



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada

Pacific Region

401 - 1230 Government Street

Victoria, B.C.

V8W 3X4

Bid Fax: (250) 363-3344

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal 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.

Proposition 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 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

Public Works and Government Services Canada - Pacific
Region

401 - 1230 Government Street

Victoria, B. C.

V8W 3X4

Title - Sujet 5.7-5.99m Aluminum Jet Boat	
Solicitation No. - N° de l'invitation M8029-184462/A	Date 2017-11-30
Client Reference No. - N° de référence du client M8029-184462	
GETS Reference No. - N° de référence de SEAG PW-\$XLV-166-7380	
File No. - N° de dossier XLV-7-40142 (166)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-12-18	Time Zone Fuseau horaire Pacific Standard Time PST
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: Castle, David G.	Buyer Id - Id de l'acheteur xlvl66
Telephone No. - N° de téléphone (250) 217-6555 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Royal Canadian Mounted Police See herein	

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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N° de l'invitation - Solicitation No.

M8029-184462

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

M8029-184462

N° de la modif - Amd. No.

File No. - N° du dossier

Id de l'acheteur - Buyer ID

XLV 166

N° CCC / CCC No./ N° VME - FMS

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PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement associated with this bid solicitation.

1.2 Statement of Work

RCMP – has a requirement for the supply and delivery of one (1), 5.7-5.99m, Aluminum Outboard Jet Boat with trailer in accordance with the Statement of Work at Annex A and inspection as per Annex C - Inspection/Quality Assurance /Quality Control. All deliverables must be delivered on or before March 31, 2018.

1.2.1 There exists an option to acquire two (2) additional boats with trailers.

1.3 Debriefings

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.

1.4 Trade Agreements

This requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA) and the Comprehensive Economic Free Trade Agreement (CETA).

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 Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-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 (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2.1.1 SACC Manual Clauses

B3000T, 2006-06-16, Equivalent Products

A9125T, 2007-05-25, Valid Labour Agreement

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 **4 calendar 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 question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

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 **British Columbia**.

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.

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 – Two (2) hard copies

Section II: Financial Bid – One (1) hard copy

Section III: Certifications - One (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 (216mm 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 should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and 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.

3.2 Section I - Technical Bid

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability in a thorough, concise and clear manner for carrying out the work.

The Statement of requirement, Annex A, is entirely mandatory. The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

3.2.1 Bidder's Check List and Technical Confirmation

The Bidders must submit a fully completed **Annex G - BID PACKAGE CHECKLIST** as part of their Technical Bid.

3.2.2 Inspection and Test Plan (ITP)

- 1. Bidders must provide with their bid the inspection plan and testing procedures that will be used to verify, test and inspect all of the components and systems on the boat from initial construction to completion. The ITP must be in accordance with **Annex C** attached to this RFP.
- 2. Bidders must outline the process by which they will address and solve problems or delays with the fabrication, various installations, testing and delivery of the boat.

3.2.3 Drawings and Other Documentation

The bidder must submit with their technical bid the following drawings listed below and all of the drawings and other documentation required in the quantities and formats described by the Statement of Work Annex A.

- (a) draft stability calculation;

- (b) calculated lightship weight;
- (c) general arrangement;
- (d) structural drawings showing deck plan, a centerline profile and frame station construction details;
- (e) detailed lines plan;
- (f) a drawing of the fuel supply arrangement.

3.2.4 Subcontractors

As part of their technical bid, Bidders must submit a completed **Annex E - Subcontractor List**.

3.2.5 Vessel Construction Experience

As part of their technical bid, the Bidder must provide objective evidence of experience in the construction of vessels of the size, type and complexity which are the subject of this RFP. To demonstrate this experience, the Bidder must provide

- (a) detailed list of such vessels built pursuant to TP 1332, Construction Standards for Small Vessels, Non-pleasure craft latest edition, within the last 5 years;
- (b) photographs of vessels of listed;
- (c) (for listed TP 1332, non-pleasure craft sold within the last 5 years only) purchaser's name and contact information, and the date of sale.

The Bidder must also provide details on how the materials and equipment used in the construction, manufacture of the proposed vessel is suited to the operating and environmental conditions that the vessel may encounter.

3.2.6 Naval Architecture and Engineering

The Bidder must provide objective evidence that it has either in-house capabilities, or has a written commitment for the duration of the Contract from a qualified sub-contractor to provide marine drafting and engineering services. Qualified sub-contractor is defined as having provided these services on similar vessel construction projects (same size, type and complexity).

3.2.7 Contractor's Quality Management System

1. The Bidder must provide objective evidence that it has a Quality Assurance Program, which must be in place during the performance of the Work, and which addresses the quality control elements below.
2. The objective evidence may be in the form of a copy of the Bidder's Quality Assurance Manual which addresses these elements.
3. The Bidder must also provide a minimum of one (1) samples of completed quality records used on the most recent marine vessel construction at its facility.
4. The quality control elements must include, as a minimum:
Quality Assurance Manual or Quality Assurance Program Descriptions
Inspection and Test Plan, Final Inspection, Quality Records

3.2.8 Insurance Requirements

The Bidder must provide 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 *Part 6 - Resulting Contract, Clause 6.19*.

If the information is not provided in the bid, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

3.2.9 Welding Certification – Bid

1. The Contract work must be 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 W47.2 (current version), Certification for Companies for Fusion Welding of Aluminum

2. Before contract award and within two (2) calendar days of the written request by the Contracting Authority, the successful bidder must submit evidence demonstrating it or its subcontractor's certification by CWB in accordance with the CSA welding standards.

3.3 Section II - Financial Bid

Bidders must submit their financial bid in accordance with the **Detailed Financial Bid Presentation Sheet at Annex D.**

3.3.1 Exchange Rate Fluctuation

C3011T, 2013-11-06, Exchange Rate Fluctuation

3.3.2 Financial Capability

A9033T, 2012-07-16, Financial Capability

3.3.3 Unscheduled Work

Bidders must provide the information requested in Annex D, Article D-3. The unscheduled work rates will be included in the Basis of Payment but will not form part of the bid evaluation.

3.3.4 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex "X" Electronic Payment Instruments, to identify which ones are accepted.

If Annex "X" Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.4 Section III: Certifications

Bidders must submit the certifications required under Part 5.

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 and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

In order to be compliant, the Bidder's proposal must, to the satisfaction of Canada:

- a) Meet all requirements of the Annex A, SOW; and
- b) Provide all information as requested in PART 3 - BID PREPARATION INSTRUCTIONS

4.1.2 Financial Evaluation

A0222T (2013-04-25), 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.

A mandatory requirement is described using the words "shall", "must", "will", "is required" or "is mandatory."

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and associated information to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority may render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#)" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#)" list at the time of contract award.

PART 6 - RESULTING CONTRACT CLAUSES

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

6.1 Security Requirement

There is no security requirement applicable to this Contract.

6.2 Statement of Work

RCMP has a requirement for the supply and delivery of one (1), 5.7-5.99m, Aluminum Jet Boat and trailer in accordance with the Statement of Work at Annex A and inspection as per Annex C - Inspection/Quality Assurance /Quality Control. All deliverables must be delivered on or before March 31, 2018.

6.2.1 Optional Goods

The Contractor grants to Canada the irrevocable option to acquire up to two (2) additional boats with trailers, as described at Annex A of the Contract under the same conditions and at the prices stated in the Basis of Payment of the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option within twelve (12) months after contract award by sending a written notice to the Contractor.

6.3 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

(<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

2030, 2016-04-04 Goods (Higher Complexity) apply to and form part of the Contract.

6.3.2 Supplemental General Conditions

1028, 2010-08-16 Ship Construction - Firm Price, apply to and form part of the Contract.

Conduct of Work. The Supplemental General Conditions 1028, Article 02 (2010-08-16) Conduct of Work, Delete Paragraph 1, entitled "Canadian Labour", in its entirety.

Warranty. The Supplemental General Conditions 1028, Article 12 (2010-08-16) – Warranty, Paragraph 3 is deleted and replaced with the following:

"The warranty periods for the vessel, from the date of its delivery to and acceptance by Canada, are:

- a) Twelve (12) months for the boat propelling machinery and auxiliaries, fittings and equipment of all kinds (excluding Government Supplied Material).
- b) Twenty four (24) months for the vessel hull and welding."

6.4 Term of Contract

6.4.1 Delivery Date

All the deliverables must be received on or before _____.

6.4.2 Delivery Location

Old Crow Detachment
Whitehorse, Yukon
Y1A 4Y3

6.4.3 Shipping Instructions - Delivered Duty Paid

1. Goods must be consigned and delivered to the destination specified in the contract: Incoterms 2000 "DDP Delivered Duty Paid" to the delivery locations listed under article 6.4.2.
2. The contractor is responsible for all delivery charges from the Contractor's facility to destination, including administration costs, insurance and risk of transport.

6.5 Authorities**6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Dave Castle
 Supply Specialist, Acquisitions, Marine
 Public Works and Government Services Canada
 Suite 401 - 1230 Government Street, Victoria B.C. V8W 3X4
 Telephone: 250-217-6555
 E-mail address: david.castle@pwgsc-tpsgc.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.

6.5.2 Technical Authority

The Technical Authority for the Contract is provided upon contract award

The Technical Authority named above 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.

6.5.3 Inspection Authority

The Inspection Authority for the Contract is provided upon contract award

The Inspection Authority is the representative of the department or agency for whom the Work is being performed under the Contract and is responsible for 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.

6.5.4 Contractor's Representative

Name and telephone numbers of the person responsible for:

General Enquiries:

Name: _____ Telephone Number: _____

Facsimile Number: _____ E-mail address: _____

Delivery Follow-up:

Name: _____ Telephone Number: _____

Facsimile Number: _____ E-mail address: _____

6.6 Payment

6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price of \$ _____. Customs duties and Applicable Taxes are extra, if applicable.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.2 Charge-out Labour Rate / Material Mark-up

The following rates are included in the Basis of Payment and must remain valid for the duration of the contract:

Charge-out Labour Rate: _____

Mark-up on Materials and Sub-Contracts: 10%

6.6.3 Unscheduled Work:

a) Price Breakdown:

The Contractor must, upon request, provide a price breakdown for all unscheduled work, by specific activities with trades, person-hours, material, subcontracts and services.

b) Pro-rated Prices:

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

c) Payment for Unscheduled Work:

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

6.6.3.1 Number of hours (to be negotiated) X \$_____, being the Contractor's firm hourly charge-out labour rate which includes overhead and profit, plus net laid-down cost of materials to which will be added a mark-up of 10 percent, customs duties are included and applicable taxes are extra. The firm hourly charge-out labour rate and the material mark-up will remain firm for the term of the Contract and any subsequent amendments.

6.6.3.2 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 6.3.3.3, will not be negotiated, but will be compensated for in accordance with 6.3.3.3.

6.6.3.3 Allowance for *Related Labour Costs* such as: Management, Direct Supervision, Purchasing and Material Handling, Quality Assurance and Reporting, First Aid, Gas Free Inspecting and Reporting, and Estimating will be included as *Overhead* for the purposes of determining the *Charge-out Labour Rate* set out in clause 6.6.2

6.6.3.4 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 Charge-out Labour Rate. The Contractor will not be entitled to a separate labour component for the purchase and handling of materials or subcontract administration.

6.6.4 Payment for Fuels, Oils and Lubricants

The Contractor is responsible for the supply and cost of all fuel, lubricating oil, hydraulic oil and other lubricants sufficient for fully charging all systems as required for operating the machinery and other equipment and for performing all tests and trials.

6.6.5 Field Engineering and Supervisory Services

If Field Service Representatives (FSR) and/or Supervisory Services are required for the Work, the cost of all such services is to be included in the price for the Work.

6.6.6 Limitation of Price

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.7 Method of Payment - Multiple Payment

Canada will pay the Contractor upon completion and delivery in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all such documents have been verified by Canada;
- c. the Work delivered has been accepted by Canada.

6.6.8 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Direct Deposit (Domestic and International);
- b. Electronic Data Interchange (EDI);
- c. Wire Transfer (International Only);

6.7 Invoicing Instructions

The Contractor must submit invoices in accordance with the information required in Section 13 of 2030 General Conditions Higher Complexity Goods.

Invoices are to be made out and sent to:

RCMP – Old Crow Detachment
4100 4th Ave
Whitehorse, Yukon
Y1A 4Y3

A copy of the original invoice must be forwarded to the Contracting Authority identified in **section 6.5.1**.

6.7.1 Warranty Holdback

A warranty holdback of 3% will be applied to the claim(s) for payment. This holdback is payable by Canada upon the expiry of the warranty holdback period of 90 days applicable to the Work. Goods and Services Tax or Harmonized Sales Tax (GST/HST), as appropriate, are to be calculated and paid on the total amount of the claim before the 3 percent holdback is applied. At the time that the holdback is released, there will be no GST/HST payable, as it was included in the previous payments.

6.7.2 Outstanding Work Holdback

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 completion of the Work. Applicable Taxes will be calculated on this outstanding work holdback amount and paid at the time that the outstanding work holdback is released.

6.8 Certifications and Additional Information**6.8.1 Compliance**

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the contract.

6.9 Welding Certification – Contract

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 W47.2 (current version), Certification for Companies for Fusion Welding of Aluminum

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 Inspection Authority, the Contractor must provide approved welding procedures and/or a list of welding personnel he intends to use in the performance 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.

6.10 Project Schedule

1. The Contractor must provide a detailed project schedule in MS Project format or equivalent to the Contracting Authority and the Technical Authority **5 days after award of Contract**. This schedule must highlight the specific dates for the events listed below.
 - (a) hull materials delivered to Contractor and sustained construction commenced;
 - (b) hull and deck completed, but not closed in to allow for full inspection of the structure and welding. The Contractor must supply a hard copy of the material certificates and construction drawings to the Technical/Inspection Authority one week prior to inspection by the Technical/Inspection Authority;
 - (c) outfitting/electrical 75% complete but all equipment and components delivered to the Contractor and available for full inspection. The Contractor must supply a hard copy of the list of equipment and electrical supplies to the Technical/Inspection Authority one week prior to inspection by the Technical/Inspection Authority;
 - (d) technical manuals delivered to Canada for approval (no less than 14 days prior to the planned delivery date);
 - (e) Contractor's tests and trial and final sea trials required by the SOW;
 - (f) boat and trailer delivered to Canada for approval;
 - (g) the start and the end of the twelve (12) month warranty period.

Note: Technical Manuals will not be returned once approved.

2. The schedule is to be regularly updated and available in the Contractor's office for review by Canada's authorities to determine the progress of the Work.

6.11 Progress Reports

1. The Contractor must submit monthly reports on the progress of the Work in an electronic format to the Technical Authority and to the Contracting Authority.
2. The progress report must contain two (2) Parts:
 - (a) PART 1: The Contractor must answer the following three questions:
 - (i) is the project on schedule?
 - (ii) is the project within budget?
 - (iii) is the project free of any areas of concern in which the assistance or guidance of Canada may be required?
 Each negative response must be supported with a clarification.
 - (b) PART 2: A narrative report, brief, yet sufficiently detailed to enable the Technical Authority to evaluate the progress of the Work, containing as a minimum:
 - (i) a description of the progress of each task and of the Work as a whole during the period of the report. Sufficient sketches, diagrams, photographs, etc., must be included, if necessary, to describe the progress accomplished.
 - (ii) reasons for any variation from the schedule.

6.12 SACC Manual Clauses

B9035C - Progress Meetings

2008-05-12

B5007C - Procedures for Design Change or Additional Work

2010-01-11

D3015C - Dangerous Goods/Hazardous Products

2007-11-30

D0018C - Delivery and Unloading

2007-11-30

C0711C - Time Verification

2008-05-12

6.13 Trade Qualifications

The Contractor must use qualified, certified (where applicable) and competent tradespeople and supervision to ensure a uniform high level of workmanship. The Contracting 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.

6.14 Quality Management Systems

1. The Contractor must have in place a Quality Assurance Program approved by the Inspection Authority during the performance of the Work which addresses the quality control elements below.
2. The quality control elements must include, as a minimum:
 - Quality Assurance Manual or Quality Assurance Program Descriptions
 - Inspection and Test Plan
 - Final Inspection
 - Quality Records
3. The Contractor's facilities may be audited by Canada, or its authorized representative, during the performance of the Work to ensure that the approved system is in place and in accordance with the foregoing requirement.
4. The Contractor will be required to submit completed quality assurance documentation with each claim for payment as applicable.

6.15 Post Contract Award/Pre-Production Meeting

Within three (3) working days of the receipt of the contract, the Contractor must contact the Contracting Authority to determine the details of a pre-production meeting. The meeting will be held at the Contractor's plant or via telephone or video conference. The Cost of holding such a pre-production meeting must be included in the price of the bid. Please note that the travel and living expenses for Government Personnel will be arranged and paid for by the Canada.

6.16 Manuals

1. The Contractor must obtain and deliver to the Technical Authority for approval, all Data Books, Operating Instruction Books, Maintenance Manuals and Spare Parts Lists (including part numbers and ordering instructions) for all machinery and equipment fitted on the Vessel as required. Once approved by the TA, the Contractor must provide two (2) complete copies in accordance with and as specified in the **Annex A**,
2. Where manuals are examined by Canada, such examination does not relieve the Contractor of any responsibility under the Contract for ensuring the correctness of all details and adequacy of performance of the Vessel, nor does it obligate Canada to accept, in whole or in part, an item of Work completed in accordance with such manual, nor does it mean such an item of Work meets the requirements of the SOW.

6.17 Inspection, Test & Trials

1. During Construction of the vessel, the Contractor must arrange for regular inspections and upon completion of the construction of the vessel, the Contractor must arrange trials. All Inspections and test and trials performed must be in accordance with the SOW and the **Annex C** - Inspection/Quality Assurance/Quality Control. The Inspection Authority must approve any additional testing not specified in the SOW.
2. The Contractor must update as required the Inspection and Test Plan (ITP) provided with its bid and submit to the Contracting Authority and the Inspection Authority seven (7) days after contract award for review and approval.

3. Once approved, any modification to the ITP must be pre-approved by the Inspection Authority. A revised ITP will be required should any modification be made.

6.18 Government Supplied Material – Not Used

6.19 Insurance Requirements

The Contractor must comply with the insurance requirements specified in **Articles 6.19.1** and **6.19.2** below. 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) 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.

6.19.1 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 \$2,000,000 per accident or occurrence and in the annual aggregate.
2. The Commercial General Liability 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) Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
 - (d) 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.
 - (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.
 - (f) 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.
 - (g) Employees and, if applicable, Volunteers must be included as Additional Insured.
 - (h) Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program).
 - (i) Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.

- (j) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.
- (k) 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.
- (l) Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.
- (m) Litigation Rights: Pursuant to subsection 5(d) of the Department of Justice Act, S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to: Director Business Law Directorate,
Quebec Regional Office (Ottawa),
Department of Justice,
284 Wellington Street, Room SAT-6042, Ottawa, Ontario, K1A 0H8

For other provinces and territories, send to: Senior General Counsel,
Civil Litigation Section, Department of Justice
234 Wellington Street, East Tower
Ottawa, Ontario K1A 0H8

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

6.19.2 Marine Liability Insurance

1. The Contractor must obtain Protection & Indemnity (P&I) insurance that must include excess collision liability and pollution liability. The insurance must be placed with a member of the International Group of Protection and Indemnity Associations or with a fixed market in an amount of not less than the limits determined by the Marine Liability Act, S.C. 2001, c. 6. Coverage must include crew liability, if it is not covered by Worker's Compensation as detailed in paragraph (2.) below.
2. The Contractor must obtain Worker's Compensation insurance covering all employees engaged in the Work in accordance with the statutory requirements of the Territory or Province or state of nationality, domicile, employment, having jurisdiction over such employees. If the Contractor is assessed any additional levy, extra assessment or super-assessment by a Worker's Compensation Board, as a result of an accident causing injury or death to an employee of the Contractor or subcontractor, or due to unsafe working conditions, then such levy or assessment must be paid by the Contractor at its sole cost.
3. The Protection and Indemnity 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 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 Department of Fisheries and Oceans and Public Works and Government Services Canada for any and all loss of or damage to the watercraft however caused.

- (c) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of cancellation.
- (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) Litigation Rights: Pursuant to subsection 5(d) of the Department of Justice Act, S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to: Director Business Law Directorate,
Quebec Regional Office (Ottawa),
Department of Justice,
284 Wellington Street, Room SAT-6042, Ottawa, Ontario, K1A 0H8

For other provinces and territories, send to:

Senior General Counsel, Civil Litigation Section, Department of Justice
234 Wellington Street, East Tower
Ottawa, Ontario K1A 0H8

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

6.20 Applicable Laws

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

6.21 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.

1. The Articles of Agreement;
2. The Supplemental General Conditions **1028, 2010-08-16**, Ship Construction - Firm Price;
3. The General Conditions **2030, 2016-04-04**, Goods (Higher Complexity);
4. Annex A - Statement of Work;
5. Annex B, Questions and Answers;
6. Annex C – Inspection/Quality Assurance/Quality Control
7. Annex D – Detailed Financial Presentation Sheet
6. The Contractor's bid dated _____.

6.22 Acceptance

1. The Inspection Authority, in conjunction with the Contractor, will prepare a list of outstanding work items at the end of the vessel's construction period. This list will form the annexes to the formal acceptance document for the vessel. A vessel acceptance meeting or telephone conference will be convened by the Inspection Authority on the work completion date of the vessel to review and sign off the form PWGSC-TPSGC 1105, Contractor's Certification.

N° de l'invitation - Solicitation No.

M8029-184462

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

M8029-184462

N° de la modif - Amd. No.

File No. - N° du dossier

Id de l'acheteur - Buyer ID

XLV 166

N° CCC / CCC No./ N° VME - FMS

2. The Inspection Authority must complete the above form and obtain the signatures of the Contractor and the Contracting Authority. The form will then be distributed by the Inspection Authority as follows:
 - a. one copy to the Contracting Authority;
 - b. one copy to the Technical Authority;
 - c. one copy to the Contractor.

ANNEX "A" - STATEMENT OF WORK**A1. VESSEL:**

- a. **5.7 to 5.99 METER ALUMINUM OUTBOARD JET BOAT – RCMP**
- b. **Configured as a 'Step Deck Bow' Outboard Jet Runabout.**

A2. ABBREVIATIONS

ABYC	American Boat and Yacht Council
AC	Alternating Current
ASTM	American Society for Testing and Materials
CFM	Contractor Furnished Material
CSA	Canadian Shipping Act
CSA	Canadian Standards Association
COLREGS	Collision Regulations
DC	Direct Current
GPS	Global Positioning System
GSM	Government Supplied material
ISO	International Organization for Standardization
PVC	Polyvinylchloride
TA	Technical Authority (As defined by the Contract)
TCMS	Transport Canada Marine Safety
UV	Ultraviolet
VHF	Very High Frequency

A3. LIST OF REFERENCE DOCUMENTS

REFERENCE	TITLE
ASTM F1166	Standard Practice for Human Engineering Design for Marine Systems, Equipment and Facilities
TP 1332	Construction Standards for Small Boats
TP 13430	Standard For Tonnage Measurement of Ships
TP 14070	Small Commercial Vessel Safety Guide
ISO 12217	Small Craft – Stability and Buoyancy Assessment and Categorization
ISO 6185	Shipbuilding and Marine Structures – Inflatable Boats
Canada Shipping Act	Small Vessel Regulations

Canada Shipping Act	Collision Regulations (COLREGS)
ABYC	American Boat and Yacht Council Standards
an Standards Association(CSA) 47.2-M1987	Certification of Companies for Fusion Welding of Aluminium
(CSA) C22.2 No. 183.2-M1983 (R1999)	Standards for DC Electrical Installations on Boats

A4. PWGSC SMALL CRAFT SOLICITATION INFORMATION

<p>a. General Information: This vessel is intended to be built based on stock small working or commercial vessel hull forms with a minimum of customization as indicated herein. Prototype hulls will not be considered for this procurement. A number of proven hulls must be shown to have been produced over the previous five years, and have no TSB “Marine Incidents” recorded against the model based on structural or design issues, for the Contractor to indicate suitability of the hull for this procurement. Bidders must submit brochures, photographs, references, builder's plates, hull identification numbers confirming multiple builds, etc. as required by the Contract Authority.</p>	
<p>b. Annex A Section A5, TECHNICAL SPECIFICATION is divided into four parts: Part 1 Article 1 General Description of Vessel Role and Function Part 2 Articles 2-9 Contractor Design and Construction Practices Part 3 Articles 10-16 Vessel Particulars Part 4 Articles 17-20 Outfitting and Equipment Part 1 provides a brief description of the vessel's role and function. Part 2, Contractor Design and Construction Practices provides general information on a wide range of construction practices, standards, vessel shipping and packaging, etc. Part 3, Vessel Particulars, cover the next layer of vessel description, physical construction and arrangement. Part 4, Outfitting and Equipment, covers the vessel's fitted equipment such as electronics, propulsion, steering and trailer (if required).</p>	
<p>c. Use of the Specification for bidding purposes: The Bidder is to mark an (X) at each BOLD header signifying that the specification has been read and that any proposal offered will meet, or exceed the required compliance with the written specification. The bidder must agree to comply with the specification even if offering an option.</p>	X
<p>d. Bidders may make notations in the appropriate column (For Example “See note 1,2,3, etc.”) to refer to any optional proposals that have been entered onto the page(s) at the end of Annex A, Statement of Work. Any cost differences, resulting from proposed options, must be entered ONLY in Annex I, Appendix 1, table b.</p>	X (e.g. see note 1)

A5. **TECHNICAL SPECIFICATION**

Table of Contents

- 1.0 General Description of Vessel Role and Functions
- 2.0 General Marine Construction Practices
- 3.0 Material and Construction Technicalities
- 4.0 Warranty Service and Parts
- 5.0 Documentation
- 6.0 Quality Assurance
- 7.0 Test and Trials
- 8.0 Packaging and Shipping
- 9.0 Trailer Information

Vessel Particulars

- 10.0 Physical Characteristics
- 11.0 Operational Performance
- 12.0 Environmental Conditions
- 13.0 Vessel Configuration
- 14.0 Construction Standards
- 15.0 Construction Drawings and Data
- 16.0 Construction and Finish

Outfitting And Equipment

- 17.0 Outfitting Detail
- 18.0 Propulsion
- 19.0 Steering
- 20.0 A trailer, if required

1.0 General Description of Vessel Role and Functions	
1.1 Mission Statement RCMP-GRC buys, manages and operates numerous small craft in support of its Departmental programs and other missions. The requirement is for a Runabout Jet boat with step deck bow in the 5.3-5.99 meter range (not including aft Jet protection grid). This boat will be used for various law enforcement operations in various river conditions including extensive work in shallow braided channels and fast flowing rapids. The boat is required to be capable of operating in up to class III Swiftwater (International River Rating) and in shallow draft (i.e. less that 6 inches).	
1.2 Utilization : Vessel to be trailered and deployed at various launching facilities.	

<u>CONTRACTOR DESIGN AND CONSTRUCTION PRACTICES</u>	
<u>General Marine Construction Practises: As applies to;</u> <u>Vessel's Specific Construction and equipment, found in Section 10 onward.</u>	
2.0	Unless stated otherwise all components, equipment and material must be Contractor furnished material, (CFM).
2.2	Ergonomic Design – General: Hazardous operating conditions must be prevented by arranging machinery and equipment in a safe manner; providing guards for all electrical, mechanical and thermal hazards to personnel; and providing guards or covers for any controls that might accidentally be activated by contact of personnel human engineering factors considered in design must include accessibility, visibility, readability, crew efficiency and comfort for a range of physiques for individuals from approx. 150 to 190 cm (5 ft. to 6' 4") in height, wearing cold weather clothing and equipment which must be accessible for use, inspection, cleaning and maintenance per ASTM F1166-88.
2.3	Vibration <ol style="list-style-type: none"> 1. The boat and all components must be free of local vibration that could endanger boat personnel, damage boat structure, machinery or systems, or interfere with the operation or maintenance of boat machinery or systems. 2. Mounts for movable components, including items moved for stowage, towing or transport must be provided with resilient material as necessary to prevent rattling. 3. Loosening of fasteners under vibration must be prevented by the use of self-locking measures, as applicable.
2.4	Equipment Protection: The Contractor is responsible for the care of all equipment. All parts, especially those having working surfaces or passages intended for lubricating oil, must be kept clean and protected during manufacture, storage, assembly and after installation. Equipment must at all times be protected against dust, moisture or foreign matter and must not be subject to rapid temperature changes or extremes in temperature.
2.5	Site Cleanliness: During construction, all chips, shavings, refuse, dirt and water must be removed at the completion of the work shift or sooner. The Contractor must ensure measures are taken to avoid wear and damage incident to construction, and to prevent corrosion or other deterioration. Equipment subject to freezing must be kept drained, except during test and trials. Equipment must be kept clean and protected from the environment prior to installation.
2.6	Facilities Painting facilities only): The Contractor must have a shop capable of maintaining temperature and humidity. It should be capable of maintaining temperature

between 16°C and 25°C., and should be capable of maintaining relative humidity below 70 percent.	
3.0 <u>Material and Construction Technicalities</u>	
3.1 Structural Integrity - All structures and components (hull, deck, collar, console, seating, etc.) must be of sufficient strength to withstand, when in a Maximum Load condition per builders' conformity plate , the lateral and vertical impact loading that equates to the conditions of the operational profile and mission requirements.	
3.2 Materials – General <ol style="list-style-type: none"> 1. Environmental Exposure; All materials must be corrosion resistant and suitable for use in a salt-water environment as detailed in the Environmental Conditions portion of the Performance Requirements. All materials normally subjected to sunlight must resist degradation caused by ultraviolet radiation. 2. Direct contact of electrolytically dissimilar metals is not allowed. Electrolytic corrosion must be prevented by insulating dissimilar materials from each other with gaskets, washers, sleeves, or bushings of suitable insulating material. 3. Aluminium alloy types 5086, or dual rated 5086/5083 H116/321 must be used for plate; aluminium alloy 6061-T6 (anodized grade), suitable for type 5356 filler alloy, must be used for extruded shapes and welded tubing and pipe. Stiffened transverse bulkheads or lightened plate frames may use type 5052 to facilitate braked tabs. Specialized use of type 6061 T6 plate in fresh water for high strength delta pads is allowed. Non-hull structural items of trim and outfit such as hatch frames, castings, deck components with braked elements, consoles, and hardware items may be of other aluminium alloys suitable for commercial saltwater marine use such as type 5052 or 6063. Thin hull topside plate, from chine to deck edge, must be alloy 5086 if .15 or .16 plate, with shallow or 45 degree embossed strakes, if required. Thicker topsides will not be embossed. Thinner topsides plate may be alloy 5052. 4. Stainless Steel: Stainless steel plate type 316 must be used for all stainless steel applications except as noted. Alloy 316L must be used in welded underwater components. 	
3.3 Fasteners <ol style="list-style-type: none"> 1. All fasteners must be of corrosion resistant materials. 2. Cadmium plated parts and fasteners, including washers, must not be used. 3. Direct attachment of alloys containing copper to aluminium is not permitted except for an electrical bonding strap, with contact bolt and separating isolation washer. 4. No fasteners must be directly threaded into aluminium alloys, except with adequate bolt or insert sizes, minimum 1/4" diameter, tapped into a suitable alloy type, and thickness, such as 1/4" 6061, with the use of thread adhesive type material. Aluminium or Stainless steel washers or backing plates must be used as appropriate. 5. Where nuts will become inaccessible after assembly of the vessel, nuts must be captured, or tapped inserts used, to allow reassembly and prevent backing off. Unless otherwise specified, self-locking nuts must be installed to prevent loosening of fasteners due to shock and vibration, and adequate thread showing as required. 6. Fasteners in deck traffic areas must be flush-mounted, flat head, round, or oval head, machine screws to eliminate tripping and snagging hazards. 	

3.4 Construction Procedures: Hulls must be fabricated as per the requirements quoted in Construction Standards, Sec 14, and requirements of Vessel Particulars.	
3.4.1 Main Hull and Appendages - Hull Form and flotation. <ol style="list-style-type: none"> 1. Hull shape must not impede water flow to the propulsion units and must direct spray and waves away from onboard personnel. 2. Watertight and Tank Bulkheads: The hull design must be such that a sufficient number of compartments, or amount of flotation, including hull compartments, and / or low smoke and flame spread flotation foam, or fire retardant flotation, or flotation devices, will allow for adequate stability and positive buoyancy in a flooded condition. See references to vessel certification, re: TP 1332 / ISO testing. 3. Stowage : Weather tight stowage for small items of equipment must be provided in void spaces beneath seats, and where practicable, inside console(s). All exterior stowage compartments must be lockable, secured by positive means and operable by gloved or insensitive hands. 	
3.5 Painting and Preservation <ol style="list-style-type: none"> 1. Fibreglass components must have a coloured gel-coat finish on all exterior surfaces. Gelcoat to be applied at 20-22 mil thicknesses. Finish colour(s) as per Vessel Particulars. 2. Aluminium components must have a painted finish, or powdercoat, on all specified exterior and interior surfaces, comprised of suitable etch, primers, and topcoat per the Vessel Particulars. Typical single coat paint systems can be applied in the 5 to 7-mil thickness range per coating set. Typical system components would be: a) etch-primer; b) two coats of primer; and c) minimum two topcoats. Powdercoat finishes will typically finish at 2 to 3 mils thickness. 3. Prior to delivery the Contractor must ensure that all non-painted exposed alum. is free of cosmetic blemishes, including all construction marks, scratches, gouges and stains. 	
3.6 Propulsion: Unless otherwise specified, propulsion motor(s) will be supplied and installed, per Outfitting section 18. <ol style="list-style-type: none"> 1. Run-in operation: The Engines must be installed and operated in accordance with the engine manufacturer's recommendations. The use of engine manufacturer's approved accessories and equipment is required except for outboard motor control cables (which must be heavy duty Morse 33C Supreme Red-Jacket ® cables, with manufacturer's cable ends installed, or manufacturer's best quality cable sets). Equipment and components must not be used, or trials performed on the engines that would, in any way, void the engine manufacturer's warranties. See Section 7.3 also. 2. Warranty: All components of the propulsion system must be warranted by the original equipment manufacturer for the standard term, sourced by GSM or as Contractor Furnished Material (CFM). 3. Impellers: Unless otherwise specified, propellers or jet impeller(s) must be as per Sec 18. Contractor must record in the trials report and equipment lists, the appropriate pitch and diameter to meet the Performance Requirements as determined by the Contractor developed design check, and trials. Impellers must be CFM. 	
3.6.5 Hydraulic Steering Systems <ol style="list-style-type: none"> 1. Steering system must be remote hydraulic with self-contained oil reservoir, and replaceable seals on the rams, unless propulsion system builder requires alternate steering arrangement per Section 19 	

<p>2. Hydraulic hoses must be of sufficient size and length to prevent pulsing. Hoses must be suitable for use in an exposed marine environment complete with stainless steel fittings.</p>	
<p>3.7.0 Electrical System</p> <ol style="list-style-type: none"> 1. The electrical system design, component selection and installation must be in accordance with Canadian Standards Association C22.2 NO. 183.2-M1983 (R1999) "Standards for D.C. Electrical Installations on Boats", or ABYC 'E' as referenced by TP1332. All electrical equipment and hardware must be installed in accordance with the manufacturer's specifications. AC systems will be called up in sec. 17, Outfitting. 2. All fitted electrical equipment must be capable of operating simultaneously with any other fitted electronics equipment without causing interference to any electronic equipment or to the magnetic compass. 3. Galvanic corrosion is to be controlled by installation of an effective bonding and grounding systems with galvanic isolation. Cathodic protection is to be effected by installation of sufficient anodes positioned so as to minimise cathodic currents per ABYC and TP1332. 	
<p>3.7.1 Twelve (12) volt DC distribution system must be provided to power the engine starting and boat service loads including:</p> <ol style="list-style-type: none"> 1. Navigation, interior, and exterior lighting. 2. Electrical equipment. 3. Instrumentation. 4. Bilge Pumps. 	
<p>3.7.2 Batteries and Switches</p> <ol style="list-style-type: none"> 1. Batteries must be marine grade, 12 V, deep cycle maintenance free, and with the ability to cross connect for twin-engine start up of either engine from either battery. Some engine packages may require larger capacity for injection systems, see Sec.17, Outfitting. 2. Battery switch must be Certification Agency, (CE, CSA, USCG, etc.) approved and must be mounted to prevent snagging or accidental switching. 3. Battery compartment must be weather tight and fitted with a suitable means of gas venting including for 'sealed' batteries. 	
<p>3.7.3 Power Distribution: Cables for all electrical distribution must be ample in size for the particular service, of marine grade tinned boat cable.</p>	
<p>3.7.4 Cabling Installation</p> <ol style="list-style-type: none"> 1. Cables must be grouped into wiring harnesses wherever possible. All wiring harnesses must be routed below decks or side decks. All below deck cabling must be through conduit pipe. 2. Cabling / conductors passing through watertight boundaries, decks, bulkheads or other exposed surfaces must be installed to maintain watertight integrity of the structure. Cable entry into watertight enclosures must be through watertight marine glands of suitable size. All electrical equipment must be readily accessible for performing maintenance. 3. Cables and conductors must be supported with clamps or straps at least every 18 inches on horizontal runs and every 14 inches on vertical runs. 4. Cabling / conductors passing through structures without watertight glands, must be protected against chafing by the use of abrasive resistant grommets. 5. Routing cables through foamed spaces must be avoided wherever possible. Cables that must be routed through foamed spaces must be run in PVC conduit pipe. The 	

pipe must be arranged in a manner that prevents water from becoming entrapped in the pipe.	
<p>3.7.5 Control and Monitoring Systems: Gauges and Indicators</p> <ol style="list-style-type: none"> 1. Unless otherwise specified, gauges must be analogue-style, or Engine Manufacturers' digital equipment. Gauges must be sized and installed so they are readily visible by the operator. 2. All gauges must be backlit with an adjustable dimmer. Lighting for gauges and lighting for compass must use separate dimmers. 3. Propulsion control system installation must include single-lever combined engine control, for each engine, to be located at the operator's position on the starboard side of the control station. Controls must conform to engine manufacturer's recommendations for commercial use. 4. The Operator's position must be fitted with a lanyard style emergency shut down switch as well as the following: 5. Bilge Pump operation indication for each compartment so equipped. 6. High water alarm for the engine installation space and every other space serviced by a bilge pump. 7. Engine space heat/ heat-rise sensor required for inboard engines, and fire alarm panel. 8. Allowance required for at least one additional input, if a single integrated alarm panel used 	
<p>3.7.6 Piping, Tanks and Ventilation Systems</p> <ol style="list-style-type: none"> 1. Flexible Connections - Where flexible connections are required for steering and fuel systems, suitable hose with permanently crimped, detachable reusable type fittings must be used. 2. Fuel Tanks must be hydrostatically tested, or air tested to 20 kPa (3.0 p.s.i.) and be labelled per the requirements of TP1332. See Sec. 18. 3. Fittings and clamps must be stainless steel. per the requirements of TP1332. 4. Each watertight Hull compartment is to have its own 12V DC bilge pump, plumbed to discharge overboard from the compartment, as per TP1332. 5. Enclosed compartments with gasoline engine or tanks spaces must have passive and powered ventilation. 	
<p>3.8 Fire Suppression - Inboard Engine Configuration</p> <p>Inboard Engine installations will require fire suppression, sound insulation, and heat sensor(s) with alarm panel in accordance with TP 1332 / TC regulations.</p>	
<p>3.9 Navigation Equipment (COLREGS)</p> <p>http://www.tc.gc.ca/acts-regulations/GENERAL/C/csa/regulations/010/csa014/csa14.html</p> <ol style="list-style-type: none"> 1. Navigation lighting fixtures must be of such a design as to resist the effects of vibration and moisture and must be provided with adequate protection from damage. 2. Particular COLREGS rules to note (vessels under 12 M.); Rules 22, 23, and Annex 1, rules 2, 9, and 10. (NOTE: The lights must be installed parallel to the "Normal Load" waterline that often may not be parallel to the deck.) 3. The navigation lights must be mounted so as not to interfere with night vision. 4. The navigation lights must be permanently mounted. 5. The Contractor must supply and install an electric horn that ensures the requirements of the Collision Regulations, Rule 32 are met, i.e. with a standard small vessel 'horn' audible 0.5 NM. The horn must be installed on the vessel exterior with the 'horn' facing forward. (See Section 13.6.) 6. A Magnetic Compass must be mounted near the centreline of the helm station, in easy view of the operator when facing forward. Deviation card development is an Owner responsibility. 	

4.0 Warranty and Service Provisions:	
4.1 Components and Equipment Support: All components and all mechanical, auxiliary, electronic and electrical equipment installed on the boat, with the exception of the collar, must be supportable by parts and service in Canada within 30 days. All components and equipment must be current models.	
4.2 Spare Parts: To facilitate replacement and inter-changeability of parts, as well as maintenance procedures and operator training wherever practicable the Contractor must standardize on selection of equipment, fittings and fabrication methods within all boats supplied, if multiple vessels are built in one contract.	
4.3 Parts and Service Depot(s) Contractor's parts depots must be capable of efficiently supplying all of the Client service area for this vessel, with spare parts for all components of the vessel and warranty service for all components of the vessel. It is recognized that many equipment items will have their own manufacturer's warranty cards for owner registration. Contractors must have a factory authorized service representative capable of call back response in all regions of Canada within 48 hours of receiving a service call. BUILDERS will find that a service relationship with marine repair and service companies in every region will provide clients reassurance of service availability. All warranty work must follow the requirements for service shops to get approval for work to ensure cost recovery. Clients will be responsible for costs above the approved levels.	
5.0 Documentation	
5.1 Technical Publications General: The Contractor must provide, upon delivery of the vessel, one (1) hard copy and one (1) electronic copy per vessel produced for the operator of the vessel, plus one (1) hard copy and one (1) electronic copy for the Technical Authority, shipped to the same address as identified for invoicing: of a comprehensive owner/operator manual that provides a physical and functional description of the craft, its machinery and equipment, as well as delivery testing and sea-trial result documentation. The manual should include but not be limited to sections such as: General Information, Technical Information, and an Initial Spare Parts List. See also section 7.8 for the listing of Deliverables "with each completed vessel".	
5.2 General Information Section: The General Information Section must include a description of the arrangement and function of all structures, systems, fittings and accessories that comprise the boat, with illustrations as appropriate: <ol style="list-style-type: none"> 1. Operating procedures. 2. Basic operating characteristics (such as temperatures, pressures, flow rates, etc.) 3. Installation criteria and drawings, assembly and disassembly instructions with comprehensive illustrations showing each step. 4. Recommended planned maintenance. 5. Complete troubleshooting procedures. 	
5.3 Technical Information Section: The technical manual should include a complete set of detailed owner / operator instructions, drawings (Section 15), parts lists and supplemental data for all components of the boat (whether acquired from external sources or custom-manufactured). <ol style="list-style-type: none"> 1. The list must include the name, part number and serial number if applicable of the parts, items or components and must indicate the supplier (name, address, phone 	

<p>number, email address) of this part, equipment or component and in which part of the specification the item appears.</p> <ol style="list-style-type: none"> Hull; including hull data, hull and deck equipment serial or manufacturer's numbers, including tank test reports, Life Saving Appliances, lifting gear, extinguishers, etc. TEST and TRIAL results, and certification notices, instructions, and warranty cards that distribute with equipment. Engine(s) and propulsion manuals: including engine and propulsion serial numbers. Electronics manuals, (if applicable): including model and serial numbers. Collar, if any; including collar materials and glue materials and product sheets, and procedures necessary for onboard repair of the collar, including a materials repair kit. Regulatory and Stability information: as required per TP 1332, which references ABYC, TC publications, or ISO12217 that further references ISO 6185 for RIBs. ISO 11812 for drainage times of cockpits, and ISO 11216 for hatch and portal watertightness are required as well, for example. <p>Stability and ISO operation class calculations MUST be calculations on Maximum Load, which may lead to dual certification on the builder's plate as the calculations must be done for the Normal Load as well as it will result in a higher (rougher sea states and wind) ISO operating classification, for SAR emergencies and extreme duty usage.</p> <ol style="list-style-type: none"> Contractor to fill out Simplified Method of Tonnage Measurement, TC form 4a. NOTE: Builder is encouraged to use the "Small Vessel Detailed Compliance Report" sheets as a check off sheet for hull and equipment and list the name/ Company of the person checking the data in the "Authorised Representative" space on P. 7 of the form. http://www.tc.gc.ca/eng/marinesafety/svcp-menu-3633.htm. 	
<p>5.4 Initial Spare Parts List: The Technical manual must also include a list of recommended initial onboard spare parts to be stocked for the craft. At a minimum this list must include the following items (as applicable):</p> <ol style="list-style-type: none"> Propulsion: Propeller / impeller, filters, water pump impeller, starting battery, throttle and shift cables, any special engine tools. Electrical: fuses, light bulbs, electrical panel breakers; Boat Structures and Fittings: Miscellaneous commonly used fasteners. 	
<p>6.0 Quality Assurance: The basic reference to ISO 900x compliance is as per the contract document.</p>	
<p>7.0 Test and Trials:</p>	
<p>7.1 The Contractor must inspect and test the following items, as required, for adherence to the contract requirements and proper operation (proper operation means that the equipment can be started, operated, connected together and demonstrated to function in a normal fashion, as applicable). All discrepancies must be corrected prior to delivery.</p> <ul style="list-style-type: none"> - The required inspections and tests are minimums and are not intended to supplant any controls, examinations, inspections or tests normally employed by the Contractor to assure the quality of the boat: <ol style="list-style-type: none"> Weight Construction Quality Lifting Gear Propulsion Engines including Starting and Controls Steering System 	

6. Fuel System 7. Electrical System 8. Electronics	
7.2 Sea Trials – General: The Technical Authority must be notified no less than 48 hours prior to sea trials. The Technical Authority reserves the right to witness or decline attendance of sea trials, or to require the Inspector to attend. Absence of the Technical Authority, or Inspector at sea trials does not relieve the Contractor of its responsibility to conduct and record sea trials. Sea trial results must be forwarded to the Contract and Technical Authorities prior to delivery of the vessel. The Technical Authority will inform the Inspector of trials so they may attend.	
7.3 Sea trials must be conducted by the Contractor to demonstrate the boat and its equipment conform to the requirements as stated in the Contract and the Performance Requirements. All expenses incident to the trials must be borne by the Contractor, including fuel unless otherwise specified. A crew provided by the Contractor must operate the vessel during sea trials. All Sea Trial instrumentation and equipment must be furnished and operated by the Contractor. Trial instrumentation, where applicable, is not to replace the boat's instruments (e.g., engine tachometer, pressure gauges, thermometers). The Contractor must furnish all necessary hardware and fittings and must install the measuring devices. After satisfactory completion of the trials, all instrumentation must be removed and all systems restored. The Contractor must provide calibration data certifying the accuracy of the instrumentation for the tests. The Contractor is required to run the vessel during builders' trials until the engine(s) have accumulated the operation hours sufficient for the initial engine service by the engine supplier, or for 10 hours, whichever is least, and to have a manufacturers' service agent perform the service and provide an initial service report.	
7.4 The Contractor must submit a Test & Trials Plan , including a description of all of the acceptance trials to be performed. As a minimum, the following trials must be conducted: The vessel must operate in the Normal Loaded Condition, per Sec 10.. 1. Speed Trials - The speed trials must be done over a course at least one nautical mile in length. Two runs must be made over the course, one in each direction with the speeds for the two runs averaged. The use of GPS data (averaged) is acceptable. 2. Endurance Trial - During the endurance trials, it must be demonstrated that all parts of the propulsion system are in full operation. All systems must be operated to check for proper installation. Fuel consumption can be calculated using manufacturers' data. 3. Astern Propulsion - The vessel must be operated and manoeuvred using astern propulsion to establish the astern performance. During the backing performance tests the throttles must be set to provide approximately 1/3 of the rated engine horsepower. 4. Steering Gear; Tests must be conducted on the steering gear to demonstrate the adequacy of the steering system under all operations. Manoeuvring tests must be performed to ensure that the boat meets the stated Basic Performance requirements, per Sec 11. Manoeuvring trials must be conducted in the Normal Operating Condition. 5. Lifting Gear Load Test; Vessel and bridle or lift frame may be tested at 150% of normal load condition, as specified in the Vessel Particulars; to lift and hold without deformation of the lift points or associated hull. Lift points to be recessed flush with deck, and certified for load.	

<p>6. Stern towing arrangement: Testing bollard pull to design capacity in a direct astern load. Data from previous test to same standard, for same post and construction accepted</p> <p>7. At the conclusion of sea trials each boat must be thoroughly cleaned and inspected. Outboard engine cooling systems must be flushed through with fresh water. The Contractor must repair any damage to the vessel or ancillary equipment resulting from sea trials, to the satisfaction of the Inspection Authority.</p>	
<p>7.5 Final Inspection and Acceptance (PWGSC Acceptance Document) for delivery; Final Inspection must not be performed until all tests have been satisfactorily completed with data available for review. The boat must be ready for delivery in all respects, except for final preparation for shipment. The Contractor must provide personnel, as required, to resolve questions and to demonstrate equipment operation maintenance accessibility, removal and installation. The Contractor must document the results of the final inspection and submit these results to the Inspection Authority; a copy of the trial results must be shipped with the deliverables for each boat, per 7.6/ 7.7.</p>	
<p>7.6 Stability examination as applicable per TP1332, from ISO standards 12217 which for RIBs delegates to ISO 6185, or by TP 7301, requires the Contractor to record all stability/ structural, calculation and trial results and provide a copy for each boat produced, to be placed in the technical manual. See Sec. 14 Standards. The stability trial of the first of a series of vessels can be used for all identical vessels.</p>	
<p>7.7 Trial Records - The Contractor must maintain records of testing for each boat for a minimum of two years. The Contractor must prepare a trials check sheet that certifies that each test has been completed. The check sheet must indicate the actual weight of the boat in Light Condition, per section 10. The check sheet must also indicate the Normal Loaded weight and the date for the 150% "normal load" lifting gear test, if required. This check sheet must be included with the deliverables of each vessel.</p>	
<p>7.8 <u>Standard Deliverables</u> (and notes on client department registration and compliance)</p> <p>Required with each completed vessel, one manual and one CD per vessel delivered plus one manual and one CD for the client department TA. Items 2 to 4 may be collected in separate clear sleeves.</p> <ol style="list-style-type: none"> 1. A detailed operator manual must be provided for all equipment, and systems, per Sec 5. This may be developed using equipment instruction sheets and manuals. 2. Sea Trial results, and shop testing sheets, including Builders' technical data, per Sec 5. 3. Acceptance Certificates, and compliance sheets or certificates distributed with equipment, per Sec. 5.3.2-5. 4. Regulatory Compliance data, including ISO, ABYC, or TC calculation sheets for stability, drainage, watertightness, tonnage, or Builder's flotation tests, per Sec 5.6-7. 5. The initial inspection of the vessel(s) after delivery, by Owner / Department Self Inspector, will establish TP 1332 / ISO compliance, using SVCP self inspection. 6. Vessel drawings; The Annex A Specification calls for the submission of Preliminary drawings and the "As Fitted" update of drawings must be included in the manuals. 7. NOTE: Regarding Documentation for vessel entry in the Small Vessel Registry. The Contractor should inform the Client TA as soon as they have deposited the payment on the final invoice, as this will determine when the Client department can fill out the new TC Form 19 registration for the vessel and get their O.N. assigned. The Client TA or financial authority will distribute a copy of the invoice for the end user files. 	

8.0	<u>Packaging and Shipping:</u> Shipping other than Towing on Trailer	
8.1	Prior to shipping, the boat must be cleaned throughout, preserved and covered (shrink wrap), secured on the boat trailer if any, or chocked as required, in accordance with this section.	
8.2	Bilges must be dry and free of oil and debris and the fuel tanks must be drained.	
8.3	The propulsion system must be preserved in accordance with the manufacturer's recommendations for storage of up to one year in an environment that will be subjected to freezing temperatures.	
8.4	The battery must be disconnected.	
8.5	A durable warning tag must be wire tied to the steering wheel indicating that the boat has been preserved for shipping and storage and should not be started until the propulsion machinery has been reactivated.	
8.6	Lengthy shipping arrangements must protect the boat hull from deformation from road irregularities producing, due to repeated bouncing, dents in hulls supported on roller assemblies, by the insertion of a temporary bunk to distribute loads.	
8.7	Towed Delivery on the boats' trailer: In local short haul trips in non-freezing weather, <u>only the cleaning and covering provisions may be required</u> , with the approval of the Inspection Authority.	
9.0	Trailer Information: IF required: (See Solicitation Annex 'I' pricing sheet for requested pricing, if any, and section 20 at the end of Vessel Particulars for specific trailer information)	

VESSEL PARTICULARS		
10.0 <u>Physical Characteristics: 5.989 meter (not to exceed 19.65 Feet) Aluminium Jet Boat</u>		
<p>NOTE: Every effort must be made to control the weight of the vessel to facilitate handling in beaching situations. The framing schedule may be lighter, and / or topside hull plating may use embossed strakes to increase stiffening.</p> <ol style="list-style-type: none">1. Length (hull) must be approx. 5.7m and must not exceed 5.99m.2. Hull bottom to be 5.5ft to a max of 6 ft beam and of 6.9ft to 7.6ft max at sheer.3. Minimum hull depth: 29 inches4. Preferred design to incorporate jet tunnel for optimum water availability for jet pump.5. A UHMW sheathing to be applied to hull bottom centered at keel using a suitable watertight method.6. Split swim grid with adequate support aft and welded to transom for easy access re-boarding and mounting of auxiliary engine. (See section 18).		
10.12 Normal Load conditions: (Light vessel is complete vessel; no fuel, load, or personnel)		
- Crew of 2	= 200 kg	
- Fuel	= 130-150 litres in one tank, (110 -125 kg)	
- Equipment & supplies	= 200 kg	

10.13 Vessel Tonnage Requirements: Vessel must be shown to be ≤ 5 GRT. Contractor to fill out simplified tonnage measurement form and include in manuals for vessel.	
11.0 Operational Performance	
<ol style="list-style-type: none"> 1. Unless otherwise stated, performance must be for conditions of zero sea state and no wind, in fresh water with Normal Load and complement. The craft must be designed and constructed for ease of maintenance and repair, long life, and to be easily supportable by local commercial facilities and suppliers. The craft is expected to have a service life of at least 15 years, with an expected usage of between 100 and 150 hours per year. 2. Minimum desired speed 35 knots in Normal Load condition. 	
11.1 Beaching	
<ol style="list-style-type: none"> 1. Capable of beaching on soft (sand, earth or clay) surfaces at a speed of up to 5 knots without damage to the hull. 2. Capable of beaching on hard (stone or concrete) surfaces at speeds of up to 3 knots without damage to the hull. 	
11.2 Depth under Keel	
<ol style="list-style-type: none"> 1. Operate carefully in depths of 0.2 meter on plane. Basic manoeuvring in depths of 0.50 meters off plane 	
12.0 Environmental Conditions: Capable of 24 hr. operations in these conditions;	
<ol style="list-style-type: none"> 1. Average ambient air temperature range: -5°C to + 30°C 2. Average water temperature: 0°C to +20°C. 3. Wave heights of 2 ft. to 6 ft. 4. Wind speeds up to 30 knots 	
13.0 Vessel Configuration	
13.1 General Arrangement Notes: <ol style="list-style-type: none"> 1. There must be a forward 'step-deck' with separate drainage. 2. The windshield must incorporate a centre port-side hinged window and lower weather tight closure at the forward faces of the port and starboard consoles. 3. Windshield frame to incorporate one grab rail each port and starboard located on the upper portion of the inboard aft face of the fixed forward sections. 4. The aft cockpit must run from consoles to transom with only the centreline engine box, at the transom, extending into the cockpit. 5. There must be helm and navigator seating with 1 port and 1 starboard storage box seat mounted aft of helm and nav seat. See Sec. 13.7 6. There must be side fixed windows running to the forward windshield. 7. A bow locker is required for anchor, cable and miscellaneous stowage. 	

<p>13.2 General Deck Arrangement</p> <ol style="list-style-type: none"> 1. Tie up points along the side deck and aft at transom, will be provided by the low profile handrail and to include approx. 6" aft corner cleats under the transom corner rails. 2. There is to be an anchoring bit /cleat fitted on the bow of the vessel. 3. Vessel must be outfitted with navigation lighting, and antennas as required. 4. Vessel must be fitted with aluminium protective pipe 'swim grid', which extends above the jet unit, fabricated to fully support the installation of auxiliary propulsion system. See section 18 propulsion. 5. Vessel must be equipped with securing eyes fitted to the outside of the transom used for trailer tie downs. 6. Low profile pipe railings to be installed at sheer from windshield forward to break at bow, and from approx 3' forward from transom to transom with a return across the transom on port and stbd of about 12". Aft rails height to be 30" from cockpit deck. 	
<p>13.3 Not Used</p>	
<p>13.4 Towing: A tow eye is to be incorporated into the stem such that it is flush with the stem. This is to allow the boat to bow up to rocks without getting hung up. It must be strong enough to tow the boat in calm water in a normal load condition, on an even keel, without damaging the boat. The tow eye must also be suitable for trailer tie down, and located approx. 18 inches above waterline</p>	
<p>13.5 Not Used</p>	
<p>13.6 Cockpit and Layout</p>	
<ol style="list-style-type: none"> 1. The cockpit is to be open with a walk-through windshield. The bow is to be recessed (self-draining overboard from aft P&S corners) with the welded frame windshield and lower, closure panel, sealed from water coming over the bow and into the helm and aft cockpit area. 2. Laminated Safety glass, ¼ inch thick, to be used in the windshield. Height of windshield top to be minimum 50 inches above the cockpit sole. 	
<p>13.7 Seating: There must be two, height and sliding adjustable shock mitigating seat bases at helm and navigators position .The seat units will be a deluxe, cushioned seat with a base cushion that can be flipped up to provide support for standing operation. The Wise premium bucket seat WD1156 or builder recommended equivalent to meet this requirement. Seat assemblies to be positioned to accommodate either seated or stand-up operation. Aft of these port and starboard seats will be two storage seat boxes with cushioned upholstered tops. Boxes to be approximately 20" by 30".</p>	
<p>13.8 Console:</p> <ol style="list-style-type: none"> 1. The dash layout is to be arranged in an ergonomic manner, to provide easy access to controls, electrical panels and easy viewing of navigation and propulsion instruments. The console is to be robustly constructed to eliminate flex from operators holding points, and equipped with a steering system specified for the motor (Mercury steering system). 2. A 12 V DC 'cigarette lighter' power point is to be installed on each of the port and starboard dash, with a lockable storage 'glove box' in the "Nav" console. 3. The operator's helm is to be located to starboard and equipped with all appropriate 	

gauges as recommended by the propulsion system manufacturer, as listed in 'Outfitting'. A dimmer switch is to service all dash lighting. Compass light to have separate control.	
14.0 Construction Standards	
<ol style="list-style-type: none"> 1. Transport Canada Marine Safety publication TP 1332 "Construction Standards for Small Vessels", which incorporate references to ABYC standards for equipment such as fuel tanks and fuel systems, as well as tank space ventilation, and ISO standards for stability, loading capacity, etc. as delegated to ISO 12217. http://www.tc.gc.ca/MarineSafety/Directorate/TP/tp1332/tp1332e.htm 2. Canadian Standards Association C22.2 NO. 183.2-M1983 (R1999) "Standards for D.C. Electrical Installations on Boats and TP 1332 and ABYC electrical standards." 3. Canadian Standards Association (CSA) CSA W47.2-M1987; Certification of Companies for Fusion Welding of Aluminium 	
15.0 Construction Drawings and Data	
<p>The following, "As Fitted", dimensioned drawings must be produced for manuals to record the vessel particulars. Preliminary drawings required for bid evaluation.</p> <ol style="list-style-type: none"> 1. Lines plan, sections only, with transom dead rise noted. 2. Plan and Profile, showing the General arrangement; and 3. Midship section from aft showing helm and navigation operating positions. 4. Indication of the Systems arrangement presented with the above drawings covering Bilge, Fuel, Electrical, and propulsion installations. 	<p>*</p> <p>Present with bid</p>
16.0 Construction and Finish	
16.1 Hull and Deck: The hull, and deck, must be constructed of Aluminium per the requirements of Sec 3.2.3. Mil Certificates are required for all aluminium used in the fabrication..	
<p>16.2 The hull must be an approximately 6 -12 degree dead rise "mono hull with a reverse chine flat and hull bottom to be incorporating a reinforced centre keel bar of approx 1/4" thickness.</p> <ol style="list-style-type: none"> 1. Vessel to have a fully welded hull/ deck shell and split swim grid with centre space for outboard engine. Framing welds must be continuous in areas subject to vibration in the vicinity of machinery bedplates and bow areas subject to impact. See Sec 18. 2. The hull is to have a minimum 3/8 inch thick 'delta pad' keel, with preferred jet tunnel design for outboard jet water intake. 3. A minimum of 6 full-length (bottom) stringers is required, or minimum 4 box girders with approx 6 " base on hull per girder, not including bar keel forward integrated with delta pad stiffener. Stringers to be 1/4" type 6061 extrusions, or braked .125 pl. 4. The hull and decks are to be transversely framed and longitudinally stringered, with 3/16" bottom and chine plating and minimum 1/8" side plating 5. The hull, to have minimum bottom plate thickness of .190" and side plate of .125". 	
16.3 Deck: Deck to made of aluminium will include deck plate joining faces to be continuously welded and finished to provide for smooth non-catch surface with the	

exception of machine screwed and gasket (non-adhesive) water tight, deck plate located immediately over the fuel tank. Non slip coating applied to all working deck areas.	
<p>16.4 Windows: The windows must be laminated safety glass, and carry the manufacturers' certification confirming construction. Forward windows must be minimum 1/4 inch glass as well as side windows beside the operator's positions.</p> <p>16.4.1 Protective cushioning, with sunbrella or equal covers, for operator and navigator to be fashioned for the upper window frames port and starboard. Cushions are to be removable with the ability to be attached via the canopy snap retainers.</p>	
<p>16.5 Stowage and Trailer Securing Points</p> <ol style="list-style-type: none"> 1. Two open deck stowage seat boxes to be affixed to the deck aft of helm and nav seats. 2. Arrangements must be provided for safe, secure and accessible stowage of an anchor and cable, and other equipment in bow / anchor locker and side deck trays. 3. Tie Downs; Port and Starboard trailering tie down points to be incorporated in transom. 	
<p>16.6 Bow Eye: A system is to be designed and incorporated into the construction of the stem that allows for the bowline and or trailering hook to be attached to the bow and which must not protrude from the line of the stem. The fitting must be of a non-corroding material and of sufficient strength to allow for towing the vessel at a speed of 20 knots in calm water in the normal loaded condition, on an even keel, without damaging the vessel or causing chafing of the towline.</p>	
<p>16.7 Pumping and Drainage: Electric and Manual pumps</p> <ol style="list-style-type: none"> 1. An electric bilge pump with 1500 gph capacity must be fitted in the main watertight division as well as a fixed manual operated bilge pump of the diaphragm type. The bilge pump(s), must be located so that they take suction from the lowest point of the hull, at the transom. Smooth bore piping must be installed which will allow the bilge pump to discharge directly overboard. Any additional watertight division of the hull must be serviced by a bilge pump of 1500 GPH capacity. 2. Bilge pump must have an integrated automatic float switch control that turns on the electric bilge pump when water is present in the bilge. Bilge pump must be easily accessible. Bilge system to incorporate a high water alarm with visual and audible indicators located at helm. The electric bilge pump control switch must be located on the operator's console, with settings for 'on', 'off', and 'automatic' operation. An indicator light must be provided at the control that lights when the bilge pump is operating. 3. A High-level float switch must be also be installed in the bilge compartment to warn operators of water ingress. The HIGH LEVEL switch(s) must activate an audible (cancelable) and visible alarm at the helm, and must be in plain sight of operator. Switch must accessible similarly to the bilge pumps, to manually test alarm functions. 4. Hull drainage: A compatible metal threaded plug must be provided in the lowest point to drain the hull when out of the water. 5. Valves and handles must be non-corroding material and must be located where they are readily accessible for operation, maintenance or removal. 	

<p>16.8 Hull and Deck Finish: White exterior marine paint, hull sides only, from sheer to 20” below the sheer.</p> <ul style="list-style-type: none"> - All reflective surfaces which could affect safe operation of vessel, to be painted with “zolotone” , Granite Grey, to be used on console, window frame, and side/ aft (transom top) decks, and interior return at inner side deck edge, and railings. - Fore deck must be painted with dark grey non-skid application - Cockpit deck and engine box top to be painted with Non-Skid as well. <p>RCMP decaling to be GSM supplied and installed by the contractor.</p>	
<p>16.9 Collars – Not Used</p>	
<p><u>OUTFITTING AND EQUIPMENT</u></p>	
<p>17.0 Outfitting Detail</p>	
<p>17.1 Lifesaving Emergency Equipment: Will be GSM, with the exception of the following:</p> <ol style="list-style-type: none"> a) One CO2 fire extinguisher of suitable size mounted in non-obstructing location in clear sight of operators. b) Oarlocks located amidships mounted on top gunnel with oars of suitable to assist operators in avoiding various hazards in of loss of main propulsion. 	
<p>17.2 Electrical System</p> <ol style="list-style-type: none"> 1. The electrical system must be easily accessible, incorporating a waterproof faced breaker panel with a minimum of 8 circuits fitted, and an additional panel if required for the services specified herein. A minimum of two spare breakers required. 2. Twelve (12) volt DC distribution system must be provided to power the engine starting and boat service loads. Starting battery to be used for engine service loads only. 3. All circuit breakers must be clearly identified. 	
<p>17.3 Batteries</p> <ol style="list-style-type: none"> 1. The boat is to be equipped with two deep-cycle batteries with a selector 4 position switch and connected in accordance with the motor manufacturer’s technical specifications. 2. The batteries must be of marine quality equipped with rollover caps and a capacity to adequately service engines and ancillary vessel loads. 	
<p>17.4 Wipers, Lights and Utilities:</p> <ol style="list-style-type: none"> 1. Two pantograph arm wipers must be installed on the starboard and port fwd windows. A switch located on the helm console must activate them individually. 2. A series of multipurpose light bars are to be affixed to light the working deck areas of the vessel. Two each side, port and starboard mounted under the gunnel to provide light to the aft deck working area and one each under the dash at operator and nav positions to provide light at console area deck. Lunasea LED multipurpose light bars 32CC-71-00 or equivalent. 	
<p>17.5 Navigational Equipment:</p> <ol style="list-style-type: none"> 1. The Contractor must supply and install an electric horn that meets the requirements of TP 14070 (Small Vessel Regulation). The horn must be operated by a momentary switch located on the operators’ console. The “Signaltone” model RB-85 electric horn, or Ongaro horn meets this requirement. 2. All navigation lights must display range of visibility as defined in the Canada Shipping Act, Collision Regulations. (COLREGS) (http://www.tc.gc.ca/Actsregs/csa- 	

<p>Immc/csa14.html) Navigation lights must be permanently fitted to the cabin window corners and / or socketed in suitable location to meet requirements as listed sec 13.9.2 above with protected wiring and must be waterproof. All round light can be located on socketed / removeable mast on transom deck.</p> <ol style="list-style-type: none"> 3. The fixtures must be designed to resist the effects of vibration and must be provided with adequate protection from damage that may occur when lying alongside a vessel or a pier. (The Hella NaviLED Series of lights, including the NaviLED 360 all-round light, and NaviLED sidelights meet this requirement.) 4. Non-white (red or green) lighting must be wired together on a separate breaker of the 12-volt DC electrical system. Masthead 'all around' light showing clear above the windshields and bimini is acceptable, and side lights, one meter below mast light, on windshield sides. Two switches to be provided, labelled: Nav 1 (masthead / anchor light) and Nav 2 (sidelights). 	
<p>17.6 Navigational Electronics-contractor supplied and Installed</p> <ol style="list-style-type: none"> 1. One standard horizon loud hailer with listen and intercom features 2. One Garmin GPSMAP 7410XSV with associated software for Yukon territories. 	
<p>18.0 Propulsion</p>	
<ol style="list-style-type: none"> 1. The boat is to be powered by a Yamaha Jet outboard engine which enables vessel to meet the performance criteria as listed in section 11 with full load compliment, CFM, contractor supplied and installed. 2. An auxiliary engine (Yamaha 9.9 hp 4 stroke) is to be mounted on the port side on the transom with designated controls located in such a manner that all starting / operating systems are available at the helm position. Engine to be CSM supplied. Controls, steering components and engine mounting bracket contractor supplied and installed. All control components with the exception of remote steering must be original manufacturer's equipment. 3. Motors must be installed in accordance with manufacturer's recommendations. Installations of the engine(s), controls, lubrication and fuel systems, battery connections, etc. must be verified by an authorized Yamaha representative. 4. The steering for the auxiliary is to be directly linked to the main 105/150Yamaha engine steering system. 5. Impeller is to be Stainless Steel. 	
<p>18.1 Propulsion Control</p>	
<ol style="list-style-type: none"> 1. Engine controls must be mounted on starboard inboard gunnel at optimum height to allow safe and ergonomic access to operators while standing or seated. 2. Contractor to have installed any of the following equipment included in the engine manufacturers' standard and optional gauge package for the specified engine. Note that separate hour and fuel gauges must be installed in addition to any main multifunction gauge. <ol style="list-style-type: none"> a. Tachometer for engine. b. Engine temperature alarm c. Fuel level sender and gauge d. Hour meter e. Voltage gauges. 	

f. Ignition harness (mounted so that the key cannot collect water).	
18.2 Fuel Systems: NOTE: Ensure that engine room / tank space has powered vent.	
<ol style="list-style-type: none"> 1. Fuel systems must meet with all requirements of TP 1332 "Construction Standards for Small Vessels", which reference the ABYC standards. 2. The vessel must be fitted with fuel tank(s), to be fitted centre mounted in floor or through floor level. Fuel tank to have a capacity 130-150 litres. Tanks must be hydrostatically tested, or air tested to 3.0 p.s.i. and bear manufacturers' name, capacity, and testing data. A certified rotomoulded plastic tank is acceptable. Fuel system to comply at the minimum with the most current American Boat and Yacht Council Standards, (ABYC) 3. Arrangements must be provided for the fuel tank and associated lines, vent, fill, and on / off selector manifold, to be fitted to the boat. 4. Fuel tanks must be equipped with a demand anti-siphon valve, or manual ball valve, installed on the supply fitting at the tank, depending on engine manufacturer's approval of the demand valve. 5. Fuel lines from the inboard shutoff valve or manifold to be protected against chafing and wear. The fuel shutoff "maintenance" valve to be located outside of engine compartment per TP 1332, which references ABYC standards. 6. A fuel / water separator filter is to be mounted "in-line" to the engine with easy access to drain the sediment bowl, a RACOR 320, or eq. 7. All valves and fittings for the fuel system must be of stainless steel or other non-corroding metals suitably isolated from the aluminium structure. 8. Filler pipe openings must be surface mounted on the side deck, and labelled for fuel type. 9. Fuel tank vents must be equipped with a non-return check valve with flash screen. 	
19.0 Steering:	
<ol style="list-style-type: none"> 1. Steering system to have a hard over to hard over (270 degrees from lock to lock) 2. The wheel / console connection must be of robust construction, to eliminate fore and aft or lateral movement of wheel / steering shaft fixture. 3. The Steering wheel must be stainless steel, or high strength aluminium, and be rubber or plastic covered. 4. Auxiliary engine to be controlled directly by main propulsion unit steering system. 	
20. Trailer: Must be rated at least 20% over the anticipated 'normal load' weight of the boat, and to be specified as follows:	
<ol style="list-style-type: none"> 1. Galvanized modular construction; 2. 15 inch 5 bolt wheels with disc brakes; 3. Dual axle design with vault style or equivalent sealed bearing hubs. 4. Surge brake equipped. 5. Brake, and turn signal lighting, with seven pin round socket adaptor. 6. Manual, one speed bow winch assembly with winch webbing strap, bow chock, and high lift swivel tongue jack, (1500 lb.) with wheel; 7. Must be fitted with heavy duty 'stand-on' fenders and hitch for a 2" ball; 8. Must have double "slick" bunks (minimum), and spare tire and carrier, with lug wrench; 9. Must be supplied with two ratchet tie down straps with hooks securing boat to trailer aft. Turnbuckle to be provided for securing boat to trailer forward; 	

10. Must have horizontal, side-loading guides from inside of fenders to aft end of trailer frame.	
21.0 <u>Bimini Top</u> <ol style="list-style-type: none"> 1. Supply and install a "bimini" 3 hoop canopy top with folding frame and drop down centre panel in way of open windshield. Bimini assembly to be of commercial grade with stainless steel fittings able to withstand the varying environmental conditions at maximum speeds maintaining its shape and integrity. 2. Clear panels must be provided port, starboard and aft to provide maximum range of view for both the helm and navigator's positions. Canopy material shall be of durable, waterproof, and UV resistant. "Sunbrella" or "Top Gun" or equivalent meets this requirement. 3. Headroom beneath canopy shall be a minimum 6 ft. 4 inches (1.93 meters). Canopy shall be designed for easy removal from vessel. Color shall be dark blue 4. An aft drop curtain," sloper top" and padded windshield cover of the same color and material shall also be supplied. 	
Proposal Notes:	
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9. Add lines as required	

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ANNEX B - QUESTION & ANSWER

Article	Statement of Work description	Bidder Questions	Canada Responses

ANNEX C - INSPECTION/QUALITY ASSURANCE/QUALITY CONTROL**1. Conduct of Inspection**

- (a) Inspections will be conducted in accordance with the ITP provided and accepted by the Inspection Authority and as detailed in this Annex.
- (b) The Contractor must provide its own staff or subcontractors 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.
- (c) As applicable, the Contractor must ensure that the required conditions stated in the specification prevail at the commencement of, and for the duration of, each inspection/test/trial.
- (d) 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.
- (e) 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.

2. Inspection Records and Reports

- (a) 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.
- (b) The Contractor's Quality Control (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.
- (c) 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.
- (d) Corrective action to remove cause of unsatisfactory inspections must be submitted to the Contracting Authority and 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 Contracting Authority and to the Inspection Authority.
- (e) 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.
- (f) The Contractor must reschedule unsatisfactory inspections after any required repairs have been completed.
- (g) 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 Contracting Authority and to the Inspection Authority upon request.

3. Inspection and Trials Process

3.1 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 SOW. 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 Government of Canada Authorities.

3.2 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 are required before the Work is inspected by the 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 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.

3.3 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.

3.4 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 and the

Specifications and any additional tests and trials performed by the Contractor 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 co-ordinate each test, trial and demonstration with all interested parties, including the Inspection, Contracting and Technical Authorities; regulatory authorities; Classification Society; Sub-contractors; etc. The Contractor must provide the Inspection Authority and other Government of Canada Authorities with a minimum of ten (10) working days notice of each scheduled test, trial, or demonstration.
- (f) The Contractor must keep written records of all tests, trials, and demonstrations conducted required by the QA System.
- (g) The Contractor must in all respects be responsible for the conduct of all tests and trials in accordance with the requirements of the Contract.
- (h) The Contracting Authority and the Inspection/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 D - DETAILED FINANCIAL BID PRESENTATION SHEET**D-1 Proposed Work Location:**

Contractor's Facility _____

D-2 Evaluation of Price

The price of the bid will be evaluated in Canadian dollars, customs duties are included and applicable taxes are extra, Incoterms 2000 Delivered Duty Paid (DDP) to destination.

a.	Known Work – (1 boat, 1 trailer) As defined and describe per Part 6, article 6.2 and per Annex A-Statement of Work. For a Firm Price of:	\$ _____
b.	Delivery (1 Boat and One trailer) DDP Incoterms 2000 Destination Whitehorse. Yk per Part 6, article 6.4.2 and 6.4.3 For a Firm Price of:	\$ _____
c..	Unscheduled Work <i>Labour Cost:</i> Estimated labour hours at a firm <i>Charge-out Labor Rate</i> , including overhead and profit: 10 person hours X \$ _____ per hour for a PRICE of: See articles D-3 and D3.1 below.	\$ _____
d.	EVALUATION PRICE [a + b + c] For an EVALUATION PRICE of: (customs duties are included and applicable taxes are excluded)	\$ _____

D-3 Unscheduled Work

Unscheduled work arising, as authorized by the Minister, will be calculated in the following manner:

"Number of hours (to be negotiated) X \$ _____ your firm hourly *Charge-out Labour Rate* which includes *Overhead* and profit, plus net laid-down cost of materials to which will be added a 10% mark-up, plus Goods and Services Tax or Harmonized Sales Tax as 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."

D-3.1 Notwithstanding definitions or usage elsewhere in this document, or in the Bidder'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 D-3.2 will not be negotiated, but must be included within the *Charge-out Labour Rate*. It is therefore incumbent upon the Bidder to enter values in the above table which will result in fair compensation, regardless of the structure of their Cost Management System.

D-3.2 Allowance for *Related Labour Costs* such as: Management, Direct Supervision, Purchasing and Material Handling, Quality Assurance and Reporting, First Aid, Gas Free Inspecting and Reporting, and Estimating must be included as *Overhead* for the purposes of determining the *Charge-out Labour Rate* entered in line D-2b and Article D-3 above.

D-3.3 A 10% mark-up rate will be allowed for materials and this rate will also apply to subcontracted costs. The mark-up rate includes any allowance for material and subcontract management not allowed for in the *Charge-out Labour Rate*. A separate labour component for the purchase and handling of materials or subcontract administration is not allowable.

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D-4 Boat Delivery Proposal

All deliverables are mandatory to be received on or before March 31, 2018.

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ANNEX E - SUBCONTRACTOR LIST

Specification Item	Description of Goods/Services (Including Make, Model Number as	Name of Supplier	Address of Supplier

ANNEX F - INFORMATION REQUIRED FOR THE VERIFICATION OF INTEGRITY PROVISIONS

Please provide a list of names of the following entities, according to the ownership nature of the company

1. For a Corporation - each current member of the Bidder's Board of Directors;

2. For a Partnership, General Partnership or Limited Partnership - the names of all current partners;

3. For a Sole Proprietorship or an individual doing business under a firm name - the name of the sole proprietor or individual;

4. For a Joint Venture - the names of all current members of the Joint venture;

5. For an individual - the full name of the person

ANNEX G – BID PACKAGE CHECKLIST

Instruction to Bidders: Table G-1 is a check list for self-verification purposes.

Table G-1 Bidder's Bid Package Check List**G1.1**

Notwithstanding deliverable requirements specified anywhere else within this bid solicitation and its associated Technical Specifications, the following are the only mandatory deliverables that must be submitted with the Bid documents at the time of bid closing. The following are mandatory and the Bidder must be compliant on each item to be considered responsive.

No	Part	Article	Description	Condition	Document provided
<u>Section I- Technical Bid</u>					
1		Front page	Request for Proposal document part 1 page 1 completed and signed;	Mandatory with the bid	<input type="checkbox"/>
2	3	3.2 Entirely including all sub paragraphs	Section 1 – Technical Bid	Mandatory with the bid	<input type="checkbox"/>
<u>Section II- Financial Bid</u>					
6	Annex D	All	Annex D- Detailed Financial Bid Presentation Sheet	Mandatory with the bid	<input type="checkbox"/>

G1.2 Supporting Deliverable Requirements

If the following information which supports the bid is not submitted with the Bid; it will be requested by the Contracting Authority, and it must be provided within 48 hours of the written request:

No	Part	Article	Description	Condition	Document provided
<u>Section I- Technical Bid</u>					
1	6	6.5.4	Contractor representative	48 hrs of written request	
<u>Section II- Certification</u>					
7	6	6.9	Welding certification	48 hrs of written request	<input type="checkbox"/>
8	5	5.2.1	Annex F Information required for the Verification of Integrity Provisions	48 hrs of written request	<input type="checkbox"/>
10	6	6.20	Applicable laws	48 hrs of written request	<input type="checkbox"/>

G1.3 Contract Deliverable Requirements

The following information may be requested by the Contracting Authority, and it must be provided within the conditions stated in the table below of the written request:

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No	Part	Article	Description	Condition	Document provided
<u>Other documentation after contract award (Reminder)</u>					
1	6	6.10	Project Schedule	5 days after contract award	
2	6	6.17	Inspection and Test Plan	7 days after contract award	
3	6	6.19	Insurance certificate	10 days after contract award	

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ANNEX “X” to PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

As indicated in Part 3, clause 3.1.2, the Bidder must identify which electronic payment instruments they are willing to accept for payment of invoices.

The Bidder accepts any of the following Electronic Payment Instrument(s):

- () Direct Deposit (Domestic and International);
- () Electronic Data Interchange (EDI);
- () Wire Transfer (International Only);