CHATHAM AREA TRANSIT AUTHORITY IFB 2024-06, ADDENDUM NO. 1

DATE: March 14, 2024
ORIGINAL IFB NUMBER: 2024-06
PROJECT: CAT Hybrid Ferry Vessels
This Addendum forms a part of the Invitation for Bid 2024-06 dated, February 5, 2024.

Questions posed during initial Q&A Period and CAT's Responses:

Question 1: Would CAT consider an alternative, USCG subchapter T, design that would meet or exceed the provided design?

a. If you are open to another design, what is the maximum beam, draft, and LOA that can be accommodated at the CAT docks?

Response: The IFB drawings provided is what we are looking for in the built of the vessels, any additional suggestions are welcomed however the Naval engineering plans prevail.

a. We currently do not have a max beam limitations. The draft could not comfortably exceed 8ft due to the future depth of our slip once it gets dredged. I would say the LOA should not exceed 70ft.

Question 2: Vessel proposals require significant amounts of time and resources to properly develop. We have found that the cost of hybrid vessels has surprised several potential buyers and led to outright cancellations of IFBs. Will CAT please provide an estimated budgetary range for this vessel? We are not looking for a firm number, but rather a general estimated range would be incredibly helpful to potential shipyards.

Response: Five to six million estimated budget.

Question 3: Does CAT have any intention of upgrading their shore power infrastructure? If so, would it be an upgrade to two, 480-volt 3 phase 100-amp legs, or would it be additional 240-volt single phase 100-amp legs?

Response: The specifications we prefer that the secondary output is a 3phase 120/208VAC and capable of handling the full charge amps for the 2 boats. Each Boat will have 2 shore plug 5pin 100A, so the xfmr shall provide a minimum of 400A or 150KVA.

Question 4: What are CAT's future plans for shoreside charging?

Response : We are currently working with our partners to ensure we will have the capacity and capability to charge any future hybrid ferries.

Question 5: Can the design specifications be modified to prepare for future charging capabilities (e.g. shore-power transformer capacity, ESS size, generator size)?

Response: At this time, it is unknown exactly what are charging capabilities will be in the future so we cannot answer this question.

Question 6: Is CAT interested in adding a "data transparency and accessibility" clause to ensure a data analysis and access portal will be provided by OEMs and the builder?

Response: Yes, CAT is interested in the data transparency and accessibility.

Question 7: Is CAT interested in changing the window specification from "Aluminum frame" to direct glazed?

Response: Yes, CAT would prefer the change to direct glazed.

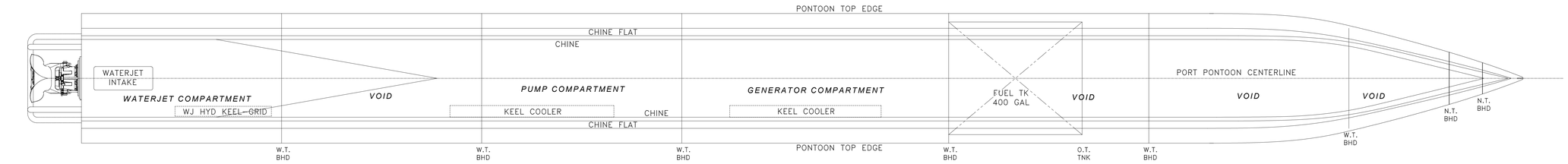
Question 8: Is CAT interested in specifying solar panels for the unused cabin top roof space?

Response: It would be accepted as an option, cost of the capabilities taken into consideration.

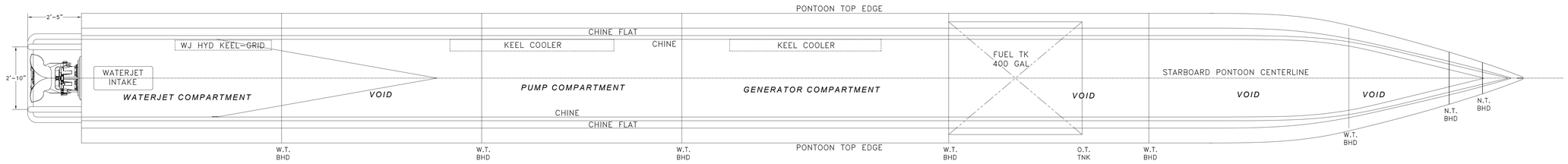
Question 9: Can you please provide me with Dwg. #22-1477-5001 & 5002 that is referenced in the outline specifications for the 65'X21'-4" Passenger Vessel.

Response: See Plans attached #22-1477-5000 – 5002.

END OF ADDENDUM NO. 1



PLAN VIEW

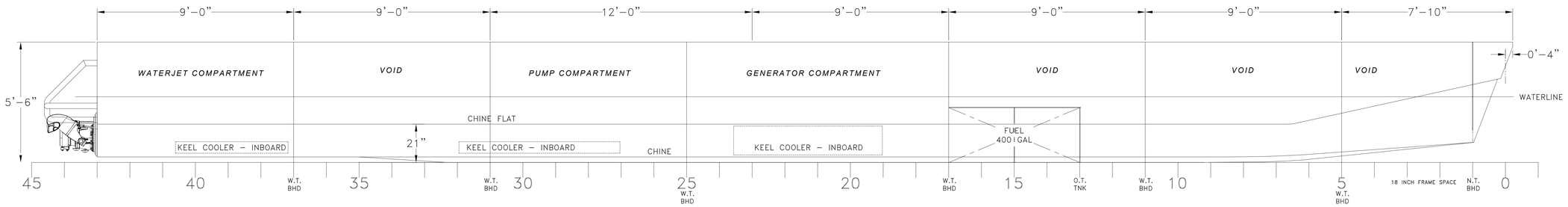


NOTES:
1. ALL MEASUREMENTS IN FEET & INCHES
2. FRAME SPACING IS 18 INCHES
3. KEEL COOLER INSETS INBOARD

VESSEL PARTICULARS

SMALL PASSENGER CATAMARAN VESSEL (T)
LENGTH: 65FT
BEAM: 22FT
DISPLACEMENT: 45LT

PASSENGERS: 150
CREW: 2



PROFILE VIEW

– GENERAL NOTES –		– ALTERATIONS –				– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A. APPROVED; S. SUBMITTED; R. REVISED

– DRAWING SUBMITTALS –

	OWNERS	MSC–USCG	ALT. NO.
5			
4			
3			
2			
1			
0	S/8.4.22/E		
P			

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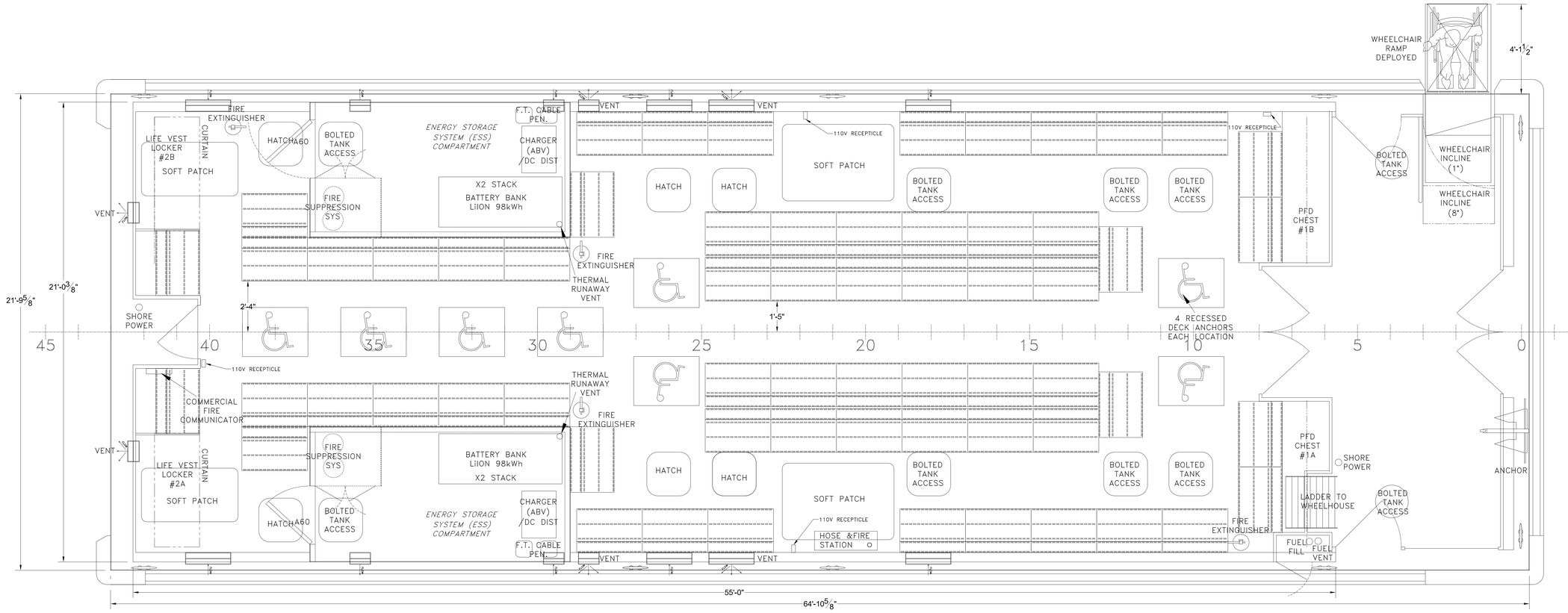
info@dejongandlebet.com

Title: 65' PASSENGER FERRY (ELECTRIC)
LINES PLAN

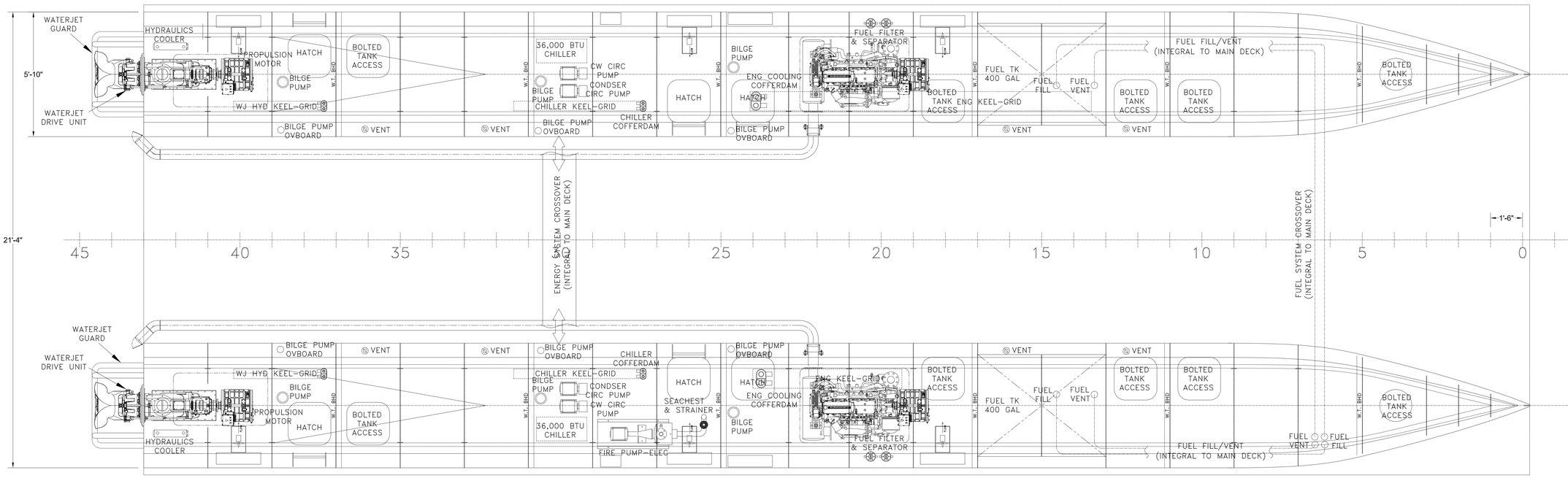
Dwg. No. 22-1477-0202
Alt. No. 0
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU
Date: 10 MAY 2022
Checked By:
Date:
App'd By:
Scale: ½" = 1'-0"
ABS App'l:
USCG App'l.:

ANSI-E (34"x44")



MAIN DECK PLAN VIEW
124 SEATS + 8 ADA + 18 STANDING



HOLD PLAN VIEW

– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION	NO.	DESCRIPTION
		1.	GENERIC PART DESIGNATIONS	8.12.22 JS				

CODE: 1 – RECEIVED; 2 – RETURNED; 3 – APPROVED; 4 – APPROVED; 5 – COMMENTED; 6 – PRELIMINARY; P

– DRAWING SUBMITTALS –			
	OWNERS	MSC–USCG	ALT. NO.
S/08.12.22/E			5
S/08.04.22/E			4
P/06.09.22/E			3
			2
			1
			0
			P

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info@dejongandlebet.com

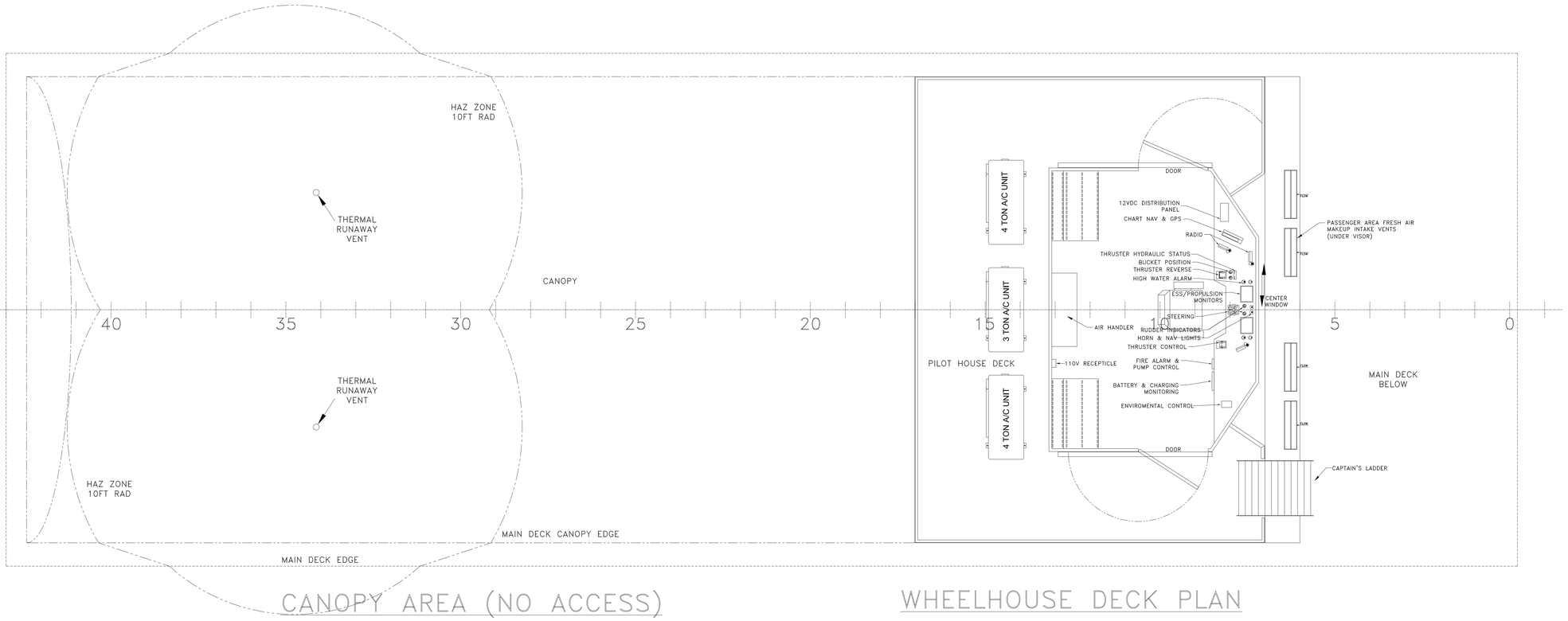
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

GENERAL ARRANGEMENT

Dwg. No. 22–1477–1001 | Alt. No. 1 | Sht. 1 OF 3

Drawn By: BRIAN BOUDREAU | Date: 16 MAY 2022
Checked By: | Date:
App'd By: | Scale: ½"=1'–0"
ABS App'l: | USCG App'l:

ANSI–E (34"x44")



CANOPY AREA (NO ACCESS)

WHEELHOUSE DECK PLAN

– GENERAL NOTES –

NO.	DESCRIPTION

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION

CODE: A –APPROVED; C –COMPLETED; P –PRELIMINARY; R –REVISED; X –RETURNED

– DRAWING SUBMITTALS –

	OWNERS	MSC–USCG	ALT. NO.
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S/08.04.22/E			4
P/06.09.22/E			3
			2
			1
			0
			P

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Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

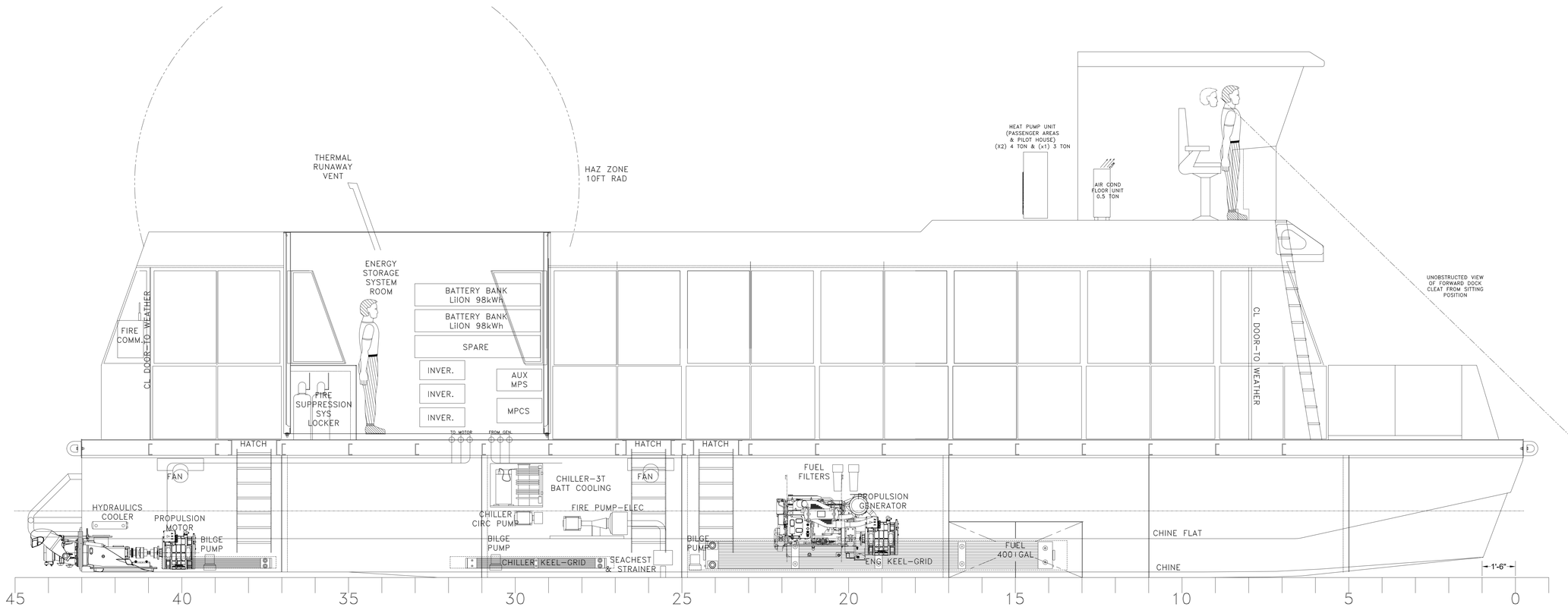
GENERAL ARRANGEMENT

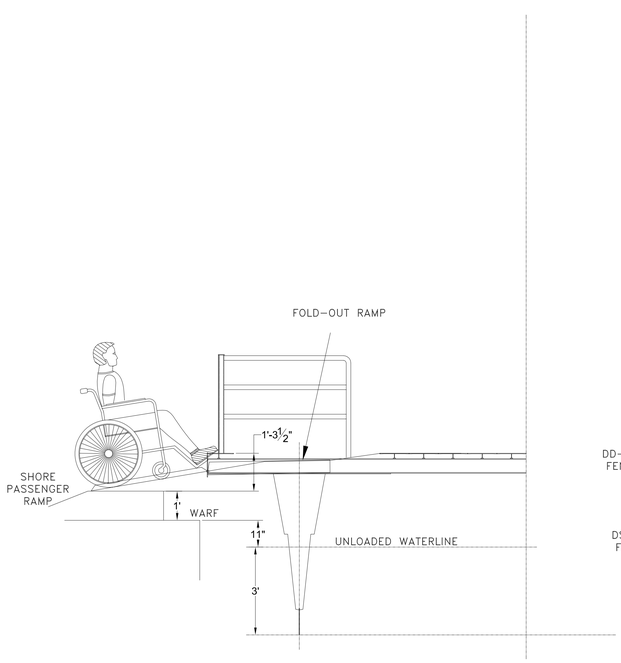
Dwg. No. 22–1477–1001

Alt. No. 1
Sht. 2 OF 3

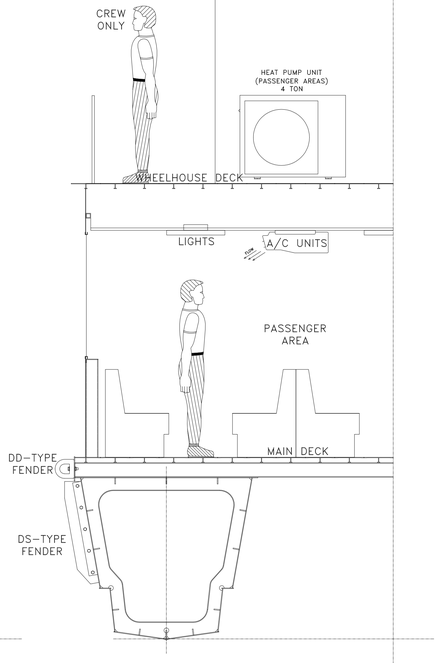
Drawn By: BRIAN BOUDREAU — Date: 16 MAY 2022
Checked By: — Date:
App'd By: — Scale: ½"=1'–0"
ABS App'l: — USCG App'l.:

ANSI–E (34"x44")

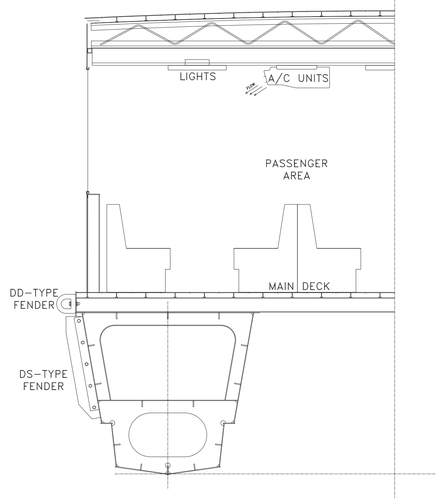




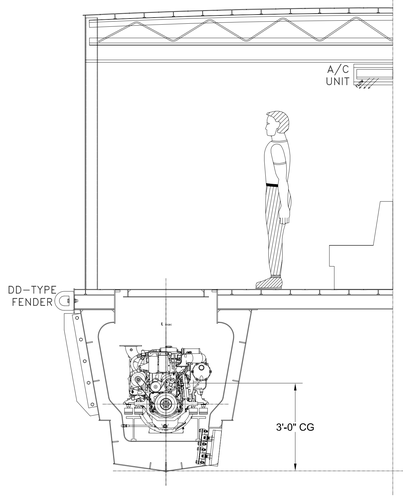
FORWARD BOARDING



TYPICAL RING FRAME



FRAME IWO
FO TANK



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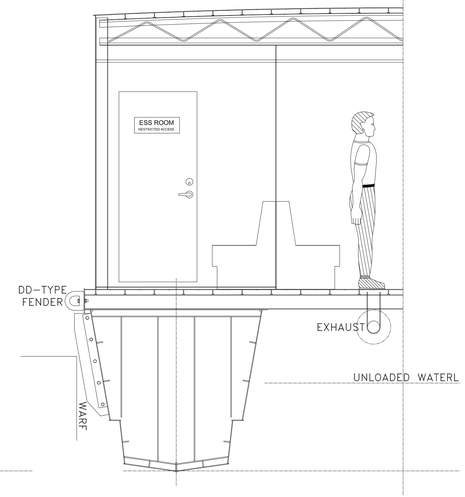
MAIN GENSET



TYPICAL
W.T. BHD

– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION	NO.	DESCRIPTION
		1.	GENERIC PART DESIGNATIONS	8.12.22 JS				

CODE: a – APPROVED; b – CERTIFIED; c – PRELIMINARY; d – AS-BUILT; e – RETURNED

– DRAWING SUBMITTALS –			
	OWNERS	MSC-USCG	ALT. NO.
P/06.09.22/E			P
S/08.04.22/E			0
S/08.12.22/E			1
			2
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			5

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Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

GENERAL ARRANGEMENT

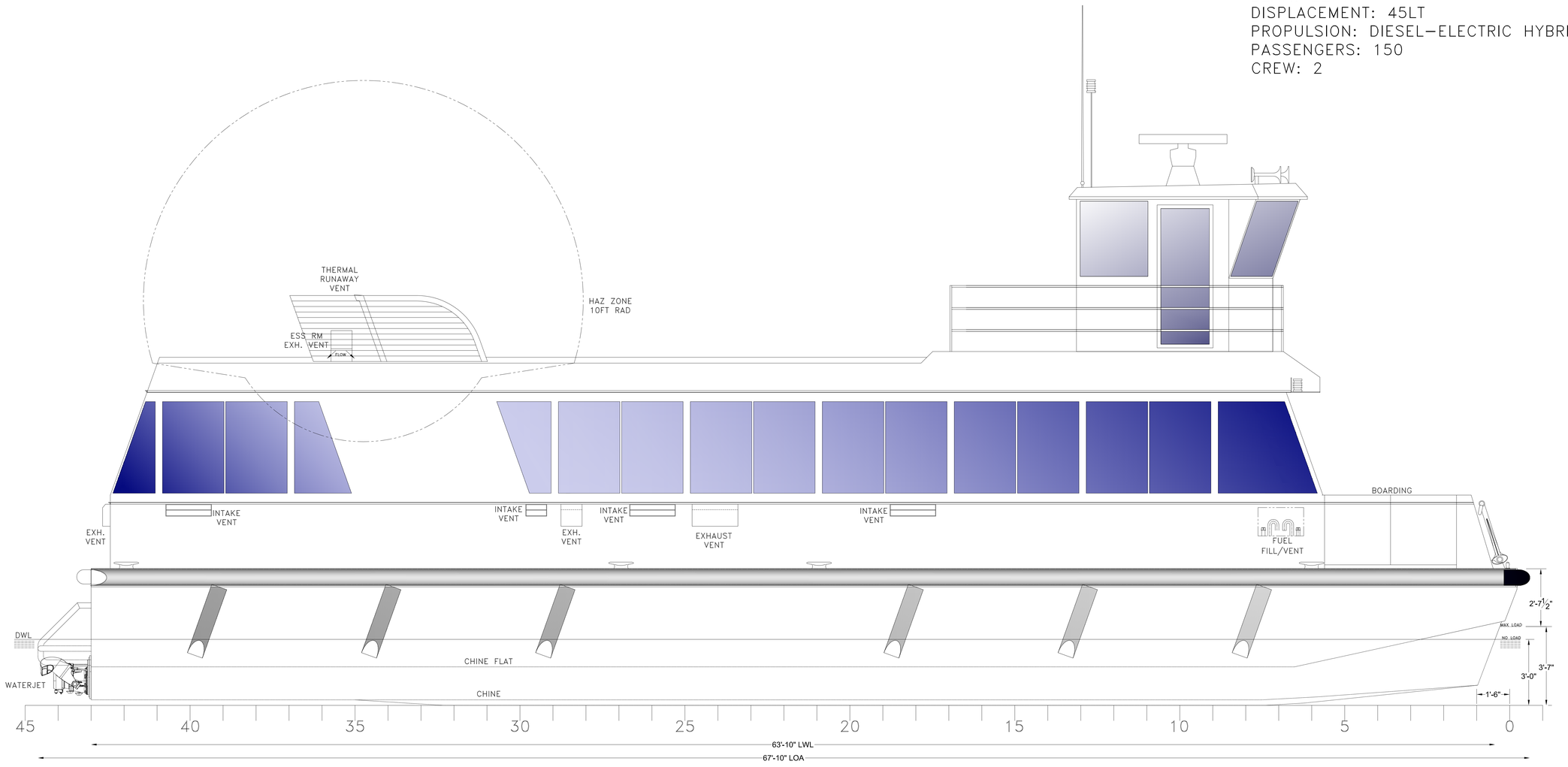
Dwg. No. 22-1477-1001
Alt. No. 1
Sht. 3 OF 3

Drawn By: BRIAN BOUDREAU Date: 16 MAY 2022
Checked By: Date:
App'd By: Scale: ½"=1'-0"
ABS App'l: USCG App'l:

ANSI-E (34"x44")

VESSEL PARTICULARS

SMALL PASSENGER CATAMARAN VESSEL (T)
LOA: 67FT–10IN
LWL: 63FT–10IN
BEAM: 22FT
DISPLACEMENT: 45LT
PROPULSION: DIESEL–ELECTRIC HYBRID
PASSENGERS: 150
CREW: 2



– GENERAL NOTES –		– ALTERATIONS –				– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A – APPROVED; B – CERTIFIED; C – PRELIMINARY; D; E; F – REVISED; G – RETURNED

– DRAWING SUBMITTALS –

						5
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						1
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			S/08.04.22/E			P
			P/06.09.22/E			
			OWNERS	MSC–USCG	ALT. NO.	

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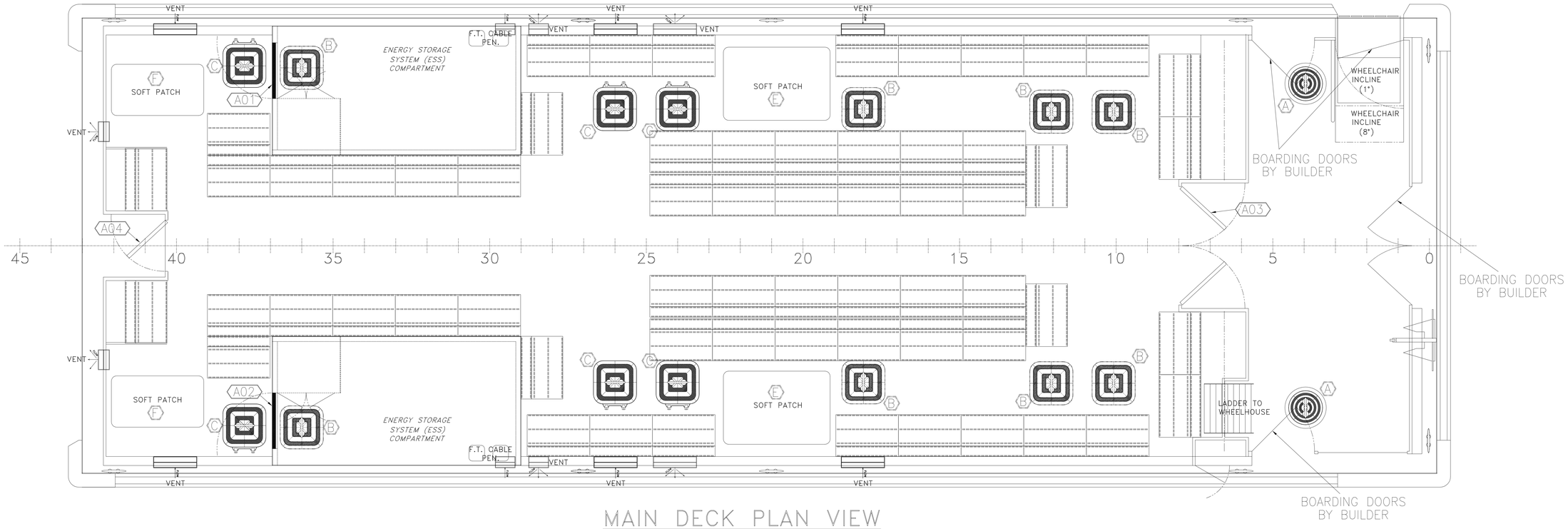
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

OUTBOARD PROFILE

Dwg. No. 22–1477–1009
Alt. No. 0
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU Date: 16 MAY 2022
Checked By: Date:
App'd By: Scale: ½"=1'–0"
ABS App'l: USCG App'l:

ANSI–E (34"x44")



MAIN DECK PLAN VIEW

VERIFY ALL HATCH AND DOOR LOCATIONS AND OPERATION WITH OWNER BEFORE INSTALL

LOCATION NOTE	ID#	NOMENCLATURE	FRAMES #OF PANELS	BHD THKNS	ELEV	HAND	FRAME TYPE	SILL TYPE	THRES-HOLD	CLEAR OPENING WIDTH	CLEAR OPENING HEIGHT	DOORS DOOR TYPE	MIN GA.	THICK.	INSERT GLASS	INSERT LOUVER	COVERING COLOR	COVERING TYPE	HARDWARE LOCK	HINGE	DOG	USCG RATING	THERMAL INSULATION	REMARKS SUGGESTED MFG & MODEL
															NOTE 2								NOTE 3	
PASSENGER DECK																								
STBD	A01	ENERGY STORAGE SYSTEM ROOM	1	4"	O	RH	F8	F8	S1	2'-8"	6'-8"	F	16	A15	N	N	WHT	PDR	Y	3	N	A-15	NA	
PORT	A02	ENERGY STORAGE SYSTEM ROOM	1	4"	O	LH	F8	F8	S1	2'-8"	6'-8"	F	16	A15	N	N	WHT	PDR	Y	3	N	A-15	NA	
CL	A03	FORWARD PASSENGER TO WEATHER	2	4"	O	BA	F10	B1	S2	5'-8"	7'-0"	FS	22	-	0.5	N	AL	NONE	Y	-	N	C	NR	
CL	A04	TRANSOM TO WEATHER	1	4"	O	RH	F10	B1	S2	2'-8"	7'-0"	FG	22	-	0.5	N	AL	NONE	Y	-	N	C	NR	
PILOTHOUSE DECK																								
P/S	B01	PILOTHOUSE (NOTE 4)	2	4"	O	LHR	F10	B1	S3	3'-6"	6'-8"	FG/FS	22	-	0.5	N	AL	NONE	Y	3	N	C	NR	

NOTES:

DIMENSIONS, THICKNESS, AND GAUGE ARE MINIMUM ACCEPTABLE. SY MAY COORDINATE WITH VENDOR FOR OPTIMAL AVAILABLE SPECS.

1 ENGINEERING SPACE (INCL. ENERGY STORAGE SYS SPACE) DOORS TO BE FITTED WITH ALARM LIGHT IN PILOT HOUSE PER 46CFR 170.255.

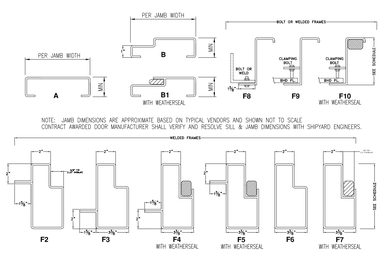
2 VERIFY GLASS DIMENSIONS AND THICKNESS WITH SHIPYARD ENGINEERS OR NAVAL ARCHITECT PRIOR TO FABRICATION.

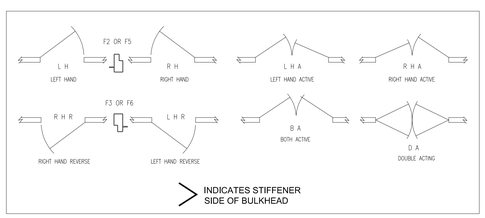
3 NR= NOT REQUIRED (THERMAL INSULATION A PLUS OR IF IN COTS DOOR IT NEED NOT BE REMOVED),
Y = REQUIRED, N=NOT INSULATED REQUIRED, NA= INSULATED TO FIRE RATING

4 BOTH PILOTHOUSE DOORS SWING AWAY DIRECTION OF EGRESS (LHR)

HATCH SCHEDULE

ID	DESCRIPTION	QUANTITY			NOTES
A	18" DIAMETER LIFT-OUT ALUMINUM W/ ALUM. WELD-IN FRAME, FLUSH W.T. HATCH, KNIFE EDGE SEAL	2			OR EQUAL, EXTERIOR DECK HATCHES WITH CAPTIVE S.S CABLE OR CHAIN. SHACKLE OR REMOVABLE LINKS
B	22"x22" SQUARE LIFT-OUT ALUMINUM W/ ALUM. WELD-IN FRAME, FLUSH W.T. HATCH, KNIFE EDGE SEAL	8			OR EQUAL, LOCATE TO OWNER'S SATISFACTION
C	22"x22" SQUARE HINGED ALUMINUM W/ ALUM. WELD-IN FRAME, FLUSH W.T. HATCH, KNIFE EDGE SEAL	4			OR EQUAL, LOCATE TO OWNER'S SATISFACTION
D	18"x23" OVAL RAISED ALUMINUM O.T. MULTI-BOLT M.H., FASTENERS: 304SS WITH NYLON INSERTS	5			OR EQUAL, LOCATE TO OWNER'S SATISFACTION
E	GENERATOR SOFTPATCH, CLEAR OPENING 5'-2" X 3'-6", FLUSH W.T. COVER, FASTENERS: 304SS WITH NYLON INSERTS	6			PATCH COVER TO MATCH STRENGTH AND TIGHTNESS OF INSTALLED DECK
F	WATERJET SOFTPATCH, CLEAR OPENING 4'-6" X 2'-6", FLUSH W.T. COVER, FASTENERS: 304SS WITH NYLON INSERTS	7			PATCH COVER TO MATCH STRENGTH AND TIGHTNESS OF INSTALLED DECK





A 18" DIAMETER LIFT-OUT AL. W/AL. WELD-IN FRAME FLUSH W.T. HATCH

B 22"x22" LIFT-OUT AL. W/AL. WELD IN FRAME, FLUSH W.T. HATCH

C 22"x22" HINGED AL. W/AL. WELD IN FRAME, FLUSH W.T. HATCH

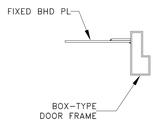
D 18"x23" RAISED ALUM. O.T. OR W.T. MULTI-BOLT MH

E 62"x42" W.T. SOFT PATCH, ALUM. PLATE

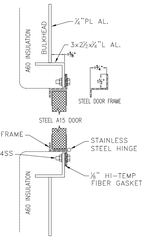
HATCH IDENTIFICATION

ALL ACCESSES MATCH THE TIGHTNESS RATING OF THE SURFACE IN WHICH THEY ARE INSTALLED.

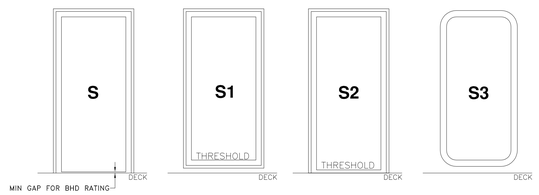
ALL ACCESSES QUICK ACTING EXCEPT MANHOLE COVERS FOR TANK ACCESS, SOFT PATCHES, AND HATCHES INTENDED FOR EQUIPMENT REMOVAL OR LOADING STORES.

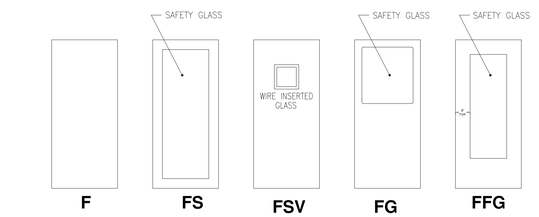


DETAIL A
TYPICAL DOOR FRAME WELD OPTION
–NOT TO SCALE–

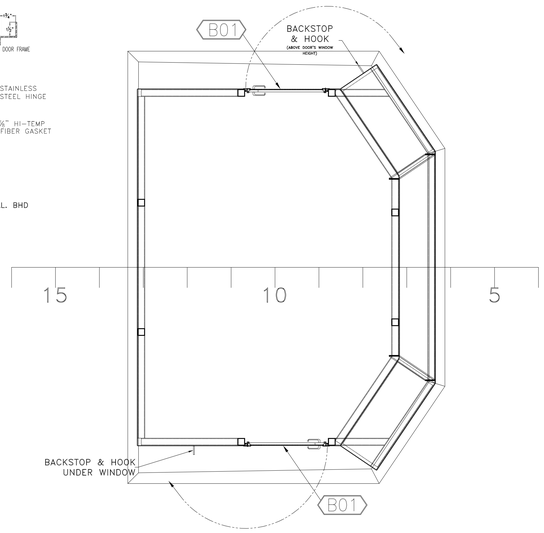


DETAIL B
A15 STEEL DOOR FRAME TO AL. BHD
LOCATION: ESS ROOM
–NOT TO SCALE–





VERIFY METAL, GLASS DIMENSIONS, AND NUMBER OF GLASS PANELS WITH OWNER AND NAVAL ARCHITECT PRIOR TO ORDERING.



PILOT HOUSE DECK

– GENERAL NOTES –

NO.	DESCRIPTION
1.	STARBOARD SECTIONS SHOWN. ALL PORT SECTIONS ARE MIRRORED ABOUT THE CENTERLINE AXIS.

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION

CODE: A – APPROVED; S – SUBMITTED – PRELIMINARY; R – REVISED; X – RETURNED

– DRAWING SUBMITTALS –

				5
				4
				3
				2
		S/08.12.22/E		1
		S/8.4.22/E		0
				P
		OWNERS	MSC–USCG	ALT. NO.

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Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

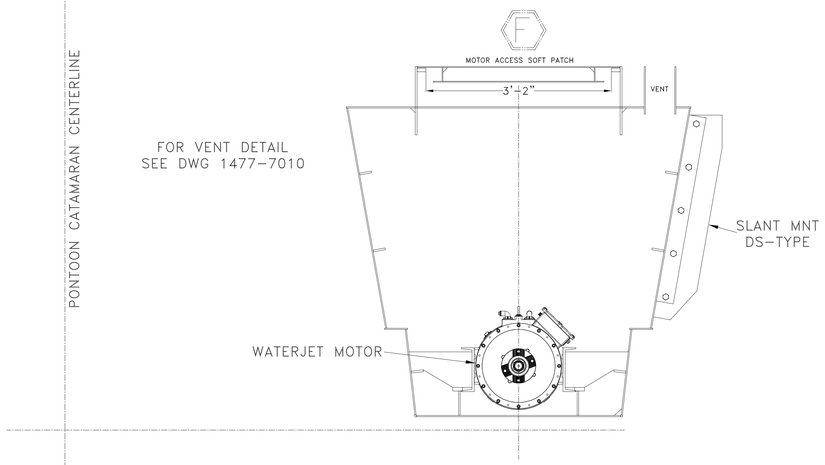
COMPARTMENT ACCESS PLAN

Dwg. No. 22-1477-1010

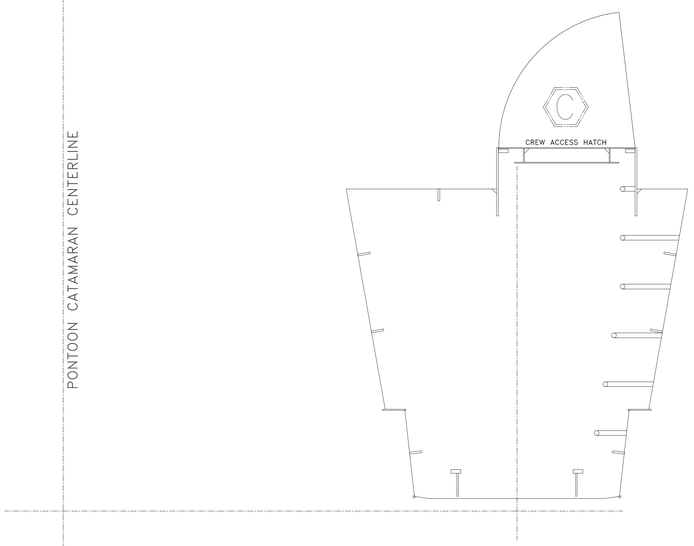
Alt. No. 1
Sht. 1 OF 3

Drawn By: BRIAN BOUDREAU Date: 27 MAY 2022
Checked By: Date:
App'd By: Scale: ½"=1'–0"
ABS App'l: USCG App'l.:

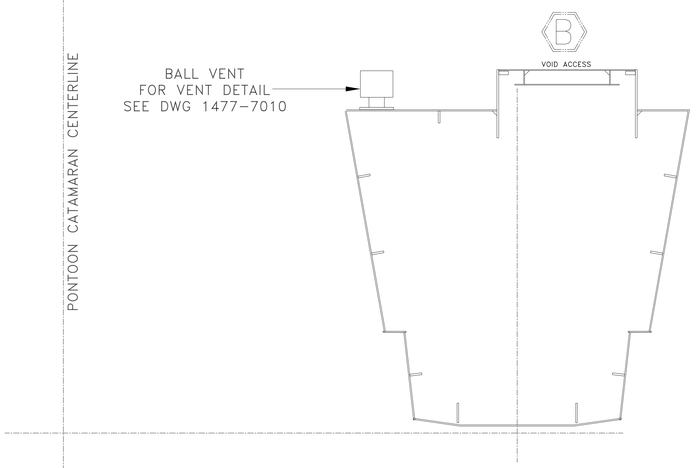
ANSI–E (34"x44")



section 40



section 38



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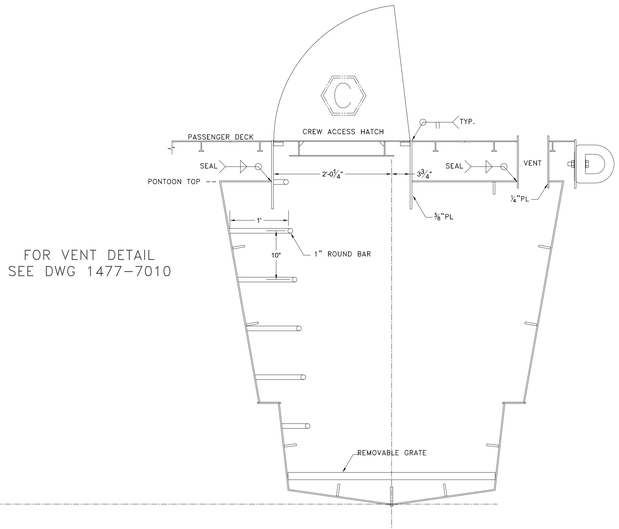

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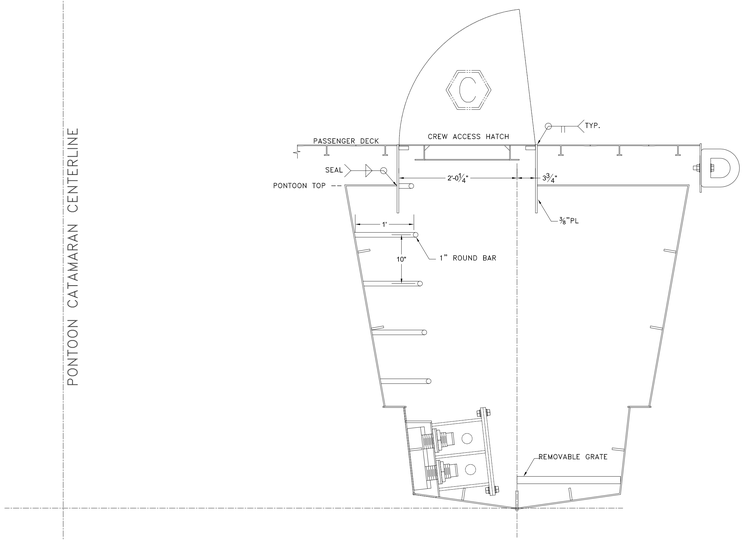

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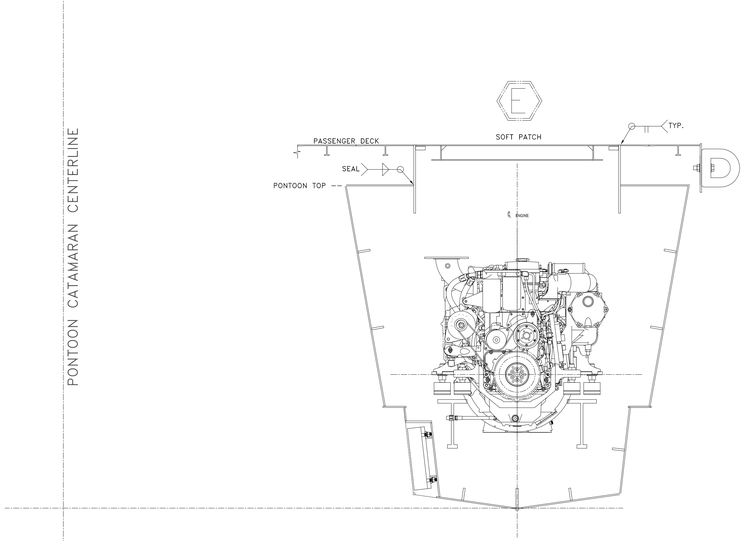

section 22

– GENERAL NOTES –

NO.	DESCRIPTION
1.	STARBOARD SECTIONS SHOWN. ALL PORT SECTIONS ARE MIRRORED ABOUT THE CENTERLINE AXIS.

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION

CODE: A –APPROVED; C –CHANGED; P –PRELIMINARY; R –RETURNED

– DRAWING SUBMITTALS –

	OWNERS	MSC–USCG	ALT. NO.
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info@dejongandlebet.com

Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

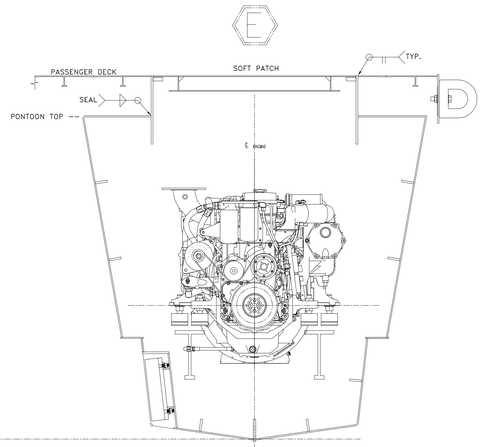
COMPARTMENT ACCESS PLAN

Dwg. No. 22-1477-1010
Alt. No. 0
Sht. 2 OF 3

Drawn By: BRIAN BOUDREAU Date: 27 MAY 2022
Checked By: Date:
App'd By: Scale: ½"=1'-0"
ABS App'l.: USCG App'l.:

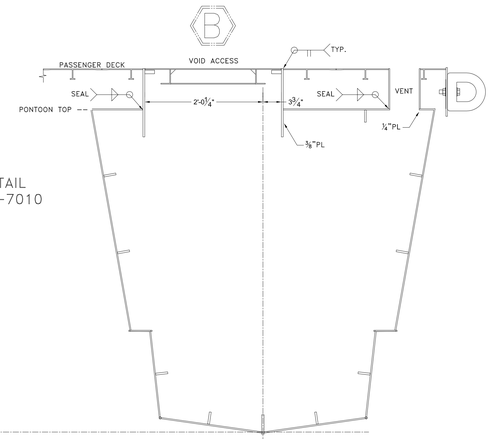
ANSI-E (34"x44")

PONTOON CATAMARAN CENTERLINE



section 20

PONTOON CATAMARAN CENTERLINE

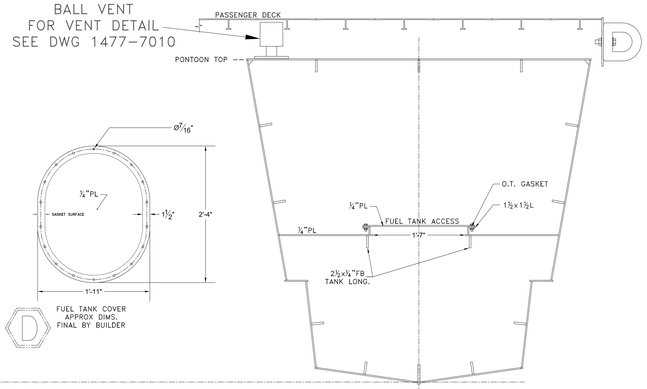


FOR VENT DETAIL
SEE DWG 1477-7010

section 18

PONTOON CATAMARAN CENTERLINE

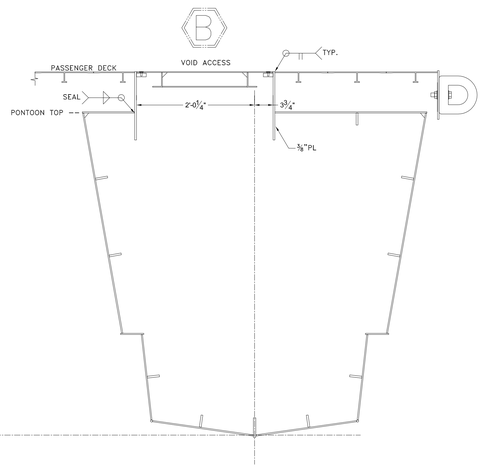
BALL VENT
FOR VENT DETAIL
SEE DWG 1477-7010



FOR OTHER FUEL TANK TOP
PENETRATION DETAIL
SEE DWG 1477-4055

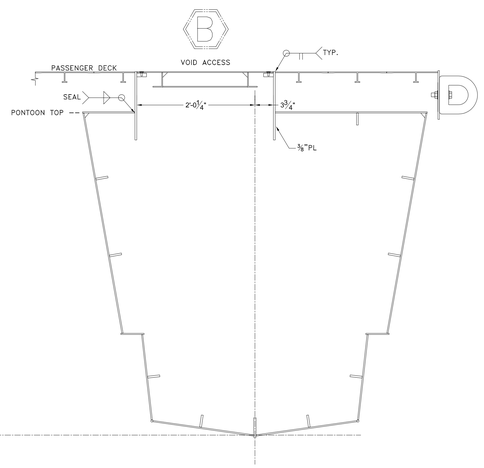
section 14

PONTOON CATAMARAN CENTERLINE



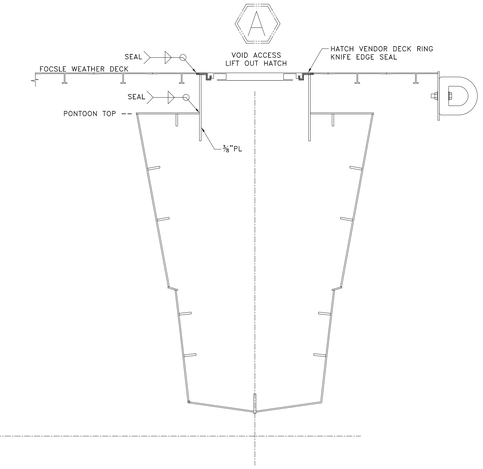
section 12

PONTOON CATAMARAN CENTERLINE



section 10

PONTOON CATAMARAN CENTERLINE



section 4

– GENERAL NOTES –	
NO.	DESCRIPTION
1.	STARBOARD SECTIONS SHOWN. ALL PORT SECTIONS ARE MIRRORED ABOUT THE CENTERLINE AXIS.

– ALTERATIONS –			
NO.	DESCRIPTION	DATE	BY

– RESERVATIONS –	
NO.	DESCRIPTION

– REFERENCES –	
NO.	DESCRIPTION

CODE: A – APPROVED; D – DRAWING; P – PRELIMINARY; R – RETURNED

– DRAWING SUBMITTALS –

	OWNERS	MSC-USCG	ALT. NO.
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P			

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

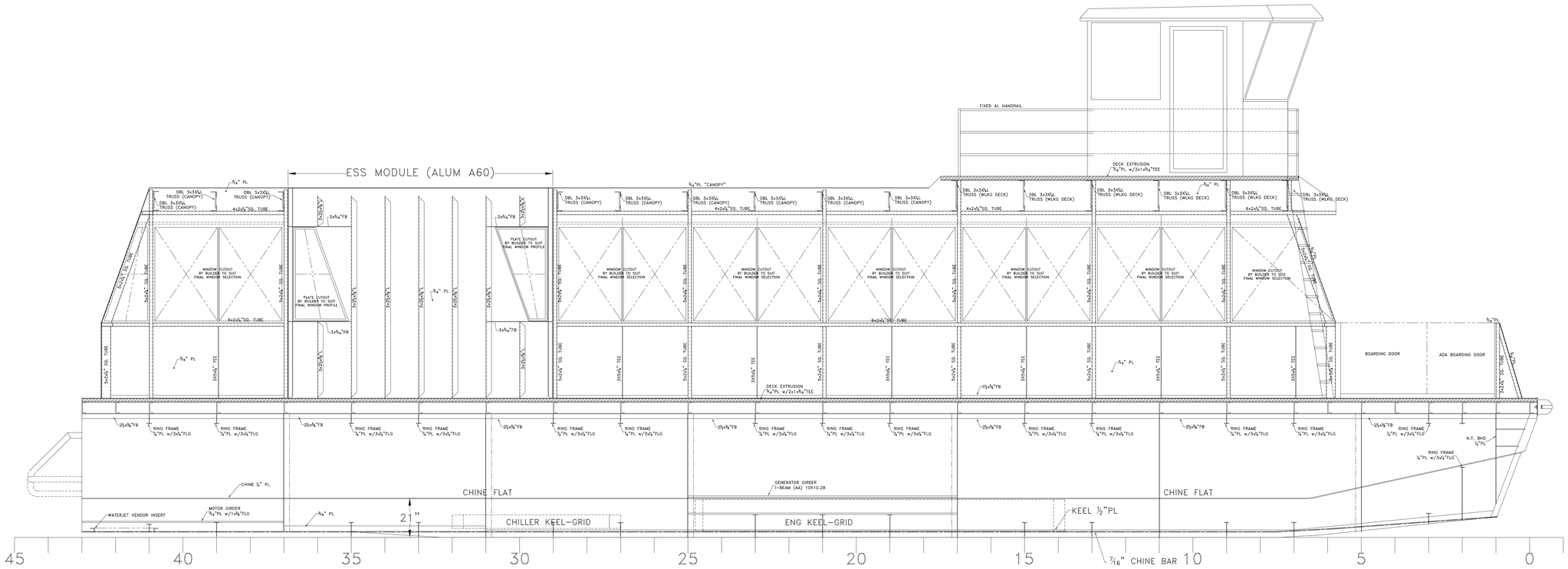
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

COMPARTMENT ACCESS PLAN

Dwg. No. 22-1477-1010
Alt. No. 0
Sht. 3 OF 3

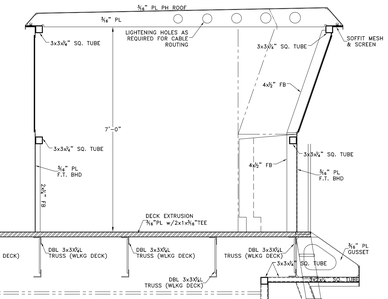
Drawn By: BRIAN BOUDREAU Date: 27 MAY 2022
Checked By: Date:
App'd By: Scale: ½"=1'-0"
ABS App'l: USCG App'l.:

ANSI-E (34"x44")



INBOARD PROFILE

PONTOON ON 7'-9" PORT BUTTOCK
HOUSE SIDE STRUCTURE ON 10'-6" PORT BUTTOCK



INBOARD PROFILE ON CENTERLINE

– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: 4 - APPROVED; 3 - COMPLETED; 2 - PRELIMINARY; 1 - REVISED; 0 - RETURNED

– DRAWING SUBMITTALS –

						5
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						3
						2
						1
						0
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				OWNERS	MSC–USCG	ALT. NO.

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

Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

STRUCTURAL INBOARD PROFILE

Dwg. No. 22-1477-2001
Alt. No. 0
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU Date: 16 MAY 2022
Checked By: Date:
App'd By: Scale: ½"=1'-0"
ABS App'l: USCG App'l:

ANSI-E (34"x44")

MATERIAL SELECTION HULL/DECKHOUSE

ALUMINUM ALLOYS:
PLATE: 5086 H116
EXTRUSIONS: 6061–T6
OR 5086 H111

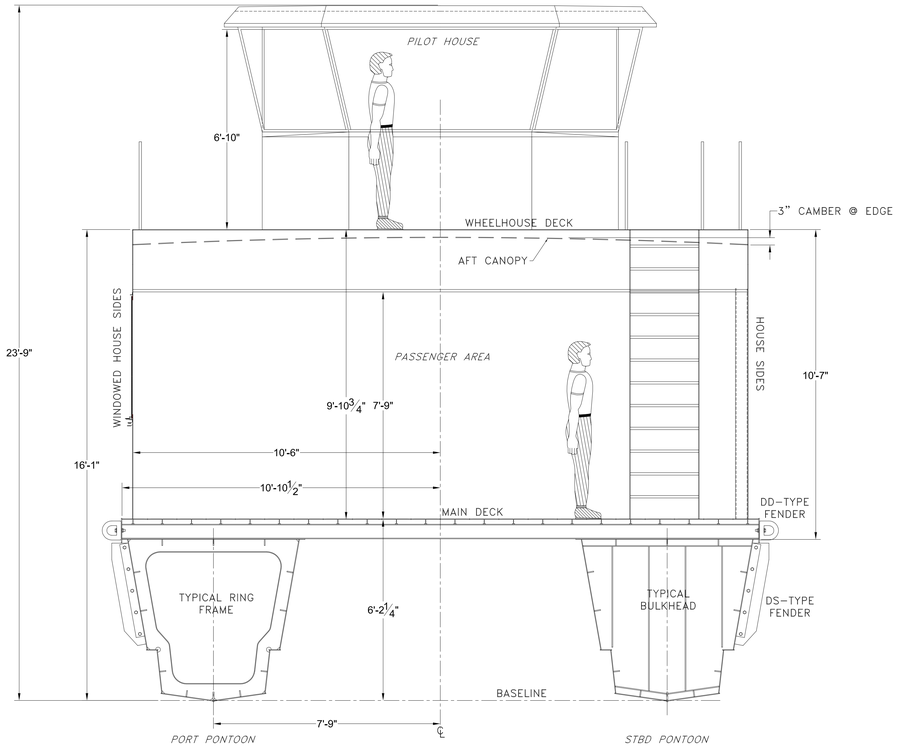
WELD SCHEDULE HULL–

3/16 / 3/16 — 3–12	W.T. BHDS TO ALL SHELL PLATING
1/8 — 2–6	N.T. BHDS TO ALL SHELL PLATING
D.C. / 1/8	LONGITUDINAL FRAMES TO SHELL & TRANSOM IN AFT VOIDS
3/16 — ○	1. CORNER BRACKETING & GUSSET PLATES
3" DC AT ENDS–VERT. 6" DC AT ENDS–HORIZ. / 3/16 — 2 1/2–12	1. FO TANK VERTICAL STIFFENERS 2. FO TANK TOP STIFFENERS
WELD DBL. CONT. FOR 10% OF EACH STIFF L @ EACH END –TYP. / 3/16 — 3–12	1. STIFFENERS TO W.T. BHDS 2. STIFFENERS TO HULL & SIDESHELL PLATING
WELD DBL. CONT. FOR 3" @ EACH END –TYP. / 1/8 — 2–12	STIFFENERS TO N.T. BHDS
CONTINUOUS / 1/8	LONGITUDINAL TEE FLANGES TO TRANSVERSE BEAM UPPER FLANGES FORE & AFT EDGES
MATCHED WELD @ EACH INTERSECTION WITH DECK XVERSE BEAMS / 1/8 — 1 1/2–12	MAIN DECK LONGITUDINAL GIRDERS TO MAIN DECK PLATE

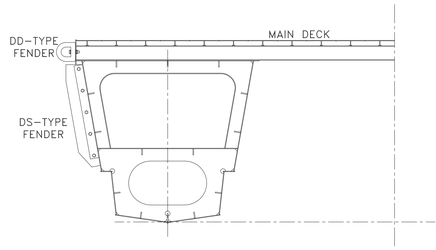
WELD SCHEDULE DECKHOUSE–

1/8 / 1/8 — 3–9	EXTERIOR BHD PERIPHERIES
3/16 — 2 1/2–10	N.T. INTERIOR BHD PERIPHERIES
1/8 / 1/8 — 3–9	DECK PERIPHERIES
WELD DBL. CONT. FOR ↕ @ EACH END / 1/8 — 1 1/2–10	TRANSVERSE DECK FRAMES
WELD DBL. CONT. FOR ↕ @ EACH END / 1/8 — 1 1/2–10	STIFFENERS TO SIDESHELL & END BHDS
1/4 — 3–6	WEBS TO FLANGE PLATES IN BUILT BEAMS & GIRDERS
WELD DBL. CONT. FOR ↕ @ EACH END / 1/8 — 1 1/2–10	STIFFENERS TO N.T. INTERIOR BHDS
WELD DBL. CONT. FOR ↕ @ EACH END / 1/8 — 1 1/2–10	STIFFENERS TO BULWARKS PLATE
1/8 / 1/8 — 3–9	BULWARKS CAP TO BULWARKS PLATE
3/16 — ○	BRACKETS TO FLANGES, FRAMES, DECKS, & SHELL

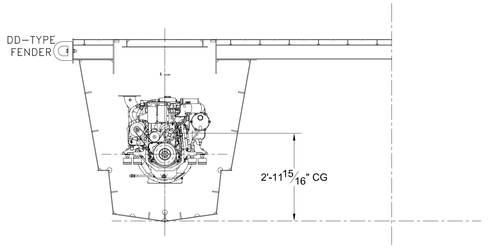
NOTES:
1– UNBRACKETED STIFFENERS TO BHDS ARE TO HAVE PAIR OF MATCHED INTERMITTENT WELDS AT EACH END.



TYPICAL SECTION
LOOKING FORWARD



SECTION: FRAME 15
IWO FO TANK



FRAME IWO
MAIN GENSET

– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A – RECEIVED; B – REVISED; A – APPROVED; B – COMMENTS; P – PRELIMINARY

							5
							4
							3
							2
							1
							0
				5/8.4.22/E			P
				OWNERS	MSC–USCG	ALT. NO.	

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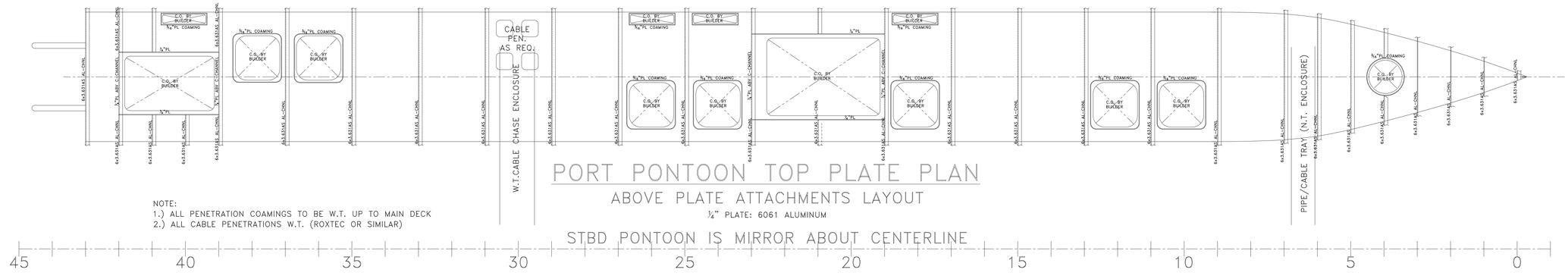
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

STRUCTURAL TYPICAL SECTION

Dwg. No. 22–1477–2000
Alt. No. 0
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU Date: 09 JUN 2022
Checked By: Date:
App'd By: Scale: 1/2" = 1'–0"
ABS App'l: USCG App'l.:

ANSI–E (34"x44")



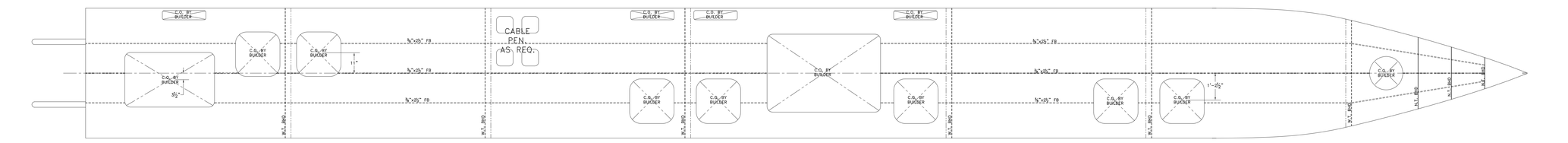
NOTE:
1.) ALL PENETRATION COAMINGS TO BE W.T. UP TO MAIN DECK
2.) ALL CABLE PENETRATIONS W.T. (ROXTEC OR SIMILAR)

PORT PONTOON TOP PLATE PLAN

ABOVE PLATE ATTACHMENTS LAYOUT

¼" PLATE: 6061 ALUMINUM

STBD PONTOON IS MIRROR ABOUT CENTERLINE

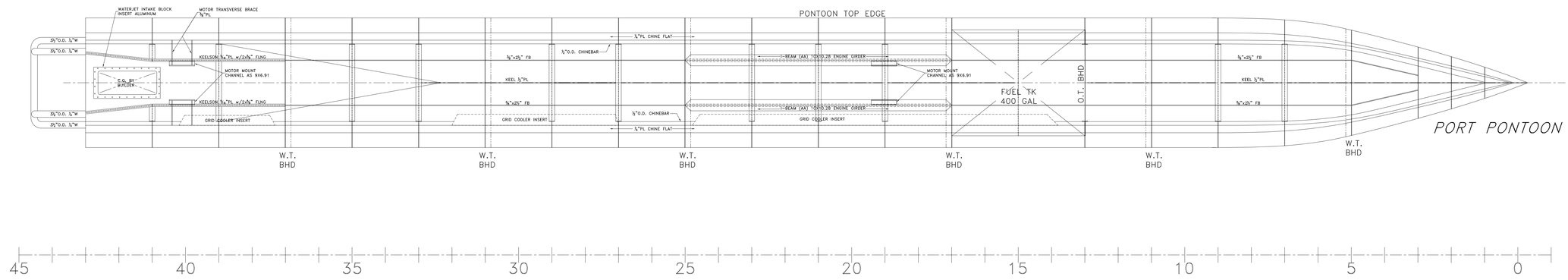


PORT PONTOON TOP PLATE PLAN

BELOW PLATE ATTACHMENTS LAYOUT

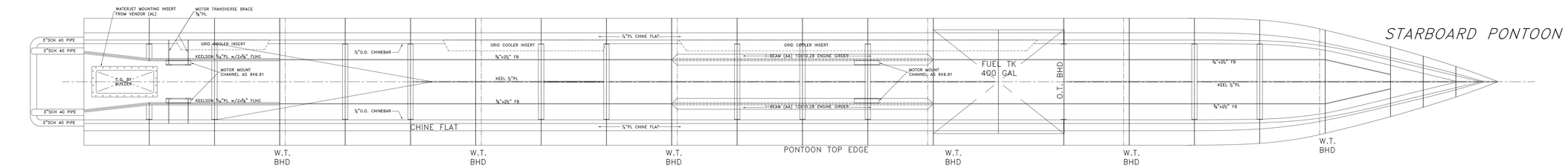
¼" PLATE: 6061 ALUMINUM

STBD PONTOON IS MIRROR ABOUT CENTERLINE



PONTOON HULL PLAN

¼" PLATE: 6061 ALUMINUM
VIEW WITH TOP PLATE REMOVED



– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A – RECEIVED; B – REVIEWED; C – COMMENTS; D – PRELIMINARY; E – APPROVED

	OWNERS	MSC–USCG	ALT. NO.
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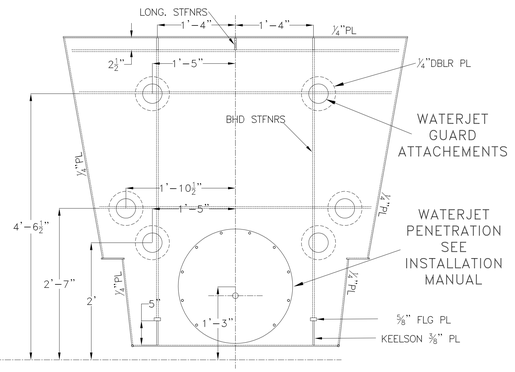
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

PONTOON PLAN

Dwg. No. 22-1477-2003
Alt. No. 0
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU Date: 9 JUNE 2022
Checked By: Date:
App'd By: Scale: ½" = 1'–0"
ABS App'l: USCG App'l.:

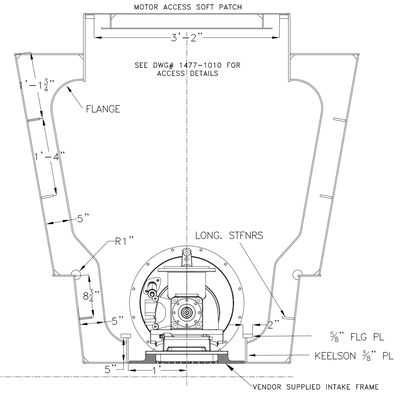
ANSI–E (34"x44")



PONTOON CATAMARAN CENTERLINE

PONTOON TRANSOM

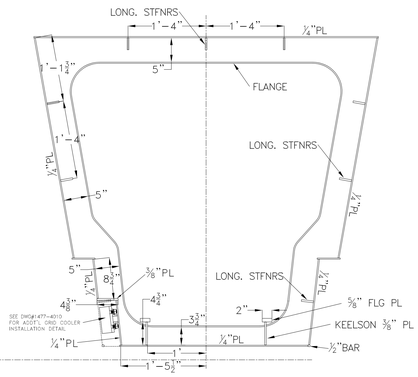
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 41

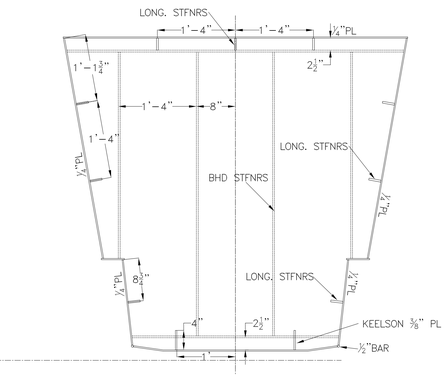
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 39

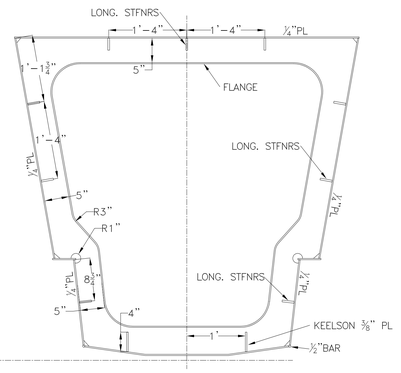
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTERLINE

W.T. BHD 37

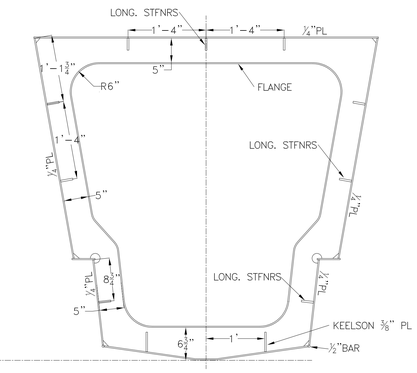
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 35

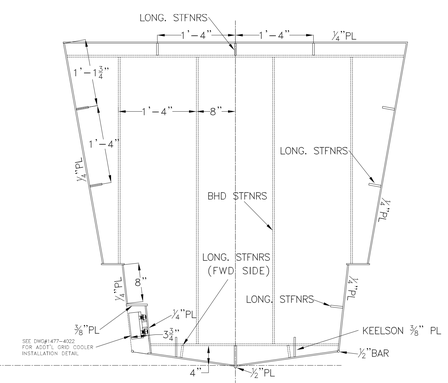
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 33

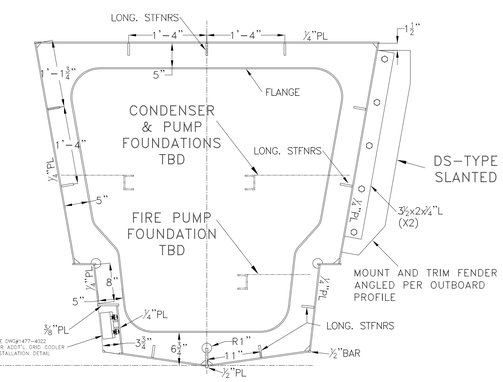
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTER

W.T. BHD 31

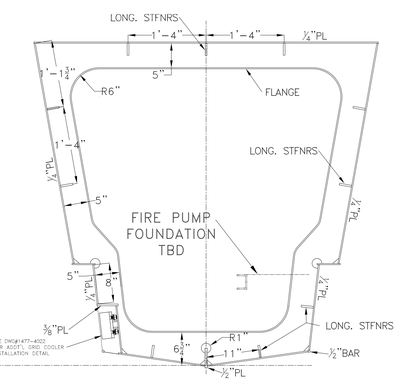
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB



PONTOON CATAMARAN CENTER

FRAME 29

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTER

FRAME 27

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB

– GENERAL NOTES –

NO.	DESCRIPTION
1.	STARBOARD SECTIONS SHOWN. ALL PORT SECTIONS ARE MIRRORED ABOUT THE CENTERLINE AXIS.

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION

CODE: A –APPROVED, C –CLASSIFIED, P –PRELIMINARY, R –REVISED

– DRAWING SUBMITTALS –

	OWNERS	MSC–USCG	ALT. NO.
5/8.4.22/E			5
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			0
			P

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Fax: (904) 399-1522
Info@dejongandlebet.com

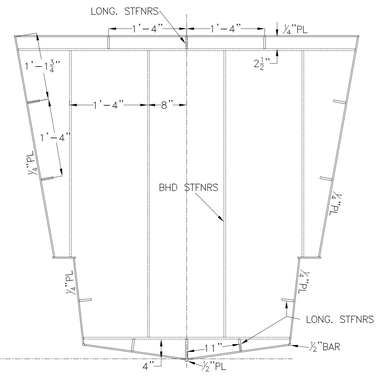
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

PONTOON TRANSVERSE FRAMES & W.T BULKHEADS

Dwg. No. 22-1477-2005
Alt. No. 0
Sht. 1 OF 3

Drawn By: BRIAN BOUDREAU Date: 27 MAY 2022
Checked By: Date:
App'd By: Scale: ½"=1'-0"
ABS App'l: USCG App'l.:

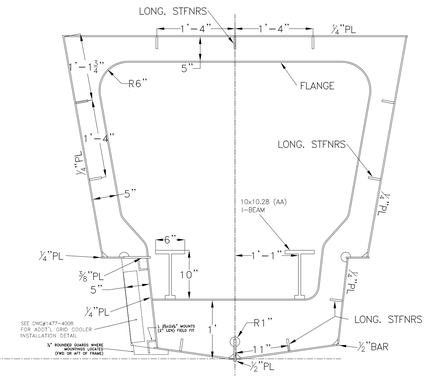
ANSI-E (34"x44")



PONTOON CATAMARAN CENTERLINE

W.T. BHD 25

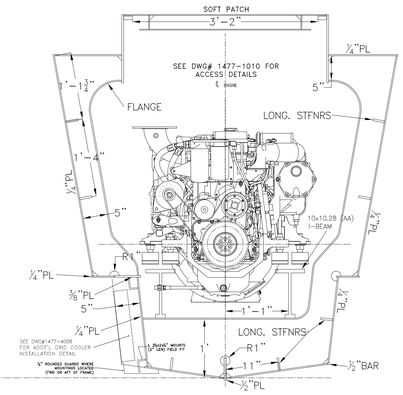
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 23

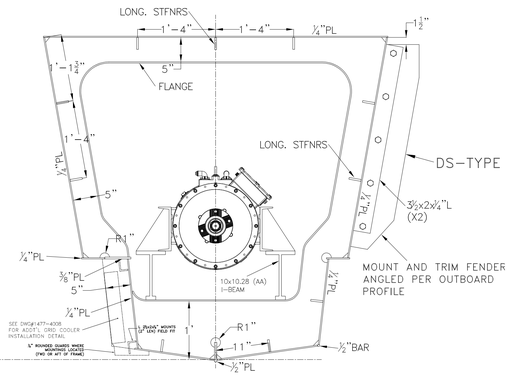
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 21

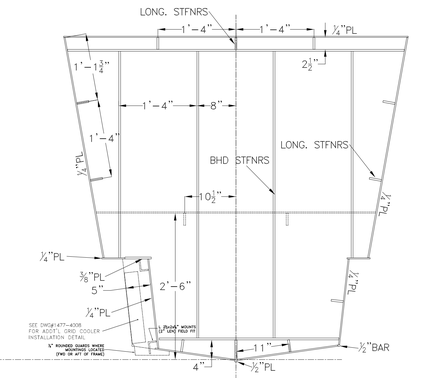
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 19

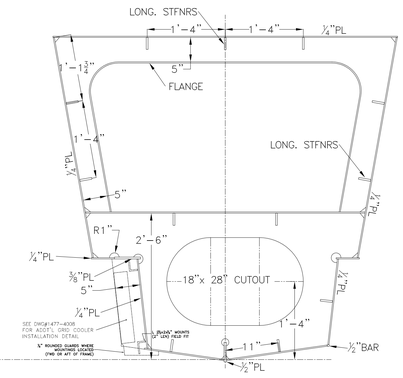
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTERLINE

O.T. BHD 17

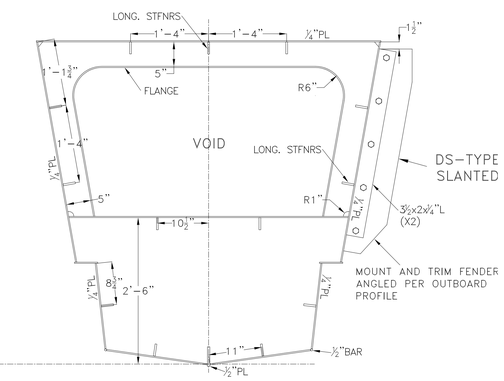
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 15

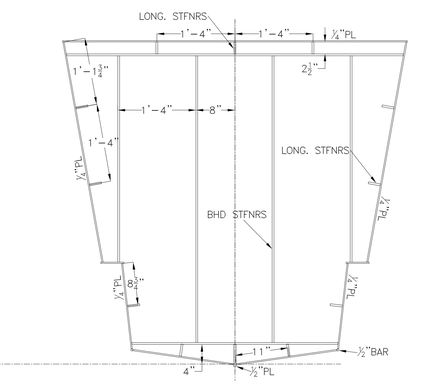
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB



PONTOON CATAMARAN CENTERLINE

O.T. BHD 13

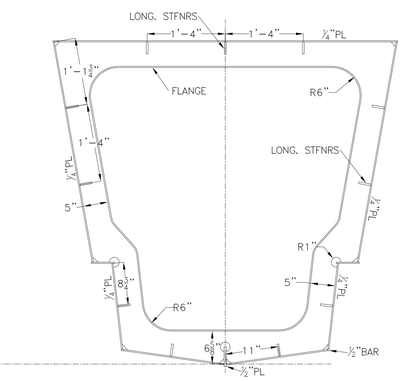
¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB



PONTOON CATAMARAN CENTERLINE

W.T. BHD 11

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB



PONTOON CATAMARAN CENTERLINE

FRAME 9

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB

– GENERAL NOTES –

NO.	DESCRIPTION
1.	STARBOARD SECTIONS SHOWN. ALL PORT SECTIONS ARE MIRRORED ABOUT THE CENTERLINE AXIS.

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION

CODE: A –APPROVED, D –COMMENTED, P –PRELIMINARY, R –REVISED, X –REJECTED

	OWNERS	MSC–USCG	ALT. NO.
5			
4			
3			
2			
1			
0	5/8.4.22/E		
P			

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Jacksonville, Florida 32207
www.dejongandlebet.com
Phone: (904) 399-3673
Fax: (904) 399-1522
Info@dejongandlebet.com

Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

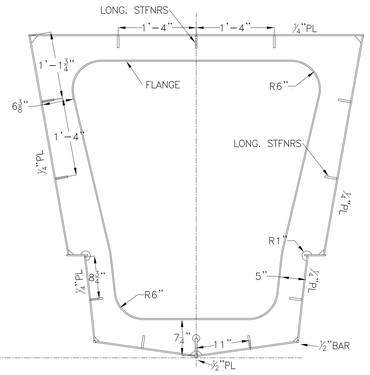
PONTOON TRANSVERSE FRAMES & W.T BULKHEADS

Dwg. No. 22-1477-2005
Alt. No. 0
Sht. 2 OF 3

Drawn By: BRIAN BOUDREAU Date: 27 MAY 2022
Checked By: Date:
App'd By: Scale: ½"=1'-0"
ABS App'l: USCG App'l.:

ANSI-E (34"x44")

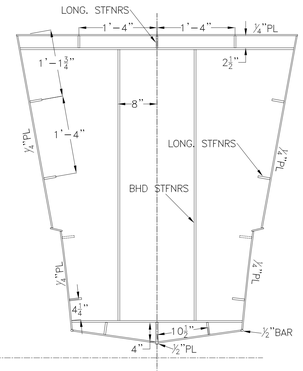
PONTOON CATAMARAN CENTERLINE



FRAME 7

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB

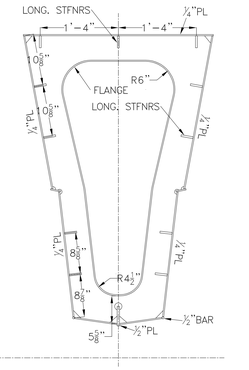
PONTOON CATAMARAN CENTERLINE



W.T. BHD 5

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB

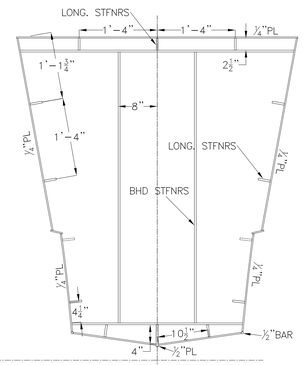
PONTOON CATAMARAN CENTERLINE



FRAME 3

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB

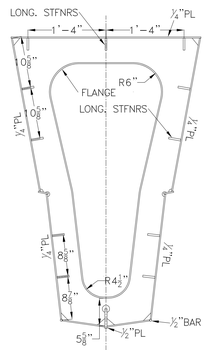
PONTOON CATAMARAN CENTERLINE



W.T. BHD 5

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB
BHD STFNRS: 3x⅜"FB

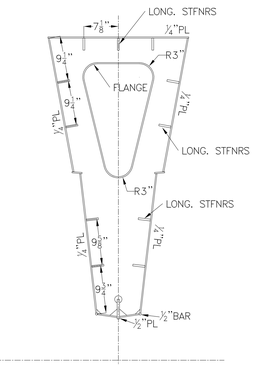
PONTOON CATAMARAN CENTERLINE



FRAME 3

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB

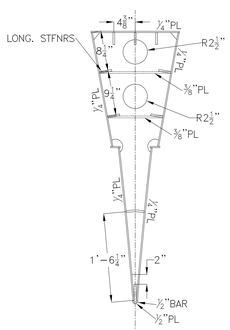
PONTOON CATAMARAN CENTERLINE



FRAME 2

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB

PONTOON CATAMARAN CENTERLINE



FRAME 1

¼" PL,
FLANGE: 3 x ¼"FB
LONG. STIFFENERS: 2½x⅜"FB

WELD SCHEDULE HULL–

3" DC AT ENDS–VERT. 6" DC AT ENDS–HORIZ.	3/16 — 2 1/2-12	1. FO TANK VERTICAL STIFFENERS 2. FO TANK TOP STIFFENERS
WELD DBL. CONT. FOR 10% OF EACH STIFF L @ EACH END –TYP.	3/16 — 3-12	1. STIFFENERS TO W.T. BHDS 2. STIFFENERS TO HULL & SIDESHELL PLATING
WELD DBL. CONT. FOR 3" @ EACH END –TYP.	1/8 — 2-12	STIFFENERS TO N.T. BHDS
CONTINUOUS	1/8	LONGITUDINAL TEE FLANGES TO TRANSVERSE BEAM UPPER FLANGES FORE & AFT EDGES
MATCHED WELD @ EACH INTERSECTION WITH DECK XVERSE BEAMS	1/8 — 1 1/2-12	MAIN DECK LONGITUDINAL GIRDERS TO MAIN DECK PLATE
3/16 / 3/16	3-12	W.T. BHDS TO ALL SHELL PLATING
1/8	2-6	N.T. BHDS TO ALL SHELL PLATING
D.C.	1/8	LONGITUDINAL FRAMES TO SHELL & TRANSOM IN AFT VOIDS
3/16		1. CORNER BRACKETING & GUSSET PLATES

ALUMINUM ALLOYS:
PLATE: 5086 H116
EXTRUSIONS: 6061–T6
OR 5086 H111

– GENERAL NOTES –

NO.	DESCRIPTION
1.	STARBOARD SECTIONS SHOWN. ALL PORT SECTIONS ARE MIRRORED ABOUT THE CENTERLINE AXIS.

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION

CODE: A – APPROVED; 1 – CHANGED; 2 – PRELIMINARY; 3 – REVISED; 4 – RESUBMITTED

							5
							4
							3
							2
							1
							0
					S/8.4.22/E		P
					OWNERS	MSC–USCG	ALT. NO.

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

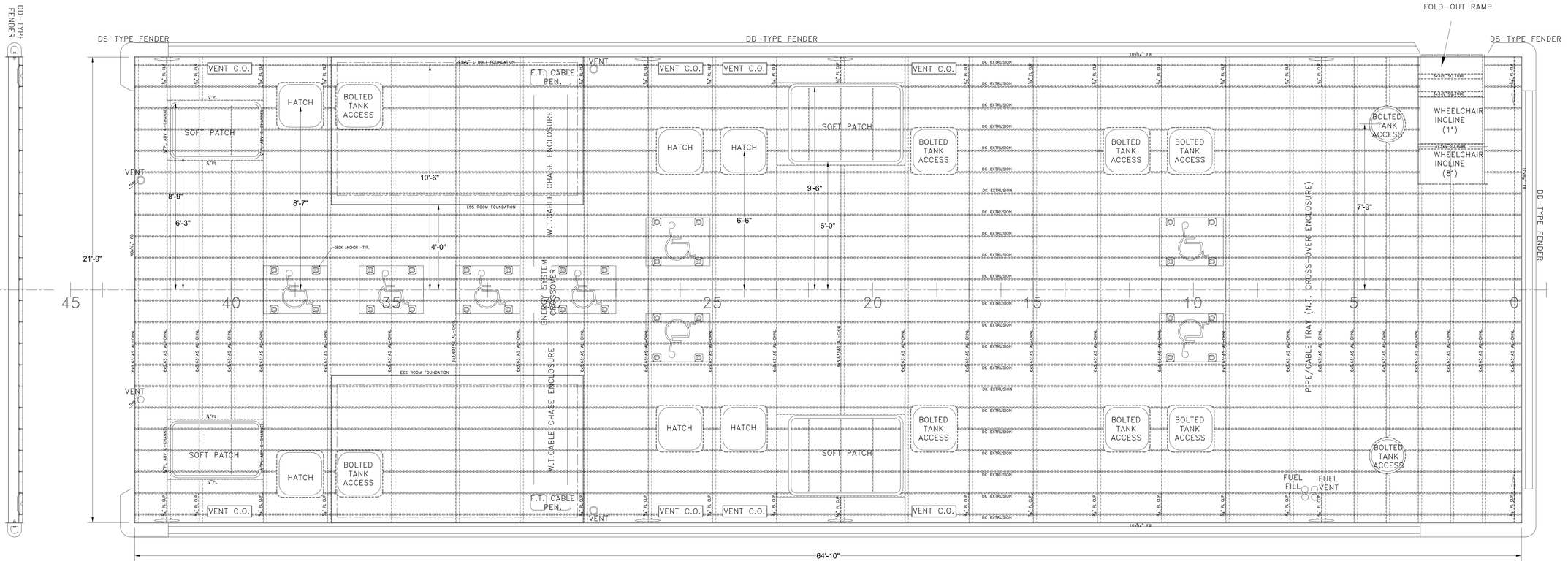
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

PONTOON TRANSVERSE FRAMES & W.T BULKHEADS

Dwg. No. 22-1477-2005
Alt. No. 0
Sht. 3 OF 3

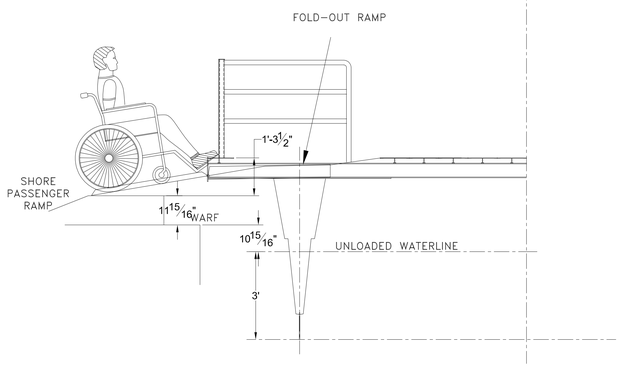
Drawn By: BRIAN BOUDREAU — Date: 27 MAY 2022
Checked By: — Date:
App'd By: — Scale: ½"=1'-0"
ABS App'l: — USCG App'l:

ANSI–E (34"x44")



MAIN DECK PLAN

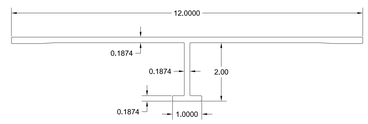
PLATE: 6061 ALUMINUM DECK EXTRUSION WITH 2"X1"X3/16" TEE



FORWARD BOARDING

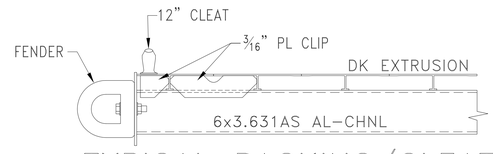
FRAMES 1 THRU 3

MODIFY DECK TO FIT SELECTED RAMP



DECK EXTRUSION DETAIL: 6061-6T ALUMINUM DIE

SCALE: 1:2



TYPICAL RACKING/CLEAT CLIP PLATE

SCALE 3"=1'-0"

– GENERAL NOTES –		– ALTERATIONS –				– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	NO.	DESCRIPTION
		1.	GENERIC PART DESIGNATIONS	8.12.22	JS				

CODE: A – APPROVED; C – CORRECTED; P – PRELIMINARY; R – REVIEWED

– DRAWING SUBMITTALS –			
	OWNERS	MSC–USCG	ALT. NO.
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			4
			3
			2
	S/08.12.22/E		1
	S/8.4.22/E		0
			P

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Phone: (904) 399-3673
Fax: (904) 399-1522
info@dejongandlebet.com

Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

MAIN DECK PLAN

Dwg. No. 22-1477-2020

Alt. No. 1
Sht. 1 OF 1

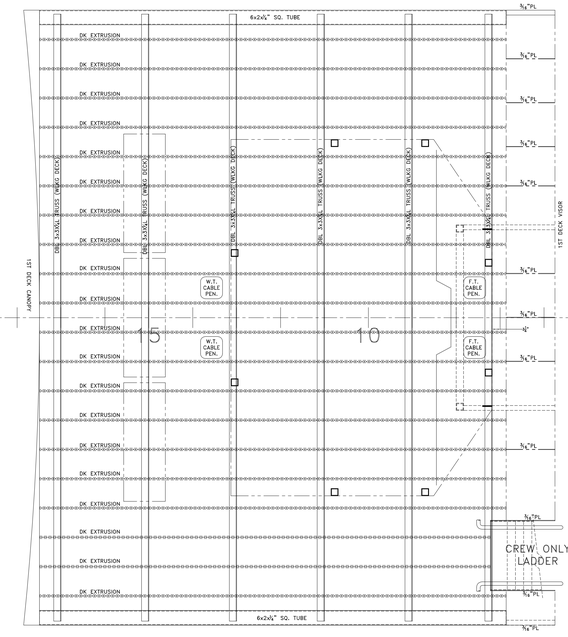
Drawn By: BRIAN BOUDREAU Date: 9 JUNE 2022

Checked By: Date:

App'd By: Scale: 1/2"=1'-0"

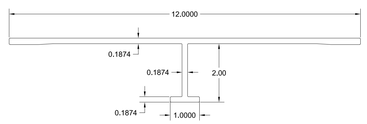
ABS App't: USCG App't.:

ANSI-E (34"x44")

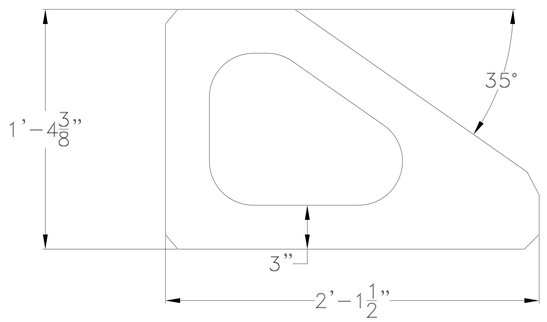


PILOTHOUSE DECK PLAN

PLATE: 6061 ALUMINUM DECK EXTRUSION WITH 2"X1"X$\frac{3}{16}$" TEE



DECK EXTRUSION DETAIL:
6061-6T ALUMINUM DIE
SCALE: 1:2



VISOR FRAME DETAIL:
$\frac{3}{16}$" PL 6061-6T ALUMINUM
SCALE: 3"=1'-0"

– GENERAL NOTES –		– ALTERATIONS –				– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A - APPROVED; B - RELEASED; C - CLASSIFIED; D - PRELIMINARY

	OWNERS	MSC-USCG	ALT. NO.
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1			
0	5/8.4.22/E		
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Fax: (904) 399-1522
info@dejongandlebet.com

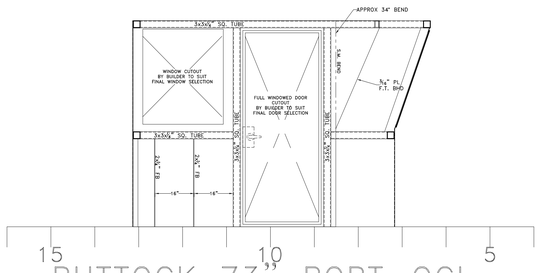
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

PILOTHOUSE DECK PLAN

Dwg. No. 22-1477-2021
Alt. No. 0
Sht. 1 OF 1

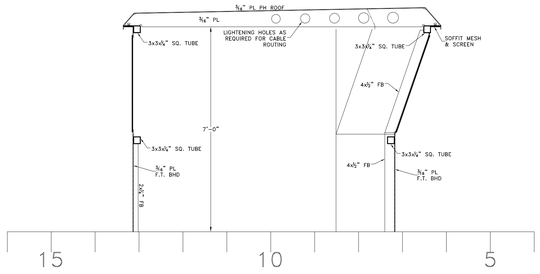
Drawn By: BRIAN BOUDREAU Date: 9 JUNE 2022
Checked By: Date:
App'd By: Scale: ½"=1'-0"
ABS App'l: USCG App'l:

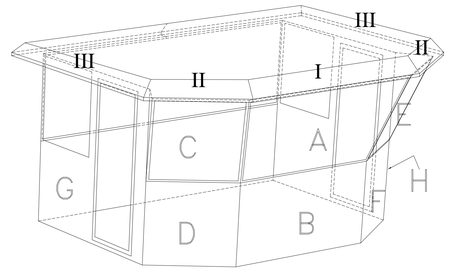
ANSI-E (34"x44")



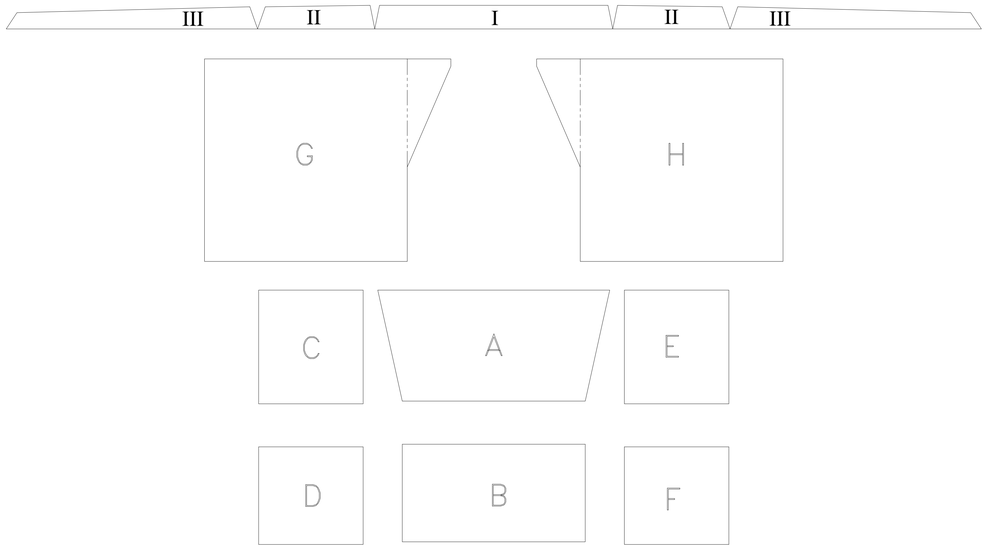
BUTTOCK 73" PORT–OCL

LOOKING TO PORT
DOOR HINGED OUTBOARD ON FOWARD EDGE

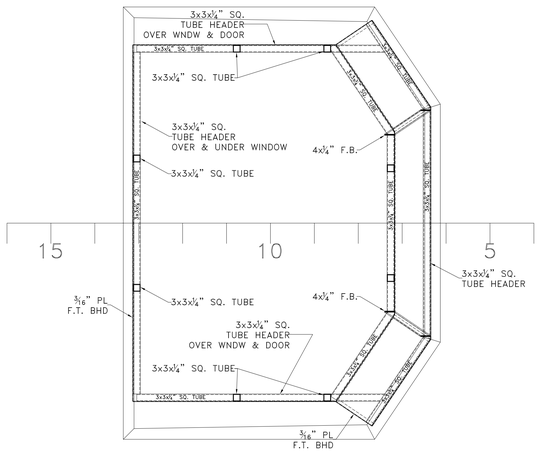




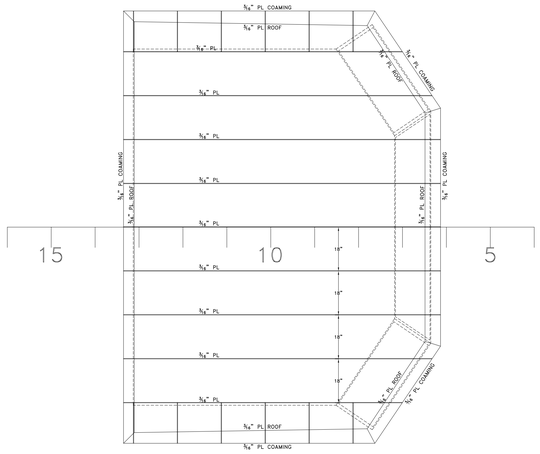
PILOTHOUSE ISO VIEW



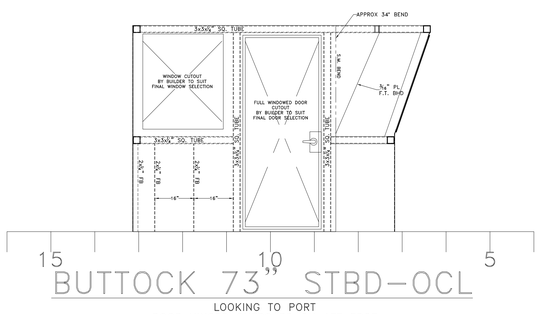
FLATTENED SHEET VIEW



BULKHEAD PLAN

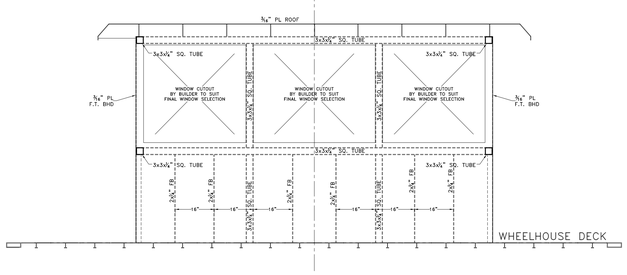


PILOTHOUSE OVERHEAD PLAN



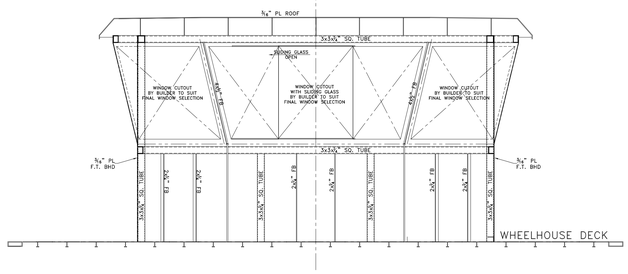
BUTTOCK 73" STBD–OCL

LOOKING TO PORT
DOOR HINGED OUTBOARD ON AFT EDGE



FRAME 13

LOOKING FORWARD



FRAME 7

LOOKING FORWARD

– GENERAL NOTES –		– ALTERATIONS –				– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A – RETURNED, B – REVISED, C – PRELIMINARY, D – COMMITTED, E – APPROVED

– DRAWING SUBMITTALS –

				5
				4
				3
				2
				1
				0
		5/8.4.22/E		P
		OWNERS	MSC–USCG	ALT. NO.

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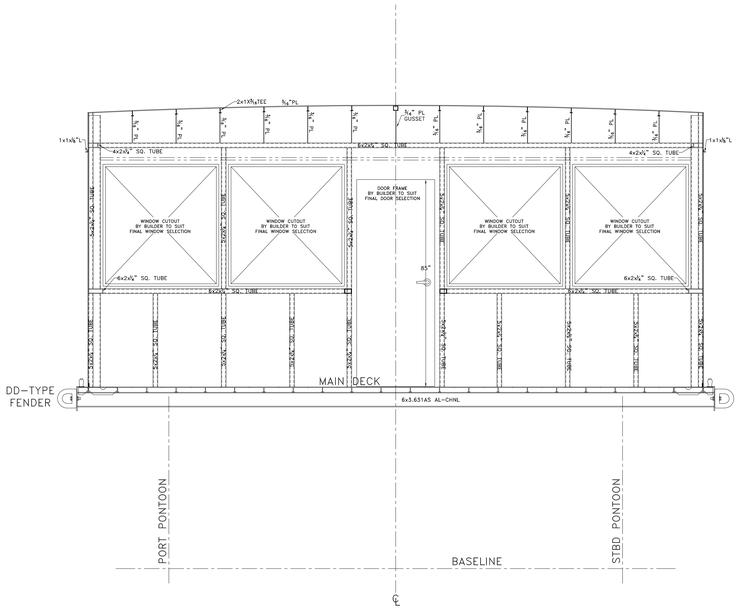
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

PILOTHOUSE DETAILS

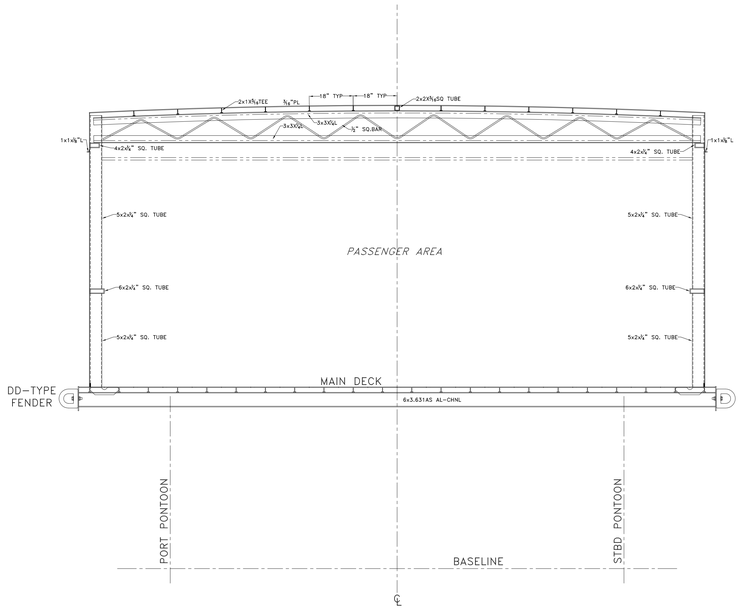
Dwg. No. 22-1477-2038
Alt. No. 0
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU
Date: 9 JUNE 2022
Checked By:
Date:
App'd By:
Scale: ½"=1'–0"
ABS App'l:
USCG App'l:

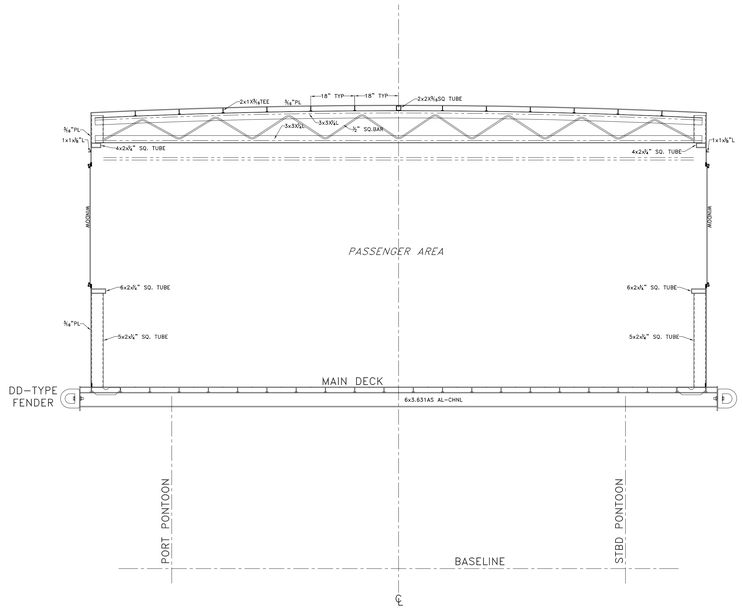
ANSI–E (34"x44")



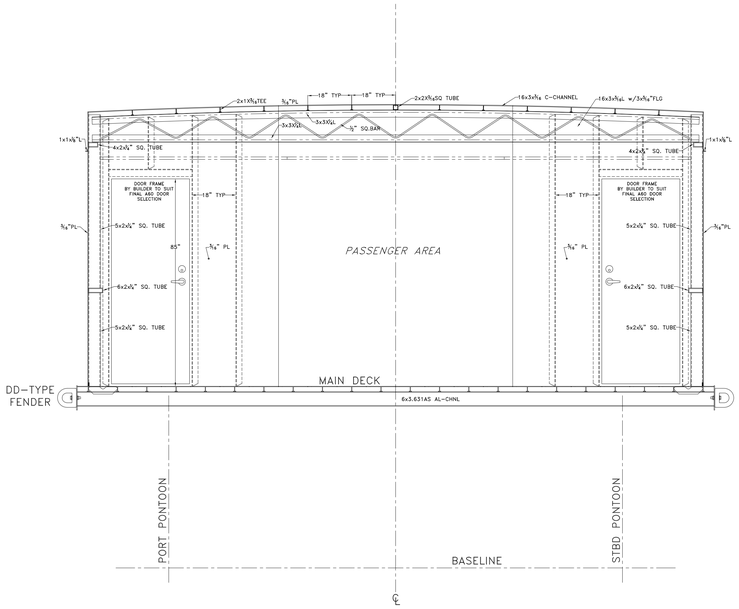
SECTION: FANTAIL



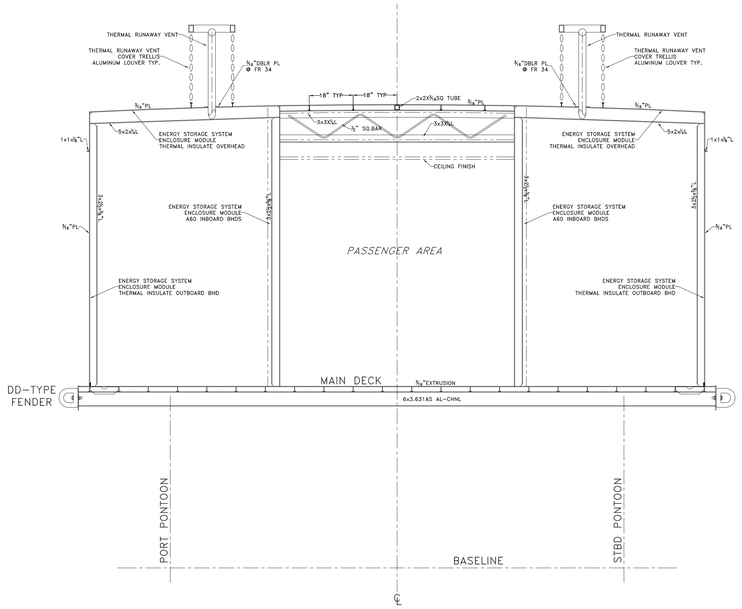
SECTION: FRAME 41



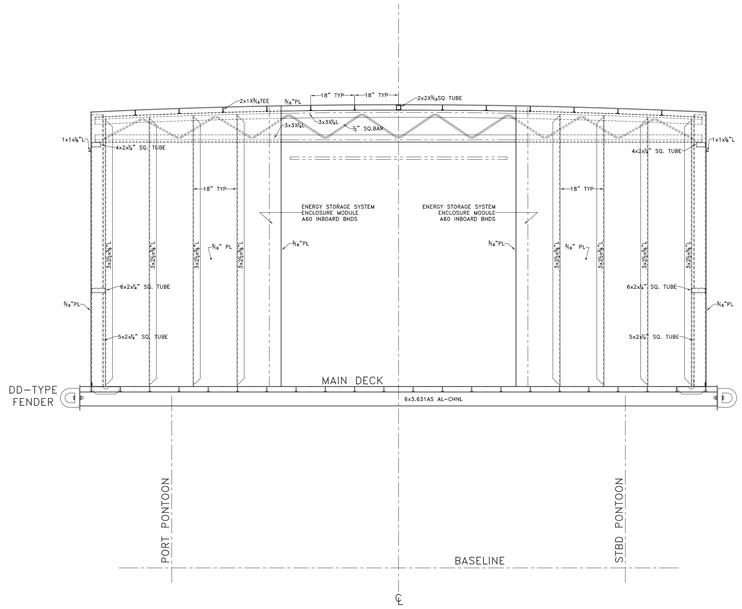
SECTION: FRAME 39



SECTION: FRAME 37



SECTION: FRAME 31,33,35



SECTION: FRAME 29

– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A – APPROVED; D – DELIVERED; P – PRELIMINARY; R – RETURNED

							5
							4
							3
							2
							1
						S/8.4.22/E	0
							P
					OWNERS	MSC-USCG	ALT. NO.

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Phone: (904) 399-3673
Fax: (904) 399-1522
info@dejongandlebet.com

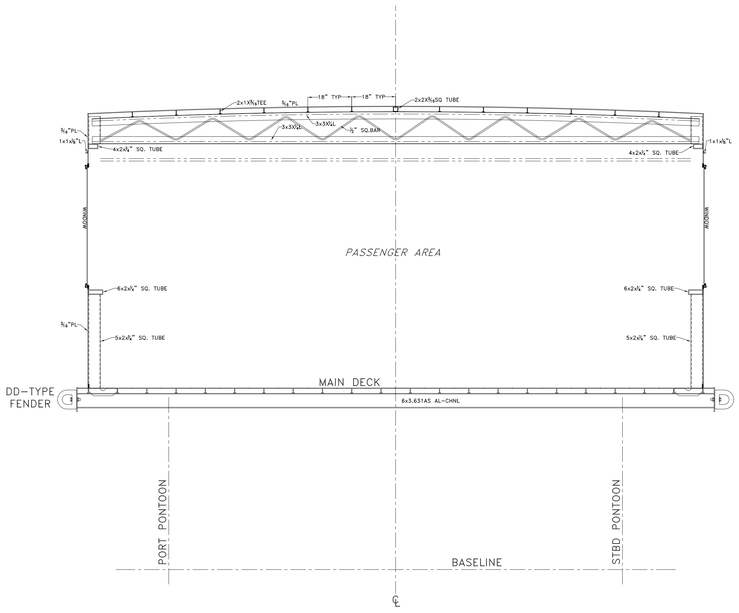
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

MAIN DECK HOUSE DETAILS

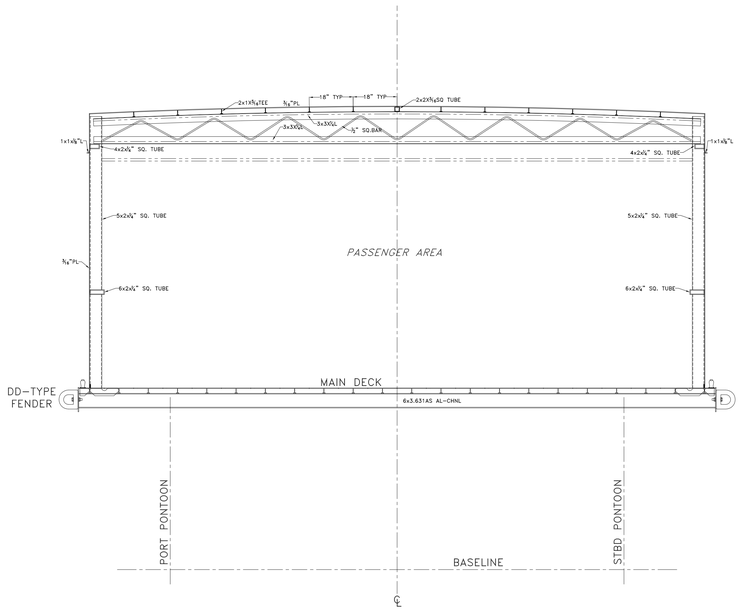
Dwg. No. 22-1477-2039
Alt. No. 0
Sht. 1 OF 3

Drawn By: BRIAN BOUDREAU Date: 9 JUNE 2022
Checked By: Date:
App'd By: Scale: ½"=1'-0"
ABS App'l: USCG App'l.:

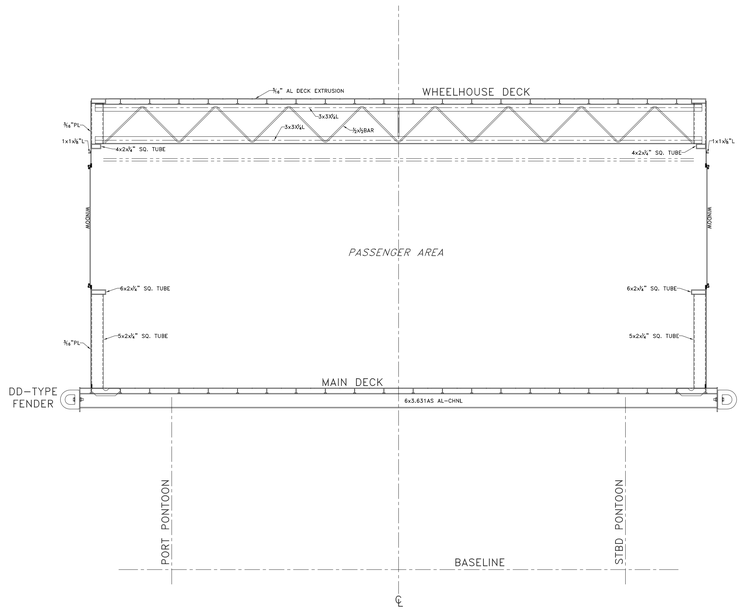
ANSI-E (34"x44")



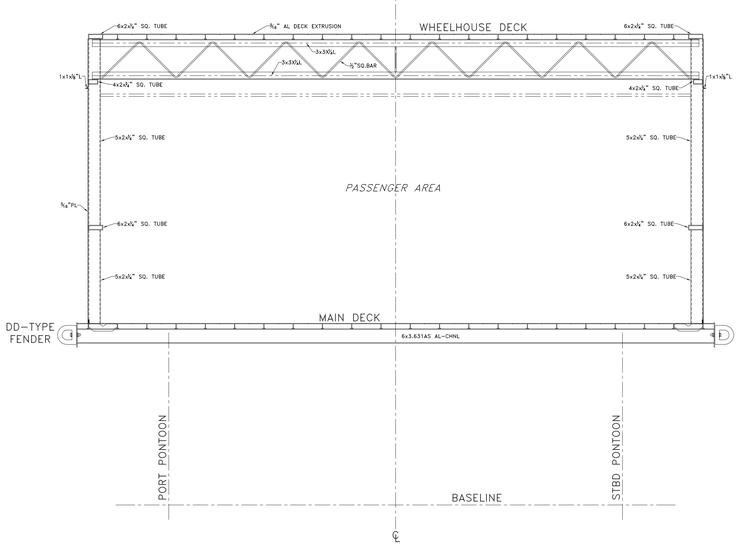
SECTION: FRAME 19,23,27



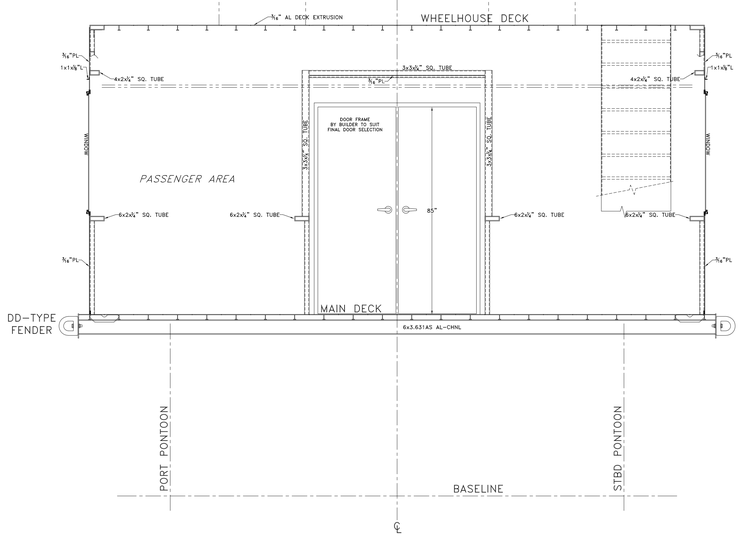
SECTION: FRAME 21,25



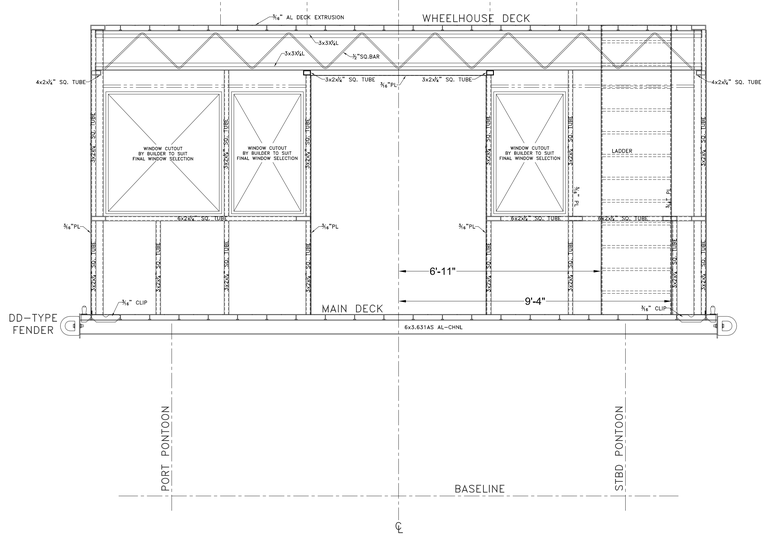
SECTION: FRAME 11,15



SECTION: FRAME 9,13,17



SECTION: FRAME 8



SECTION: FRAME 6,7

– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A – APPROVED; B – CLASSIFIED; P – PRELIMINARY; R – REVISED; X – RETURNED

– DRAWING SUBMITTALS –

						5
						4
						3
						2
						1
				S/B.4.22/E		0
						P
			OWNERS	MSC–USCG	ALT. NO.	

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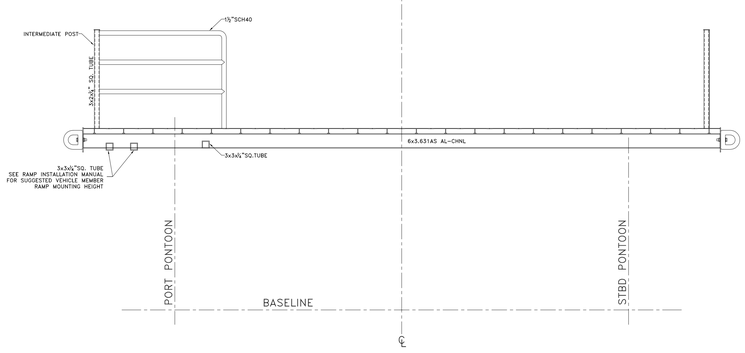
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

MAIN DECK HOUSE DETAILS

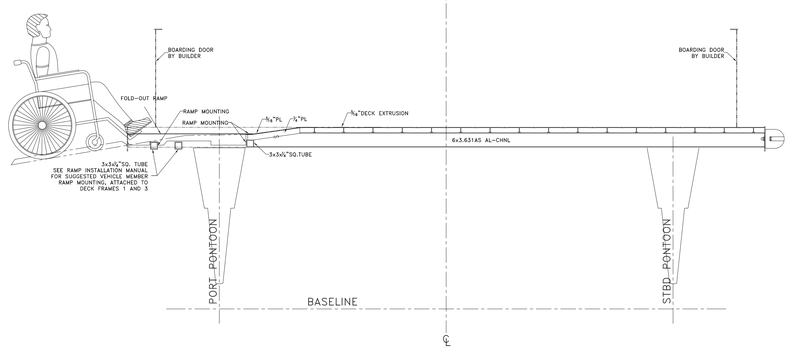
Dwg. No. 22-1477-2039
Alt. No. 0
Sht. 2 OF 3

Drawn By: BRIAN BOUDREAU Date: 9 JUNE 2022
Checked By: Date:
App'd By: Scale: 1/2" = 1'-0"
ABS App'l: USCG App'l.:

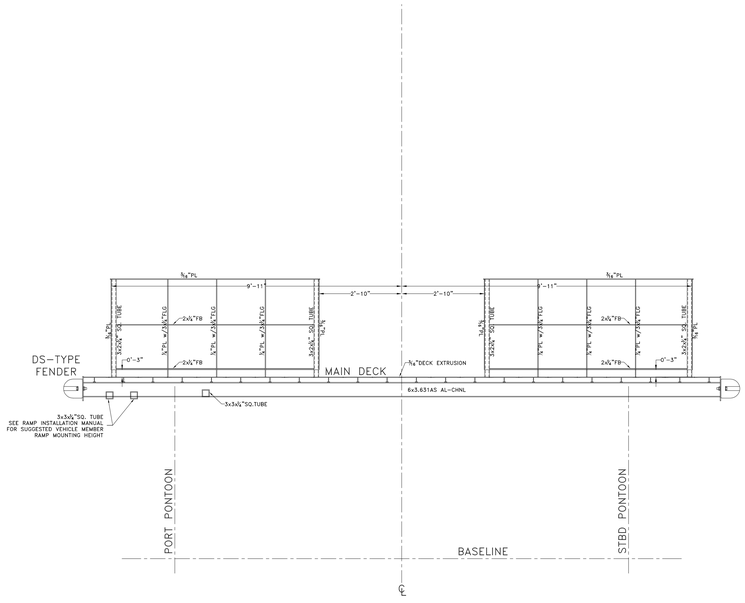
ANSI-E (34"x44")



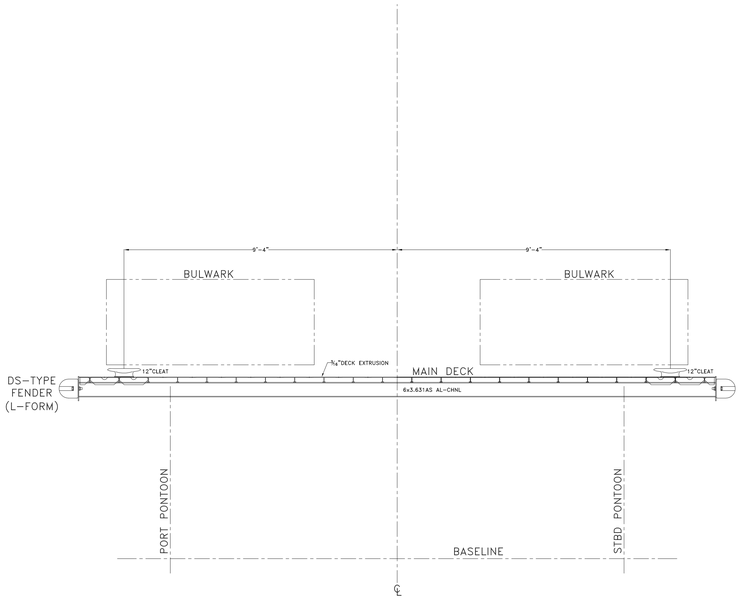
SECTION: FRAME 3



SECTION: FRAME 2



SECTION: FRAME 1



SECTION: FRAME 0

WELD SCHEDULE DECKHOUSE-

1/8 / 1/8	3-9 EXTERIOR BHD PERIPHERIES	WELD DBL. CONT. FOR ¾ @ EACH END: 1/8 / 1 1/2-10	STIFFENERS TO N.T. INTERIOR BHDS
3/16	2 1/2-10 N.T. INTERIOR BHD PERIPHERIES	WELD DBL. CONT. FOR ¾ @ EACH END: 1/8 / 1 1/2-10	STIFFENERS TO BULWARKS PLATE
1/8 / 1/8	3-9 DECK PERIPHERIES	1/8 / 1/8	3-9 BULWARKS CAP TO BULWARKS PLATE
WELD DBL. CONT. FOR ¾ @ EACH END: 1/8	1 1/2-10 TRANSVERSE DECK FRAMES	3/16	BRACKETS TO FLANGES, FRAMES, DECKS, & SHELL
WELD DBL. CONT. FOR ¾ @ EACH END: 1/8	1 1/2-10 STIFFENERS TO SIDESHELL & END BHDS		
1/4	3-6 WEBS TO FLANGE PLATES IN BUILT BEAMS & GIRDERS		

NOTES:
1- UNBRACKETED STIFFENERS TO BHDS ARE TO HAVE PAIR OF MATCHED INTERMITTENT WELDS AT EACH END.

– GENERAL NOTES –

NO.	DESCRIPTION

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION

CODE: A - APPROVED; S - SUBMITTED; P - PRELIMINARY; R - REVISED; X - RETURNED

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						4
						3
						2
				S/08.12.22/E		1
				S/8.4.22/E		0
						P
			OWNERS	MSC-USCG	ALT. NO.	

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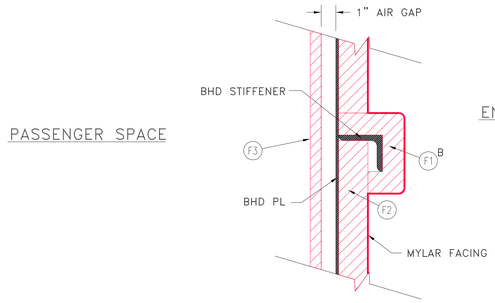
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

MAIN DECK HOUSE DETAILS

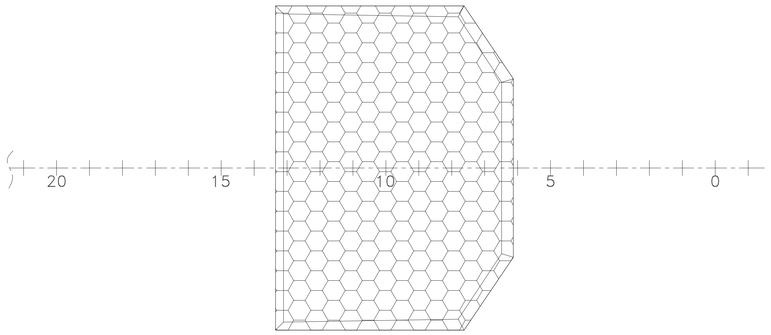
Dwg. No. 22-1477-2039
Alt. No. 1
Sht. 3 OF 3

Drawn By: BRIAN BOUDREAU Date: 9 JUNE 2022
Checked By: Date:
App'd By: Scale: ½" = 1'-0"
ABS App'l.: USCG App'l.:

ANSI-E (34"x44")



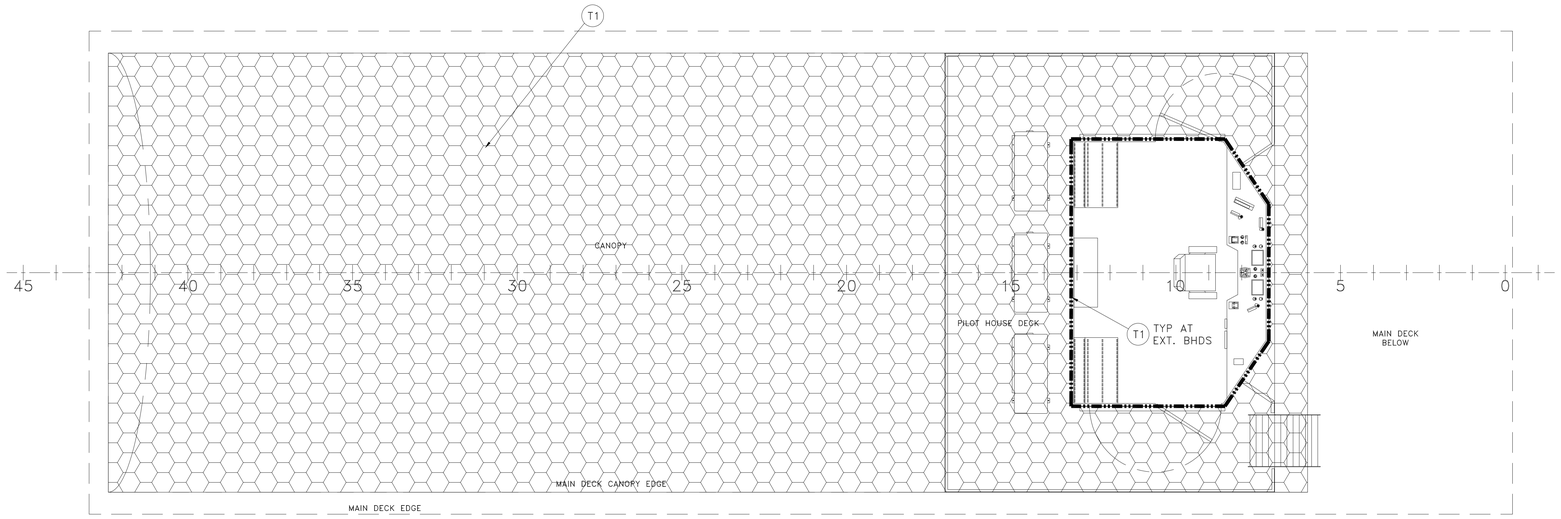
TYPICAL A-60 BULKHEAD
N.T.S



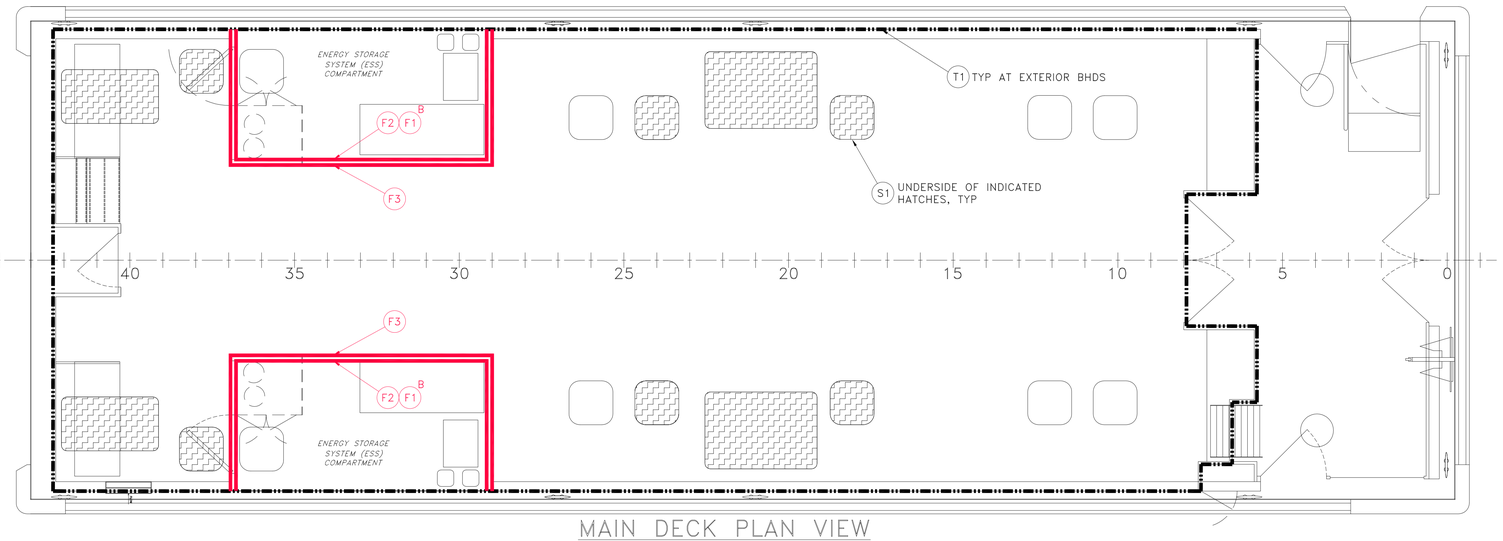
WHEELHOUSE TOP PLAN

BILL OF MATERIALS

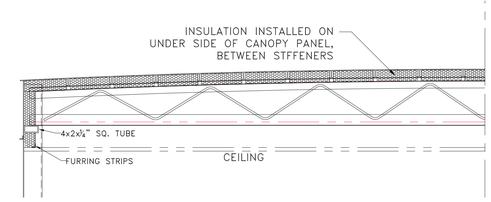
SYMBOL		
(BULKHEADS) / (DECKS)	FIRE INSULATION / A-60 (F1 AND F2 TO MEET U.S.C.G. 164.007 REQUIREMENTS, F3 TO MEET U.S.C.G. 164.008 REQUIREMENT	
	F1 (B)	BEAM WRAP, 1 1/2" THICK 8.0 P.C.F. MARINE MINERAL WOOL W/ MYLAR FACING (OR EQUAL, 1/2S MINIMUM)
	F2	2" THICK 6.0 P.C.F. MARINE MINERAL WOOL W/ MYLAR FACING (OR EQUAL, 1/2S MINIMUM)
	F3	3/4" THICK FIRE SHEATHING B-15 PANEL, (OR EQUAL, 1P MINIMUM)
(BULKHEADS) / (DECKS)	SOUND INSULATION (TO MEET U.S.C.G. 164.009 REQUIREMENTS)	
	S1	2" THICK 2.9 P.C.F. MARINE SOUND INSULATION
(BULKHEADS) / (DECKS)	THERMAL INSULATION (TO MEET U.S.C.G. 164.009 REQUIREMENTS)	
	T1	3" THICK UTILITY BLANKET INSULATION, .8 P.C.F.



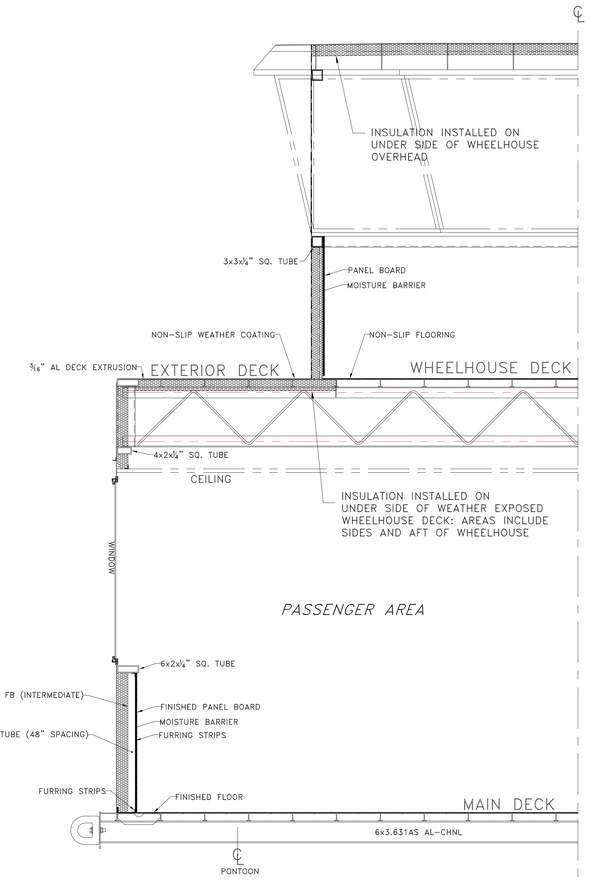
WHEELHOUSE DECK PLAN



MAIN DECK PLAN VIEW



TYPICAL SECTION FRAME 17 THRU TRANSOM
DO NOT SCALE



TYPICAL SECTION FRAME 6 THRU 17
DO NOT SCALE

– GENERAL NOTES – NO.	DESCRIPTION

– ALTERATIONS – NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

– RESERVATIONS – NO.	DESCRIPTION

– REFERENCES – NO.	DESCRIPTION

CODE: A - APPROVED, B - REVISED, C - SUBMITTED, D - PRELIMINARY

	MSC-USCG	OWNERS	ALT. NO.
5			
4			
3			
2			
1		S/08.12.22/E	
0		S/08.04.22/E	
P		P/07.12.22/E	

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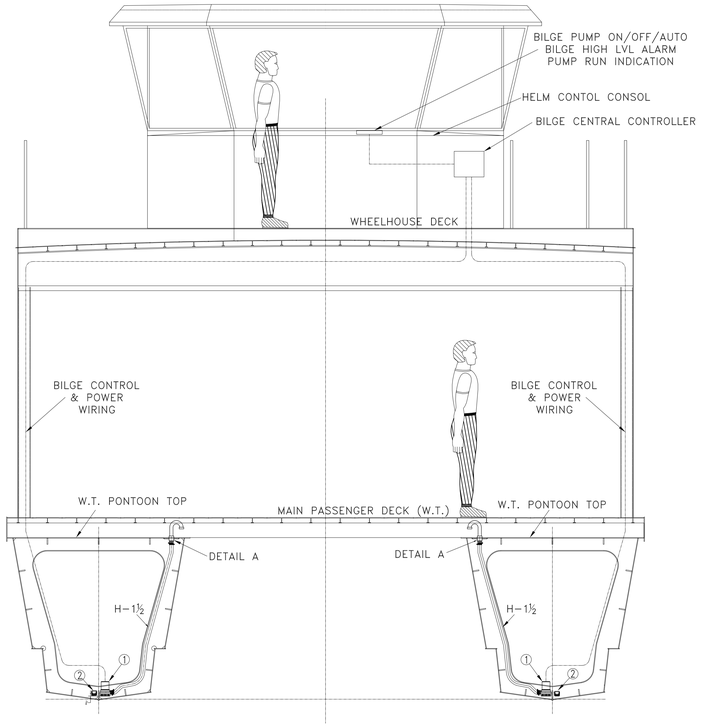
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

INSULATION SCHEDULE

Dwg. No. 22-1477-3512
Alt. No. 1
Sht. 1 OF 1

Drawn By: JOE SILAS
Checked By: BRIAN BOUDREAU
App'd By:
ABS App'l:
Date: JULY 12, 2022
Date:
Scale: AS NOTED
USCG App'l:

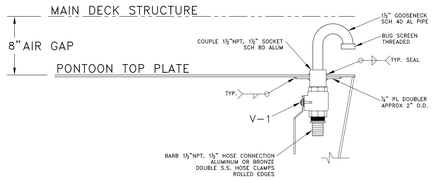
ANSI-E (34"x44")



TYPICAL SECTION
LOOKING FORWARD

MATERIAL & EQUIPMENT LIST

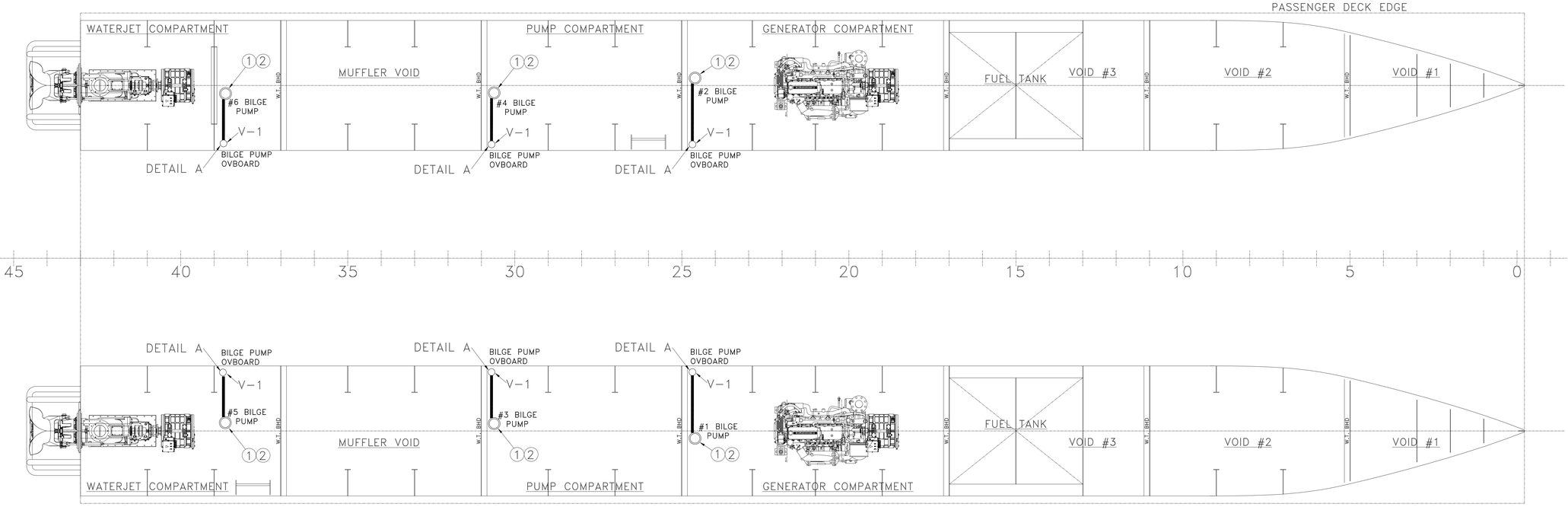
PIECE NO.	QTY.	DESCRIPTION	MFG / MODEL	STANDARDS
1	6	SUBMERSIBLE BILGE PUMP, 3700 GPH, 12VDC PORT: 1½" BARB, IGNITION PROTECTED		UL1113 APPROVED
2	6	BILGE FLOAT SWITCH WITH HIGH WATER ALARM SENDER AND KLVR CLAMP BRACKET, 12VDC		UL LISTED
H–#	–	HOSE, SIZED TO # INDICATED CORRUGATED BILGE HOSE, SMOOTH INSIDE SECURED EVERY 24" MAX DOUBLE HOSE CLAMP, STAINLESS STEEL ROLLED EDGE FASTENERS: 300 SERIES STAINLESS STEEL		SAE J2006, OPTION SAE J1942
PX–#	–	SCHEDULE 80 PIPE 6061–T6 ALUMINUM		
V–1	6	1½" BALL VALVE, NPT BRONZE OR ALUMINUM		ASTM SB61/62



TYPICAL: BILGE OVERBOARD
(6 LOCATIONS TOTAL)
NOT TO SCALE

SUBCH T NOTES:

1. IAW 46CFR 182.500(e): VOID #1, VOID #2, VOID #3, AND MUFFLER VOID ARE CONSIDERED SMALL BOUYANCY COMPARTMENTS, STABILITY CALCULATIONS SHOW THE HIGH DEGREE OF SUBDIVISION WILL NOT IMPARE THE SAFETY OF THE VESSEL. NO MACHINERY OR PENETRATIONS ARE IN THESE LOCATIONS: DRAINAGE IS OMITTED IN THESE VOIDS.
2. PUMPS CONTROLS MUST MEET THE REQUIREMENTS OF 46 CFR 182.520(a).
3. ALL SUBMERSIBLE PUMPS MUST MEET THE REQUIREMENTS OF 46CFR 182.520(e).



HOLD PLAN VIEW

– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	NO.	DESCRIPTION
		1.	GENERIC PART DESIGNATIONS	8.12.22	JS				

CODE: 4 – APPROVED; 3 – COMMENTED; 2 – PRELIMINARY; 1 – RECEIVED

– DRAWING SUBMITTALS –

ALT. NO.	OWNERS	MSC–USCG
5		
4		
3		
2		
1	S/08.12.22/E	
0	S/8.4.22/E	
P		

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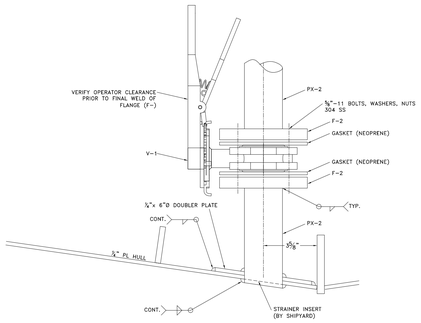
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

BILGE PIPING

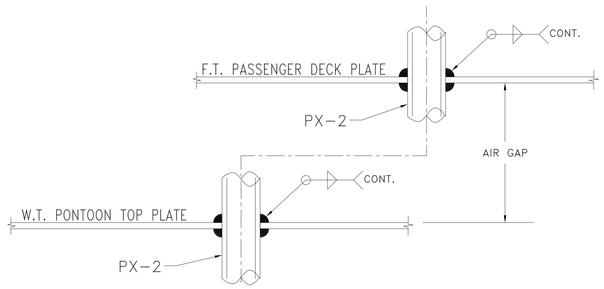
Dwg. No. 22-1477-4005
Alt. No. 1
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU Date: 14 JUL 2022
Checked By: Date:
App'd By: Scale: ½"=1'–0"
ABS App'l: USCG App'l.:

ANSI–E (34"x44")



DETAIL B:
FIRE MAIN SUCTION HULL PENETRATION
3"=1'-0"



DETAIL A:
FIRE MAIN W.T PENETRATIONS
PONTOON TOP AND PASSENGER DECK
3"=1'-0"

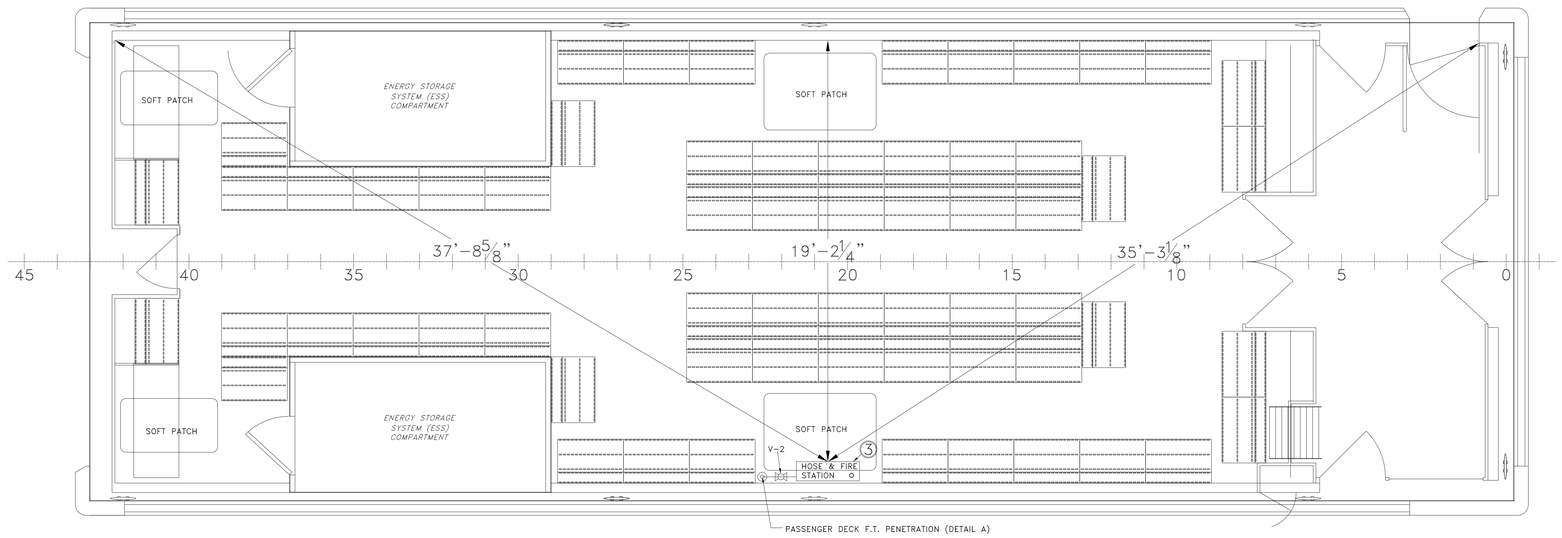
MATERIAL & EQUIPMENT LIST

PIECE NO.	QTY.	DESCRIPTION	MATERIAL SPECIFICATION	REMARKS
V-1	1	2" BUTTERFLY VALVE, 150 LB, WAFER TYPE, DUCTILE IRON	ASTM A-395	OR EQUAL
V-2	1	2" GLOBE VALVE, 150 LB, 90°, BRONZE, NPT THREADED	ASTM A-395	OR EQUAL
PX-#	AS REQ'D	SCH 80 PIPE, ALUMINUM	5086/6061	
F-#	AS REQ'D	SIZED TO PIPE LOCATION, FLANGED, 150#, SLIPON OR WELD-NECK, ANSI/ASME B16.5	5086/6061	
(P)	1	PRESSURE GAUGE, 0-150 PSI, STAINLESS STEEL CONNECTION.		ASME/UL
(1)	1	SELF-PRIMING FIRE PUMP: 5HP, 50GPM @70 PSI, 208V 3ø	----	OR EQUAL REMOTE START/STOP FROM LOCAL AND OPERATORS STATION
(2)	1	2" NPT STRAINER, BRONZE CASTING, S.S. ENCLOSURE, 304SS BASKET		OR EQUAL
(3)	1	FIRE STATION, 1½" HOSE, VALVE, NOZZLE UNIT; 50'x1½ " UL19, FIRE HOSE W/ BRASS FITTINGS (NFPA 1963), 1-1/2" SHIPBOARD VARI-NOZZLE, STRAIGHT STREAM SETTING ½" DIA. (USCG EQUIPMENT CLASS 162.027) OR OTHER NOZZLE ACCEPTABLE TO USCG INSPECTOR	USCG APPROVED	OR EQUAL

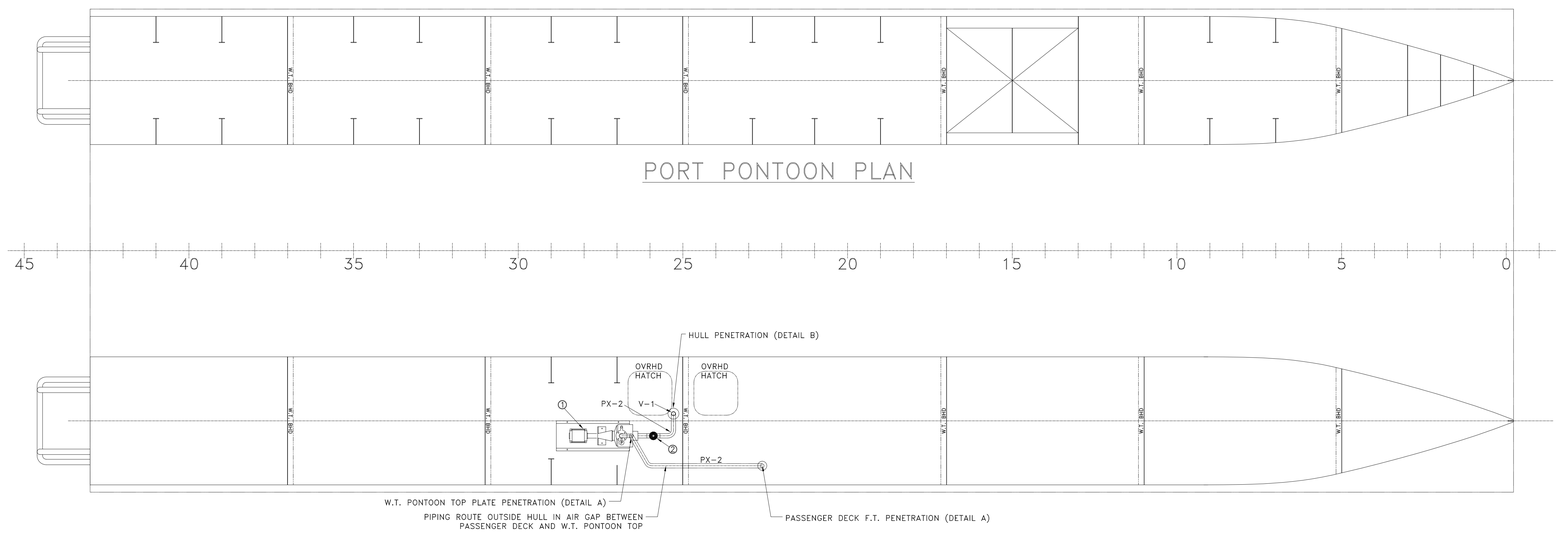
46CFR 182.730(a)(3): NONFERROUS METALLIC PIPING MATERIALS ARE ACCEPTABLE FOR USE IN ALUMINUM BILGE, BALLAST, AND FIREMAIN PIPING ON ALUMINUM HULLED VESSELS. ENSURE RESTRICTIONS OF 46CFR 182.730(b) ARE APPLIED.

ALL COMPONENTS OF THE FIRE STATION SHALL COMPLY WITH THE REQUIREMENT OF SUBCHAPTER T SECTION 181 (46 CFR 181-C).

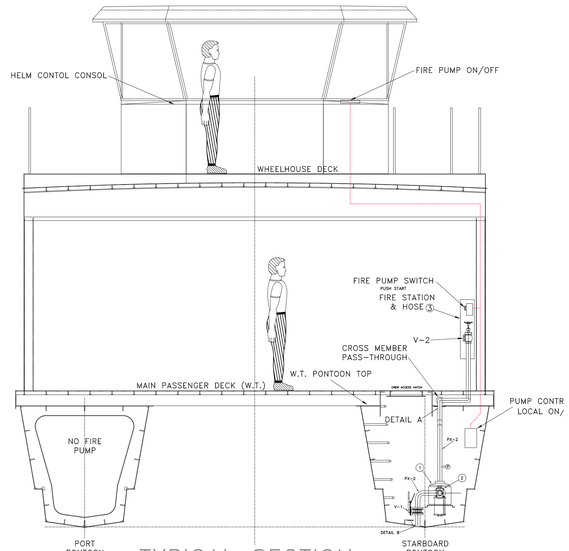
PIPING LONGITUDINAL RUN PASS-THROUGHS IN CROSS MEMBERS MAY BE MADE WHERE THE CROSS MEMBER WEB THAT IS IN THE VICINITY TO THE PONTOON TOP PLATE. HOWEVER NUMBER OF CUTS SHOULD BE MINIMIZED



MAIN DECK PLAN VIEW



PORT PONTOON PLAN



TYPICAL SECTION
ESS CHILLER COMPARTMENT
LOOKING FORWARD

- GENERAL NOTES -

NO.	DESCRIPTION
1	ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 46 CFR SUBCHAPTER T

- ALTERATIONS -

NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

- RESERVATIONS -

NO.	DESCRIPTION

- REFERENCES -

NO.	DESCRIPTION

CODE: A - APPROVED; P - PRELIMINARY; C - CERTIFIED; R - REVISED; X - RETURNED

- DRAWING SUBMITTALS -

MSC-USCG	OWNERS	ALT. NO.
	P/07.13.22/E	P
	S/08.04.22/E	0
	S/08.12.22/E	1
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		3
		4
		5

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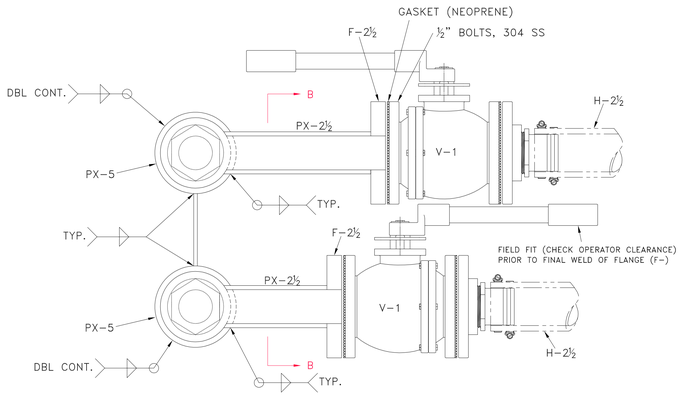
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

FIREMAIN PIPING

Dwg. No. 22-1477-4006
Alt. No. 1
Sht. 1 OF 1

Drawn By: JOE SILAS Date: JULY 13, 2022
Checked By: BRIAN BOUDREAU Date:
App'd By: Scale: ½"=1'-0"
ABS App'l: USCG App'l.:

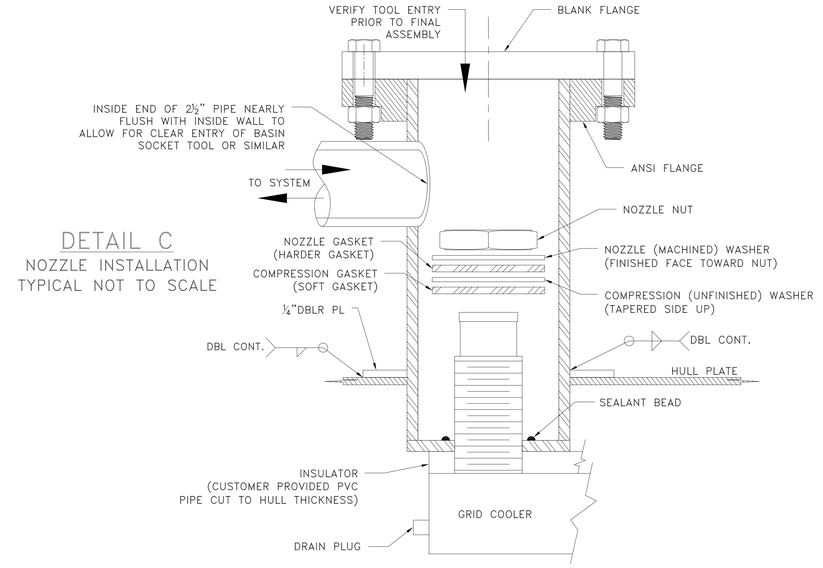
ANSI-E (34"x44")



SECTION A–A

GRID COOLER COFFERDAM

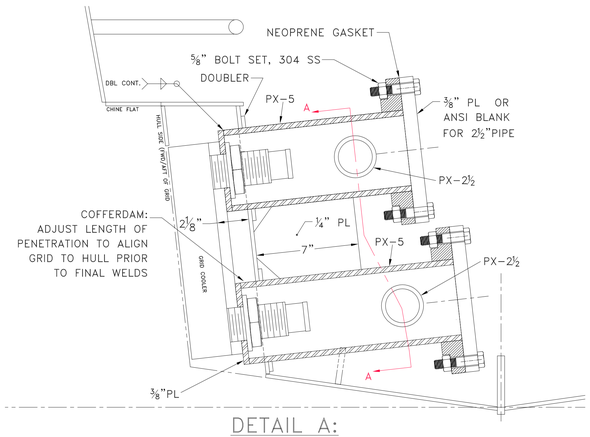
3"=1'–0"



DETAIL C

NOZZLE INSTALLATION

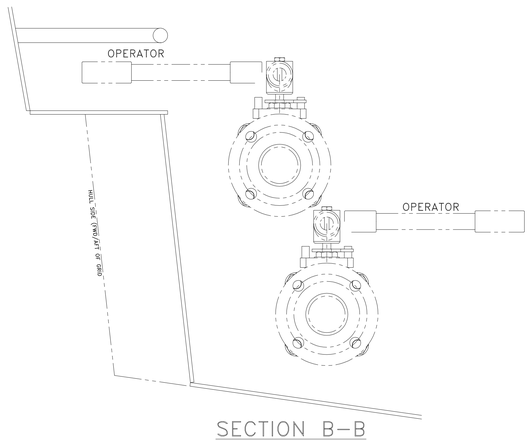
TYPICAL NOT TO SCALE



DETAIL A:

GENERATOR GRID COOLER COFFERDAM

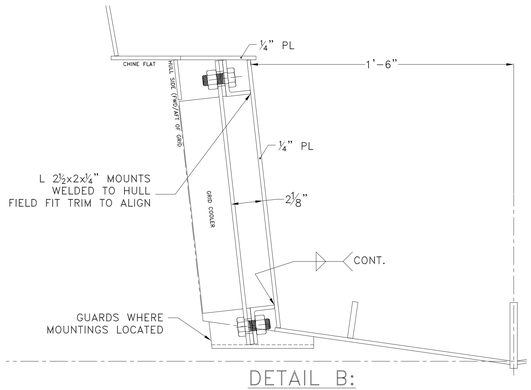
SCALE: 3"=1'–0"



SECTION B–B

VALVE OPERATOR

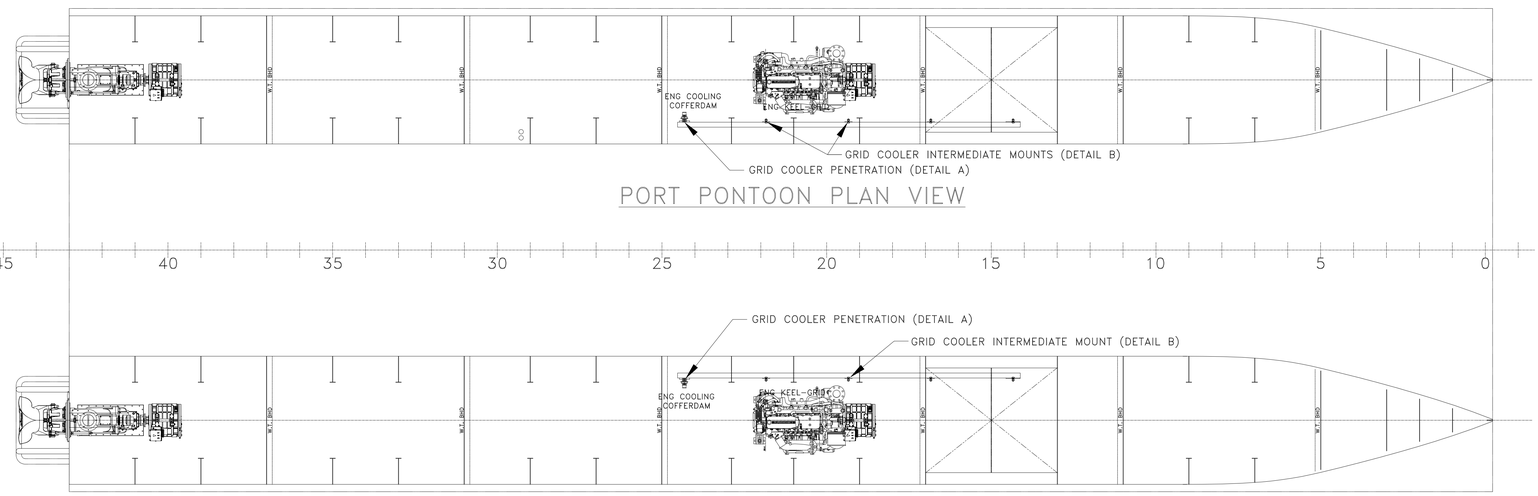
3"=1'–0"



DETAIL B:

GRID INTERMEDIATE SUPPORTS

SCALE: 3"=1'–0"



PORT PONTOON PLAN VIEW

STBD PONTOON PLAN VIEW

MATERIAL & EQUIPMENT LIST

PIECE NO.	QTY.	DESCRIPTION	REMARKS
V–1	4	2½" ISOLATION VALVE, BALL FLANGED, BRONZE OR S.S.	ASME SB61
CV–1	**	CHECK VALVE, IN–LINE, BRONZE OR S.S. (NOTE **)	ASTM SB61
PX–#	AS REQ'D	SIZE TO "#" SCH 80 ALUMINUM PIPE, 5086 OR 6061	ASTM B241
H–#	AS REQ'D	I.D. SIZE TO "#" REINFORCED MARINE HOSE, MIN 200PSI, MFG SHIELDS XXX OR EQ STAINLESS STEEL DOUBLE HOSE CLAMPS OR FACTORY INSTALLED THREADED J1475	SAEJ2006/UL1129
F–#	AS REQ'D	SIZE TO "#", 150# FLANGE SLIP–ON, ALUMINUM PIPE, 5086 OR 6061	ASTM B16.5, SB211
1	2	KEEL COOLER: 14,000BTU, 48GPM, 187 IN	CU–NI
2	2	COFFERDAM, 5" SCH 80 PIPE, ⅜" PLATE ¼" GUSSETS & STIFFNERS	YARD FABRICATED, SEE SECTION A–A

** NOTE: CHECK VALVE ONLY ADDED WHERE THERE IS NOT A VALVE INTEGRAL TO THE ENGINE. ALL PIPE, HOSE, & VALVE SIZES SUBJECT TO ENGINE VEDOR INSTALLATION REQUIREMENTS.

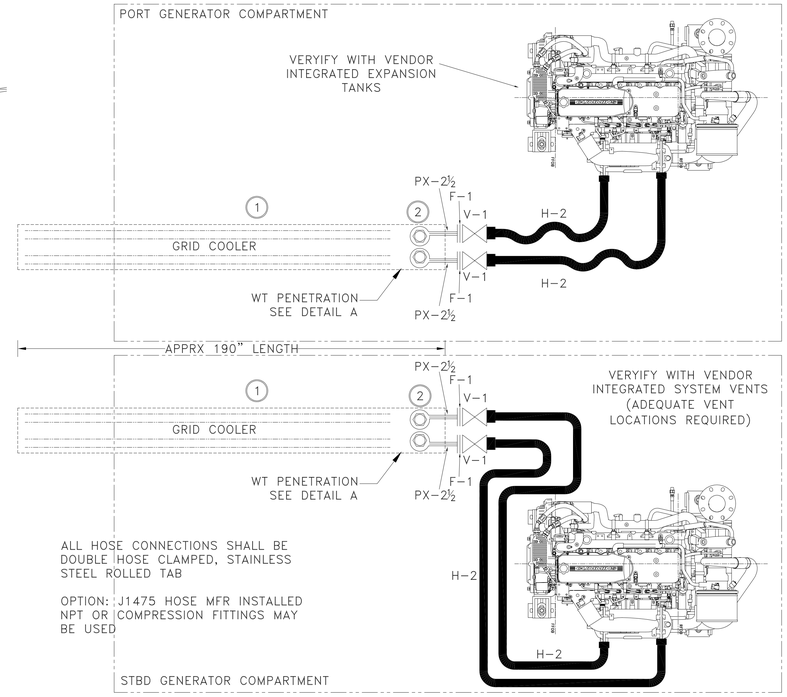
ENGINE PARTICULARS:

SEE SPECIFICATIONS
RATING: 305 HP
RATED SPEED: 2600 RPM

HEAT REJECTION:
JACKETWATER: 13,700 BTU/MIN
AUXILIARY: 490 BTU/MIN

COOLING SYSTEM:
CAPACITY ENGINE & INTEGRAL EXPANSION TANK: 7.0 GAL
MAX COOLANT TEMP – ENGINE OUT: 205°F
MAX COOLANT TEMP _ INLET: 130°F
COOLANT FLOW TO COOLER: 48 GPM

ALL HOSE SHALL BE SECURED APPROXIMATELY EVERY 24 INCHES TO RESTRICT MOVEMENT BUT ALLOW FOR EXPANSION WITHOUT IMPARTING TENSION. AVOID ROUTING HOSES NEAR HOT COMPONENTS AND/OR PROVIDE HEAT SHIELD PROTECTION TO THE SATISFACTION OF THE OWNER.



GENERATOR COOLING SCHEMATIC

NOT TO SCALE

– GENERAL NOTES –

NO.	DESCRIPTION
1	ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 46 CFR SUBCHAPTER T

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION

CODE: 1 – PRELIMINARY; 2 – COMPLETED; 3 – REVISED; 4 – APPROVED; 5 – RETURNED

– DRAWING SUBMITTALS –

MSC–USCG	OWNERS	ALT. NO.
		5
		4
		3
		2
	S/08.12.22/E	1
	S/8.4.22/E	0
		P

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Jacksonville, Florida 32207
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Fax: (904) 399–1522
Info@dejongandlebet.com

Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

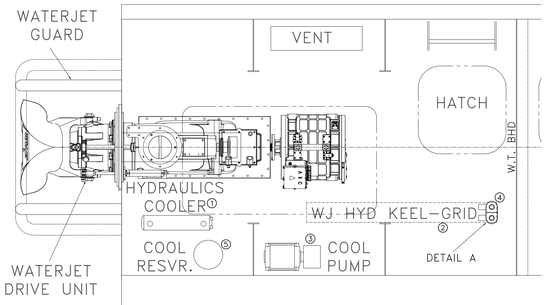
GENERATOR COOLING SYSTEM PIPING

Dwg. No. 22–1477–4008

Alt. No. 1
Sht. 1 OF 1

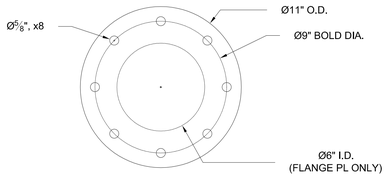
Drawn By: JOE SILAS — Date: JUNE 24, 2022
Checked By: BRIAN BOUDREAU — Date: _____
App'd By: _____ — Scale: AS NOTED
ABS App'l: _____ — USCG App'l: _____

ANSI–E (34"x44")



45 40

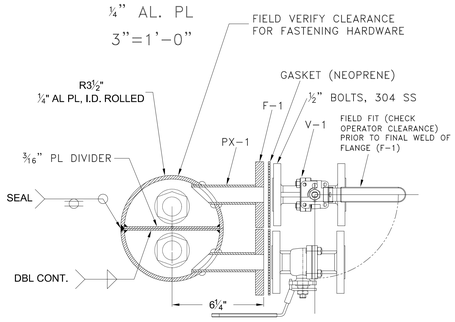
PLAN VIEW



COFFERDAM COVER PLATE

¼" AL. PL

3"=1'-0"



SECTION A-A:

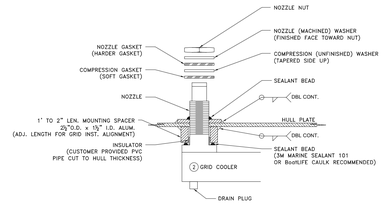
COFFERDAM

3"=1'-0"

WATERJET PARTICULARS:

MAKE/MODEL: *SEE SPECIFICATIONS*
DRIVE: *ELECTRIC MOTOR*
MOTOR RATING: *274 HP CONT.*
RATED SPEED: *2600 RPM*

JET MOUNTED HYDRAULICS AND JET MOUNTED HYDRO-MECHANICAL CONTROL



SECTION B-B

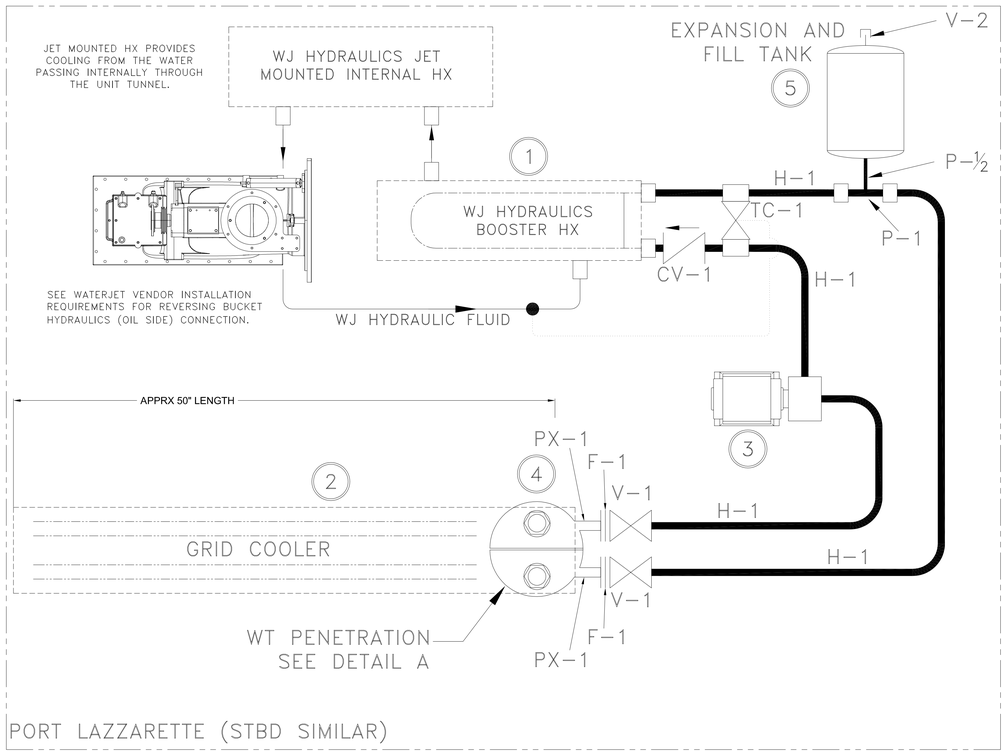
GRID COOLER INSTALLATION

6"=1'-0"

MATERIAL & EQUIPMENT LIST

PIECE NO.	QTY.	DESCRIPTION	MFG / MODEL	STANDARDS
①	2	HEAT EXCHANGER, WATER-COOLED OIL COOLER PORT SIZE: ¾" OIL, ¾" WATER, 4 TO 20 GPM BTU/HR: TBD	SHELL-TUBE	WATERJET VENDOR TO PROVIDE BTU/HR RATING
②	2	KEEL COOLER, COPPER NICKEL, 500BTU, 6GPM, 50 IN.		-
③	2	SELF-PRIMING PUMP, ½HP INLET: 1½", OULET: 1½" (W/ REDUCERS) 115/230V AC, 29GPM @ 20FT		-
④	2	HULL PENETRATION COFFERDAM MIN ¼" PL, 6061/5086 ALUM 1"FLANGED WATER INLET/OUTLET, 304 STAINLESS STEEL FITTINGS	SY FABRICATED (OR OTS EQ.)	SEE DETAIL A-A
⑤	2	EXPANSION/FILL TANK, 5 TO 15 GAL COATED STEEL OR STAINLESS STEEL ½" NPT CONN., <15PSI	SY FABRICATED (OR OTS EQ.)	SEE NOTE BELOW
TC-1	2	1" D.A. REGULATOR VALVE (TEMPERATURE CONTROL) BODY: BRONZE OR S.S., FASTENERS: 304 STAINLESS STEEL		
V-1	6	1" BALL VALVE (OR BTRFLY), FLANGED BODY: BRONZE OR S.S., FASTENERS: 304 STAINLESS STEEL		ASME B61
V-2	2	¼" VENT VALVE, GLOBE OR BALL BRONZE, FNPT		ASME B61
CV-1	2	IN-LINE CHECK VALVE, (SIZE TO SERVICE LINE) BRONZE, 200#WOG, FNPT, THREADED		ASME B61
P-#	-	SCHEDULE 10 STAINLESS STEEL TUBE 304 STAINLESS STEEL, ALL PIPE, FITTINGS, & FASTENERS	SHIPYARD	
PX-#	-	SCHEDULE 80 PIPE 6061-T6 ALUMINUM	SHIPYARD	
H-#	-	HOSE, SIZED TO # INDICATED DOUBLE HOSE CLAMP OR MFG THREADED FITTINGS FASTENERS: 300 SERIES STAINLESS STEEL	SHIPYARD	J2006, OPTION J1942
F-#	-	FLANGE 150# SLIPON 6061-T6 ALUMINUM FASTENERS: 304 STAINLESS STEEL	SHIPYARD	

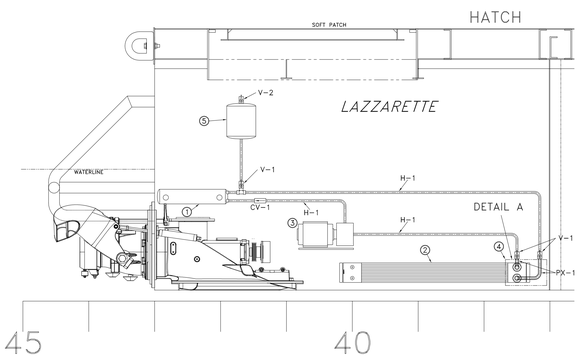
EXPANSION TANK NORMAL OPERATING PRESSURE VENTED TO ATM.



WATERJET HYDRAULICS COOLING SCHEMATIC (X2)

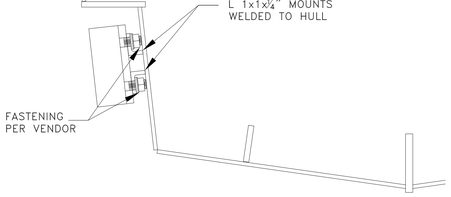
PORT AND STARBOARD SIDES IDENTICAL AND INDEPENDENT

NOT TO SCALE



45 40

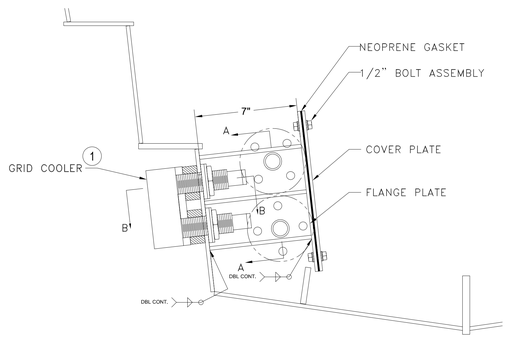
INBOARD PROFILE VIEW



DETAIL B:

GRID COOLER INTERMEDIATE SUPPORT

SCALE: 3"=1'-0"



DETAIL A:

GRID COOLER COFFERDAM

SCALE: 3"=1'-0"

- GENERAL NOTES -		- ALTERATIONS -			- REFERENCES -	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION
1	ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 46 CFR SUBCHAPTER T	1.	GENERIC PART DESIGNATIONS	8.12.22 JS		

CODE: A - APPROVED; B - CHANGED; C - PRELIMINARY; D - REVISED; E - RETURNED

							5
							4
							3
							2
						S/08.12.22/E	1
						S/8.4.22/E	0
							P
					OWNERS	MSC-USCG	ALT. NO.

- DRAWING SUBMITTALS -

DeJong & Lebet, Inc.

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1734 Emerson Street
Jacksonville, Florida 32207
www.dejongandlebet.com

Phone: (904) 399-3673
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info@dejongandlebet.com

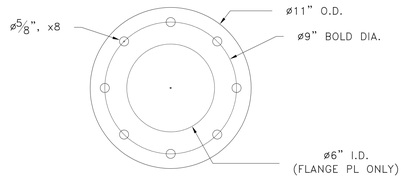
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

EXHAUST MIXER & WATERJET HYDRAULICS COOLING

Dwg. No. 22-1477-4010 Alt. No. 1 Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU Date: 12 JUL 2022
Checked By: Date:
App'd By: Scale: ½" = 1'-0"
ABS App'l: USCG App'l.:

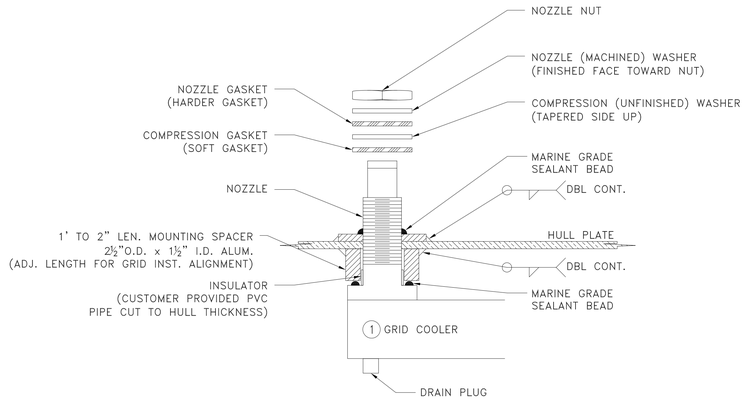
ANSI-E (34"x44")



COFFERDAM COVER PLATE

¼" AL. PL

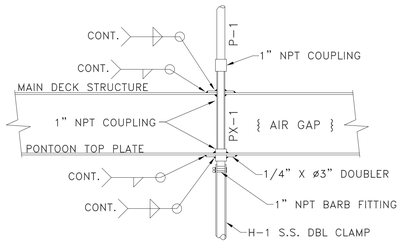
3"=1'-0"



SECTION B-B

GRID COOLER INSTALLATION

6"=1'-0"



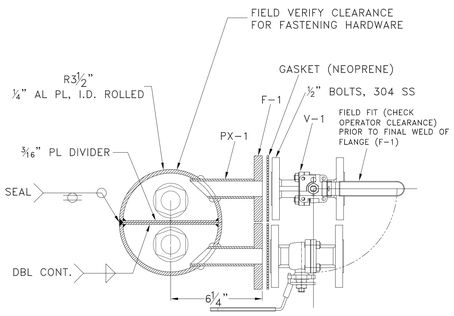
DETAIL-C

WT PENETRATION

1½"=1'-0"

MATERIAL & EQUIPMENT LIST

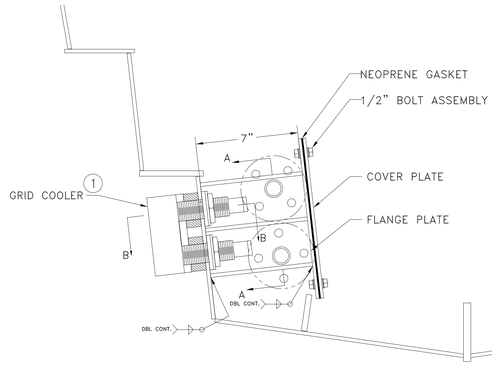
PIECE NO.	QTY.	DESCRIPTION	SPECS / REMARKS
V-1	4	1" ISOLATION VALVE, BTRFLY OR BALL FLANGED, BRONZE OR S.S.	ASME SB61
CV-1	4	1" CHECK VALVE, IN-LINE, BRONZE OR S.S.	ASTM SB61
PX-#	AS REQ'D	SIZE TO "#" SCH 80 ALUMINUM PIPE, 5086 OR 6061	ASTM B241
H-#	AS REQ'D	I.D. SIZE TO "#" REINFORCED MARINE HOSE, MIN 200PSI, STAINLESS STEEL DOUBLE HOSE CLAMPS OR FACTORY INSTALLED THREADED	SAEJ2006/UL1129
F-#	AS REQ'D	SIZE TO "#", 150# FLANGE SLIP-ON, ALUMINUM PIPE, 5086 OR 6061	ASTM B16.5, SB211
1	2	KEEL COOLER: 500BTU/MIN, 6 GPM, 74 IN.	
2	2	COFFERDAM, ¼" AL PLATE W 1" NPT SCH 40 PIPE	YARD FABRICATED, SEE SECTION A-A
3	2	CHILLER: 36,000 BTU	
4	2	CHILLED WATER CIRCULATION PUMP: ⅓HP CENTRIFUGAL 120/240VAC 29GPM @ 20FT HEAD	OR EQUAL
5	2	CONDENSOR CIRCULATION PUMP: ⅓HP CENTRIFUGAL 120/240VAC 29GPM @ 20FT HEAD	OR EQUAL



SECTION A-A:

COFFERDAM

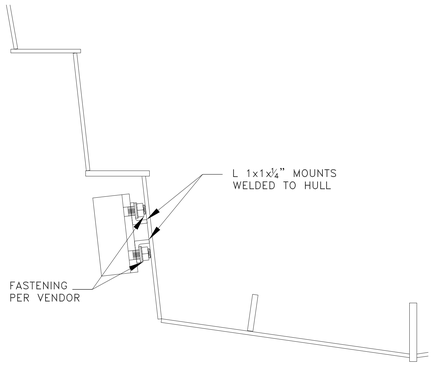
3"=1'-0"



DETAIL A:

GRID COOLER COFFERDAM

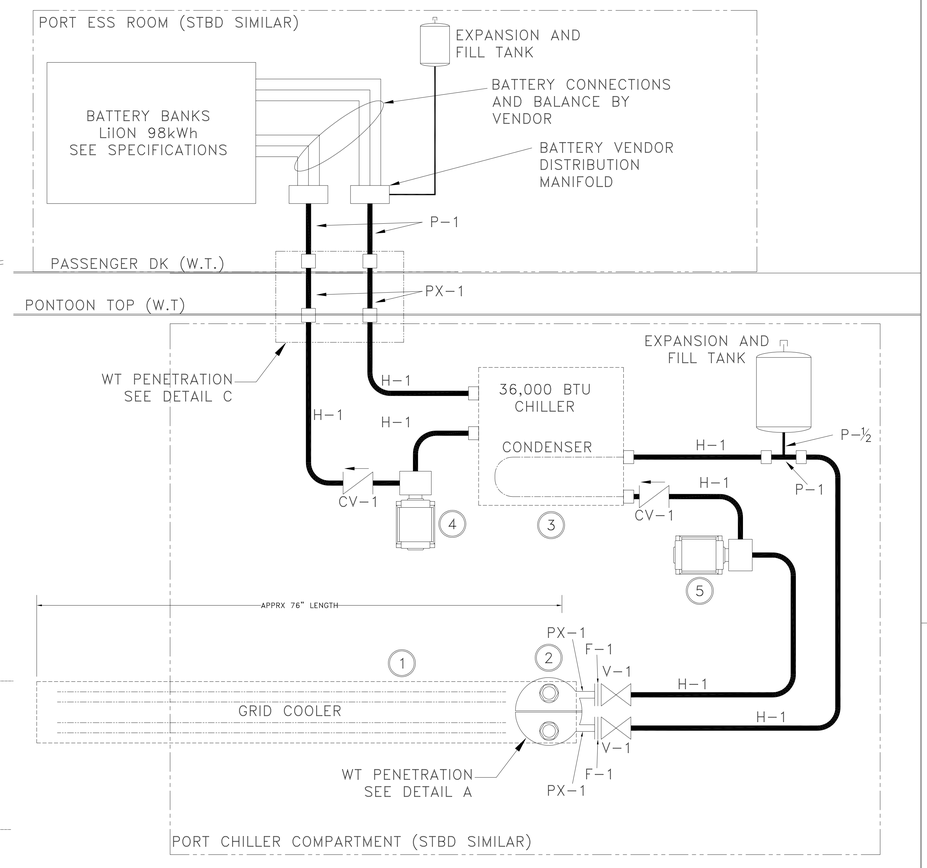
SCALE: 3"=1'-0"



DETAIL B:

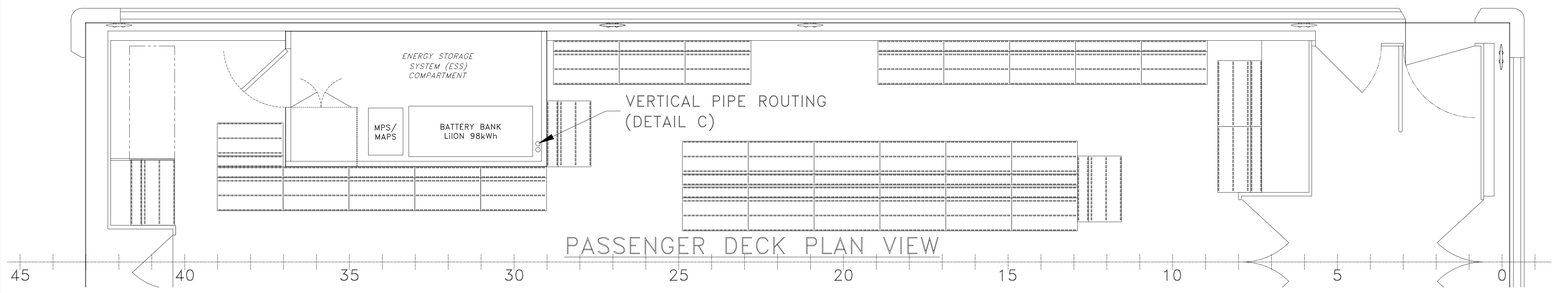
GRID COOLER INTERMEDIATE SUPPORT

SCALE: 3"=1'-0"

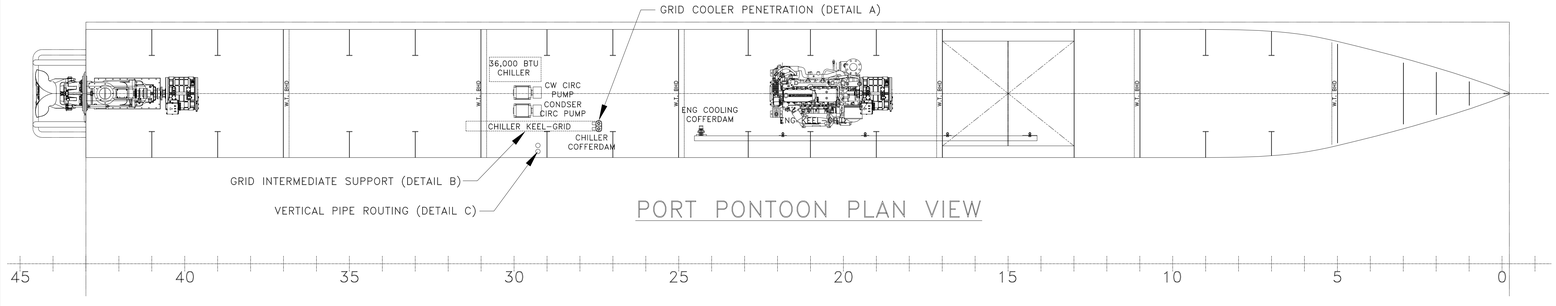


BATTERY SYSTEM COOLING SCHEMATIC (X2)

PORT AND STARBOARD SIDES IDENTICAL
AND INDEPENDENT
NOT TO SCALE



PASSENGER DECK PLAN VIEW



PORT PONTOON PLAN VIEW

– GENERAL NOTES –		– ALTERATIONS –			– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE BY	NO.	DESCRIPTION	NO.	DESCRIPTION
1	ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 46 CFR SUBCHAPTER T	1.	GENERIC PART DESIGNATIONS	8.12.22 JS				

CODE: A - APPROVED; B - COMPLETED - PRELIMINARY; C - RECEIVED - RETURNED

– DRAWING SUBMITTALS –			
MSC-USCG	OWNERS	ALT. NO.	
		5	
		4	
		3	
		2	
	S/08.12.22/E	1	
	S/8.4.22/E	0	
		P	

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Jacksonville, Florida 32207
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Phone: (904) 399-3673
Fax: (904) 399-1522
info@dejongandlebet.com

Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

BATTERY (ESS) SYSTEM COOLING PIPING

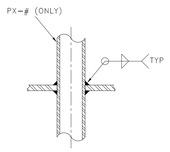
Dwg. No. 22-1477-4022

Alt. No. 1
Sht. 1 OF 1

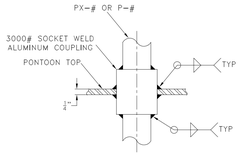
Drawn By: JOE SILAS
Checked By: BRIAN BOUDREAU
App'd By:
ABS App'l:

Date: JUNE 24, 2022
Date:
Scale: 3/8"=1'-0" OR AS NOTED
USCG App'l:

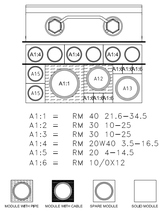
ANSI-E (34"x44")



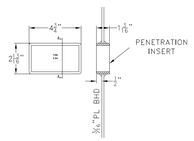
DETAIL A
PONTOON W.T. TOP PENETRATION
TANK VENT, FILL, SHUTOFF TUBE
NOT TO SCALE



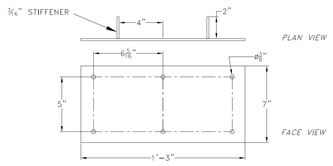
DETAIL B
FUEL TANK O.T. TOP PENETRATION
NOT TO SCALE



DETAIL C-1
PONTOON BHD PENETRATION
FILL DETAIL



DETAIL C-2
PONTOON BHD PENETRATION
INSERT, ALUMINUM



DETAIL D
FUEL FILTER MOUNTING
3/16"PL, 6056 AL

1. MOUNT FILTER ASSEMBLY AS CLOSE TO VERTICAL AS POSSIBLE, DO NOT EXCEED 10° FROM VERTICAL.

2. DO NOT REMOVE VALVE FITTINGS AS THEY ARE INTEGRAL COMPONENTS TO THE VALVE BODY.

BILL OF MATERIALS

#	QTY.	SERVICE	TYPE	MAKE/MODEL	MATERIAL	SPEC
(1)	2	FUEL FILTER	MARINE TURBINE SERIES, 60 GPH ¾"-16 SAE PORTS, 30 MICRON		METAL BOWL	USCG APPROVED
PX-#	AS REQ'D		SCH. 80 PIPE		6061-T6 ALUMINUM	ASTM B241
P-#	AS REQ'D		SCH. 40 PIPE	SEAMLESS PIPE/TUBE MIN WALL 0.035"	304 STAINLESS STEEL	
H-#	AS REQ'D		FUEL OIL HOSE, 150# WP			SAE J-1942, SAE J-1475 (FITTINGS)
FX-#"	AS REQ'D		3000 # SOCKET WELD FITTINGS		5086 ALUMINUM	ASTM B210
(L)	2	LEVEL DETECTOR				
V-1	2	REMOTE SHUTDOWN FO TANK VALVE	¾" FULL PORT BALL VALVE, STAINLESS STEEL, FLANGED, 150 LB SSP		304/316 S.S.	ASTM A351-CF8M
V-2	2		¾" FULL PORT BALL VALVE, STAINLESS STEEL, THREADED, 150 LB SSP		304/316 S.S.	ASTM A351-CF8M
CV-1	2		¾" SWING CHECK VALVE, STAINLESS STEEL, THREADED, 200 PSI, WOSG		304/316 S.S.	ASTM A351-CF8M

SYMBOLS LIST

	FUEL OVER TANK TOP, SIDE AND FLOW DIRECTION ARROW
	FUEL RETURN CURVE DIRECTION AND FLOW DIRECTION ARROW
	REDUCER
	BULKHEAD PENETRATION (SEE DETAIL #)
	HOSE
	TURBINE FUEL FILTER
	DRIP PAN
	BALL VALVE
	CHECK VALVE
	EMERGENCY FUEL SHUT OFF VALVE WITH REMOTE CABLE ACTIVATION

ENGINE PARTICULARS:

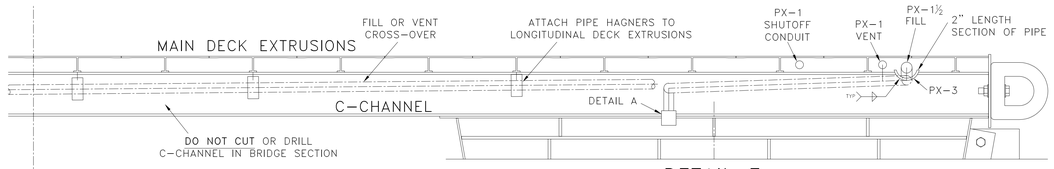
ENGINE: SEE SPECIFICATIONS
RATING: 505 HP
RATED SPEED: 2600 RPM
TYPE: DIESEL

FUEL CONSUMPTION (RATED): 15.5 GAL/HR
FUEL FLOW TO PUMP: 57.0 GAL/HR
MAX FUEL TEMP TO PUMP: 140 °F
APPRX FUEL RETURN FLOW: 41.5 GAL/HR
APPRX FUEL RETURN TEMP: 150 °F

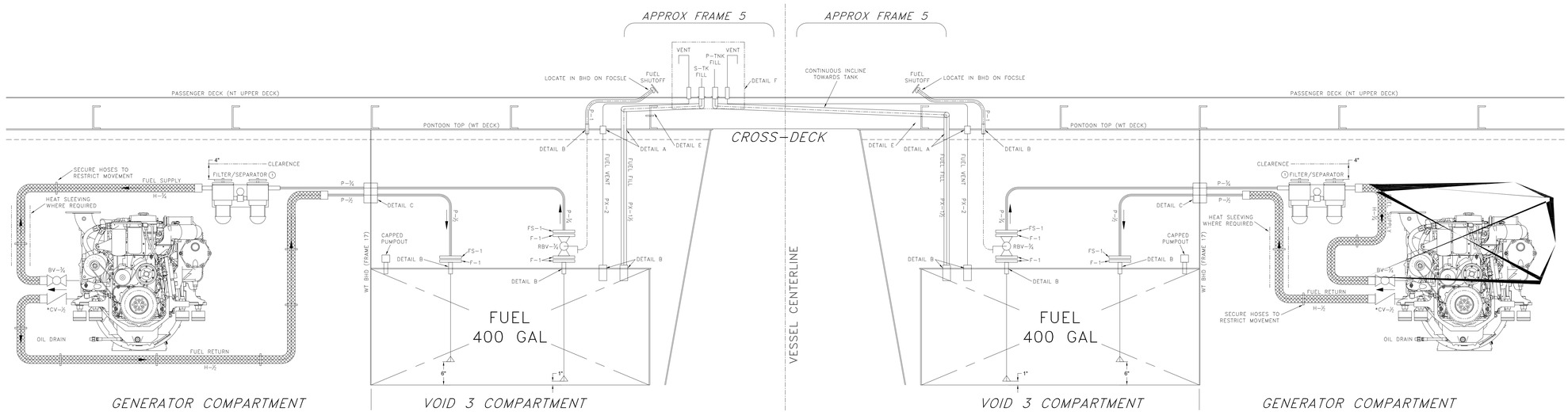
SYSTEM PARTICULARS:

TANK CAPACITY (TOTAL): 800 GAL
TANK VENT DIA: 1" SCH 40 (1.660IN O.D. / 0.035in WALL)

NOTE: FOR PIPE FASTENERS: AVOID 316L OR ANY 400 SERIES STAINLESS STEEL FASTENERS WHERE HEAT AND DISIMIAR METALS ARE PRESENT, SELECT 304 STAINLESS STEEL WHERE POSSIBLE.

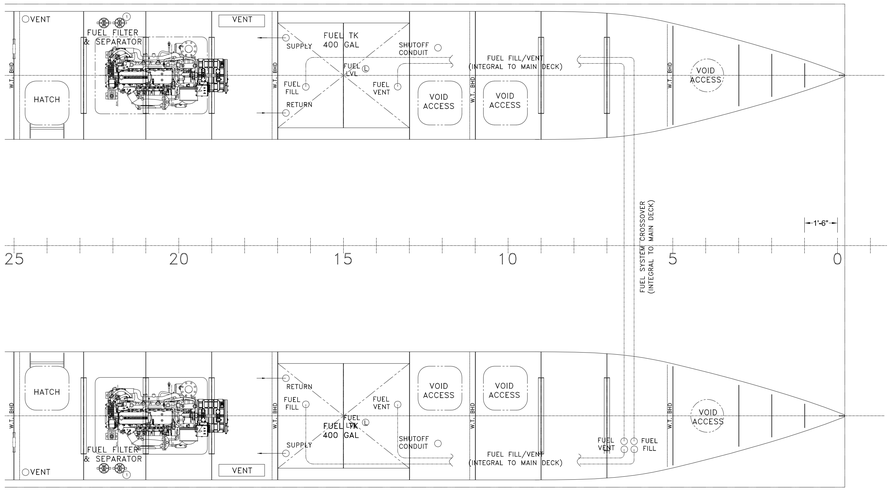


DETAIL E
PIPE ROUTING THROUGH UNDER DECK



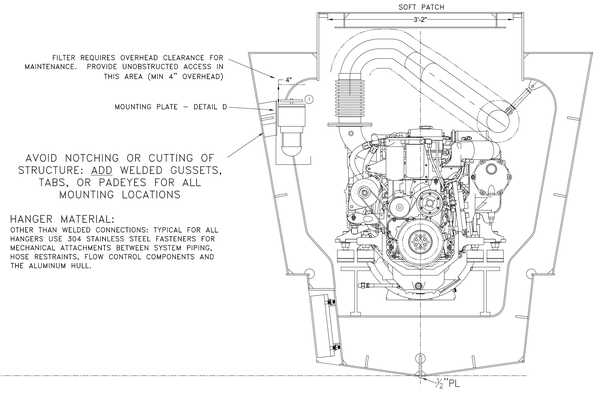
GENERATOR COMPARTMENT — VOID 3 COMPARTMENT — VOID 3 COMPARTMENT — GENERATOR COMPARTMENT

STBD PONTOON — PORT PONTOON

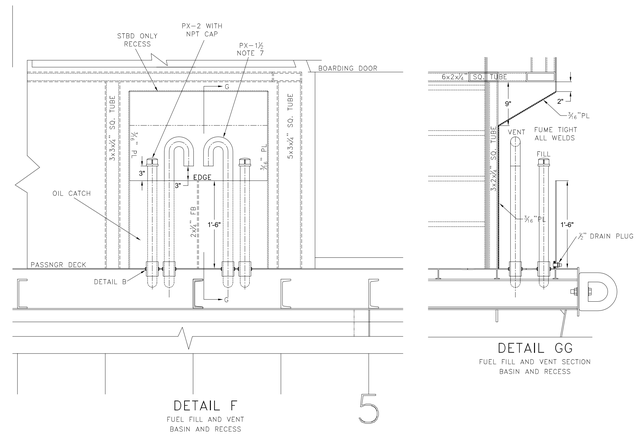


HOLD/UNDER DECK PLAN VIEW

PONTOON CATAMARAN CENTERLINE



FRAME 21



DETAIL F
FUEL FILL AND VENT BASIN AND RECESS

DETAIL GG
FUEL FILL AND VENT SECTION BASIN AND RECESS

5

— GENERAL NOTES —

NO.	DESCRIPTION
1	ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 46 CFR SUBCHAPTER T.
2	FUEL LINES TO BE SEAMLESS 304 STAINLESS STEEL PIPE WITH MINIMUM WALL 0.035 INCH.
3	FLEXIBLE NON-METALLIC HOSES AND FITTINGS SHALL CONFORM TO SAE J1942 AND J1475 SPECIFICATIONS. HOSES SHALL BE FITTED WITH FIRE SLEEVES WHERE REQUIRED UNDER SAEJ1942.
4	SHUTOFF VALVES SHALL BE PROVIDED IN THE FUEL SUPPLY AT THE FUEL TANK AND ENGINE CONNECTIONS. THE VALVE LOCATED AT THE TANK SHALL BE CAPABLE OF REMOTE OPERATION FROM OUTSIDE THE SPACE IN WHICH THE VALVE IS LOCATED (PREFERABLY FROM THE WEATHER DECK). SOLENOID VALVES ARE NOT ACCEPTABLE FOR THIS FUNCTION.
5	ALL SUPPLY FILTERS SHALL CONFORM TO 46 CFR 119.455(b)(5) AND 46 CFR 182.455(b)(6).
6	ALL FILL, SOUNDING, AND VENT PIPES SHALL CONFORM TO 46 CFR 182.445 AND 46 CFR 182.450.
7	EXPOSED END OF FUEL TANK VENT PIPE MUST BE FITTED WITH REMOVABLE FLAME SCREEN OR FLAME ARRESTER PER 46 CFR 182.450(e).

— ALTERATIONS —

NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

— REFERENCES —

NO.	DESCRIPTION

CODE: A - APPROVED; B - PRELIMINARY; C - DRAWING; D - REVISED; R - RESTENCED

— DRAWING SUBMITTALS —

	OWNERS	MSC-USCG	ALT. NO.
5			
4			
3			
2			
1		S/08.12.22/E	
0		S/8.4.22/E	
P			

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info@dejongandlebet.com

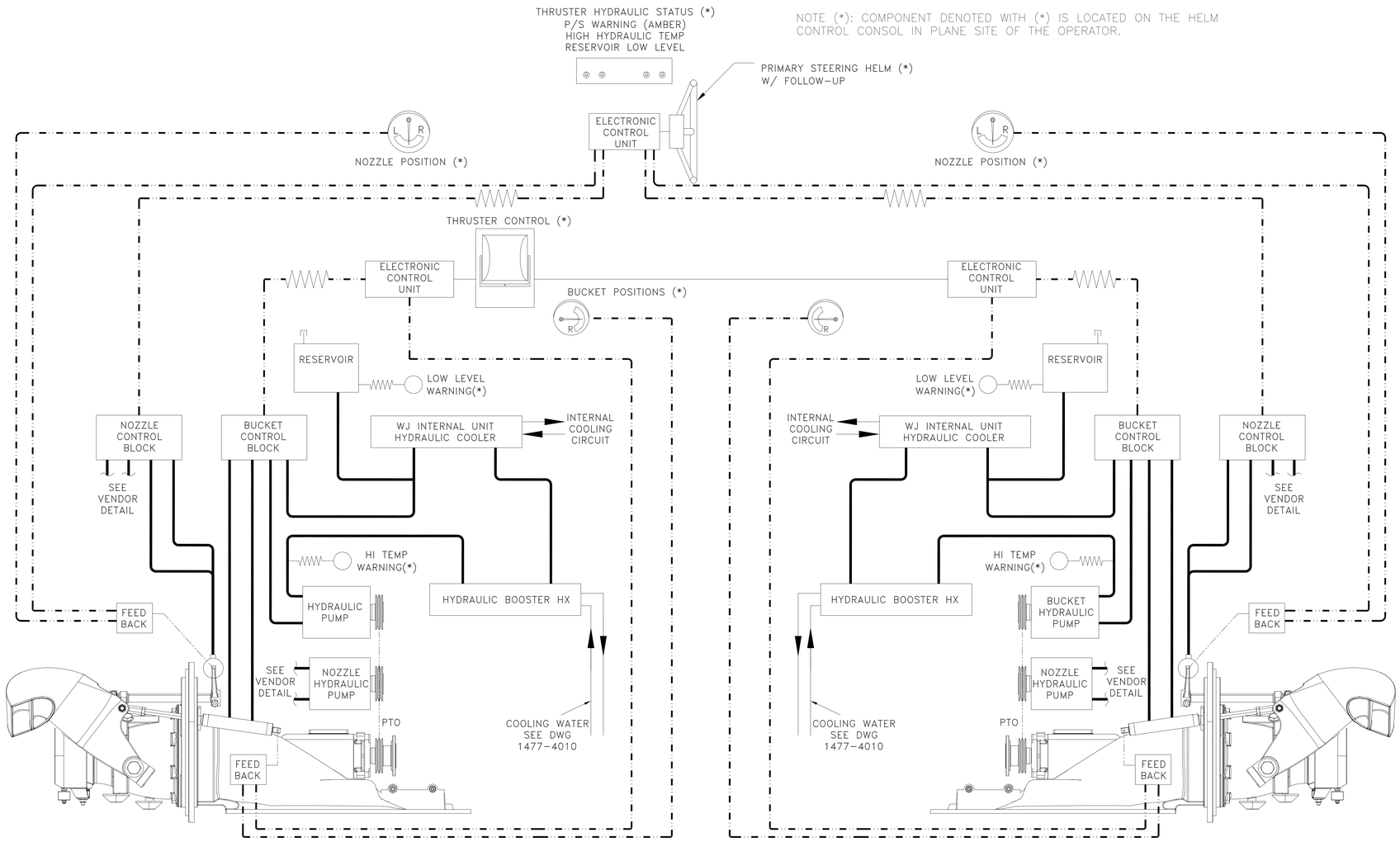
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

FUEL SYSTEM PIPING

Dwg. No. 22-1477-4055
Alt. No. 1
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU — Date: 05 JUL 2022
Checked By: — Date:
App'd By: — Scale: ½"=1'-0"
ABS App't: — USCG App't.:

ANSI-E (34"x44")



NOTE (*): COMPONENT DENOTED WITH (*) IS LOCATED ON THE HELM CONTROL CONSOL IN PLANE SITE OF THE OPERATOR.

HYDRAULIC SYSTEM SCHEMATIC

PORT & STARBOARD WATERJETS
SEE VENDOR INSTALLATION REQUIREMENTS FOR DETAIL

*** HIERARCHY ***
THIS SCHEMATIC IS A SIMPLIFIED DIAGRAM OF DESIRED OPERATIONAL AND MAINTENANCE CHARACTERISTICS OF THE WATERJET UNIT: VENDOR TO INCORPORATE AS MUCH AS POSSIBLE WITHIN NORMAL DESIGN AND LIMITATIONS. ITEMS THAT ARE SIGNIFICANT DEVIATIONS SHOULD BE BROUGH TO THE ATTENTION OF THE OWNER AND ENGINEERS FOR FINAL DECISION.

SCHEMATIC LEGEND

ELECTRONIC CONTROL AND INDICATION WIRING: REFER TO VENDOR INSTALLATION REQUIREMENTS FOR ELECTRONIC CONTROL WIRING HARNESS SPECIFICATIONS AND FINAL ARCHITECTURE.

HYDRAULIC FLUID PIPE AND HOSE: ALL PIPING AND HOSES SHALL BE SPECIFIED TO MEET 46 CFR SUBCHAPTER T REQUIREMENTS. REFER TO VENDOR INSTALLATION REQUIREMENTS FOR SIZING AND SYSTEM TEMPERATURE AND PRESSURE LIMITATIONS.

MECHANICAL INTERFACE: COMPONENTS SUCH AS POWER TAKEOFF (PTO) AND LINKAGES SHALL BE SPECIFIED AND INSTALLED TO MEET 46 CFR SUBCHAPTER T REQUIREMENTS. REFER TO COMPONENT SPECIFIC VENDOR INSTALLATION REQUIREMENTS FOR APPLICATION.

SYSTEM SPECIFIC REQUIREMENTS

WATERJET THRUSTER MUST BE REVERSIBLE TO ALLOW THE OPERATOR TO BACK FLUSH THE INTAKE NOZZLE WITH MINIMUM INTERVENTION.
- PROIVDE ANTI-REVSERSING CLUTCH FOR HYDRAULIC PTO
- ENSURE BUCKETS CAN BE POSITIONED FOR WATERJET REVERSAL

SYSTEM SHALL INCLUDE A HYDRAULIC RESERVOIR LEVEL INDICATOR (AMBER WARNING LIGHT) ON THE HELMSTATION CONSOL.

SYSTEM SHALL INCLUDE A HYDRAULIC FLUID HIGH TEMPERATURE INDICATOR (AMBER WARMING LIGHT) ON THE HELM STATION CONSOL

– GENERAL NOTES –

NO.	DESCRIPTION
1	ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 46 CFR SUBCHAPTER T.
2	HYDRAULC OIL LINES TO BE SEAMLESS 304 STAINLESS STEEL PIPE WITH MINIMUM WALL 0.035 INCH.
3	FLEXIBLE NON-METALLIC HOSES AND FITTINGS SHALL CONFORM TO SAE J1942 AND J1475 SPECIFICATIONS.
	HOSES SHALL BE FITTED WITH FIRE SLEEVES WHERE REQUIRED UNDER SAEJ1942.

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

– REFERENCES –

NO.	DESCRIPTION

CODE: 4 - APPROVED; 3 - COMPLETED; 2 - PRELIMINARY; 1 - REVISED; 0 - RETURNED

– DRAWING SUBMITTALS –

OWNERS	MSC-USCG	ALT. NO.
		5
		4
		3
		2
	S/08.12.22/E	1
	S/8.4.22/E	0
		P

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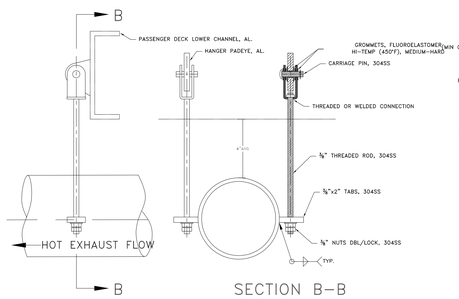
Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

WATERJET THRUSTER HYDRAULICS SYSTEM

Dwg. No. 22-1477-4072
Alt. No. 1
Sht. 1 OF 1

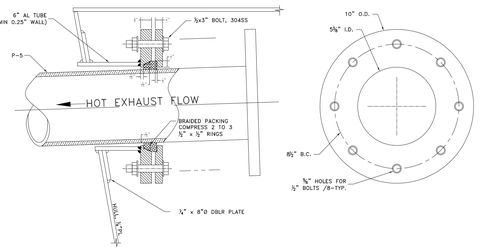
Drawn By: BRIAN BOUDREAU Date: 21 JUL 2022
Checked By: Date:
App'd By: Scale: 1/2"=1'-0"
ABS App'l: USCG App'l:

ANSI-E (34"x44")



SECTION B–B

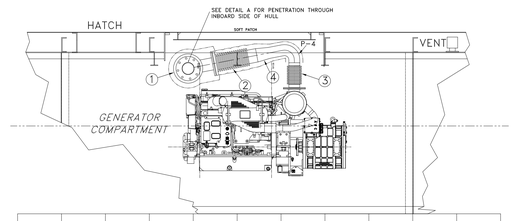
DETAIL B
TYPICAL EXTERIOR HANGER
NOT TO SCALE



DETAIL A
HULL PENETRATION

ENGINE PARTICULARS:

ENGINE:	*SEE SPECIFICATIONS*
RATING:	*305 HP*
RATED SPEED:	*2600 RPM*
EXHAUST FLOW:	*1325 CFM*
EXHAUST TEMP:	*1073 °F*
EXHAUST DIA:	*4 INCH*

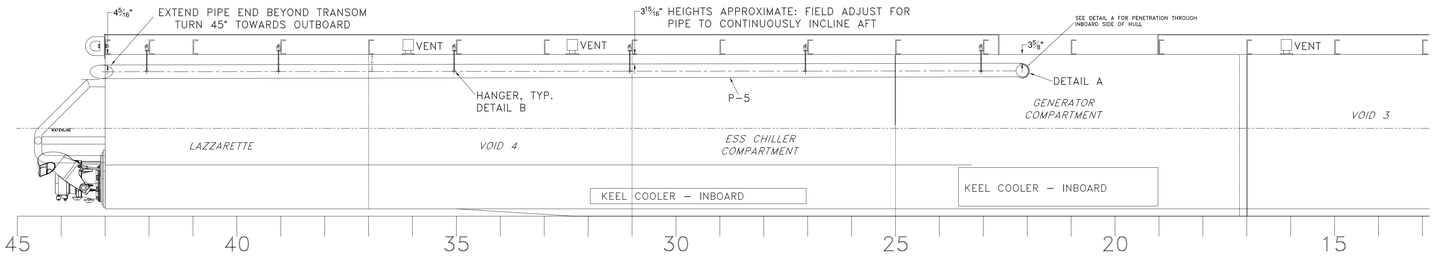


INBOARD PROFILE VIEW
INTERIOR PONTOON

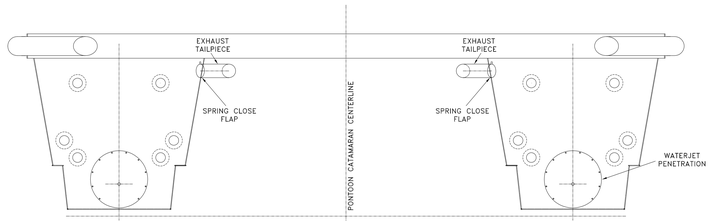
MATERIAL & EQUIPMENT LIST

PIECE NO.	QTY.	DESCRIPTION	MFG / MODEL	REMARKS
1	2	SILENCER, CRITICAL GRADE 5"–END INLET, 5" END–OUTLET, FLANGED 304 STAINLESS STEEL		
2	4	FLEX CONNECTORS, 321 SS 5"–FLANGED X TUBE FITTING 304 STAINLESS STEEL FITTINGS/FASTENERS, HI–TEMP BLANKETS		
3	2	FLEX CONNECTORS, 321 SS 4"–FLANGED X TUBE FITTING 304 STAINLESS STEEL FITTINGS/FASTENERS, HI–TEMP BLANKETS		MATCH 4" FLG TO ENG EXHAUST
4	2	REDUCER ELBOW, CUSTOM BUILT 4" INLET, 5" OUTLET, FIELD FIT TO SUIT 304 STAINLESS STEEL	SHIPYARD	
P–#	–	SCHEDULE 10 STAINLESS STEEL TUBE, SIZED TO # 304 STAINLESS STEEL, ALL PIPE, FITTINGS, & FASTENERS	SHIPYARD	
PX–#	–	SCHEDULE 80 PIPE, SIZED TO # 6061–T6 ALUMINUM	SHIPYARD	
F–#	–	FLANGE, ⅜" MIN THICKNESS, USE 125# DIMS AND BOLT PATTERN STANDARD FLANGE FACE FINISH FASTENERS: 300 SERIES STAINLESS STEEL	SHIPYARD	SEE NOTE BELOW
FX–#	–	FLANGE 125# SLIPON 6061–T6 ALUMINUM FASTENERS: 304 STAINLESS STEEL	SHIPYARD	SEE NOTE BELOW

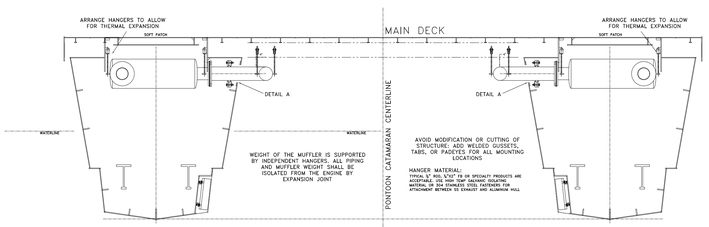
NOTE: FOR EXHAUST PIPE FASTENERS: AVOID 316L OR ANY 400 SERIES STAINLESS STEEL FASTENERS WHERE HEAT AND DISIMIAR METALS ARE PRESENT, SELECT 304 STAINLESS STEEL WHERE POSSIBLE.



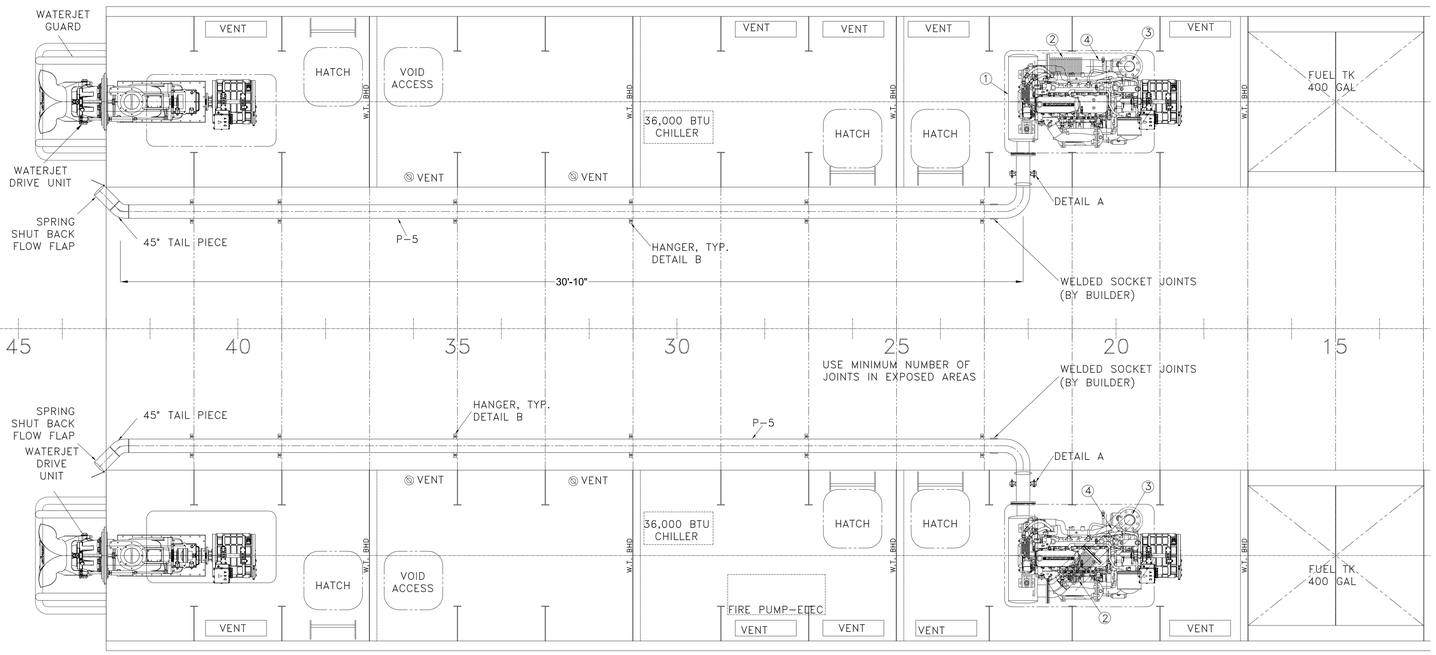
INBOARD PROFILE VIEW
EXTERIOR PONTOON – FROM CENTERLINE

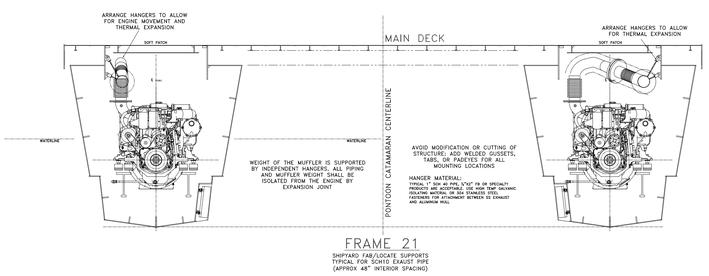


FRAME 42
SHIPYARD TAB/LOCATE SUPPORTS TYPICAL FOR SCH10 EXAUST PIPE (APPROX 72" EXTERIOR SPACING)



FRAME 22
SHIPYARD FAB/LOCATE SUPPORTS TYPICAL FOR SCH10 EXAUST PIPE (APPROX 72" EXTERIOR SPACING)





FRAME 21
SHIPYARD FAB/LOCATE SUPPORTS TYPICAL FOR SCH10 EXAUST PIPE (APPROX 48" INTERIOR SPACING)

– GENERAL NOTES –

NO.	DESCRIPTION
1	ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 46 CFR SUBCHAPTER T
2	PIPING SHALL BE RUN AS DIRECTLY AS POSSIBLE WITH A MINIMUM NUMBER OF BENDS AND FITTINGS. PROVIDE A TAKEDOWN JOINT FOR EACH COMPARTMENT
3	PRIOR TO FABRICATION OF MATING PIPE ASSEMBLIES, VERIFY EQUIPMENT CONNECTIONS FOR SIZE, LOCATION AND TYPE IN ACCORDANCE WITH MANUFACTURER CERTIFIED
—	DRAWINGS, OR DIRECTLY FROM THE EQUIPMENT. TEMPLATE BOLTING PATTERNS AND CONNECTIONS AS REQUIRED.
4	PIPE HANGERS SHALL MEET THE REQUIREMENTS OF ASTM F708. THE CONTRACTOR SHALL DESIGN AND INSTALL PIPE HANGARS AS NECESSARY TO ADEQUATELY SUPPORT EXHAUST
—	SYSTEMS UNDER STATIC AND DYNAMIC LOADS IMPOSED BY VESSEL MOTIONS, VIBRATION AND THERMAL EXPANSION. THERMAL INSULATION GASKETS SHALL BE INSTALLED BETWEEN
—	THE EXHAUST PIPE AND THE HANGER ATTACHMENT TO THE SHIP.
5	PROVIDE EXPANSION JOINTS WHERE REQUIRED TO ACCOMMODATE THERMAL GROWTH OF EXHAUST PIPES. EXPANSION JOINTS ARE TO BE STAINLESS STEEL MULTI–PLY LAMINATE
6	WEIGHT TRANSMITTED TO EACH ENGINE EXHAUST OUTLET CONNECTION IS NOT TO EXCEED THE MANUFACTURERS' RECOMMENDATIONS IN ANY CONDITION
7	INSULATION FOR ENGINE EXHAUST PIPING AND SILENCERS SHALL BE REMOVABLE INSULATION BLANKETS HAVING A 2" MINIMUM THICKNESS. BLANKETS SHALL BE FASTENED WITH
—	STAINLESS STEEL HOOKS AND LACING. INSULATION MATERIALS AND INSTALLATION DETAILS SHALL BE IN ACCORDANCE WITH ASTM F683.
8	CONTRACTOR SHALL VERIFY ENGINE EXHAUST BACK PRESSURE REQUIREMENTS AND CONNECTION DETAILS PRIOR TO ORDERING MATERIALS.
9	PRIOR TO BEING PLACED INTO SERVICE THE EXHAUST PIPING SHALL BE CHECKED FOR LEAKS. SMALL LEAKS MAY BUILD UP OVER TIME, ALL COMPARTMENTS WITH EXHAUST JOINTS SHALL BE VENTED
10	1/4" PIPE TAPS SHALL BE INSTALLED ON ENGINE EXHAUST OUTLET PIPING TO FACILITATE BACK PRESSURE MEASUREMENTS.

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY
1.	GENERIC PART DESIGNATIONS	8.12.22	JS

– REFERENCES –

NO.	DESCRIPTION

CODE: A –APPROVED; B –PRELIMINARY; C –DRAWING; D –RECORD; E –RETURNED

– DRAWING SUBMITTALS –

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	S/8.4.22/E		0
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info@dejongandlebet.com

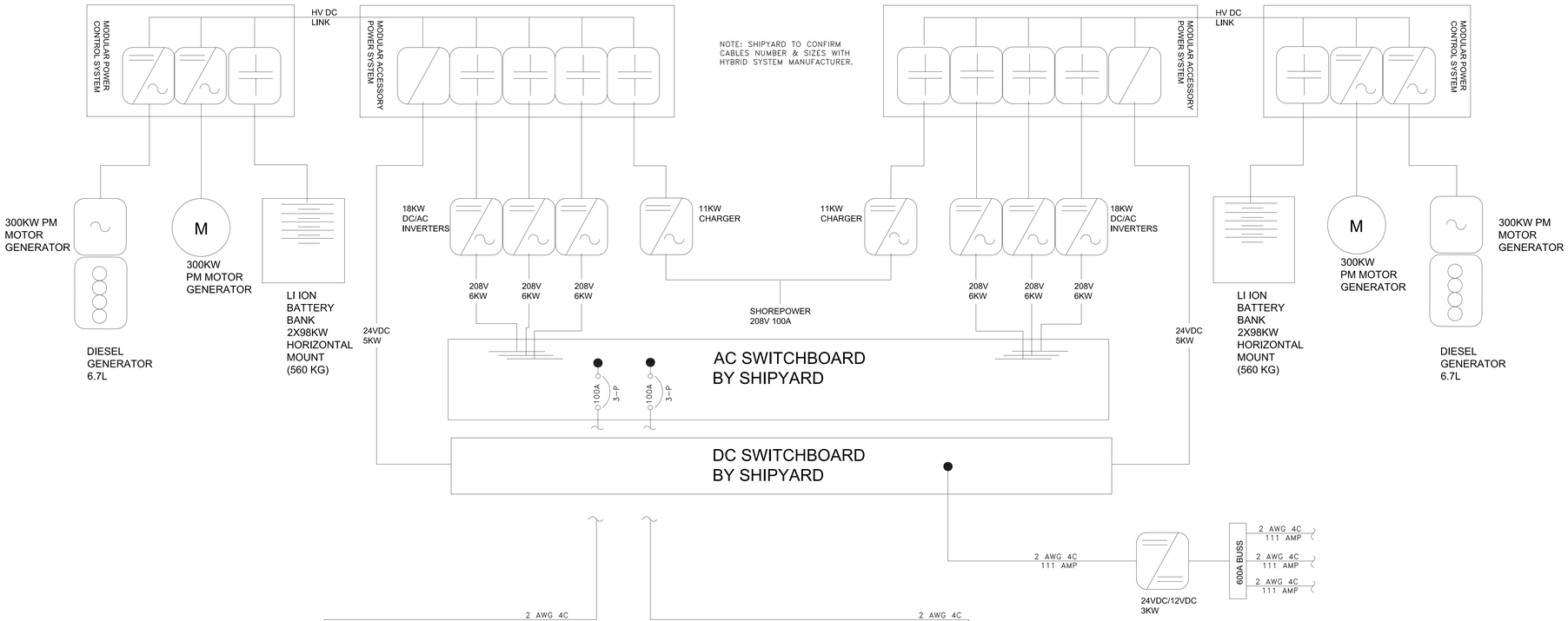
Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

GENERATOR EXHAUST PIPING

Dwg. No. 22–1477–4076
Alt. No. 1
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU Date: 01 JUL 2022
Checked By: Date:
App'd By: Scale: ½"=1'–0"
ABS App'l: USCG App'l:

ANSI–E (34"x44")



– GENERAL NOTES –

NO.	DESCRIPTION
1	ALL CIRCUIT BREAKERS SHALL MEET REQM'T PER CFR 46 120.380 (M): EACH CIRCUIT BREAKER MUST MEET UL 489, "MOLDED-CASE CIRCUIT BREAKERS AND CIRCUIT BREAKER ENCLOSURES," OR OTHER STANDARD SPECIFIED BY THE COMMANDANT, AND BE OF THE MANUALLY RESET TYPE DESIGNED FOR: (1) INVERSE TIME DELAY; (2) INSTANTANEOUS SHORT CIRCUIT PROTECTION; AND (3) SWITCHING DUTY IF THE BREAKER IS USED AS A SWITCH. (N) EACH CIRCUIT BREAKER MUST INDICATE WHETHER IT IS IN THE OPEN OR CLOSED POSITION.
2	ALL ELECTRICAL WIRE SHALL BE UL APPROVED BOAT OR UL MARINE CABLE
3	ALL METALLIC ENCLOSURES AND FRAMES OF ELECTRICAL EQUIPMENT SHALL BE PERMANENTLY GROUNDED TO THE HULL

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION
1	

CODE: A – APPROVED; S – SUBMITTED; P – PRELIMINARY; R – RECEIVED; RETURNED

	USCG–OCMI	USCG–MSC	OWNER	ALT. NO.
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0			S/8.4.22/E	

– DRAWING SUBMITTALS –

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info@dejongandlebet.com

Title: 65'x22'x3' PASSENGER VESSEL (DIESEL ELECTRIC HYBRID)

AC ELECTRICAL DISTRIBUTION

Dwg. No. 22-1477-5000

Alt. No. 1
Sht. 1 of 1

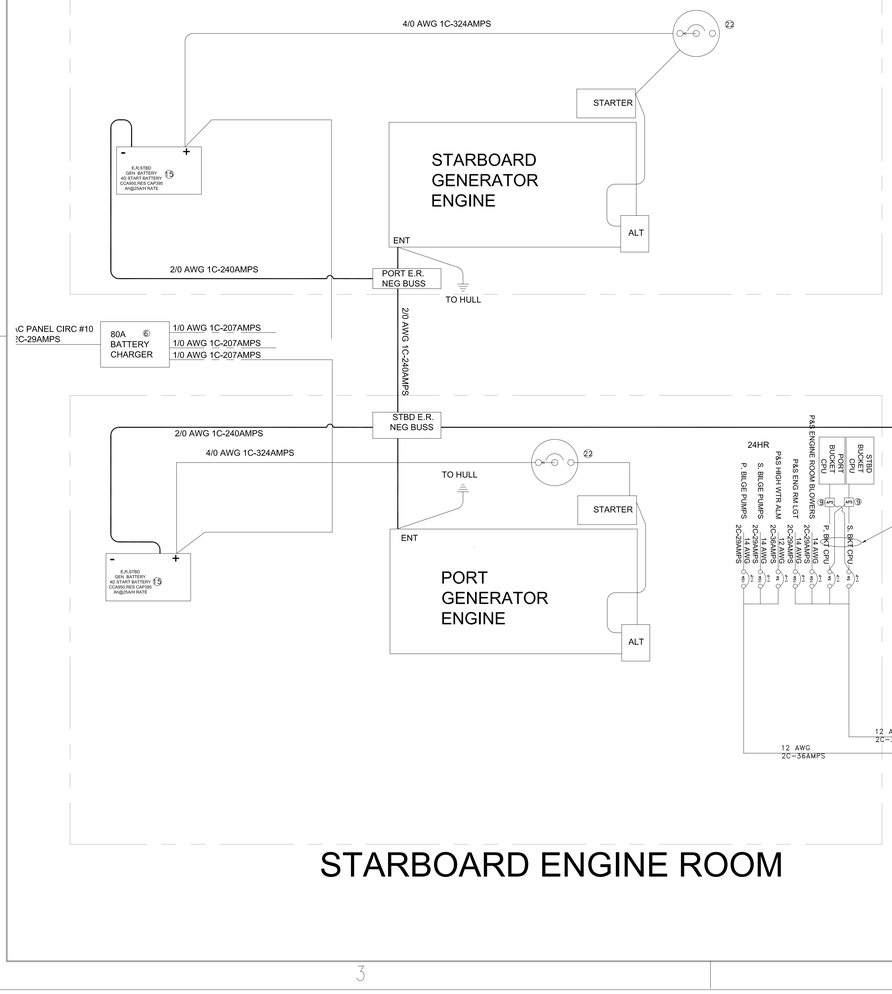
Drawn By: Christopher Duncan — Date: JULY 06, 2022
Checked By: ED Vaughn — Date:
App'd By: — Scale: NONE
ABS App'l: — USCG App'l.:

ANSI-E (34"x44")

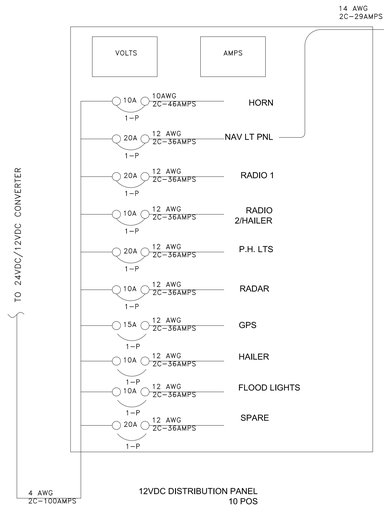
DC ELECTRICAL B.O.M.

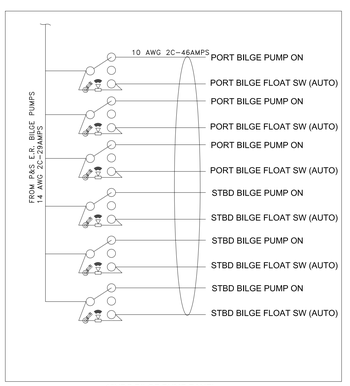
ITEM	QUANTITY	DESCRIPTION	PART NUMBER	MANUFATURER	NOTES
10	2	FUSE CARTRIGE TYPE 80 AMP	LBJ-80SP OR EQUAL		UL APPROVED CARTRIDGE TYPE
11	2	FUSE CARTRIGE TYPE 100AMP J CLASS	LPJ-100SP OR EQUAL		UL APPROVED CARTRIDGE TYPE
12	2	FUSE BLOCK	J60100-1CR OR EQUAL		UL APPROVED
13	5	MASTER DISCONNECT SWITCH	C/H M284-02		
14	1	BATTERY MANAGEMENT PANEL	8693		11 POSITIONS AUXILLARY CIRCUITS, 525a/1000A
15	3	ENGINE START BATTERY	4D		950 CCA,395 RES CAP, 193 AMP HOUR
16	2	PILOT HOUSE DEEP CYCLE BATTERY	4D		385 RES CAP, 180 AMP HOUR
17	2	DECK LIGHTS	8001177		WHITE/WHITE 5 1/2"
18	2	PH LIGHTS	8001504		RED/WHITE 6 3/4"
19	2	FLOOD LIGHTS	8001344-02		
20	2	ENGINE ROOM LIGHTS	9000500		
21	1	DC DISTRIBUTION PANEL 10 POS FOR P.H.	8082		
22	1	NAV LIGHTS PANEL 3 POS	8025		
23	1	ON OFF BOTH BATTERY SWITCH	3001		HD ON OFF WITH AFD
24	1	ON OFF BOTH BATTERY SWITCH	9001e		
25	1	BILGE PUMP PANEL CUSTOM			
	AS NEEDED	BOAT(MARINE) CABLE VARIOUS SIZES			UL APPROVED BOAT CABLE

PORT ENGINE ROOM



PILOTHOUSE





12VDC BILGE PUMP PANEL

STARBOARD ENGINE ROOM

– GENERAL NOTES –

NO.	DESCRIPTION
1	ALL CIRCUIT BREAKERS SHALL MEET REQM'T PER CFR 46 120.380 (M): EACH CIRCUIT BREAKER MUST MEET UL 489, "MOLDED-CASE CIRCUIT BREAKERS AND CIRCUIT BREAKER ENCLOSURES," OR OTHER STANDARD SPECIFIED BY THE COMMANDANT, AND BE OF THE MANUALLY RESET TYPE DESIGNED FOR: (1) INVERSE TIME DELAY; (2) INSTANTANEOUS SHORT CIRCUIT PROTECTION; AND (3) SWITCHING DUTY IF THE BREAKER IS USED AS A SWITCH. (N) EACH CIRCUIT BREAKER MUST INDICATE WHETHER IT IS IN THE OPEN OR CLOSED POSITION.
2	ALL BUSS TO HAVE A MIN OF 1" SPACE BETWEEN PHASE SUPPORTED AS REQUIRED WITH PLASTIC INSULATORS.
3	ALL ELECTRICAL WIRE SHALL BE UL APPROVED BOAT OR UL MARINE CABLE
4	ALL METALLIC ENCLOSURES AND FRAMES OF ELECTRICAL EQUIPMENT SHALL BE PERMANENTLY GROUNDED TO THE HULL

– ALTERATIONS –

NO.	DESCRIPTION	DATE	BY

– RESERVATIONS –

NO.	DESCRIPTION

– REFERENCES –

NO.	DESCRIPTION
1	

CODE: R–RECEIVED S–SUBMITTED A–APPROVED						
						12
						11
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						1
					S/8.4.22/E	0
		USCG–OCMI	USCG–MSC	OWNER	ALT. NO.	

– DRAWING SUBMITTALS –

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Jacksonville, Florida 32207
www.dejongandlebet.com

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

Title: 65'x22'x3' PASSENGER VESSEL (DIESEL ELECTRIC HYBRID)

DC ELECTRICAL ONE-LINE

Dwg. No. 22-1477-5002

Alt. No. 1
Sht. 1of 1

Drawn By: Christopher Duncan Date: JULY 06, 2022
Checked By: ED Vaughn Date:
App'd By: Scale: NONE
ABS App'l: USCG App'l.:

ANSI-E (34"x44")

DEJONG & LEBET, NAVAL ARCHITECTS, INC.

SHIP'S ELECTRICAL PLANT LOAD ANALYSIS
DLI #22-1477

DATE	REV.
August 12, 2022	1

Summary of Loads

Northern Lights 20kW 3Ph 120/208vac .8PF

CIRCUIT #	DESCRIPTION	ATTACHED LOADS (KW)	Service factor	WINTER LOAD	SUMMER LOAD
SW1-1	Pilothouse Distribution Panel	19.99		7.7	7.7
SW1-2	HVAC Distribution Panel	18.18		10.5	10.5
	TOTAL SWITCHBOARD kW	38.2		18.3	18.3
	TOTAL AMPS @ GENERATOR (.8pf)	132.5		63.3	63.3

DEJONG & LEBET, NAVAL ARCHITECTS, INC.

SHIP'S ELECTRICAL PLANT LOAD ANALYSIS
DLI #22-1477

DATE	REV.
August 12, 2022	1

Pilot House Dist Panel

CIRCUIT #	DESCRIPTION	ATTACHED LOADS (KW)	Service factor	Winter Loads	Summer Loads
1,3,5	Fire Pump (5 HP)	5.04	0.0	0.00	0.00
2	Main Deck Receptacles	0.72	0.3	0.22	0.22
7	Pilot House Battery Charger	0.24	0.6	0.15	0.15
4	Pilot House Receptacles	0.72	0.3	0.22	0.22
9	Battery System Cooling Pumps #1	0.19	0.6	0.11	0.11
6	Cabin Lights #1	0.75	0.7	0.53	0.53
11	Battery System Cooling Pumps #2	0.19	0.6	0.11	0.11
8	Cabin Lights #2	0.75	0.7	0.53	0.53
13	Battery System Chiller #1	4.49	0.5	2.25	2.25
10	ER Battery Charger	2.03	0.6	1.22	1.22
15	Battery System Chiller #2	4.49	0.5	2.25	2.25
12	Spare	0.00	0.0	0.00	0.00
17	Exhaust Cooling Pump #1	0.19	0.4	0.08	0.08
14	Spare	0.00	0.0	0.00	0.00
19	Exhaust Cooling Pump #2	0.19	0.4	0.08	0.08
16	Spare	0.00	0.0	0.00	0.00
	TOTAL PANEL kW	**20.0**		**7.7**	**7.7**
	TOTAL AMPS 208/120v 3 Phase	**69.4**		**26.8**	**26.8**

DEJONG & LEBET, NAVAL ARCHITECTS, INC.

SHIP'S ELECTRICAL PLANT LOAD ANALYSIS
DLI #22-1477

DATE	REV.
August 12, 2022	1

Pilot House Dist Panel

CIRCUIT #	DESCRIPTION	ATTACHED LOADS (KW)	Service factor	Winter Loads	Summer Loads
1,3	AHU #1 4 Ton	5.52	0.6	3.31	3.31
2,4	AHU #2 4 Ton	5.52	0.6	3.31	3.31
5,7	AHU #3 Daikin 4 Ton	4.58	0.6	2.75	2.75
6	Port Generator Rm Intake & Exhaust Fans	0.89	0.4	0.36	0.36
9	Stbd. Generator Rm Intake & Exhaust Fans	0.89	0.4	0.36	0.36
8	Port Chiller Intake Fan	0.10	0.6	0.06	0.06
11	Stbd. Chiller Intake Fan	0.10	0.6	0.06	0.06
10	Port Lazarette Intake Fan	0.10	0.5	0.05	0.05
13	Stbd. Lazarette Intake Fan	0.10	0.5	0.05	0.05
12	Port Battery Room Intake & Exhaust Fans	0.19	0.6	0.12	0.12
15	Stbd. Battery Room Intake & Exhaust Fans	0.19	0.6	0.12	0.12
14	Spare	0.00	0.0	0.00	0.00
	TOTAL PANEL kW	**18.2**		**10.5**	**10.5**
	TOTAL AMPS 208/120v 3 Phase	**63.1**		**36.6**	**36.6**

DEJONG & LEBET, NAVAL ARCHITECTS, INC.

SHIP'S ELECTRICAL PLANT LOAD ANALYSIS
DLI #22-1477

DATE	REV.
August 12, 2022	1

12vDC
Pilothouse DC Load Analysis

CIRCUIT #	A		AMPERES	CIRCUIT #	B	AMPERES
1	Horn		0.83	4	Radio 2 Hailer/PA	5.50
2	NAV LIGHTS		10.00			
3	Radio 1 Hailer/PA		5.50			
5	P.H. Lights		5.80			
6	Radar/Chartplotter Navnet T214w built in GPS		10.00			
7	Cabin Light Backup Inverter (Direct from		40.00			
8	Firepump Clutch		4.00			
	TOTAL COLUMN A		76.13		TOTAL COLUMN B	5.50
					10% COLUMN B	0.55
					LARGEST ITEM COLUMN B	5.50
					Ships Service Battery Selection	
	TOTAL DC LOAD COLUMN A + LARGEST COLUMN B		**81.63**		87.13 x 3hrs=261.4 Ah, 2x 180	
					Ah battery connected	
	Peukerts T=0.0292 x $I^{\wedge 1.225}$ x 60	T=	434.14		parallel=360 Ah. Rating @	
	T=battery reserve in minutes				20Ah rating=(.5 x 360=180	
	I=Total Current of Column A in Amperes				useable Ah), therefore use	
	Battery Bank Amp Hours(Reserve capacity)		360Ah(770ResCap)*		Peukerts method for sizing	
	*2x 12V 4D AGM connected in Parralel (385Res Cap x 2 =770 Res Cap)		434.14<770 therefore acceptable reserve capacity.		Battery Bank	

DEJONG & LEBET, NAVAL ARCHITECTS, INC.

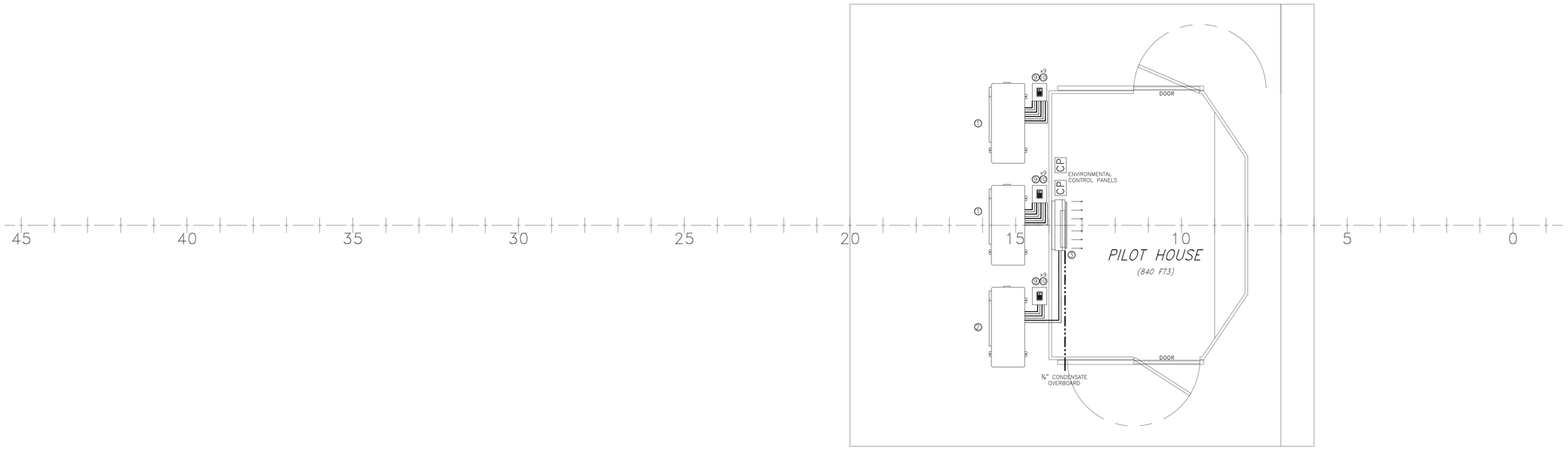
SHIP'S ELECTRICAL PLANT LOAD ANALYSIS
DLI #22-1477

DATE	REV.
August 12, 2022	1

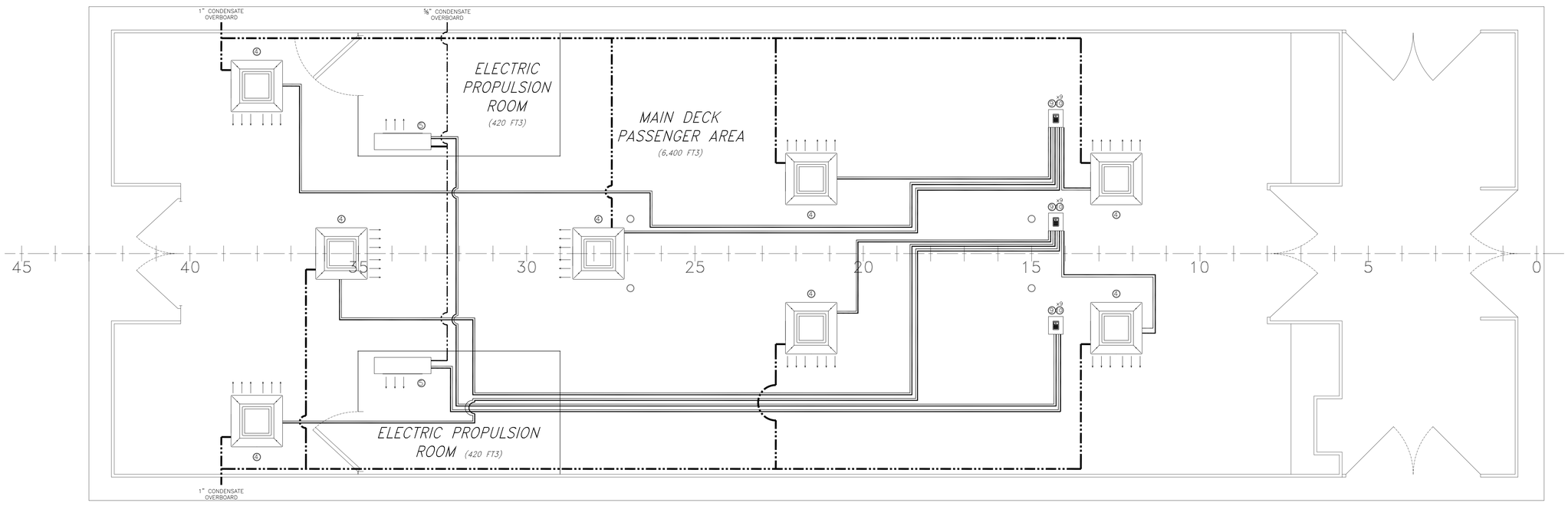
12vDC

Engine Room Panel DC Load Analysis (Primary Charge from Engine Driven Alt, Secondary from ER batt Charger)

CIRCUIT #	A	AMPERES	CIRCUIT #	B	AMPERES
1	Port Bilge Pump	5.50	4	P&S Engine Room Light	1.40
2	Starboard Bilge Pump	5.50			
3	Port High Water Alarm	15.00			
5	Starboard High Water Alarm	15.00			
6	Starboard Bucket Controller	4.00			
7	Port Bucket Controller	4.00			
	TOTAL COLUMN A	49.00		TOTAL COLUMN B	1.40
				10% COLUMN B	0.14
				LARGEST ITEM COLUMN	1.40
				Ships Service Battery Selection	
	TOTAL DC LOAD COLUMN A + LARGEST COLUMN B	**50.40**		46.4 x 3hrs=139.2Ah, 3x 193 ah battery connected parallel=579Ah. Rating @ 20Ah rating=(.5 x 579=289.5 useable Ah), therefore use either method for sizing Battery Bank	
	Peukerts T=0.0292 x I^1.225 x 60	240.49			
	T=battery reserve in minutes				
	I=Total Current of Column A in Amperes				
	Battery Bank Amp Hours(Reserve capacity)	579Ah(1185ResCap)*			
	*3x 12V 4D AGM connected in Parralel (395Res Cap x 3 =1185 Res Cap)	240.5<1185 therefore acceptable reserve capacity.			



WHEELHOUSE A/C UNIT LAYOUT



MAIN DECK A/C UNIT LAYOUT

– GENERAL NOTES –		– ALTERATIONS –				– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	NO.	DESCRIPTION

CODE: A – APPROVED; S – SUBMITTED; P – PRELIMINARY; # – REVISED; R – RETURNED

	OWNERS	MSC–USCG	ALT. NO.
5			
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info@dejongandlebet.com

Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

HVAC LAYOUT AND DETAILS

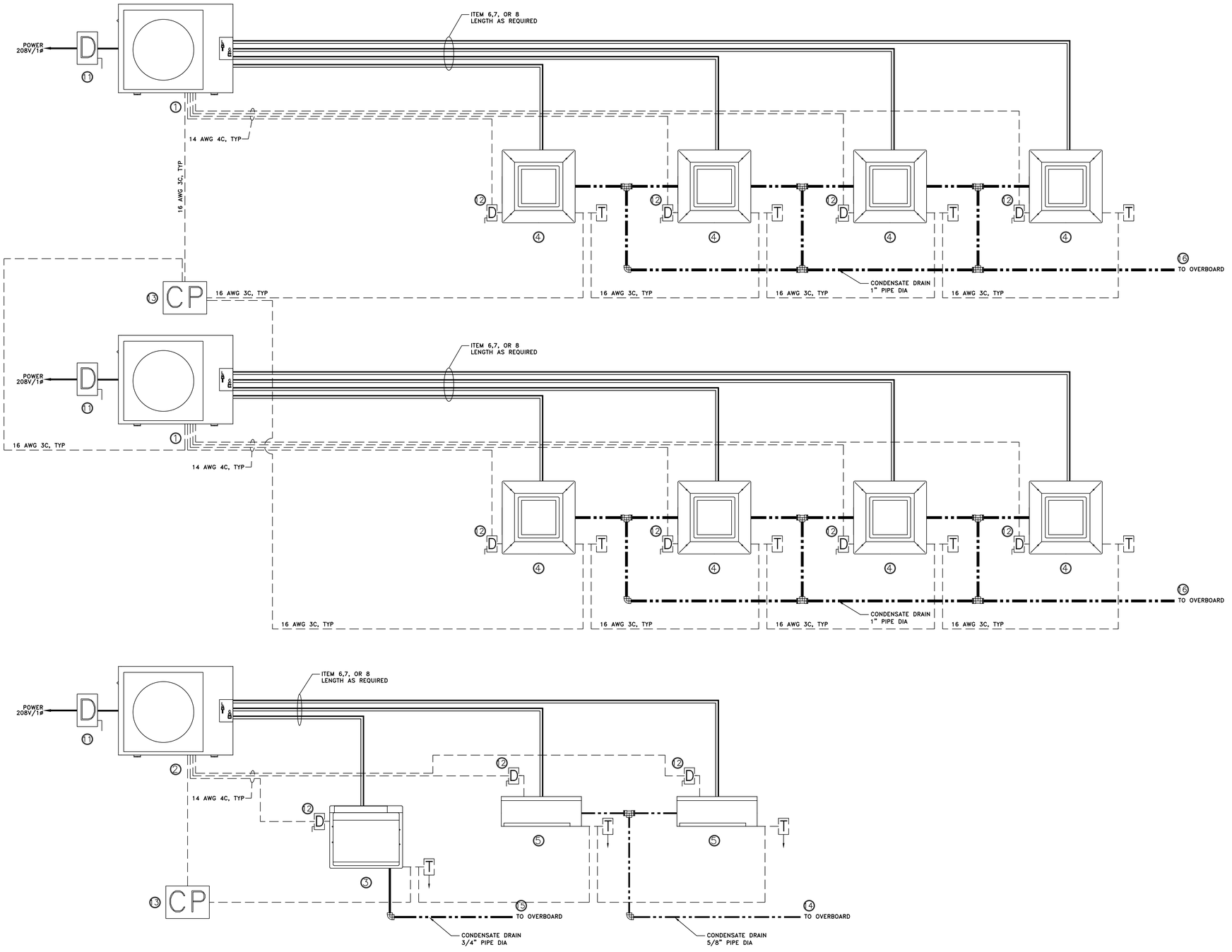
Dwg. No. 22-1477-7000
Alt. No. 0
Sht. 1 OF 2

Drawn By: JOE SILAS
Checked By: ED VAUGHN
App'd By:
ABS App'l:

Date: JUNE 1, 2022
Date:
Scale: NOT TO SCALE
USCG App'l.:

ANSI-E (34"x44")

EQUIPMENT SCHEDULE					
PART NUMBER	LOCATION	QTY	AIR HANDLER TYPE	BTU	DESCRIPTION
①	UPPER DECK, AFT OF WHEEL HOUSE	2	HEAT PUMP CONDENSER	48,000	
②	UPPER DECK, AFT OF WHEEL HOUSE	1	HEAT PUMP CONDENSER	36,000	
③	WHEEL HOUSE	1	FLOOR MOUNTED	15,000	
④	PASSENGER CABIN	8	CASSETTE	12,000	
⑤	ELECTRONICS ROOM	2	WALL MOUNTED	9,000	
⑥	MINI SPLIT INSULATED LINE SET, 15' LENGTH	AS REQ	WHEELHOUSE UNIT	½" SUCTION LINE ¼" LIGUID LINE	
⑦	MINI SPLIT INSULATED LINE SET, 30' LENGTH	AS REQ	PASSENGER CABIN UNITS	½" SUCTION LINE ¼" LIGUID LINE	
⑧	MINI SPLIT INSULATED LINE SET, 65' LENGTH	AS REQ	ELECTRONICS ROOM UNITS	½" SUCTION LINE ¼" LIGUID LINE	
⑨	DECK PENETRATION SEAL FRAME	3	WHEELHOUSE DECK	–	
⑩	DECK PENETRATION SEAL GLANDS	27	WHEELHOUSE DECK	–	
⑪	MAIN DISCONNECT 60A, 208V AC, 1ø, 2 POLE	3	COMPRESSOR	–	
⑫	LOCAL DISCONNECT 30A, 600V AC, 1ø, 3 POLE	11	INTERIOR UNIT	–	
⑬	MAIN ENVIRONMENTAL CONTROL INTERFACE	2	WHEELHOUSE		
⑭	CONDENSATE DRAIN	AS REQ	ELECTRONICS ROOM UNITS	–	5/8"ø PVC
⑮	CONDENSATE DRAIN	AS REQ	WHEELHOUSE UNIT	–	3/4"ø PVC
⑯	CONDENSATE DRAIN	AS REQ	CASSETTE UNITS	–	1"ø PVC
⑰	MAIN POWER SUPPLY	AS REQ	SUPPLY FROM 20B PANEL	–	14 AWG 4C
⑱	ENVIRONMENTAL CONTROL WIRING	AS REQ	SUPPLY FROM 20B PANEL	–	16 AWG 3C



– GENERAL NOTES –		– ALTERATIONS –				– RESERVATIONS –		– REFERENCES –	
NO.	DESCRIPTION	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	NO.	DESCRIPTION
		1.1	GENERIC EQUIPMENT DESIGNATION	8.12.22	EV				

CODE: A – APPROVED; S – SUBMITTED; R – REVIEWED; W – WITHDRAWN

– DRAWING SUBMITTALS –						
						5
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				S/8.12.22/E		1
				S/8.4.22/E		0
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				OWNERS	MSC–USCG	ALT. NO.

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Title: 65' PASSENGER FERRY (DIESEL–ELECT HYBRID)

HVAC LAYOUT AND DETAILS

Dwg. No. 22–1477–7000

Alt. No. 1
Sht. 2 OF 2

Drawn By: JOE SILAS — Date: JUNE 1, 2022
Checked By: ED VAUGHN — Date:
App'd By: — Scale: NOT TO SCALE
ABS App'l: — USCG App'l.:

ANSI–E (34"x44")

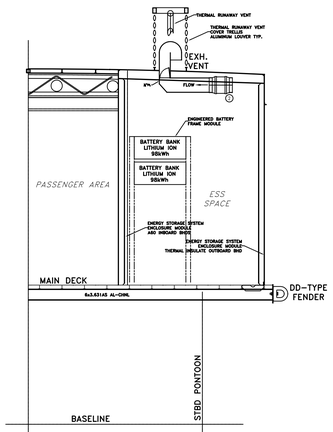
MATERIAL & EQUIPMENT LIST

PIECE NO.	QTY.	DESCRIPTION	REMARKS
1	6	INLINE FAN, 610 CFM, 12" DIA 115V, 60Hz	NOTE (*), GEN COMPARTMENT
2	8	INLINE FAN, 250 CFM, 8" DIA 115V, 60Hz	FANS IN ESS REQ. NON-SPARKING IAW ASTM F3353-19
3	8	AIR PIPE HEAD (BALL VENT), WT CERT. 2½" INLET, NPT THREADED, ALUM	FLANGE CONN. ALSO ACCEPTABLE

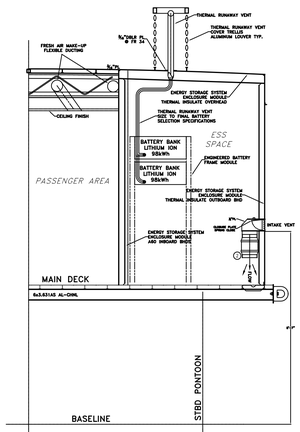
NOTE (*):
NON-METALLIC MATERIALS MAY BE USED BELOW PONTOON TOP PENETRATION PROVIDED COMPONENT IS CAPABLE OF CONTINUOUS EXPOSURE TO TEMPERATURE RANGE (-22°F TO 185°F) WITHOUT FAILURE.

NON-METALLIC COMPONENTS SHALL BE INSTALLED AT LEAST 9 INCHES HORIZONTALLY (OR BELOW) AND 18 ABOVE ANY SURFACE CAPABLE OF REACHING A TEMPERATURE OF 200°F UNDER NORMAL OPERATING CONDITIONS.

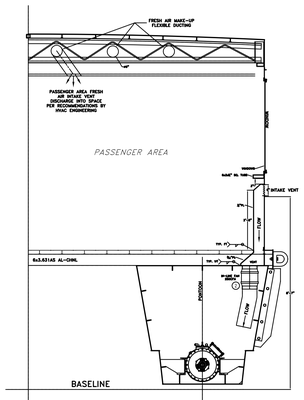
LOUVERS:
GENERATOR ROOM INTAKE: MINIMUM AREA = 1 SQFT



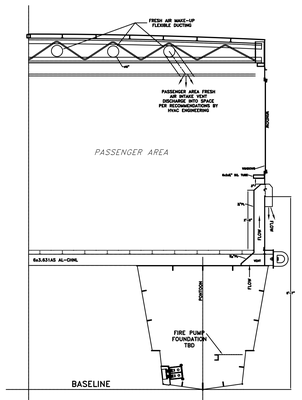
SECTION: FRAME 35
(ESS ROOM EXHAUST)



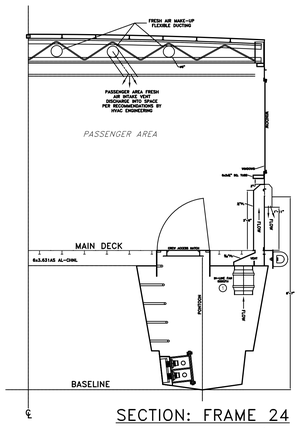
SECTION: FRAME 30
(ESS ROOM INTAKE)



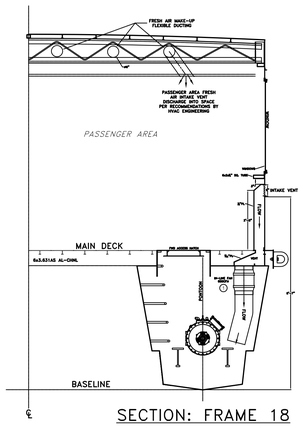
SECTION: FRAME 40
(LAZZARETTE INTAKE)
-FRAME 26 SIMILAR-



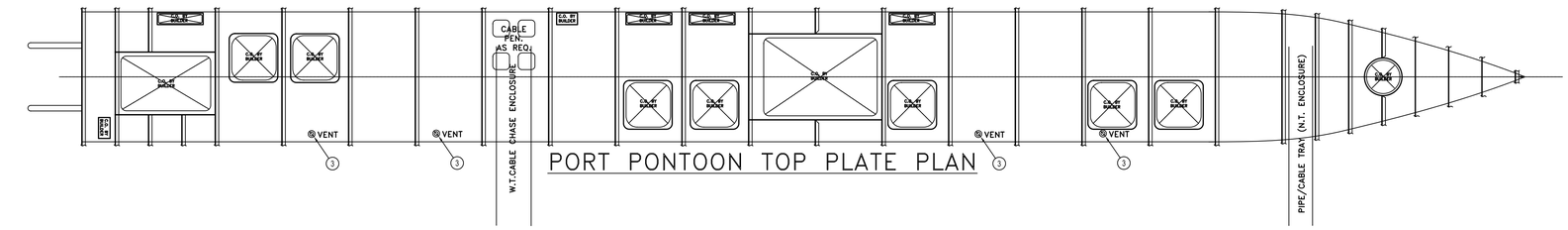
SECTION: FRAME 28
(CHILLER/FIRE PUMP COMPARTMENT EXHAUST)



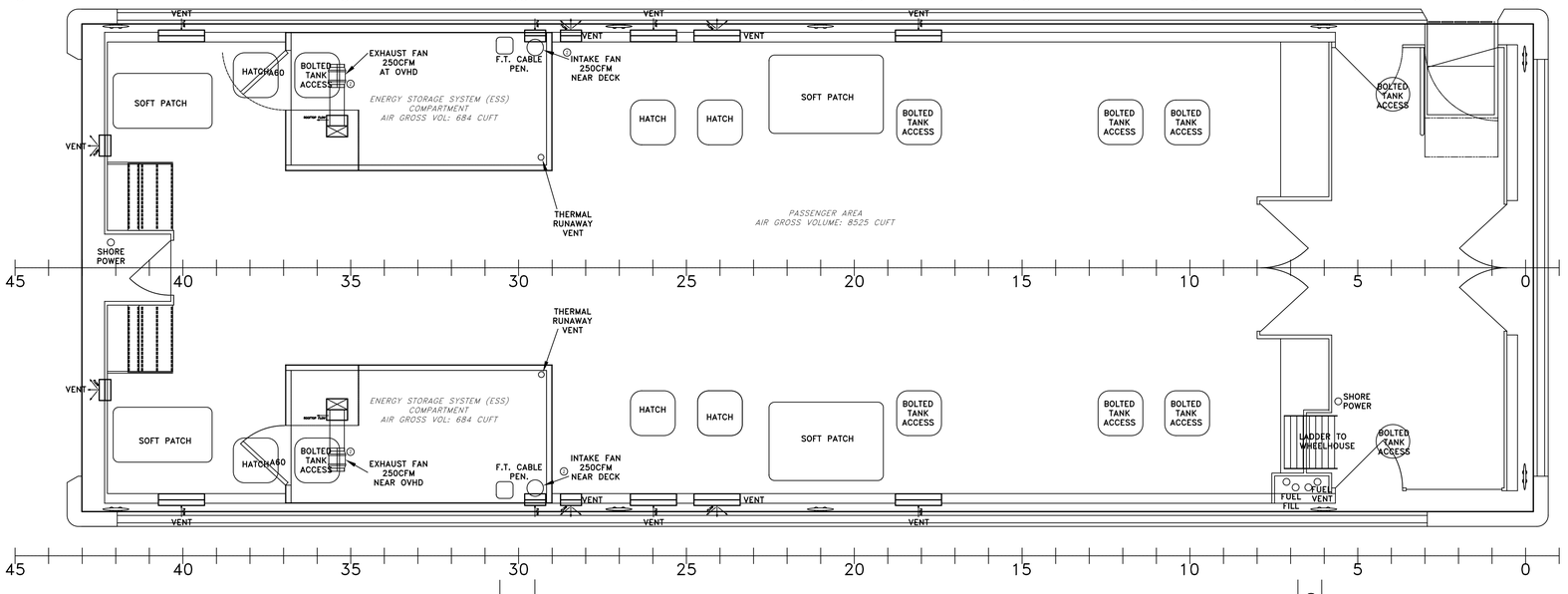
SECTION: FRAME 24
(GENERATOR ROOM EXHAUST)

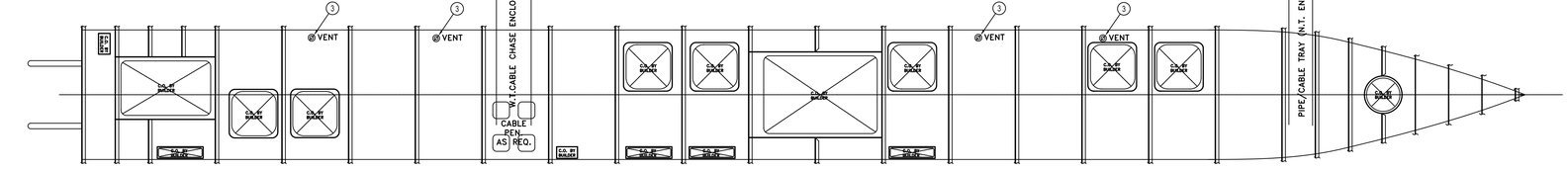


SECTION: FRAME 18
(GENERATOR ROOM INTAKE)



PORT PONTOON TOP PLATE PLAN

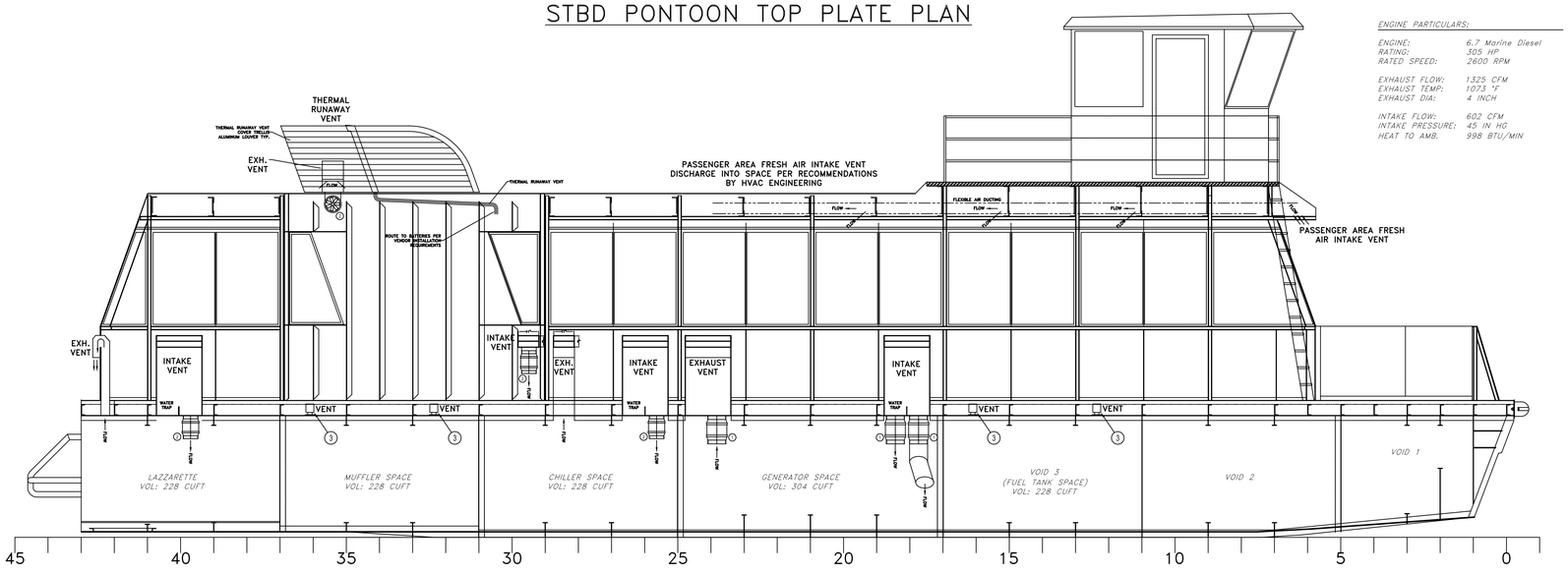




STBD PONTOON TOP PLATE PLAN

ENGINE PARTICULARS:

ENGINE:	6.7 Marine Diesel
RATING:	305 HP
RATED SPEED:	2600 RPM
EXHAUST FLOW:	1325 CFM
EXHAUST TEMP:	1073 °F
EXHAUST DIA:	4 INCH
INTAKE FLOW:	602 CFM
INTAKE PRESSURE:	45 IN HG
HEAT TO AMB.	998 BTU/MIN



- GENERAL NOTES -

NO.	DESCRIPTION

- ALTERATIONS -

NO.	DESCRIPTION	DATE	BY
1.1	GENERIC PART DESIGNATIONS	8.12.22	EV

- REFERENCES -

NO.	DESCRIPTION

CODE: A - APPROVED; S - SUBMITTED FOR APPROVAL; R - RETURNED FOR REVISION

- DRAWING SUBMITTALS -

	OWNERS	MSC-USCG	ALT. NO.
5			
4			
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2			
1	S/8.12.22/E		
0	S/8.4.22/E		
P			

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Title: 65' PASSENGER FERRY (DIESEL-ELECT HYBRID)

VENTILATION DETAIL & PLAN

Dwg. No. 22-1477-7010
Alt. No. 1
Sht. 1 OF 1

Drawn By: BRIAN BOUDREAU Date: 11 JUL 2022
Checked By: Date:
App'd By: Scale: 3/8"=1'-0"
ABS App'l: USCG App'l.:

ANSI-E (34"x44")