FISHERS ISLAND FERRY DISTRICT MUNNATAWKET REPLACEMENT VESSEL DESIGN.



DESIGN STATUS

DESIGN PROJECT STAGES



KICK OFF

September 2024

Onsite meeting and project ramp up.



CONCEPT DESIGN

November 2024

Develop Arrangement, overall vessel size and mechanical architecture.



PRELIMINARY DESIGN

February 2025

Preliminary Engineering calculations, hull form, propulsion powering, stability, structure.



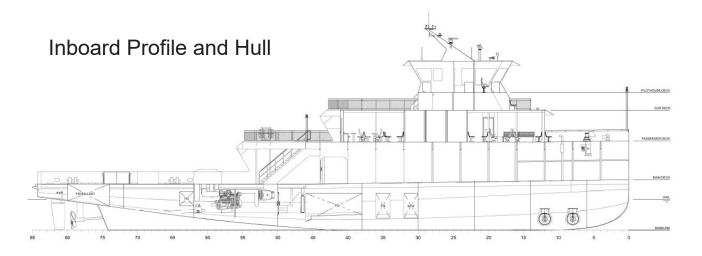
CONTRACT DESIGN

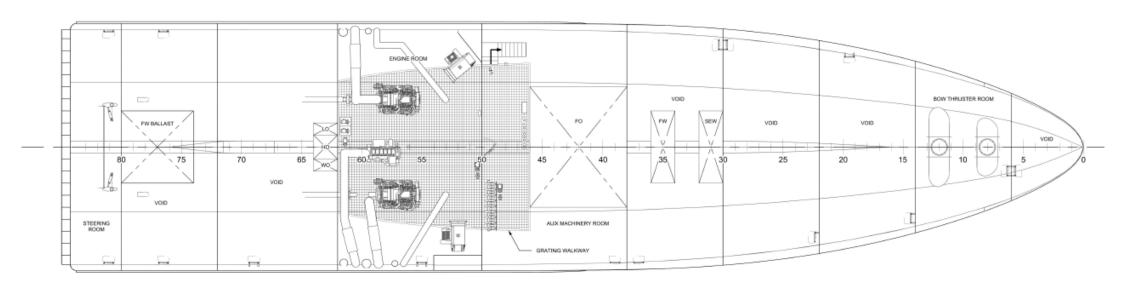
Ongoing, Target Completion June 2025 Design refinement, adding detail, mechanical systems, outfitting.

GA

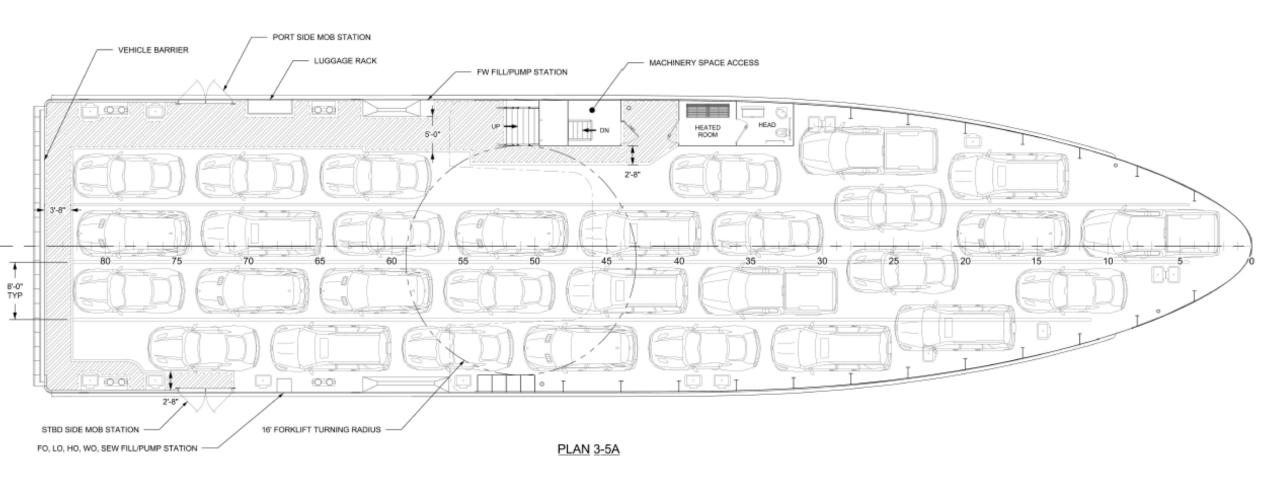
Length Overall 170 ft Molded Beam 41 ft Molded Depth 13 ft



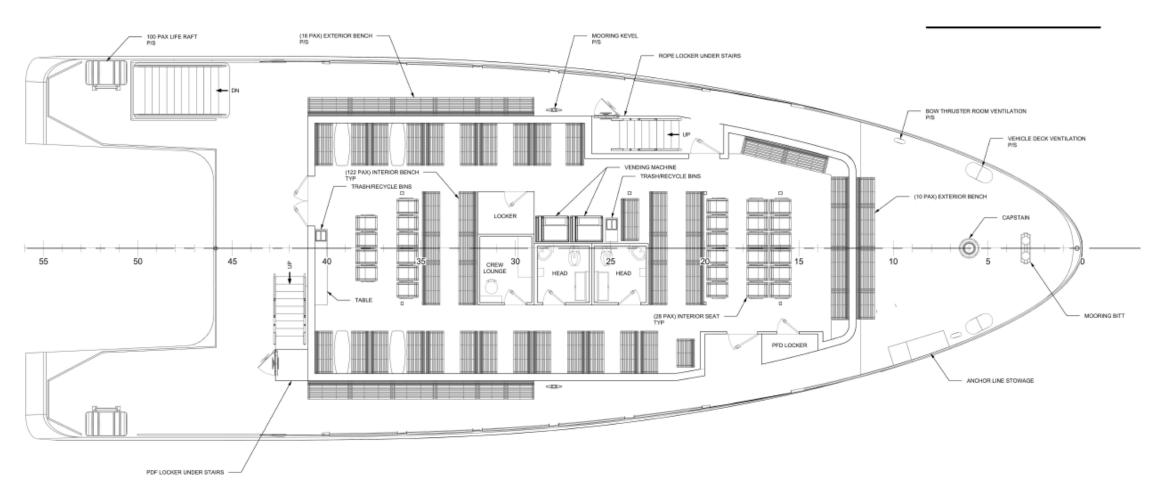




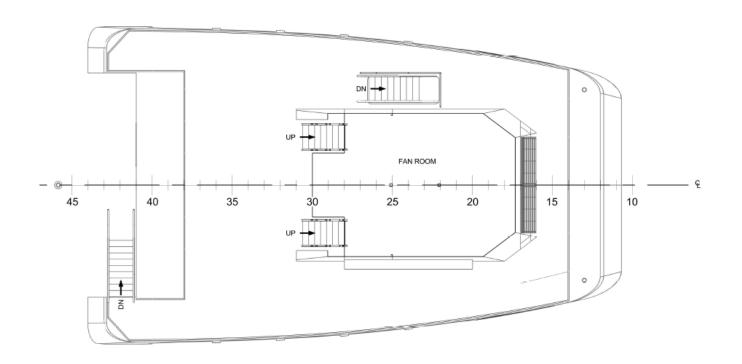
Main Deck

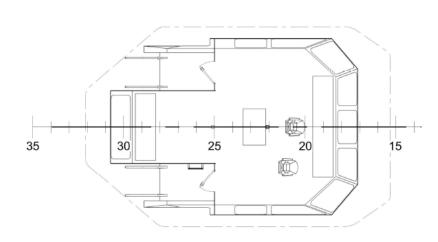


Passenger Deck



Sun Deck and Pilothouse





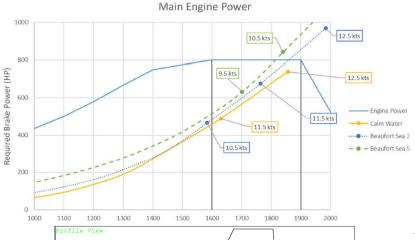
DESIGN STATUS

ENGINEERING

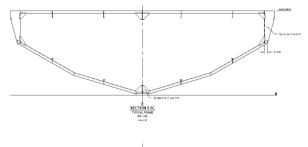
Preliminary calculations establishing major machinery and hull form requirements.

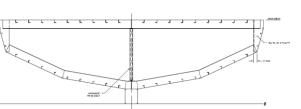
Preliminary Reports for:

- Speed and Power
- Maneuvering
- Noise and Vibration
- Weight
- Stability
- Structure Scantlings
- Electrical Loads









PROPULSION POWER

Two 800 HP Main Engines 5 ft Diameter Propellers

WEIGHT AND STABILITY

450 LT Lightship weight620 LT Full Load Displacement with 30 cars3.5 ft to 5.25 ft Stern Freeboard Range

STRUCTURE

Preliminary Hull and Superstructure Scantlings. Steel construction Less than 100 GRT

100 \$	Technical Specification Engineers Cost Estimate Speed and Powering Maneuvering Analysis Lines Plan General Arrangement Sight Lines Propulsion Study Tonnage Estimate Noise and Vibration Report Emergency Evacuation Plan Fire Zone Plan Stability Analysis Weight Estimate Incline Procedure	24147.01-010-01 24147.01-043-01 24147.01-050-01 24147.01-050-02 24147.01-060-01 24147.01-060-02 24147.01-062-01 24147.01-070-01 24147.01-077-01 24147.01-077-01 24147.01-077-02 24147.01-077-02
100 \$	Speed and Powering Maneuvering Analysis Lines Plan General Arrangement Sight Lines Propulsion Study Tonnage Estimate Noise and Vibration Report Emergency Evacuation Plan Fire Zone Plan Stability Analysis Weight Estimate	24147.01-050-01 24147.01-050-02 24147.01-050-01 24147.01-060-01 24147.01-060-02 24147.01-070-01 24147.01-073-01 24147.01-077-02 24147.01-077-02
100 \$	Maneuvering Analysis Lines Plan General Arrangement Sight Lines Propulsion Study Tonnage Estimate Noise and Vibration Report Emergency Evacuation Plan Fire Zone Plan Stability Analysis Veight Estimate	24147.01-050-02 24147.01-051-01 24147.01-060-01 24147.01-060-02 24147.01-070-01 24147.01-073-01 24147.01-077-02 24147.01-077-02
100 \$	Lines Plan General Arrangement Sight Lines Propulsion Study Tonnage Estimate Noise and Vibration Report Emergency Evacuation Plan Fire Zone Plan Stability Analysis Veight Estimate	24147.01-051-01 24147.01-060-01 24147.01-060-02 24147.01-062-01 24147.01-070-01 24147.01-077-01 24147.01-077-01
100 S	General Arrangement Sight Lines Propulsion Study Tonnage Estimate Noise and Vibration Report Emergency Evacuation Plan Fire Zone Plan Stability Analysis Weight Estimate	24147.01-060-01 24147.01-060-02 24147.01-062-01 24147.01-070-01 24147.01-073-01 24147.01-077-02
100 S	Sight Lines Propulsion Study Tonnage Estimate Noise and Vibration Report Emergency Evacuation Plan Fire Zone Plan Stability Analysis Weight Estimate	24147.01-060-02 24147.01-062-01 24147.01-070-01 24147.01-073-01 24147.01-077-01 24147.01-077-02
100 S	Propulsion Study Tonnage Estimate Noise and Vibration Report Emergency Evacuation Plan Fire Zone Plan Stability Analysis Weight Estimate	24147.01-062-01 24147.01-070-01 24147.01-073-01 24147.01-077-01 24147.01-077-02
100 8	Tonnage Estimate Noise and Vibration Report Emergency Evacuation Plan Fire Zone Plan Stability Analysis Weight Estimate	24147.01-070-01 24147.01-073-01 24147.01-077-01 24147.01-077-02
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100 8	Emergency Evacuation Plan Fire Zone Plan Stability Analysis Weight Estimate	24147.01-077-01 24147.01-077-02
100 S	Fire Zone Plan Stability Analysis Weight Estimate	24147.01-077-02
100 S	Stability Analysis Weight Estimate	
100 S	Weight Estimate	24147.01.079.01
100 S		24147.01-073-01
100 S	Incline Procedure	24147.01-096-01
100 S		24147.01-097-01
100 S	Renderings	24147.01-098-01
	Structure	
	Scantling Calculations	24147.01-100-01
	FEA (if conducted)	24147.01-100-02
	Docking Plan	24147.01-101-01
	Welding Schedule	24147.01-102-01
	Hull Structure Drawing	24147.01-110-01
	Tank Drawing	24147.01-125-01
	Superstructure Drawing	24147.01-150-01
	Structural Closures arrangement and sp	24147.01-167-01
	Masts	24147.01-170-01
	Equipment Foundations	24147.01-180-01
200 P	Propulsion	
	Machinery Arrangement	24147.01-200-01
	ME Shafting Arrangement	24147.01-243-01
300 E	lectrical	
500 E	Electrical Load Analysis	24147.01-301-01
	Primary cable-way routing	24147.01-304-01
	AC and DC One Line	24147.01-320-01
	HO and DO ONE DINE	24141.01-320-01

CONTRACT DESIGN

Current Ongoing EffortIncorporate feedbace

- Incorporate feedback from Preliminary Design Review
- Continue design refinement
- Adding detail
- Develop additional drawings and reports
- Define vessel systems and outfitting

400	Navigation and Communication	
	Bridge Arrangement	24147.01-400-01
	Mast and Antenna Arrangement	24147.01-400-02
	Navigation Light Arrangement	24147.01-422-01
500	Systems	
000	Vents Fills and Sounds	24147.01-506-01
	HVAC	24147.01-512-01
	Machinery Space Ventilation	24147.01-512-01
	Fire Main	24147.01-521-01
	Scuppers and Deck Drains	24147.01-526-01
	Black and Gray Water	24147.01-528-01
	Bilge	24147.01-528-01
	Potable Water	24147.01-523-01
	FW Cooling	24147.01-536-01
	Fuel	24147.01-536-01
	Lube Oil	24147.01-542-01
	Waste Oil	24147.01-543-01
	Compressed Air	24147.01-551-01
	Fixed Fire Extinguishing	24147.01-555-01
	Hydraulics	24147.01-556-01
	Steering	24147.01-561-01
	Exhaust	24147.01-563-01
	Maneuvering (Thrusters)	24147.01-568-01
	Anchoring	24147.01-581-01
	Mooring	24147.01-582-01
	Fire and Safety	24147.01-583-01
600	Outfitting	
	Passenger Space Arrangement	24147.01-600-01
	Vehicle Deck Arrangement	24147.01-600-02
	Hull Marking	24147.01-602-01
	Finish Material Plan	24147.01-620-01
	Ladder and Stair Arrangement	24147.01-623-01
	Non-structural door arrangement and s	24147.01-624-01
	Window and Window wiper details	24147.01-625-01
	Cathodic Protection	24147.01-633-01
	Insulation Plan	24147.01-635-01

THANK YOU.

Stephen White
Principal Naval Architect
T 401.406.8582
sdwhite@glosten.com

