

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Bid Receiving - PWGSC / Réception des
soumissions - TPSGC
11 Laurier St. / 11, rue Laurier
Place du Portage, Phase III
Core 0A1 / Noyau 0A1
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

**INVITATION TO TENDER
APPEL D'OFFRES**

**Tender To: Public Works and Government Services
Canada**

We hereby offer to sell to Her Majesty the Queen in right of
Canada, in accordance with the terms and conditions set
out herein, referred to herein or attached hereto, the goods,
services, and construction listed herein and on any attached
sheets at the price(s) set out therefor.

**Soumission aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la
Reine du chef du Canada, aux conditions énoncées ou
incluses par référence dans la présente et aux annexes
ci-jointes, les biens, services et construction énumérés
ici et sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Vendor/Firm Name and Address
**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution
Ship Refits and Conversions / Radoubss et
modifications de navires and / et
11 Laurier St. / 11, rue Laurier
6C2, Place du Portage
Gatineau, Québec K1A 0S5

Title - Sujet CCGS MARTHA L. BLACK DRYDOCKING	
Solicitation No. - N° de l'invitation F3012-13R469/A	Date 2013-05-02
Client Reference No. - N° de référence du client F3012-13R469	GETS Ref. No. - N° de réf. de SEAG PW-\$\$MD-018-23749
File No. - N° de dossier 018md.F3012-13R469	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-05-22	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Vandal, Paul	Buyer Id - Id de l'acheteur 018md
Telephone No. - N° de téléphone (819) 956-0645 ()	FAX No. - N° de FAX (819) 956-0897
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF FISHERIES AND OCEANS NGCC MARTHA L.BLACK 101 BOUL.CHAMPLAIN QUEBEC Quebec G1K7Y7 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

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PART 1 - GENERAL INFORMATION

1.1 Introduction

The bid solicitation and resulting contract document is divided into seven (7) parts plus annexes as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation and states that the Bidder agrees to be bound by the clauses and conditions contained in all parts of the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, if applicable, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Financial and Other Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Technical Specification, the Basis of Payment, the Insurance Requirements and other Annexes.

1.2 Summary

1. The Requirement is:
 - a) to carry out the maintenance and alterations of the Canadian Coast Guard Vessel CCGS Martha L. Black in accordance with the associated Technical Specifications detailed in Annex "A".
 - b) to carry out unscheduled work authorized by the Contracting Authority.
2. bidders must provide a list of names, or other related information as needed, pursuant to section 01 of Standard Instructions 2003.
3. The requirement is exempt from the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), Annex 4 and the North American Free Trade Agreement (NAFTA), Chapter Ten Annex 1001.2b Paragraph 1(a). However, it is subject to the Agreement on Internal Trade (AIT). The sourcing strategy relating to this procurement will be limited to suppliers in Eastern Canada, in accordance with Shipbuilding, Refit, Repair and Modernization Policy (1996-12-19).

1.3 Debriefings

After contract award, bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority **within 15 working days** of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions

(<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) Manual issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2012-11-09) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than **three (3) working days** before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a "proprietary" nature must be clearly marked "proprietary" at each relevant item. Items identified as proprietary will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

Any clarifications or changes to the bid solicitation resulting from the questions and answers will be included as an amendment to the bid solicitation.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

Refer to Annex "H1" for Deliverables/Certifications.

2.5 Bidders' Conference

A bidders' Conference chaired by the Contracting Authority will be held onboard the CCGS Martha L. Black located at Sandy Beach, Gaspé, Quebec on May 14, 2013 at 09:00. The scope of the requirement outlined in the bid solicitation will be reviewed during the conference and questions will be answered. It is recommended that bidders who intend to submit a bid attend or send representative.

Bidders are requested to communicate with the Contracting Authority before the conference to confirm attendance. Bidders should provide, in writing, to the Contracting Authority, the names of the person(s) who will be attending and a list of issues they wish to table at least **three (3) working days** before the scheduled conference.

Any clarifications or changes to the bid solicitation resulting from the bidder's conference will be included as an amendment to the bid solicitation. Bidders who do not attend will not be precluded from submitting a bid.

2.6 Optional Site Visit - Vessel

It is recommended that the Bidder or a representative of the Bidder visit the work site. The site visit will be held on May 14, 2013 at 13:00 onboard the CCGS Martha L. Black, located at Sandy Beach, Gaspé, Quebec. Bidders must communicate with the Contracting Authority no later than **three (3) working days** before the scheduled visit to confirm attendance and provide the name(s) of the person(s) who will attend. Bidders who do not confirm attendance and provide the name(s) of the person(s) who will attend as required will not be allowed access to the site. Bidders will be requested to sign an attendance form. Bidders who do not attend or send a representative will not be given an alternative appointment but they will not be precluded from submitting a bid. Any clarifications or changes to the bid solicitation resulting from the site visit will be included as an amendment to the bid solicitation.

2.7 Work Period - Marine

Work must commence and be completed as follows:

Commence: June 28, 2013

Complete: August 10, 2013

By submitting a bid, the Bidder certifies that they have sufficient materiel and human resources allocated or available and that the above work period is adequate to both complete the known work and absorb a reasonable amount of unscheduled work.

PART 3 - BID - PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that Bidders provide their bid in separately bound sections as follows:

- Section I - Technical Bid (2 hard copies)
- Section II - Financial Bid (1 hard copy)
- Section III - Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation;

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders are encouraged to :

- 1) use paper containing fibre certified as originating from a sustainably-managed forest and/or containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

The Bidder must provide all of the deliverables as referenced in Annex "H1" Deliverables and Certifications.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Financial Bid Presentation Sheet in Annex "G", and the detailed Pricing Data Sheet, Appendix 1 to Annex "G". The total amount of Goods and Services Tax or Harmonized Sales Tax must be shown separately, if applicable.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

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Buyer ID - Id de l'acheteur

018md

Client Ref. No. - N° de réf. du client

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CCC No./N° CCC - FMS No/ N° VME

3.1.1 **Unscheduled Work and Evaluation Price**

In any vessel refit, repair or docking contract, unscheduled work will arise after the vessel and its equipment is opened up and surveyed.

An anticipated cost for the unscheduled work will be included in the evaluation price. The evaluation price will be calculated by including an estimated amount of additional person-hours multiplied by a firm hourly charge-out labour rate for unscheduled work and will be added to the firm price for the known work.

The Evaluation Price will be used for evaluating the bid. The additional amount of person-hours for unscheduled work will be based on historical experience and there is no minimum or maximum amount of unscheduled work nor is there a guarantee of such unscheduled work.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical, management and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

Section I - Technical Bid / Certifications

Notwithstanding deliverable requirements specified within the bid solicitation and its associated Technical Specification Annex "A", mandatory deliverables that must be submitted with the Bidder's bid to be deemed responsive are summarized in Annex "H1".

Section II - Financial Bid

In order to be compliant, the Bidder's bid must, to the satisfaction of Canada, meet all requirements and provide all information required under Part 3, Section II - Financial Bid.

Canada reserves the right to request information to support any bid requirement. The Bidder is instructed to address each requirement in sufficient depth to permit a complete analysis and assessment by the Evaluation Team. The Bid will be deemed responsive if it is found to meet all the mandatory requirements.

4.1.1 Evaluation of Price

SACC Manual Clause A0220T (2007-05-25) Evaluation of Price

4.2 Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

Bidders should note that all contract awards are subject to Canada's internal approvals process, which includes a requirement to approve funding in the amount of any proposed Contract. Notwithstanding that a Bidder may have been recommended for award of Contract, issuance of any Contract will be contingent upon internal approval in accordance with Canada's policies. If such approval is not given, no Contract will be awarded.

4.3. Deliverables after Contract Award

Refer to Annex "H2".

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018md

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PART 5 - CERTIFICATIONS

General

Bidders must provide the required certifications to be awarded a contract. Canada will declare the bid non-responsive if the required certifications are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify the bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

5.1 Mandatory - Certifications Required Precedent to Contract Award

5.1.1 Code of Conduct and Certifications - Related documentation

By submitting a bid, the Bidder certifies as per section 01 of Standard Instructions 2003, for himself and his affiliates, to be in compliance with the Code of Conduct and Certifications clause of the Standard instructions. The related documentation herein required will help Canada in confirming that the certifications are true.

5.1.2 Federal Contractors Program - \$200,000 or more

1. The Federal Contractors Program (FCP) requires that some suppliers, including a supplier who is a member of a joint venture, bidding for federal government contracts, valued at \$200,000 or more (including all applicable taxes), make a formal commitment to implement employment equity. This is a condition precedent to contract award. If the Bidder, or, if the Bidder is a joint venture and if any member of the joint venture, is subject to the FCP, evidence of its commitment must be provided before the award of the Contract.

Suppliers who have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

2. If the Bidder does not fall within the exceptions enumerated in 3.(a) or (b) below, or does not have a valid certificate number confirming its adherence to the FCP, the Bidder must fax (819-953-8768) a copy of the signed form LAB 1168, Certificate of Commitment to Implement Employment Equity, to the Labour Branch of HRSDC.

3. The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- (a) () Is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- (b) () is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- (c) () is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC (having not bid on requirements of \$200,000 or more), in which case a duly signed certificate of commitment is attached;
- (d) () is subject to the FCP, and has a valid certificate number as follows: _____
(e.g. has not been declared an ineligible contractor by HRSDC.)

Further information on the FCP is available on the HRSDC Web site.

PART 6 - FINANCIAL AND OTHER REQUIREMENTS

6.1 Financial Capability

SACC Manual Clause A9033T (2012-07-16) Financial Capability

6.2 Contract Financial Security

6.2.1 In the bid, the Bidder must indicate the following in Annex G "Financial Bid Presentation Sheet":

- a) the type of Contract Financial Security the Bidder intends to provide if awarded the Contract; and
- b) the cost to the Bidder of the Contract Financial Security.

Refer to Annex "H1" for Deliverables/Certifications

6.2.2 If this bid is accepted, the Bidder shall be required to provide the Contract Financial Security in accordance with 7.12 within **(5) five working days** after the date of contract award.

6.2.3 If, for any reason, Canada does not receive, within the specified period, the required Contract Financial Security, Canada may accept another offer, seek new bids, negotiate a contract or not accept any bids, as Canada may deem advisable.

6.3 Vessel Transfer Costs

Vessel Transfer Costs will apply to the evaluation price of this solicitation.

1. The evaluation price must include the cost for transferring the vessel from its home port to the shipyard/ship repair facility where the Work will be performed and the cost of transferring the vessel to its home port following completion of the Work, in accordance with the following:

(a) The Bidder must provide the location of the shipyard/ship repair facility where it proposes to perform the Work together with the applicable vessel transfer cost from the list provided under paragraph 2 of this clause shall be entered into Table G1:

(b) If the list in paragraph 2 of this clause does not provide the shipyard/ship repair location where the Bidder intends to perform the Work, then the Bidder must advise the Contracting Authority, in writing, at least **10 calendar days** before the bid closing date, of its proposed location for performing the Work. The Contracting Authority will confirm to the Bidder, in writing, at least **5 calendar days** before the bid closing date, the location of the shipyard/ship repair and the applicable vessel transfer cost.

A bid that specifies a location for executing the Work which is not on the list of paragraph 2 of this clause, and for which a notification in writing has not been received by the Contracting Authority as required above, will be considered non-responsive.

2. List of shipyard/ship repair facilities and applicable vessel transfer costs

Vessel: CCGS Martha L. Black
Home port: Québec, QC

Transfer costs in the case of vessels transferred using a government delivery crew include the fuel cost at the vessel's most economical speed of transit and for unmanned refits only, crew transportation costs for the delivery crew based on the location of the vessel's home port and the shipyard/ship repair facility. Crew transportation costs do not include any members of the delivery crew who remain at the shipyard/ship repair facility in order to discharge project responsibilities related to the vessel being transferred.

Transfer costs in the case of vessels transferred unmanned by either commercial towing, railway, highway or other suitable means of transportation must be:

- (i) included as part of the Bidder's financial bid in the case where the Bidder is responsible for the transfer; or
- (ii) identified as the applicable vessel transfer cost, as given in the list below, in the case when Canada is responsible for the transfer.

Shipyard/ship repair facility

Applicable vessel transfer cost

Company	City	Transfer Cost Manned
Davie Industries inc.	Québec, QC	C\$0.00
Halifax shipyard	Halifax , NS	C\$47,207.00
Heddle Marine	Hamilton ON	C\$28,411.00
Kiewit Offshore	Marystown, NL	C\$53,014.00
Newdock Dockyard	St-Jonh's, NL	C\$61,944.00
Seaway marine Industries	St. Catharines, ON	C\$26,913.00
Shelburne Marine	Shelburne,NS	C\$53,514.00
Verreault Navigation inc.	Les Méchins QC	C\$58,384.00

Proposed Drydocking Location : _____

Refer to Annex "H1" for Deliverables/Certifications.

6.4 Docking Facility

Before contract award, the successful Bidder may be required to demonstrate to the satisfaction of Canada that the certified capacity of the docking facility, including any means or conveyance to remove the vessel from the water, is adequate for the anticipated loading in accordance with the related dry docking plans and other documents detailed in the Contract. The successful Bidder will be notified in writing and will be allowed a reasonable period of time to provide detailed keel block load distribution sketches and blocking stability considerations, along with the supporting calculations to show the adequacy of the proposed docking arrangement.

At the time of bid closing the Bidder must provide current and valid certification of the capacity and condition of the docking facility to be used for the Work. The certification must be provided by a recognized consultant or classification society and must have been issued within the past two years.

Although a dry docking facility may have a total capacity greater than the vessel to be docked, the weight distribution of the vessel may cause individual block loading to be exceeded. Also, while the physical dimensions of a dry docking facility may indicate acceptability for docking of a specific vessel, other limitations such as spacing of rails on a marine railway, concrete piers or abutments adjoining the dry dock may, preclude the facility from being considered as a possible dry docking site and render the bid non-responsive.

Refer to Annex "H1" for Deliverables/Certifications

6.5 Workers' Compensation - Letter of Good Standing

The Bidder must have an account in good standing with the applicable provincial or territorial Workers' Compensation Board.

The bidder must provide with the bid, a certificate or letter from the applicable Worker's Compensation Board confirming the Bidder's good standing account. Failure to comply with the request may result in the bid being declared non-responsive.

Refer to Annex "H1" for Deliverables/Certifications.

6.6 Valid Labour Agreement

If the Bidder has a labour agreement, or other suitable instrument, in place with all its unionized labour, it must be valid for the proposed period of any resulting contract. Documentary evidence of the agreement or suitable instrument must be provided on or before bid closing date. If this information is not provided with the bid it will render the bid non-responsive.

Refer to Annex "H1" for Deliverables/Certifications

6.7 Preliminary Work Schedule

At the time of bid closing the Bidder must submit to Canada one (1) copy of its preliminary production work schedule. This schedule is to show the commencement and completion dates for the Work in the available work period, including realistic target dates for significant events. This schedule will be reviewed with the successful Bidder at the Pre-Refit Meeting.

Refer to Annex "H1", Deliverables/Certifications.

6.8 ISO 9001:2008 - Quality Management Systems

The Bidder shall have in place a Quality Management System registered to ISO 9001:2008 or a Quality Management System modeled on ISO 9001-2008 and shall provide at time of bid closing:

- If registered its valid ISO 9001-2008 certification;
- Example of Quality Control Plan (QCP) as per clause 6.15

Documentation and procedures of bidders may be subject to a Quality System Evaluation (QSE) by the Technical Authority during bid evaluation period.

Refer to Annex "H1" for Deliverables/Certifications.

6.9 Health and Safety

The Bidder must submit with its bid objective evidence that it has a documented Health and Safety system fully compliant with all current Federal, Provincial and Municipal regulations. If this information is not provided with the bid it will render the bid non-responsive.

Refer to Annex "H1" for Deliverable Requirements.

6.10 Hazardous Waste

1. The Bidder acknowledges that sufficient information has been provided by Canada with respect to the location and estimated amount of hazardous materials such as asbestos, lead PCBs, silica or other hazardous materials or toxic substances.
2. The price includes all costs associated with the removal, handling, storage, disposal and/or working in the vicinity of hazardous materials such as asbestos, lead, PCBs, silica and other hazardous materials or toxic substances on board the vessel, including those costs resulting from the need to comply with applicable laws and regulations in relation to the removal, handling, disposal or storage of hazardous materials or toxic substances.
3. The completion date for the Work takes into account the fact that the removal, handling, storage, disposal and/or working in the vicinity of hazardous materials such as asbestos, lead, PCBs, silica and other hazardous materials or toxic substances may be affected by the need to comply with applicable federal, provincial and municipal laws or regulations and that this will not be considered to be an excusable delay.

6.11 Insurance Requirements

The Bidder must provide with its bid a letter from an insurance broker or an insurance company licensed to operate in Canada stating that the Bidder, if awarded a contract as a result of the bid solicitation, can be insured in accordance with the Insurance Requirements specified in Annex "C". If this information is not provided with the bid it will render the bid non-responsive.

Refer to Annex "H1", Deliverables/Certifications.

6.12 Welding Certification

1. Welding must be performed by a welder certified by the Canadian Welding Bureau and in accordance with the requirements of the following Canadian Standards Association (CSA) standards:

- (a) CSA W47.1-03, Certification for Companies for Fusion Welding of Steel (Minimum Division Level 2.1); and
- (b) CSA W47.2-M1987 (R2003), Certification for Companies for Fusion Welding of Aluminum (Minimum Division Level 2.1).

The bidder shall submit proof of certification with the bid. The certification shall remain valid for the duration of the contract. If this information is not provided with the bid it will render the bid non-responsive.

Refer to Annex " H1 " for Deliverables/Certifications.

6.13 Project Management Services

The Bidder is required to provide a Project Management Team experienced and capable of successfully managing the ship refit contract as defined herein. Project management personnel, services and deliverables must comply with the requirements detailed in the contract.

1. Intent

- (a) Job titles used in this annex are for clarity within this document only. The Contractor is free to choose job titles that suit its organization.
- (b) The Contractor, through its Project Management Team, is responsible to discharge the duties and supply the deliverables required in the Contract and the Specifications.
- (c) Project Management encompasses the direction and control of such functions as engineering, planning, purchasing, manufacturing, assembly, overhauls, installations and test and trials.

2. Project Manager

- (a) The Contractor must supply an experienced Project Manager (PM).
- (b) The PM must have experience in managing a project of this nature.

3. Project Management Team

Other than the Project Manager, the Contractor must assign and vary other job descriptions to suit its organization; provided however that the collective resume of its Project Management must provide for the effective control of the project elements including but not limited to:

- i. Project Management
- ii. Quality Assurance
- iii. Planning and Scheduling

4. Tender Deliverable

Names, brief resumes, and list of duties for each of the team members that ensures that each of the project elements listed in Article 3. above have been addressed.

5. Reports

The following Management Reports and Documentation are to be prepared and maintained by the Contractor and submitted to Canada in accordance with the Contract or upon request by the Contracting Authority.

- i. Production Work Schedule
- ii. Inspection Summary Report
- lii. Growth Work Summary

Refer to Annex "H1" for Deliverables/Certifications.

6.14 List of Proposed Subcontractors

If the bid includes the use of subcontractors, the Bidder shall provide a list of all subcontractors including a description of the things to be purchased, a description of the work to be performed by specification section and the location of the performance of that work. The list should not include the purchase of off-the-shelf items, software and such standard articles and materials as are ordinarily produced by manufacturers in the normal course of business, or the provision of such incidental services as might ordinarily be subcontracted in performing the Work, i.e. subcontract work valued at less than \$ 5,000.00 aggregate for the project.

Refer to Annex "H1" for Deliverables/Certifications.

6.15 Quality Control Plan

At the time of bid closing the Bidder must submit to Canada an example of its Quality Control Plan (QCP) as applied on previous projects of the same nature.

Refer to Annex "H1" for Deliverables/Certifications.

6.16 Inspection and Test Plan

At the time of bid closing the Bidder must submit to Canada an example of an Inspection and Test Plan (ITP) complete with requirement and inspection reports as developed on previous projects of the same nature.

Refer to Annex "H1" for Deliverables/Certifications.

6.17 Environmental Protection

At the time of bid closing the Bidder must submit details of its environmental emergency response plans, waste management procedures and/or formal environmental training undertaken by its employees.

Refer to Annex "H1" for Deliverables/Certifications.

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6.18 Fire Protection, Fire Fighting and Training Procedures

The Bidder must submit with its bid objective evidence that it has documented fire protection, fire fighting and training procedures compliant with current regulations and their insurance requirements. The fire protection, fire fighting and training procedures will, once accepted by Canada, form part of the Contract. Please refer to clause 7.24. If this information is not provided with the bid it will render the bid non-responsive.

Refer to Annex "H1" for Deliverables/Certifications.

PART 7 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

7.1 Requirement

The Contractor must:

- a) carry out the , maintenance and alterations of the Canadian Coast Guard Vessel CCGS Martha L. Black in accordance with the associated Technical Specifications detailed in the Requirements and attached as Annex "A".
- b) carry out any unscheduled work authorized by the Contracting Authority.

7.2 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual issued by Public Works and Government Services Canada (PWGSC). The manual is available on the following PWGSC website:
(<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>)

7.2.1 General Conditions

2030 (2013-03-21), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

2030 (2013-03-21) General Conditions Higher Complexity - Goods are hereby amended as follows:

Section 22 Warranty

1. The Contractor, if requested by Canada, must replace or repair at its own expense any finished work, excluding Government Issue incorporated in the Work, which becomes defective or which fails to conform to contract requirements as a result of faulty or inefficient manufacture, material or workmanship.
2. Despite acceptance of the finished work, and without restricting any other term of the Contract or any condition, warranty or provision imposed by law, the Contractor warrants that the following will be free from all defects and will conform with the requirements of the Contract:
 - (a) The painting of the underwater portion of the hull for a period of 365 days commencing from the date of undocking, except that the Contractor will only be liable to repair and/or replace to a value to be determined as follows:

Original cost to Canada of the underwater painting work, divided by 365 days and multiplied by the number of days remaining in the warranty period. The resultant sum would represent the "Dollar Credit" due to Canada from the Contractor.

- (b) All other painting work for a period of 365 days commencing from the date of acceptance of the Work;

(c) All other items of work for a period of ninety (90) days commencing from the date of acceptance of the Work, except that:

(i) the warranty on the work related to any system or equipment not immediately placed in continuous use or service will be for a period of ninety (90) days from the date of acceptance of the vessel;

(ii) for all outstanding defects, deviations, and work items listed on the Acceptance Document at Delivery, the warranty will be ninety (90) days from the subsequent date of acceptance for each item.

3. The Contractor agrees to pass to Canada, and exercise on behalf of Canada, all warranties on the materials supplied or held by the Contractor which exceed the periods indicated above.
4. Refer to Annex "D" and its Appendix "1" for Warranty Defect Claim Procedures and forms.

1031-2 (2008-05-12), Contract Cost Principles, apply and form part of the Contract.

7.2.2 Supplemental General Conditions

1029 (2010-08-16) Ship Repairs - (excluding article 08) apply and form part of the Contract

7.3 Term of Contract

7.3.1 Work Period - Marine

1. Work must commence and be completed as follows:

Commence: June 28, 2013

Complete: August 10, 2013

2. The Contractor agrees that the above time (the "Work Period") provides an adequate period to perform the subject work and absorb a reasonable amount of unscheduled work. The Contractor certifies that they have sufficient material and human resources allocated or available to complete the subject work and a reasonable amount of unscheduled work within the Work Period.

Canada has the right to delay the arrival of the Vessel at the Contractor's facility subject to the following conditions:

- a) Canada gives 30 calendar days advance notice of a 15 day maximum delay.

The Contractor may claim no additional cost when arrival of the vessel at the Contractor's facility is delayed up to a maximum of 15 calendar days beyond the commencement date, above. The Completion Date shall be extended by a period equal to the length of the delay.

- b) Canada does not provide 30 calendar days advance notice of a delay.

The Completion Date shall be reasonably adjusted to reflect the impact of the delay on the arrival of the Vessel and Canada shall pay only the Daily Services Fee referred to in the Basis of Payment for the period of the delay.

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7.4 Authorities

7.4.1 Contracting Authority

The Contracting Authority for the Contract is:

Paul Vandal
Department of Public Works and Government Services Canada (PWGSC)
Defence and Major Projects Sector
PWGSC, 6C2 Place du Portage, Phase III
11 Laurier Street,
Gatineau, Quebec, K1A 0S5
Tel: (819) 956-0645 Fax: (819) 956-0897
E-Mail - paul.vandal@pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

7.4.2 Technical Authority

The Technical Authority for the Contract is:

Fisheries and Oceans Canada
Canadian Coast Guard
Marine Engineering Division – QBC
101 Champlain Boulevard
Québec, Qc G1K 7Y7 Office: 1-126
Canada
Telephone : 418-648-3208
Fax : 418-648-5247
E-mail : Jean-Francois.Thibault@dfo-mpo.gc.ca

The Technical Authority, is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

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7.4.3 Inspection Authority

The Inspection Authority for the Contract is the Canadian Coast Guard.

Name will be determined at Contract Award

Name: _____
 Telephone: _____
 Cell: _____
 Fax: _____
 E-mail: _____

The Inspection Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for the inspection of the Work and acceptance of the finished work. The Inspection Authority may be represented on-site by a designated inspector and any other Government of Canada Inspector who may from time to time be assigned in support of the designated inspector.

7.4.4 Contractor Contacts

Name and Telephone numbers of person responsible for:

General Enquiries:

Name _____ Telephone Number _____
 Fax Number _____ E-mail Address _____

Delivery Follow-up:

Name _____ Telephone Number _____
 Fax Number _____ E-mail Address _____

Refer to Annex "H1" for Deliverables/Certifications.

7.5 Payment

7.5.1 Basis of Payment - Firm Price

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price indicated in the Basis of Payment Annex " B" for the Known Work. Goods and Services Tax or Harmonized Sales Tax is extra, if applicable. Payment for unscheduled work shall be in accordance with Annex "B".

No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Specifications, will be authorized or paid to the Contractor unless such design changes, modifications or interpretations have been authorized in writing, by the Contracting Authority prior to their incorporation in the Work.

7.5.2 Terms of Payment - Progress Payment

1. Canada will make progress payments in accordance with the payment provisions of the Contract, no more than once a month, for cost incurred in the performance of the Work, up to 90 percent of the amount claimed and approved by Canada if:
 - (a) an accurate and complete claim for payment using form PWGSC-TPSGC 1111 <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>, Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
 - (b) the amount claimed is in accordance with the basis of payment;
 - (c) the total amount for all progress payments paid by Canada does not exceed 90 percent of the total amount to be paid under the Contract;
 - (d) all certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives.
2. The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of all work required under the Contract if the Work has been accepted by Canada and a final claim for the payment is submitted.
3. Progress payments are interim payments only. Canada may conduct a government audit and interim time and cost verifications and reserves the rights to make adjustments to the Contract from time to time during the performance of the Work. Any overpayment resulting from progress payments or otherwise must be refunded promptly to Canada.

7.5.3 Liens - Section 427 of the Bank Act SACC Manual Clause H4500C (2010-01-11) Liens - Section 427 of the Bank Act

7.5.4 Limitation of Price SACC Manual Clause C6000C (2011-05-16) Limitation of Price

7.5.5 Time Verification SACC Manual Clause C0711C (2008-05-12) Time Verification

7.6 Invoicing Instructions

The Contractor must submit invoices in accordance with the information required in Section 13 of 2030, General Conditions, Higher Complexity, Goods and Article 7.5 Payment and Article 7.6 Invoicing Instructions.

7.6.1 Invoices

1. Invoices are to be made out to:

Department of Fisheries and Oceans
Canadian Coast Guard
Finance
Quebec Region
101, Blvd. Champlain
Québec, QC
G1K 7Y7

And

The original invoice to be forwarded for verification to:

Public Works and Government Services Canada
Marine Systems Directorate
Defence and Major Projects Sector
11 Laurier Street, Place du Portage
Phase III, 6C2
Gatineau, Quebec
K1A 0S5
Attention: Paul Vandal

2. Canada will only make payment upon receipt of a satisfactory invoice duly supported by specified release documents and any other documents called for under the Contract.
3. The Contractor shall not submit an invoice prior to the completion and acceptance of the Work or shipment of the items to which it relates.

7.6.2 Invoicing Instructions - Progress Claim

1. The Contractor must submit a claim for payment using form PWGSC-TPSGC 1111 <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>, Claim for Progress Payment.

Each claim must show:

- (a) all information required on form PWGSC-TPSGC 1111;
 - (b) all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
2. The Goods and Services Tax or Harmonized Sales Tax (GST/HST), as applicable, must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no GST/HST payable as it was claimed and payable under the previous claims for progress payments.
 3. The Contractor must prepare and certify one original and two (2) copies of the claim on form PWGSC-TPSGC 1111, and forward it to the Contracting Authority identified under the section entitled "Authorities" of the Contract for appropriate certification after inspection and acceptance of the Work takes place.

The Contracting Authority will then forward the original and two (2) copies of the claim to the Contracting Authority for certification and onward submission to the Payment Office for the remaining certification and payment action.

4. The Contractor must not submit claims until all work identified in the claim is completed.

7.6.3 Warranty Holdback

A warranty holdback of 5% of the total contract price as last amended (GST/HST excluded) will be applied to the final claim for payment. This holdback will be payable by Canada upon the expiry of the 90 day warranty period(s) applicable to the Work. Goods and Services tax or Harmonized Sales tax (GST/HST), as appropriate, is to be calculated and paid on the total amount of the claim before the 5% holdback is applied. At the time that the holdback is released, there will be no GST/HST payable, as it was included in previous payments.

7.7 Certifications

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

7.8 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____.

7.9 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the Supplemental General Conditions 1029, (2010-08-16), Ship Repairs;
- (c) the General Conditions 2030, , General Conditions - Higher Complexity - Goods
- (d) the General Conditions 1031-2, (2008-05-12), Contract Cost Principles;
- (e) Annex "A", Statement of Work;
- (f) Annex "B", Basis of Payment;
- (g) Annex "C", Insurance Requirements;
- (h) Annex "D", Warranty;
- (i) Annex "E", Procedure for Unscheduled Work;
- (j) Annex "F", Quality Control/Inspection;
- (k) Annex "G", Financial Bid Presentation Sheet;
- (l) Annex "H", Deliverables/Certifications
- (m) Annex "J", Vessel Turnover
- (n) the Contractor's bid dated _____ (insert date of bid), as amended _____ (insert date(s) of amendment(s) if applicable)

7.10 Insurance Requirements

The Contractor must comply with the insurance requirements specified in Annex "C". The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.

The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.

The Contractor must forward to the Contracting Authority within **ten (10) working days** after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. Coverage must be placed with an Insurer licensed to carry out business in Canada. The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

7.11 Limitation of Contractor's Liability for Damages to Canada

1. This section applies despite any other provision of the Contract and replaces the section of the general conditions entitled "Liability". Any reference in this section to damages caused by the Contractor also includes damages caused by its employees, as well as its subcontractors, agents, and representatives, and any of their employees.
2. Whether the claim is based in contract, tort or another cause of action, the Contractor's liability for all damages suffered by Canada caused by the Contractor's performance of or failure to perform the Contract is limited to \$10 million per incident or occurrence to an annual aggregate of \$20 million for losses or damage caused in any one year of carrying out the Contract, each year starting on the date of coming into force of the Contract or its anniversary. This limitation of the Contractor's liability does not apply to:
 - (a) any infringement of intellectual property rights;
 - (b) any breach of warranty obligations; or
3. Each Party agrees that it is fully liable for any damages that it causes to any third party in connection with the Contract, regardless of whether the third party makes its claim against Canada or the Contractor. If Canada is required, as a result of joint and several liability, to pay a third party in respect of damages caused by the Contractor, the Contractor must reimburse Canada for that amount.

7.12 Financial Security

7.12.1 Term of Financial Security

Any bond, bill of exchange, letter of credit or other security provided by the Contractor to Canada in accordance with the terms of the Contract must not expire before 90 days after the completion date indicated in the Contract.

The Contracting Authority may, at its sole discretion, require an extension to the period of the security, for which the Contractor may apply for financial compensation.

The Contracting Authority may, at its sole discretion, return the security to the Contractor before the expiration, provided however that no risk will accrue to Canada as a result of this.

7.12.2 Contract Financial Security

1. The Contractor must provide one of the following contract financial securities within **five (5)** working days after the date of contract award:

- (a) a performance bond (form PWGSC-TPSGC 505) and a labour and material payment bond (form PWGSC-TPSGC 506), each in the amount of 20 percent of the Contract Price;

OR

- (b) a security deposit as defined below in the amount of 10 percent of the Contract Price.

Any bond must be accepted as security by one of the bonding companies listed in Treasury Board Contracting Policy, Appendix L, Acceptable Bonding Companies (<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12027>). The bond forms mentioned in (a) above are available at: <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>.

2. If, for any reason, Canada does not receive the financial security in the amount set out above within the specified period, the Contractor will be in default. Canada may, at its discretion, terminate the Contract for default pursuant to the Contract default provision, accept another bid, reject all bids or issue a new bid solicitation.

3. Security deposits in the form of government guaranteed bonds with coupons attached will be accepted only if all coupons that are unmatured, at the time the security deposit is provided, are attached to the bonds. The Contractor must provide written instructions concerning the action to be taken with respect to coupons that will mature while the bonds are pledged as security, when such coupons are in excess of the security deposit requirement.

4. If the security deposit is in the form of a bill of exchange, Canada will deposit the bill of exchange in an open account in the Consolidated Revenue Fund. Bills of exchange that are deposited to the credit of the Consolidated Revenue Fund will bear simple interest, calculated on the basis of the rates which are in effect during the period the deposit is held.

These rates are published monthly by the Department of Finance and are set to be equal to the average yield on 90-day Treasury Bills, less 1/8 of 1 percent. Interest will be paid annually or, when the security deposit is returned to the Contractor, if earlier. The Contractor may, however, request Canada to hold and not cash the bill of exchange, in which case no interest will become payable.

5. Canada may convert the security deposit to the use of Canada if any circumstance exists which would entitle Canada to terminate the Contract for default, but any such conversion will not constitute termination of the Contract.

6. When Canada so converts the security deposit:

- (a) the proceeds will be used by Canada to complete the Work according to the conditions of the Contract, to the nearest extent that it is feasible to do so and any balance left will be returned to the Contractor on completion of the warranty period; and
- (b) if Canada enters into a contract to have the Work completed, the Contractor will:
 - (i) be considered to have irrevocably abandoned the Work; and
 - (ii) remain liable for the excess cost of completing the Work if the amount of the security deposit is not sufficient for such purpose. "Excess cost" means any amount over and above the amount of the Contract Price remaining unpaid together with the amount of the security deposit.

7. If Canada does not convert the security deposit to the use of Canada before completion of the contract period, Canada will return the security deposit to the Contractor within a reasonable time after such date.

8. If Canada converts the security deposit for reasons other than bankruptcy, the financial security must be reestablished to the level of the amount stated above so that this amount is continued and available until completion of the contract period.

9. In this Article,

"security deposit" means

- (a) a bill of exchange that is payable to the Receiver General for Canada and certified by an approved financial institution or drawn by an approved financial institution on itself; or
- (b) a government guaranteed bond; or
- (c) an irrevocable standby letter of credit, or
- (d) such other security as may be considered appropriate by the Contracting Authority and approved by Treasury Board;

"approved financial institution" means

- (a) any corporation or institution that is a member of the Canadian Payments Association;
- (b) a corporation that accepts deposits that are insured by the Canada Deposit Insurance Corporation or the Régie de l'assurance-dépôts du Québec to the maximum permitted by law;
- (c) a credit union as defined in paragraph 137(6) of the Income Tax Act;
- (d) a corporation that accepts deposits from the public, if repayment of the deposits is guaranteed by a Canadian province or territory;
- (e) the Canada Post Corporation.

"government guaranteed bond" means a bond of the Government of Canada or a bond unconditionally guaranteed as to principal and interest by the Government of Canada that is:

- (a) payable to bearer;
- (b) accompanied by a duly executed instrument of transfer of the bond to the Receiver General for Canada in accordance with the Domestic Bonds of Canada Regulations;
- (c) registered in the name of the Receiver General for Canada.

"irrevocable standby letter of credit"

- (a) means any arrangement, however named or described, whereby a financial institution (the "Issuer"), acting at the request and on the instructions of a customer (the "Applicant"), or on its behalf,
 - (i) will make a payment to or to the order of Canada, as the beneficiary;
 - (ii) will accept and pay bills of exchange drawn by Canada;
 - (iii) authorizes another financial institution to effect such payment, or accept and pay such bills of exchange; or
 - (iv) authorizes another financial institution to negotiate, against written demand(s) for payment, provided that the conditions of the letter of credit are complied with.
- (b) must state the face amount which may be drawn against it;
- (c) must state its expiry date;
- (d) must provide for sight payment to the Receiver General for Canada by way of the financial institution's draft against presentation of a written demand for payment signed by the authorized departmental representative identified in the letter of credit by his\her office;
- (e) must provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face amount of the letter of credit;
- (f) must provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice (UCP) for Documentary Credits, 2007 Revision, ICC Publication No. 600. Pursuant to the ICC UCP, a credit is irrevocable even if there is no indication to that effect; and
- (g) must be issued (Issuer) or confirmed (Confirmer), in either official language, by a financial institution that is a member of the Canadian Payments Association and is on the letterhead of the Issuer or Confirmer. The format is left to the discretion of the Issuer or Confirmer.

7.13 Sub-contracts and Sub-contractor List

The Contracting Authority is to be notified, in writing, of any changes to the list of subcontractors before commencing the work.

When the Contractor sub-contracts work, a copy of the sub-contract purchase order is to be passed to the Contracting Authority. In addition, the Contractor must monitor progress of sub-contracted work and inform the Inspection Authority on pertinent stages of work to permit inspection when considered necessary by the Inspection Authority.

7.14 Work Schedule and Reports

No later than **five (5) calendar days** after contract award, the preliminary work schedule provided with the bid must be revised, detailed and resubmitted in preparation to the contract award meeting.

The Contractor must provide a detailed work schedule showing the commencement and completion dates for the Work in the available work period, including realistic target dates for significant events.

During the work period the schedule is to be reviewed on an ongoing basis by the Inspection Authority and the Contractor, updated when necessary, and available in the Contractor's office for review by Canada's authorities to determine the progress of the Work.

7.15 Insulation Materials - Asbestos Free

All materials used to insulate or re-insulate any surfaces on board the vessel must meet Transport Canada Marine standards, for commercial marine work, and, for all work, be free from asbestos in any form. The Contractor must ensure that all machinery and equipment located below or adjacent to surfaces to be re-insulated are adequately covered and protected before removing existing insulation.

7.16 Trade Qualifications

The Contractor must use qualified, certificated (if applicable) and competent tradespeople and supervision to ensure a uniform high level of workmanship. The Technical Authority may request to view and record details of the certification and/or qualifications held by the Contractor's tradespeople. This request should not be unduly exercised but only to ensure qualified tradespeople are on the job.

7.17 ISO 9001:2008 - Quality Management Systems

In the performance of the Work described in the Contract, the Contractor must comply with the requirements of:

ISO 9001:2008 - Quality management systems - Requirements, published by the International Organization for Standardization (ISO), current edition at date of submission of Contractor's bid.

The Contractor's quality management system must address each requirement contained in the standard, however, the Contractor is not required to be registered to the applicable standard.

7.18 Project Management Services

The Contractor is required to provide their own Project Management Team experienced and capable of successfully managing the ship repair contract as defined herein. Project management personnel, services and deliverables must comply with the requirements detailed in the contract.

1. Intent

(a) Job titles used in this annex are for clarity within this document only. The Contractor is free to choose job titles that suit its organization.

(b) The Contractor, through its Project Management Team, is responsible to discharge the duties and supply the deliverables required in the Contract and the Specifications.

(c) Project Management encompasses the direction and control of such functions as engineering, planning, purchasing, manufacturing, assembly, overhauls, installations and test and trials.

2. Project Manager

(a) The Contractor must supply an experienced Project Manager (PM).

(b) The PM must have experience in managing a project of this nature.

3. Project Management Team

Other than the Project Manager, the Contractor must assign and vary other job descriptions to suit its organization; provided however that the collective resume of its Project Management must provide for the effective control of the project elements including but not limited to:

- i. Project Management
- ii. Quality Assurance
- iii. Planning and Scheduling

4. Reports

The following Management Reports and Documentation are to be prepared and maintained by the Contractor and submitted to Canada in accordance with the Contract or upon request by the Contracting Authority.

- i. Production Work Schedule
- ii. Inspection Summary Report
- lii. Growth Work Summary

7.19 Quality Control Plan

The Contractor must implement and follow the Quality Control Plan (QCP) prepared according to the latest issue (at contract date) of ISO 10005:2005 Quality management - Guidelines for quality plans, approved by the Inspection and the Technical Authority. The QCP must describe how the Contractor will conform to the specified quality requirements of the Contract and specify how the required quality activities are to be carried out, including quality assurance of subcontractors. The Contractor must include a traceability matrix from the elements of the specified quality requirements to the corresponding paragraphs in the QCP. The QCP must be made available to the Inspection and Technical Authority for review and approval **within five (5) calendar days** after contract award.

The documents referenced in the QCP must be made available when requested by the Inspection Authority.

The Contractor must make appropriate amendments to the QCP throughout the term of the Contract to reflect current and planned quality activities. Amendments to the QCP must be acceptable to the Inspection Authority and the Technical Authority.

Refer to Annex "F" for details.

7.20 Inspection and Test Plan

The Contractor must in support of its Quality Control Plan (QCP), implement an approved Inspection and Test Plan (ITP).

The Contractor must provide at no additional cost to Canada, all applicable test data, all Contractor technical data, test pieces and samples as may reasonably be required by the Inspection Authority to verify conformance to contract requirements. The Contractor must forward at his expense such technical data, test data, test pieces and samples to such location as the Inspection Authority may direct.

Refer to Annex "F" for details.

7.21 Equipment/Systems: Inspection/Test

Inspections, Tests and Trials of Equipment, Machinery and Systems shall be conducted in accordance with the Specification. The Contractor is responsible for performing, or having performed, all Inspections, Tests and Trials necessary to substantiate that the materiel and services provided conform to contract requirements.

Refer to Annex "F" for details.

7.22 Environmental Protection

The Contractor and its sub-contractors engaged in the Work on a Crown vessel must carry out the Work in compliance with applicable municipal, provincial and federal environmental laws, regulations and industry standards.

The Contractor must have detailed procedures and processes for identifying, removing, tracking, storing, transporting and disposing of all potential pollutants and hazardous material encountered, to ensure compliance as required above. The contractor must maintain in force their Environmental Protection procedures through the course of the contract.

All waste disposal certificates are to be provided to the Technical Authority, with information copies sent to the Contracting Authority. Furthermore, additional evidence of compliance with municipal, provincial and federal environmental laws and regulations is to be furnished by the Contractor to the Contracting Authority when so requested.

The Contractor must have environmental emergency response plans and/or procedures in place. Contractor and subcontractor employees must have received the appropriate training in emergency preparedness and response. Contractor personnel engaging in activities which may cause environmental impacts or potential non compliance situations, must be competent to do so on the basis of appropriate education, training, or experience.

7.23 Hazardous Waste

1. The Contractor acknowledges that sufficient information has been provided by Canada with respect to the location and estimated amount of hazardous materials such as asbestos, lead PCBs, silica or other hazardous materials or toxic substances.
2. The price includes all costs associated with the removal, handling, storage, disposal and/or working in the vicinity of hazardous materials such as asbestos, lead, PCBs, silica and other hazardous materials or toxic substances on board the vessel, including those costs resulting from the need to comply with applicable laws and regulations in relation to the removal, handling, disposal or storage of hazardous materials or toxic substances.
3. The completion date for the Work takes into account the fact that the removal, handling, storage, disposal and/or working in the vicinity of hazardous materials such as asbestos, lead, PCBs, silica and other hazardous materials or toxic substances may be affected by the need to comply with applicable federal, provincial and municipal laws or regulations and that this will not be considered to be an excusable delay.

7.24 Fire Protection, Fire Fighting and Training

The Contractor must maintain in force their fire protection, fire fighting and training procedures through the course of the Contract.

7.25 Welding Certification

1. The Contractor must ensure that welding is performed by a welder certified by the Canadian Welding Bureau (CWB) in accordance with the requirements of the following Canadian Standards Association (CSA) standards:

- (a) CSA W47.1-03, Certification for Companies for Fusion Welding of Steel (Minimum Division Level 2.1); and
- (b) CSA W47.2-M1987 (R2003), Certification for Companies for Fusion Welding of Aluminum (Minimum Division Level 2.1).

2. In addition, welding must be done in accordance with the requirements of the applicable drawings and specifications.

3. Before the commencement of any fabrication work, and upon request from the Technical Authority, the Contractor must provide approved welding procedures and/or a list of welding personnel intended to be used in the completion of the work. The list must identify the CWB welding procedure qualifications attained by each of the personnel listed and must be accompanied by a copy of each person's current CWB welding certification.

7.26 Procedures for Design Change or Additional Work

SACC Manual Clause B5007C (2010-01-11) Procedures for Design Change or Additional Work

In addition, refer to Annex "E".

7.27 Vessel Unmanned Refits

SACC Manual Clause A0024C (2010-08-16) Vessel Unmanned Refits

7.28 Pre-Refit Meeting

A Pre-Refit meeting will be convened and chaired by the Contracting Authority at the Contractor's facility at a time to be determined. At that meeting the contractor will introduce all its management personnel as per its organization chart, and Canada will introduce authorities. Details of ship's arrival and work commencement will be discussed.

7.29 Progress Meetings

Progress meetings, chaired by the Contracting Authority, will take place at the Contractor's facility as and when required, generally once a month. Interim meetings may also be scheduled. Contractor attendees at these meetings will, as a minimum, be its Contract (Project) Manager, Production Manager (Superintendent) and Quality Assurance Manager. Progress meetings will generally incorporate Technical meetings to be chaired by the Technical Authority.

7.30 Outstanding Work and Acceptance

1. The Inspection Authority, in conjunction with the Contractor, will prepare a list of outstanding work items at the end of the work period. This list will form the annexes to the formal acceptance document for the vessel. A contract completion meeting will be convened by the Inspection Authority on the work completion date to review and sign off the form PWGSC-TPSGC1205, Acceptance. In addition to any amount held under the Warranty Holdback Clause, a holdback of twice the estimated value of outstanding work will be held until that work is completed.
2. The Contractor must complete the above form in three (3) copies, which will be distributed by the Inspection Authority as follows:
 - (a) original to the Contracting Authority;
 - (b) one copy to the Technical Authority;
 - (c) one copy to the Contractor.

7.31 Site Regulations

The Contractor must comply with all rules, instructions and directives in force on the site where the Work is performed.

7.32 Scrap and Waste Material

Despite any other provision of the Contract, scrap and waste materials other than accountable material, derived from the Contract, will revert to the Contractor as part of the Contract Price.

7.33 Stability

The Contractor will be solely responsible for the stability and trim of the ship during the period the vessel is in the Contractor's facility, including docking and undocking. The Contractor must maintain weight change information pertinent to the vessel's stability during the docking period. The Technical Authority will supply the Contractor with cross curves of stability, hydrostatic curves, tank status, location of centre of gravity, and other information relevant to the ship's condition upon handing over of the vessel.

7.34 Vessel Access by Canada

Canada reserves the right to have its personnel carry out limited work on equipment on board the vessel. This work will be carried out at times mutually acceptable to Canada and the Contractor.

7.35 Title to Property - Vessel

If the Contractor is in default in carrying any of its obligations under the Contract, Canada, or its agents, will have the immediate right to enter the shipyard, without first obtaining a court order, to take possession of the vessel and all other property of Canada, including, but not limited to, work-in-process located on the premises, and to perform any further work required to enable the vessel and other such property to be removed from the shipyard.

7.36 Workers Compensation

The Contractor must maintain its account in good standing with the applicable provincial or territorial Workers' Compensation Board for the duration of the Contract.

7.37 Dispute Resolution

The parties agree to follow the procedures below for the settlement of any disputes which may arise throughout the life of this Contract prior to seeking redress through court procedures:

- (a) Disputes arising from this Contract will in the first instance be resolved by the Contracting Authority and the Contractor's Contract Administrator within 15 working days or such additional time as may be agreed to by both parties.
- (b) Failing resolution under (a) above, the Manager of the Ship Refit Division (MD) of the Marine Systems Directorate at PWGSC and the Contractor's Representative Supervisor will attempt to resolve the dispute within an additional fifteen (15) working days.
- (c) Failing resolution under (a) or (b) above, the Senior Director of the Marine Systems Directorate at PWGSC, and the Contractor's Senior Management will attempt to resolve the dispute within an additional thirty (30) working days.
- (d) Notwithstanding the above procedure, either party may seek a decision through the courts at any time during the dispute.

7.38 Failure to Deliver

Time is of the essence of the Contract. Changes in the Completion date not caused by Canada are Contractor defaults, will prejudice Canada and are at the Contractor's expense. The Completion date will not be extended without consideration being provided by the Contractor acceptable to Canada in the form of adjustment to the price, warranty or services to be provided.

7.39 Care, Custody and Control

Supplemental General Conditions 1029 (2010-08-16) Ship Repairs Article 09 Where Vessel Out of Commission.

7.40 Licensing

The Contractor must obtain and maintain all permits, licenses and certificates of approval required for the work to be performed under any applicable federal, provincial or municipal legislation. The Contractor is responsible for any charges imposed by such legislation or regulations. Upon request, the Contractor must provide a copy of any such permit, license or certificate to Canada.

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ANNEX "A"

CCGS MARTHA L. BLACK DRYDOCKING SPECIFICATION SUMMER 2013

Dated March 2013

Associated Drawings and Documentation

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ANNEX "B"

BASIS OF PAYMENT PRICE

Annex "B" will form the Basis of Payment for the resulting Contract and should not be filled in at the bid submission stage.

B1 Contract Firm Price

A)	Known Work For work as stated in Article 7. 1, Specified in Annex "A" and detailed in the attached Pricing Data Sheets, for a FIRM PRICE of:	\$
B)	GST / HST as applicable of line a) only	\$
C)	Total Firm Price GST/HST Included:	\$

B2 Unscheduled Work

The Contractor will be paid for unscheduled work arising, as authorized by Canada. The authorized unscheduled work will be calculated as follows:

"Number of hours (to be negotiated) X \$ _____, being the Contractor's firm hourly charge-out labour rate which includes overhead, consumables, and profit, plus net laid-down cost of materials to which will be added a mark-up of 10%, plus Goods and Services Tax or Harmonized Sales Tax, if applicable, of the total cost of material and labour. The firm hourly charge-out labour rate and the material mark-up will remain firm for the duration of the Contract and any subsequent amendments."

B2.1: Notwithstanding definitions or usage elsewhere in this document, or in the Contractor's Cost Management System, when negotiating hours for unscheduled work, PWGSC will consider only those hours of labour directly involved in the production of the subject work package.

Elements of Related Labour Costs identified in B2.2 below, will not be negotiated, but will be compensated for in accordance with B2.2.

B2.2: Allowance for Related Labour Costs such as: Management, all Supervision, Purchasing and Material Handling, Quality Assurance and Reporting, First Aid, Gas Free Certification Inspecting and Reporting, Estimating, and Preparing Unscheduled Work Submissions will be included as Overhead for the purposes of determining the Charge-out Labour Rate entered in line B2 above.

B2.3: The 10% mark-up rate for materials will also apply to subcontracted costs. The mark-up rate includes any allowance for material and subcontract management not allowed for in the Chargeout Labour Rate. The Contractor will not be entitled to a separate labour component for the purchase and handling of materials or subcontract administration.

Pro-rated Prices Unscheduled Work

Hours and prices for unscheduled work shall be based on comparable historical data applicable to similar work at the same facility, or shall be determined by pro-rating the quoted Work costs in the Contract when in similar areas of the vessel.

B3 Overtime

The Contractor must not perform any overtime under the Contract unless authorized in advance and in writing by the Contracting Authority. There will be no overtime payment for Known Work. Any request for payment must be accompanied by a copy of the overtime authorization and a report containing the overtime performed pursuant to the written authorization. Payment for authorized overtime will be calculated as follows:

For unscheduled work, the Contractor will be paid the authorized overtime hours at the quoted charge-out labour rate plus the following premium rates:

For Time and one half: \$ _____ per hour; or,

For Double time \$ _____ per hour

The above premiums will be calculated by taking the average hourly direct labour rate premiums, plus certified fringe benefit, plus profit on labour premium and fringe benefits. These rates will remain firm for the duration of the Contract, including all amendments and are subject to audit if considered necessary by Canada.

B4 Daily Services Fee

In the event of a delay in the performance of the Work that lengthens the Work period beyond the date specified in this Contract, and if such delay is recognized and agreed upon by the Contracting Authority as being attributable to Canada, Canada agrees to pay the Contractor the daily services fee, described below, for each day of such delay. This fee shall be the sole liability of Canada to the Contractor for the delay.

The firm daily services fee is:

(a) For a working day: \$ _____

(b) For a non-working day: \$ _____

The above fees shall include but not be limited to, all aspects of the following costs: Project Management Services, Administrative Support, Production Services, Quality Assurance, Material Support, Planned Maintenance and Ship Services, and all other resources and direct costs needed to maintain the Vessel at the Contractor's facility. These fees are firm and not subject to any additional charges for mark-up or profit.

B5 Vessel, Refit, Repair or Docking Cost

The following costs must be included in the price:

1. Ship Services: include all costs for ship services such as water, steam, electricity, etc., required for vessel maintenance for the duration of the Contract.

2. Docking and Undocking include:

(a) all costs resulting from wharfage, security, shoring, shifting and/or moving of the vessel within the successful Bidder's facility;

(b) the cost of services to tie up the vessel alongside and to cast off.

Unless specified otherwise, the vessel will be delivered by Canada to the successful Bidder's facility alongside a mutually agreed safe transfer point, afloat and upright, and the successful Bidder will do the same when the Work is completed. The cost of services to tie up the vessel alongside and to cast off must be included in the evaluation price.

3. Field Service Representatives/Supervisory Services: include all costs for field service representatives/supervisory services including manufacturers' representatives, engineers, etc. The Contractor is responsible for the performance of all subcontractors and FSRs.

These services must not be an extra charge except where unscheduled work requiring these services is added to the Contract.

4. Removals: include all costs for removals necessary to carry out the Work and will be the responsibility of the successful Bidder whether or not they are identified in the specifications, except those removals not apparent when viewing the vessel or examining the drawings. The successful Bidder will also be responsible for safe storage of removed items and reinstalling them on completion of the Work. The successful Bidder will be responsible for renewal of components damaged during removal.

5. Sheltering, Staging, Cranage and Transportation: include the cost of all sheltering, staging including handrails, cranage and transportation to carry out the Work as specified.

The Contractor will be responsible for the cost of any necessary modification of these facilities to meet applicable safety regulations.

B6 Pricing Data Sheets

Parameters from the Pricing Data Sheets will be used at Canada's sole discretion in the determination of unscheduled work price.

ANNEX "C"**INSURANCE REQUIREMENTS****C.1 Ship Repairers' Liability Insurance**

1. The Contractor must obtain Ship Repairer's Liability Insurance and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$10,000,000 per accident or occurrence and \$20,000,000 in the annual aggregate.
2. The Ship Repairer's Liability insurance must include the following:
 - a. Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada as additional insured should read as follows: Canada, represented by Public Works and Government Services Canada.
 - b. Waiver of Subrogation Rights: Contractor's Insurer to waive all rights of subrogation against Canada as represented by Environment Canada and Public Works and Government Services Canada for any and all loss of or damage to the vessel, however caused.
 - c. Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of cancellation.
 - d. Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
 - e. Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

C.2 Commercial General Liability Insurance

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$10,000,000 per accident or occurrence and \$20,000,000 in the annual aggregate.
2. The Commercial General Liability Insurance policy must include the following:
 - (a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
 - (b) Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.
 - (c) Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
 - (d) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

(e) **Blanket Contractual Liability:** The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.

(f) Employees and, if applicable, Volunteers must be included as Additional Insured.

(g) **Employers' Liability** (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)

(h) **Notice of Cancellation:** The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.

(i) If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.

(j) **Owners' or Contractors' Protective Liability:** Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.

(k) **Sudden and Accidental Pollution Liability** (minimum 120 hours): To protect the Contractor for liabilities arising from damages caused by accidental pollution incidents.

ANNEX "D"**WARRANTY****Warranty Procedures****1. Scope**

a. The following are the procedures that suit the particular requirements for warranty considerations for a vessel on completion of a refit.

2. Reporting Failures With Warranty Potential

a. The initial purpose of a report of a failure is to facilitate the decision as to whether or not to involve warranty and to generate action to effect repairs. Therefore in addition to identification, location data, etc. the report must contain details of the defect. Warranty decisions as a general rule are to be made locally and the administrative process is to be in accordance with procedures as indicated.

b. These procedures are necessary as invoking a warranty does not simply mean that the warrantor will automatically proceed with repairs at his expense. A review of the defect may well result in a disclaimer of responsibility, therefore, it is imperative that during such a review the Department is directly represented by competent technical authority qualified to agree or disagree with the warrantor's assertions. Since the INSPECTION AUTHORITY has the closest and most active involvement of the contracted work completed this agency must assume this role.

3. Procedures

a. Immediately it becomes known to the Ship's Staff that an equipment/system is performing below accepted standards or has become defective, the procedures for the investigation and reporting are as follows:

i. The vessel advises the Technical Authority when a defect, which is considered to be directly associated the refit work, has occurred.

ii. On review of the Specification and the Acceptance Document, the Technical Authority in consort with Ship's Staff is to complete the Tombstone Data and section 1 of the Warranty Claim Form Appendix 1 of Annex "D" and forward the original to the Contractor for review with a copy to the PWGSC Contracting Authority. If the PWGSC Contracting or INSPECTION AUTHORITY is unable to support warranty action, the Defect Claim Form will be returned to the originator with a brief justification. (It is to be noted that in the latter instance PWGSC will inform the Contractor of its decision and no further action will be required of the Contractor.

Warranty defect claims may be forwarded in hard copy, by fax or by e-mail whichever format is the most convenient.

iii.. Assuming the Contractor accepts full responsibility for repair, the Contractor completes Section 2 and 3 of the Warranty Claim Form, returns it to the INSPECTION AUTHORITY who confirms corrective action has been completed, and who then distributes the form to the Technical Authority and the PWGSC Contracting Authority.

b. In the event that the Contractor disputes the claim as a warranty defect, or agrees to share, the contractor is to complete Part 2 and 3 of the Warranty Claim Form with the appropriate information and forward it to the Contracting Authority who will distribute copies as necessary.

c. When a warranty defect claim is disputed by the Contractor, the Technical Authority may arrange to correct the defect by in-house resources or by contracting the work out. All associated costs must be tracked and recorded as a possible charge against the contractor by PWGSC action. Material costs and manhours expended in correcting the defect are to be recorded and entered in Section 5 of the warranty defect claim by the Technical Authority who will forward the warranty defect claim to the PWGSC Contracting Authority for action. Defective parts of equipment are to be retained pending settlement of claim.

d. Defective equipment associated with potential warranty should not normally be dismantled until the Contractor's representative has had the opportunity to observe the defect. The necessary work is to be undertaken through normal repair methods and costs must be segregated as a possible charge against a contractor by PWGSC action.

4. Liability

a. Agreement between the Contracting Authority, INSPECTION AUTHORITY, Technical Authority and the Contractor will result in one of the following conditions:

i. The Contractor accepts full responsibility for costs to repair or overhaul under the warranty provisions of the contract;

ii. The Technical Authority accepts full responsibility for repair and overhaul of item concerned; or

iii. The Contractor and the Technical Authority agree to share responsibility for the costs to repair or overhaul the unserviceable item, in such cases the PWGSC Contracting Authority will negotiate the best possible sharing arrangement.

b. In the event of a disagreement as in paragraph 5c, PWGSC will take necessary action with the Contractor while the Technical Authority informs its Senior Management including pertinent data and recommendations.

c. The total cost of processing warranty claims must include accommodation and travel costs of the Contractor's employees as well as equipment/system down time and operational constraints. Accordingly, the cost to remediate the defect, in manhours and material, will be discussed between the Contracting/Inspection Authorities and the Technical Authority to determine the best course of action.

5. Alongside Period For Warranty Repairs and Checks

a. If at all possible, an alongside period for the vessel is to be arranged just before the expiration of the 90 day warranty period. This alongside period is to provide time for warranty repair and check by the contractor.

b. In respect to the underwater paint, should it become defective during the associated warranty period the contractor is only liable to repair to a value determined as follows:
"Original cost to Canada for painting and preservation of the underwater section of the hull, divided by 365 days and multiplied by the number of days remaining in the 365 days warranty period. The resultant would represent the 'Dollar Credit' due to Canada from the Contractor."

c. The Underwater paint system, before expiration of the warranty, should be checked by divers. The Technical Authority is to arrange the inspection and ensure that a representative of the Contractor will attend. The Technical Authority will inform the Contracting Authority of any adverse results.

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Public Works and Government Services Canada

Travaux publics et Services gouvernementaux Canada

Warranty Claim Réclamation De Garantie

Vessel Name – Nom de navire	File No. – N° de dossier	Contract No. - N ° de contrat								
Customer Department – Ministère client	Warranty Claim Serial No. Numéro de série de réclamation de garantie									
Contractor – Entrepreneur	Effect on Vessel Operations Effet sur des opérations de navire <table> <tr> <td>Critical</td> <td>Degraded</td> <td>Operational</td> <td>Non-operational</td> </tr> <tr> <td>Critique</td> <td>Dégradé</td> <td>Opérationnel</td> <td>Non-opérationnel</td> </tr> </table>		Critical	Degraded	Operational	Non-operational	Critique	Dégradé	Opérationnel	Non-opérationnel
Critical	Degraded	Operational	Non-operational							
Critique	Dégradé	Opérationnel	Non-opérationnel							

1. Description of Complaint – Description de plainte

Contact Information – l'information de contact	
Name – Nom	Tel. No. - N ° Tél
Signature – Signature	Date

2. Contractor's Investigative Report – Le rapport investigateur de l'entrepreneur

3. Contractor's Corrective Action – La modalité de reprise de l'entrepreneur

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Client Ref. No. - N° de réf. du client

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Contractor's Name and Signature – Nom et signature de l'entrepreneur

Date of Corrective Action - Date de modalité de reprise

Client Name and Signature - Nom et signature de client

Date

4. PWGSC Review of Warranty Claim Action – Examen d'action de réclamation de garantie par TPSGC

Signature – Signature

Date

ANNEX "E"**PROCEDURE FOR PROCESSING UNSCHEDULED WORK****1. Purpose**

The Unscheduled Work Procedure has been instituted for the following purposes:

- a. To establish a uniform method of dealing with requests for Unscheduled Work;
- b. To obtain the necessary Technical Authority approval and Contracting Authority authorization before Unscheduled Work commences;
- c. To provide a means of maintaining a record of Unscheduled Work requirements including Serial Numbers, dates, and accumulated cost. The Contractor shall have a cost accounting system that is capable of assigning job numbers for each Unscheduled Work requirement so that each requirement can be audited individually.

2. Definitions

- a. An Unscheduled Work Procedure is a contractual procedure whereby changes to the scope of Work under the Contract may be defined, priced and contractually agreed to. Such changes may arise from;
 - i. "Work Arising" from opening up of machinery and/or surveys of equipment and material, or
 - ii. "New Work" not initially specified but required on the Vessel.
- b. The procedure does not allow for the correction of deficiencies in the Contractor's Bid.
- c. No unscheduled work may be undertaken by the Contractor without written authorization of the Contracting Authority except under emergency circumstances described in Sub. Paragraph 3(b). Unscheduled Work
- d. Work undertaken without written Contracting Authority authorization will be considered the Contractor's responsibility and cost.
- e. The appropriate PWGSC form is the final summary of the definition of the Unscheduled Work requirement, and the costs negotiated and agreed to.

3. Procedures

- a. The procedure involves the electronic form PWGSC 1379 for refit and repair and will be the only form for authorizing all Unscheduled Work.
- b. Emergency measures required to prevent loss or damage to the Vessel which would occur if this procedure were followed, shall be taken by the Contractor on its own authority. The responsibility for the cost of such measures shall be determined in accordance with the terms and conditions of the Contract.
- c. The Technical Authority will initiate a work estimate request by defining the Unscheduled Work requirement. It will attach drawings, sketches, additional specifications, other clarifying details as appropriate, and allocate their Serial Number for the request.

d. Notwithstanding the foregoing, the Contractor may propose to the Technical Authority in writing, either by letter or some type of Defect Advice Form (this is the Contractor's own form) that certain **Unscheduled Work** should be carried out.

e. The Technical Authority will either reject or accept such Proposal, and advise the Contractor and Contracting Authority. Acceptance of the Proposal is not to be construed as authorization for the work to proceed. If required, the Technical Authority will then define the **Unscheduled Work** requirement in accordance with Sub. Paragraph 3.(c).

f. The Contractor will electronically submit its Proposal to the Contracting Authority together with all price support, any qualifications, remarks or other information requested.

The price support shall demonstrate the relationship between the scope of work, the Contractor's estimated costs and its selling price. It is a breakdown of the Contractor's unit rates, estimates of person hours by trade, estimate of material cost per item for both the contractor and all of its subcontractors including quotations, estimates of any related schedule impact and an evaluation of the contractor's time required to perform the **Unscheduled Work**.

g. The Contractor shall provide copies of purchase orders and paid invoices for Subcontracts and/or materials, including stocked items, in either case. The Contractor shall provide a minimum of two quotations for Subcontracts or materials. If other than the lowest, or sole source is being recommended for quality and/or delivery considerations, this shall be noted. On request to the Contractor, the Contracting Authority shall be permitted, to meet with any proposed Subcontractor or material supplier for discussion of the price and always with the Contractor's representative present.

h. After discussion between the Contracting Authority and the Contractor and if no negotiation is required, the Contracting Authority will seek Technical Authority confirmation to proceed by signing the form. The Contracting Authority will then sign and authorize the **Unscheduled Work** to proceed.

i. In the event the Technical Authority does not wish to proceed with the work, it will cancel the proposed **Unscheduled Work** through the Contracting Authority in writing.

j. In the event the negotiation involves a Credit, the appropriate PWGSC form will be noted as "credit" accordingly.

k. In the event that the Technical Authority requires **Unscheduled Work** of an urgent nature or an impasse has occurred in negotiations, the commencement of the **Unscheduled Work** should not be unduly delayed and should be processed as follows, in either case. The Contractor will complete the appropriate PWGSC 1379 form indicating the offered cost and pass it to the Contracting Authority. If the Technical Authority wishes to proceed, the Technical Authority and the Contracting Authority will sign the completed PWGSC form with the notation, "CEILING PRICE SUBJECT TO DOWNWARD ADJUSTMENT", and allocate a Serial Number having the suffix "A". The work will proceed with the understanding that following an audit of the Contractor's actual costs for completing the described work, the cost will be finalized at the ceiling price or lower, if justified by the audit. A new PWGSC form will then be completed with the finalized costs, signed and issued with the same Serial Number without the suffix "A", and bearing a notation that this form is replacing and canceling the form having the same Serial Number with the suffix "A".

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NOTE:

PWGSC forms bearing Serial Numbers with a suffix "A" shall not to be included in any contract amendments, and therefore no payment shall be made until final resolution of the price and incorporation into the contract.

4. Amendment to Contract or Formal Agreement

The Contract will be amended from time to time in accordance with the Contract terms to incorporate the costs authorized on the appropriate PWGSC forms.

ANNEX "F"**QUALITY CONTROL/INSPECTION****F1 Quality Control Plan**

The Contractor must implement and follow the Quality Control Plan (QCP) prepared according to the latest issue (at contract date) of ISO 10005:2005 quality management - Guidelines for quality plans, approved by the Inspection and the Technical Authority. The QCP must describe how the Contractor will conform to the specified quality requirements of the Contract and specify how the required quality activities are to be carried out, including quality assurance of subcontractors. The Contractor must include a traceability matrix from the elements of the specified quality requirements to the corresponding paragraphs in the QCP. The QCP must be made available to the Inspection and Technical Authority for review and approval **within five (5) calendar** days after contract award.

The documents referenced in the QCP must be made available within two (2) working days when requested by the Inspection Authority.

The Contractor must make appropriate amendments to the QCP throughout the term of the Contract to reflect current and planned quality activities. Amendments to the QCP must be acceptable to the Inspection Authority and the Technical Authority.

F2 Inspection and Test Plan (ITP):

1. The Contractor must prepare an Inspection and Test Plan (ITP) comprising individual inspection and test plans for each specification item of this project, in accordance with the Quality Standard and its Quality Control Plan. The ITP must be submitted to the Inspection Authority for review and amended by the Contractor to the satisfaction of the Inspection Authority.

- a. Each ITP must contain all inspection points identified in the Specification highlighting any mandatory points that must be witnessed by the Inspection Authority and other "hold" points imposed by the Contractor to ensure the quality of the work.
- b. Milestone delivery date for the ITP is given in the Contract, however individual ITPs should be forwarded for review as developed.

2. Coding:

a. Each Inspection and Test Plan (ITP) is to be coded for identification clearly demonstrating a systematic approach similar to the following (Contractor's system should be defined in its Quality Control Plan):

i. Prefixes for Inspections, Test and Trials:

- Prefix "1" is a Contractor inspection, i.e. 1H-10-01, 1H-10-02;
- prefix "2" is a Contractor post repair test, i.e. 2H-10-01; and
- prefix "3" is a Contractor post repair trial, i.e. 3H-10-01.

b. Specification items followed by assigned sequence numbers for inspection processes within each Specification Item; and

c. Cross reference to a verification document number

F3 Inspection and Test Plan Criteria:

Inspection criteria, procedures and requirements are stated in the specifications, drawings, technical orders and reference standards invoked by the Specifications. Test and trial documentation may also be included or referenced in the Specifications. An individual Inspection and Test Plan (ITP) is required for each Specification item.

- a. All ITPs must be prepared by the Contractor in accordance with the above criteria, its Quality Plan, and must provide the following reference information:
 - i. the ship's name;
 - ii. the Specification item number;
 - iii. equipment/system description and a statement defining the parameter which is being inspected;
 - iv. a list of applicable documents referenced or specified in the inspection procedure;
 - v. the inspection, test or trial requirements specified in the Specification;
 - vi. the tools and equipment required to accomplish the inspection;
 - vii. the environmental conditions under which the inspections are to be conducted and the tolerances on the inspection conditions;
 - viii. a detailed step-by-step procedure of how each inspection is to be performed, conformance parameters, accept/reject criteria and recording of results, deficiencies found and description of corrective action(s) required;
 - ix. name and signature of the person who prepared the plan, date prepared and amendment level; and,
 - x. names and signatures of the persons conducting and witnessing the inspection, test or trial.

4. Contractor Imposed Testing:

Tests and trials in addition to those given in the Specification must be approved by the Inspection Authority.

- a. Amendments: Amendment action for the Inspection and Test Plans must be ongoing throughout the refit and reflect the inspection requirements for unscheduled work. Amendments must be submitted as developed, but not less frequently than once every second week.

F4 Conduct of Inspection

1. Inspections must be conducted in accordance with the ITP and as detailed in F4.
2. The Contractor must provide its own staff or subcontracted staff to conduct inspections, tests and trials; excepting that Technical Authority or Inspection Authority personnel may be designated in the specifications, in which case the Contractor must ensure that its own staff are provided in support of such inspection/test/trial.
3. The Contractor must ensure that the required conditions stated in the ITP prevail at the commencement of, and for the duration of, each inspection/test/trial.
4. The Contractor must ensure that personnel required for equipment operation and records taking during the inspection/test/trial are briefed and available at the start and throughout the duration of the inspection/test/trial. Tradesmen or FSRs who may be required to effect minor changes or adjustments in the installation must be available at short notice.
5. The Contractor is to coordinate the activities of all personnel taking part in each inspection/test/trial and ensure that safe conditions prevail throughout the inspection/test/trial.

F5 Inspection Records and Reports

1. The Contractor on the inspection record, test or trials sheets as applicable must record the results of each inspection. The Contractor must maintain files of completed inspection records consistent with the Quality Standard and its Quality Plan for this project.
2. The Contractor's QC representative (and the FSR when required) must sign as having witnessed the inspection, test or trial on the inspection record. The Contractor must forward originals of completed inspection records, together with completed test(s) and/or trials sheets to the Inspection Authority as they are completed.
3. Unsatisfactory inspection/test/trial results, for which corrective action cannot be completed during the normal course of the inspection/test/trial, will require the Contractor to establish and record the cause of the unsatisfactory condition to the satisfaction of the Inspection Authority. Canada representatives may assist in identification where appropriate.
4. Corrective action to remove cause of unsatisfactory inspections must be submitted to the Inspection Authority in writing by the Contractor, for approval before affecting such repairs and rescheduling of the unsatisfactory inspection/test/trial. Such notices must be included in the final records passed to the Inspection Authority.
5. The Contractor must undertake rectification of defects and deficiencies in the Contractor's installation or repair as soon as practicable. The Contractor is responsible to schedule such repairs at its own risk.
6. The Contractor must reschedule unsatisfactory inspections after any required repairs have been completed.
7. Quality Control, Inspection and Test records that substantiate conformance to the specified requirements, including records of corrective actions, must be retained by the Contractor for three (3) years from the date of completion or termination of the Contract and must be made available to the Inspection Authority upon request.

F6 Inspection and Trials Process

1. Drawings and Purchase Orders
 - a. Upon receipt of two (2) copies of each drawing or purchase order, the designated Inspection Authority will review its content against the provisions of the specification. Where discrepancies are noted, the Inspection Authority will formally advise all concerned, in writing using a Discrepancy Notice. The resolution of any such discrepancy is a matter for consultation between the Contractor and other Crown Authorities.

The Inspection Authority is NOT responsible for the resolution of discrepancies.**2. Inspection**

a. Upon receipt and acceptance of the Contractor's ITP, inspection will consist of a number of Inspection Points supplemented by such other inspections, tests, demonstrations and trials as may be deemed necessary by the Inspection Authority to permit him to certify that the work has been performed in compliance with the provisions of the specification. The Contractor must be responsible for notifying the designated Inspection Authority of when the work will be available for inspection, sufficiently in advance to permit the designated Inspection Authority to arrange for the appropriate inspection.

b. The Inspection Authority will inspect the materials, equipment and work throughout the project against the provisions of the specification and, where non-conformances are noted, will issue appropriate **INSPECTION NON-CONFORMANCE REPORTS.**

c. The Contract requires the implementation of a Quality Assurance/Quality Control system, so the Inspection authority must require that the Contractor provide a copy of its internal inspection report pertaining to a work item before conducting the requested inspection. If third party inspections are required by the Contract (e.g. inspections by a certified CWB 178.2 welding inspector), the reports of these inspections must be required before the Work is inspected by the PWGSC Inspection Authority.

d. The QA/QC system is a requirement, so if the documentation is presented to the Inspection Authority before an inspection stating that the Work is satisfactory but the Inspection Authority finds that the Work has not been satisfactorily inspected, the Inspection Authority must issue an Inspection Non-conformance Report against the Work and another against the failure of the Contractor's QA/QC system.

e. Before carrying out any inspection, the PWGSC Inspection Authority must review the requirements for the Work and the acceptance and/or rejection standards to be applied. Where more than one standard or requirement is called up and they are potentially conflicting, the Inspection Authority must refer to the order of precedence in the Contract to determine the standard or requirement to be applied.

3. Inspection Non-conformance report

a. An Inspection Non-conformance report will be issued for each non-conformance noted by the Inspection Authority. Each report will be uniquely numbered for reference purposes, will be signed and dated by the Inspection Authority, and will describe the non-conformance.

b. When the non-conformance has been corrected by the Contractor and has been re-inspected and accepted by the Inspection Authority, the Inspection Authority will complete the Report by adding an applicable signed and dated notation.

c. At the end of the project, the content of all Inspection Non-conformance Reports which have not been signed-off by the Inspection Authority will be transferred to the Acceptance Documents before the Inspection Authority's certification of such documents.

4. Tests, Trials, and Demonstrations

a. To enable the Inspection Authority to certify that the Work has been performed satisfactorily, in accordance with the Contract and Specifications, the Contractor must schedule, co-ordinate, perform, and record all specified Tests, Trials and Demonstrations required by the Inspection Authority.

b. Where the Specifications contain a specific performance requirement for any component, equipment, sub-system or system, the Contractor must test such component, equipment, sub-system or system to the satisfaction of the Inspection Authority, to prove that the specified performance has been achieved and that the component, equipment, sub-system or system performs as required by the specifications.

c. Tests, trials and demonstrations must be conducted in accordance with a logical, systematic schedule which must ensure that all associated components and equipment are proven before sub-systems demonstration or testing, and that sub-systems are proven before system demonstration or testing.

d. Where the Specifications do not contain specific performance requirements for any component, equipment, sub-system or system, the Contractor must demonstrate such component, equipment, sub-system or system to the satisfaction of the Inspection Authority .

e. The Contractor must submit its Inspection and Test Plan as detailed in F2.

f. The Contractor must co-ordinate each test, trial and demonstration with all interested parties, including the Inspection Authority; Contracting and Technical Authorities; regulatory authorities; Classification Society; Sub-contractors; etc. **The Contractor must provide the Inspection Authority and other Crown Authorities with a minimum of five (5) working days notice of each scheduled test, trial, or demonstration.**

g. The Contractor must keep written records of all tests, trials, and demonstrations conducted as detailed in F5. The Contractor may utilize the **PWGSC STANDARD TESTS & TRIALS RECORD SHEETS** which can be customized by the Contractor to suit individual test or trial requirements. These Record Sheets are available from the Inspection Authority in digital format.

h. The Contractor must in all respects be responsible for the conduct of all tests and trials in accordance with the requirements of the Contract.

i. The Inspection Authority and the Technical Authority reserve the right to defer starting or continuing with any sea trials for any reasonable cause including but not limited to adverse weather, visibility, equipment failure or degradation, lack of qualified personnel and inadequate compliance with safety standards.

ANNEX "G"**Financial Bid Presentation Sheet****G1 Price for Evaluation**

A)	Known Work For work as stated in Part 1 Clause 1.2, Specified in Annex "A" and detailed in the attached Pricing Data Sheets Appendix 1 of Annex "G", for a FIRM PRICE of:	\$ _____
B)	<p>Unscheduled Work Contractor Labour Cost: Estimated labour hours at a firm Charge-out Labour Rate, including overhead and profit for evaluation purpose only: 2000 person hours X \$_____ per hour for a PRICE of: See Article G2.1 and G2.2 below.</p> <p>Overtime premium for time and one half: Estimated hours for evaluation purposes only: 200 person hours X \$_____ per hour for a PRICE of: See Article G3 Below.</p> <p>Overtime premium for double time: Estimated hours for evaluation purposes only: 200 person hours X \$_____ per hour for a PRICE of: See Article G3 below.</p>	<p>\$ _____</p> <p>\$ _____</p> <p>\$ _____</p>
C)	<p>Daily Service Fees for evaluation purpose only As per Clause G4</p> <p>i) Ten (10) working days X \$_____ firm daily service fee = \$ _____</p> <p>ii) Four (4) non-working days X \$_____ firm daily service fee = \$ _____</p>	<p>\$ _____</p> <p>\$ _____</p>
D)	<p>Vessel Transfer Cost as Per Clause G6</p> <p>Proposed shipyard / ship repair facility: _____</p>	\$ _____
E)	<p>EVALUATION PRICE GST Excluded, [A + B + C+ D] For an EVALUATION PRICE of (GST/HST excluded):</p>	\$ _____

G2 **Unscheduled Work**

The Contractor will be paid for unscheduled work arising, as authorized by Canada. The authorized unscheduled work will be calculated as follows:

"Number of hours (to be negotiated) X \$ _____, being the Contractor's firm hourly charge-out labour rate which includes overhead, consumables, and profit, plus net laid-down cost of materials to which will be added a mark-up of 10 percent, plus Goods and Services Tax or Harmonized Sales Tax, if applicable, of the total cost of material and labour. The firm hourly charge-out labour rate and the material mark-up will remain firm for the duration of the Contract and any subsequent amendments."

G2.1: Notwithstanding definitions or usage elsewhere in this document, or in the Contractor's Cost Management System, when negotiating Hours for unscheduled work, PWGSC will consider only those hours of labour directly involved in the production of the subject work package.

Elements of Related Labour Costs identified in G2.2 below, will not be negotiated, but will be compensated for in accordance with Note G2.2. It is therefore incumbent upon the bidder to have bid appropriately which will result in fair compensation, regardless of their Cost Management System.

G2.2: Allowance for Related Labour Costs such as: Management, all Supervision, Purchasing and Material Handling, Quality Assurance and Reporting, First Aid, Gas Free Certification Inspecting and Reporting, and Estimating and preparing unscheduled work Submissions will be included as Overhead for the purposes of determining the Charge-out Labour Rate entered in line G2 above.

G2.3: The 10% mark-up rate for materials will also apply to subcontracted costs. The mark-up rate includes any allowance for material and subcontract management not allowed for in the Chargeout Labour Rate. The Contractor will not be entitled to a separate labour component for the purchase and handling of materials or subcontract administration.

G3 **Overtime**

The Contractor must not perform any overtime under the Contract unless authorized in advance and in writing by the Contracting Authority. There will be no overtime payment for Known Work. Any request for payment must be accompanied by a copy of the overtime authorization and a report containing the overtime performed pursuant to the written authorization. Payment for authorized overtime will be calculated as follows:

For unscheduled work, the Contractor will be paid the authorized overtime hours at the quoted charge-out labour rate plus the following premium rates:

For Time and one half: \$ _____ per hour; or,

For Double time \$ _____ per hour

The above premiums will be calculated by taking the average hourly direct labour rate premiums, plus certified fringe benefit, plus profit on labour premium and fringe benefits. These rates will remain firm for the duration of the Contract, including all amendments and are subject to audit if considered necessary by Canada.

G4 Daily Services Fee

In the event of a delay in the performance of the Work, and if such delay is recognized and agreed upon by the Contracting Authority as being attributable to Canada, Canada agrees to pay the Contractor the daily services fee, described below, for each day of such delay. This fee shall be the sole liability of Canada to the Contractor for the delay.

The firm daily services fee is:

- (a) For a working day: \$ _____
- (b) For a non-working day: \$ _____

The above fees shall include but not be limited to, all aspects of the following costs: Project Management Services, Administrative Support, Production Services, Quality Assurance, Material Support, Planned Maintenance and Ship Services, and all other resources and direct costs needed to maintain the Vessel at the Contractor's facility. These fees are firm and not subject to any additional charges for mark-up or profit.

G5 Vessel, Refit, Repair or Docking Cost

The following costs must be included in the price:

1. Ship Services: include all costs for ship services such as water, steam, electricity, etc., required for vessel maintenance for the duration of the Contract.
2. Berthing include:
 - (a) all costs resulting from , wharfage, security, shoring, shifting and/or moving of the vessel within the successful Bidder's facility;
 - (b) the cost of services to tie up the vessel alongside and to cast off.

Unless specified otherwise, the vessel will be delivered by Canada to the successful Bidder's facility alongside a mutually agreed safe transfer point, afloat and upright, and the successful Bidder will do the same when the Work is completed. The cost of services to tie up the vessel alongside and to cast off must be included in the evaluation price.

3. Field Service Representatives/Supervisory Services: include all costs for field service representatives/supervisory services including manufacturers' representatives, engineers, etc.

These services must not be an extra charge except where unscheduled work requiring these services is added to the Contract.

4. Removals: include all costs for removals necessary to carry out the Work and will be the responsibility of the successful Bidder whether or not they are identified in the specifications, except those removals not apparent when viewing the vessel or examining the drawings. The successful Bidder will also be responsible for safe storage of removed items and reinstalling them on completion of the Work. The successful Bidder will be responsible for renewal of components damaged during removal.

5. Sheltering, Staging, Cranage and Transportation: include the cost of all sheltering, staging including handrails, cranage and transportation to carry out the Work as specified.

The successful Bidder will be responsible for the cost of any necessary modification of these facilities to meet applicable safety regulations.

G6 Vessel Transfer Costs

1. The evaluation price must include the cost for transferring the vessel from its home port to the shipyard/ship repair facility where the Work will be performed and the cost of transferring the vessel to its home port following completion of the Work, in accordance with the following:

(a) The Bidder must provide the location of the shipyard/ship repair facility where it proposes to perform the Work together with the applicable vessel transfer cost from the list provided under paragraph 2 of this clause shall be entered into Table G1:

(b) If the list in paragraph 2 of this clause does not provide the shipyard/ship repair location where the Bidder intends to perform the Work, then the Bidder must advise the Contracting Authority, in writing, at least 5 calendar days before the bid closing date, of its proposed location for performing the Work. The Contracting Authority will confirm to the Bidder, in writing, at least 3 calendar days before the bid closing date, the location of the shipyard/ship repair and the applicable vessel transfer cost.

A bid that specifies a location for executing the Work which is not on the list of paragraph 2 of this clause, and for which a notification in writing has not been received by the Contracting Authority as required above, will be considered non-responsive.

2. List of shipyard/ship repair facilities and applicable vessel transfer costs

Vessel: CCGS Martha L. Black
Home port: Quebec, QC

Transfer costs in the case of vessels transferred using a government delivery crew include the fuel cost at the vessel's most economical speed of transit and for unmanned refits only, crew transportation costs for the delivery crew based on the location of the vessel's home port and the shipyard/ship repair facility. Crew transportation costs do not include any members of the delivery crew who remain at the shipyard/ship repair facility in order to discharge project responsibilities related to the vessel being transferred.

Transfer costs in the case of vessels transferred unmanned by either commercial towing, railway, highway or other suitable means of transportation must be:

(i) included as part of the Bidder's financial bid in the case where the Bidder is responsible for the transfer; or

(iii) identified as the applicable vessel transfer cost, as given in the list below, in the case when Canada is responsible for the transfer.

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Shipyard/ship repair facility

Applicable vessel transfer cost

Company	City	Transfer Cost Manned
Davie Industries inc.	Québec, QC	C\$0.00
Halifax shipyard	Halifax , NS	C\$47,207.00
Heddle Marine	Hamilton ON	C\$28,411.00
Kiewit Offshore	Marystown, NL	C\$53,014.00
Newdock Dockyard	St-Jonh's, NL	C\$61,944.00
Seaway marine Industries	St. Catharines, ON	C\$26,913.00
Shelburne Marine	Shelburne,NS	C\$53,514.00
Verreault Navigation inc.	Les Méchins QC	C\$58,384.00

Proposed Drydocking Location : _____

Refer to Annex "H1" for Deliverables/Certifications.

ANNEX "G" - APPENDIX 1**PRICING DATA SHEETS**

Spec. #	Description	Total Hours	Total Labour Cost	Total Material Cost	Total FSR& Sub-Contractors Cost	Total Firm Price	Unit Price
H.D.-1	DRYDOCKING AND NUMBERING		\$	\$	\$	\$	
1.8	unitary price per displacement \$ /Per Block						\$
H.D.-2	SERVICES		\$	\$	\$	\$	
2.5	Electrical Power (Supply 50,000KW)		\$	\$	\$	\$	
2.5	Electrical Power / per Kilowatt-hour						\$
2.6	Fresh Water Supply 450 m ³ /day X 43 days		\$	\$	\$	\$	
2.6	Fresh Water per Cubic Meter / Day						\$
2.9	Craneage service _____\$/Hr. X 10 hours		\$	\$	\$	\$	
2.9	Crane Service Hourly Rate						\$
2.11	Compressed Air Supply		\$	\$	\$	\$	
2.11	Compressed Air Rate Per Day						\$
H.D.-3	INSPECTION AND ADDITIONAL WORK		\$	\$	\$	\$	

Spec. #	Description	Total Hours	Total Labour Cost	Total Material Cost	Total FSR& Sub-Contractors Cost	Total Firm Price	Unit Price
H.D.-4	HULL PAINTING AND CLEANING		\$	\$	\$	\$	
4.3	Sandblasting SA 2 ½ \$/m ²						\$
4.4	Hull Painting \$/m ²						\$
4.5	Hull Painting \$/m ²						\$
4.10	Temporary Shelter \$						\$
H.D.-5	HULL ABOVE WATERLINE		\$	\$	\$	\$	
H.D.-6	MARKING FREEBOARD DRAFT SIGNAGE		\$	\$	\$	\$	
H.D.-7	EXTERNAL AND INTERNAL SEA CHESTS		\$	\$	\$	\$	
H.D.-8	ULTRASONIC THICKNESS TEST (SEA WATER PIPING)		\$	\$	\$	\$	
H.D.-9	BALLAST WATER TANKS		\$	\$	\$	\$	
H.D.-10	FUEL TANKS		\$	\$	\$	\$	
H.D.-11	OIL CHANGE AND VERIFICATION OF BOW THRUSTER		\$	\$	\$	\$	
H.D.-12	PROPELLERS		\$	\$	\$	\$	

Spec. #	Description	Total Hours	Total Labour Cost	Total Material Cost	Total FSR& Sub-Contractors Cost	Total Firm Price	Unit Price
H.D.-13	HULL REPAIRS		\$	\$	\$	\$	
13.1	Shell Plate Renewal _____\$/Pound						\$
13.4	Internal Renewal _____\$/Pound						\$
H.D.-14	ANCHORS AND CHAINS		\$	\$	\$	\$	
H.D.-15	CHAIN LOCKER		\$	\$	\$	\$	
H.D.-16	PLATING WELDED SEAMS		\$	\$	\$	\$	
H.D.-17	CENTERBOARD TRUNK WORK		\$	\$	\$	\$	
H.D.-18	ULTRASONIC THICKNESS TEST (FOR FRAMING IN BALLAST TANK)		\$	\$	\$	\$	
H.D.-19	CLEANING AND PAINTING OF BILGE AND BALLAST TOP TANK IN ENGINE ROOMS		\$	\$	\$	\$	
H.D.-20	OVERBOARD DISCHARGE VALVES		\$	\$	\$	\$	
H.D.-21	ASBESTOS ABATEMENT		\$	\$	\$	\$	
H.D.-22	TAILSHAFT MECHANICAL SEALS		\$	\$	\$	\$	

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Spec. #	Description	Total Hours	Total Labour Cost	Total Material Cost	Total FSR& Sub-Contractors Cost	Total Firm Price	Unit Price
H.D.-23	HULL, VOID SPACE & TANK SURVEY		\$	\$	\$	\$	
3.3.1	Bid of 1000 Shots (including proper surface preparation)		\$	\$	\$	\$	
	Unit Cost for each additional Shot						\$
3.3.2	Certified Man-Lift including Operator for a period of 100 hours.		\$	\$	\$	\$	
	Unit Cost per hour for the use of the man-lift and operator						\$
	Total		\$	\$	\$	\$	

ANNEX H DELIVERABLES/CERTIFICATIONS

H1 Mandatory Tender Deliverables Check List

Notwithstanding deliverable requirements specified within the bid solicitation and its associated Technical Specification (Annex A), mandatory deliverables that must be submitted with the Bidder's tender to be deemed responsive are summarized below.

The Bidder must submit a completed Annex "H1" Deliverables/ Certifications.

The following are mandatory and the Bidder's submission will be evaluated against the requirements as defined herein. The Bidder must be determined to be compliant on each item to be considered responsive.

Item	Description	Completed and Attached
1	Invitation To Tender document part 1 page 1 completed and signed;	
2	Completed Annex "G" Financial Bid Presentation Sheet", clauses G1 through G6;	
3	Completed Pricing Data Sheets, per clause 3.1 Section II, Annex "G", Appendix 1;	
4	Completed Annex "H1" Deliverables/Certifications;	
5	Changes to Applicable Laws (if any), as per clause 2.4	
6	Submission of Code of Conduct - List of Directors as per, section 5.1.1 and attached as Annex "I ";	
7	Federal Contractors Program for Employment Equity, Complete section 5.1.2;	
8	Type of Financial Security and Cost to Bidder for Financial Security, as per 6.2	
9	Vessel Transfer Cost, as per clause 6.3 and Annex "G"	
10	Docking Facility, as per clause 6.4	
11	Proof of good standing with Worker's Compensation Board, as per clause 6.5	
12	Proof of valid Labor Agreement or similar instrument covering the work period, as per clause 6.6	
13	Preliminary Work Schedule , per clause 6.7;	
14	If Registered its Valid ISO 9001-2008 Certification, as per clause 6.8	
15	Objective evidence of documented Health and Safety System, as per clause 6.9;	
16	Insurance Requirements, as per clause 6.11	
17	Proof of welding certification, as per clause 6.12	
18	Project Management as per clause 6.13	
19	List of subcontractors, as per clause 6.14	
20	Example of its Quality Control Plan, as per clause 6.15	
21	Example of an Inspection and Test Plan as per clause 6.16	
22	Details of Environmental Emergency Response Plan, Details of Formal Environmental Training as per Clause 6.17	
23	Objective evidence of documented Fire Protection, Fire Fighting and Training Procedure, as per clause 6.18	
24	Contractor Contacts, as per clause 7.4.4	

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018mdF3012-13R469

Buyer ID - Id de l'acheteur

018md

CCC No./N° CCC - FMS No/ N° VME

H2 Deliverables after Contract Award

Item	Description	Reference	Due By
1	Insurance requirements as per Annex "C"	Clause 7.10 and Annex "C"	10 Working Days after contract award
2	Contract Financial Security	Clause 7.12	5 Working Days after contract award
3	Revised Work Schedule	Clause 7.14	5 calendar days after contract award
4	The Contractor's Quality Control Plan	Clause 7.19	5 calendar days after contract award

H3 Deliverables Prior to Contract Award (If Requested)

Item	Description	Reference	Due By
1	Financial Capability	Clause 6.1	5 Working Days prior to contract award if requested

Solicitation No. - N° de l'invitation

F3012-13R469/A

Amd. No. - N° de la modif.

File No. - N° du dossier

018mdF3012-13R469

Buyer ID - Id de l'acheteur

018md

CCC No./N° CCC - FMS No/ N° VME

Client Ref. No. - N° de réf. du client

F3012-13R469

ANNEX I

Code of Conduct - List of Directors

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

ANNEX J

VESSEL CUSTODY

J1 Vessel Custody

1. This work is going to take place with the vessel "out of commission" and therefore in the "care, control and custody" of the Contractor.
2. An "ACCEPTANCE CERTIFICATE - ASSUMPTION OF CUSTODY OF FEDERAL GOVERNMENT SHIPS BY SHIPYARDS" (attached as Appendix 1 to this Annex "J") shall be completed as required and a copy passed to the INSPECTION AUTHORITY.
3. To facilitate this turnover, representatives of the Contractor and Canada shall confirm the condition of the vessel.
4. A vessel condition report shall be appended to the above noted certificate and shall be accompanied by colour photographs or videos in either conventional or digital format.
5. When the vessel is to be returned to the "care, control and custody" of Canada, an "ACCEPTANCE CERTIFICATE - RESUMPTION OF CUSTODY OF FEDERAL GOVERNMENT SHIPS BY THE CLIENT DEPARTMENT" (Attached as appendix 2 to this Annex J) shall be completed and a signed copy passed to Canada for distribution.

Solicitation No. - N° de l'invitation

F3012-13R469/A

Amd. No. - N° de la modif.

File No. - N° du dossier

018mdF3012-13R469

Buyer ID - Id de l'acheteur

018md

Client Ref. No. - N° de réf. du client

CCC No./N° CCC - FMS No/ N° VME

F3012-13R469

ANNEX J - APPENDIX 1

ACCEPTANCE CERTIFICATE

ASSUMPTION OF CUSTODY OF CANADIAN GOVERNMENT SHIPS BY CONTRACTORS

ACCEPTANCE OF _____

1. The undersigned, on behalf of the Department of Canadian Coast Guard and of _____ acknowledge to have handed over and received respectively CCGS _____ for the purpose of refit, all in accordance with the terms and conditions of PWGSC Contract Serial Number _____ and such documents which form part of the said contract.

2. It is mutually agreed by all parties that the condition report by compartment or area shall be considered as an addendum to this agreement; and shall be a valid document in the taking over of the vessel by the Contractor, even if the inspection and signing occur after the signing of the agreement but within the agreed ten (10) day period.

SIGNED AT _____ PROVINCE _____ ON,

THE _____ DAY OF _____ (Month) 2013.

AT _____ HOURS.

FOR: _____
(CONTRACTOR)

FOR: _____
Department of Canadian Coast Guard

WITNESSED BY: _____
PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

F3012-13R469/A

018md

Client Ref. No. - N° de réf. du client

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

F3012-13R469

018mdF3012-13R469

ANNEX J - APPENDIX 2

ACCEPTANCE CERTIFICATE

RESUMPTION OF CUSTODY OF CANADIAN GOVERNMENT SHIPS BY SHIPYARDS

ACCEPTANCE OF CCGS _____

1. The undersigned, on behalf of _____ and of the Department of Canadian Coast Guard, acknowledge to have handed over and to have received respectively the CCGS _____, said vessel having been received By _____ on _____ (date), for the purpose of refit in accordance with the terms and conditions of PWGSC Contract Serial Number _____.

2. It is mutually agreed by all parties that the liabilities and responsibilities of _____, as defined in Article 9 of PWGSC 1029 Supplemental General Conditions for Ship Repairs, for a vessel out of commission, shall automatically cease as at _____ hours on _____ (date).

3. That effective from _____ hours on the _____ (date) Article 8 of PWGSC 1029 for a vessel "in commission" Shall apply, and that responsibility for the care and protection of the said vessel shall revert to Canada.

SIGNED AT _____ PROVINCE _____ ON,

THE _____ DAY OF _____ (Month) 2013.

AT _____ HOURS.

FOR: _____
(CONTRACTOR)

FOR: _____
Department of Canadian Coast Guard

WITNESSED BY: _____
PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

CCGS MARTHA L. BLACK

"DRY DOCKING SPECIFICATION"

Summer 2013

Christopher Broemeling
Project Officer
Marine Engineering
Technical services
DFO/Coast Guard

March 2013

N.G.C.C MARTHA L BLACK
DRY DOCKING SPECIFICATION

SUMMER 2013

H.D.-1	DRYDOCKING AND NUMBERING
H.D.-2	SERVICES
H.D.-3	INSPECTION AND ADDITIONAL WORK
H.D.-4	HULL PAINTING AND CLEANING
H.D.-5	HULL ABOVE WATERLINE
H.D.-6	MARKING FREEBOARD DRAFT SIGNAGE
H.D.-7	EXTERNAL AND INTERNAL SEA CHESTS
H.D.-8	ULTRASONIC THICKNESS TEST (SEA WATER PIPING)
H.D.-9	BALLAST WATER TANKS
H.D.-10	FUEL TANKS
H.D.-11	OIL CHANGE AND VERIFICATION OF BOW THRUSTER
H.D.-12	PROPELLERS
H.D.-13	HULL REPAIRS
H.D.-14	ANCHORS AND CHAINS
H.D.-15	CHAIN LOCKER

N.G.C.C MARTHA L BLACK
DRY DOCKING SPECIFICATION

SUMMER 2013

- H.D.-16 PLATING WELDED SEAMS
- H.D.-17 CENTERBOARD TRUNK WORK
- H.D.-18 ULTRASONIC THICKNESS TEST (FOR FRAMING IN BALLAST TANK)
- H.D.-19 CLEANING AND PAINTING OF BILGE AND BALLAST TOP TANK IN ENGINE ROOMS
- H.D.-20 OVERBOARD DISCHARGE VALVES
- H.D.-21 ASBESTOS ABATEMENT
- H.D.-22 TAILSHAFT MECHANICAL SEALS
- H.D.-23 HULL, VOID SPACE AND TANK SURVEY
- H.1 NOTICE TO THE SHIPYARD BIDDER'S CONCERNING THE PAINTING PRODUCTS

CCGS MARTHA L BLACK

"DRAWINGS FOR DRY DOCKING SPECIFICATION"

SUMMER 2013

Are included with the specification, the following plans:

<u>Adresse Plans</u>	<u>Description</u>	Drawing #
	Docking Plan	108 H-0022
	Shell Expansion	108 H-0001
	Tank top & double bottom	H-003
	Arrg't Seabay & Seachests	71-20-01
	Arrg't Overboard Discharges	71-50-01
	Diagram Central Cooling	71-10-01
	Symbolisation	07352 SF
	Framing expansion	H-002
	Capacity Plan	108 H-0026
	Pipe module No. 13	77-70-01
	Pipe module No. 14	77-75-01
	Vents and soundings	60-90-23
	Surface intérieure du tunnel	07352S11
	Black Toles 2013 Babord	07352S41
Plans\H.D.-4 ET H.D.-5 SURFACE DE PAINTURE		
	Shell expansion Surface de peinture	108 H-00SP
Plans\H.D.-8 ESSAIS D'ÉPAISSEUR ULTRASONIQUES		
	ESSAIS D'ÉPAISSEUR ULTRASONIQUES	07352S36
	ESSAIS D'ÉPAISSEUR ULTRASONIQUES	07352S37
	ESSAIS D'ÉPAISSEUR ULTRASONIQUES	07352S38
	ESSAIS D'ÉPAISSEUR ULTRASONIQUES	07352S39
	ESSAIS D'ÉPAISSEUR ULTRASONIQUES	07352S40
Plans\H.D.-9.8 ET H.D.-10.4 SERPENTINS À VAPEUR		
	Diagram Steam system	65-10-01_01
	Condensate System	65-10-01_02
Plans\H.D.-11 Propulseur d'étrave Rolls-Royce 900TT		
	General arrangement Rolls-Royce 900TT	B8201913
	Propeller assembly Rolls-Royce 900TT	B8201926
	Tunnel Thruster Installation Rolls-Royce 900TT	B8201972
	Shipping instruction Rolls-Royce 900TT	B8201981
	Lower unit assembly Rolls-Royce 900TT	D8201921

CCGS MARTHA L BLACK

"DRAWINGS FOR DRY DOCKING SPECIFICATION"

SUMMER 2013

Adresse	<u>Description</u>	Drawing #
Plans\H.D.-17	PUITS DES TRANSDUCTEURS	
	DERIVE DES TRANSDUCTEURS	MB-97-14
	PUIT DES TRANSDUCTEURS	MB-97-13
	ECOUTILLE, HISSAGE, GLISSEMENT, VAPEUR	MB-98-03
	SYSTEME DE BLOCAGE	MB-98-04
Plans\H.D.-20	OVERBOARD DISCHARGE VALVES	
	Valve 1" installation	Photos
	Orion 10" Globe valve	Spec.
	Liste des soupapes corrigées	
Plans\H.D.-21	TRAVAUX DE DÉSAMANTAGE	
	WIRE LEAD ET DERRICK CONTROL	108-555-H-0014
	DERRICK CONTROL ROOM	108-555-H-0015_1
	WIRE LEADS COMPT.	108-555-H-0015_2
Plans\H.D.-22	GARNITURES MÉCANIQUE DES ARBRES PORTE HÉLICE	
	Type MD seal, Crane maneseal	H71756

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-1	DRYDOCKING AND NUMBERING	REMARKS
1.1	Reference: Docking plan, drawing No 108 H-0022	
1.2	<u>Ship's particulars:</u>	
	Length overall:	83.0 meters
	Length between beam:	16.2 meters
	Maximum draft:	6.1 meters
	Load displacement:	5006 metric tons
1.3	The shipyard will be responsible for mooring the ship to a wharf adjacent to the dry dock, including the installation and removal of two (2) gangways, supplied by the shipyard, regardless of the time the ship arrives or departs. A gangway is to be installed to the aft section of the ship and a second one on the opposite side, to the fore section once the ship in the dry dock only.	
1.4	The shipyard shall supply a tugboat assistance to dock and float the ship, regardless of the time the ship arrives or departs.	
1.5	The shipyard will supply labour, material and equipment required to dock, tow and float the ship, including lay days throughout the dry docking period, to perform the work described hereunder, in regards of obtaining the seaworthiness certificate renewal. The dry-dock will operate the ship's mooring winches for entries and departures of the vessel into and from the dry-dock. The CCG with supply no personnel for this work.	

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-1	DRYDOCKING AND NUMBERING	REMARKS
1.6	Keel blocks supporting the ship's hull and keel which are found to be in way of tank plugs, sea chests or sea suction grids are to be moved to give access to the above-mentioned openings. Care must be taken to avoid any blocks being set on the echo sounder transducers, located between frames 126 and 127 port side and starboard side and the "Doppler" sonar located at frame 162.	
1.7	Given to the fact that the shipyard will be in possession of the docking plan upon contract award, the shipyard will move any misplaced blocks at its own expense.	
1.8	Fisheries and Oceans Canada/Coast Guard (F&O/CG) could request that block(s) be moved for any other reason, the contractor will provide a unitary price per displacement in an addendum to this item.	
1.9	The shipyard shall supply the material and labour required to number the hull frames and bulkheads in order to facilitate inspection. The shipyard shall ensure that the frames remain numbered during the entire dry docking period until the ship is afloat.	
1.10	Frames shall be numbered at an interval of five (5) frames in compliance with the ship's construction drawings.	

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-1	DRYDOCKING AND NUMBERING	REMARKS
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(1.10 Continued)

An eight (8) hour sea trial will be scheduled and completed after floating the ship and upon completion of all specification items. Trials will be done at full speed during one full day of sea trials. Four (4) persons (plus a supervisor) are required for the sea trials. The shipyard shall provide linesmen.

NOTE 1: During dry docking, please consider the ships fore section hull over thickness of 12,5mm between frames 148 and 174. Blocks will have to be adjusted to meet this special feature.

NOTE 2: The shipyard will have to inform the inspection authority (Coast guard) to allow for an examination of blocking prior of the dry docking.

A sigh equipment will be installed by the shipyard so that the coast guard representative to allow for an examination of blocking. Moreover, one alignment report will have to be produced by the shipyard.

NOTE 3: The selected shipyard will have to provide a written document confirming the date and the hour of entry and the exit of the dry dock as well as the availability of the adjacent wharf to this one.

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-2	SERVICES	REMARKS
2.1	<p>The following services are to be supplied to the ship during the entire dry docking period, for which a global price is to be submitted. This price will cover the entire dry docking period. Item pricing for each service must also be submitted, allowing for the possibility that such services may be provided on an individual basis for shorter or longer periods. Certain services marked with an asterisk (*) are required throughout the dry docking period as well as at the contractor's wharf upon arrival and departure of the ship.</p>	
* 2.2	<p>Gangways</p> <p>Supply labor and services for installation and removal of two (2) gangways, handling of lines and ropes and installation of a safety net under fore and aft gangways throughout the entire dry docking period. Gangways are shipyard supplied.</p>	
* 2.3	<p>Telephone Lines</p> <p>(*) Supply two (2) telephone lines to the ship. One line will be connected to the ships existing system (existing system), and the other line will be connected to the chief engineer's office, supplied with an independent telephone. Supply a high speed internet connexion to the chief engineer's office.</p> <p>Supply two (2) offices, one for the CCG representative and one for the TPSGC representative. Each office will be supplied with one telephone line including the telephone, and one high speed internet connexion. Supply a printer with integrated fax, including 8-1/2" X 11" paper for the whole contract period. All phone and internet lines will be kept in service 24hr per day, assuring exterior communication at all times.</p>	

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-2	SERVICES	REMARKS
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* 2.4 Temporary Deck Covering

In order to protect the alleyways from dirt, supply and install a 1/16" thickness cardboard over the surfaces of the main, upper, boat, flight and navigation officers decks. The surface area to be covered is 2,500sq.ft.

Supply and install Masonite boards on all entries, stairways, chief engineer's office, the alleyway leading to the steering gear compartment, including the area around the steering gear itself. Installation is to be effectuated as soon as the ship enters dry dock, or before, if possible. Cardboard is to be replaced if damaged.

The installation shall be done as soon as the vessel enters the dry-dock or before if possible.

On completion of the refit, all protected coverings shall be removed ashore and disposed of. Any tape residue remaining shall be removed from decks and bulkheads

* 2.5 **Electrical Power**

- The Contractor shall be responsible for supplying 600 VAC, 3 Ph, 400 amp service electrical power for the duration of the Contract.
- The Contractor shall be responsible for supplying and connecting the necessary shore cable to the ships shore power connection. The Contractor shall be responsible for ensuring that the correct phasing is present prior to the electrical service starting.

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-2	SERVICES	REMARKS
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(*2.5 Continued)

- A Contractor supplied Kilowatt-hour meter, to be used for monitoring electrical power consumed, shall be connected to the ship's shore connection. Both the CCG Inspection Authority and the CCG Technical Authority shall witness the meter reading at the beginning of service and again at the end to determine total consumption during the contract period. The Contractor shall record these reading.

- For bidding purposes, the Contractor is to bid on supplying 50,000 kilowatt hours of electrical power for the duration of the refit as well as providing a unit price per kilowatt-hour. The final power consumption total shall be adjusted up or down by PWGSC 1379 action.

Note: This ship's cable is 150 feet long with a male plug at each end.

2.6 Supply material and labor to install the required fresh water supply connections for the following services, throughout the entire dry docking period. Disconnect upon completion of work. A flow meter must be installed in the supply line so as to measure ship's water consumption.

2.6.1 Fresh water supply; 70 psi.

2.6.2 Fire main connection; international connection.

* 2.6.3 Filling of fresh water tanks.

2.6.4 Cooling of air conditioning and refrigeration system

NOTE: Cost for fresh water must be included in the dry docking cost (Consumption is about 450 cubic meters per day)

2.7 Supply material and labour to temporarily connect drainage hoses to

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-2	SERVICES	REMARKS
	keep waste water away from ship's hull and drain these waters to dry dock drainage system. Disconnect upon completion of work.	
	2.7.1 <u>Empty compartment No. 6</u> Waste water system 3" Starboard F-20	
	2.7.2 <u>Boiler water tank vent</u> Tank vent 2 ½" Starboard F-13	
* 2.8	Garbage Removal A suitably sized garbage container (dumpster) shall be supplied on the ship's flight deck. Refuse shall be removed daily from the ship including week-ends and holidays. Ship's personnel shall comply with any recycling programs that the Contractor has in place, provided the appropriate containers are made available	
2.9	Cranage The Contractor shall quote on the general services of a crane, including an operator and a rigger, for the support of the vessel's day-to-day activities, i.e. the moving of stores from the vessel to the Contractor's facilities ashore while the vessel is in the dry-dock. The Contractor shall quote on providing this service for ten (10) hours over the duration of the contract plus an hourly rate for adjustment purposes.	
2.10	Scaffolding The Contractor shall supply the necessary labour and equipment to erect, as necessary, scaffolding and staging to facilitate the inspection of the ship's hull as necessary by Transport Canada Marine Safety Branch Surveyor and Ship's personnel. This will include but not be	

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-2	SERVICES	REMARKS
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(2.10 Continued)

limited to scaffolding and equipment to access propellers, rudder, thruster, and renewal of anodes. The scaffolding shall be removed when the work is complete at the Contractor's expense.

2.11 Compressed Air Supply

The Contractor shall quote on supplying compressed air at a daily rate through a reducing station set to deliver 150 psig, (36 CFM) of air at a constant pressure. This air supply shall be connected to the ship's service air system. The Contractor shall quote on a unit price for compressed air supply.

2.12 Clean Up

- Upon completion of this Contract, the Contractor shall be responsible for the removal of all garbage, debris and extraneous material generated from carrying out the work and for returning the vessel to at least the state of cleanliness in which it was first handed over to the Contractor for the conducting of the refit.

- Once all known work and final clean up has been completed, the Contractor's Quality Assurance Representative, the CCG Technical Authority and the CCG Inspection Authority shall perform a "walk through" of the vessel to view all areas where work was performed by the Contractor. Any deficiencies or damage noted shall be recorded and compared to the photos taken previously.

- The Contractor shall at his cost correct any and all deficiencies that are determined to be as a result of the contracted work.

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-2	SERVICES	REMARKS
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(2.12 Continued)

- Prior to the refloating of the vessel, all transducers shall be washed off with a mild liquid detergent-water solution to rid them of any contaminants and/or marine growth. After the transducers have been washed they are to be rinsed off with fresh water to ensure that no soap scum is left on the transducer faces.

2.13 Fire Watches

Contractor shall provide the necessary fire watches in all cases of welding, burning, or any other hot work. The Contractor shall supply all necessary fire extinguishers. Should any ship's extinguishers be used in an emergency, the Contractor shall immediately have them refilled. A fire watch shall be maintained by the Contractor up to 1/2 hour after all hot work is finished.

2.14 Vessel Security

- The Contractor shall be fully responsible for the security of the vessel whilst it is at his facilities and when attached to the adjacent work if work is being effectuated. As a result, the Contractor shall be responsible for providing and maintaining security to the vessel during the quiet hours during the course of this Contract. Security patrols will be required to travel throughout the vessel's interior and exterior at a minimum of every three (3) from 1900 hours to 0700 hours the following morning, Monday through to Fridays, and for the full 24 hours period on Saturday, Sunday and holidays.
- In the event of any hot work occurring during the day, surveillance must be increased to once hourly for at least three (3) hours after the beginning of quiet hours. In the event that the Contractor utilizes a second or third shift during the period of the

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-2	SERVICES	REMARKS
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(2.14 Continued)

Contract, the Contractor may commence security rounds at the end of the last shift.

- Contractor must provide a logbook, which shall be initialed by the security person upon completion of each round.

2.15 Inspection

The following inspections are required to be verified by the Contractor's Quality Assurance representative, the CCG Inspection Authority the CCG Technical Authority:

- Initial walk through of vessel to establish condition and cleanliness,
- Gangways are in place and in a safe and secure manner, safety netting installed, and adequate lighting installed,
- Installation of temporary flooring in the areas as noted in this specification,
- Witnessing kilowatt meter reading on commencement of power being supplied and again upon completion,
- Water service for fire fighting and potable water purposes is as per specification,
- Overboard discharges are supplied as per specification,
- Compressed air supply is being supplied as per the requirements of this specification,
- Garbage is being removed as per specification,
- Vessel security requirements are being maintained as specified,
- Transducer faces being cleaned and washed,
- Final walk through of vessel to determine status and cleanliness of all areas of work.

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-3	INSPECTION AND ADDITIONAL WORK	REMARKS
3.1	Work will be completed and inspected to the F&O/CG Technical Support Branch representative's entire satisfaction which, when non available, will be substituted by the ship's Chief Engineer.	
3.2	Upon completion of each specification item, F&O/CG representative will have to be notified so the work can be inspected, prior to final completion of the specification items.	
3.3	Failure to notify F&O/CG representative does not absolve the shipyard of the responsibility of providing the opportunity to inspect any completed item.	
3.4	Inspection of any item by F&O/CG representative does not substitute the inspections required by the Ship safety (SSB or those required by Public Works and Government Services Canada (PWGSC).	
3.5	The shipyard is also responsible for calling in with the ship's chief Engineer and the ship safety surveyors for the work required inspections.	
3.6	Any accidental breakage of ship's components, parts, tools and equipment during the present specified work that are caused by the shipyard will be replaced at the contractor's own expense, including labor for replacement.	

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-3	INSPECTION AND ADDITIONAL WORK	REMARKS
	<p>* 3.7 The shipyard will provide the ship's Chief engineer four (4) complete log copies and one (1) software copy of all measurements and readings taken during work described hereafter, including all additional work resulting from the hull inspection and its components. Concerning measurements, tolerances, plays and gaps must be calculated and wrote down in the measurement booklet when two parts normally assembled together are measured separately (ex :propeller shaft and stern tube bushing inner diameter)</p> <p>3.8 All the additional work that are not described in this dry docking specification and resulting from any inspection, will have to be negotiated by the PWGSC representative on a PWGSC 1379 form, and while being useful themselves of a written description. the description of work will be drafted by F&O/CG representative, in order to allow with PWGSC to obtain the presentation of a firm price quotation, this prior to beginning work concerned.</p> <p>3.9 The Government Of Canada has the right to cancel partly or entirely any item of this specification in the case where inspection isn't needed due to the ship's components good condition.</p>	

Note: The shipyard will have to respect the Canada Labour Code

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-5	HULL ABOVE WATERLINE	REMARKS
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<p>(3.9 Continued)</p>		
<p>The ship's hull has to be fresh water cleaned with a minimal pressure of 80psi before beginning sandblasting work. All painting shall be done by a painter certified in the use of these products.</p>		
<p>Throughout the entire sandblasting period, all ship openings and ventilation ducts are to be covered air-tight with polyethylene plastic wrap to prevent sand from entering accommodations and engine room compartments.</p>		
4.1	The entire coated hull area is to be completely recoated with Coast Guard red INTERNATIONAL (RAL-3000) INERTA 160 paint.	
4.2	The total underwater area is 1,900 m ² . The underwater areas from the keel up to the 7m load line including; rudder, ship's bow covering anchor pockets (a triangle leading to the aft upper edge of each pocket from frame 164 , rudder trunk and bossing are also included in the total surface area.	
4.3	Damaged surface area represents 30% of the total underwater. 570m ² of area, which will be damaged is to be sandblasted with a 80 microns minimum abrasive to obtain SA 2 ½ grade, according to the SIS 05 5900 Swedish standard. area. Contractor shall quote on a Unit Price for sandblasting /sq.m.	
4.4	The areas to be worked start at the 7m load line, specified in item 4.2, and ends at the 4m load line. This area covers the complete perimeter of the ship. Paint color is Coast Guard Red Inerta 160/Intershield 163.	

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-5	HULL ABOVE WATERLINE	REMARKS
		<p>Damaged areas only will be repaired such as specified to item 4.3. It will be necessary to paint a slightly larger area in order to match the new paint system to the existing one.</p> <p>Contractor will supply and apply one or two coats of red INERTA 160 on the surface area to be treated to obtain a final dry paint thickness on bare metal of 0.020". Avoid paint sags and runs.</p> <p>Contractor shall quote on a Unit Price for painting /sq.m.</p>
4.5		<p>The areas to be worked start at the 4m load line and end at the keel, specified in item 4.2. This area covers the complete perimeter of the ship. Paint color is Coast Guard Black Inerta 160 Intershield 163.</p> <p>Damaged areas only will be repaired such as specified to item 4.3. It will be necessary to paint a slightly larger area in order to match the new paint system to the existing one.</p> <p>Contractor will supply and apply one or two coats of black INERTA 160 on the surface area to be treated to obtain a final dry paint thickness on bare metal of 0.020". Avoid paint sags and runs</p> <p>Contractor shall quote on a Unit Price for painting /sq.m.</p>
4.6		<p>Provide a drawing which shows each block position in relation to their respective frame. This drawing will be used as a reference for the next dry docking, to position the blocks in order to paint the area actually covered by the blocks.</p>
4.7		<p>All drain plugs under fuel tanks, water tanks, bilges and cofferdams will be protected during paint work and left open before ship is undocked. Echo sounder transducers are to be protected and left open. Also protect bow thrusters openings and the Loch plate at frame 162.</p>

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-5	HULL ABOVE WATERLINE	REMARKS
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Upon completion of work, verify, tighten and ensure water tightness of all drain plugs under the hull using the vacuum box method.

4.8 All necessary precautions are to be taken to minimize the steel oxidation after sandblasting, by applying the INERTA 160 paint as soon as possible. Sweep surfaces with compressed air prior to apply paint.

4.9 The shipyard will define the steel plating area that can be prepared within the time period that the personnel can work non-stop.

4.10 The shipyard must supply and install a temporary shelter covering the ship's hull entire area that is to be painted. This shelter is to be ventilated and heated. No combustion gasses exhausted from the heaters are allowed in the shelter. The shelter must be dismantled only after the paint work is completed, and only after the recommended drying time is reached.

Contractor shall quote on a Unit Price for a ventilated and heated shelter.

NOTE 1: It is the contractor's responsibility to clean, gather and dispose of all product of sandblasting.

NOTE 2: The INERTA 160 paint will be applied according to the AKZO NOBEL (INTERNATIONAL PAINT) instructions.

The special AKZO NOBEL expert technician will be in charge of issuing notices and assuring that required conditions are respected. The AKZO NOBEL technician is to be present during all painting and sanding work.

The AKZO NOBEL technician service costs will be included in

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ITEM H.D.-5	HULL ABOVE WATERLINE	REMARKS
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the shipyard's quotation.

NOTE 3: Magnetic particle inspections will be required by S.S. for the shelter anchoring points that were welded to the hull.

NOTE 4: The application of these products shall be done with new hoses, having a minimum diameter of 3/8" inches ID.

4.11 Rudder - In the sandblasting process, completely clean the rudder's welding plugs. Supply material to fill these welding plugs with the following product: Speed Crete blue line 3700-132, made by WR Meadown of Canada ltd . This product is available in Montreal Quebec, phone (514) 731-6119. This product must be applied before INERTA coating on the hull and rudder. Approximately 50 welding plugs (2" x 6" x 1.5") must be filled.

4.12 All hull openings where sand may infiltrate must be protected before starting the sandblasting process. These protections are to be maintained, and if necessary replaced, so as to ensure the prevention of sand infiltration. Example of openings: sea overboard discharges, anodes, thrust bearing block, rudder trunk, stern tubes, propellers, and bow thruster.

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HULL ABOVE WATERLINE

REMARKS

NOTE: Refer to the following cross-reference grid if the chosen paint brand is AMERON or INTERNATIONAL:

Équivalencias AMERON / INTERNATIONAL	
INTERNATIONAL	AMERON
Intergard 264	Amercoat 235
Interbond 501	Amercoat 235
Interthane 990	Amercoat 450H
Inerta 160 20 mils dry Intershield 163 20 mils dry	

- 5.1 Ship's hull starting from the 6m load line to level of bulwarks includes the top of the bulwarks and the accommodation ladder locations.
- 5.2 The total surface area of this part is 953 m². This surface area will be sandblasting to obtain the commercial grade. Attention should be given to the sort of sand, pressure and distance from the hull when sandblasting, as the Inerta 160 may flake. It is contractor's responsibility to clean, gather and dispose of all sand used for sandblasting. Approximately 15% of surface area damaged must be sandblasting to obtain commercial grade. The remaining surface area must be cleaned with high pressure water jet 5000 (P.S.I)
- 5.3 Surfaces are to be swept with compressed air before applying the paint. The contractor will supply and apply one (1) INTERGARD 264 red base coat of 0.005" to 0.006" thick dry on bare metal surfaces, and two (2) coats of INTERTHANE 990 Coast Guard red over the entire surface area. Each coat is to be 0.0015" thick dry. (International Paint code: RAL-3000).

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ITEM H.D.-5	HULL ABOVE WATERLINE	REMARKS
	<ul style="list-style-type: none">• Chocks will be painted with two coats of black paint.	
5.4	Before paintwork, the contractor will plug deck drains with drilled wood plugs that are fitted with a pipe section, so the evacuated water won't make contact with the hull. These plugs must be maintained watertight for the whole length of the work.	
5.5	All portholes and windows on the upper deck are to be masked and protected during sandblasting and painting. Unmask upon completion of work.	
5.6	Throughout the entire sandblasting period, all ship openings and ventilation ducts are to be covered air-tight with polyethylene plastic wrap to prevent sand from entering accommodations and engine room compartments.	
	<p>These openings must be examined and accepted by the CCG representative before commencing sanding operations.</p> <p>All equipment such as ladders, winches, davits, cranes, pulleys, etc. located on main deck, forecastle, boat and flight deck will be covered and protected the same way. All protections will be removed after the sandblasting and paintwork. Unmask upon completion of work. (The accommodation ladders must be removed and reinstalled after the paint system application).</p>	
5.7	Red INTERTHANE 990 is to be applied on top of the hull coating (Inerta 160) no longer than eight (8) hours after the hull coating will have been applied on the hull in order to obtain adequate adhesion.	

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ITEM H.D.-5

HULL ABOVE WATERLINE

REMARKS

The contractor is responsible of any sandblasting product entry in any of the ship's compartment/equipment and will assume any breakdown related to the lack of protection of the mentioned compartments/equipments in article 5.6.

Note: Refer to the cross-reference grid at the end of Item H.D.-4 for paint brand equivalencies.

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ITEM H.D.-6	MARKING FREEBOARD DRAFT AND SIGNAGE	REMARKS
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Reference: Dessin # 07352-SF Symbolisation fédérale

- 6.1 The freeboard discs, letters, load line and draft marks, fore and aft, port and starboard, are to be painted with two (2) coats of RAL 9003 white paint, compatible with the ship's hull paint. There are two (2) sets of draft marks on each side of the ships bow and on each side of the stern.

- 6.2 All signage must also be repainted with two (2) coats of RAL 9003 white paint, including the ship's name on sides, bow and stern as well as the port of registration. On both sides, the diagonal white stripes and the demarking RAL 9004 black stripes, the "Garde Côtière" and "Coast Guard", "Canada" inscriptions on either side of the forecastle and the Canada official flag symbol and "Danger" with the symbols for "propellers" and "bow thruster".

- 6.3 The contractor will supply RAL 9003 white paint for all signage
And RAL 9004 black paint for all black stripes.

NOTE: Free board discs must be examined by the Ship safety and remade by welding. Mark the annotation "C" and "M" of each side of the freeboard disc. Paint the new marks of paint system specified to Item 6.3.

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ITEM H.D.-7	EXTERNAL AND INTERNAL SEA CHESTS	REMARKS
7.1	Reference: Drawing No. 71-20-01-02 Sea bay & sea chest arrangement	
		All work mentioned in the present item will be carried out according to the actual regulations and procedure for enclosed space works. The manhole covers and access grids to the external and internal sea chests are to be opened. The strainer between internal and external port and starboard must be opened.
7.2	Internal surfaces of these compartments are to be cleaned using a 3500psi high pressure water jet in order to remove all loose paint. Waste mud of a total of 10 tons is to be evacuated (adjustable by means of 1379) , and compartments are to be dried after completion of cleaning process. Compartments are to be inspected in the presence of the CCG Ship Safety surveyor. Following inspection, apply two (2) coats of Epoxy (INTERTUF JX A110/106) paint in the strainer casings between sea bay and sea chest and two (2) coats of INTERGUARD FP paint in the evaporator external sea chest. The remaining sea chests do not require painting.	
		Use a scrapper to remove peeling paint in the pipe tunnel and apply a rust converter (Conquest or equivalent) to all exposed metal, 25% of the total surface.
7.3	The sea chest manhole covers are to be closed up with new gaskets, galvanized steel, bolts, studs and nuts, supplied by the shipyard.	

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ITEM H.D.-7 EXTERNAL AND INTERNAL SEA CHESTS REMARKS

(7.3 Continued)

Replace the cover of the internal sea box, including the studs.

7.4 The external sea chest access grids are to be closed up with new stainless steel bolts and secured by tack welding. The number of new bolts required is 120, 16mm dia. X 100 mm long.

7.5 LIST OF EXTERNAL AND INTERNAL SEA CHESTS

Propulsion motor room

<u>Description</u>	<u>Side</u>	<u>Frames</u>
External sea chest, Submersible pump	Port	51-53
External sea chest stern tube pump	C	37-39

<u>Generator room</u>		
External, lower sea chest	Port	96-106
External, lower sea chest	Stbd	96-106
External, upper sea chest	Port	96-106
External, upper sea chest	Stbd	96-106
External sea chest, evaporator	Stbd	102-106
Internal sea chest	C	96-102

IMPORTANCE NOTICE: The Crown will not provide the surface areas relative to Item H.D.-7, H.D.-9 and H.D.-10. These surfaces shall be deducted from the drawings. 100% of these surfaces shall be considered in the bid expected if it's specified.

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ITEM H.D.-8	ULTRASONIC THICKNESS TESTS SEA WATER PIPING	REMARKS
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Réf:	Drawings:	Arrg't of air & Sounding pipes	# 67-30-02
		Arrg't Seabay & Seachests	# 71-20-01
		Pipe module No. 1 (A) zone 11,	# 77-10-01
		Pipe module No. 13	# 77-70-01
		Pipe module No. 14	# 77-75-01

- 8.1 Provide the services of a specialized firm and certified by the Ship safety to carry out the ultrasonic testing thickness of the sea water piping as enumerated on the list in addendum which supplied by the CCG representative.
- 8.2 Referring to the drawings listed it will be required to take thickness readings, specified for each pipe and indicate on each drawing the exact location of the thickness measurements. Contractor or shipyard will supply a detailed report of 8 copies showing the original thickness, the percentage of wear down, the thickness taken, etc, according to the guidance drawing which provided by the CCG. Fifty (50) additional thickness readings will be available to use by the CCG representative.
- 8.3 During ultrasonic thickness gauging, surfaces will have to be ground to bare metal to obtain a uniform contact surface. All the ultrasonic thickness measurements will be made in presence and to the satisfaction of the concerned authorities. Upon completion of work each surface which will have been ground will have to be covered with the ship's paint system.

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ITEM H.D.-8	ULTRASONIC THICKNESS TESTS SEA WATER PIPING	REMARKS
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8.4 All material displaced to gain access to the ship's internal compartments and to allow the thickness measurements such as compartment cover, ceiling tile, interior wall panels, floor plate, metal grids and insulation etc, will have to be reinstalled upon completion of work.

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ITEM H.D.-9	BALLAST WATER TANKS AND VOID SPACE	REMARKS
9.1	Remove drain plugs to empty tanks as soon as the ship will be seated on the keel blocks.	
9.2	Open all manhole covers on tanks and empty compartments and to ventilate adequately. An atmosphere salubrity certificate is to be obtained prior to the start of any work.	
9.3	Clean with a high pressure water jet (10000 to 15000 PSI). Clean and remove all debris ashore. Dry tank.	
9.4	The internal structure of these tanks and empty compartments are to be inspected in the presence of a ship safety surveyor.	
9.4.1	40% of each ballast and void tank must be prepared with mechanical tools before applying the paint system. Perimeter of surface area on bar metal must be prepared with mechanical tools to install and to mix the new paint system with the existing paint system staying after preparation. Apply one (1) first coat of Amercoat product "Amercoat sealer of .0015" inch. thick on bare metal in ballast tanks. Apply one (1) coat of paint (Amercoat 240 from Amercoat Canada, Quebec office Tél.: 418-849-3334) of .012" inch thick in the ballast tanks on damaged surface areas. Apply one (1) coat of paint Amercoat sealer, 0.0015" on bare metal surfaces in void spaces. Apply one (1) coat of paint Amercoat 240 in void space compartments of .0012" inch per coat on damage areas identified.	
NOTE:	<u>No substitute will be accepted.</u>	
9.4.2	The voids space are to be adequately ventilated prior to inspection.	
9.5	Close the manhole covers with the new gaskets, nuts and bolts.	

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ITEM H.D.-9	BALLAST WATER TANKS AND VOID SPACE	REMARKS
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- 9.6 Tanks are to be subjected to a hydrostatic test in the presence of the Ship Safety surveyor with this intention, vents are to be plugged with plugs on the inside of the tanks. Reinstall the drain plugs.
- 9.7 Upon completion of hydrostatic test, remove the drain plugs and drain the tanks. Remove the vent plugs. Reinstall the drain plugs.

NOTE:A vacuum test is to be effectuated in order to prove the water tightness of the drain plugs in the presence of the CCG representative.

List of tanks involved

<u>Tanks</u>	<u>Location</u>	<u>Capacity</u>	<u>Surface area to be prepared</u>
No 2 Port D.F.	F 126-152	49.9 m ³	50%
No 2 D.F. starboard	F 126-152	49.9 m ³	50%
*FWD. Starboard Wing	F 163-175	43.4 m ³	50%
*FWD. Port Wing	F 163-175	43.4 m ³	50%
*Port Wing	F 152-163	51.4 m ³	50%
*Starboard Wing	F 152-163	51.4 m ³	50%
No 3 D.F. port	F 54-70	43.5 m ³ (oily waters)	50%
No 4 D.F. starboard	F 54-70	43.4 m ³	50%
*Fore peak	175-front F	85.5 m ³	50%
After peak	F 1-13	112. m ³	50%

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ITEM H.D.-9

**BALLAST WATER TANKS
AND VOID SPACE**

REMARKS

(9.7 Continued)

List of empty compartments (Void space)

<u>Compartment</u>	<u>Location</u>	<u>Surface area to be prepared</u>
Empty lateral compartment No. 1.	Port F 117-126	20%
" No. 1	Starboard, F 117-126	20%
" No. 2	Port F 106-117	20%
" No. 2	Starboard F 106-117	20%
" Double bottom	Port F 102-206	20%
" Double bottom	Starboard F 102-106	20%
Empty lateral compartment No. 3	Port F 54-70	20%
" No. 3	Starboard F 54-70	20%
" No. 4	Port F 30-54	20%
" No. 4	Starboard F 30-54	20%
" No. 5	Port F 13-30	20%
" No. 5	Starboard F 13-30	20%
" aft	F11-13	20%
Cofferdam, helicopter fuel tank	F5-13	20%
Port echo sounder compartment	F126-130	100%
Starboard echo sounder compartment	F126-130	100%
Fore center piping tunnel	F102-163	25%
Aft center piping tunnel	F51-94	25%
Port lateral empty compartment double bottom	F53-54	20%
Starboard cofferdam for centerboard trunk transducer	F123-126	25%

9.8 Reference drawing # 65-10-01_01

Reference drawing # 65-10-01_02

Remove and discard of all steam heating coils around the suction piping and their piping inside the tanks marked with an asterisk (*) at the item H.D.-9.7

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ITEM H.D.-9	BALLAST WATER TANKS AND VOID SPACE	REMARKS
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(9.8 Continued)

Supply material and install inserts plates to replace the bulkhead pipe transits for the steam and condensate to the satisfaction of the Marine Safety surveyor.

Remove and discard of all coils support brackets inside the tanks, grind surfaces. These coils been damaged, the contractor will have to take necessary arrangements to drain the fuel they contain and clean the tanks after the work is completed.

Each coil include 50' feet of 13mm-25mm ID SCH 80 Grade A Black steel.

Contractor will have to dismantle necessary equipment for access to work and inspection, reinstall after.

Proceed to hydrostatic tests as specified to item H.D.-9.6

Note: Forward Peak tank, steam heating coil is to be hydrostatically tested to determine it water tightness. After which the CCG representative will decide whether the coil shall be replaced or repaired.

9.9 Reference drawing # 60-90-23 Vents and soundings

The sounding pipes for the potable water tanks (port and starboard) are to be replaced using specifications available in reference drawing.

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ITEM H.D.-10

FUEL TANKS

REMARKS

- 10.1 The oily water and diesel fuel oil tanks, are to be drained, swept with steam and ventilated for a long enough period to ensure that tanks are free of dangerous and explosive gases.

Once manhole covers have been removed, a certificate is to be obtained from a chemist who will inspect the tanks and certify that the tanks are gas free; a copy of the certificates are to be posted in a visible location and another copy for each tank is to be given to the Chief Engineer.

- 10.2 Remove drain plugs and drain tanks of fuel, water and mud that is to be transferred into a container and removal ashore by the shipyard. the quantity of remaining fuel after having pumped the tanks is approximately of 12 tons. These tanks are to be cleaned of all deposits before inspection by a Ship Safety surveyor. After which these tanks will be closed with new gaskets, bolts, nuts, and washers and subjected to a hydrostatic test to the satisfaction of the Ship Safety surveyor. These tanks will then be drained, dried of all water and left empty.

The contractor is to use a portable pump to complete the drying process of all tanks, except for the double bottoms.

The gaskets for the fuel and oil tanks will have to be made in "Nitril".

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ITEM H.D.-10

FUEL TANKS

REMARKS

10.3 List of tank

<u>Tanks</u>	<u>Location</u>	<u>Capacity</u>
* Fuel tank No 1 port	F 163-175	55.4 m ³
* Fuel tank No 2 starboard	F 163-175	55.4 m ³
* Fuel tank No 3 port	F 152-163	117.7 m ³
* Fuel tank No 4 starboard	F 152-163	111.7 m ³
* Fuel tank No 5 port	F 106-121	118.6 m ³
* Fuel tank No 6 starboard	F 106-121	118.6 m ³
* Double bottom No 7 port	F 106-126	51.8 m ³
* Double bottom No 8 starboard	F 110-126	41.5 m ³
* Double bottom No 9 port	F 70-96	79.7 m ³
* Double bottom No 10	F 70-96	79.7 m ³
* Overflow tank	F 106-110	8.5 m ³
Fuel drain tank	F 94-96	1.9 m ³
Oily water tank	F 55-64	1.6 m ³
Port used oil tank	F 30-37	6.5 m ³
Starboard oily water tank	F 30-37	6.5 m ³
Helicopter fuel tank	F 5-11	22.8 m ³
* lower Flume tank	M117-126	116.3 m ³
* Upper Flume tank	M117-126	118.3 m ³
Renovated oil tank	F54-57	13.8 m ³
Day tank	F64-70	27.8 m ³
Settling tank	F57-64	32.5 m ³
Emergency generator tank	F 67-69	1.9 m ³

NOTE 1: Overflow pipes are to be plugged with plugs during hydrostatic tests and upon completion of tests to remove the plugs.

NOTE 2: The contractor will have to prove the water tightness of the drain plugs after the hydrostatic tests.

NOTE 3: Close valves in order to isolate level indicators and using plugs prior to hydrostatic tests in order not to damage the pressure transducer bellows.

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ITEM H.D.-10	FUEL TANKS	REMARKS
10.4	Reference drawing # 65-10-01_01 Reference drawing # 65-10-01_02	<p>Remove and discard of all steam heating coils around the suction piping and their piping inside the tanks marked with an asterisk (*) at the item H.D.-10.3</p> <p>Supply material and install inserts plates to replace the bulkhead pipe transits for the steam and condensate to the satisfaction of the Marine Safety surveyor.</p> <p>Remove and discard of all coils support brackets inside the tanks, grind surfaces. These coils been damaged, the contractor will have to take necessary arrangements to drain the fuel they contain and clean the tanks after the work is completed.</p> <p>Each coil includes 50' feet of 13mm ID SCH 80 Grade A Black steel.</p> <p>Contractor will have to dismantle necessary equipment for access to work and inspection, reinstall after.</p> <p>Proceed to hydrostatic tests as specified to item H.D.-10.2</p> <p>NOTE: There are four (4) coils in the tank lower stabilization.</p> <p>Obtain the certificates needed a chemist to perform hot work in these reservoirs.</p>

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ITEM H.D.-11	OIL CHANGING AND VERIFICATION OF BOW THRUSTER	REMARKS
11.1	Reference drawing # D8101810-a fig. 5.1, Model 900 TT. Reference drawing: # D8201921 Lower unit assembly.	
11.2	The bow thruster grids on ship's hull housing side of the bow thruster must be removed on (Propeller side).	
11.3	Take off the cap and the propeller of the bow thruster.	
11.4	Isolate the oil header tank bow thruster supply valve. Remove the drain plug under the bow thrusters' foot and drain the oil After having installed a drain pipe screwed in the bow thrusters' drain plug threaded hole, open the valve (17.2) and drain the header tank completely approximately 240 litres. Dispose of the used oil. (Keep an oil sample for analysis).	
11.5	Clean the header tank and install the inspection door with new gasket.	
11.6	Supply and fill up bow thrusters' header tank using Esso Spartan EP 100 (approx 260 litres) oil. Make sure the system is purged (Allow two -2- days for fill up and air purge).	
11.7	Measure clearance between propeller blades and tunnel thruster and include the measurements in the logbook.	
11.8	Supply and install on each support in a transversal way, one (1) zinc anode of 15 pound (2 in all).	

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ITEM H.D.-11	OIL CHANGING AND VERIFICATION OF BOW THRUSTER	REMARKS
11.9	Include in the quotation to weld fifty (50) linear feet of stainless steel welding seams multiplied by 3 passes on tunnel thrusters (total 150' feet). Quantity of linear seam will be adjusted higher or lower by process of 1379 form.	
11.10	Lubricate the shaft seals: Four ¼” bolts and seals (2 bolt holes for filling and 2 bolt holes that act as vents). Use LUBRIPLATE 630AA or equivalent (lithium based grease with mineral oil) to be supplied by the shipyard.	
11.11	Anticipate to repaint the tunnel, the leg, the supports with the same paint system as the hull. (Protect the tailshaft and the stainless steel doubling plates) during steps of paint applying.	
NOTE:	Bow thruster body and tunnel must have the same painting treatment as the underwater part of ship. (See Item H.D.-4)	
11.12	Reinstall the propeller and the propeller cone in the presence of the Coast Guard representative. Fill the propeller cone with vegetable grease. Shaft seals of propeller must be greased with Lubriplate 630AA or equivalent grease. Take propeller backlash and the working play of propeller in tunnel housing.	
11.13	Reinstall the protection grid on the tunnel and paint with the same painting system of the Hull.	

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ITEM H.D.-12	PROPELLERS	REMARKS
12.1	The propellers will be removed for the inspection and to effectuate repairs, if necessary.	
12.2	Rope guards are to be removed to measure and record port and starboard tailshaft wear down as well as run out. Readings are to be measured with instruments provided by and in the presence of the Chief Engineer, recorded and given to the Ship Safety surveyor. Measure the run out of each shaft in place. Replace the corrosion rings (anodes) on each stern tube.	
12.3	Once the cement has been removed, unscrew and remove both propeller cones and, lower to the dry dock bottom. Remove the square locking rods welded between the sixteen (16) holding down nuts and studs. Then unscrew the sixteen (16) nuts.	
12.4	Dismantle and remove "PILGRIM" nuts locking plates. Slacken off propeller shaft nuts and taking care to turn them around so that the moving internal part of the nuts is towards outside and not towards the propeller hub. Remove rings and rubber seal of the internal face (stern tube and propeller hub side).	
12.5	Eight special studs will then be installed on the propeller hub (supplied by the ship) in the propeller hub. A 6" thick by 4 in diameter plate will be slid onto the studs and hardened up against the PILGRIM nut and the tailshaft by 8 nuts.	

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ITEM H.D.-12

PROPELLERS

REMARKS

(12.5 Continued)

The eight (8) nuts will hold the special steel plate against the PILGRIM nut and once pressure is applied with the ship supplied hydraulic pump, the propeller will drop from the tapered end of the tailshaft.

During propeller withdrawal, hydraulic pump ship supplied, chain blocks are to be rigged to support the weight of propeller.

12.6 The propellers are then to be withdrawn from the tapered end of the tailshafts. If the propellers are damaged and after having obtained an evaluation by an expert, propellers are to be loaded on a truck and shipped to the expert. The price for propeller repair work will be on a PWGSC 1379 form as per expert's invoice.

12.7 Upon reception of the propellers, they are to be adjusted and reinstalled.

The contractor will include in known work the performance of six (6) propeller fits using Prussian blue on each propeller, for a total of twelve (12). Propeller fits will be effectuated in place.

12.8 Finally, the propellers will be reinstalled with new shipyard supplied rubber O rings on the internal groove of the propeller hub. The propellers will be tightened on the shaft taper using the "PILGRIM" nuts and of the hydraulic pump.

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ITEM H.D.-12	PROPELLERS	REMARKS
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<p>(12.8 Continued)</p> <p>Once the propellers are in place, nuts are tightened and locked, to drill new holes for the locking devices. After they have been cleaned, refit propeller cones and refill them with " Tallow ". To tighten all the sixteen (16) nuts on each cone, port and starboard is thirty-two (32) on the whole. Lock the nuts by welding a " U " stainless steel rod over 1/4" section..</p> <p>Fill the sixteen (16) bolt holes on each cone, port and starboard with high density cement in order to protect the nuts and studs.</p>		
12.9	Supply material, steel 5/8' ' thick steel plate, fabricate, shape then weld in place of new rope guards. Continuous weld the steel plates over their overall circumference as well as the joints between their half-sections.	
	Prior to welding them in place, the plates are to be sandblasted to grade SA 2½ and then painted on the both sides with the same paint that coats the ship's hull.	
NOTE 1:	All tools and special equipment are to be returned to the ship. The Chief Engineer or his representative must be present during removal and reinstallation of propellers. Once that the propeller will be removed, the "PILGRIM" nut will be reinstalled on the tailshaft.	
NOTE 2:	If the propellers are not damaged and no work is required by the Ship safety or the Coast Guard, this item could be cancelled completely or partly.	
	In the event of repair, the propeller or the propellers will be sent as soon as possible at the repairer to respect the times of exit of dry dock.	

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ITEM H.D.-13

HULL REPAIR

REMARKS

13.1 Reference "shell expansion Drawing", # 108-H-0001

The following plates will have to be replaced:

Plate	Location	Dimentional
Strake No 2	Port F97-116	8' x 25' 8"
Strake No. 3	Port F106.5-116.5	7' 7" x 13' 2"
Strake No. 4	Port F69.5 - 95.5	4' 5" x 34'
Strake No 4	Starboard M 94 - 86	tôle complete
Strake No 2	Starboard M 106-118	tôle complete

In the forward bulb of the bow thruster between M170 - M175; port side, top of bulb replace metal section 4 'x 5'; starboard, top of bulb to replace metal section 4 'x 5'; section of metal plating to replace on lower section of bulb starting from the keel section 4'x 5'.

Recharge the welds of all digit indications on the hull of the vessel port and starboard at following frames:(13, 30, 54, 70, 96, 106, 117, 126).

Steel used will have to be of grade "E" or equivalent approved by the Ship Safety .Certificates will have to be given to the SSB and a copy to the Coast Guard representative. All the plates of 12 mm indicated on the drawing will have to be replaced by plates of 15 mm.

Contractor shall quote on a Unit Price/Pound for plate renewal.

13.2 Prior cutting the plates it will have to be made sure that all the safety measures are in place. To have free gas certificates in the various tanks, hot work authorization permits, to follow the regulation of the various government agencies: provincial, federal and municipal.

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ITEM H.D.-13	HULL REPAIR	REMARKS
13.3	All the welders effectuating work will have to be certified by the Canadian Welding Bureau. (Certified ACNOR W47.1, all positions)	
13.4	The Coast Guard estimates that the frames, stiffeners, floors, etc which will have to be replaced at the time of the plates replacement, represent 30% (in weight) of all plates to be replaced. Contractor shall quote on a Unit Price/ Pound for internal renewal.	
13.5	Cut the plates, replace damaged frames and stiffeners by using the suitable methods. Grind, shape new plates and weld those to all the good engineering practices. The welding, full penetration will have to produce an excess that will be ground to obtain a rounded and smooth of ¼ of inch which will merge with the other welding of the hull.	
13.6	The shipyard will have to show that these welds are watertight. It will have to make an hose test for the parts which are not in the tanks and a hydrostatic test to verify the welds in the tank, cofferdams and other void spaces. A Ship Safety surveyor will have to be present.	
13.7	Apply on new plates the same paint system as used on the hull plating.	
	After having prepared surfaces and having mechanically cleaned, for plates being located inside of a ballast tank and the void space, apply one (1) coat of "Amercoat 240" paint a thickness of .012"inch per coat for the void space compartment and one (1) coat of "Amercoat 240" of .012" inch thick such as specified in Item H.D.9 for the ballast tank.	
	For the welds being located inside the fuel tank, apply a mineral oil coat using a rag on the bare metal.	

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ITEM H.D.-13

HULL REPAIR

REMARKS

13.8 The shipyard is responsible for the displacement of the keel blocks during work of cutting and of welding and the Coast guard will not assume any expenses for its displacements.

All the removed material will be discarded and will have to be disposed by the shipyard.

It will be necessary to take and present to the Ship Safety surveyor ten (10) X ray of welding joint. Provide for these examinations a price in addenda with the contract.

NOTE 1: Shipyard must be respected the "Shell expansion drawing proposed" and will use the right steel plate and use the goods practices to form the plate. Shipyard must supplied a modified "Shell expansion" at the beginning of work after inspection by TCMS.

NOTE 2: In the process of steel plate installing, shipyard must estimate that 25% of plates perimeter to change must be adjusted perfectly with the new steel plates in respect with hull underwater lines.

NOTE 3: It is recommended that bidders who intend to submit a bid attend or send representative, to evaluate that the interior access of the work are specified and to supply the correct costs to execute the works.

NOTE 4: After internal inspection by TC expert of compartments and tanks involved, the surface area can be increased or decreased and all works will be adjusted by the process of PW & GSC 1379 form.

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ITEM H.D.-14	ANCHORS AND CHAINS	REMARKS
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14.1 Anchors and chains shall be lowered to dry dock bottom for inspection by Ship Safety surveyor. Wire brush or sandblast chains. Take ten (10) measurements per shot of chains and record to measurement log.

Two (2) lengths of chain will have to be disconnected from the "bitter ends" and reconnected at the other end of chains, to anchors.

Supply and apply two coats of "Interlac 665" anti-corrosive paint to chains, black in color.

14.2 Remark, with white paint, the first links corresponding to the number of shots from anchor on both sides of connecting link, also remark with stainless steel wire the last white link as previously described. Paint the detachable link with red paint.

14.3 Clean the anchors with the light sandblasting and apply two (2) coats of "Alkide" semi-gloss black paint.

NOTE 1: Length of anchor chains: port - 8 shots
starboard - 9 shots

NOTE 2: Touch-up the paint after the anchors and chains which reassembled to their initial position (anchors, hull, hawse hole).

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ITEM H.D.-15

CHAIN LOCKER

REMARKS

- 15.1 As anchor chains will have been removed from chain lockers, lift out perforated grid plates on bottom of chain lockers. They will be repositioned upon completion of work. The grids will have to be cleaned and repainted.
- 15.2 Chain lockers will have to be completely cleaned, scraped and to be wire brushed with the steel brush. All dirt and refuse to be removed from the vessel. Chain locker drains and drain pipes are to be cleaned and proved in good working order. Supply and apply two (2) coats of white epoxy paint to the internal surfaces of the chain lockers. Each coat is to be .005 "thick" (Intergard FP WHITE D52 264).
- 15.3 Bidder shall bid to remove, transport and dispose of two (2) cubic meters of mud and dirt. The successful bidder shall have the mud analyzed at his own cost. If the contaminants are presents the mud and dirt shall then disposed of in accordance with applicable rules. The cost to dispose of these contaminated mud shall then be at the expense of the Crown and will treated through 1379 form.

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ITEM H.D.-16	PLATING WELDED SEAMS	REMARKS
16.1	On both sides of the ship's hull, approximately 500 linear feet of welded seams are to be redone. Gauge and reweld. An average of twelve weld passes are required. Welding should produce an excess weld that will be ground to obtain a rounded and smooth of ¼ "of inch. (Total of 12 X 500 = 6,000 feet)	
16.2	The contractor is to remove remaining paint on the welded seams and then sandblast to grade SA 2½ prior to undertaking welding work. The seams to be redone will be determined subject to inspection of the plating by the ship safety surveyor and the Fisheries and oceans/coast guard representative.	
16.3	Reload by welding the damage on anchor pocket. Estimate hundred (100) linear feet to reload for both sides. Grind after work to obtain a smooth surface.	
16.4	Remove two (2) lugs for chain block welded on hull in way of propellers.	
16.5	Paint the new welding joints with the same paint system as the hull.	
NOTE: This item may be canceled in part or in its entirety if in the expert's opinion the welded seams are acceptable in their current state.		

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ITEM H.D.-17	CLEANING AND PAINTING OF TRANSDUCER TRUNKS	REMARKS
17.1	Once the paint system has been applied to the ship's hull, remove the transducer trunks according to the procedure established by the ship. The contractor is to seize the centerboard using a crane sling. In coordination with the ship's crew, withdraw the centerboard from the trunk and place it on the ship's fore deck.	
17.2	Using a high pressure water jet (minimum 5,000 psi) clean all internal surfaces of trunks. As well as all the internal and external surfaces of the scientific derive.	
17.3	On all bare metal surfaces, approximately 30%, the contractor is to remove all traces of oxidation using mechanical tools or sandblasting before applying the following paint system: <ul style="list-style-type: none">- supply and apply two (2) coats of INTERSHIELD 300 paint from International Paint. Each coat is to be 0.006" thick;- supply and apply one (1) coat of anti-fouling INTERSPEED BRA 640 paint from International Paint over the entire internal trunk surface. Coat is to be 0.005" thick.	
17.4	The contractor is to dis-assemble the ant-friction system for both the truck and centerboard, and completely replace the system according to manufacturer's specifications.	
17.5	The transducer trunks are to be cleaned and free of any traces of abrasive or other material prior to applying paint system.	
17.6	Remove protection from anti-friction system and reinstall centerboard in its storage position according to the procedure established by the ship.	

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ITEM H.D.-18	ULTRASONIC THICKNESS TESTS (FOR FRAMING IN BALLAST TK)	REMARKS
Ref.:	"Drawing number: H-0002 - Framing expansion The Government Of Canada has the right to cancel partly or entirely any item of this specification in the case where inspection isn't needed due to the ship's components good condition.	
18.1	Provide the services of a specialized firm and certified by the ship safety for carried out an ultrasonic thickness survey of framing in ballast tanks listed to Item H.D.-9. One (1) ultrasonic thickness test is to be taken for each of the positions identified in the reservoirs on the drawings supplied by F & O/CCG.	
18.2	Referring to the guidance drawing, inscribe each thickness gauging recorded on these drawings. Provision must be made for (100) additional readings will be anticipated to verify the plates thickness and stiffener at locations identified on site by the F & O/CCG representative within the ballast tank.	
18.3	At locations selected for the thickness gauging, surfaces will have to be ground to bare metal to obtain a uniform contact surface. All the ultrasonic thickness gauging will be taken in presence and to the satisfaction of the concerned authorities. Upon completion of test each surface which will have been ground will have to be covered with the ship's paint system identified to the Item H.D.9.	

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ITEM H.D.-18	ULTRASONIC THICKNESS TESTS (FOR FRAMING IN BALLAST TK)	REMARKS
18.4	All thickness readings are to be inscribed on copies of the guidance drawing. Provide a complete report which compares the original readings of the steel plates and structures with the readings recorded by indicating the percentage of wear down. Give eight (8) copies of these readings and report to the Fisheries and Oceans/Coast Guard representative.	
18.5	All the material which will have been removed or moved will have carefully to be reinstalled in the same order as at the beginning of work.	

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ITEM H.D.-19

**CLEANING AND PAINTING OF BILGE
AND BALLAST TOP TANK OF ENGINE ROOMS**

REMARKS

19.1 Surface are involved

	<u>IDENTIFICATION</u>	<u>FRAME</u>	<u>SURFACE AREA</u>
A)	Engine Room	F 96 to F 106	700 sq. feets
B)	Propulsion motor Room	F 30 to F 54	1300 sq. feets
C)	Sewage compartment	F 12.5 to F30	150 sq. feets

19.2 All equipments in way of surface area to paint shall be protected in the process of cleaning, preparing and paint applying and must be removed after inspection by DFO/CCG representative at the end of work.

19.3 Mark and remove floor plate to access on ballast top tank identified and reinstall after painting work.

19.4 Clean, degrease and dry all surface area to paint and dispose of liquid and material used for the cleaning.

19.5 Prepare all surface area with mechanical tools to remove rust, loose paint and dispose of all dust and refuse of cleaning.

Paint system staying on ballast top tank must be prepared to have a lightly rough profile before applying the paint system. Shipyard must estimate 100% to prepare.

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ITEM H.D.-19	CLEANING AND PAINTING OF BILGE AND BALLAST TOP TANK OF ENGINE ROOMS	REMARKS
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19.6 After surface area will be accepted by DFO/CCG representative apply the following paint system:

- Apply one (1) coat of paint Intergard 264 on bar metal of .006" inch per coat, white in color (FPD052) of International paint.
- Apply a second coat, same thickness, and same color on 100% of surface area identified. (Item 19.1 A, B, C)

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ITEM H.D.-22	OVERBOARD DISCHARGE VALVES	REMARKS
20.1	Replace a 10" main sea water discharge valve for the central cooling system (#60) forward engine room port side, with a new valve supplied by the CCG. Gaskets and bolts to be supplied by the dry-dock. Specification sheet in annex.	
20.2	Include in your quotation, the cost, material and labour for the installation of one (1) transit pipe of 1" inch diameter, flanged and of 6" in length. Transit pipes will be schedule 160 pipe, the assembly will be hot dipped galvanized before installation on hull, welded full penetration to the satisfaction of Marine Safety expert. Supply and apply two (2) coats of cold galvanize to damage area by welding. This line will be used by the reverse osmoses system in order to permit the utilisation of both the reverse osmoses and evaporator at the same time. The transit will be installed between frames 85 and 86 starboard side, as indicated on supplied plan. A one inch flanged valve, class 150, supplied by the owner with a ½" de-icing line will be installed on this transit. A one inch, schedule 80 steel line, flanged at both ends, double hot galvanized, of a length of 6 feet shall be fabricated and installed to connect the reverse osmoses machine and the one inch valve. Fabricate and install another line ½" inches, schedule 80 steel line, flanged at both ends, double hot galvanized, and of a length of 6 feet shall be fabricated to connect the ½" flange on	

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ITEM H.D.-22 OVERBOARD DISCHARGE VALVES REMARKS

(20.2 continued)

the valve and the steam supply for the de-icing for the evaporator overboard.

20.3 Supply the material and man hours necessary to dismantle, unplug and re-install the following de-icing valves and piping, with new gaskets.

1. Low seachest suction port #12
2. Foam pump circuit overboard valve #59
3. Sanitary system Overboard discharge valve #48

20.4 Boiler overboard discharge valves #55, 3 way, one (1) inch starboard, frame 71

The valve seats and discs are to be lapped together. In the case where valve grinding is not sufficient to correct a seat defect, repairs will be negotiated on a GSC 1379 form.

The bonnets, spindles and threads are to be cleaned and reassembled. Moving parts are to be coated with anti-seize lubricating compound, supplied by the shipyard. All valves to be replaced will be installed using new grade 5, zinc plated bolts, nuts and washers, that will be coated with anti seize compound before assembly.

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ITEM H.D.-22	ASBESTOS ABATEMENT	REMARKS
21.1	<p>The following article consists of the abatement of asbestos on surfaces in the Derrick Control Room (Structure) and the Wire leads compartment (murs), followed by the re-insulation of surfaces. The following procedures must be respected.</p> <p>All work must be started as soon as possible. As soon as the work is completed, a study of the vessel will be done by a company specialized in asbestos management for materials susceptible of containing asbestos. A report with the results will be sent aboard prior to the inspection of internal items required by TC for vessel certification. The contractor must leave the ship in same condition as it was upon arrival.</p> <p>The Contractor is responsible for conducting an inspection of existing damage before the work begins and submitting a report of this damage to the Asbestos Professional. Any damage to the ship not identified before the start of work must be repaired at the contractor's own cost.</p>	
21.2	<p>During Asbestos work conditions, the Contractor is responsible for supplying the equipment and manpower necessary to complete all phases of the work described in these sections.</p>	
21.3	<p>All workers who have access to the contaminated Asbestos Work Areas must have received the necessary training, as per the Quebec Safety Code for the Construction Industry, S-2.1, r. 4.</p>	

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ITEM H.D.-22	ASBESTOS ABATEMENT	REMARKS
21.4	The Contractor must coordinate with the Chief Engineer, if possible, the shutdown and re-establishment of the heating, ventilation and air-conditioning (HVAC) systems, as required for work of this type.	
21.5	On the worksite, the Contractor must offer the services of an General Asbestos Abatement Superintendent (“General Superintendent”) authorized to supervise all aspects of the work, notably the estimation and negotiation of changes to the contract, updating the tenders, and demands, planning of the work as well as the manpower and equipment needs, the management of communications and the coordination with the Asbestos Professional and the CCG representative.	
21.6	The Contractor must also have a Shift Superintendent available, who will be responsible for all aspects of manpower, equipment and production.	
21.7	The Contractor must conduct work in a manner to ensure that, at all times, no airborne asbestos fibres, asbestos-containing waste or water leak contaminates areas outside the worksite under its responsibility.	
21.8	The Contractor must ensure that the work procedures comply with all federal, provincial and local regulations and legislation in effect at the time of execution.	

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ITEM H.D.-22	ASBESTOS ABATEMENT	REMARKS
21.09	The Contractor is responsible for providing proper respiratory protection to workers as specified in the Guide des appareils de protection respiratoire utilisés au Québec, published by the Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST) or any other agency approved by the Commission de la santé et de la sécurité du travail (CSST).	
21.10	The Contractor is responsible for validating worksite conditions as well as the presence, location and quantity of ACMs before submitting a tender.	
21.11	Remove all equipment and material necessary for the complete execution of the asbestos abatement work.	
21.12	Cover the furniture and equipment that must remain in the Asbestos Work Areas with impervious polyethylene sheets.	
21.13	Coordinate the location of the Asbestos Waste Bin with the CCG representative.	
21.14	Clean all electrical wiring, electrical boxes and any other equipment that will remain in operation within the Asbestos Work Areas, and protect them with polyethylene sheeting.	
21.15	Maintain a permanent emergency lighting system.	
21.16	Remove and treat as asbestos waste all the materials listed in "SITE CONDITIONS" of these sections of the Specifications in the Asbestos Work Areas:	

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ITEM H.D.-22	ASBESTOS ABATEMENT	REMARKS
(21.16 Continued)		
	1° Treat as asbestos waste any porous materials and materials that were not protected before the start of the asbestos abatement work.	
21.17	Label all Asbestos Waste Bins according to the Quebec Safety Code for the Construction Industry.	
21.18	Perform the asbestos abatement work as described in Part 3 "EXECUTION" of these sections of the Specifications.	
21.19	Post warning signs at all access points of the Asbestos Work Areas as per the Quebec Safety Code for the Construction Industry. Such signs shall read: ASBESTOS (50 mm) DANGER (40 mm) DO NOT BREATHE DUST (15 mm) PROTECTIVE EQUIPMENT MUST BE WORN (15 mm) NO ADMITTANCE WITHOUT AUTHORIZATION (15 mm) INHALING ASBESTOS DUST MAY BE HARMFUL TO YOUR HEALTH (10 mm)	
21.20	All members of the supervisory personnel must hold a recognized certificate proving attendance at an asbestos removal training course (one (1) day minimum duration) acceptable to the Asbestos Professional and have supervised a minimum of five (5) other asbestos abatement projects.	

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ITEM H.D.-22	ASBESTOS ABATEMENT	REMARKS
21.21	The General Superintendent or the Shift Superintendent must be on-site at all times during work that may disturb asbestos. Failure to comply with this requirement will result in immediate stoppage of all work, at no cost to the CCG.	
21.22	Comply with federal, provincial, and local requirements, provided that in any case of conflict among those requirements or with these Specifications, the more stringent requirements shall apply. Work procedures shall be performed under regulations in effect at the time that work is performed.	
21.23	At least ten (10) days before commencing work, inform in writing the following organizations: 1° the appropriate regional or zone director of the Medical Services Branch of Health Canada; 2° the regional Labour Program office of Human Resources and Skills Development Canada; 3° the CSST; and 4° certified authorities in asbestos waste disposal.	
21.24	Submit prior to starting work: 1° The names and credentials of the: a) General Superintendent and b) Shift Superintendents. 2° A proposed schedule providing the following for each phase of work: a) the duration of abatement work and b) the proposed average daily work force.	

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ITEM H.D.-22	ASBESTOS ABATEMENT	REMARKS
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(21.24 Continued)

Endroit : Derrick Control Room (Structure)
Étage : Pont de Navigation
Pi² : 550
Échantillon : S0005 (Pinchin Environmental projet : 01-7011)
Hazard : Asbestos
Friabilité : Friable
Materiel : Tan/Grey Texture Coat (Surface)

Endroit : Wire leads compartment (murs)
Étage : Pont principale
Pi² : 850
Échantillon : S0032 (Pinchin Environmental projet : 01-7011)
Hazard : Asbestos
Friabilité : Friable
Materiel : Tan Texture Coat (Surface)

21.25 Ask a firm specializing in insulation is to install new insulation approved materials.

A-60 fire barrier insulation. Rockwool Marine Firebatts 130 insulation, or equivalent, approved for A-60 class division steel structure application. The insulation shall be applied according to the manufacturer's specifications to ensure A-60 fireproof rating. Also provides thermal and acoustic insulation. After installing the nails to support the insulation, it will be important to apply a paint layer identical to the rest of the steel structure. The paint job will be done by the contractor.

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ITEM H.D.-22

ASBESTOS ABATEMENT

REMARKS

(21.25 Suite)

1. Provide an integrated system of linings and insulation which will satisfy all applicable requirements.
2. Provide non-combustible insulation of approved types.
3. In areas exposed to mechanical damage, cover the insulation with a protective layer perforated galvanized steel (24 gauge)
4. The insulation of the deck or bulkhead shall be carried pas the penetration, intersection or terminal point for a distance of at least 450mm. In the case of adjoining boundaries of different A-Class insulation values, it is the insulation with the higher value which shall be continued on the deck/bulkhead with insulation of lower value for the distance of a least 450mm.

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ITEM H.D.-22	TAILSHAFT MECHANICAL SEALS	REMARKS
22.1	Once the vessel is docked, the Contractor is to uncouple the 1 1/2" diameter cooling water connections and the 1/2" diameter air connections from each seal. The port and starboard tail shaft mechanical seals are then to be dismantled cleaned and then laid out for inspection by the CCG Technical Authority and the WGSC Inspection Authority.	
22.2	Any defective parts will be replaced with Owner's supplied parts. Contractor shall provide in the price of his bid a unit price for machining the machined contact surfaces of each mechanical seal.	
22.3	On completion of all associated work and with the tailshafts in place, both mechanical seals are to be re-assembled and re-installed in their respective locations as per the seal Manufacturer's recommended procedures A new, Contractor's supplied, gasket shall be installed between the mechanical seal and aft bulkhead. Loctite Super Bonder 409 glue (Contractor's supply) shall be used join the new, Owner's supplied, inflatable ring seals for each mechanical seal. All seal threaded fasteners shall receive an application of anti-seizing compound. The CCG Technical Authority and the CCG Inspection Authority shall witness the re-assembly of the seals.	
22.4	The 1 1/2" diameter cooling water connections and the 1/2" diameter air connections, for each seal, shall be functionally tested to ensure correct flow of cooling water and air supply. Once proven correct each connection is to be reattached to its associated seal.	

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ITEM H.D.-22	TAILSHAFT MECHANICAL SEALS	REMARKS
22.5	The inflatable ring on each seal is to be inflated and tested to prove operation and then deflated.	
22.6	Once the ship is afloat, both seals shall be immediately inspected for excessive leakage and adjust as per manufacturer's recommended procedure. Final adjustments shall take place with the shaft turning and during the sea trials at normal cruise speed.	
Note:	<p>1.1 Inspection</p> <p>The following inspections are required to be verified by the CCG Inspection Authority the CCG Technical Authority:</p> <ul style="list-style-type: none">• The dismantling and inspection of the mechanical seals,• The re-installation of the seals,• Verification of cooling water flow to the seals,• Verification of air pressure to the seals,• Verification of inflation and deflation of inflatable seals. <p>1.2 Testing</p> <p>The following tests are to be performed on the mechanical seals on the tailshafts:</p> <ul style="list-style-type: none">• Testing of the system during Dock trials,• Testing of the system during the four (4) hour sea trail	

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ITEM H.D.-22	TAILSHAFT MECHANICAL SEALS	REMARKS
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(22.6 Continued)

1.3 Quality assurance

A crane seal specialiste will be present for the duration for all work.

Example:

Alternative Marine LLC

Contact Bradley Owens

1328 East 6th st, Superior, WI 54880

Phone: (218)590-4506

Fax. (715)398-0376

E-mail: altsealser@aol.com

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ITEM H.D.-23

HULL, VOID SPACE & TANK SURVEY

REMARKS

H.D.-23 HULL, VOID SPACE & TANK SURVEY

The Government Of Canada has the right to cancel partly or entirely any item of this specification in the case where inspection isn't needed due to the ship's components good condition

The H.D.-23 is an option, and a specific price is required for this ITEM

The Contractor shall arrange for Lloyd's Register to attend the vessel and carry out the following work

H.D.-23 Part 1: SCOPE:

- 1.1 The intent of this specification item shall be for the contractor to provide access to various parts of the hull and internal tanks to allow a vessel hull condition survey. The work will involve the opening-up of void spaces, fuel and water ballast tanks and the provision of scaffolding or certified man-lift for the inspection of the exterior hull and for taking of Ultrasonic Thickness (UT) measurements. The location of the UT measurements will be determined by a Classification Society arranged using separate contract by the Technical Authority.
- 1.2 The vessel hull condition survey description will detail the condition of the vessel's hull and adjacent spaces at the present time, identify discrepancies from regulatory and class requirements and prepare recommendations on the required work to maintain the vessel in a reliable service for a period of an additional 20 years.
- 1.3 This delivered document shall include a description of the deficiencies in the existing hull system, a list of recommended repairs, a cost estimate to conduct the work and a time line of when these repairs will be required to be conducted to maintain the vessels certification and reliable operational service.
- 1.4 This document will be used to develop a hull integrity control system for the vessel. The description must be of sufficient detail for the Coast Guard to use as a base document for planning purposes and to ensure that future steel replacement will be sufficient for regulatory purposes and to maintain the vessels reliability for up to 20 years of additional service.

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ITEM H.D.-23

HULL, VOID SPACE & TANK SURVEY

REMARKS

H.D.-23 Part 2: REFERENCES:

Requirements directed by the Classification Society Inspector.

CCGS Sir William Alexander

LR8320470

Proposal for Condition Assessment Survey

Author: Colin Clark

Business Development Manager, Atlantic Canada

Lloyd's Register Canada Ltd.

Date: 14 May 2012

- 2.1 Guidance Documents
 - Canadian Coast Guard (CCG) vessel hull and tank drawings.
- 2.2 Standards
 - 2.2.1 Coast Guard ISM Safety Procedures for tank entry and hot work
 - 2.2.2 Lloyds Rules (Vessel was constructed to the Lloyds rules in place at that date)
- 2.3 Regulations
 - 2.3.1 Transport Canada Marine Safety, Hull Regulations
- 2.4 Quality Assurance Standards
 - 2.4.1 Lloyds Register shall have in place a quality assurance system that meets the elements of ISO 9001 required for a project of this nature.

H.D.-23 Part 3: TECHNICAL DESCRIPTION:

- 3.1 General
 - 3.1.1 Prior to commencement of work Lloyds Register shall review the vessel's current drawings and documentation in relation to the vessel to determine their currency and accuracy. This review shall include a review of the recorded plate thicknesses recorded for regulatory purposes.
 - 3.1.2 Prior to the commencement of any and all work on the ship, Lloyds Register shall ensure the Coast Guard all ISM Safety standards have been reviewed by the surveyors and the directions have been implemented. The Technical Authority shall arrange to assist Lloyds Register in establishing the required procedures and arrange required cleaning and safety certification. It shall be Lloyds Register's responsibility to verify all standards are met prior to commencing work.

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ITEM H.D.-23	HULL, VOID SPACE & TANK SURVEY	REMARKS
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- 3.1.3 All materials, and equipment required for the survey and documentation development shall be contractor supply.
- 3.1.4 Lloyds Register shall provide the chief engineer forty eight hour notification of any requirement to access enclosed spaces for measurement purposes. The operation of any of the vessel's equipment will be by the ship's crew only.
- 3.1.5 Lloyds Register shall submit any developed documentation to the Technical Authority for its review and comment. Lloyds Register shall make applicable modifications to the documents resulting from this review. The new modified documents shall be submitted to the Technical Authority.

3.2 Developing the documentation

- 3.2.1 Lloyds Register shall survey the vessel's hull adjacent spaces and carry out any required test to obtain the knowledge required to develop the documentation.
- 3.2.2 The extent of the survey shall comply with Class requirements appropriate for the ship's classification type and age.

As a Minimum the following items shall be surveyed:

- a) Tanks where corrosion is considered likely:
 - All ballast spaces
 - Indicative fuel oil tanks / fuel oil/ballast combination tanks
 - Fore and aft peak tanks
- b) Side shell and steel abutting side shell where abrasion/damage is considered likely due to ice interaction. These shall as a minimum include:
 - Wind and water strakes of the side shell (ice belt)
 - Bottom shell plating
 - Bow area
 - Forefoot /ice skeg area
- c) Areas with step changes in hull modulus, or in areas experiencing high shear due to icebreaking.

These shall as a minimum include:

- i) Accommodation block deck connection
- ii) Area above the forefoot /ice skeg.

C.C.G.S. MARTHA L BLACK (SUMMER 2013)

ITEM H.D.-23 HULL, VOID SPACE & TANK SURVEY REMARKS

3.2.3 During the survey Lloyds Register shall record and assess the condition of the following items:

- a) Actual or latent defects, the presence of deficiencies relating to structural damage, fractures, buckling and ice damage and corrosion and weld grooving.
- b) Coating condition, both breakdown and representative measurements of remaining thickness.
- c) Condition of other protective systems, anodes etc.

3.2.4 Lloyds Register shall notify the Canadian Coast Guard immediately of any findings which in their estimation requires immediate remediation for the safety of the vessel.

3.2.5 Lloyds Register shall develop a schematic drawing showing all components of the hull that require work. Each component shall be identified and its location on the ship shown on a supplied hull expansion, general arrangement or tank arrangement drawing.

3.2.6 Lloyds Register shall develop a narrative description of the required remediation work and a time line for when each work package will be required to maintain vessel reliability, certification and safe operation. As part of the docking contract, Canadian Coast Guard will arrange thickness measurements for all relevant structural members in accordance with Class\Regulatory requirements for a vessel of this age. Lloyds Register shall recommend UTM requirements for a vessel of this age.

3.2.7 Lloyds Register shall develop an estimate of the cost of each identified work package based on the repairs being conducted in a Canadian ship yard in 2013.

3.2.8 Lloyds Register shall develop a recommended hull integrity plan showing the recommended steel work on the vessel for each of the vessel's upcoming dry dockings, an estimate of the time required to conduct the work and the estimated cost of each work package.

The plan shall include the requirements for preparing the ship to a state whereby the vessel could be considered for acceptance into class (AIC).

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3.3 Contractor:

3.3.1 The contractor shall provide the services a firm specializing in NDT (ultrasonic thickness testing) to determine the shell plating thickness as indicated by the Classification Society. The Contractor shall bid on 1000 shots (including proper surface preparation), with a unit cost for each additional shot which includes travel expenses from the NDT testing company. This cost will be adjusted by PWGSC 1379 action.

3.3.2 The contractor shall provide any staging or certified man-lifts required to enable the Classification Society to perform a detailed examination and inspection of the hull and for the ultrasonic thickness testing. The contractor shall quote on the provision of a certified man-lift including operator for a period of 100 hours and provide unit cost per hour for the use of the man-lift and operator. This cost will be adjusted by PWGSC 1379 action.

3.3.3 The Classification Society Inspector will direct where the UT shots and inspection will take place.

3.3.4 At a minimum these will be:

- Side shell and steel abutting side shell where abrasion/damage is considered likely due to ice interaction.
- Wind and water strakes of the side shell (ice belt)
- Bottom shell plating
- Bow area
- Forefoot /ice skeg area
- Areas with step changes in hull modulus, or in areas experiencing high shear due to icebreaking.
- Accommodation block deck connection
- Area above the forefoot /ice skeg

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ITEM H.D.-23

HULL, VOID SPACE & TANK SURVEY

REMARKS

VOID Spaces

(Already identified for opening, cleaning and survey in spec #H.D.-9 Void Spaces)

<u>Compartment</u>	<u>Location</u>	<u>TC inspection Item</u>
Empty lateral compartment No. 1.	Port F 117-126	3L011
" No. 1	Starboard, F 117-126	3L012
" No. 2	Port F 106-117	3L013
" No. 2	Starboard F 106-117	3L014
" Double bottom	Port F 102-206	3L015
" Double bottom	Starboard F 102-106	3L016
Empty lateral compartment No. 3	Port F 54-70	3L017
" No. 3	Starboard F 54-70	3L018
" No. 4	Port F 30-54	3L019
" No. 4	Starboard F 30-54	3L020
" No. 5	Port F 13-30	3L021
" No. 5	Starboard F 13-30	3L022
" aft	F11-13	3L023
Cofferdam, helicopter fuel tank	F5-13	3L044
Port echo sounder compartment	F126-130	3L046
Stbd echo sounder compartment	F126-130	3L047
Fore center piping tunnel	F102-163	3L048
Aft center piping tunnel	F51-94	3L049
Port lateral empty compartment double bottom	F53-54	
Starboard cofferdam for centerboard trunk transducer	F123-126	3L068

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ITEM H.D.-23

HULL, VOID SPACE & TANK SURVEY

REMARKS

Ballast Tanks

(Already identified for opening, cleaning and survey as part of spec item HD-9 – Ballast Tanks)

<u>Tanks</u>	<u>Location</u>	<u>Capacity</u>	<u>TC inspection Item</u>
No 2 Port D.F.	F 126-152	49.9 m ³	3L006
No 2 D.F. starboard	F 126-152	49.9 m³	3L007
*FWD. Starboard Wing	F 163-175	43.4 m ³	3L003
*FWD. Port Wing	F 163-175	43.4 m ³	3L002
*Port Wing	F 152-163	51.4 m ³	3L004
*Starboard Wing	F 152-163	51.4 m ³	3L005
No 3 D.F. port	F 54-70	43.5 m ³ (oily waters)	3L008
No 4 D.F. starboard	F 54-70	43.4 m ³	3L009
*Fore peak	175-front F	85.5 m ³	3L001
After peak	F 1-13	112. m ³	3L010

List of external and internal sea chests

(Already identified for opening, cleaning and survey as part of spec item HD-7 – Ballast Tanks)

<u>Description</u>	<u>Side</u>	<u>Frames</u>	<u>TC inspection Item</u>
<u>Propulsion motor room</u>			
External sea chest, Submersible pump	Port	51-53	3L056
External sea chest stern tube pump	C	37-39	3L057
<u>Generator room</u>			
External, lower sea chest	Port	96-106	3L054
External, lower sea chest	Stbd	96-106	3L055
External, upper sea chest	Port	96-106	3L052
External, upper sea chest	Stbd	96-106	3L053
External sea chest, evaporator	Stbd	102-106	3L051
Internal sea chest	C	96-102	3L051

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ITEM H.D.-23

HULL, VOID SPACE & TANK SURVEY

REMARKS

Fuel tanks

(Already identified for opening and survey as part of spec item H.D.-10 – Fuel tanks.

<u>Tanks</u>	<u>Location</u>	<u>Capacity</u>	<u>TC inspection Item</u>
* Fuel tank No 1 port	F 163-175	55.4 m ³	3L024
* Fuel tank No 2 starboard	F 163-175	55.4 m ³	3L025
* Fuel tank No 3 port	F 152-163	117.7 m ³	3L026
* Fuel tank No 4 starboard	F 152-163	111.7 m ³	3L027
* Fuel tank No 5 port	F 106-121	118.6 m ³	3L028
* Fuel tank No 6 starboard	F 106-121	118.6 m ³	3L029
* Double bottom No 7 port	F 106-126	51.8 m ³	3L030
* Double bottom No 8 stbd	F 110-126	41.5 m ³	3L031
* Double bottom No 9 port	F 70-96	79.7 m ³	3L032
* Double bottom No 10	F 70-96	79.7 m ³	3L033
* Overflow tank	F 106-110	8.5 m ³	3L036
Fuel drain tank	F 94-96	1.9 m ³	3L037
Oily water tank	F 55-64	1.6 m ³	3L040
Port used oil tank	F 30-37	6.5 m ³	3L041
Starboard oily water tank	F 30-37	6.5 m ³	3L042
Helicopter fuel tank	F 5-11	22.8 m ³	3L043
* lower Flume tank	M117-126	116.3 m ³	3L035
* Upper Flume tank	M117-126	118.3 m ³	3L034
Renovated oil tank	F54-57	13.8 m ³	
Day tank	F64-70	27.8 m ³	3L038
Settling tank	F57-64	32.5 m ³	3L039
Emergency generator tank	F 67-69	1.9 m ³	

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ITEM H.D.-23

HULL, VOID SPACE & TANK SURVEY

REMARKS

H.D.-23 PART 4: DELIVERABLES

- 4 Upon completion of all UT and inspection points, the Contractor and the Owner's representative (or designate) shall conduct a final inspection and ensure all tanks, covers, have been returned to operating conditions and the attending Classification Society Inspector has completed all inspections.
- 4.1 Drawings/Reports
 - 4.1.1 Lloyds Register shall supply the CCG Technical Authority with four (4) typewritten copies and one digital of the remedial work description.
 - 4.1.2 Lloyds Register shall supply the CCG Technical Authority with four (4) hard copies and one electronic copy, AUTOCAD 2008 format, of all drawings and sketches produced as part of the contract.
 - 4.1.3 Lloyds Register shall supply the CCG Technical Authority with four (4) typewritten copies and one digital of the estimate.
 - 4.1.4 Lloyds Register shall supply the CCG Technical Authority with four (4) typewritten copies and one digital of the proposed time line.
 - 4.1.5 Lloyds Register shall supply the CCG Technical Authority with four (4) typewritten copies and one digital of the recommended hull integrity plan.
 - 4.1.6 Lloyds Register shall provide the CCG Technical Authority four (4) hard copies and one electronic copy of a Quality Assurance (QA) report indicating that all components have been inspected by Lloyds Register's QA Department for correct installation and fit.
- 4.2 Project Schedule – The contractor shall provide a project schedule with its proposal and after award of the contact bi-weekly updates of the schedule showing progress. This schedule shall include all work associated with the contact including all on ship survey requirements. Schedule shall be provided electronic format compatible with Microsoft project 2007 or later.

H.D.-23 Part 5: PROOF OF PERFORMANCE:

- 5.1.1 The Contractor is to be responsible for all inspections and UT shots required by the Classification Society Inspector to determine an inspection schedule; at each inspection point, the Contractor is to advise the Owner's representative, in advance, to allow his/her attendance.

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ITEM H.-1

**NOTICE TO THE SHIPYARD BIDDER'S
CONCERNING THE PAINTING PRODUCTS**

REMARKS

1. All painting products of International paint shall be replaced by the equivalent painting product of Ameron Marine Coating expected when is specified (no substitute or equivalence product accepted).

<u>International paint</u>		<u>Ameron Marine Coating</u>	
Interlac	665	Amercoat	5450
Interbond	501	Amercoat	235
Interzinc	52	Amercoat	68
Intergard	264	Amercoat	235
Interprime	065	Amerlock sealer/Amercoat 240	
Interthane	990	Amercoat	450 H
Inerta	160	No substitute accepted	

2. Shipyards shall be supplied the equivalent and compatible painting product as specified in providing a certificate of conformity to the CCG representative.
3. All painting products not specified in specification shall be shown to the CCG representative before using and the shipyard must be proved of the product compatibility with the painting system proposed and the existing painting systems (Intergard FP).