6-0												
FRAME 15	0-0-0	2-10-1	0-8-5+	3-0-4	3-2-1+	3-2-3	3-5-6+	3-5-0+	3-9-7+	3-7-0+	5-2-0+	3-7-0+	5-4-7	3-5-6+	5-7-4	3-4-2	8-0-0	3-6-0	8-0-0	6-6-0	0-0-0	3-6-0
FRAME 16	0-0-0	3-0-0	3-2-1+	3-2-3	3-9-5+	3-7-0	4-4-4+	3-8-3+	5-2-0	3-7-1	5-7-4	3-4-2	8-0-0	3-6-0	8-0-0	6-6-0	0-0-0	6-6-0				
FRAME 17	0-0-0	3-0-0	3-2-1+	3-2-3	3-9-5+	3-7-0	4-4-4+	3-8-3+	5-2-0	3-7-1	5-7-4	3-4-2	8-0-0	3-6-0	8-0-0	6-6-0	0-0-0	6-6-0				



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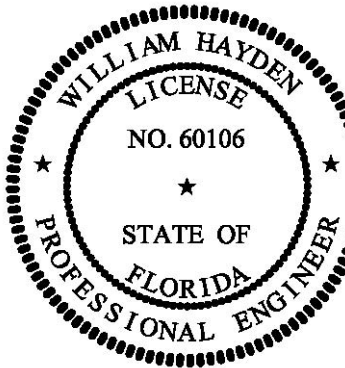
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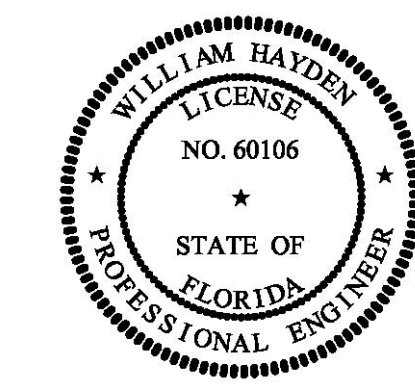
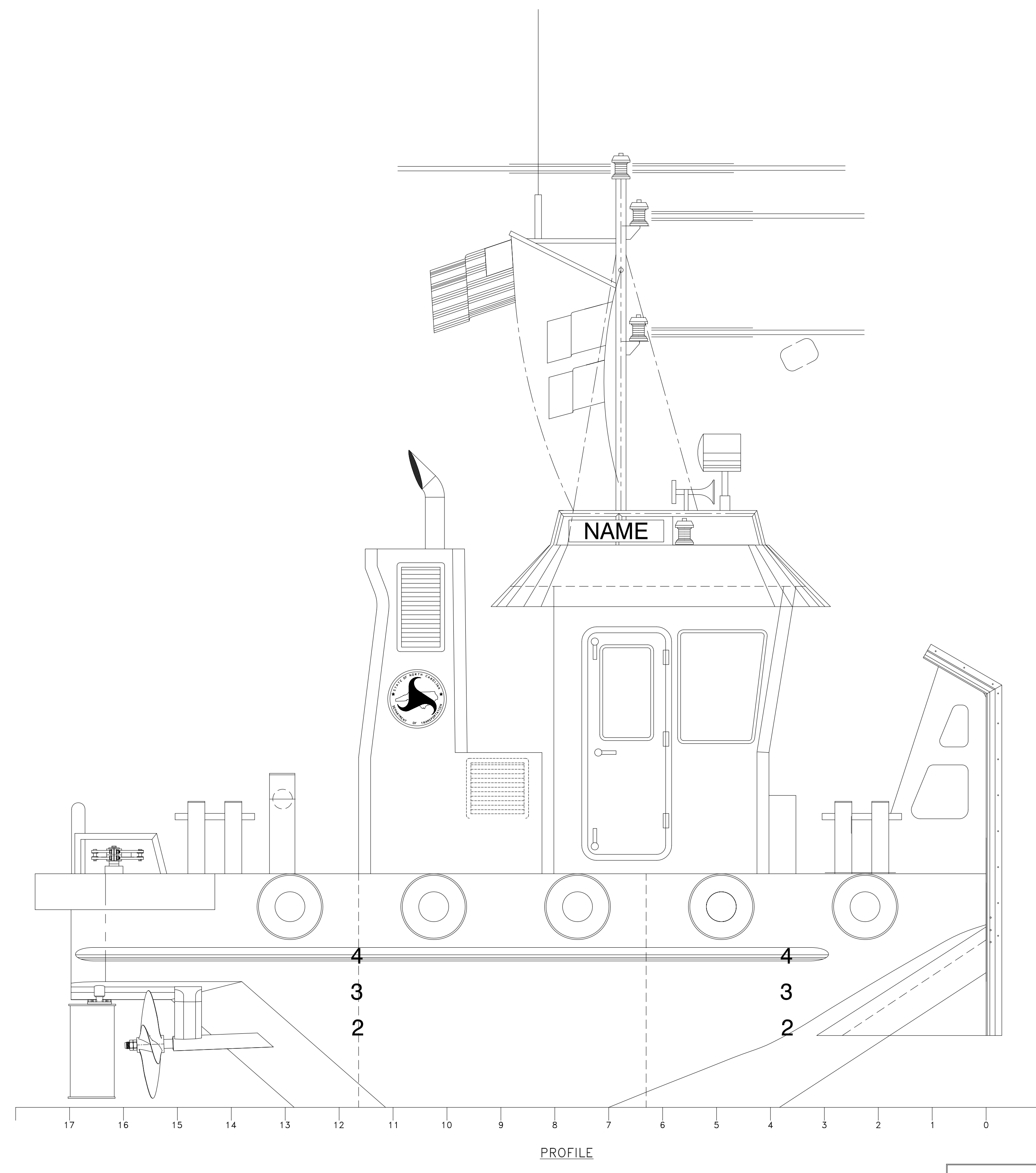
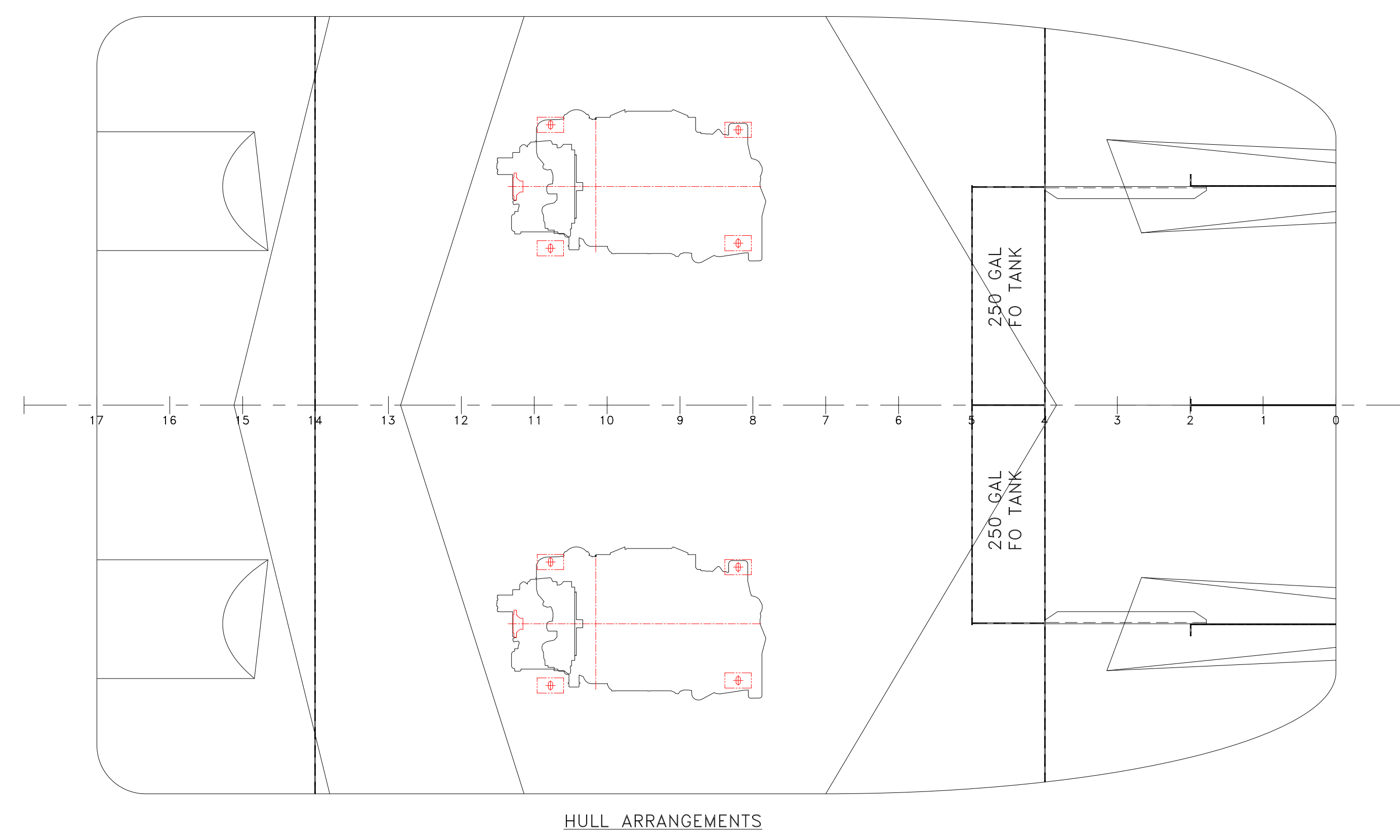
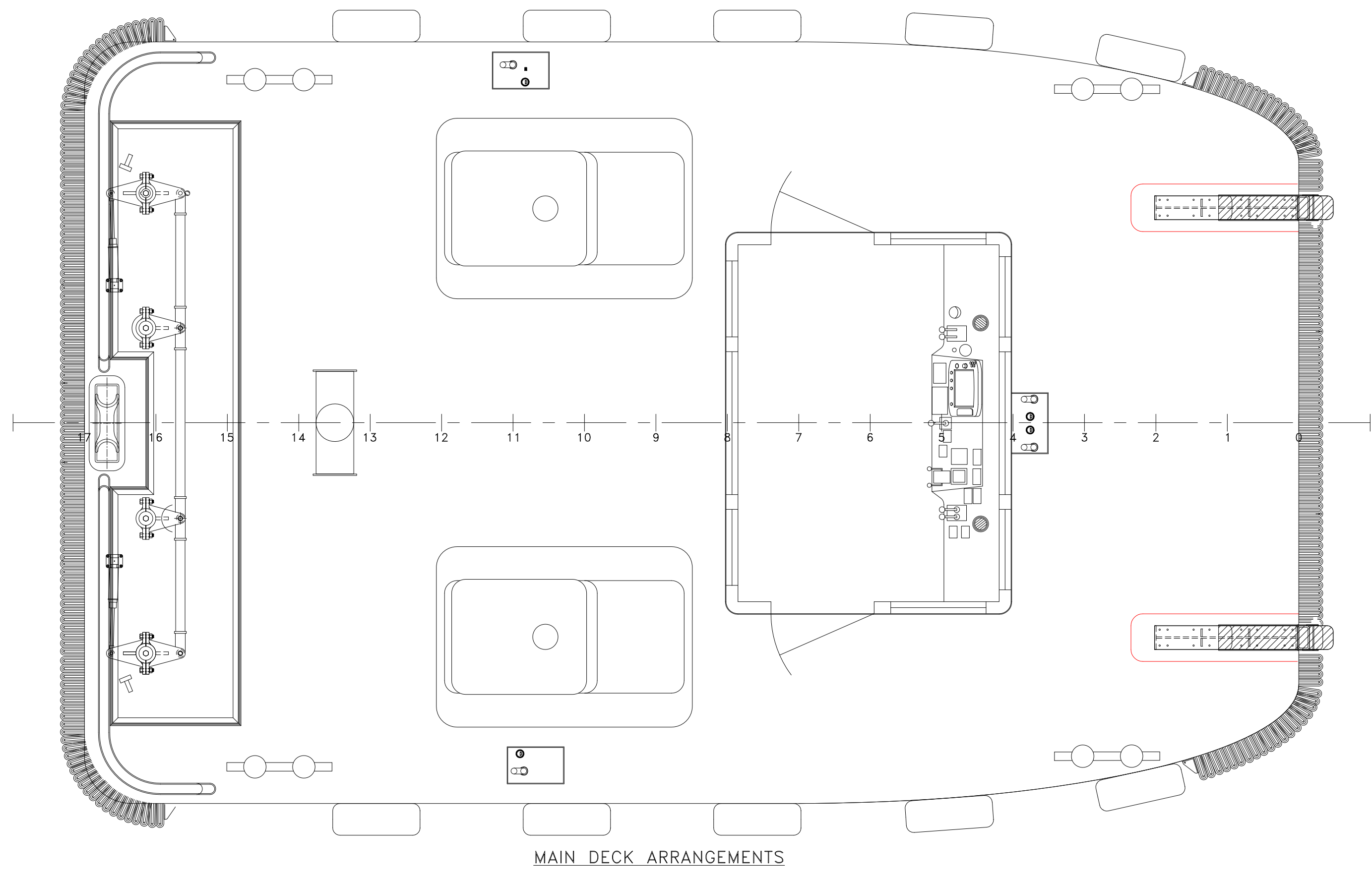
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LINESPLAN

Dwg. No. 1393B-100 Alt. No. 0
 Sht. 1 of 1

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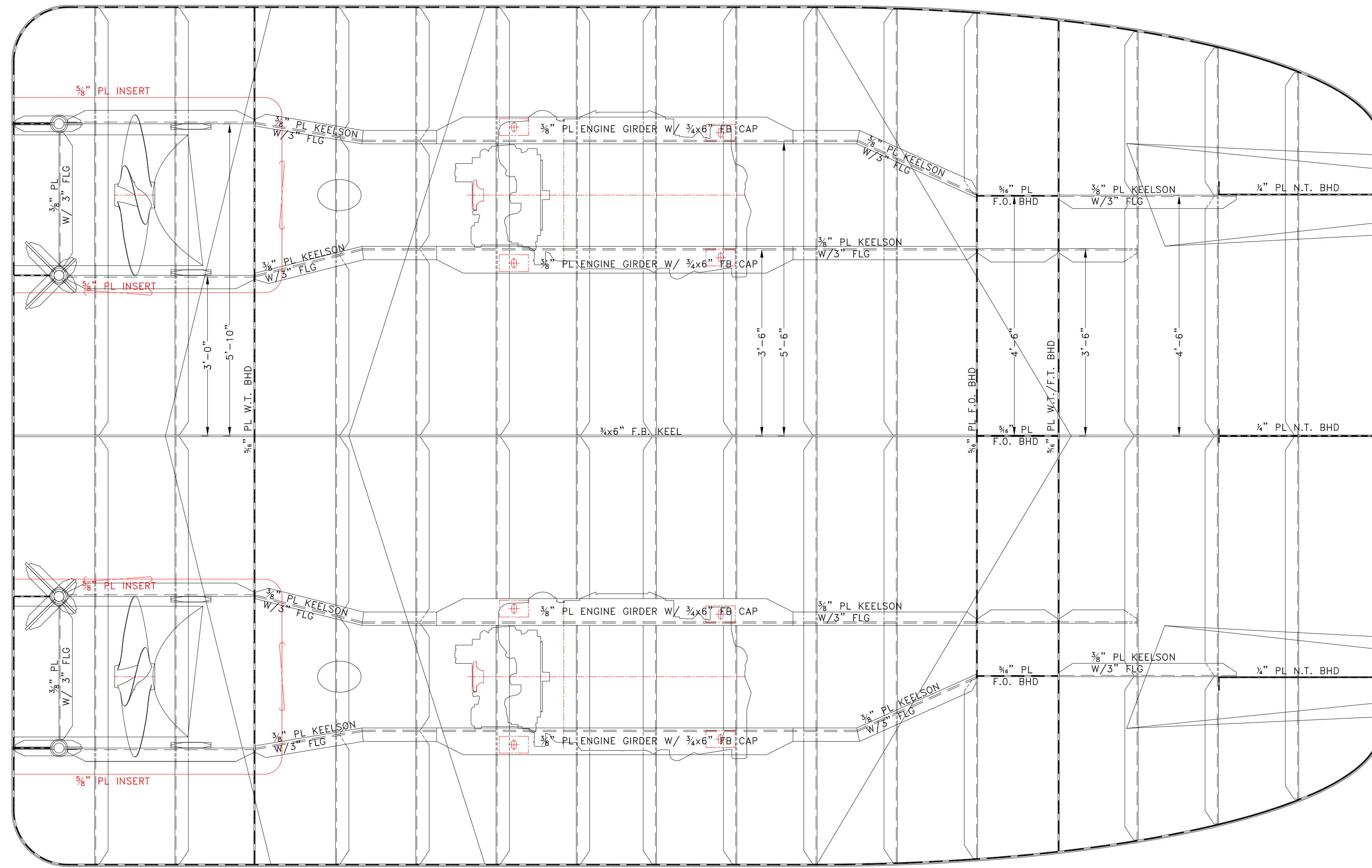
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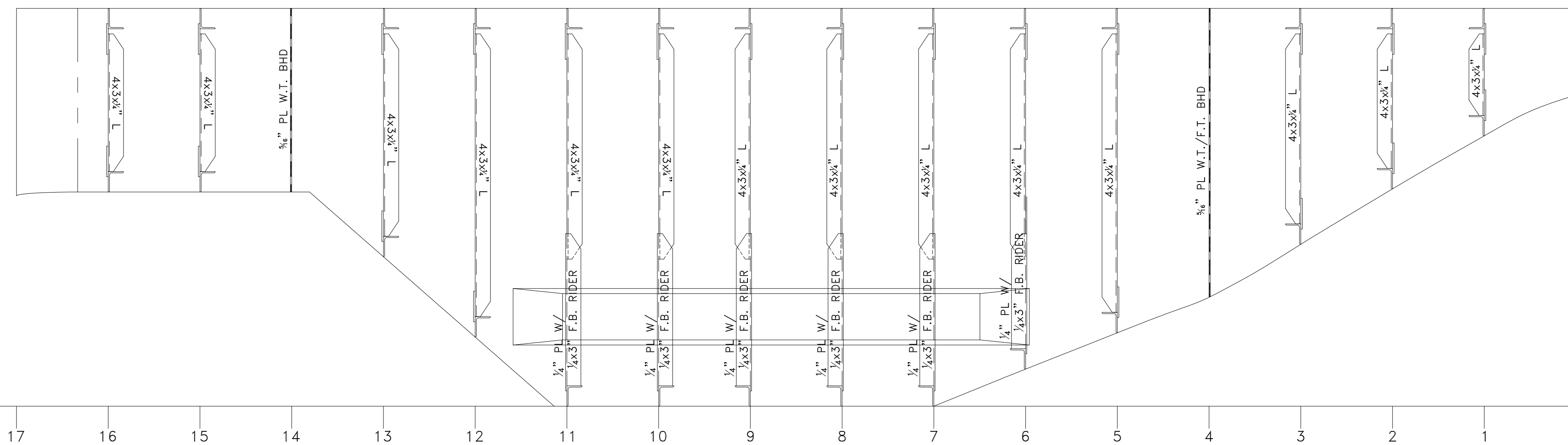
ARRANGEMENTS & PROFILE

Dwg. No. **1393B-101** Alt. No. 0
Sh. 1 of 1

Drawn By: **JACOB CONNALLY** Date: **JANUARY 2, 2019**
Checked By: _____ Date: _____
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ABS App'l: _____ USCG App'l: _____

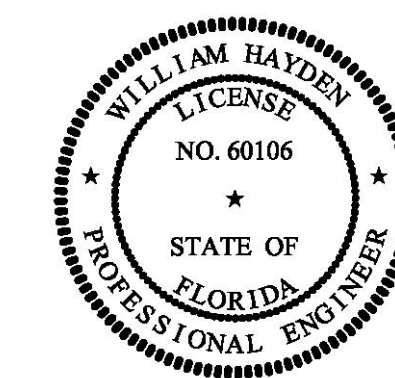
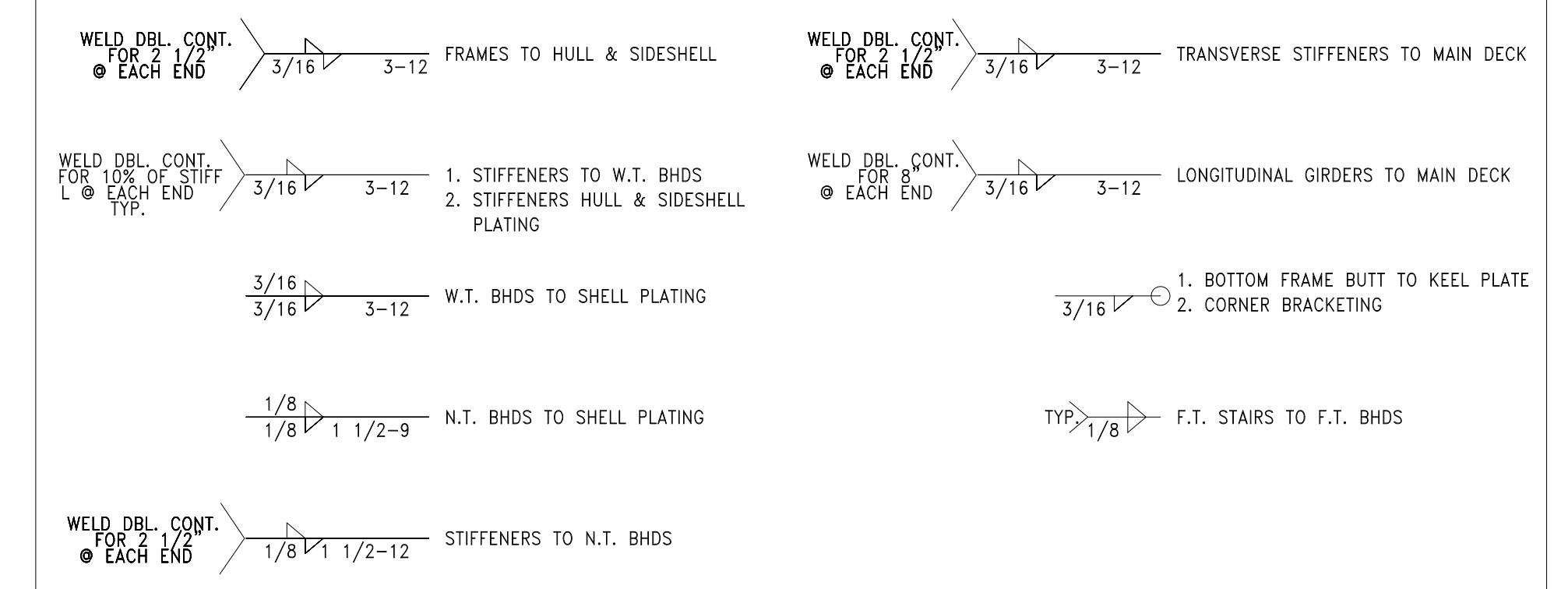


BOTTOMSHELL STRUCTURAL PLAN
 3/8" PL W/ 4x3x1/4" L XVERSE BEAMS ON 2'-0" CENTERS
 UNLESS OTHERWISE NOTED



SIDESHELL STRUCTURAL PLAN
 1/4" PL W/ 4x3x1/4" L XVERSE FRAMES ON 2'-0" CENTERS
 UNLESS OTHERWISE NOTED
 PORT SIDE SHOWN LKG OUTBD. STBD SIMILAR; OPP HAND

WELD SCHEDULE-TYPICAL



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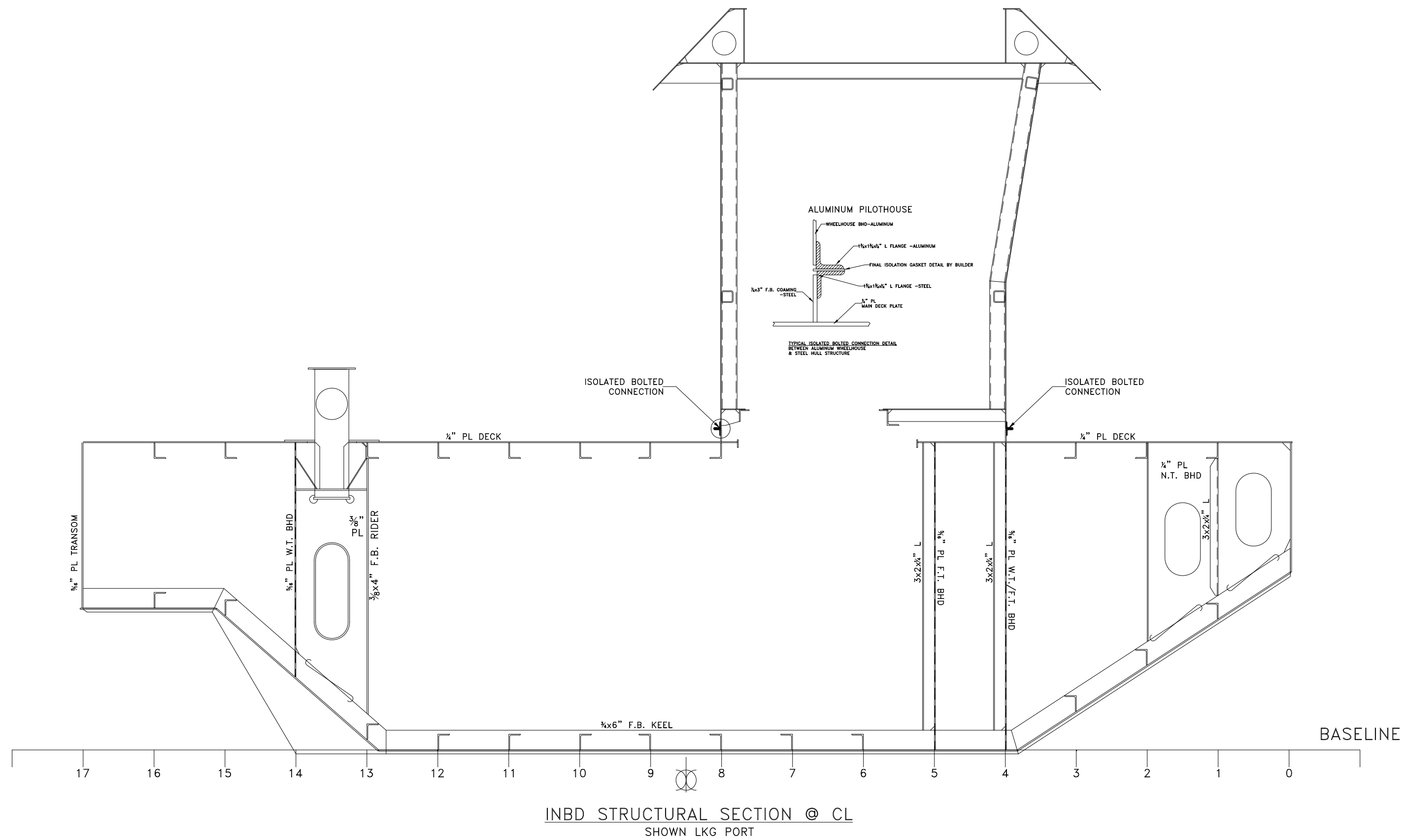
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Title: 25.5'x16'x6.5' NCDOT PUSHBOAT

**BOTTOM & SIDESHELL
 STRUCTURAL DETAILS**

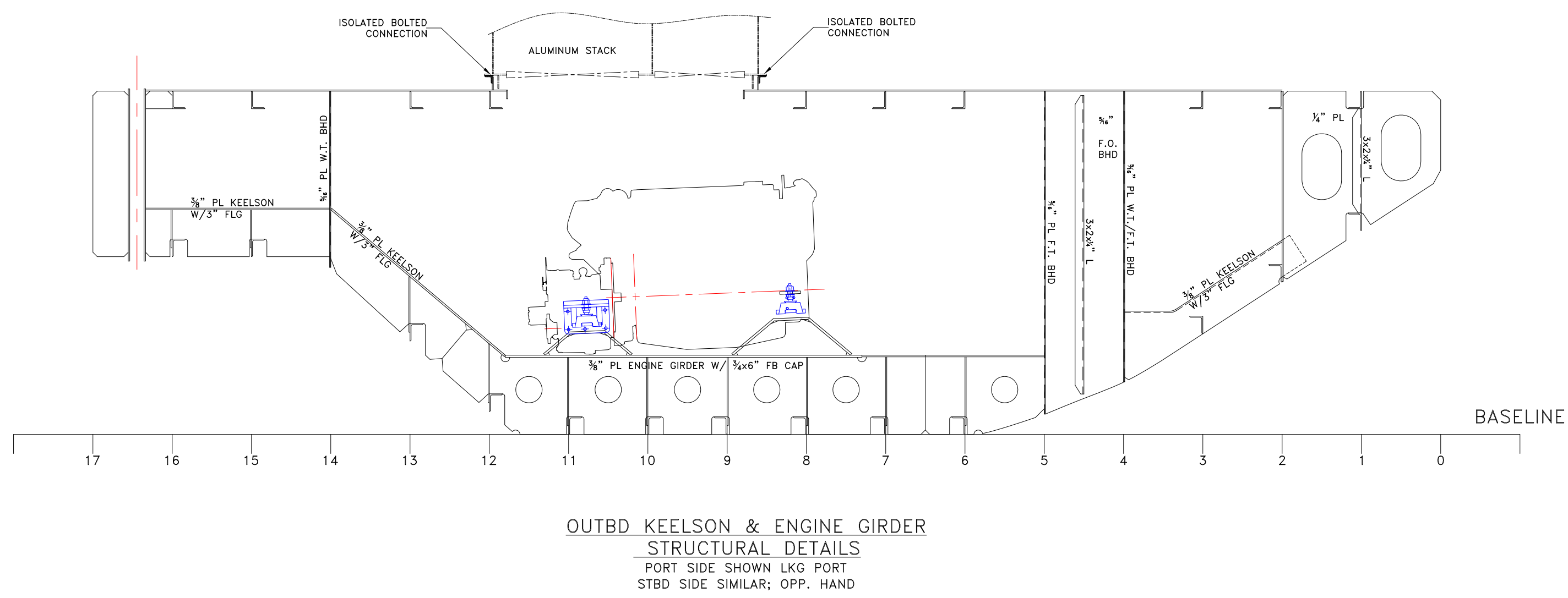
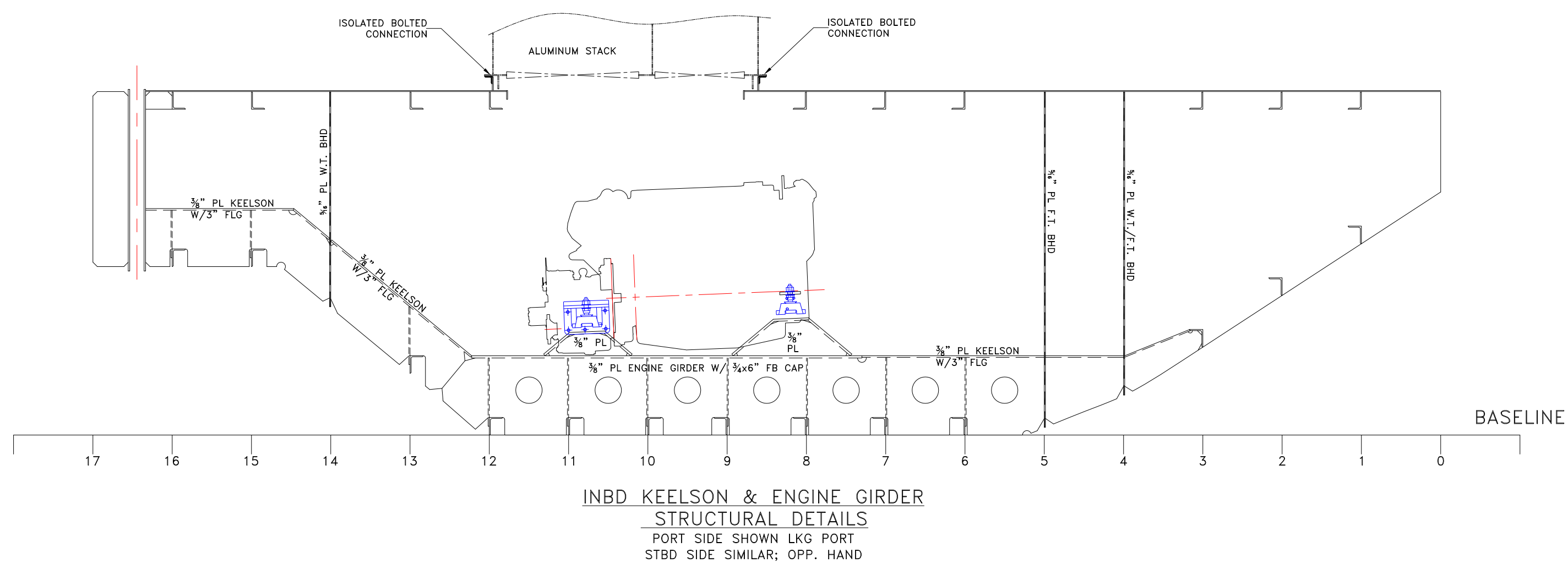
Dwg. No. 1393B-110 Alt. No. 0
 Sht. 1 of 1

Drawn By: JACOB CONNALLY Date: JANUARY 2, 2019
 Checked By: _____ Date: _____
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WELD SCHEDULE-TYPICAL

WELD DBL. CONT. FOR 2 1/2\"/>	3/16 3-12	FRAMES TO HULL & SIDESHELL	WELD DBL. CONT. FOR 2 1/2\"/>	3/16 3-12	TRANSVERSE STIFFENERS TO MAIN DECK
WELD DBL. CONT. FOR 10% OF STIFF L TYP.	3/16 3-12	1. STIFFENERS TO W.T. BHDS 2. STIFFENERS HULL & SIDESHELL PLATING	WELD DBL. CONT. FOR 8\"/>	3/16 3-12	LONGITUDINAL GIRDERS TO MAIN DECK
	3/16 3-12	W.T. BHDS TO SHELL PLATING		3/16	1. BOTTOM FRAME BUTT TO KEEL PLATE 2. CORNER BRACKETING
	1/8 1 1/2-9	N.T. BHDS TO SHELL PLATING		TYP. 1/8	F.T. STAIRS TO F.T. BHDS
WELD DBL. CONT. FOR 2 1/2\"/>	1/8 1 1/2-12	STIFFENERS TO N.T. BHDS			



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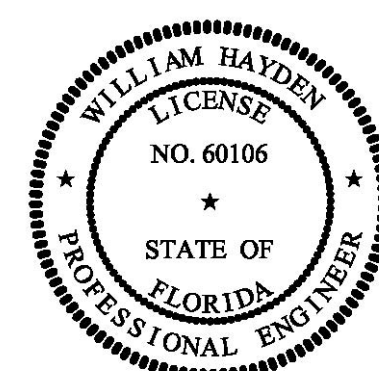
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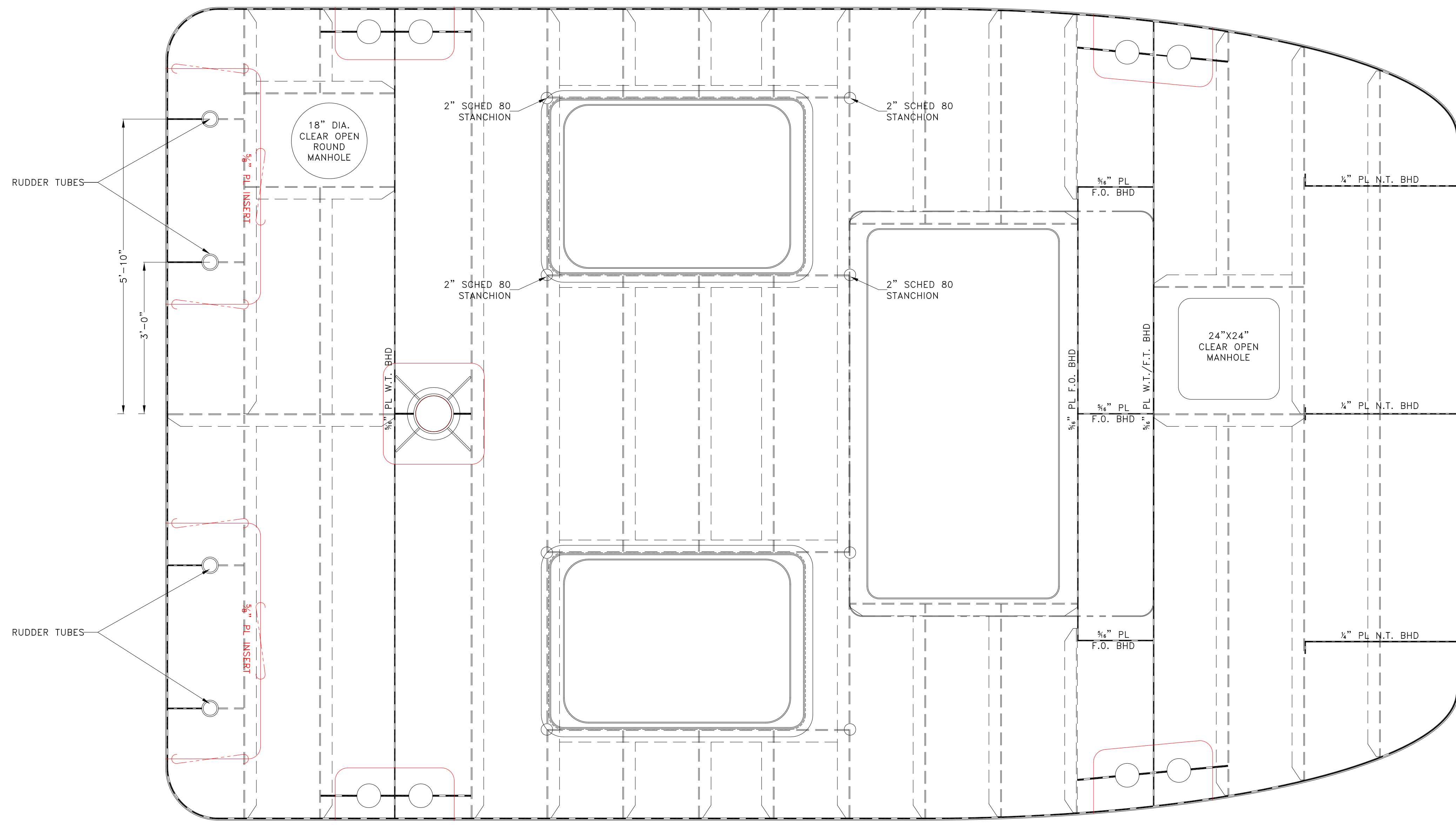
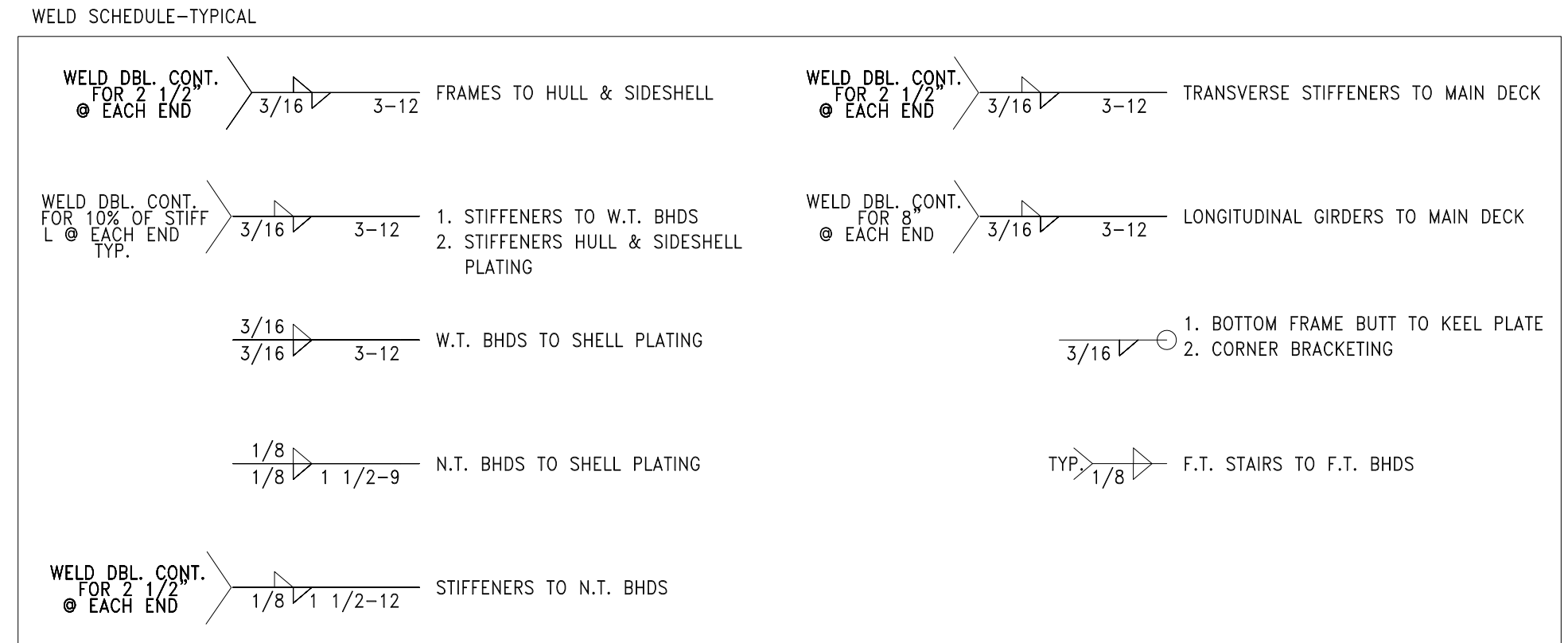
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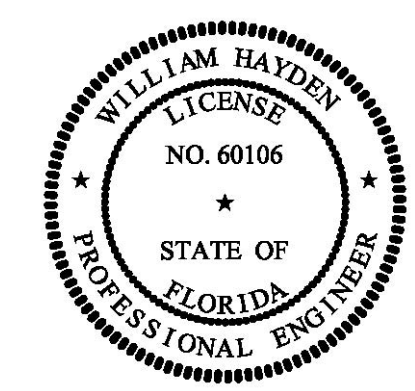
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 Checked By: _____ Date: _____
 App'd By: _____ Scale: **1/2" = 1'-0"**
 ABS App'l: _____ USCG App'l: _____





MAIN DECK STRUCTURAL PLAN
 1/4" PL W/ 4x3x1/4" L XVERSE BEAMS ON 2'-0" CENTERS
 UNLESS OTHERWISE NOTED



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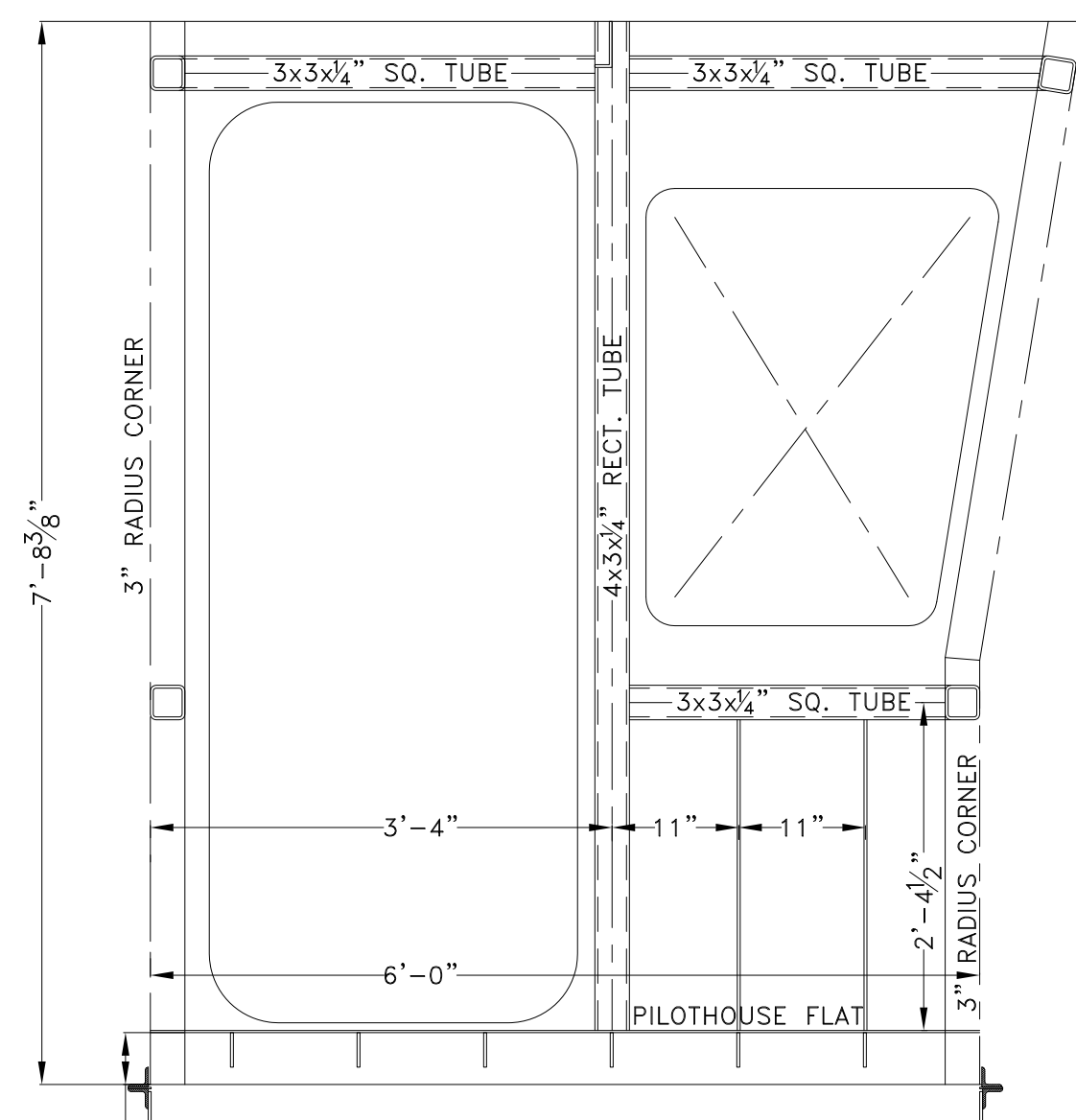
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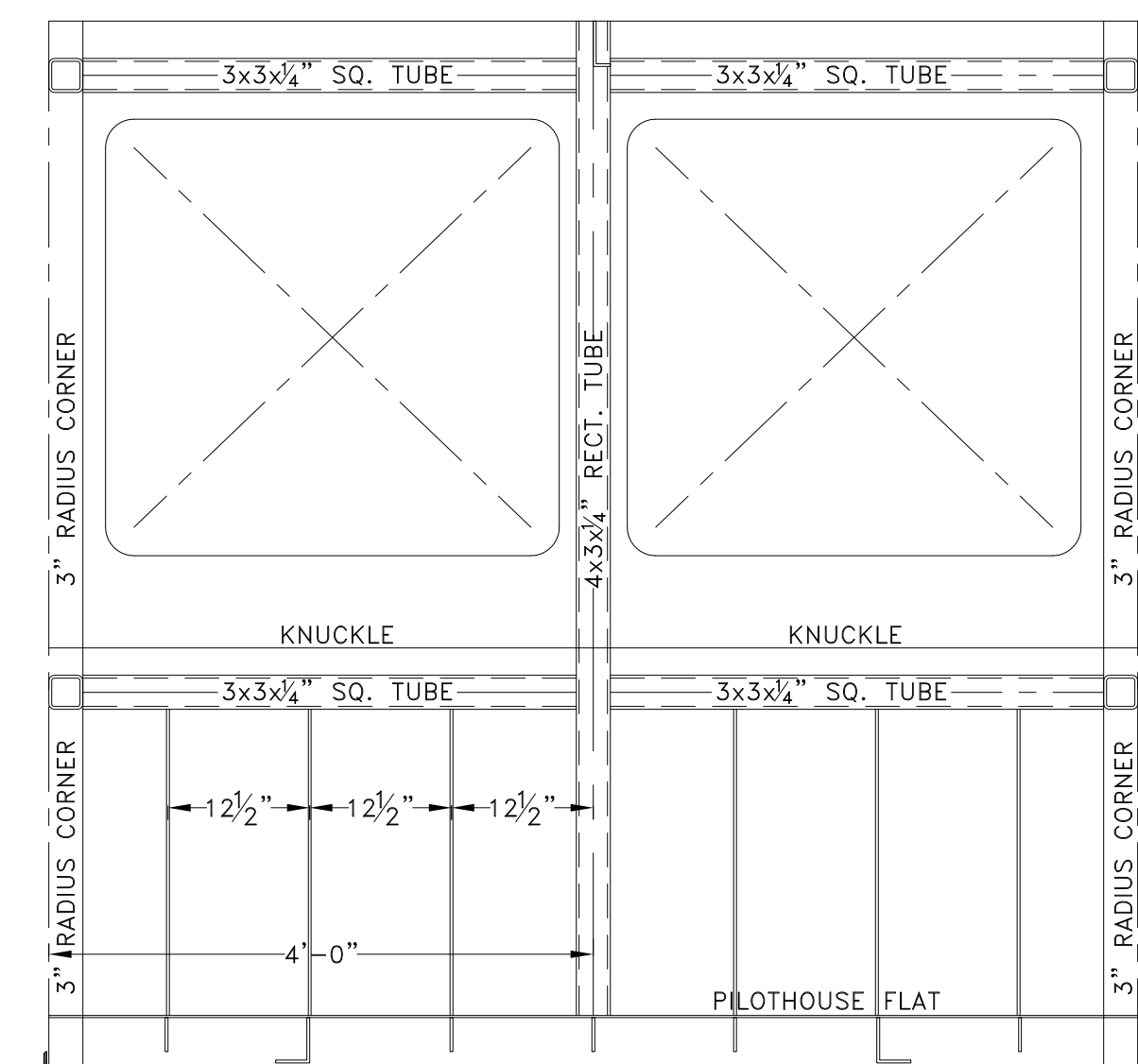
MAIN DECK STRUCTURAL DETAILS

Dwg. No. 1393B-130 Alt. No. 0 Sh. 1 of 1

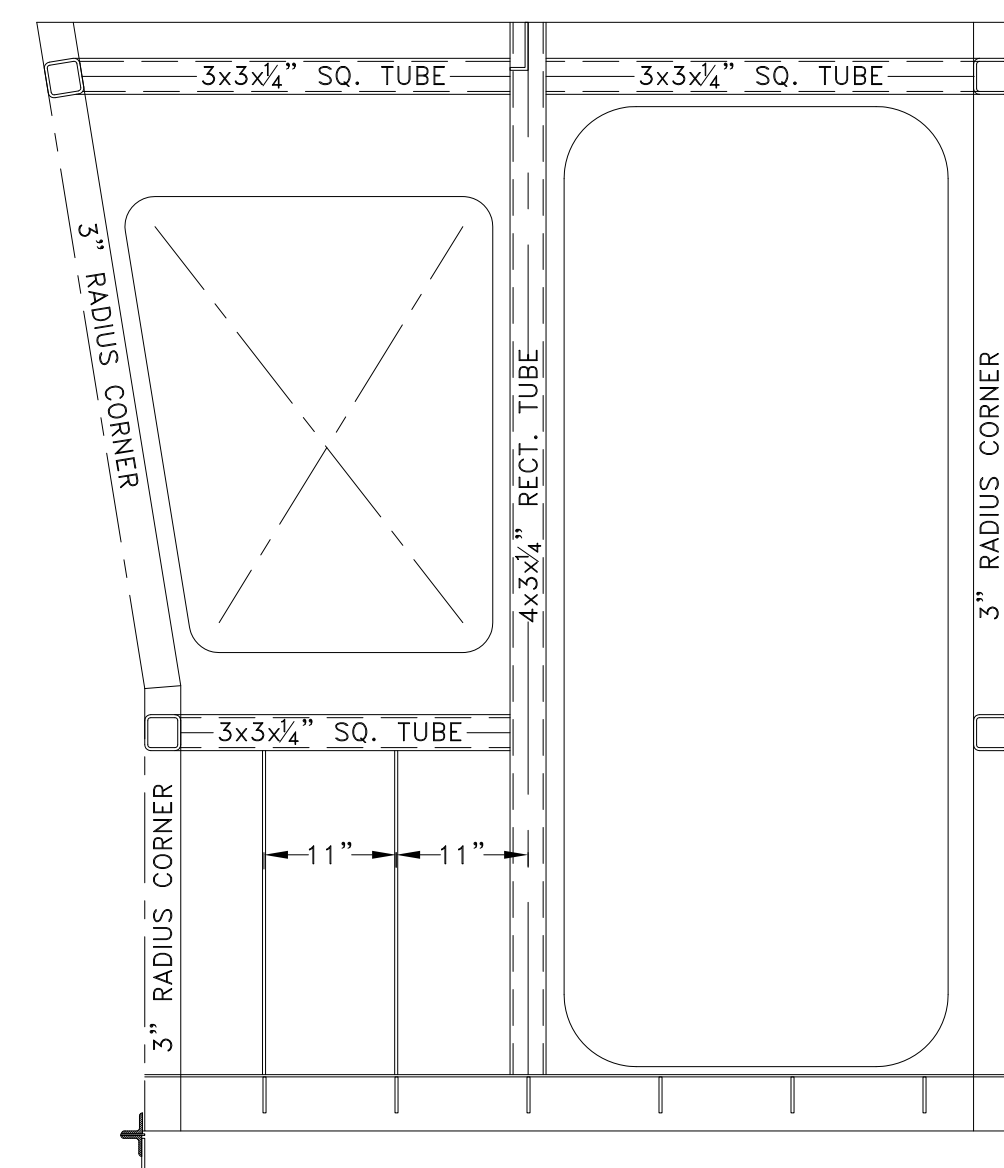
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 ABS App'l: _____ USCG App'l: _____



WHEELHOUSE
PORT SIDE BHD @ 4'-0" OCL
 1/4" PL W/ 1/2x3" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED
 SHOWN LKG OUTBD
 STIFFENERS ON INBD FACE

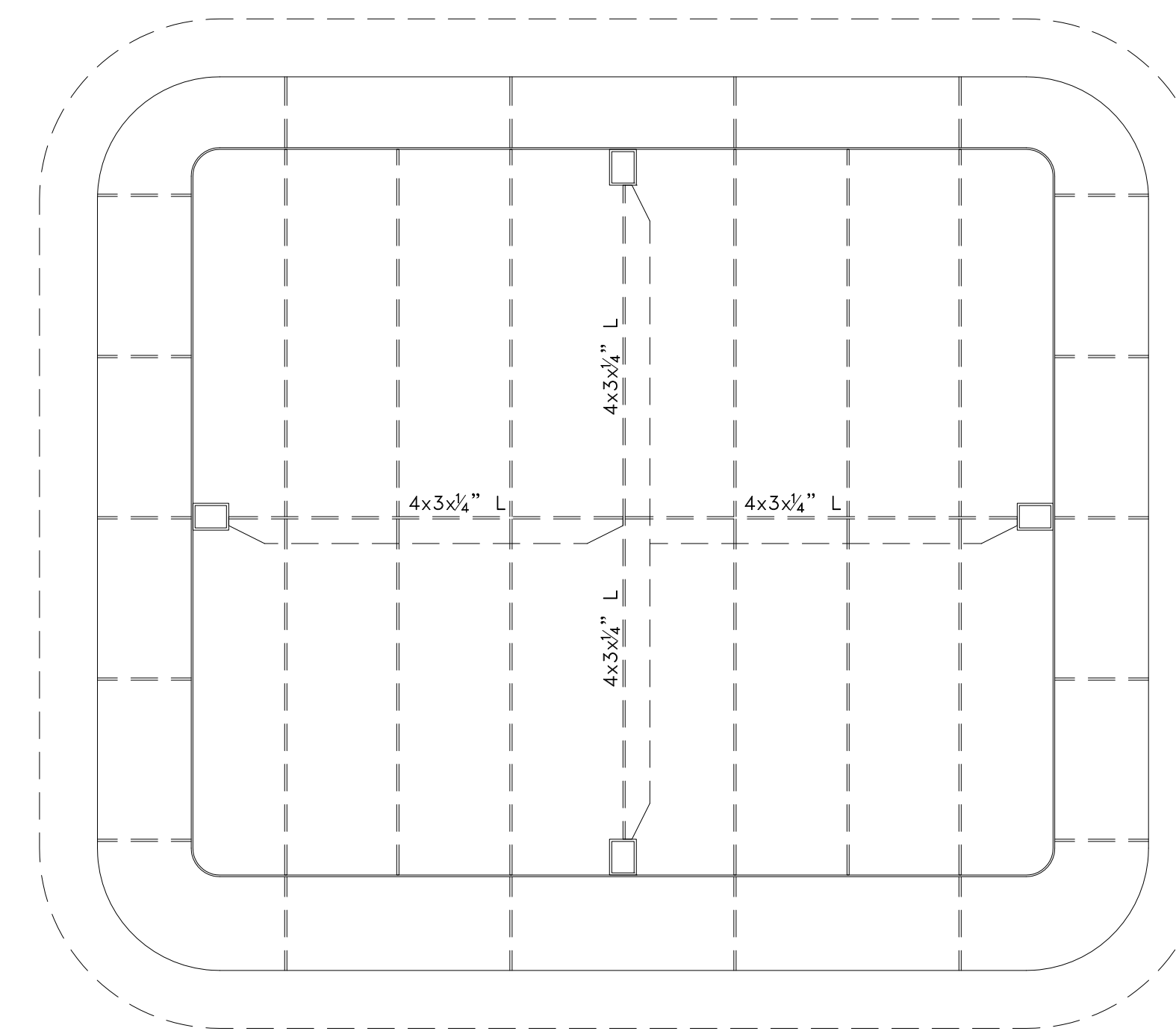


WHEELHOUSE
FWD BHD @ FR 4
 1/4" PL W/ 1/2x3" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED

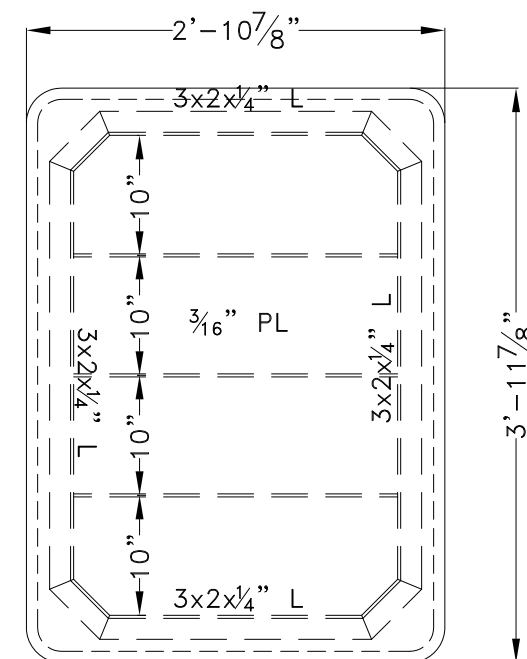


WHEELHOUSE
STBD SIDE BHD @ 4'-0" OCL
 1/4" PL W/ 1/2x3" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED
 SHOWN LKG OUTBD
 STIFFENERS ON INBD FACE

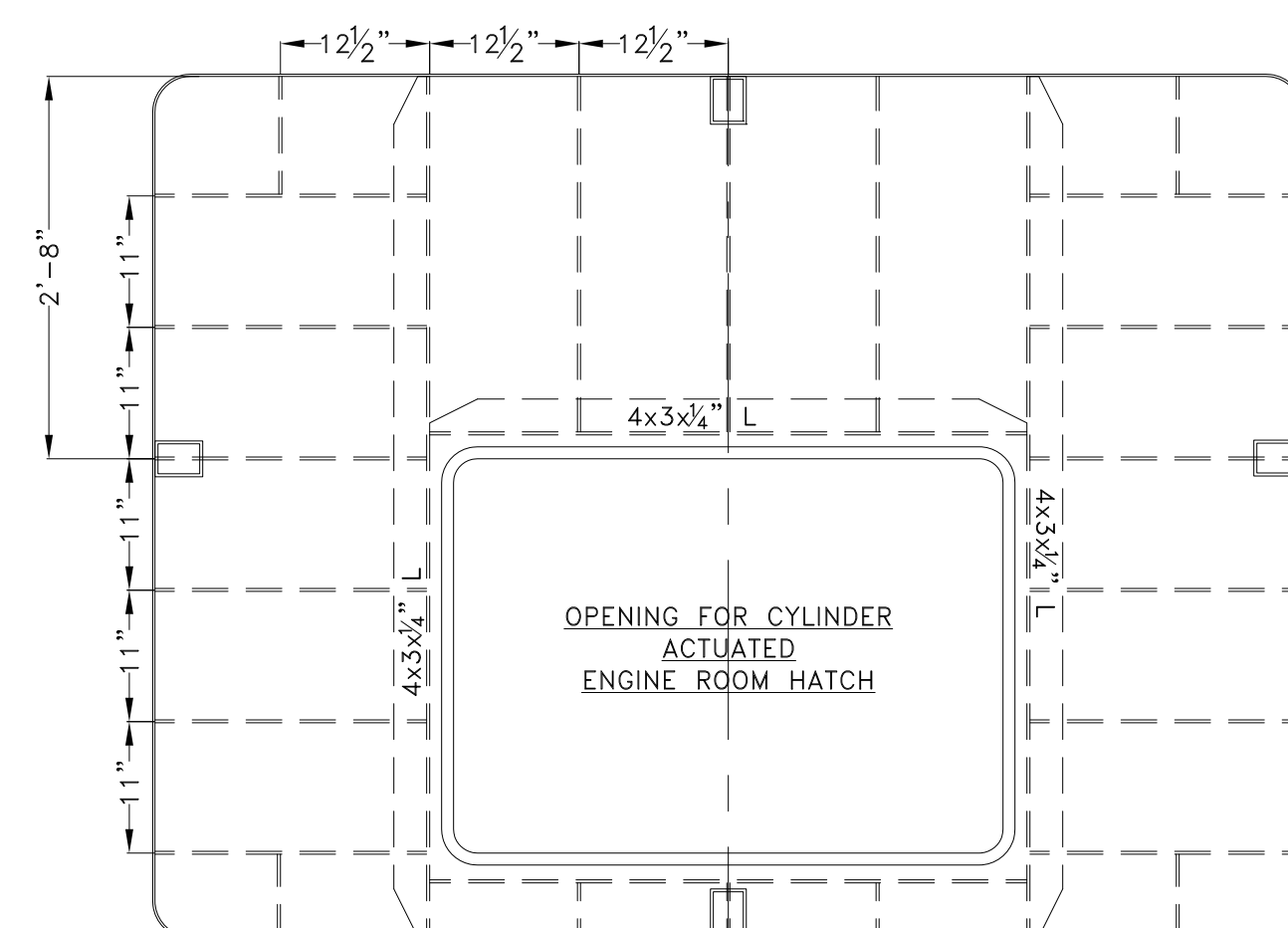
ALL DECKHOUSE CONSTRUCTION
5086 H116 AL. PLATING
6061-T6 AL. EXTRUSIONS



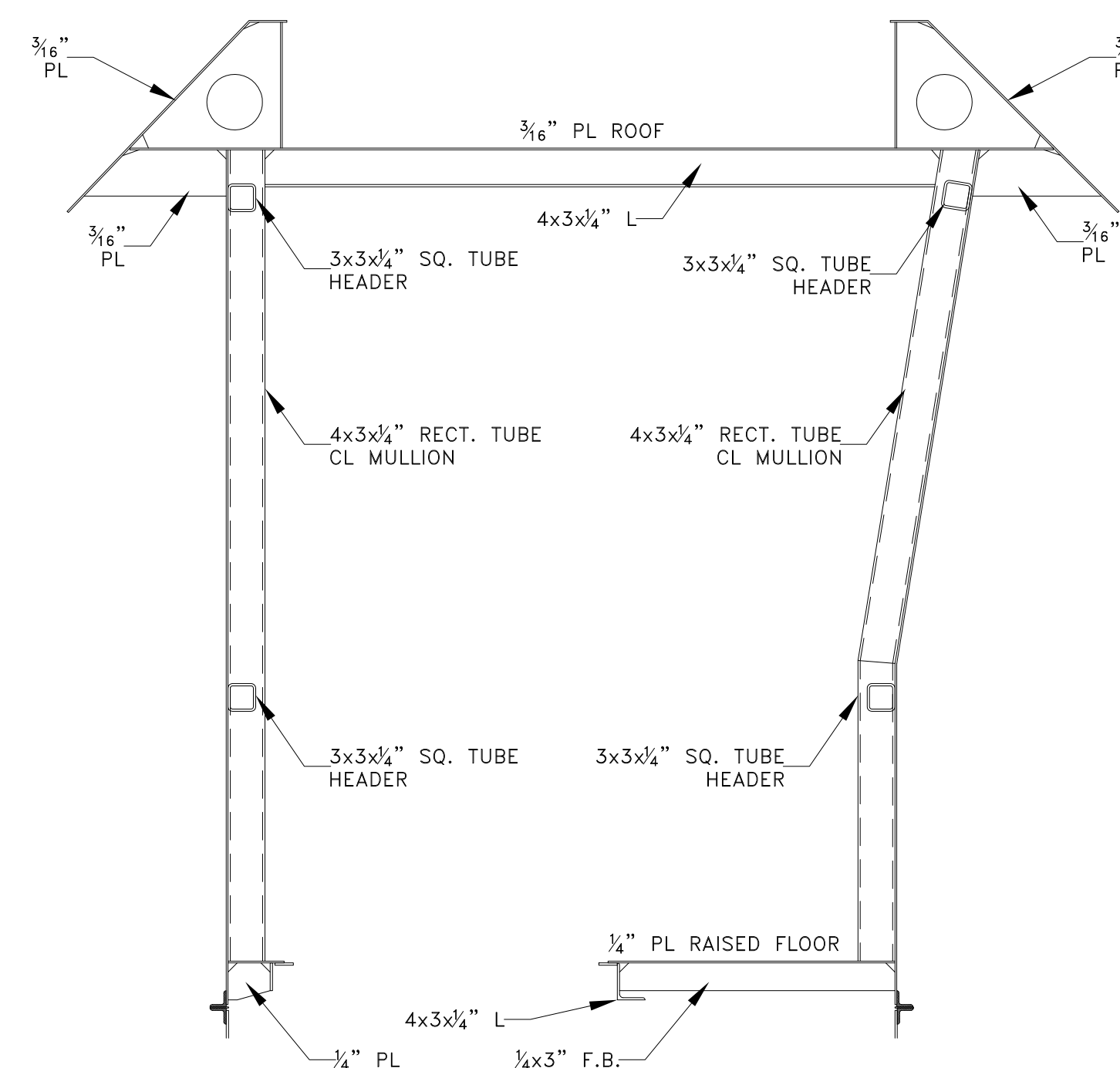
WHEELHOUSE
ROOF FLAT
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 UNLESS OTHERWISE NOTED



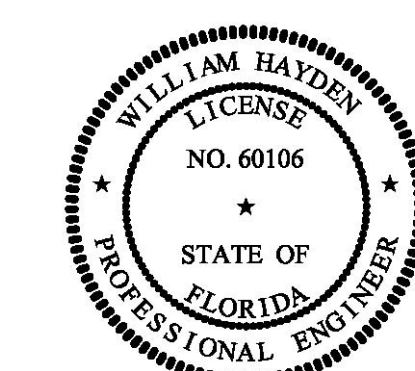
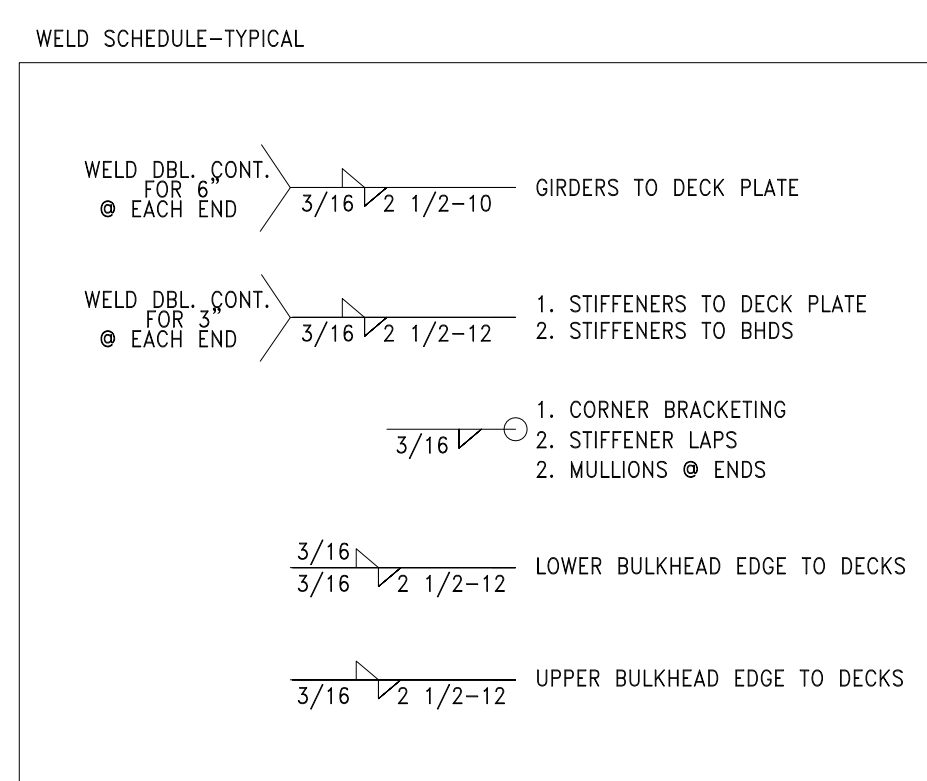
ER ACCESS HATCH PANEL
 1/4" PL W/ 1/2x3" F.B.
 UNLESS OTHERWISE NOTED
 CYLINDER ACTUATION BY BUILDER TO SUIT
 FINAL INSTALLATION DETAILS



1/4" PL WHEELHOUSE
DECK DETAILS
 1/4" PL W/ 1/2x3" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED



WHEELHOUSE
AFT BHD @ FR 8
 1/4" PL W/ 1/2x3" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED



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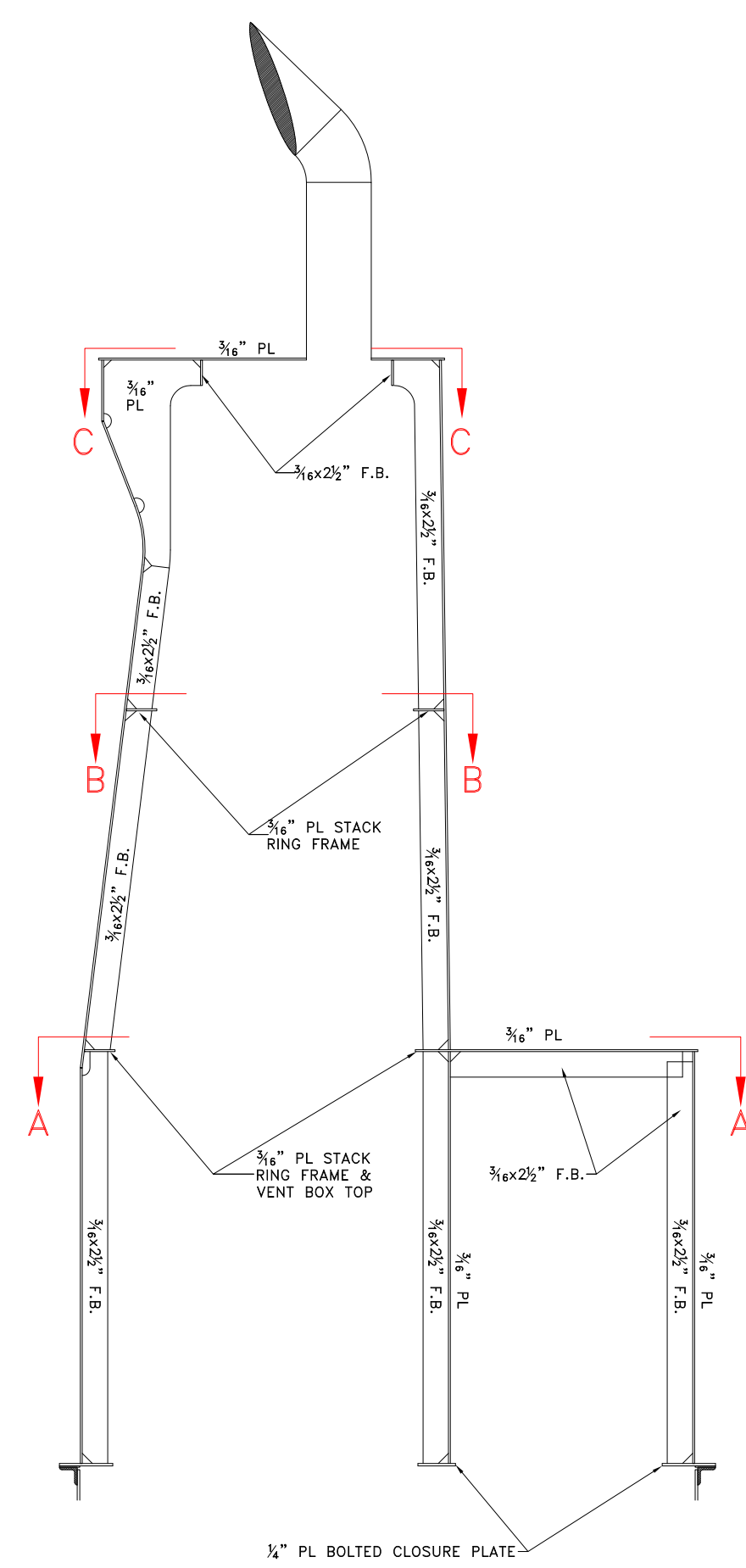
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Title: 45.5'x20'x6.5' NCDOT PUSHBOAT

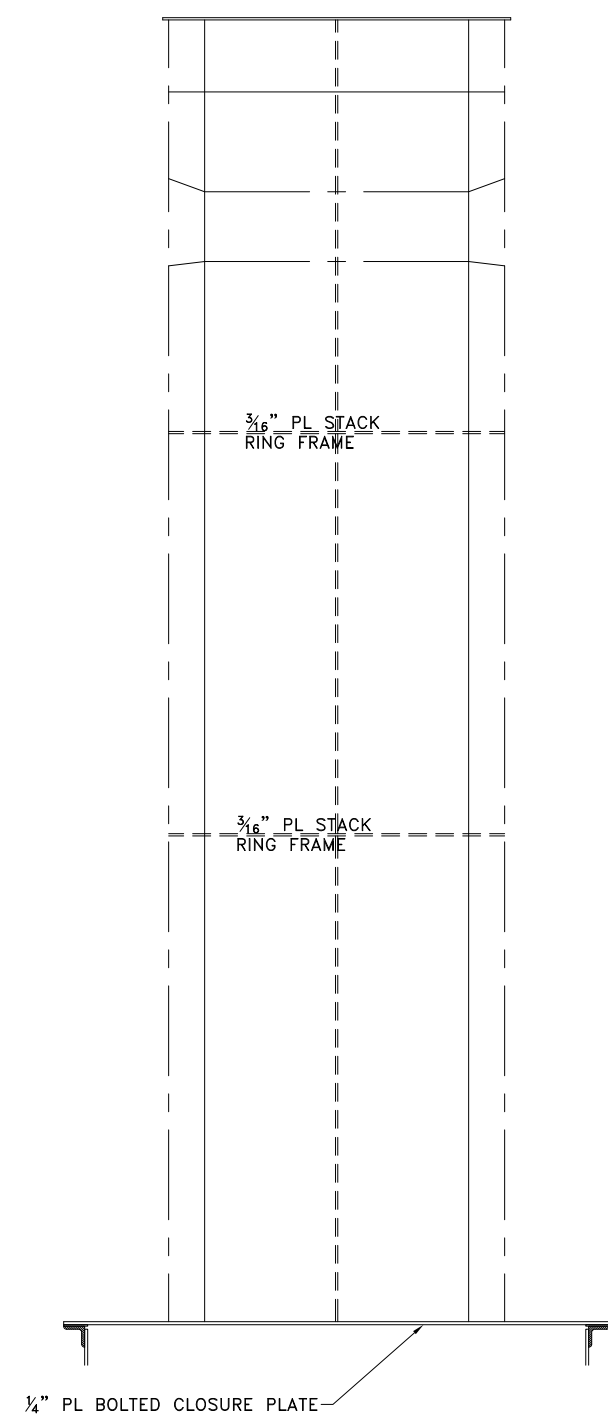
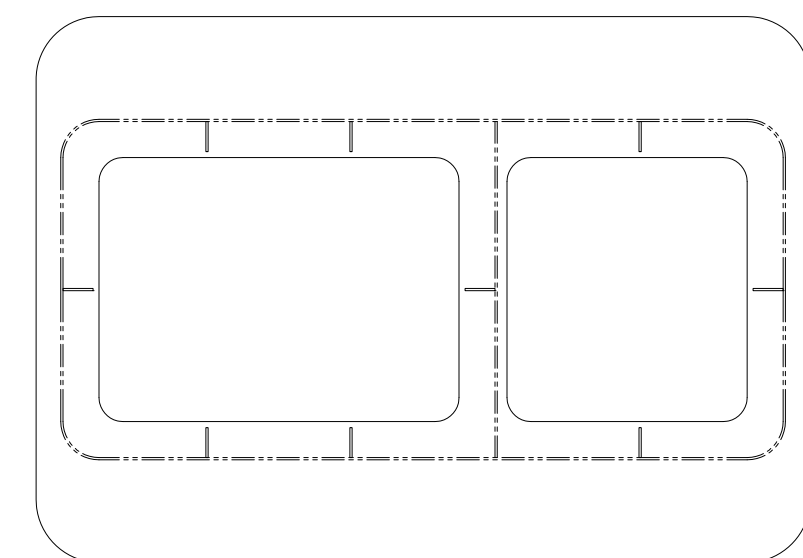
ALUMINUM PILOTHOUSE
STRUCTURAL DETAILS

Dwg. No. 17-1393B-152 Alt. No. 0
 Sh. 1 of 2

Drawn By: JACOB CONNALLY Date: JUNE 05, 2018
 Checked By: _____ Date: _____
 App'd By: _____ Scale: 3/4" = 1'-0"
 ABS App'l: _____ USCG App'l: _____

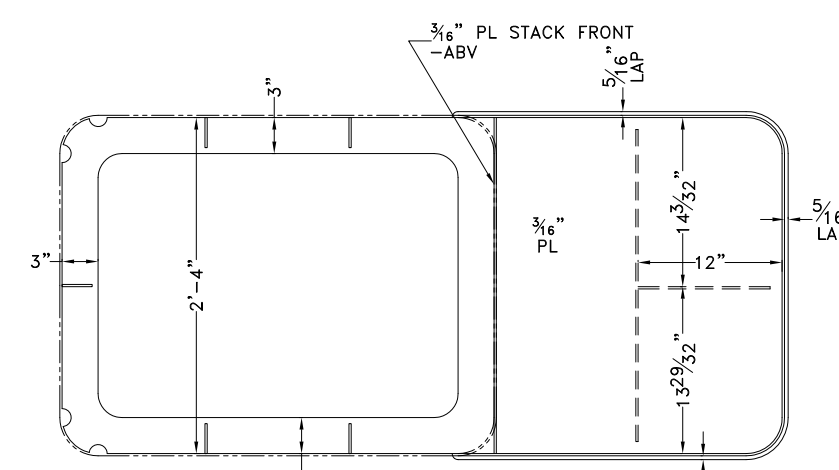


1/2" PL BOLTED CLOSURE PLATE



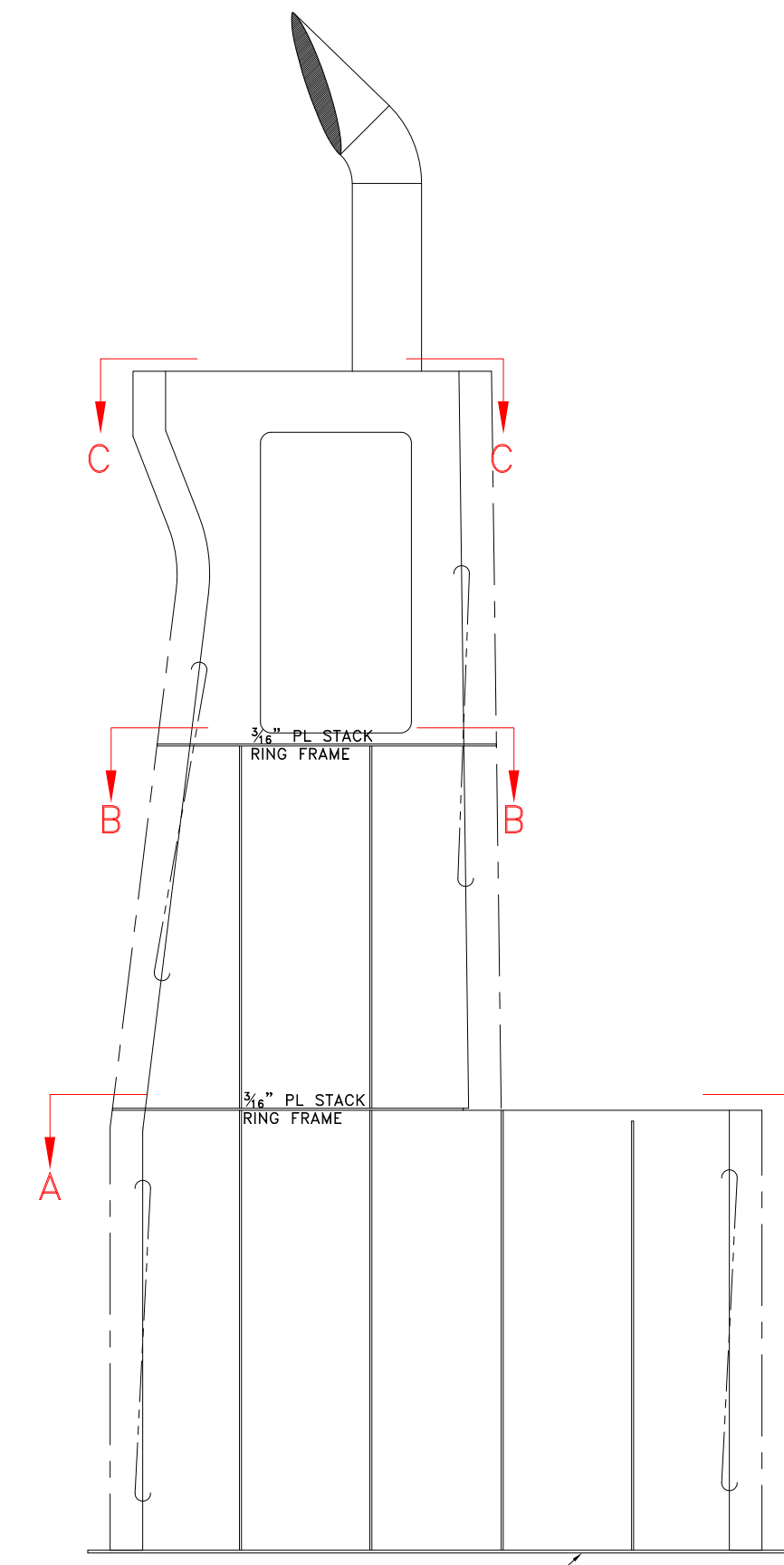
1/2" PL BOLTED CLOSURE PLATE

AFT STACK BHD
 3/16" PL W 3/16x2 1/2" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED
 PORT SIDE SHOWN LKG FWD
 STBD SIDE SIM.;OPP. HAND



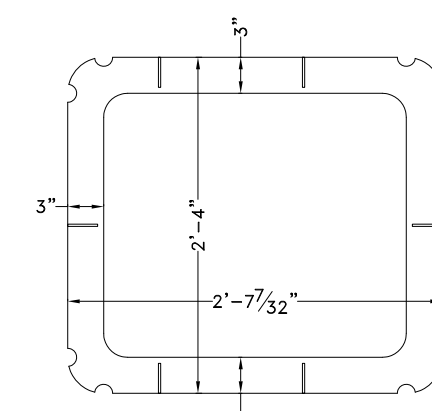
SECTION A-A

VENT BOX TOP & STACK RING FRAME
 • 3"-4 1/2" ABV 1/2" PL BOLTED COVER PLATE
 3/16" PL W 3/16x2 1/2" F.B. STIFFS
 PORT SIDE SHOWN LKG DOWN
 STBD SIMILAR; OPP. HAND



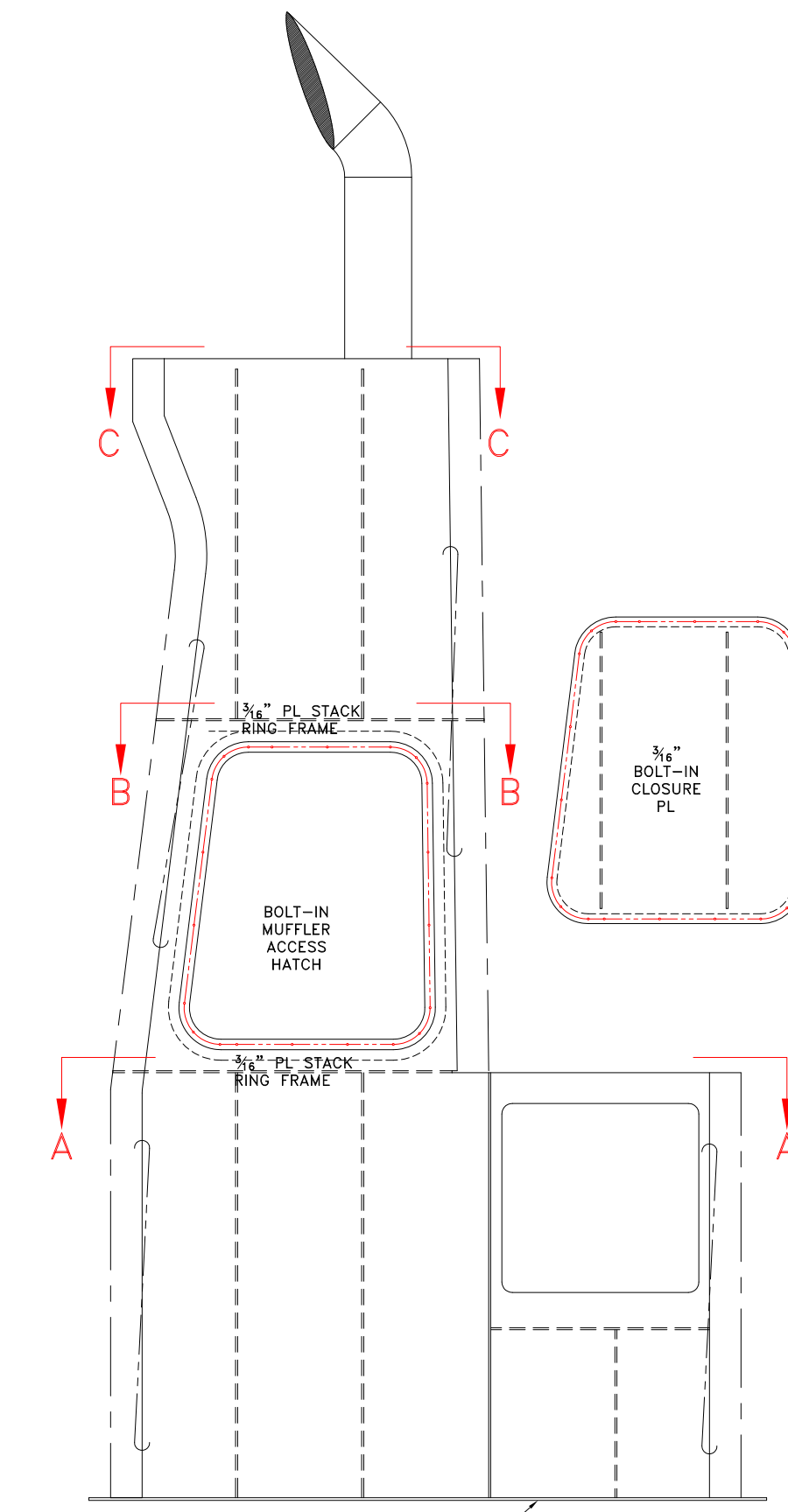
1/2" PL BOLTED CLOSURE PLATE

OUTBOARD STACK BHD
 3/16" PL W 3/16x2 1/2" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED
 STBD SIDE SHOWN LKG INBD
 PORT SIDE SIM.;OPP. HAND



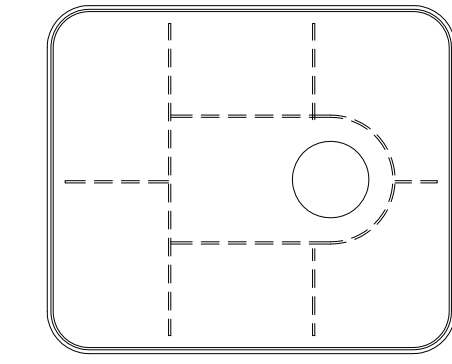
SECTION B-B

1/2" PL STACK RING FRAME
 • 6"-2" ABV 1/2" PL BOLTED COVER PLATE
 PORT SIDE SHOWN LKG DOWN
 STBD SIMILAR; OPP. HAND



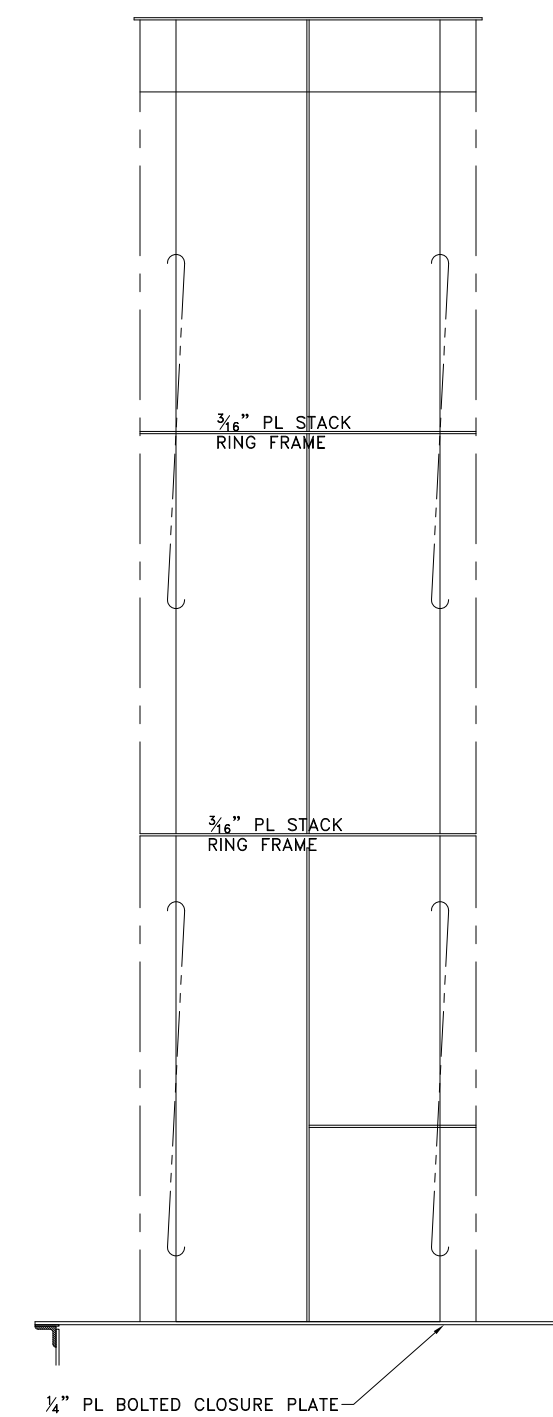
1/2" PL BOLTED CLOSURE PLATE

INBD STACK BHD
 3/16" PL W 3/16x2 1/2" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED
 STBD SIDE SHOWN LKG INBD
 PORT SIDE SIM.;OPP. HAND



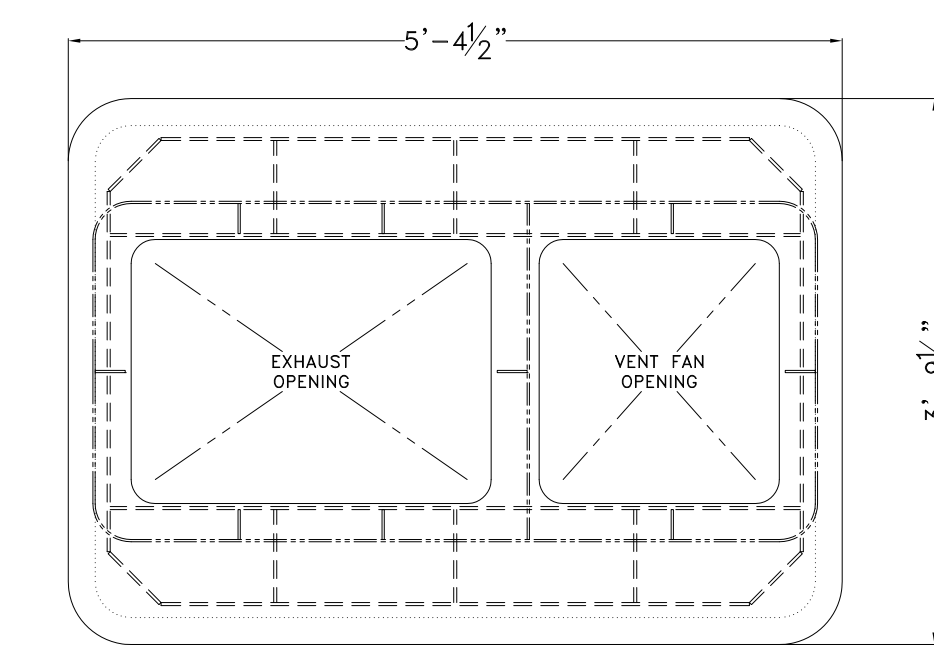
SECTION C-C

3/4" PL STACK TOP PLATE
 W/ 3/16x2 1/2" F.B. STIFFS
 PORT SIDE SHOWN LKG DOWN
 STBD SIMILAR; OPP. HAND



1/2" PL BOLTED CLOSURE PLATE

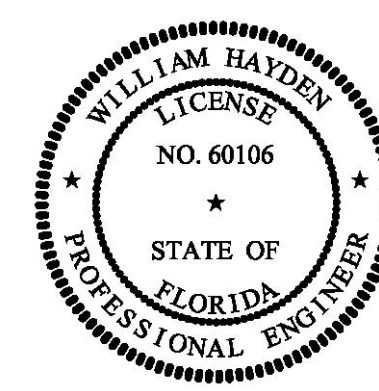
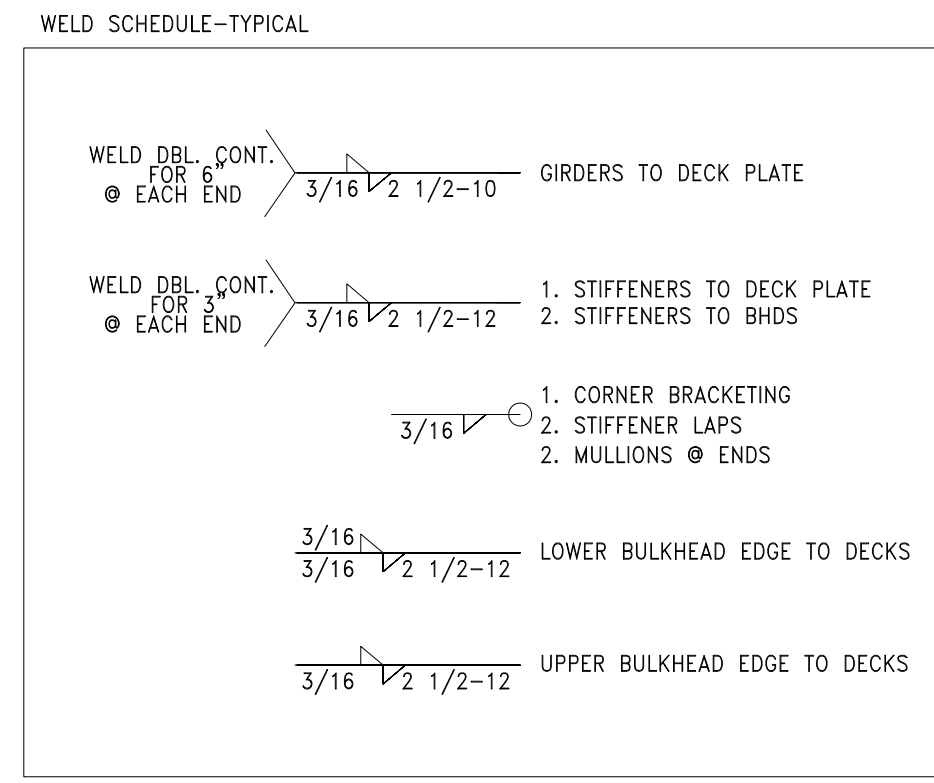
FWD STACK BHD
 3/16" PL W 3/16x2 1/2" F.B. STIFFENERS
 UNLESS OTHERWISE NOTED
 PORT SIDE SHOWN LKG FWD
 STBD SIDE SIM.;OPP. HAND



STACK BASEPLATE DETAIL

1/4" PL STACK TOP PLATE
 W/ 3/16x3" F.B. STIFFS
 LKG DOWN

ALL DECKHOUSE CONSTRUCTION
5086 H116 AL. PLATING
6061-T6 AL. EXTRUSIONS



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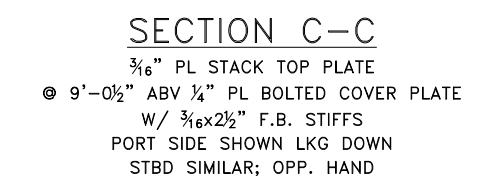
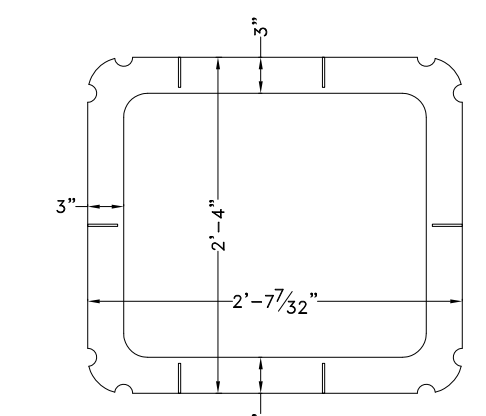
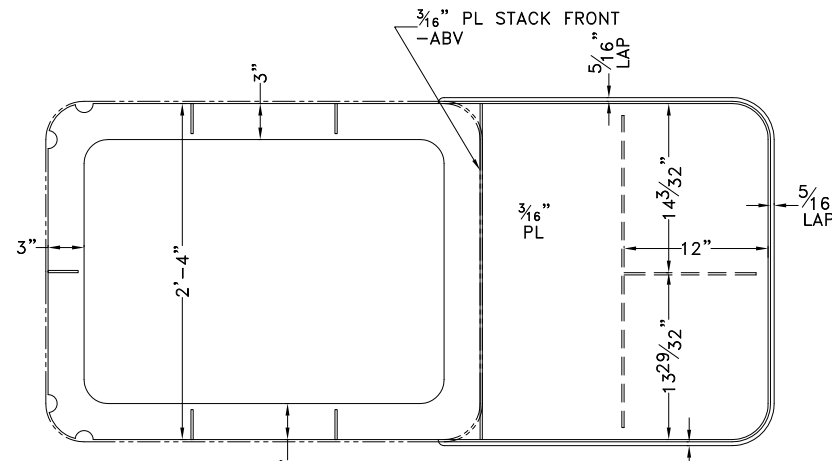
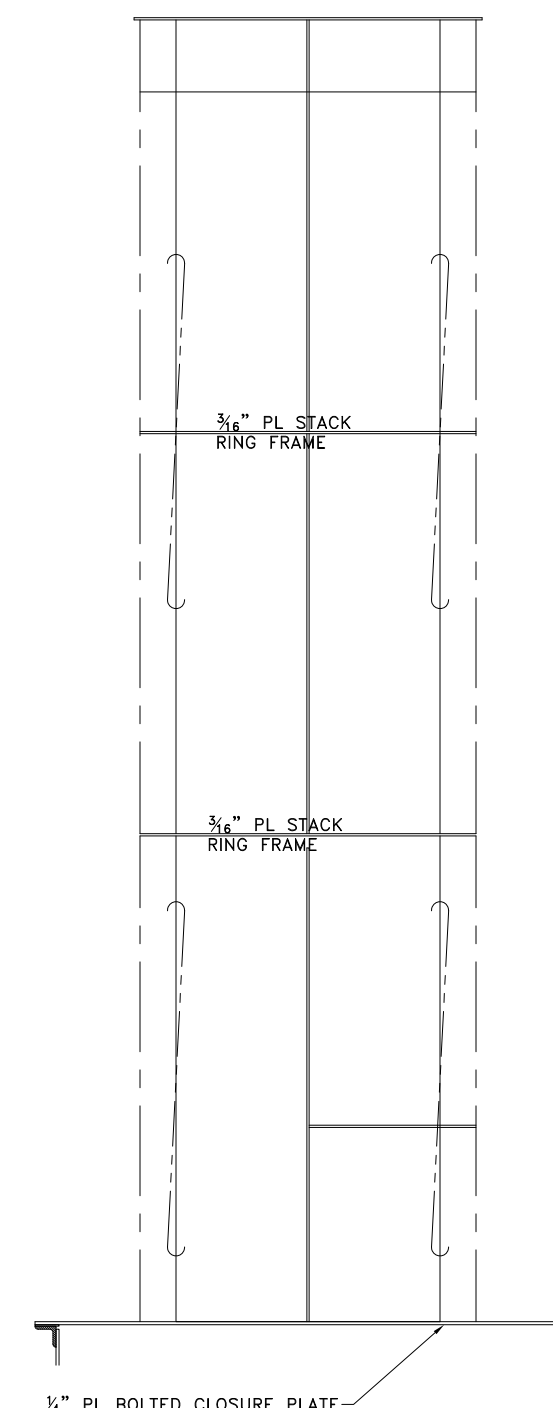
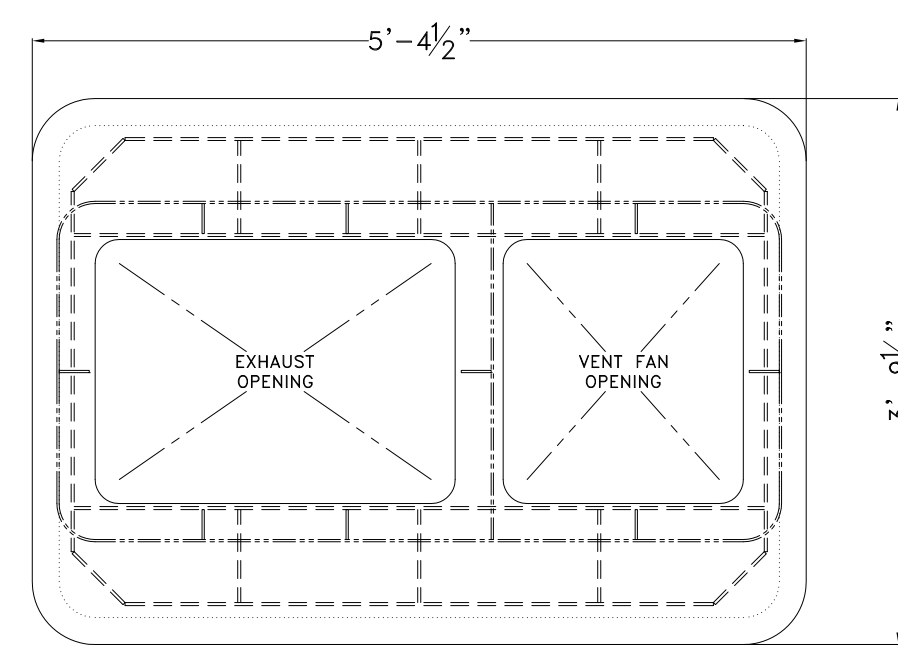
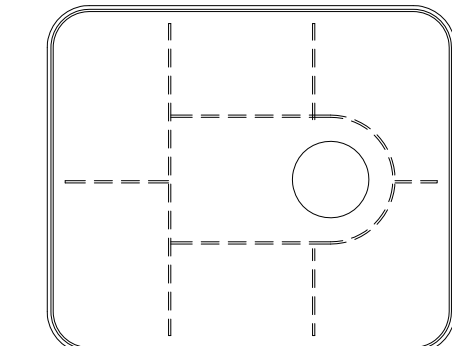
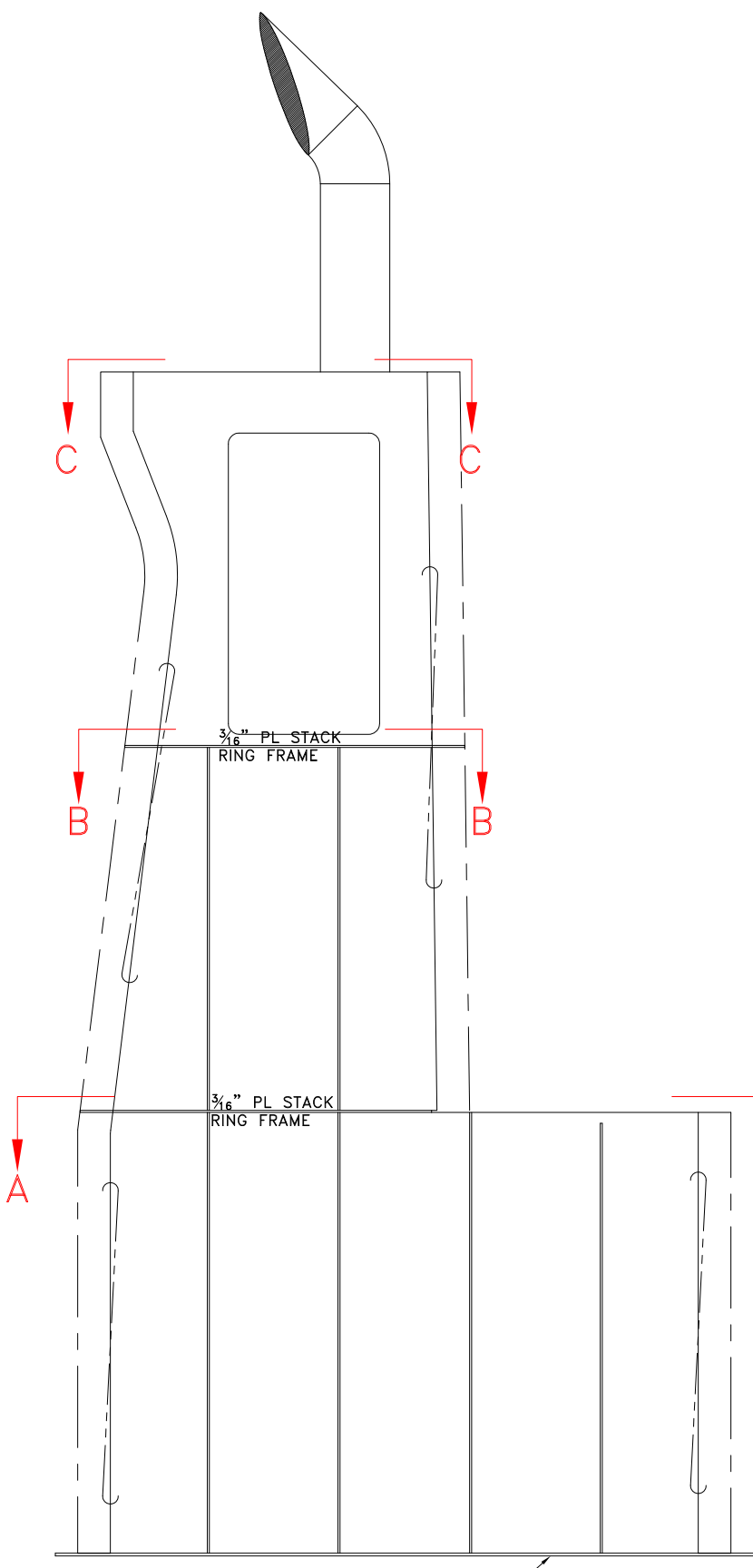
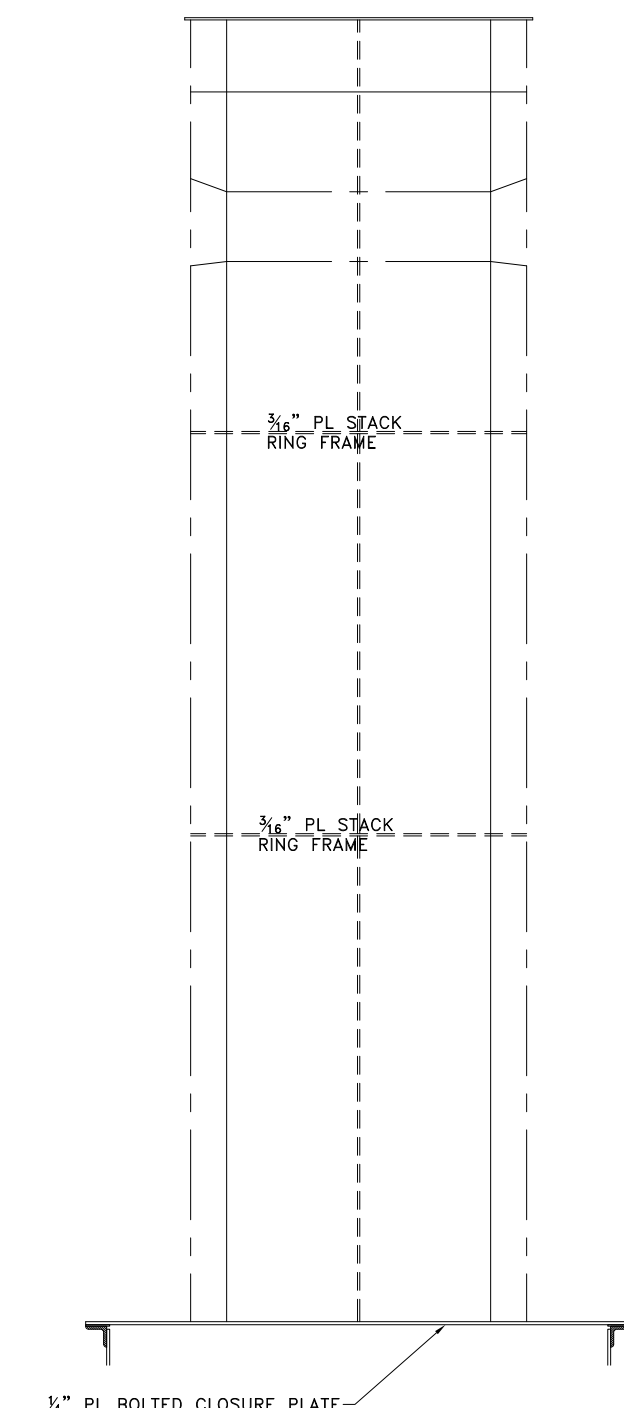
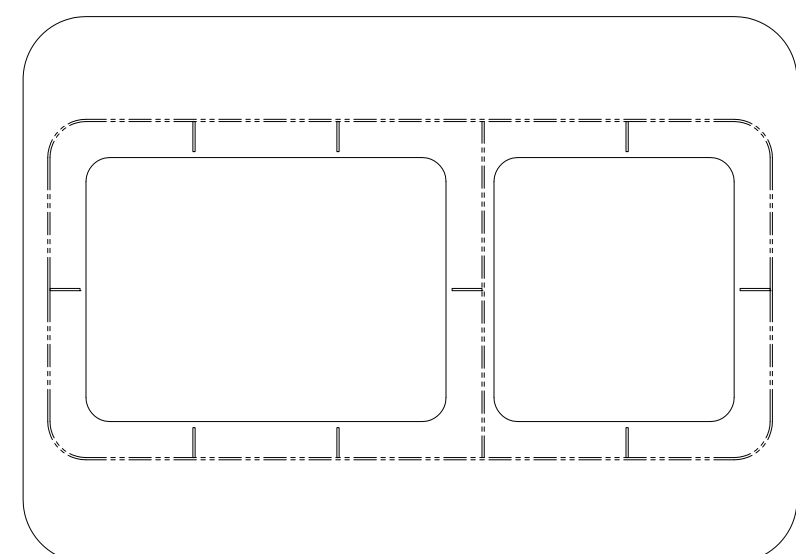
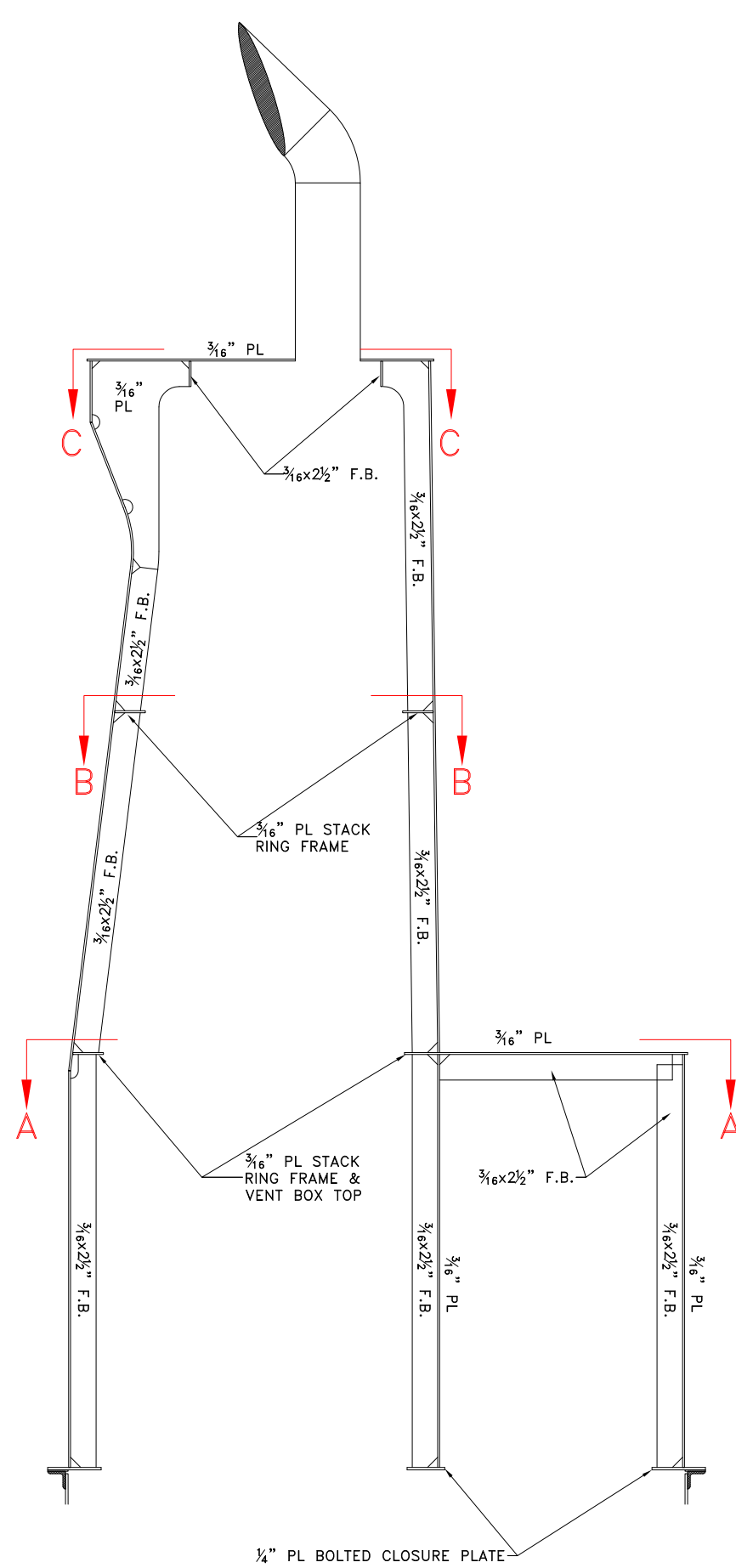
Phone: (904) 399-3473
 Fax: (904) 399-1522
 info@dejongandlebet.com

Title: 45.5'x20'x6.5' NCDOT PUSHBOAT

ALUMINUM STACK STRUCTURAL DETAILS

Dwg. No. 17-1393B-152 Alt. No. 0
 Sht. 2 of 2

Drawn By: JACOB CONNALLY Date: JUNE 05, 2018
 Checked By: _____ Date: _____
 App'd By: _____ Scale: 3/4" = 1'-0"
 ABS App'l: _____ USCG App'l: _____



STACK BASEPLATE DETAIL
1/4" PL STACK TOP PLATE
W/ 1/2x3" F.B. STIFFS
LKG DOWN

ALL DECKHOUSE CONSTRUCTION
5086 H116 AL. PLATING
6061-T6 AL. EXTRUSIONS

WELD SCHEDULE-TYPICAL

WELD DBL. CONT. FOR EACH END	3/16" V 1/2-10	GIRDERS TO DECK PLATE
WELD DBL. CONT. FOR EACH END	3/16" V 1/2-12	1. STIFFENERS TO DECK PLATE 2. STIFFENERS TO BHDS
	3/16"	1. CORNER BRACKETING 2. STIFFENER LAPS 2. MULLIONS @ ENDS
	3/16" V 1/2-12	LOWER BULKHEAD EDGE TO DECKS
	3/16" V 1/2-12	UPPER BULKHEAD EDGE TO DECKS

AFT STACK BHD
3/16" PL W 3/4x2 1/2" F.B. STIFFENERS
UNLESS OTHERWISE NOTED
PORT SIDE SHOWN LKG FWD
STBD SIDE SIM.;OPP. HAND

OUTBOARD STACK BHD
3/16" PL W 3/4x2 1/2" F.B. STIFFENERS
UNLESS OTHERWISE NOTED
STBD SIDE SHOWN LKG INBD
PORT SIDE SIM.;OPP. HAND

INBD STACK BHD
3/16" PL W 3/4x2 1/2" F.B. STIFFENERS
UNLESS OTHERWISE NOTED
STBD SIDE SHOWN LKG INBD
PORT SIDE SIM.;OPP. HAND

FWD STACK BHD
3/16" PL W 3/4x2 1/2" F.B. STIFFENERS
UNLESS OTHERWISE NOTED
PORT SIDE SHOWN LKG FWD
STBD SIDE SIM.;OPP. HAND

SECTION A-A
VENT BOX TOP & STACK RING FRAME
3"-4 1/2" ABV 1/4" PL BOLTED COVER PLATE
3/16" PL W 1/2x2 1/2" F.B. STIFFS
PORT SIDE SHOWN LKG DOWN
STBD SIMILAR; OPP. HAND

SECTION B-B
3/16" PL STACK RING FRAME
6"-2" ABV 1/4" PL BOLTED COVER PLATE
PORT SIDE SHOWN LKG DOWN
STBD SIMILAR; OPP. HAND

SECTION C-C
3/16" PL STACK TOP PLATE
9"-0 1/2" ABV 1/4" PL BOLTED COVER PLATE
W/ 3/4x2 1/2" F.B. STIFFS
PORT SIDE SHOWN LKG DOWN
STBD SIMILAR; OPP. HAND

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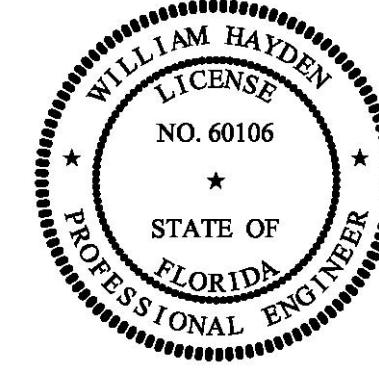
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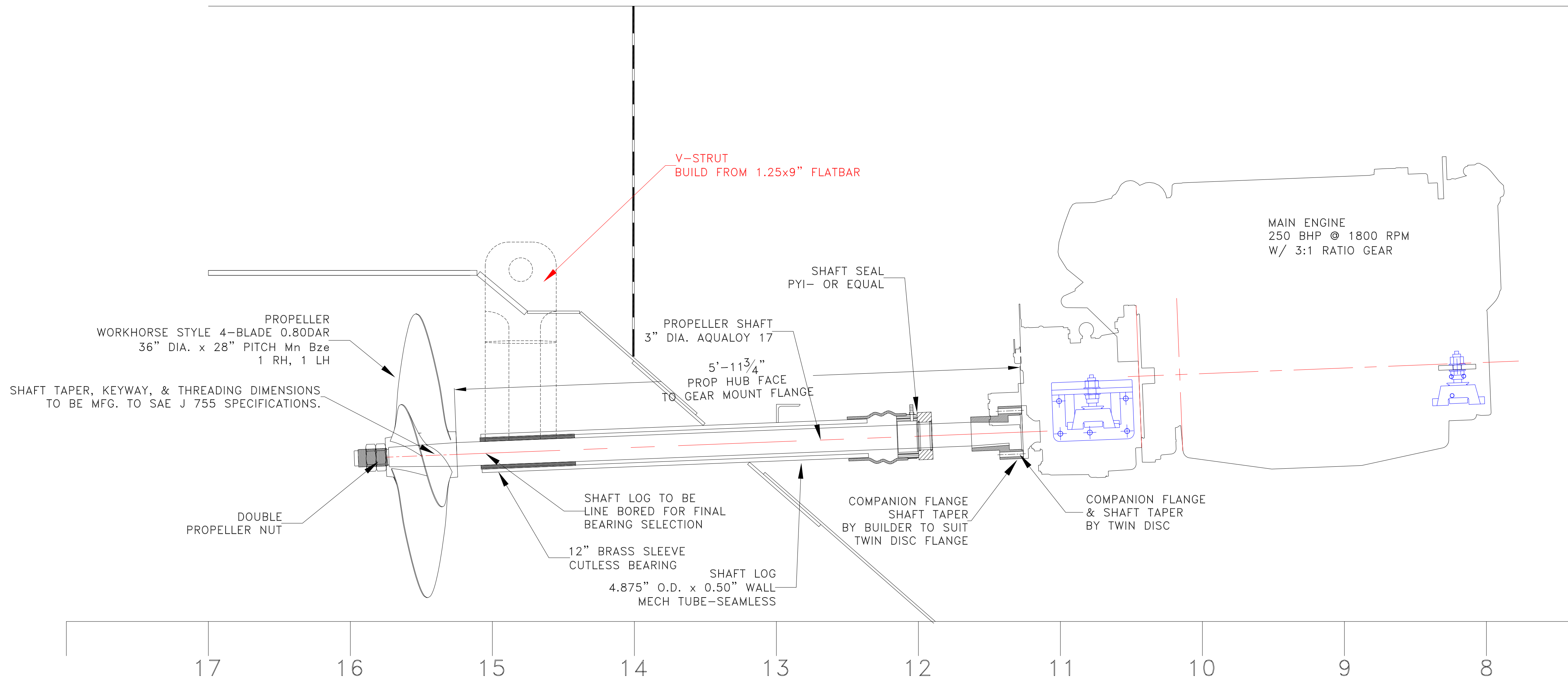
Title: 45.5'x20'x6.5' NCDOT PUSHBOAT

ALUMINUM STACK STRUCTURAL DETAILS

Dwg. No. 17-1393B-152 Alt. No. 0
Sht. 2 of 2

Drawn By: JACOB CONNALLY Date: JUNE 05, 2018
Checked By: _____ Date: _____
App'd By: _____ Scale: 3/4" = 1'-0"
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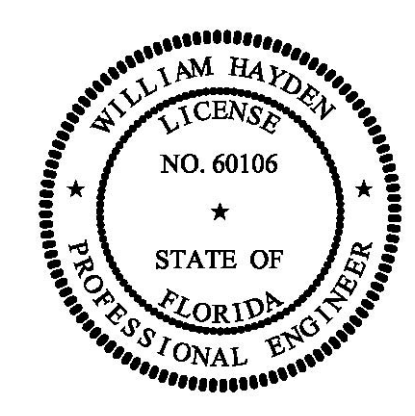
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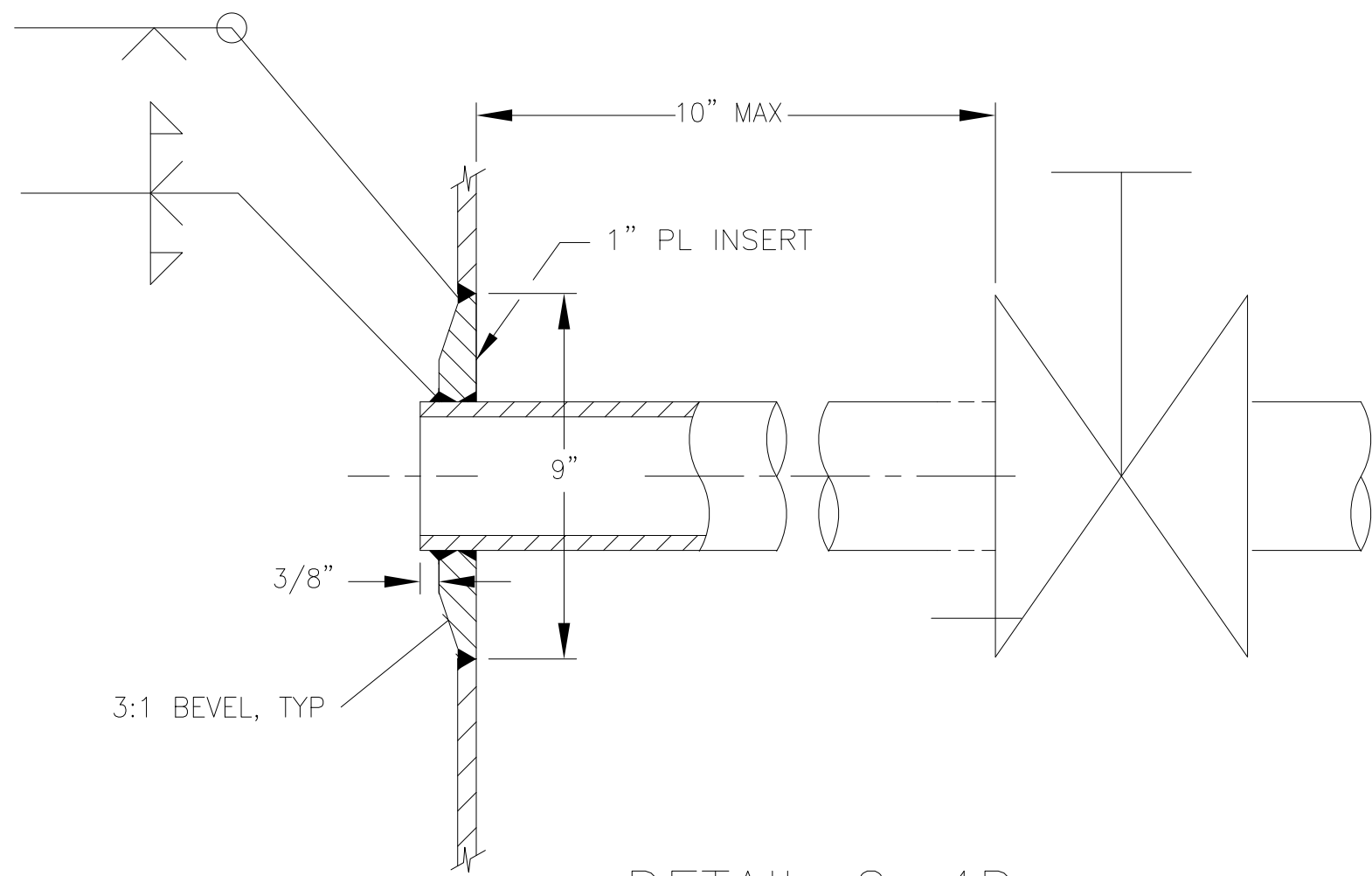
TITLE: 45.5'x20'x6.5' NCDOT PUSHBOAT

SHAFTING DETAILS

Dwg. No. 1393B-182 Alt. No. 0
 Sh. 1 of 1

Drawn By: JACOB CONNALLY Date: JUNE 05, 2018
 Checked By: _____ Date: _____
 App'd By: _____ Scale: 1-1/2" = 1'-0"
 ABS App'l: _____ USCG App'l: _____





DETAIL 2-4D
OVERBOARD DISCHARGE
NO SCALE

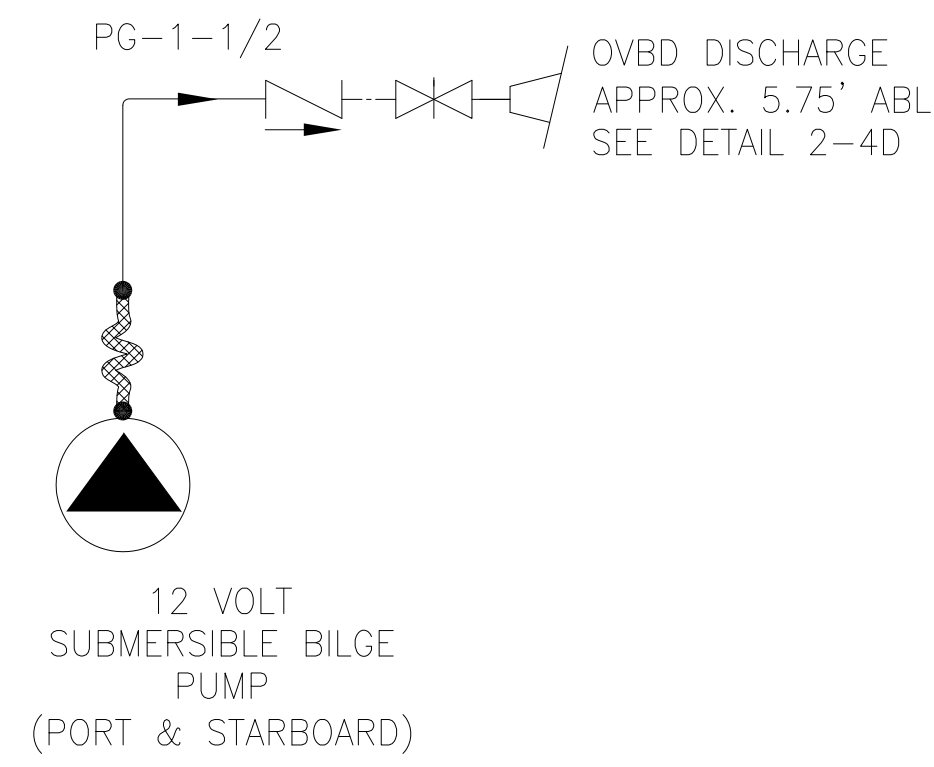
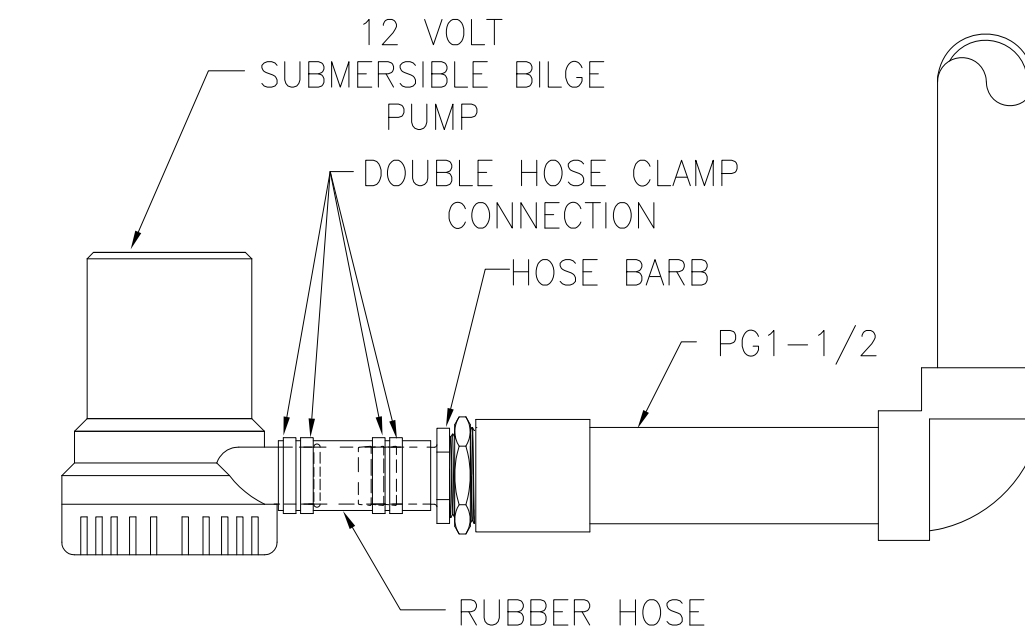
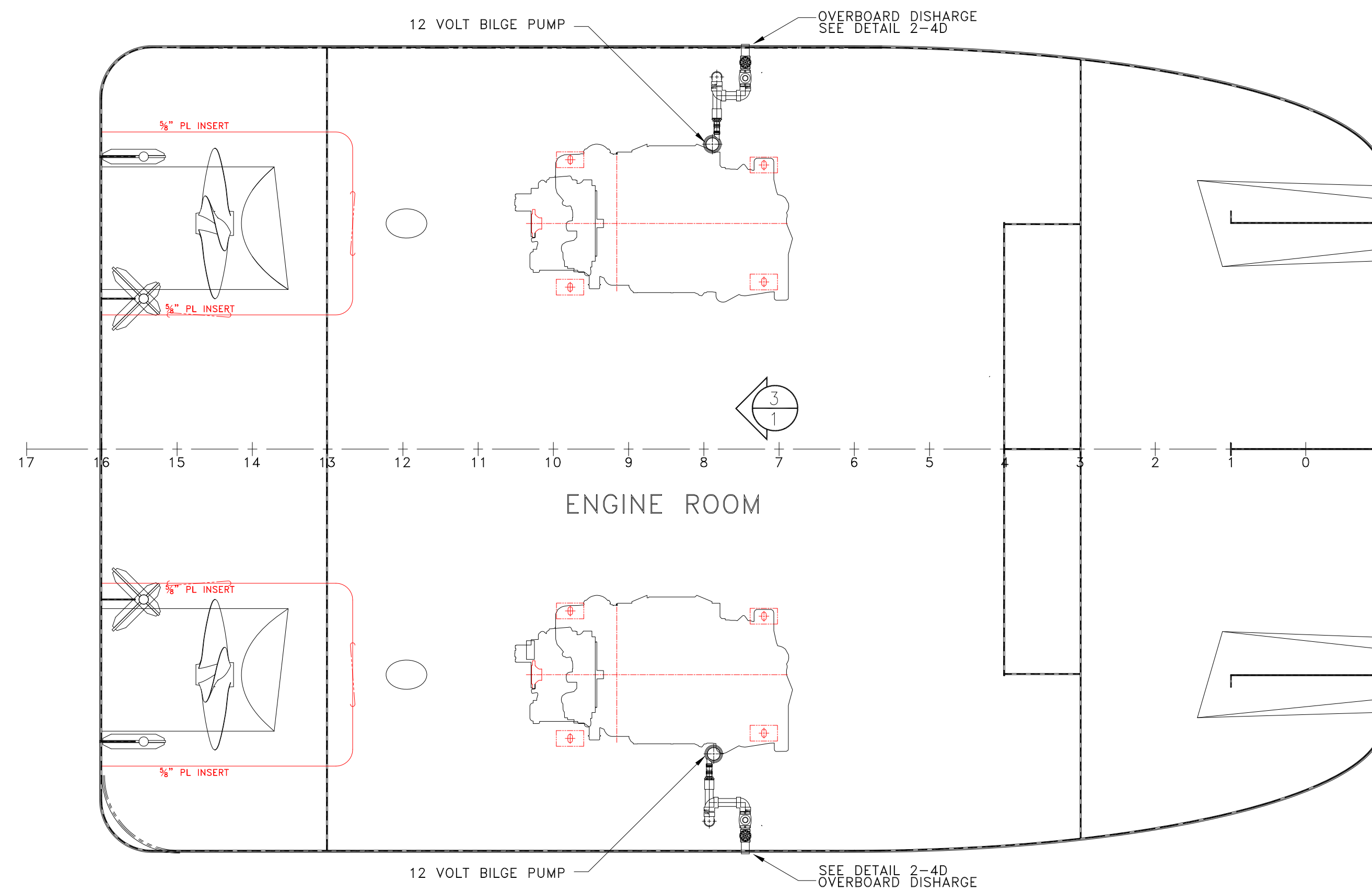


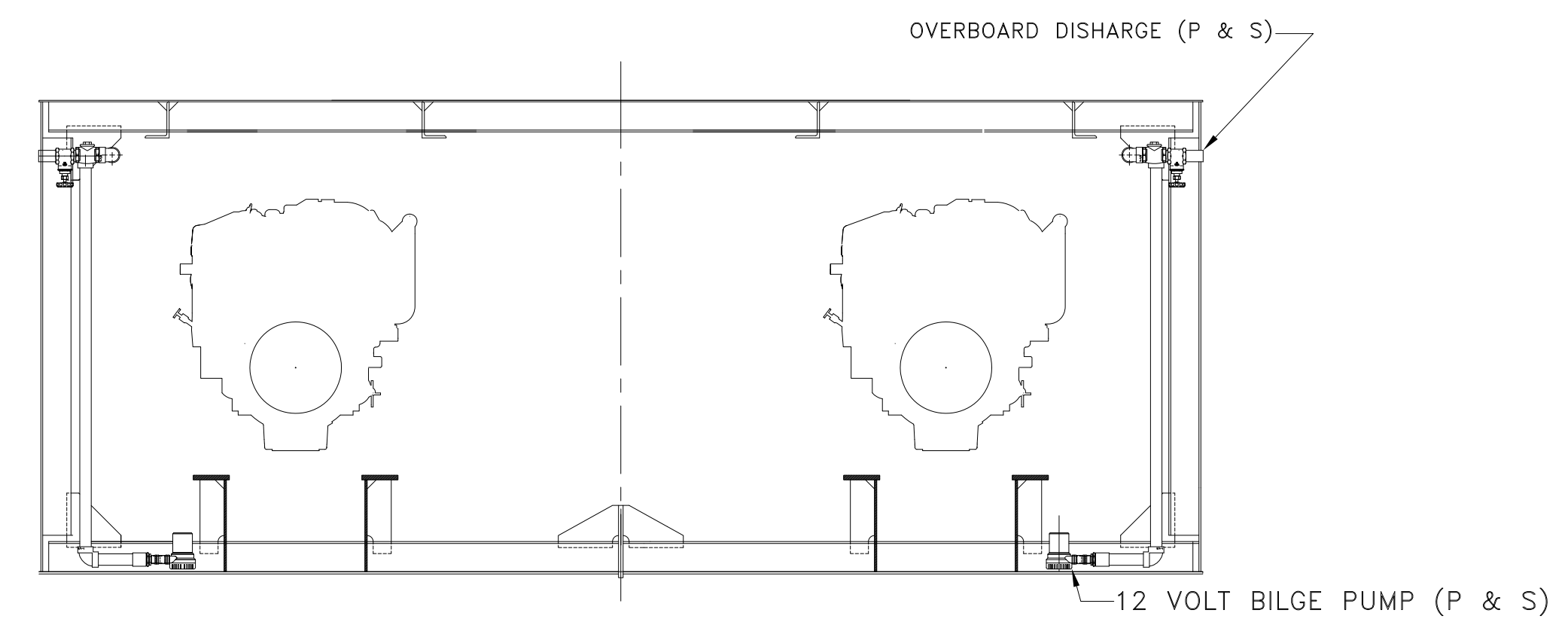
DIAGRAM 2-1A
BILGE SYSTEM PIPING SCHEMATIC



DETAIL 2-1E
12 VOLT PUMP CONNECTION
NO SCALE



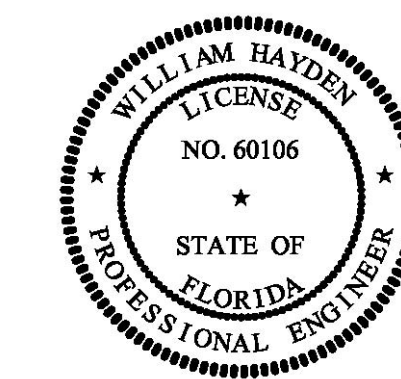
HOLD



1 12 VOLT BILGE PUMP PIPING
SCALE: 1/2" = 1'-0"

GENERAL NOTES

NO.	DESCRIPTION
1.	MATERIAL AND WORKMANSHIP SHALL CONFORM TO U.S. COAST GUARD REQUIREMENTS FOR SUBCHAPTER "M" VESSELS.
2.	THIS DRAWING IS DIAGRAMMATIC AND DOES NOT REPRESENT A COMPLETE DETAILED DESIGN. THE CONTRACTOR SHALL DEVELOP A DETAILED DESIGN THAT PROVIDES A FULLY FUNCTIONAL ARRANGEMENT SUITABLE FOR INSTALLATION, TAKING INTO ACCOUNT ALL FROM THE SHIP AND NECESSARY SYSTEM INTERFACES AND INTERFERENCES. DIMENSIONS SHALL BE VERIFIED MANUFACTURERS' CERTIFIED DRAWINGS AS APPROPRIATE.
3.	PIPING SHALL BE RUN AS DIRECTLY AS PRACTICABLE WITH A MINIMUM NUMBER OF BENDS AND FITTINGS AND WITH SUFFICIENT TAKE DOWN JOINTS TO PROVIDE FOR REMOVAL, INSPECTION, SERVICING AND REPLACEMENT OF EQUIPMENT.
4.	AVOID POCKETS IN THE PIPE LINES. BOSSES AND VALVES OR SCREWED PLUGS SHALL BE FITTED TO ENABLE COMPLETE DRAINING OF PIPES WHERE POCKETS DO OCCUR.
5.	PIPING SHALL BE ADEQUATELY SUPPORTED BY HANGERS IN ACCORDANCE WITH ASTM F708. HANGERS SHALL BE ATTACHED TO THE PIPE WITH BOLTED CLAMPS AND WELDED TO THE BASIC SHIP STRUCTURE. HANGERS SHALL NOT BE ATTACHED BY WELDING DIRECTLY TO PIPES.
6.	BOTH PUMPS SHALL BE CAPABLE OF REMOTE STARTING FROM THE BRIDGE.
7.	PIPING SHALL BE THOROUGHLY CLEANED BEFORE TESTING.
8.	VALVES 1-1/2" AND SMALLER SHALL BE THREADED.



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Title: 25'x16'x6.5' NCDOT PUSHBOAT
BILGE SYSTEM

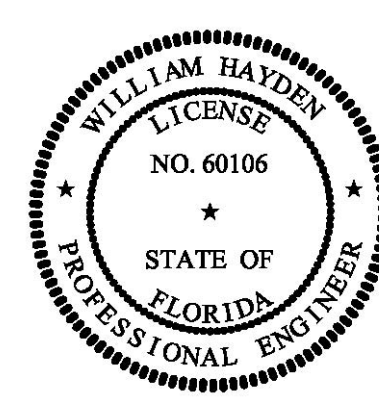
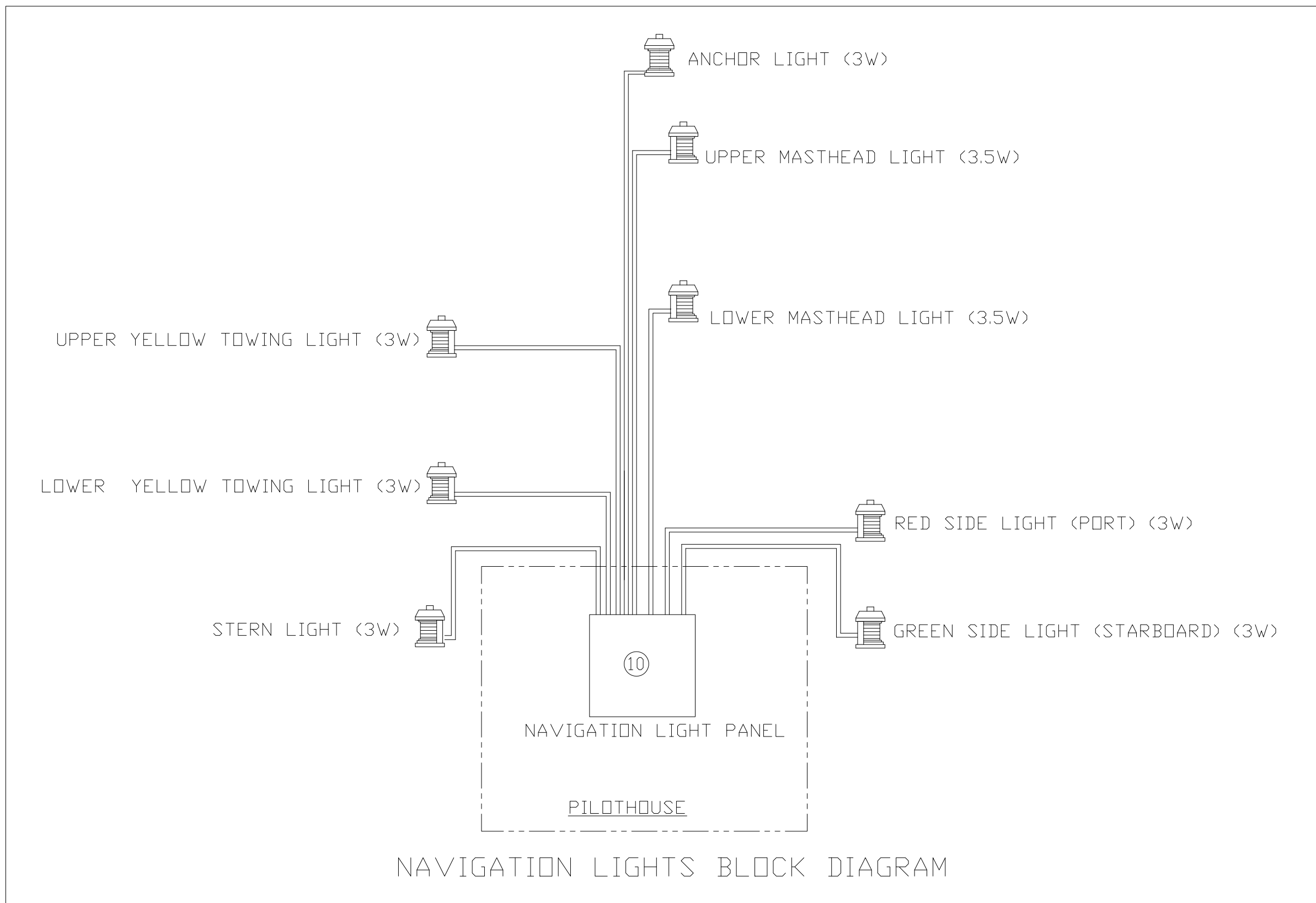
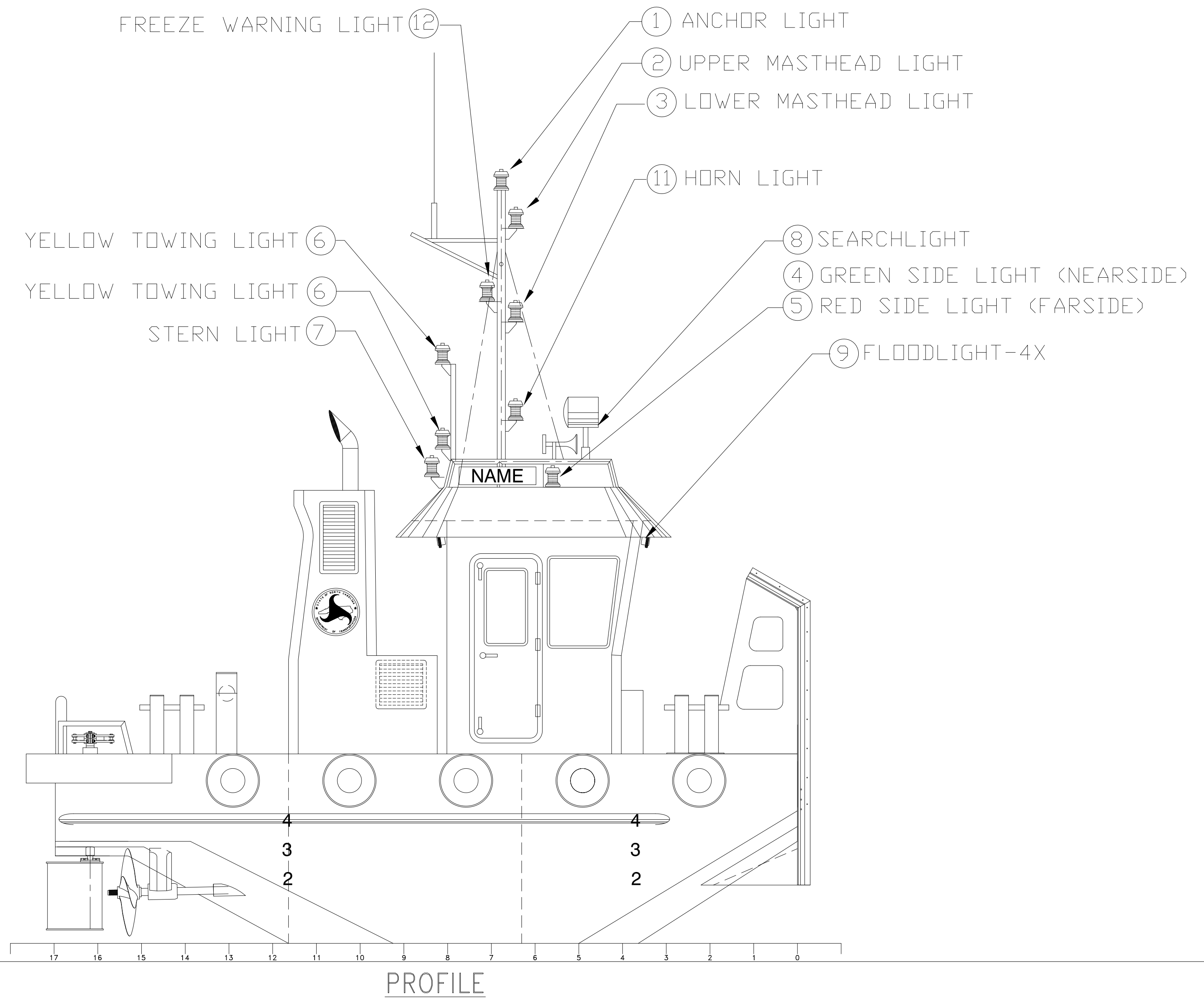
Dwg. No. **13-1393B-263** Alt. No. 0
 Sht. 2 of 2

Drawn By: JAH Date: JAN 2, 2019
 Checked By: _____ Date: _____
 App'd By: _____ Scale: 1/2" = 1'-0"
 ABS App'l: _____ USCG App'l: _____

BILL OF MATERIALS

LIGHTING FIXTURE SCHEDULE

ITEM	QTY.	DESCRIPTION	MANUFACTURER #	ARC	VISIBILITY	REMARKS
1	1	ANCHOR LIGHT - WHT ALL AROUND	PERKD 0210SWBDP1	360°	2 MILES	OR EQUAL
2	1	UPPER MASTHEAD LIGHT, LED	PERKD 0210MBDDP1	225°	3 MILES	OR EQUAL
3	1	LOWER MASTHEAD LIGHT, LED	PERKD 0210MBDDP1	225°	3 MILES	OR EQUAL
4	1	GREEN SIDE LIGHT, LED	PERKD 0210SDBDP1	112.5°	2 MILES	OR EQUAL
5	1	RED SIDE LIGHT, LED	PERKD 0210PDBDP1	112.5°	2 MILES	OR EQUAL
6	2	YELLOW TOWING LIGHTS, SINGLE LENS ,LED	PERKD 0210PDBDP1	135°	2 MILES	OR EQUAL
7	1	WHITE STERN LIGHT, LED	PERKD 0210SNBDP1	135°	2 MILES	OR EQUAL
8	1	SEARCHLIGHT, 8", 12 VOLT, SEALED BEAM CHROME PLATED, LEVER CONTROL	PERKD 0314C0812V			
9	4	FLOODLIGHT, LED, 1000 LUMEN	LUMITEC 101334			OR EQUAL
10	1	NAVIGATION LIGHT PANEL, 8 SINGLE LAMP CIRCUITS	J-BOX NLFM8S12VDC-PFA			OR EQUAL
11	1	HORN LIGHT - WHT ALL AROUND	PERKD 0210SWBDP1	360°	2 MILES	OR EQUAL
12	1	FREEZE WARNING LT - BLUE ALL AROUND	-	360°	2 MILES	24 VDC



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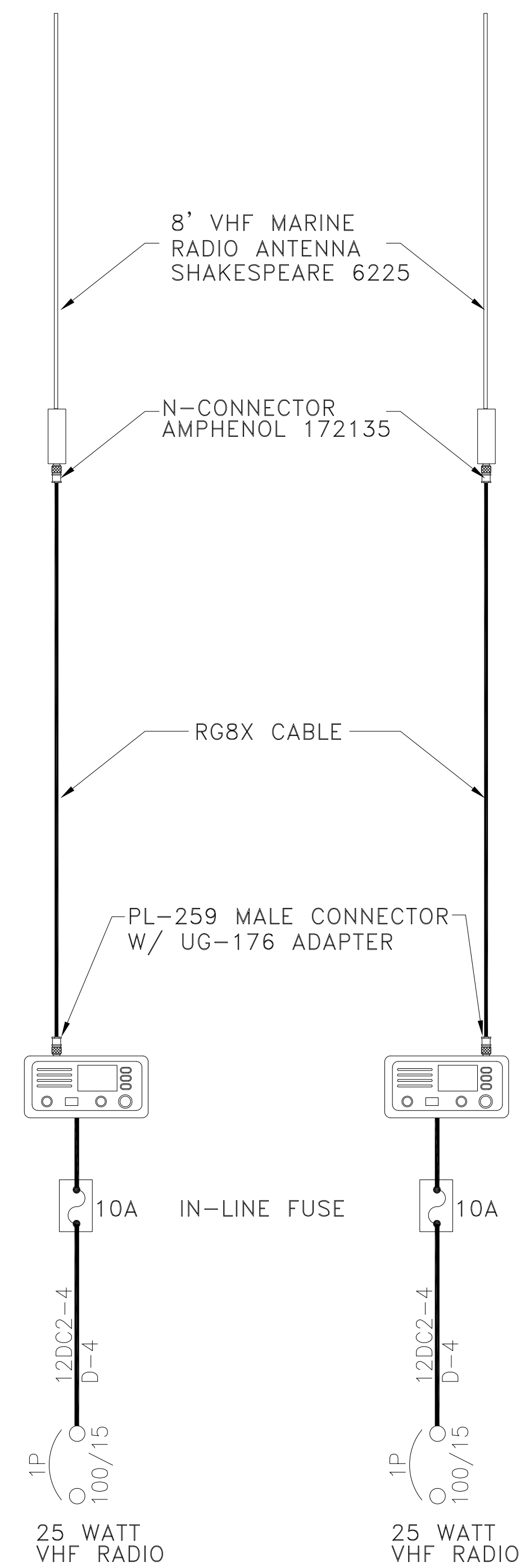
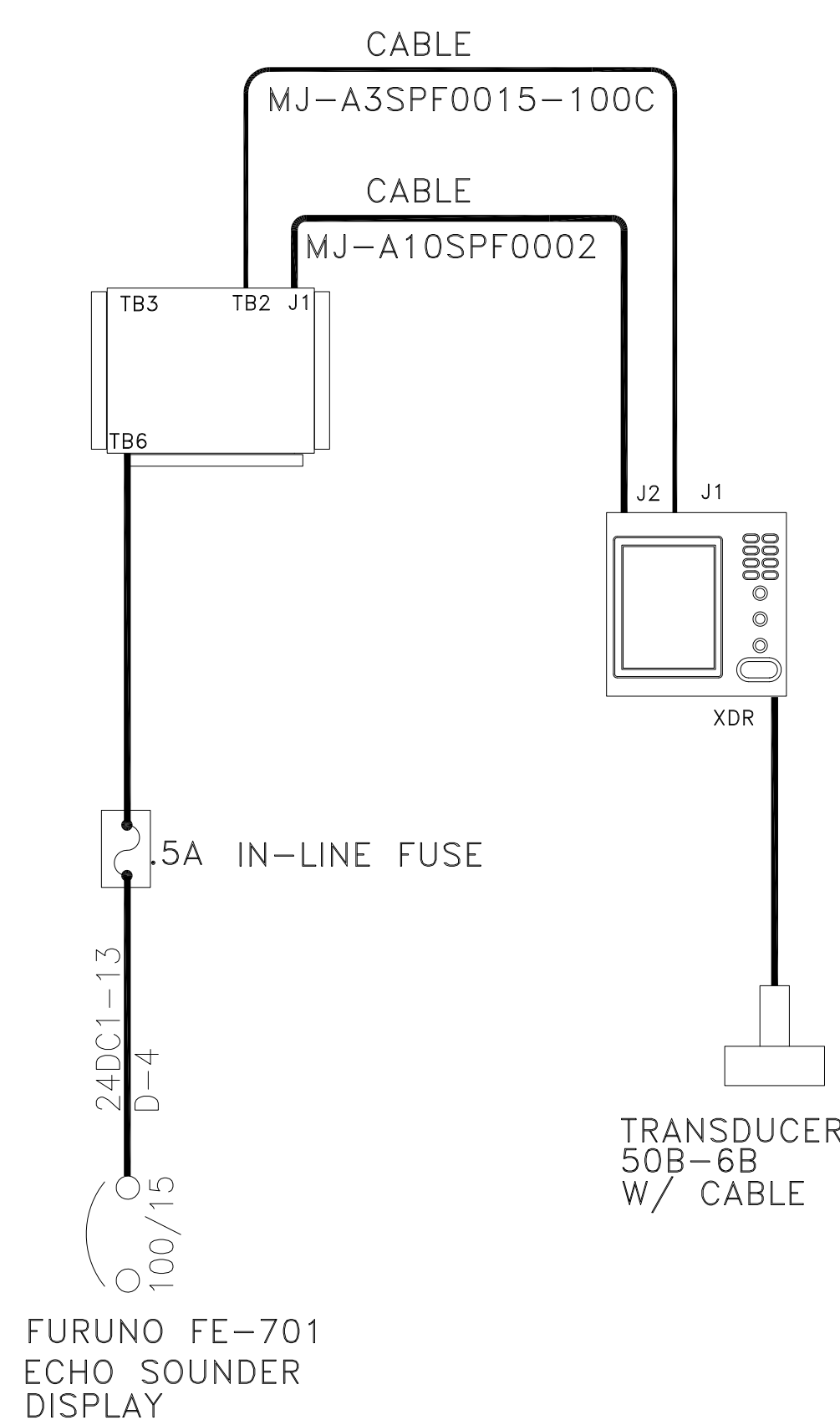
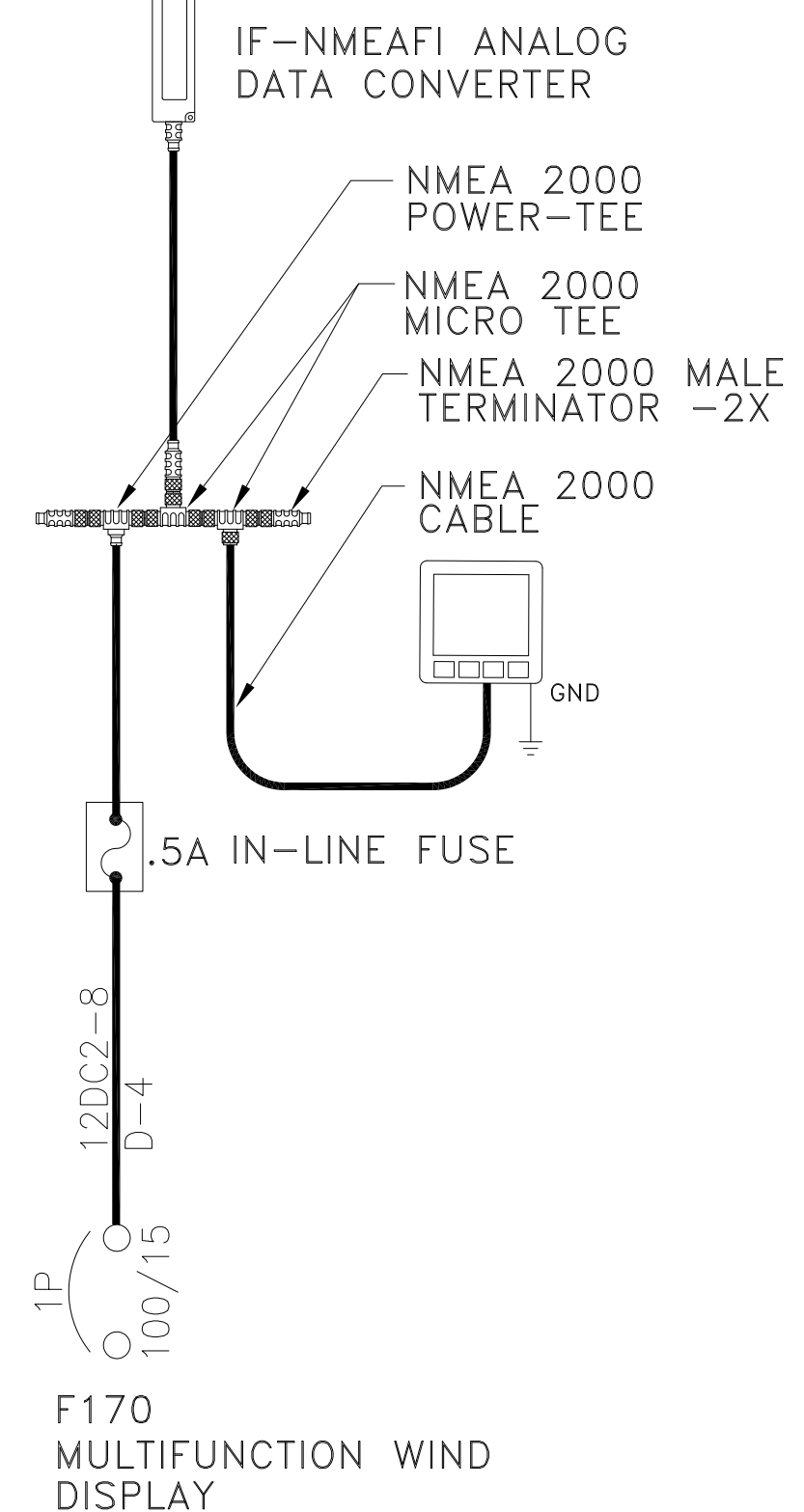
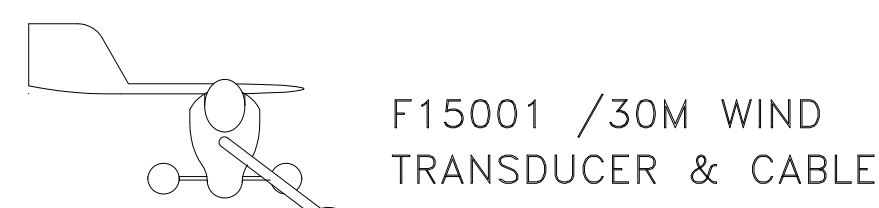
Title: 25.5'x16'x6.5' NCDOT PUSHBOAT

**NAVIGATION/SEARCH/FLOODLIGHTS
& NAV. LTS. BLOCK DIAGRAM**

Dwg. No. **1393B-422** Alt. No. 0
Sht. 1 of 1

Drawn By: **JACOB CONNALLY** Date: **JANUARY 2, 2019**
Checked By: _____ Date: _____
App'd By: _____ Scale: **1/2" = 1'-0"**
ABS App'l: _____ USCG App'l: _____

MATERIAL SCHEDULE				
SYMBOL	ITEM	QTY	DESCRIPTION	MFG
	1	1	CIRCUIT BREAKER X - POLES Y - FRAME SIZE Z - TRIP RATING	-
	2	1	WIND SPEED/DIRECTION TRANSDUCER & CABLE	FURUNO F15001
	3	1	ANALOG DATA CONVERTER	FURUNO IF-NMEAFI
	4	1	COLOR DISPLAY	FURUNO FI-70
	5	1	NMEA 2000 POWER TEE	-
	6	2	NMEA 2000 MICRO TEE	-
	6	2	NMEA 2000 TERMINATOR RESISTOR	-
	7	AR	IN-LINE FUSE	-
	12	1	ECHO SOUNDER DISPLAY	FURUNO FE-701
	13	1	TRANSDUCER W/ CABLE	FURUNO 50B-6B
	14	1	ECHO SOUNDER DISTRIBUTION BOX	FURUNO FE-702
	15	1	25 WATT VHF RADIO	-
-	16	AR	NMEA 2000 CABLE	-
-	17	AR	NMEA 0183 CABLE	-
-	18	1	SOUNDER POWER CABLE	MJ-A3SPF0015-100C
-	19	2	SOUNDER SIGNAL CABLE	MJ-A10SPF0002
-	20	2	8' VHF MARINE RADIO ANTENNA	SHAKESPEARE 6225
-	21	AR	RG8X CABLE	-
-	22	2	N-CONNECTOR	AMPHENOL 172135
-	23	2	PL-259 MALE CONNECTOR W/ UG-176 ADAPTER	-



- GENERAL NOTES -

NO.	DESCRIPTION
1	MATERIAL AND WORKMANSHIP SHALL CONFORM TO U.S. COAST GUARD REQUIREMENTS FOR SUBCHAPTER "M" VESSELS AND AMERICAN BUREAU OF SHIPPING RULES FOR BUILDING AND CLASSING STEEL VESSELS UNDER 90M.
2	ALL PERMANENTLY INSTALLED ELECTRICAL EQUIPMENT SHALL HAVE METAL ENCLOSURES PROPERLY GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, UNLESS NOTED OTHERWISE.
3	ALL POWER CABLE SHALL COMPLY WITH THE REQUIREMENTS OF IEEE 1580. ALL CABLE SHALL BE LOW SMOKE, ZERO HALOGEN TYPE, TRICAB OR EQUAL.
4	NYLON OR BRASS STUFFING TUBES SHALL BE USED WHEN PENETRATING ELECTRICAL ENCLOSURES OR JUNCTION BOXES.
5	RESIZE CABLE FOR LENGTH OF RUN OF DC CIRCUITS IF APPLICABLE.
6	ALL CABLES SHALL BE RATED AT 90°C CONDUCTOR TEMPERATURE IN ACCORDANCE WITH IEEE STANDARD NO. 45 2002 TABLE 25.
7	EACH CABLE SHALL BE TAGGED WITH ITS UNIQUE CIRCUIT DESIGNATION USING EMBOSSED ALUMINUM TAGS ON EACH SIDE OF PENETRATIONS AND INTO CONNECTION BOXES AND/OR EQUIPMENT.
8	METAL USED FOR TERMINAL STUDS, LUGS, NUTS, AND WASHERS SHALL BE CORROSION RESISTANT AND GALVANICALLY COMPATIBLE WITH THE WIRE AND TERMINAL LUGS.
9	WIRES TERMINATING IN EQUIPMENT SHALL BE ARRANGED TO PROVIDE A SURPLUS LENGTH OF WIRE SUFFICIENT TO ALLOW FOR DISCONNECTION, AND TO PERMIT MULTIPLE WIRES TO BE FORMED AT TERMINAL STUDS.
10	CABLE PENETRATIONS OF STRUCTURAL FIRE PROTECTION SHALL UTILIZE FIRE STOPS WHICH MAINTAIN THE FIRE PROTECTION LEVEL (GRADE A, B, ETC.) ASSOCIATED WITH THE FIRE ZONE PENETRATED.
11	CABLE PENETRATIONS THROUGH BULKHEADS AND DECKS, BOTH WATERTIGHT AND NON-WATERTIGHT, SHALL COMPLY WITH REGULATORY BODY REQUIREMENTS. MULTI-CABLE TRANSIT TYPE PENETRATIONS MAY BE SUBSTITUTED FOR STUFFING TUBES FOR ALL PENETRATIONS EXCEPT THROUGH OPEN DECKS. EXTRA HEAVY, LOW ALLOY KICK PIPES WITH STUFFING TUBES, OR EQUIVALENT, SHALL BE WELDED INTO ALL OPEN DECKS AND SHALL BE NINE INCHES HIGH TO TOP OF THE STUFFING TUBE. BUILT-IN WATERTIGHT BOXES MAY BE USED IN LIEU OF KICK PIPES. POURED SEALERS SHALL NOT BE ALLOWED.

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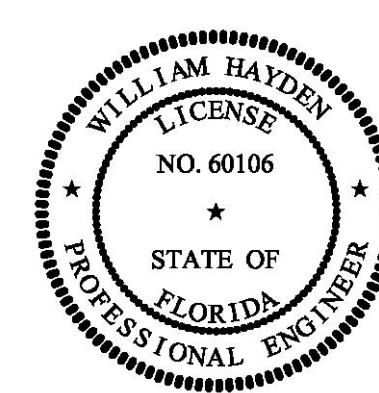
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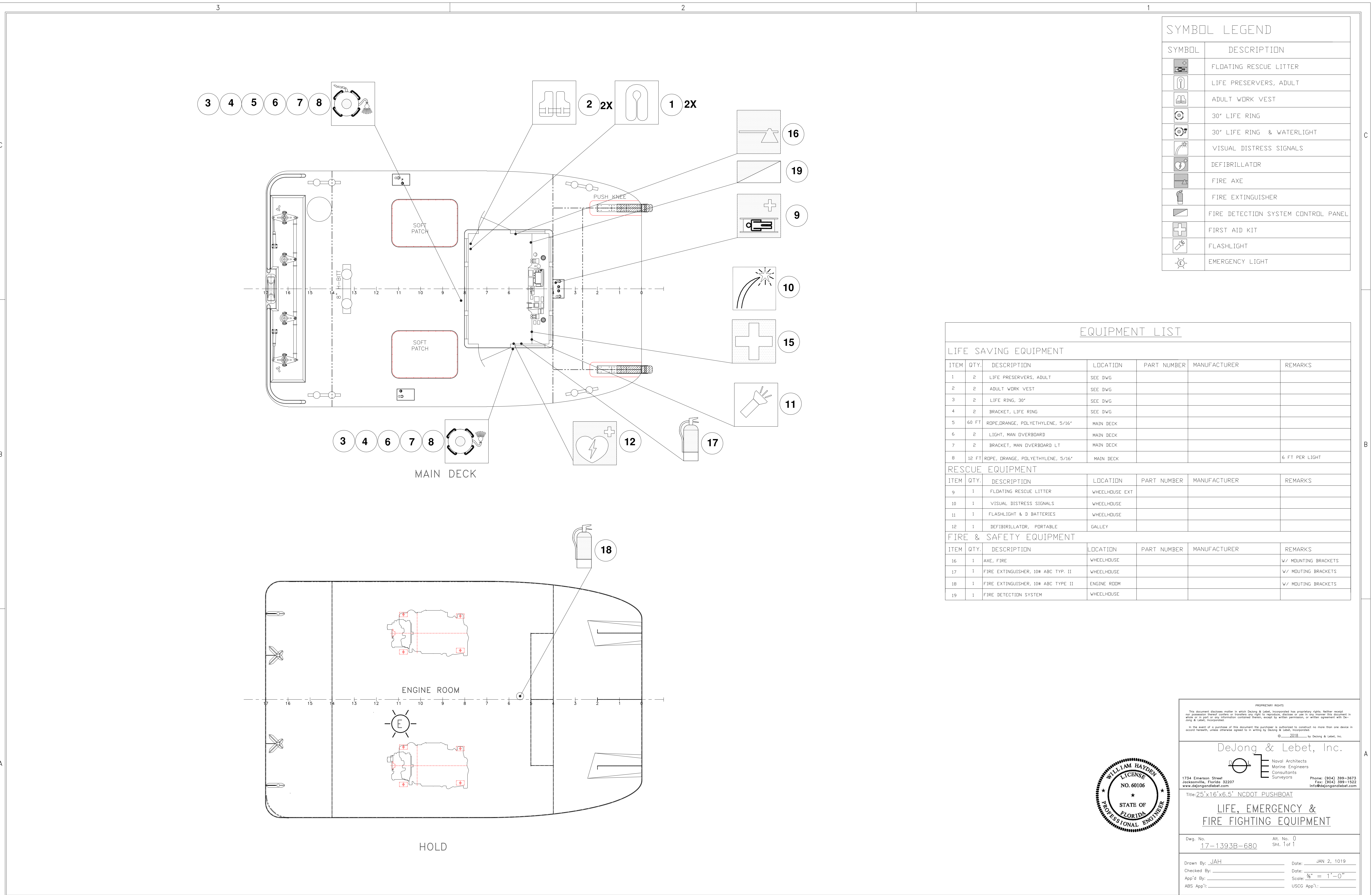
Title: 25.5'x16'x6.5' NCDOT PUSHBOAT

ELECTRONIC WIRING DIAGRAM

Dwg. No. 1393B-423 Alt. No. 0
Sh. 1 of 1

Drawn By: JACOB CONNALLY Date: JANUARY 2, 2019
Checked By: _____ Date: _____
App'd By: _____ Scale: NTS
ABS App'l: _____ USCG App'l: _____





SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	FLOATING RESCUE LITTER
	LIFE PRESERVERS, ADULT
	ADULT WORK VEST
	30" LIFE RING
	30" LIFE RING & WATERLIGHT
	VISUAL DISTRESS SIGNALS
	DEFIBRILLATOR
	FIRE AXE
	FIRE EXTINGUISHER
	FIRE DETECTION SYSTEM CONTROL PANEL
	FIRST AID KIT
	FLASHLIGHT
	EMERGENCY LIGHT

EQUIPMENT LIST						
LIFE SAVING EQUIPMENT						
ITEM	QTY.	DESCRIPTION	LOCATION	PART NUMBER	MANUFACTURER	REMARKS
1	2	LIFE PRESERVERS, ADULT	SEE DWG			
2	2	ADULT WORK VEST	SEE DWG			
3	2	LIFE RING, 30"	SEE DWG			
4	2	BRACKET, LIFE RING	SEE DWG			
5	60 FT	ROPE, ORANGE, POLYETHYLENE, 5/16"	MAIN DECK			
6	2	LIGHT, MAN OVERBOARD	MAIN DECK			
7	2	BRACKET, MAN OVERBOARD LT	MAIN DECK			
8	12 FT	ROPE, ORANGE, POLYETHYLENE, 5/16"	MAIN DECK			6 FT PER LIGHT
RESCUE EQUIPMENT						
ITEM	QTY.	DESCRIPTION	LOCATION	PART NUMBER	MANUFACTURER	REMARKS
9	1	FLOATING RESCUE LITTER	WHEELHOUSE EXT			
10	1	VISUAL DISTRESS SIGNALS	WHEELHOUSE			
11	1	FLASHLIGHT & D BATTERIES	WHEELHOUSE			
12	1	DEFIBRILLATOR, PORTABLE	GALLEY			
FIRE & SAFETY EQUIPMENT						
ITEM	QTY.	DESCRIPTION	LOCATION	PART NUMBER	MANUFACTURER	REMARKS
16	1	AXE, FIRE	WHEELHOUSE			W/ MOUNTING BRACKETS
17	1	FIRE EXTINGUISHER, 10# ABC TYP. II	WHEELHOUSE			W/ MOUNTING BRACKETS
18	1	FIRE EXTINGUISHER, 10# ABC TYPE II	ENGINE ROOM			W/ MOUNTING BRACKETS
19	1	FIRE DETECTION SYSTEM	WHEELHOUSE			

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Title: 25'x16'x6.5' NCDOT PUSHBOAT

LIFE, EMERGENCY &
 FIRE FIGHTING EQUIPMENT

Dwg. No. 17-1393B-680	Alt. No. 0	Sht. 1 of 1
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Drawn By: JAH	Date: JAN 2, 2019
Checked By: _____	Date: _____
App'd By: _____	Scale: 3/8" = 1'-0"
ABS App'l: _____	USCG App'l: _____

