STATEMENT OF WORK
DRYDOCKING AND SPECIAL PERIODICAL SURVEY FOR
M/V "SEAWAY GUARDIAN"

SECTION 1 - SCOPE

1.1 – Purpose / Introduction / Overview

The Great Lakes St. Lawrence Seaway Development Corporation (GLS) has a requirement to complete a drydocking and American Bureau of Shipping (ABS) Classification Society first 5-year special periodical associated surveys of the marine motor vessel (M/V) "Seaway Guardian." This will include the drydocking of the vessel, ABS special periodical hull, machinery, and automation surveys, renewal of load line, IAPP, and IOPP certification as well as additional maintenance, steel work, and coating renewal. The work shall be completed at the contractor's marine maintenance and repair facility (shipyard).

1.2 - Background.

Part of the Department of Transportation (DOT), the Great Lakes St. Lawrence Seaway Development Corporation (GLS) is a wholly owned government corporation created by statute May 13, 1954, to construct, operate and maintain the U.S. portion of the St. Lawrence Seaway between the Port of Montreal and Lake Erie. The mission of the GLS is to serve the U.S. intermodal and international transportation system by improving the operation and maintenance of a safe, reliable, efficient, and environmentally responsible deep-draft waterway, in cooperation with its Canadian counterpart. The GLS also encourages the development of trade through the Great Lakes Seaway System, which contributes to the comprehensive economic development of the entire Great Lakes region.

The M/V "SEAWAY GUARDIAN" is an all-steel construction ice-class towing vessel under ABS Classification Society Rules for vessels under 90-meters. The vessel has the mission of aiding in the safe and efficient passage of vessels through the Seaway.

1.3 - Vessel Particulars:

"SEAWAY GUARDIAN"

Owner GLS IMO No. 9883039 Official No. 1295108 Class No. 20274138 Flag Massena, New York, USA Call Sign WDO2000 Designer: Robert Allan, LTD Builder/Year Gulf Island Shipyard / July 2020 **Classification** ABS ✠ A1, Towing Vessel, FF Capable ✠ AMS, ✠ ABCU Additional Notations: Ice Class IA 2352.6 HP (1734 kW), BP (61), IHM, U.S. Domestic Service **Deck Equipment**	**Propulsion / Power Generation / Bollard Pull** Main Engines 2x CAT 3516E, (2 x 2,682 BHP @ 1600 RPM) Propulsion system - Azimuth Stern Drives (ASD) with 2 x Rolls-Royce US 35 CP Controllable-Pitch Propeller Z-drive units located in Z-drive compartment with shafting connected to main engines and Z-drives with flexible couplings on both port and starboard side Generators 2x CAT C9.3 diesel generators (2 x 250 kW 0.8 pf @ 1800 RPM) 1 x Caterpillar Marine Power, C7.1 150kW Harbor Genset Bollard pull 61mt Vessel Speed: 13.5 kts. **Crane**

Towing Winch 1 Markey Model TES-34UL Tow winch on aft deck; Fully variable speed - line pull, 65 LT at stall at first layer, 50 LT at 25 feet/minute, 25 LT at 50 feet/minute
Drum capacity - capacity for 1,000' of towline; 2-1/8" steel wire rope, minimum breaking strength = 195 LT fitted with 55mm x 300m tow wire; Brake capacity - 65 LT at full drum brake fitted with remote auto-release (abort) system
Shark Jaw Smith-Berger 100 T Jaws configured for use with 1-1/8" buoy chain and up to 2”
Stern Roller SWL Smith-Berger 4 x 12’ 65 LT SWL
Gob Eye 70-ton SWL rated gob eye main deck
Tugger Winch 1 MARKEY, Model DEP-12 electrically powered Tugger Winch on port aft deck 8 LT line pull, at stall variable speed control; 0–50 feet/minute, Hand brake rated to 10 LT at first layer
Barge Winches on bow 2 Patterson, Model WWP75E-12.5-10 230-460-P-R, electrically driven barge connection winches, each fitted with minimum 75' of 1-1/2" UHMWPE line: 65 LT dog holding capacity, -40 LT electric brake holding capacity
Capstan 1 x Schoellhorn Albrecht, Model SA1817-65-20E-G capstan on aft deck, 10 LT line pull, at stall, fully variable speed control; 0–65 feet/min.
External Fire Fighting
• Monitors: Fire Fighting System, Model: FFS1200/300 LB, 5280 GPM water, 1320 GPM foam/water Fire Monitors
• Pumps: 2 Fire Fighting System Fire Pumps, Model SFP 250x350xPC, 630 GPM at 148 psi driven by main engine power take off; 1 emergency fire pump; 2 MP
• Onboard fire suppression systems: NOVEC Fire Suppression System
- Foam 4335 USG

Pollution Response
Barrel-o-Boom" (2 x BOB-250)
- 500' total length, in multiple sections with provision for adding additional sections to achieve greater containment lengths
- 6" float diameter
- 8" skirt length
- suitable for operation in temperatures of -25 ° F to 160° F
- integrated rope for boom deflation and compaction
- System to be fully contained for storage in plastic over-pack barrel, each barrel complete with:
  - oil containment boom
  - tow adapter
  - tow bridles, two (2) off
  - tow lines, two (2) off, 75' length each
  - oil absorbing pads

Workboat
1 x 17’ (5.2m) Tuffboat Aluminium Skiff with 90HP outboard
Dimensions
- Length (LOA) 118’-00” (35.96 m)
- Beam: 45’-0” (13.7m)
- Depth: 19’-7” (6.0m)
- Design Draft (navigational): 16’-0” (4.9m)
- Air Draft 69’ (based on draft 15’ 5¾”)
- Deadweight 237.34mt
- Gross tonnage 759 (National), 729 (ITC)
- Net tonnage 516 (National), 218 (ITC)

Deck Capacities
- Deck load capacity
- Deck strength
- Free deck area ~650ft² (18.4m²)

1 RAPP Marine, Model HP40-40kE knuckle boom deck crane on aft starboard with a lifting load capacity of 19,700 lbs (static) at maximum reach of 40 ft. 20, mounted on stbd. quarter
Man Riding Rated
Accommodation
Person Capacity 14
Personnel Transfer
Jason's Cradle (man overboard recovery system)
hinged boarding platforms at bulwark level barge boarding platform at forecastle deck
Safety
Life Rafts 2 @ 16 persons each, 1 each side
Tank Capacities
Fuel Oil: 35,000 gal (135 m³) 34, 968
Fresh water: 7,500 gal (28 m³) 7462
Navigation gear:
• Radar: Furuno X & S Band BlackBox Radar, Model FAR 21x7-BB Series
• Electronic chart display: Furuno FAR2XXCRO with Chart Reader Option
• Compass: SIMRAD GC80 Gyrocompass and Lilley & Gillie MK2000S Binnacle Magnetic Compass
• AIS: Furuno FA1702 Automatic Identification System
• E-nav software:
• Autopilot: Simrad AP70
Communications:
• Radio: 2 Standard Horizon Marine with Model 2200GX VHF Radios
• Satellite connection: Sailor 250 INMARSAT
Anchoring
2 x high holding power anchors, 1,883 lbs. size, one primary stowed in anchor pocket in hull forward, and one spare stowed on aft side of winch house
Anchor Chain: 105 fathoms x 1-3/16" U2 (high strength) grade, galvanized
Anchor Windlass vertical capstan windlass on foredeck; chain wildcat, sized for 1-3/16" chain
Fendering System
Port and Starboard: D type rubber fenders on quarter and bow. M type fendering on bow. Tires on port and stbd. amidships
Bow Fendering
•two (2) courses of bow fender of extruded” D” fender 400mm x 400mm to level of bow knuckle as shown
•Structural vertical push knee fender supports port and starboard, fit with 450mm x 450mm hollow square fenders. Suitable clearance to fully loaded waterline to avoid interference during operations in ice
Main Sheer Fenders
•Hard type rubber tires as indicated on General Arrangement, approx. 1.2m diameter
Stern Fenders
•Extruded hollow "D" rubber fender 400mm x 400mm, with round bore
Deck Sheathing
•Aft Work Deck

• Length / Width ~26'x~25' (7.9m x 7.6m)	

*Reference: "SEAWAY GUARDIAN," VESSEL INFORMATION BOOKLET, Contract No. 213-030, TAI Project: TAI 1189, Rev. (0), July 22, 2020

SECTION 2 – APPLICABLE DOCUMENTS

The documents listed in this section, combined with the other sections of the SOW, form the contract requirements for the project. These documents are being furnished to the Contractor in electronic format only.

Drawings:

1) Drawing # 23561 Rev. 2 – Z-Drive Seating.
2) Drawing # 6019-910-001 Rev. C – Wheelhouse Arrangement.
3) Drawing # 81111 Rev. 4 – Ventilation System Intake Details.
4) Drawing # 6019-940-004 Rev. D – TV Distribution System.
5) Drawing # 41500 Rev. 3 – Towing & Pushing Arrangement.
6) Drawing # 10130 Rev. 7 – Tank Plan.
7) Drawing # 6019-935-007 Rev. D – Talk Back System.
8) Drawing # 21050 Rev. 3 – Structural Sections.
9) Drawing # 21010 Rev. 3 – Structural Arrangement.
10) Drawing # 21210 Rev. 3 – Skeg Structure.
11) Drawing # 6019-610-004 Rev. A – Shore Power Facilities 480V Primary 200A, 3PH.
12) Drawing # 21040 Rev. 2 – Shell Plate Plan.
13) Drawing # 52500 Rev. 6 – Shafting Arrangement.
14) Drawing # 10030 Rev. 0 – Sea Chest and Box Cooler Arrangement Detail.
15) Drawing # 83200 Rev. 2 – Scuppers and Drains.
16) Drawing # 36100 Rev. AO – Safety Equipment Plan.
17) Drawing # 6019-935-001 Rev. C – PA/GA System.
18) Drawing # 62550 Rev. 3 – Navigational Lights Plan.
19) Drawing # 6019-920-001 Rev. D – Cabling Diagram Navigation Aids.
20) Drawing # 6019-610-002 Rev. A – Motor Control #2.
21) Drawing # 6019-610-002 Rev. A – Motor Control #1.
22) Drawing # 21000 Rev. 3 – Midship Section.
23) Drawing # 6019-935-006 Rev. B – Master Clock System.
24) Drawing # 22410 Rev. 2 – Mast Structure.
25) Drawing # 30500 Rev. 5 – Manhole, Hatches & Access Plates and Panel Arrangement.
26) Drawing # 23510 Rev. 3 – Main Engine and Fi-Fi Pump Seating.
27) Drawing # 61500 Rev. 3 – Main Electrical Equipment and Major Wireways Plan.
28) Drawing # 81110 Rev. 5 – Machinery Space Ventilation Arrangement.
29) Drawing # 76000 Rev. 5 – Machinery Exhaust Arrangement.
30) Drawing # 73500 MC Rev. 1 – Machinery Cooling System Diagram.
31) Drawing # 50000 Rev. AO – Machinery Arrangement.
32) Drawing # 6019-915-001 Rev. 5 – Machinery Alarm & Monitoring System.
33) Drawing # 74500 Rev. 5 – Lube Oil System Diagram.
34) Drawing # 10010 Rev. 4 – Lines Plan.
35) Drawing # 6019-935-004 Rev. F – LAN/CCTV System.
36) Drawing # 30710 Rev. 2 – Ladders, Stairs, Walkways and Handrails Arrangement.

37) Drawing # 31500 Rev. 3 – Insulation Plan.
38) Drawing # 22520 Rev. 2 – Independent Tanks.
39) Drawing # 30002 Rev. 2 – Inboard Profile.
40) Drawing # 21305 Rev. 3 – Ice Deflectors.
41) Drawing # 6019-815-001 Rev. 5 – HVAC System Diagram.
42) Drawing # 6019-815-002 Rev. 3 – HVAC Duct Routing.
43) Drawing # 23210 Rev. 0 – Auxiliary Machinery Foundation.
44) Drawing # 38501 Rev. 2 – Hull Markings – Underwater Survey.
45) Drawing # 34510 Rev. 1 – Guards Around Rotating Machinery.
46) Drawing # 30000 Rev. AO – General Arrangement.
47) Drawing # 71000 Rev. 3 – Fuel Oil System Diagram.
48) Drawing # 36005 Rev. 3 – Fire Zone Plan.
49) Drawing # FPS Fire and Smoke Detection System Rev. B.
50) Drawing # 70500 Rev. 6 – Fills, Vent and Sounding Diagram.
51) Drawing # 6019-930-001 Rev. A – Cabling Diagram External Communications.
52) Drawing # 6019-910-002 Rev. A – Engine Order Telegraph System.
53) Drawing # UCS-27737-1 Rev. 5 – Ventilation and Pumps Shutdown Panel.
54) Drawing # 6019-935-002 Rev. B – Emergency Phone System.
55) Drawing # 60000 Rev. AO – Electrical One Line Diagram (AC & DC).
56) Drawing # 14110 Rev. O – Docking Plan.
57) Drawing # (Customer PO # 0030370-000) South Coast Electric – Panelboards Drawing.
58) Drawing # 62520 Rev. 2 – Detailed Lighting Layout Plan.
59) Drawing # 22010 Rev. 3 – Deckhouse Structure.
60) Drawing # 22210 Rev. 1 – Bulwark Drawing.
61) Drawing # 83000 Rev. 5 – Black and Grey Water System Diagram.
62) Drawing # 71500 Rev. AO – Bilge and Fire System Diagram.
63) Drawing # 23210 Rev. 0 – Auxiliary Machinery Foundation.
64) Drawing # 6019-940-005 Rev. B – Antenna Arrangement.
65) Drawing # 40500 Rev. 3 – Anchor and Mooring Arrangement.
66) Drawing # 6019-610-001 Rev. B – 480V Main Switchboard.
67) Drawing # 6019-610-005 Rev. A – 120/208V AC Switchboard.
68) Drawing # 45000 Rev. AO – Fendering Arrangement.
69) Drawing # 73000 Rev. O – Fire Fighting System (FiFi) (Off-Ship) (Pipe Spool Drawing).
70) Drawing # 73000 Rev. 4 - Fire Fighting System (FiFi) (Off-Ship) (Water-Spray System).
71) Drawing # 19062023 Rev. 3 – Ontario Shipyard Docking Plan on HM1.
72) Great Lakes Load Line Dimensions & Layout Document Rev. A 05/01/2024
73) Anode Hull Arrangement Drawing.

<u>Manuals & Additional Documentation</u>

74) ABS Survey After Construction – Part 7 pertaining to M/V "SEAWAY GUARDIAN".
    - ABS Drydocking Survey
    - Survey After Construction – Part 7 (Vessels in Great Lakes Service)
    - ABS Renewal Load Line Survey #1
    - ABS Hull Periodical Survey #1 & Annual Survey #6
    - ABS Machinery Periodical Survey #1 & Annual Survey #6

- ABS Automation Periodical Survey #1 & Annual Survey #6
- ABS IOPP Survey #1
- Chapter 23 & 39
- ABS IAPP Survey #1
- Chapters 19 & 39

75) Seaway Guardian Great Lakes Loadline document
76) International paint specification document

Section 3 - REQUIREMENTS

3.1 – Scope Requirements

This SOW consists of the drydocking and in completing the ABS Classification Society first 5-year special periodical hull, machinery, and automation surveys, renewal of load line, as well as the International Air Pollution Prevention (IAPP) and International Oil Pollution Prevention IOPP certifications. This SOW also includes additional maintenance, steel work, and coating renewal of the vessel.

The work shall be completed at the contractor's shipyard. GLS shall be responsible for delivery of the vessel to the contractor's shipyard in the best light vessel condition practical.

The contractor shall be responsible for all labor, equipment, materials, utilities, and any other costs required to complete all requirements of the SOW.

Within 10 calendar days of award, the contractor shall submit a detailed project plan and schedule.

3.2 – Task Requirements

CLIN 0001 – Docking and Vessel on Drydock

Task 1 – Provide wet lay berth or wharfage to allow for pre-drydocking preparation to Include Inspection, block placement, and docking evolution planning. The contractor is responsible for inspecting and accepting the docking arrangement of the vessel prior to commencing any other work. The contractor is responsible for all pre-docking requirements to safely proceed with drydocking. The wet lay berth or wharfage shall have a water depth of a minimum 22 feet. GLS is responsible for vessel arrival at the shipyard in the best light vessel condition practical. Once the vessel is docked at the wet lay berth or wharfage, the contractor is responsible for all pre-docking preparation required to proceed with drydocking the vessel.

Task 2 – Perform vessel drydocking. The contractor shall ensure that all onboard variable frequency drives (VFDs) have been disconnected from ground and safe to allow welding on the hull after being positioned on the drydock.

CLIN 0002 – Vessel fuel removal and storage
Task 1 – To meet draft requirements for clearance to float above drydock blocking to load onto drydock, the contractor shall provision to remove fuel, store, and re-deliver and load to vessel post drydocking.

CLIN 0003 – Shore power for vessel for the duration of work dockside and on drydock
Task 1 – The contractor shall connect and provide shore power for the duration of work dockside prior to drydock, while on drydock, and after drydock prior to departure. The vessel's power requirements are 3-Phase, 60 Hz, 480v, 150a. The contractor is responsible for disconnecting shore power at the conclusion of all work with GLS personnel in position to resume onboard powering of the vessel. GLS will provide a Meltric shore side connection pigtail (onboard the vessel) for wiring to the transformer to connect the vessel's shore power cable.

CLIN 0004 – Pressure wash and clean the hull
Task 1 – The contractor shall cold water pressure wash the entire hull from bulwarks to the skeg. Pressure washing shall be completed with a maximum pressure of 5000 psi and a minimum of a 25-degree nozzle used to prevent damage, pealing or flaking to the ice paint coating and topcoat paints. Special care shall be taken to not pressure wash the transducer or speed sensor which will require washing and cleaning by hand. After cleaning is performed, the contractor shall perform a visual inspection of the exterior of the vessel including the ice belt, entire hull sides, entire hull bottom, skeg, azimuth drives, the two stern ice-deflection diamonds, transducer, speed sensors and the below the waterline float coat plugs. Note that the underwater hull was originally top coated with a sacrificial topcoat due to saltwater exposure on for delivery. Some of this may come off during power washing work.

CLIN 0005 – Facilitate ABS Special Periodical Survey #1
Task 1 – The contractor shall coordinate, facilitate and provide direct support for the ABS Special Periodical Survey #1, drydock examination and internal structural examination as it pertains to the survey requirements that pertain to this specific vessel per the ABS Survey After Construction document. This task includes completing NDT testing and reporting which includes hull plate thickness readings, magnetic particle testing of welds, and paint coatings thickness measurements. The contractor shall also perform electrical Megger testing and reporting for buss boards, generators, motors and motor control center (MCC) cabinets.

CLIN 0006 – Removal of international and domestic load lines and plimsoll markings
Task 1 – The contractor shall removal the current international and domestic load lines and plimsoll markings located at the vessel's midship on both the port and starboard sides. The contractor shall take care to not damage or gouge the hull plate when removing old welded on markings. Care shall also be taken to not damage or remove the vessel's midship draft marks.

CLIN 0007 – Fabrication and installation of new Great Lakes load line and plimsoll markings and paint repairs

Task 1 – The contractor shall fabricate 3/8" (or 10mm) thick mild steel plate new Great Lakes load line and plimsoll markings and install markings at the vessel's midship on both the port and starboard sides. The markings shall be seal welded to prevent rust from forming at weld seam. Insulation adjacent to the hot work area shall be removed from the interior engine room bulkhead before hot work commences. Prior to welding the new markings onto the hull, the contractor shall coordinate with the ABS surveyor who must certify dimensional layout of markings. Reference the Great Lakes Load Line Dimensions & Layout Document Rev. A 05/01/2024 drawing for details, dimensions and locations of markings.

Task 2 – The contractor shall repair the disturbed paint as well as paint the new load lines and plimsoll markings. Bare steel shall be mechanically cleaned and primed. All painting shall be completed be per the requirements of the international paint specification document to maintain compatibility with the existing paint systems.

- Exterior hull plating where the new Great Lakes markings are to be installed, shall have all disturbed paint mechanically prepped for coating renewal which includes primed with Intershield 300HS or equal and overcoated with high solids epoxy black Interthane 990HS or equal.
- Inside plating of the engine room bulkhead adjacent to hot work shall have all hot work disturbed paint mechanically prepped for coating renewal, primed with grey (Intertuf 262 or equal) and overcoated with white (Interlac 665 or equal) for areas not located behind insulation or linings. Insulation shall be reinstalled to original state after completion of installation of markings and paint repair.
- Load line and plimsoll markings shall be painted white (Interthane 990HS or equal).
- Inspect for signs of electrolysis pitting of steel plate and structure. Paint coating failures and any touch-up painting locations shall be repaired per the Hull 6019 Paint Specification document for details and requirements. Inspect the underwater hull coatings for abrasions or blistering which will require spot blasting and recoating. The underwater hull was originally top coated with a sacrificial top coat due to saltwater exposure on for delivery. Any of this remaining after power washing earlier in the drydock, shall be buffed. Afterwards the entire underwater hull area shall be painted black with Intershield 163 Inerta 160 or equal (ice paint).

CLIN 0008 – Renewal of UWILD hull bottom tank designation markings draft markings

Task 1 – The contractor shall prepare and paint white the UWILD hull bottom tank designation markings as well as the port and starboard side draft markings located at the forward, midship and aft. Reference Drawing # 38501 Rev. 2 - Hull Markings - Under Water Survey and the International paint specification documents for details and requirements.

CLIN 0009 – Additional inspections

Task 1 – The contractor shall perform an inspection of the following:

- Azimuth thrusters (port and starboard). Recently some of the cover securing bolts were discovered missing during a dive inspection. Temporary bolts were installed by the divers which shall be replaced by the contractor using OEM designed fasteners. The contractor shall provide the services of an OEM authorized service representative onsite to inspect the azimuth drives.

- All bolted covers and bolt locking keepers
- Lower gear box shaft oil seals
- Lower gear box covers
- Lower gear box hub covers
- Lower gear box drain plugs
- Controllable pitch propellor hubs
- Pitch propellor mounting bolts and bolt locking keepers
- Propellor blades

Task 2 – The contractor shall coordinate with the ABS inspector for the opening and inspection of all box coolers, sea chests, sea chest valves and overboard valves This includes:

- Port and starboard box coolers grates
- Port and starboard Fifi Sea Chest grates
- Port forward emergency fire pump sea chest grate
- Main fire/bilge pump and HVAC cooling intake sea chest located in the starboard box cooler

CLIN 0010 – Inspect and replace anodes (labor only)
Task 1 – The contractor shall inspect and replace anodes that are missing or unserviceable. This includes the hull welded anodes, azimuth drives bolted anodes, sea chest anodes, and box cooler anodes. If an anode is still serviceable, but its means of connection are damaged or partially missing, the contractor shall repair the connection. For the hull welded anodes, it is known that one of the anodes is missing and one on the starboard forward side has strap welds requiring repairs. GLS will have spare hull and azimuth anodes on hand and onboard the vessel for replacement if needed due to wear or missing.

CLIN 0011 – Chain locker cleaning, anchor cleaning and chain cleaning and shot repainting
Task 1 – The contractor shall clean the chain locker area of debris, which will require the vessel's anchor and fake chain to be lowered onto the drydock floor. The anchor and chain shall be pressure washed. Pressure washing shall be completed with a maximum pressure of 5000 psi and a minimum of a 25-degree nozzle. Inspect the chain's connection links and weak links. The chain's red, yellow and white shot markings shall be repainted. The chain's shot mark counts shall be relabeled.

CLIN 0012 – Clean out the Clean Lube Oil Tank and Bulk Lube Oil Storage Tank
Task 1 – The contractor shall open and clean out the Clean Lube Oil Tank (425 U.S. gallon tank). The tank shall be wiped clean and inspected by the ABS inspector and GLS prior to closure.

Task 2 – The contractor shall suction out all remaining liquid, including residual oil in the bottom, in the Bulk Lube Oil Storage Tank as well as the piping to the hose reel in engine room. The tank was found to have contamination from condensation and debris at the bottom from the original build. The contractor shall clean and wipe the tank. The contractor shall inspect the interior of tank for any rust from water contamination and solvent clean the interior of the tank in order for it to resume clean oil storage. Flush the pump and piping to hose reel to remove any contaminated oil from system. The tank shall be inspected by the ABS inspector and GLS prior to closure.

CLIN 0013 – Inspection and repair of the start air regulator and pressure relief valve replacement
Task 1 – The contractor shall remove the 3-inch start air regulator from piping spools and disassemble, inspect, clean and test it. Repair of the regulator is required to ensure it can maintain 150 psi pressure as designed.

Task 2 – The contractor shall replace in kind the installed ABS certified pressure relief (rated for 165 psi) for the airline which is located after the air reducing station.

CLIN 0014 – Air compressor overhaul
Task 1 – The contractor shall provide the services of an OEM authorized service representative to perform a complete overhaul service on both of the vessel's compressors which are Quincy Qr-325 Series, Model #: BM325HPSB, Product #: 2012311959, Serial #: UTY106236. This work must be performed when the vessel is drydocked and the drives are not requiring compressed air for shaft sealing.

CLIN 0015 – Engine and generator inspection
Task 1 – The contractor shall provide the services of an OEM authorized service representative to perform inspection and testing of the main propulsion engines and generators. This includes the two Caterpillar 3516T4 main engines, two Caterpillar C9 ship service generators, and one Caterpillar C7 harbor generator.

CLIN 0016 – Navigational Electronics Technician - VHF Radio Antenna Tuning.
Task 1 – The contractor shall provide the services of an OEM authorized service representative to troubleshoot and resolve interference issues with the vessel's four VHF radios and antennas.

CLIN 0017 – Vessel off drydock (undocking)
Task 1 – The contractor shall provide the COR with a minimum of 10 calendar days notice in order for GLS to make arrangements to independently inspect all underwater openings prior to undocking. The contractor bares the responsibility for ensuring the vessel is ready for refloating prior to undocking.

Task 2 – Upon the completion of all drydocking work requirements, and on the day of the undocking, the contractor shall:

- Remove any additional shoring
- Ensure keel blocks are secure
- Disconnect shore power (primary and secondary) and remove the gangway

Task 3 – Upon the completion of the undocking and the vessel is refloated up off the blocks, the contractor shall supply a tug(s) for maneuvering the vessel immediately out of the dock into position to be secured at a wet lay berth with shore power reconnected. The location shall be suitable for access for the required post-refloat work prior to departure from the shipyard.

Task 4 – During post drydocking the contractor shall provide all necessary technical support and labor for dock and sea trials to verify the vessel's seaworthiness and system performance at full-load operating conditions. This shall include a dockside operational test of all mechanical, electrical, and navigational systems with GLS's vessel crew.

CLIN 0018 – Fuel bunkering and potable water delivery to vessel off drydock
Task 1 – The contractor shall refuel the vessel with an equal amount of fuel removed from the vessel prior to drydocking, plus an additional 5000 U.S. gallons of #2 ultra low sulfur diesel fuel oil after the vessel is off drydock and alongside in wet lay berth. A fuel sample and bunker delivery note shall be provided to the GLS crew onboard the vessel prior to loading the fuel onto the vessel.

Task 2 – The contractor shall load 6000 U.S. gallons of potable water onto the vessel after the vessel is off drydock and alongside in wet lay berth.

CLIN 0019 – Disposal of additional tank wastes after drydock work
Task 1 – The contractor shall disposal of additionally accumulated tank wastes (black water, gray water, oily water, sludge tank, used oil tank and clean oil tank) after the completion of drydock work.

3.3 – Deliverables

Deliverable	Due Date	Submit To
Attend kick off meeting	Within 10 days of award	N/A
Detailed project plan and schedule	Within 10 days of award	COR
Inspections and relevant documentation related to ABS surveys as described in Section 3.2 Task Requirements (electronic format)	Within the Period of Performance	COR
Paint materials to be used IAW the SOW	Within the Period of Performance	COR
Fuel sample of fuel to be loaded onto the vessel after drydock work	Within the Period of Performance	COR

3.4 – General Conditions

3.4.1 – Period of Performance

The contractor shall begin performance within 30 calendar days and complete it within 60 calendar days after receiving the notice to proceed. It is expected that the notice to proceed will be issued in September 2026.

3.4.2 – Contracting Officers Representative (COR)

The Contracting Officer's Representative (COR) monitors all technical aspects of the contract and assists in contract administration. The COR ensures that the contractor performs the necessary inspections in connection with contract performance, maintains written and oral communications with the contractor concerning technical aspects of the contract, monitors contractor performance. All reports required and contractor invoices shall be sent to the COR.

3.4.3 – Place of Performance

All work is to be completed at the contractor's marine maintenance and repair facility (shipyard). The place of performance must be a marine maintenance facility geographically located within the Great Lakes / St. Lawrence Seaway system. Transiting this specialized ice-class asset out of the Great Lakes introduces unacceptable transit risks, excessive fuel costs, and operational downtime.

3.4.4 – Government Furnished Equipment/Information

GLS will supply spare anodes as described in CLIN 0010, Task 1, as well as the drawings and documents listed in Section 2. The contractor shall supply all other labor, materials and equipment needed to complete the project.

3.4.5 – Facilities

GLS will provide access to all required areas aboard the vessel to complete the project.

3.4.6 – Facility Access and Vessel Documents

The COR, GLS vessel crew, and ABS Surveyor shall be afforded access via gate key or security card, to the vessel at the contractor's shipyard during normal business hours of the shipyard including while it is at wet lay berth. In the case that crew are living onboard the vessel 24-hours a day at the contractor's wet lay berth, crew shall have ability to come and go from the contractor's facility.

The COR shall have ready electronic access during the course of the work to all documentation concerning the vessel including but not necessarily limited to:

- Drawings
- Specifications
- Technical Information
- Engineering Calculations
- Schedules
- Test and Inspection Reports
- Documents relevant to the completion of the SOW requirements
- Regulatory Body Reports

3.4.7 – Safety and Environmental Requirements

Contractor shall comply with all applicable safety and environmental regulations having jurisdiction.

3.4.8 KICK-OFF MEETING

The Contractor shall attend a virtual kick-off meeting to initiate the contract and establish a shared understanding of project objectives, requirements, and expectations. The kick-off meeting serves as an important platform for effective communication and collaboration among stakeholders. The kick-off meeting shall be within 10 days of contract award or as directed by the Contracting Officer (CO). The following individuals shall attend the kick-off meeting:

A. Contractor Representatives

Key Personnel

B. Government Representatives

Contracting Officer's Representative

Contracting Officer