

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR JAMES H. TROGDON, III Secretary

September 10, 2019

Addendum No. 2

Contract No.: DA00468

WBS Element: 16.33001

M/V Swan Quarter Credit Drydock (CDD)

To Whom It May Concern:

Reference is made to the proposal and plans previously furnished for this project.

The following revision has been made to the proposal:

- Pg. 1 Date of the Bid Opening changed from 9/11/2019 to 10/2/2019
- Pg. 2 Removed second sentence in paragraph 5.
- Pg. 6 Contract times changed from 8/7/19 2/7/20 to 1/14/20 5/15/20
- Pg. 21 Removed Contractor License Requirement.
- Page 25 Vessel Availability changed to January 14, 2020 to May 15, 2020 and "vessel returned to NCDOT no later than May 15, 2020"
- Pg. 36 Changed to 48 hours "The contractor shall inform the NCDOT Representatives a minimum 72 hours in advance of all USCG inspections."
- Pg. 38 Remove first line on paragraph 3.
- Pg. 38 Add "Contractor shall store fuel at facility"
- Pg. 41 1st paragraph added "shall be included in bid price" to the last sentence.
- Pg. 42 6th paragraph "NCDOT" added should read "NCDOT shall ensure that the vessel
- Pg. 44 Remove the last sentence paragraph 5. Changed to Contractor shall allow 1 day for Dock Trials and 1 day for Sea Trials

Pg. 44 – Section 2.5 changed days from 7 to 4

Pg. 48 – Section 5.5 Removed first sentence in second paragraph.

- Pg. 50 Section 7.1 added Disassemble to description
- Pg. 51 g) added "NCDOT will hydrostatically test all valves prior to supplying the contractor with the valve."
- Pg. 55 Section 8.4 paragraph 2 removed "Painting--Hull Below DLWL" added "Painting & Blasting Hull Below DLWL"
- Pg. 65 changed 15.4 Requirements to 14.4 Requirements

Pg. 66 – Changed: The lump sum contract bid price for Generic Ferry Item (Blast - Hull Below DLWL) and Generic Ferry Item (Painting - Hull Below DLWL) shall include all costs for paint and blasting to the hull below DLWL, except for the high-pressure water wash and application of Anti-Fouling paint.

TO

The lump sum contract bid price for *Generic Ferry Item (Blast & Paint - Hull Below DLWL)* shall include all costs for paint and blasting to the hull below DLWL, except for the high-pressure water wash and application of Anti-Fouling paint.

Pg. 67 – Changed: The lump sum contract bid price for *Generic Ferry Item* (*Blast - Hull Above DLWL*) and *Generic Ferry Item* (*Painting - Hull Above DLWL*) shall include all costs for paint and blasting to the hull above DLWL,

TO

The lump sum contract bid price for *Generic Ferry Item* (*Blast & Paint - Hull Above DLWL*) shall include all costs for paint and blasting to the hull above DLWL,

Pg. 69 – Changed: The lump sum contract bid price for *Generic Ferry Item (Blast - Superstructure)* and *Generic Ferry Item (Painting - Superstructure)* shall include all costs for paint and blasting to the superstructure,

TO

The lump sum contract bid price for *Generic Ferry Item* (*Blast & Paint - Superstructure*) shall include all costs for paint and blasting to the superstructure,

Pg. 71 – Changed: The lump sum contract bid price for *Generic Ferry Item (Blast – All Decks)* and *Generic Ferry Item (Painting – All Decks)* shall include all costs for paint and blasting all the decks.

TO

The lump sum contract bid price for *Generic Ferry Item* (*Blast & Paint – All Decks*) shall include all costs for paint and blasting all the decks.

Pg. 82 - changed 23.4 Requirements to 22.4 Requirements

- Pg. 84 added to description last sentence "NCDOT will provide Omni Bow Thruster and butterfly valves, Existing Thruster will be returned to NCDOT."
- Pg. 84 added to last sentence 23.2.3 Requirements. New cable run will be addressed by Supplemental Agreement if applicable.
- Pg. 88 added to 24.6 Payment: Changed 2 descriptions to match pay items Generic Ferry Item (Blast & Paint – Above DLWL)
- Pg. 90 added to description "The NCDOT Representative will designate which fifteen (15) deck plates are to be replaced (Average area is 3' X 3')."
- Pg. 92 Removed Safety Vests

DA00468 Bid Form Revisions:

Remove Items 23, 24, 25 & 26

Change description of Items:

0011 - Generic Ferry Item (Blast & Paint – All Decks)

0012 - Generic Ferry Item (Blast & Paint – All Hull Above DLWL)

0013 - Generic Ferry Item (Blast & Paint – All Hull Below DLWL)

0014 - Generic Ferry Item (Blast & Paint – Superstructure)

Please replace the original pages with the attached revised pages.

The amended EBS File (DA00468.002x) has been uploaded. We apologize for any inconvenience.

Sincerely,



C. E. Slachta Division Proposals Engineer

Cc: J. D. Jennings, PE C. W. Bridgers Jr., PE G. A. Byrum, PE R. W. Midgett, PE E. Sedlacek

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 1

PROPOSAL

DATE AND TIME OF BID OPENING: OCTOBER 2, 2019 AT 2:00 PM

CONTRACT ID: DA00468

WBS ELEMENT NO.: 16.33001

COUNTY: DARE

TYPE OF WORK: M/V SWAN QUARTER CREDIT DRYDOCK (CDD)

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD BID IS \$30,000. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

ZANSPO

THIS IS A DIVISION LET PROJECT.

5% BID BOND OR BID DEPOSIT REQUIRED.

MENTO

NAME OF BIDDER

ADDRESS OF BIDDER

PROPOSAL FOR THE CONSTRUCTION OF

CONTRACT NO. DA00468 IN DARE COUNTY, NORTH CAROLINA

DATE: AUGUST 12, 2019 DEPARTMENT OF TRANSPORTATION, RALEIGH, NORTH CAROLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No. **DA00468**; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Department of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with *the 2018 Standard Specifications for Roads and Structures* by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Contract No. **DA00468** in **Dare County**, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications project, and hereby become a part of this contract.

The published volume entitled *North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2018* with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the construction and work included in this contract is to be done in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Engineer.

If the proposal is accepted and the award is made, the contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except over the signature of the said Contract Officer or Division Engineer.

The quantities shown in the itemized proposal for the project are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the quantity of any item or portion of the work as may be deemed necessary or expedient. An increase or decrease in the quantity of an item will not be regarded as sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for the contract.

Accompanying this bid is a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Bidder shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by him, as provided in the Standard Specifications; otherwise said deposit will be returned to the Bidder.

6

REVISED 9/10/2019

SP1 G10 A

CONTRACT TIME AND LIQUIDATED DAMAGES:

(7-1-95) (Rev. 12-18-07)

The date of availability for this contract is **January 14, 2020**

The completion date for this contract is **May 15, 2020**

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **One Thousand Dollars** (\$1000.00) per calendar day.

108

PROSECUTION OF WORK:

(7-1-95) (Rev. 8-21-12)

The Contractor will be required to prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance of the project. The Contractor will not be permitted to suspend his operations except for reasons beyond his control or except where the Engineer has authorized a suspension of the Contractor's operations in writing.

In the event that the Contractor's operations are suspended in violation of the above provisions, the sum of **\$500.00** will be charged the Contractor for each and every calendar day that such suspension takes place. The said amount is hereby agreed upon as liquidated damages due to extra engineering and maintenance costs and due to increased public hazard resulting from a suspension of the work. Liquidated damages chargeable due to suspension of the work will be additional to any liquidated damages that may become chargeable due to failure to complete the work on time.

104

NO MAJOR CONTRACT ITEMS:

(2-19-02) (Rev. 8-21-07)

None of the items included in this contract will be major items.

NO SPECIALTY ITEMS:

(7-1-95)

None of the items included in this contract will be specialty items (see Article 108-6 of the 2018 Standard Specifications).

108-6

SP1 G15R

SP1 G31

SP1 G34

properly licensed in accordance with A heating, plumbing, and air conditioning c (licensing of electrical contractors).		
COOPERATION BETWEEN CONT	RACTORS: 105-7	SP1 G133
The Contractor's attention is directed to a	Article 105-7 of the 2018 Standa	rd Specifications.
The Contractor on this project shall cool limits of this project to the extent that the		
ELECTRONIC BIDDING: (2-19-19)	101, 102, 103	SP1 G140

Revise the 2018 Standard Specifications as follows:

CONTRACTOR'S LICENSE REQUIREMENTS:

Page 1-4, Article 101-3, DEFINITIONS, BID (OR PROPOSAL) *Electronic Bid*, line 1, replace "Bid Express®" with "the approved electronic bidding provider".

Page 1-15, Subarticle 102-8(B), Electronic Bids, lines 39-40, replace "to Bid Express®" with "via the approved electronic bidding provider".

Page 1-15, Subarticle 102-8(B)(1), Electronic Bids, line 41, delete "from Bid Express®"

Page 1-17, Subarticle 102-9(C)(2), Electronic Bids, line 21, replace "Bid Express® miscellaneous folder within the .ebs" with "electronic submittal".

Page 1-29, Subarticle 103-4(C)(**2), Electronic Bids, line 32,** replace ".ebs miscellaneous data file of Expedite" with "electronic submittal file"

TWELVE MONTH GUARANTEE:

(7-15-03)

108

SP1 G145

(A) The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the Department, and/or for use in excess of the design.

(7 - 1 - 95)

REVISED 9/10/2019

STATE

SP1 G88

If the successful bidder does not hold the proper license to perform any plumbing, heating, air conditioning, or electrical work in this contract, he will be required to sublet such work to a contractor

21

GENERAL SPECIFICATIONS

INTRODUCTION

The following "Special Provisions" (comprised of both "General Specifications" and "Technical Specifications") applicable to the 2018 Dry-Docking and Repair of the vessel

M/V Swan Quarter, shall be used in conjunction with the North Carolina Department of Transportation (NCDOT) "NCDOT Standard Specifications" for Vessels, herein referred to as the "Specifications." The Special Provisions are crafted to complement the Specifications. In the event of a conflict, though, the Special Provisions take precedence. The Special Provisions and Specifications, together with drawings, attachments, and all other appendices included with the entire integrated agreement between the Contractor and NCDOT shall be referred to as the Contract Documents. The Contract Documents describe the performance expected for all dry dock and repair work to be completed on the vessel.

VESSEL AVAILABILITY

The ferry [M/V Swan Quarter] will be available for the work outlined in these Special Provisions between the dates of January 14, 2020 – May 15, 2020. The vessel [M/V Swan Quarter] must be returned to the NCDOT no later than May 15, 2020 to be placed back in regular service. It is anticipated that the work shall require portion of which shall require the vessel to be in the dry dock.

DESCRIPTION OF WORK

The Contract Documents describe the requirements for dry docking, repairs, and improvements on NCDOT vessel [M/V Swan Quarter].

The [M/V Swan Quarter] is a steel-hulled passenger/car ferry operated for service between [Ocracoke and Cedar Island]. The principal characteristics of the vessel are as follows:

Length Overall (molded):	220'-6
Breadth (molded) over guard:	50'-0"
Draft, DLWL:	6'-6"
Displacement, DLWL:	800.25 LT (Long Tons)

DRY DOCK INSPECTION BY THE U.S. COAST GUARD AND NCDOT

The vessel shall be dry docked by the Contractor to allow for the necessary inspection of the underwater body and appendages, valves, shafting, rudders, propellers, bow thruster tunnels, sea chests, steering gear, and all other areas of the vessel to meet the USCG requirements for renewal of the COI. The inspection will be carried out under the supervision of the USCG Inspector, and will require access to all hull voids and compartments. The Contractor shall inform the NCDOT Representative a minimum 48 hours in advance of all USCG inspections. The Contractor shall be responsible for removing any equipment, fastenings, interferences, or enclosures and providing access to any areas as directed by the USCG Inspector or the NCDOT Representative. After inspection, repairs, re-inspection, and with the approval of the NCDOT Representative and Coast Guard Inspector, the Contractor shall restore all equipment, fastenings, interferences, or enclosures as required by the NCDOT Representative.

NCDOT Inspection Representative POC:

Marshall Coleman – QA Specialist <u>mccoleman2@ncdot.gov</u> (252) 423-5110 or George Emerson – QA Specialist <u>gaemerson@ncdot.gov</u> (252) 423-5119 Ferry Division, North Carolina Department of Transportation 8550 Ferry Road Manns Harbor, NC 27953

The Contractor shall ensure that the NCDOT Representative is informed of and copied on all communications and correspondence with the USCG, including but not limited to inspections.

The Contractor shall schedule all USCG required inspections between 0800 and 1430 on normal business weekdays (Monday through Friday).

Payment

All costs and expense to the Contractor for removing and replacing equipment, fastenings, interferences, and enclosures, and any other work as outlined in this section shall be included in the lump sum contract bid price for *Generic Ferry Item (Take Control and Dry-Dock the M/V Swan Quarter)* and no further payment will be made.

condition, or better. All areas where paint or surface finishes are disturbed due to Contractor work shall be touched up to pre-arrival aesthetic appearance and preservation integrity, or better.

While under the Contractor's control, the Contractor shall maintain valve tag-out procedures. All valves, regardless of system or function, which are operated by the Contractor or his subcontractors, from their original position at time of delivery to the Contractor shall be red tagged. The Contractor shall maintain a log to be located in the Engine Room that will note the original valve position, location and purpose of the red-tagged valve and date and time it is either opened or closed each time it is operated. The valve tags and log shall be maintained for the entire duration of the contract. Upon returning the vessel to the owner's control, all valves shall be returned to their original position at the time the Contractor took possession of the vessel.

The Contractor shall provide a heated/air conditioned private office, with two (2) desks and four (4) chairs, a secure 5mb/sec or faster internet connection, small refrigerator and building power (minimum one (1) convenience outlet per wall or equivalent power strip) for the NCDOT Representative for the duration of the project. The office space shall be located as near the vessel dry dock as possible or in the office complex normally provided for the shipyard customer's port engineers. Provide two (2) marked reserved parking spaces, inside the shipyard, for the duration of the project.

The Contractor shall dry dock the vessel within twenty-four (24) hours of its arrival at the Contractor's facility. If the vessel is not immediately taken into the dry dock when it arrives at the Contractor's facility, the Contractor shall provide all labor, material, and equipment, including tugboats as necessary, to secure the vessel to the Contractor's moorings and to move the vessel to the dry dock when appropriate. Except where specifically indicated otherwise by these Specifications, the vessel will be delivered to the Contractor with minimal fuel and all temporary items removed such as hand radios, binoculars, personal items, food, and trash. The Contractor shall be responsible for any lightering, ballast operation, or liquid load transfer necessary to accommodate the dry dock capacity or complete any work called out in the Contract Documents. The ship will be received with the same amount of fuel onboard as it was delivered to the Contractor. Contractor shall store fuel at the contractor facility. Price shall be included in the dry dock bid price. Approximate fuel will be +/- 2,500 gallons.

The Contractor shall, plan, budget, and provide a number of days in dry dock as required to complete the work in these Special Provisions. The dry docking schedule shall be provided to the NCDOT Representative prior to the dry-docking of the vessel. Except for emergency situations (prior docking commitments on the part of the Contractor do not constitute emergency situations), once the vessel is docked, any deviation in the dry-docking schedule or dry-docking evolutions (undockings and re-dockings of the vessel) must be requested and submitted in writing to the NCDOT Representative, at least ten (10) days in advance of the proposed change.

The Contractor shall provide adequate docking facilities, soft fenders and mooring lines for the vessel which shall accommodate the vessel's draft and will allow the vessel to safely rise and fall with the tide so no damage occurs to the vessel while it is moored to the Contractor's facilities. Mooring lines shall be sized and configured to accommodate the vessel and all reasonably anticipated weather occurrences for the Contractor's facility.

Place cribbing such that the hull will be exposed to allow work as outlined herein. The ship shall be blocked such that all underwater body painting and inspection detailed in the Contract Documents are accomplished. The Contractor shall shift ("bump") the ship in dry dock to expose, inspect, and paint the areas covered by the docking blocks. The Contractor may use a removable block configuration (sand boxes) in lieu of shifting the ship in dry dock. Shift ("bump") shall be included in the bid price for dry dock.

Provide all staging, tarpaulins, weather covers, closures, and aerial apparatus necessary to accomplish the repairs and/or inspection work detailed in the Contract Documents.

If the vessel is dry docked contrary to any of these conditions, the Contractor shall immediately undock the vessel. The condition responsible for the undocking shall be corrected and the vessel shall be dry docked as soon thereafter as possible. The undocking and follow-on dry dockings, under these circumstances, shall be performed by the Contractor at no additional expense to the NCDOT.

If strain or deformation is noted during or after the dry-docking, the Contractor shall immediately undock the vessel. The condition responsible for the undocking shall be corrected and the vessel shall be dry docked as soon thereafter as possible. The undocking and follow-on dry dockings, under these circumstances, if determined to be a result of a Contractor act, omission, or other failure to abide by the direction in the Contract Documents, shall be performed by the Contractor at no additional expense to the NCDOT.

The Contractor shall undock the ship, without strain or deformation, upon completion of all underwater work, topside painting, or at the direction of the NCDOT Representative.

Immediately preceding the undocking the Contractor shall conduct an inspection, in the company of the NCDOT Representative, to verify the ship is ready to undock. During this inspection, the Contractor shall demonstrate:

- a) That all sea chest strainer plates are installed and fastened, with lock wired or tack welded stainless steel nuts or stainless steel Nylock style nuts, on allstuds.
- b) That all cover plates, plugs, or other protective devices are removed from transducers and hull openings and that the transducer windows are intact and undamaged.
- c) That all anodes are in place and free of paint or other cover to permitimmediate activation at undocking.
- d) That the propeller nut locks are intact.
- e) That all underwater body hull paint is intact and cured past the minimum dry to launch criteria established by the paint manufacturer.
- f) That the ship's stability is suitable for undocking and that no significant changes in ship's displacement, trim, and heel, from that observed at dry docking, are likely at undocking.

- g) That all gangways and shore services are disconnected.
- h) That all sea valves are closed.
- i) That all shaft seals are intact.
- j) That the rudder packing is intact.
- k) That the ship is in all respects ready to undock.

During the undocking the Contractor shall assign personnel to inspect hull fittings, seals, packings, transducer covers, and valves in all spaces, continuously, to discover and correct leaks. If a leak is discovered, the undocking shall be suspended, the leak shall be stopped and the condition causing the leak corrected, before the undocking is permitted to continue. The ship shall be undocked without strain or deformation.

The Contractor shall vent and bleed all sea water systems and prepare them for unrestricted operation of the vessel, in all normally anticipated sea states and weather conditions. When the ship is undocked it shall be moored safely, as directed in the Contract Documents, and prepared for dock and sea trials. The Contractor shall ensure that all sea water systems are fully functional for dock and sea trials and at the time of delivery of the vessel.

If the vessel is undocked contrary to any of these conditions, the Contractor shall immediately dry dock the vessel. The Contractor shall correct the condition responsible for the aborted undocking, and then undock the vessel as soon thereafter as possible. The dry-docking and follow-on undockings, under these circumstances, shall be performed by the Contractor at no additional expense to the NCDOT.

If any strain or deformation is noted during or after the undocking, the Contractor shall immediately dry dock the vessel. The Contractor shall correct the condition responsible for the aborted undocking, then undock the vessel as soon thereafter as possible. The dry-docking and follow-on undockings, under these circumstances, shall be performed at no additional expense to the NCDOT.

When under the Contractor's control, the Contractor shall not use or permit the use of the elevator for the carriage of personnel, tools, or materials. With the exception of any work on the elevator that is specified, the entire elevator installation, including door jams and thresholds, shall be secured from use and protected by the Contractor.

NCDOT shall ensure that the vessel's sinks, toilets, urinals, deck drains, and all other drainage systems are not used, except for the drainage of rainwater or exterior wash water runoff. Use of the drainage systems for the preparation and disposal of materials is specifically prohibited. The Contractor shall ensure that all drainage systems are fully functional at the time of delivery of the vessel.

When under the Contractor's control, the Contractor shall maintain circuit breaker tag-out procedures. All circuit breakers, regardless of system or function, which are operated by the Contractor or his sub-contractors, from their original position at time of delivery to the Contractor shall be red tagged.

The Contractor shall submit detailed test memoranda, bound into a test memoranda booklet, for each system to be tested and for the dock and integrated sea trials, no less than seven (7) working days prior to the scheduled start of dock trials. This milestone shall be inserted in the Contractor's progress schedule. The Contractor shall include as part of the test memoranda book, a sea trial and dock trial agenda detailing the sequence in which the tests will be conducted. The Contractor shall develop and conduct the test and trial protocols and schedules to thoroughly shakedown the vessel, in all modes and at various courses and speeds, including full power, to prove the capability and reliability of the vessel to operate, without restriction, on its certificated routes.

NCDOT shall provide a Coast Guard licensed Master, a Coast Guard licensed Engineer and other crew members as needed and in accordance with the vessel's COI operating requirements, to supervise and exercise operational and technical control of the vessel for all dockside and underway trial periods.

The Contractor shall be responsible for proving the operation and reliability of all systems disturbed by the work detailed in these Specifications, particularly, the main engines, main engine and reduction gear cooling systems, exhaust system, reduction gears, pneumatic engine and clutch controls, shaft brakes, propulsion shafting affected by the work scope, and all disturbed electrical and auxiliary systems. This same Contractor responsibility will extend to any equipment, machinery, or systems that are added to the original contracted work scope through approved change-orders.

The Contractor shall complete all maintenance and repair items and new installations, except for startup and testing, before dock trials and sea trials commence. Systems relying on integration with other systems shall be tested only after full integration is established. Partial trials, interrupted trials, and zone trials may be conducted for the Contractor's purposes and will be attended by the NCDOT Representative but will not be counted as acceptance trials.

Acceptance trials shall commence by 0800 each scheduled day and shall stop no later than 1600 each scheduled trial day. Contractor shall allow 1 day for Dock Trials and 1 Day for Sea Trials.

2.5 Tests, Trials and Documentation:

The Contractor shall provide the NCDOT Representative with a detailed and completed Dock and Sea Trial Agenda at least 4 working days prior to the commencement of dock trials. The NCDOT Representative shall approve of this agenda prior to the commencement of dock and sea trials.

2.6 <u>CHECKPOINT:</u>

NCDOT will conduct a startup of M/V Swan Quarter up to 4 working days before the scheduled dock trials. NCDOT will provide the necessary startup personnel. Contractor shall provide assistance as needed and any repairs required will be addressed as "Additional Work."

2.7 Payment:

The lump sum contract bid price for *Generic Ferry Item (Startup, Dock and Sea Trials)* for the [M/V Swan Quarter] shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions, including testing and trials and all time necessary in dry dock and/or pier side to complete the work involved.

The Contractor shall perform gas free testing for tanks, accessible voids, holds, and enclosed areas in way of the hull when directed by the NCDOT Representative at any time such testing is indicated for the protection of the vessel and the <u>safety of personnel</u>. If gas free certification is lost, the affected compartment(s) shall be re-certified by the NFPA-certified marine chemist.

The NCDOT Representative will not accept re-certification by the competent person. If gas free certification is lost due to an act or omission of the Contractor, then additional cleaning, ventilating, and certification shall be accomplished at no cost to the NCDOT.

Compartments that are gas freed and certified per the Contract Documents shall remain in a gas free and certified condition until the Coast Guard and the NCDOT Representative approve closure of the compartment and until all Contractor work in the compartment is complete. Any gas free activity and certification required by the Contractor to conduct shipyard operations will be at the Contractor's expense and incidental to the various bid items involved.

Any gas free testing work directed by the NCDOT Representative in excess of two times per hold, tank or enclosed area, and that is not required by the Contractor to conduct his/her operations, will be considered and settled by the NCDOT Representative as Additional Work.

5.5 <u>CHECKPOINT:</u>

Upon completion of work, the Contractor shall test all bilge high-level alarms. Any repairs required will be addressed as "Additional Work." Protect all bilge suction pockets and boxes from clogging. At the conclusion of all work, clean suction strainers and valves. Exercise all valves and verify that they are easily operable.

The Contractor shall include in their bid for this item an allowance for spot prep and painting of bilge as directed by the NCDOT Representative Contractor shall take care to protect all equipment from overspray. Any equipment damaged by over spraying shall be restored to its original condition at no additional expense to NCDOT.

All paint work shall be accomplished as detailed in the Special Provision item "Painting – General."

5.6 Tests, Trials and Documentation:

Contractor shall check, update daily, and post at all entry points to the various voids, copies of all certifications and Safe for Entry permits.

5.7 Payment:

The lump sum contract bid price for *Generic Ferry Item (Open, Clean, and Certify Gas Free: Bilges, Holds, and Enclosed Areas)* shall include all costs for cleaning, painting, ventilation, marine chemist inspections and certifications, competent person inspections and certifications, and certification of all tanks, accessible and inaccessible voids, holds and enclosed areas in way of the hull and including disposal of all waste. No further compensation will be made.

6.6 Tests, Trials and Documentation:

Following refurbishment and re-installation of all hatches and doors, Contractor shall prove all hatches watertight when subjected to low pressure or hose wash.

6.7 Payment:

Include all costs associated with repairs and modifications to the various items outlined in this Special Provision in the lump sum contract price for *Generic Ferry Item* (*Main Deck Hatch Maintenance and Repair*) and *Generic Ferry Item* (*Remove 3 Main Deck WTD*, *Then Reinstall with NCDOT Provided WTD*). No further compensation will be made.

7.0 SEA VALVES:

7.1 Description:

This section describes the requirements to remove, disassemble, open, clean and inspect **all** the vessel's sea water valves, including but not limited to:

- Sea valves
- Overboard discharge valves
- Scupper valves

Contractor shall take into consideration work associated with "Sea Water Cooling Systems Inspection and Maintenance" of this section and closely coordinate this work.

Attention is made to the Contractor to note the valve tag-out procedures described in **Take** Control and Dry Dock the [M/V Swan Quarter]."

7.2 References

- 7.2.1 DWG 09-060 256-01 Engine Cooling Piping Schematic
- 7.2.2 DWG 09-060 256-02 Engine Cooling System Arrangement & Details
- 7.2.3 DWG 09-060 533-01 Potable Water Schematic
- 7.2.4 DWG 09-060 521-01 Fire Main System Schematic
- 7.2.5 DWG 09-060 163-01 Sea Chest
- 7.2.6 DWG 09-060 261-01 Fuel Oil System Schematic
- 7.2.7 DWG 09-060 264-01 Lube Oil & Dirty System Schematic
- 7.2.8 DWG 09-060 506-01 Fills, Vents and Sounds Schematic
- 7.2.9 DWG 09-060 529-01 Bilge Oily Water Schematic

7.3 Owner Furnished Equipment:

See items a) thru e) in section 7.4

7.4 Requirements

The Contractor shall complete the following work on sea valves, overboard discharge valves and scupper valves:

- a) Disassemble all sea valves, sea chest vent valves and all overboard discharge for USCG and NCDOT Representative inspection of the interior valve body, seats, under bonnet, stem and packing housing for valves over 2". All 2" valves condemned by the USCG Inspector or NCDOT Representative shall be replaced or repaired by the NCDOT and returned back to the contractor.
- b) The Contractor shall remove all cover plates in the bulkheads for unrestricted access to the valves and the voids, as indicated in the "Open, Clean and Certify Gas Free Holds and Enclosed Areas" section of these Special Provisions.
- c) Blue the seat contact areas of the discs and perform a blue fit check of the valve seats in the presence of the USCG Inspector and NCDOT Representative.
- d) Following approval of the USCG Inspector and NCDOT Representative, clean the valve components, renew the bonnet gasket or seal, lubricate the valve stem, repack the stem gland and reassemble the valves.
- e) Open and inspect sea water system check valves as listed.
- f) All 3" valves condemned by the USCG Inspector or NCDOT Representative shall be replaced or repaired by the NCDOT and returned back to the contractor.
- g) Upon completion of valve overhaul and prior to installation, hydrostatically test all overhauled and new valves to the satisfaction of USCG and NCDOT Representative. NCDOT will hydrostatically test all valves prior to supplying the contractor with the valve.
- h) Reinstall all valves using new Contractor furnished gaskets (Garlock 3760 or equal) and 316 Stainless Steel fasteners.
- i) Complete inspections and submit report no later than five (5) working days after drydocking.

Number	Valve Name	Location	Туре
1	Shaft Cooling Sea Chest	Engine Room	1 1/2" Gate Valve
2	Sprinkler Sea Chest	Engine Room	4" Gate Valve
3	Main Fire Pump Overboard	Engine Room	2" Gate Valve
4	Main Fire Pump Overboard	Engine Room	2" Check Valve
5	Main Fire Pump Relief Valve	Engine Room	2" Relief Valve
6	Main Fire Pump Sea Chest	Engine Room	3" Gate Valve
7	Bilge Sea Chest	Engine Room	3" Gate Valve
8	Bilge Overboard	Engine Room	3" Gate Valve
9	Bilge Overboard	Engine Room	3" Check Valve
10	Bilge Manifold - below EOS FWD	Engine Room	3" Stop Check
11	Bilge Manifold - MSD/Tank Rm AFT	Engine Room	3" Stop Check
12	Bilge Manifold - below Galley Void	Engine Room	3" Stop Check
13	Bilge Manifold - Rope Locker	Engine Room	3" Stop Check
14	Bilge Manifold - Bow Thruster Compt	Engine Room	3" Stop Check
15	Bilge Manifold - Forepeak	Engine Room	3" Stop Check
16	Bilge Manifold - Steering Compt	Engine Room	3" Stop Check
17	Bilge Manifold - Shaft Compt	Engine Room	3" Stop Check

7.5 Table of Valves NOTE: TABLE IS FOR REFERNCE ONLY

7.6 Tests, Trials and Documentation

As indicated in the "Requirements" section above.

Following reassembly of all valves, Contractor shall prove watertight at operating pressure.

7.7 Payment

Include all costs associated with repairs and modifications to the various items outlined in this Special Provision and Supplemental Work Provisions in the lump sum contract price for *Generic Ferry Item (Sea Valves).* No further compensation will be made.

8.0 ZINC ANODE REPLACEMENTS:

8.1 Description

This section describes the requirements to remove and replace with new identified zinc anodes on the hull and rudders.

8.2 References

8.2.1 <u>DWG 09-060 997-01 – [M/V Swan Quarter] Docking & Anode</u>

Plan

8.3 Owner Furnished Equipment

Keel Cooler Anodes (small, bar anodes that bolt directly into the coolers themselves).

8.4 **Requirements**

The Contractor shall renew all anodes on the vessel. Vessel is equipped with an estimated total of **one-hundred and nine (109) 23-24 lb. weld on zincs, ZHS-23 or equal.

This is in addition to four (4), 5.3 lb. teardrop shape, weld on anodes inside each sea chest and bow thruster sea inlet and six (6), 6 lb. teardrop shape anodes on each rudder, and sixty (60) 12 lb. rectangular shape ZSS-12 or equal on the keel cooler guards. All welding on the hull is to be accomplished prior to cleaning, prepping, and painting in the bilge areas. Keel cooler bolt on zinc anodes (specific to protecting the keel coolers themselves) shall be replaced in accordance with this work item and in accordance with the requirements of item., "SEA WATER COOLING, INSPECTION, AND MAINTENANCE."

Compensation for renewal of all anodes requiring renewal shall be paid under this work item.

Repaint disturbed areas with anti-corrosive and anti-fouling paint in way of the zinc strap welds. Painting shall be as specified in the "Painting & Blasting Hull Below DLWL" section of these Special Provisions. All anodes shall be properly masked off when the surrounding areas are being painted. Masking tape shall be removed within 24 hours from when it was applied.

8.5 Tests, Trials and Documentation

None

Pressure wash, as described above, may start at any time, but must precede the painting called out in these Special Provisions.

The Contractor shall protect all equipment adjacent to and attached to the structures to be washed from damage by solvent and high-pressure water. Such equipment includes, but is not limited to, light fixtures, cables, piping, sprinkler heads, antennas, horns, loudspeakers, cameras, screens, windows, door hardware, elevator equipment, louvers, bells, wire penetrations, and life rings.

13.5 Tests, Trials and Documentation:

None

13.6 Payment:

The lump sum contract bid price for *Generic Ferry Item (High-Pressure Water Wash – Superstructure)* shall include all costs associated with the solvent and high-pressure water wash detailed in this Special Provision. No further compensation will be made.

14.0 BLASTING AND PAINTING - HULL BELOWDLWL:

14.1 Description:

This section describes the requirements for painting the ferry hull (underwater body), from the keel to 12" above the design load waterline.

After high-pressure water washing of the hull, as outlined in the "High-Pressure Water Wash – Hull Below DLWL" section, the Contractor shall blast the hull below the DLWL.

Representative, spot repair the anti-corrosive (Primer) coating and shall apply anti-foulin (AF) coatings over the entire underwater body.

14.2 References:

14.2.1 <u>"General Painting Instructions" as part of these Special Provisions:</u>

14.3 Owner Furnished Equipment:

None

14.4 Requirements:

The Contractor shall blast the hull below the DLWL by abrasive blast to a SSPC-SP-10, Commercial Blast or by other equivalent standard surface preparation.

After surface preparation, dry the area with clean dry compressed air. The Contractor shall assure that the areas to be painted are free of dust, dirt, salt, loose paint, moisture, and other contaminants before painting.

Anti-corrosive paint at the perimeter of the blasted areas shall be feathered or otherwise made tight to eliminate paint failure points and present a clean mechanically etched surface for a secure bond with new Primer applied to the blasted surfaces. Coat all bare metal areas the same day they are exposed by blasting. Apply anti-corrosive paint by conventional industrial airless spray or compressed air spray equipment.

The Contractor shall determine the Manufacturer's minimum and maximum "dry to self-recoat" criteria and apply the second anti-corrosive coat inside this window.

The anti-corrosive coating system in these selected areas shall be:

• Primer Coat: Amercoat 370 red oxide applied @ 4.0-6.0 Mils DFT

(NOTE: Paint manufacture requires 2 coats of primer)

- Stripe Coat: Amercoat 370 grey applied @ 4.0-6.0 Mils DFT
- Third Coat: ABC #3 red applied @ 4.0-6.0 Mils DFT

14.5 Tests, Trials and Documentation:

None

14.6 Payment:

The lump sum contract bid price for *Generic Ferry Item* (*Blast & Paint - Hull Below DLWL*) shall include all costs for paint and blasting to the hull below DLWL, except for the high-pressure water wash and application of Anti-Fouling paint. Payment for these items will be based upon the Contractor's unit bid price for (*High- Pressure Water Wash – Hull Below DLWL*) and applying Anti-Fouling paint shall be paid for under the lump sum contract bid price for (*Painting - Hull Below DLWL*). Lump Sum prices shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions. No further compensation will be made.

15.0 BLASTING AND PAINTING - HULL ABOVE DLWL:

15.1 Description:

After high-pressure water washing of the hull, as outlined in the "High-Pressure Water Wash – Hull Above DLWL" section, the Contractor shall blast the hull above the DLWL.

15.2 References:

15.2.1 <u>"General Painting Instructions" as part of these Special Provisions:</u>

15.3 Owner Furnished Equipment:

None

15.4 Requirements:

The Contractor shall blast the hull above the DLWL by abrasive blast to a SSPC-SP-10, Commercial Blast or by other equivalent standard surface preparation.

After surface preparation, dry the area with clean dry compressed air. The Contractor shall assure that the areas to be painted are free of dust, dirt, salt, loose paint, moisture, and other contaminants before painting.

Anti-corrosive paint at the perimeter of the blasted areas shall be feathered or otherwise made tight to eliminate paint failure points and present a clean mechanically etched surface for a secure bond with new Primer applied to the blasted surfaces. Coat all bare metal areas the same day they are exposed by blasting. Apply anti-corrosive paint by conventional industrial airless spray or compressed air spray equipment.

The Contractor shall determine the Manufacturer's minimum and maximum "dry to self-re-coat" criteria and apply the second anti-corrosive coat inside this window.

The anti-corrosive coating system in these selected areas shall be:

• Primer Coat: Amercoat 370 red oxide applied @ 4.0-6.0 Mils DFT

(NOTE: Paint manufacture requires 2 coats of primer)

- Stripe Coat: Amercoat 370 grey applied @ 4.0-6.0 Mils DFT
- Third Coat: Amercoat 370 black applied @ 4.0-6.0 Mils DFT
- Finish Coat: PSX-One black applied @ 2.0-3.0 Mils DFT

The paint specified in this Special Provision item shall be applied to the selected areas in addition to the paint detailed in the Special Provision item "Painting – Hull Above DLWL".

15.5 Tests, Trials and Documentation:

None

15.6 Payment:

The lump sum contract bid price for *Generic Ferry Item* (*Blast & Paint - Hull Above DLWL*) shall include all costs for paint and blasting to the hull above DLWL, except for the high-pressure water wash. Payment for this item will be based upon the Contractor's unit bid price for (*High-Pressure Water Wash – Hull Above DLWL*). No further compensation will be made. Lump Sum prices shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions. No further compensation will be made.

application, the areas shall be free of all dust, debris, salt, moisture, and other contaminants which may have been introduced following the high-pressure water wash. The surface preparation and cleaning shall be inspected and approved by the Paint Manufacturer's Representative before the final coats are applied. Paint shall be applied by conventional industrial airless spray or compressed air spray equipment in accordance with the paint manufacturer's recommendations. The paint coats for the selected areas shallbe:

For bulkheads, inboard and outboard faces and the car deck overhead:

- Primer Coat: Amercoat 370 red oxide applied @ 4.0-6.0 Mils DFT
- Stripe Coat: Amercoat 370 grey applied @ 4.0-6.0 Mils DFT
- Third Coat: Amercoat 370 white applied @ 4.0-6.0 Mils DFT
- Finish Coat: PSX-One white applied @ 2.0-3.0 Mils DFT

After washing, blasting and cleaning; Contractor shall apply a fresh finish coat over the entire super structure. New top coat shall match exactly the existing paint schematic on the vessel. Contractor shall remove all existing signage, outdoor seating, and protect all windows, equipment and other sensitive areas from overspray prior to applying the top coat. Once top coat is fully applied and dried, Contractor shall restore all signage to its original condition.

The work outlined in this Special Provision item shall be coordinated with the other Special Provision items.

16.5 Tests, Trials and Documentation:

None

16.6 Payment:

The lump sum contract bid price for *Generic Ferry Item (Blast & Paint - Superstructure)* shall include all costs for paint and blasting to the superstructure, except for the high-pressure water wash. Payment for this item will be based upon the Contractor's unit bid price for (*High-Pressure Water Wash – Superstructure*). No further compensation will be made. Lump Sum prices shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions. No further compensation will be made.

Line paint shall be applied to restore the vessel's car and safety lines to their original condition. Line paint schedule is as follows:

• One coat Amercoat 229T yellow applied @ 2.0-4.0 Mils DFT

Dry Film Thickness (DFT), where specified, is the minimum dry film thickness in mils.

The line paint and safety marking paint is to be applied in the areas and pattern detailed by Reference 16.2.1. Line paint should be applied in accordance with the paint manufacturer's instructions. Contractor is to apply non-skid materials by the "broadcast method," into final top coat of line paint and safety marking paint areas, in accordance with paint manufacturer's recommendations and guidance. <u>CHECK POINT:</u> NCDOT representatives shall witness the application of the non-skid process.

All Car Deck and above Car Deck valve handles shall be painted in their proper colors, as applicable.

17.4.2 Other Exposed Decks

All paint shall be applied in accordance with the paint manufacturer's directions.

Prior to application of top coat, Contractor shall apply non-skid to the deck by broadcast method.

CHECKPOINT: NCDOT representatives shall witness the application of the non-skid process.

Paint schedule for exposed decks above the Car Deck shall be as follows:

- Primer Coat: Amercoat 370 red oxide applied @ 4.0-6.0 Mils DFT
- Stripe Coat: Amercoat 370 grey applied @ 4.0-6.0 Mils DFT
- Third Coat: Amercoat 370 grey applied @ 4.0-6.0 Mils DFT
- Finish Coat: Amercoat 229T grey applied @ 2.0-4.0 Mils DFT

Dry Film Thickness (DFT), where specified, is the minimum dry film thickness in mils.

17.5 Tests, Trials and Documentation:

None

17.6 Payment:

The lump sum contract bid price for *Generic Ferry Item (Blast & Paint – All Decks)* shall include all costs for paint and blasting all the decks. Lump Sum prices shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions. No further compensation will be made.

22.3 Owner Furnished Equipment:

Fernstrum Keel Coolers, Keel cooler bolt on anodes, and grounding straps (as needed)

22.4 Requirements:

The Contractor shall complete the following work in the sea chests:

- a) Remove all external sea chest inlet strainer plates (3 total)
- b) Disassemble sea chest piping at valves or takedown joints as needed, unbolt and remove internal sea chest cover plate
- c) Remove one or more grating bars to Bow Thruster Sea Chest as necessary to allow (3000 psi) hydro blast and painting of sea chest grating bars associated with Bow Thruster inlets.
- d) Remove all soft and hard fouling marine growth and high pressure water wash (3000 psi minimum) the inlets, sea chests and interior salt water spool pieces.
- e) Prep and paint the inlet strainer plate and interior of each sea chest per the requirements detailed in the painting section of these Special Provisions.
- f) Reinstall the strainer plates and grating bars using new fasteners of the same size, type, and materials as was removed.
- g) Contractor is to use existing take-down joints and flanged connections to equipment to disconnect, inspect, and clean connected sea water piping in order to remove marine growth.

22.4.1 CHECK POINT:

NCDOT Representative shall inspect cleaned FW piping prior to re-installation.

Drain and dispose of FW cooling fluid from all engine installations. Unbolt and remove keel coolers from the hull. Thoroughly clean and remove all mussels, clams, and other biofouling organisms and residue from all external keel cooler surfaces. Using clean fresh water, hydro test the vessel's keel coolers to the manufacturers recommended test of 35 psi.

22.4.2 <u>CHECK POINT:</u>

Prior to hydro test, Contractor is to provide NCDOT Representative with documented recommended hydro test pressure obtained from manufacturer.

22.4.3 NCDOT Representative is also to witness the hydro test of all keelcoolers.

Four each main engine keel coolers, Fernstrum model D24135W-ZE1.

Two each generator jacket water keel coolers, Fernstrum model D14184U-ZE1

Two each reduction gear keel coolers, Fernstrum model BN1045B-ZE1

One each bow thruster engine jacket water keel cooler, Fernstrum model D16111U-ZE1

One each bow thruster engine aftercooler and gear, Fernstrum model CN12111C-ZE1

22.5 Tests, Trials and Documentation:

Upon completion of renewals, repairs, and pressure teats, Contractor is to electrically test the isolation (should be "0") between keel coolers and hull, to ensure that they are electrically bonded.

22.5.1 CHECK POINT:

NCDOT Representative is to witness the bonding test for all keel coolers. Testing shall be to the satisfaction of the NCDOT Representative.

22.6 Payment:

Include all costs associated with repairs and modifications to the various items outlined in this Special Provision in the lump sum contract price for *Generic Ferry Item (Engine Water Cooling System Inspection and Maintenance)*. No further compensation will be made.

Include all costs associated with high-pressure water washing the sea chests in the lump sum bid item (*High-Pressure Water Wash – Hull Below DLWL*). Include all costs associated with painting the sea chests in the lump sum bid item (*Painting – Hull Below DLWL*).

23.0 BOW THRUSTER REMOVAL AND REPLACEMENT:

23.1 Description:

This section describes the requirement to install a BERP (Bolted Equipment Removal Path) opening in main deck of the M/V Swan Quarter for removal and replacement of the Omni Bow Thruster. This section also covers the removal and replacement of the bow thruster and walkway. Finally, this section covers the cleaning/blasting and painting of the bow thruster tubes. NCDOT will provide Omni Bow Thruster and butterfly valves, Existing Thruster will be returned to NCDOT.

23.2 BERP Installation

23.2.1 References

23.2.1 Scantling Plans, Bow – FR 35

110-01 Rev. 4

23.2.2 Section 10 - "General Painting Instructions" as part of these Special Provisions.

23.2.2 Owner Furnished Equipment:

None

23.2.3 Requirements:

The contractor shall relocate and protect all wiring IWO main deck hole cut. All piping and equipment IWO of hole cut shall also be protected. Remove all material on flange plate not needed for new fit up and properly dispose of all cutout material. Prep and grind work area. New cable run will be addressed by Supplemental Agreement if applicable.

Following installation of Main Engine Exhaust Piping and prior to painting, contractor shall prove watertight integrity of hull inserts when subjected to low pressure water wash. <u>CHECKPOINT</u>

Contractor to provide Mill Certificates for all material used for repair. CHECKPOINT

24.6 Payment:

Include all costs associated with the lump sum contract price for *Generic Ferry Item* (*Replace and Paint Port & Stbd. Main Engine Exhausts From 1st INBD Flange Through Hull + Doubler Plate*). Lump Sum prices shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions. No further compensation will be made.

Include all costs associated blasting with the lump sum contract price for *Generic Ferry Item* (*Blast & Paint – Above DLWL*). Lump Sum prices shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions. No further compensation will be made.

Include all costs associated painting with the lump sum contract price for *Generic Ferry Item* (*Blast & Paint – Above DLWL*). Lump Sum prices shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions. No further compensation will be made.

25.0 RELOCATION OF 18" FREEMAN HATCH:

25.1 Description:

This section describes the requirement to relocate STDB M/V Swan Quarter main deck 18" Freeman Hatch between FR 27 - FR 28 to FR 26 - FR 27.

25.2	References:	
	25.2.1 Scantling Plans, Bow – FR 35	110-01 Rev. 4
	25.2.2 Handrails & Ladder, Below Deck	612-01 Rev. 1

25.3 Owner Furnished Equipment:

Refurbished 18" Freeman Hatch and 18" SS-316-L Freeman Hatch Ring

25.4 Requirements:

The contractor shall relocate 18" Freeman Hatch as per drawing 110-01 Rev. 4. All wiring, piping and equipment IWO of hole cut shall be protected. Remove all material not needed for new fit up and properly dispose of all cutout material. Prep and grind work area. Existing 18" Freeman Hatch to be given to NCDOT Representative. <u>CHECKPOINT</u>

26.5 Test, Trials and Documentation:

Following refurbishment of Car Deck Lighting System, Contractor shall prove operational of lights in the company of the NCDOT Representative.

26.6 Payment:

The lump sum contract bid price for *Generic Ferry Item (Replace Car Deck Light Fixtures)* shall be the total compensation for all labor, equipment, tools and materials to accomplish the work detailed in these Special Provisions, including testing and trials. No further compensation will be made.

27.0 REPLACE DECK PLATES:

27.1 Description:

This section describes the requirement to install and paint new deck plates in the forward and aft voids, bow thruster and engine room deck plates.

27.2 References:

27.2.1 See Section 10 Painting - General above in Special Provisions

27.3 Owner Furnished Equipment:

None

27.4 Requirements:

The NCDOT Representative will designate which fifteen (15) deck plates are to be replaced (Average area is 3' X 3'). Contractor shall blast, surface prep, and paint to correct color, refer to Section 10 "Painting-General Special Provisions".

27.5 Test, Trials and Documentation:

Contractor to reinstall deck plates with new design hardware in original designed locations.

27.6 Payment:

The contract unit bid price per each for *Generic Miscellaneous Item (Replace Deck Plates)* shall be the total compensation for removal and replacement of all deck plates, all labor, equipment, tools and new materials to accomplish the work detailed in these Special Provisions, including testing and trials. No further compensation will be made.

STANDARD SPECIAL PROVISIONS

AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(5-20-08)

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. - Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in General Statute 143C-6-11(c). Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(E) of the 2018 Standard Specifications.

BIDS OVER LIMIT:

(08-01-16)

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds \$5.0 million, the bid will not be considered for award.

DIVISION LET CONTRACT PREQUALIFICATION:

(07-01-14)(12-1-16)

Any firm that wishes to bid as a prime contractor shall be prequalified as a Bidder or PO Prime Contractor prior to submitting a bid. Information regarding prequalification can be found at: https://connect.ncdot.gov/business/Prequal/Pages/default.aspx.

Prior to performing the work, the prime contractor and/or subcontractor(s) shall be prequalified in the work code(s) which are identified as work items in the prime contractor's construction progress schedule that they will complete themselves. Any contractor identified as working outside their expertise may be considered in default of contract.

SAFETY VESTS:

All Contractors' personnel, all subcontractors and their personnel, and any material suppliers and their personnel must wear an OSHA approved reflective vest or outer garment at all times while on the project.

Z-2

SPD 01-400

SPD 01-410

Sep 09, 2019 2:32 pm

D19 Page 1 of 3

County :	Dare
----------	------

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
		F	ROADWAY ITEMS			
0001	0000820000-N	SP	GENERIC MISCELLANEOUS ITEM (BERTHING DAYS)	10 DAY		
0002	0000820000-N	SP	GENERIC MISCELLANEOUS ITEM (LAY DAYS)	1 DAY		
0003	0001020000-N	SP	GENERIC MISCELLANEOUS ITEM (LINE SHAFT BEARING REPLACEMEN T)	1 EA		
0004	0001020000-N	SP	GENERIC MISCELLANEOUS ITEM (REPLACE DECK PLATES)	15 EA		
0005	0001020000-N	SP	GENERIC MISCELLANEOUS ITEM (TAIL SHAFT BEARING REPLACEMEN T)	2 EA		
0006	0001020000-N	SP	GENERIC MISCELLANEOUS ITEM (ZINC ANODE REPLACEMENTS, KEEL COOLER GUARDS / 12 LB.)	60 EA		
0007	0001020000-N	SP	GENERIC MISCELLANEOUS ITEM (ZINC ANODE REPLACEMENTS, KEEL COOLERS / BOLT ON PER KEEL COOLER SPECIF ICATIONS)	20 EA		
0008	0001020000-N	SP	GENERIC MISCELLANEOUS ITEM (ZINC ANODE REPLACEMENTS, RUDD ERS/ 6 LB)	12 EA		
0009	0001020000-N	SP	GENERIC MISCELLANEOUS ITEM (ZINC ANODE REPLACEMENTS, SEA CHEST & BOW THRUSTER - 5.3 LB.)	4 EA		
0010	0001020000-N	SP	GENERIC MISCELLANEOUS ITEM (ZINC ANODE REPLACEMENTS, VESS EL HULL / 23-24 LB.)	109 EA		
0011	0005000000-N	SP	GENERIC FERRY ITEM (BLAST & PAINT - ALL DECKS)	Lump Sum	L.S.	
0012	0005000000-N	SP	GENERIC FERRY ITEM (BLAST & PAINT - HULL ABOVE D LWL)	Lump Sum	L.S.	
0013	0005000000-N	SP	GENERIC FERRY ITEM (BLAST & PAINT - HULL BELOW D LWL)	Lump Sum	L.S.	

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amoun
π		π				
0014	0005000000-N	SP	GENERIC FERRY ITEM (BLAST & PAINT - SUPERSTRUCTU RE)	Lump Sum	L.S.	
0015	0005000000-N	SP	GENERIC FERRY ITEM (CLEAN, PREP & PAINT BOW THRUS TER PORT & STBD TUBES BEFORE REINSTALLING BOW THRU)	Lump Sum	L.S.	
0016	0005000000-N	SP	GENERIC FERRY ITEM (CUT, PRE-FABRICATE, INSTALL & PAINT MAIN DECK SOFT PATCH FOR BOW T HRUSTER R)	Lump Sum	L.S.	
0017	0005000000-N	SP	GENERIC FERRY ITEM (ENGINE WATER COOLING SYSTEM I NSPECTION AND MAINTENANCE)	Lump Sum	L.S.	
0018	0005000000-N	SP	GENERIC FERRY ITEM (HIGH-PRESSURE WATER WASH, SUPERSTRUCTURE)	Lump Sum	L.S.	
0019	0005000000-N	SP	GENERIC FERRY ITEM (HIGH-PRESSURE WATER WASH, HUL L ABOVE DLWL)	Lump Sum	L.S.	
0020	0005000000-N	SP	GENERIC FERRY ITEM (HIGH-PRESSURE WATER WASH, HUL L BELOW DLWL)	Lump Sum	L.S.	
0021	0005000000-N	SP	GENERIC FERRY ITEM (MAIN DECK HATCH MAINTENANCE A ND REPAIRS)	Lump Sum	L.S.	
0022	0005000000-N	SP	GENERIC FERRY ITEM (OPEN, CLEAN AND CERTIFY GAS F REE: BILGES, HOLDS AND ENCLOSED ARE AS)	Lump Sum	L.S.	
0023	0005000000-N	SP	GENERIC FERRY ITEM (RELOCATE & PAINT MAIN DECK FO RWARD VEST IBULE 18" FREEMAN HATCH & BELO W DECK LA)	Lump Sum	L.S.	
0024	0005000000-N	SP	GENERIC FERRY ITEM (REMOVE & INSTALL BOW THRUSTER AND WALK WAY)	Lump Sum	L.S.	

9 Page 2 of 3

Sep 09, 2019 2:32 pm

ITEMIZED PROPOSAL FOR CONTRACT NO. DA00468 REVISED 9/10/2019

Sep 09, 2019 2:32 pm County : Dare			ITEMIZED PROPOSAL FOR CONTRACT NO. DA00468		REVISED 9/10/2019	Page 3 of 3
	Item Number	Sec #	Description	Quantity	Unit Cost	Amoun
0025	0005000000-N	SP	GENERIC FERRY ITEM (REMOVE 3 MAIN DECK WTD, THEN REINSTALL WITH NCDOT PROVIDED WTD)	Lump Sum	L.S.	
0026	0005000000-N	SP	GENERIC FERRY ITEM (REMOVE ALL MSD TANK HATCHES - CLEAN, PREP, PAINT & REPLACE ALL GASK ETS)	Lump Sum	L.S.	
)027	0005000000-N	SP	GENERIC FERRY ITEM (REMOVE AND REPLACE CAR DECK N ET HOOKS)	Lump Sum	L.S.	
0028	0005000000-N	SP	GENERIC FERRY ITEM (REPLACE & PAINT PORT & STBD M AIN ENGINE EXHAUSTS FROM 1ST INBD FLANGE THROUGH H)	Lump Sum	L.S.	
)029	0005000000-N	SP	GENERIC FERRY ITEM (REPLACE CAR DECK LIGHT FIXTUR ES)	Lump Sum	L.S.	
)030	0005000000-N	SP	GENERIC FERRY ITEM (RUDDER REMOVALS & INSPECTIONS)	Lump Sum	L.S.	
0031	0005000000-N	SP	GENERIC FERRY ITEM (SEA VALVES)	Lump Sum	L.S.	
)032	0005000000-N	SP	GENERIC FERRY ITEM (SEWAGE SYSTEM - CLEAN, INSPEC T & PERFOR M MAINTENANCE)	Lump Sum	L.S.	
0033	0005000000-N	SP	GENERIC FERRY ITEM (STARTUP, DOCK AND SEA TRIALS)	Lump Sum	L.S.	
0034	0005000000-N	SP	GENERIC FERRY ITEM (TAIL SHAFT & PROPELLER REMOVA LS, INSPEC TIONS & SHAFTING ALIGNMENTS)	Lump Sum	L.S.	
)035	0005000000-N	SP	GENERIC FERRY ITEM (TAKE CONTROL OF M/V SWAN QUAR TER)	Lump Sum	L.S.	