



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving Box/Boîte de Réception des
Soumissions

1st Floor/1^{ère} étage, Suite 1212

100-1045 Main Street

Moncton

New Brunswick

E1C 1H1

Bid Fax: (506) 851-6759

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

Acquisitions NB/PEI (Moncton Office) – Bureau
d'acquisitions N.-B./Î.-P.-É. (Moncton)

1045 Main Street / 1045, rue Main

Moncton

New Bruns

E1C 1H1

Title - Sujet Design of SABS Wharf Replacement	
Solicitation No. - N° de l'invitation EC373-221781/A	Date 2022-02-03
Client Reference No. - N° de référence du client EC373-221781	
GETS Reference No. - N° de référence de SEAG PW-\$PWJ-005-6149	
File No. - N° de dossier PWJ-1-44132 (005)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Atlantic Daylight Saving Time ADT on - le 2022-03-17 Heure Avancée de l'Atlantique HAA	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Lomax (PWJ), Sandra	Buyer Id - Id de l'acheteur pwj005
Telephone No. - N° de téléphone (506) 639-8503 ()	FAX No. - N° de FAX (506) 851-6759
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA CONTRACT POLICY & ADMIN 126 PRINCE WILLIAM ST SAINT JOHN New Brunswick E2L2B6 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée See Herein – Voir ci-inclus	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

REQUEST FOR PROPOSAL (RFP)

Design Services Wharf Replacement & Site Redevelopment St. Andrews Biological Station

Public Works and Government Services Canada Contracting Authority:
Sandra Lomax
PWGSC, Real Property Contracting
1045 Main Street, Moncton, New Brunswick E1C 1H1
Cell No.: 506-639-8503
Email: Sandra.lomax@pwgsc-tpsgc.gc.ca

REQUEST FOR PROPOSAL (RFP)

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PART 1 - SUPPLEMENTARY INSTRUCTIONS TO PROPONENTS (SI)

SI1 INTRODUCTION

1. Public Works and Government Services Canada (PWGSC) intends to retain an individual consulting firm or joint venture to provide the professional services for the project as set out in this Request for Proposal (RFP).
2. This is a single phase selection process. The nature of the requirement and the anticipated limited number of response by the industry leads PWGSC to believe that this approach will not unduly force a large number of firms to expend an overall unreasonable amount of effort in response to PWGSC.
3. Proponents responding to this RFP are requested to submit a full and complete proposal. The proposal will cover not only the qualifications, experience and organization of the proposed Consultant Team, but also the detailed approach to the work, and the pricing and terms offered. A combination of the technical and price of services submissions will constitute the proposal.
4. This bid solicitation allows and encourages proponents to use the epost Connect service provided by Canada Post Corporation to transmit their proposals electronically.

Due to the nature of the bid solicitation, transmission of proposals by facsimile is not recommended for administrative reasons but offered to proponents to provide an alternative opportunity in case of incompatibility or inability to transmit by epost Connect service.

Proponents must refer to GI16 Submission of proposal, and [SRE 2 Proposal Requirements](#), of the bid solicitation, for further information.

SI2 PROPOSAL DOCUMENTS

1. All instructions, general terms, conditions and clauses identified in the RFP by number, date and title, are hereby incorporated by reference into and form part of this solicitation and any resultant contract.

All instructions, general terms, conditions and clauses identified in the RFP 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.

2. The following are the proposal documents:
 - (a) Supplementary Instructions to Proponents (SI);
General instructions (GI) – Architectural and/or Engineering services – Request for Proposal; Submission Requirements and Evaluation (SRE);
 - (b) the general terms, conditions and clauses, as amended, identified in the Agreement clause;
 - (c) Project Brief / Terms of Reference;
 - (d) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";

- (e) any amendment to the solicitation document issued prior to the date set for receipt of proposals; and
 - (f) the proposal, Declaration/Certifications Form and Price Proposal Form.
3. Submission of a proposal constitutes acknowledgment that the Proponent has read and agrees to be bound by these documents.

SI3 QUESTIONS OR REQUEST FOR CLARIFICATION

Questions or requests for clarification during the solicitation period must be submitted in writing to the Contracting Authority named on the RFP - Page 1 at e-mail address Sandra.lomax@pwgsc-tpsgc.gc.ca as early as possible. Enquiries should be received no later than 5 working days prior to the closing date identified on the front page of the Request for Proposal. Enquiries received after that date may not be answered prior to the closing date of the solicitation.

SI4 CANADA'S TRADE AGREEMENTS

This procurement is subject to the provisions of the World Trade Organization - Agreement on Government Procurement (WTO-AGP), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA).

SI5 COVID-19 VACCINATION REQUIREMENT

This requirement is subject to the COVID-19 Vaccination Policy for Supplier Personnel. Failure to complete and provide the COVID-19 Vaccination Requirement Certification as part of the bid will render the bid non-responsive.

SI6 CERTIFICATIONS

1. Integrity Provisions – Declaration of Convicted Offences

In accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Proponent must **provide with its bid, as applicable**, to be given further consideration in the procurement process, the required documentation as per [General instructions 1 \(GI1\), Integrity Provisions – Proposal, section 3b](#).

2. Federal Contractors Program for Employment Equity - Proposal Certification

By submitting a proposal, the Proponent certifies that the Proponent, and any of the Proponent's members if the Proponent is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's website](#)

Canada will have the right to declare a proposal non-responsive if the Proponent, or any member of the Proponent if the Proponent is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

Canada will also have the right to terminate the Agreement for default if a Consultant, or any member of the Consultant if the Consultant is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Agreement.

The Proponent must provide the Contracting Authority with a completed Federal Contractors Program for Employment Equity - Certification (see [Appendix B - Declaration/Certifications Form](#)), before contract award. If the Proponent is a Joint Venture, the Proponent must provide the Contracting Authority with a completed Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

3. COVID-19 Vaccination Requirement Certification

In accordance with the COVID-19 Vaccination Policy for Supplier Personnel, all Bidders must provide with their bid, the COVID-19 Vaccination Requirement Certification attached to this bid solicitation, to be given further consideration in this procurement process. This Certification incorporated into the bid solicitation on its closing date is incorporated into, and forms a binding part of any resulting Contract.

SI7 WEBSITES

The connection to some of the Web sites in the RFP is established by the use of hyperlinks. The following is a list of the addresses of the Web sites:

Employment Equity Act

<http://laws-lois.justice.gc.ca/eng/acts/E-5.401/index.html>

Federal Contractors Program (FCP)

<https://www.canada.ca/en/employment-social-development/corporate/portfolio/labour/programs/employment-equity/federal-contractors.html>

Certificate of Commitment to Implement Employment Equity form LAB 1168

<https://catalogue.servicecanada.gc.ca/content/EForms/en/Detail.html?Form=LAB1168>

Ineligibility and Suspension Policy

<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>

Code of Conduct for Procurement

<https://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/index-eng.html>

Lobbying Act

<http://laws-lois.justice.gc.ca/eng/acts/L-12.4/?noCookie>

Buy and Sell

<https://buyandsell.gc.ca/>

Supplier Registration Information

<https://srisupplier.contractscanada.gc.ca>

Consultant Performance Evaluation Report Form

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913-1.pdf>

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PWJ005
CCC No./N° CCC - FMS No./N° VME

Canadian sanctions

https://www.international.gc.ca/world-monde/international_relations-relations_internationales/sanctions/index.aspx?lang=eng&_ga=2.4399216.2143508984.1600280756-1424234476.1600280756

National Joint Council (NJC) Travel Directive

<http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php>

PART 2 - GENERAL INSTRUCTIONS (GI) – ARCHITECTURAL AND/OR ENGINEERING SERVICES – REQUEST FOR PROPOSAL

GI1 Integrity provisions - proposal

1. The *Ineligibility and Suspension Policy* (the “Policy”) in effect on the date the bid solicitation is issued, and all related Directives in effect on that date, are incorporated by reference into, and form a binding part of the bid solicitation. The Proponent must comply with the Policy and Directives, which can be found at [Ineligibility and Suspension Policy \(https://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html\)](https://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html).
2. Under the Policy, charges and convictions of certain offences against a Supplier, its affiliates or first tier sub-consultants, and other circumstances, will or may result in a determination by Public Works and Government Services Canada (PWGSC) that the Supplier is ineligible to enter, or is suspended from entering into a contract with Canada. The list of ineligible and suspended Suppliers is contained in PWGSC's Integrity Database. The Policy describes how enquiries can be made regarding the ineligibility or suspension of Suppliers.
3. In addition to all other information required in the bid solicitation, the Proponent must provide the following:
 - a. by the time stated in the Policy, all information required by the Policy described under the heading “Information to be Provided when Bidding, Contracting or Entering into a Real Property Agreement”; and
 - b. with its bid, a complete list of all foreign criminal charges and convictions pertaining to itself, its affiliates and its proposed first tier sub-consultants that, to the best of its knowledge and belief, may be similar to one of the listed offences in the Policy. The list of foreign criminal charges and convictions must be submitted using an Integrity Declaration Form, which can be found at [Declaration form for procurement \(https://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html\)](https://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html).
4. Subject to subsection 5, by submitting a bid in response to this bid solicitation, the Proponent certifies that:
 - a. it has read and understands the [Ineligibility and Suspension Policy \(https://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html\)](https://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html);
 - b. it understands that certain domestic and foreign criminal charges and convictions, and other circumstances, as described in the Policy, will or may result in a determination of ineligibility or suspension under the Policy;
 - c. it is aware that Canada may request additional information, certifications, and validations from the Proponent or a third party for purposes of making a determination of ineligibility or suspension;
 - d. it has provided with its bid a complete list of all foreign criminal charges and convictions pertaining to itself, its affiliates and its proposed first tier sub-consultants that, to the best of its knowledge and belief, may be similar to one of the listed offences in the Policy;
 - e. none of the domestic criminal offences, and other circumstances, described in the Policy that will or may result in a determination of ineligibility or suspension, apply to it, its affiliates and its proposed first tier sub-consultants; and

- f. it is not aware of a determination of ineligibility or suspension issued by PWGSC that applies to it.
5. Where a Proponent is unable to provide any of the certifications required by subsection 4, it must submit with its bid a completed Integrity Declaration Form, which can be found at [Declaration form for procurement \(https://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html\)](https://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html).
6. Canada will declare non-responsive any bid in respect of which the information requested is incomplete or inaccurate, or in respect of which the information contained in a certification or declaration is found by Canada to be false or misleading in any respect. If Canada establishes after award of the Contract that the Proponent provided a false or misleading certification or declaration, Canada may terminate the Contract for default. Pursuant to the Policy, Canada may also determine the Proponent to be ineligible for award of a contract for providing a false or misleading certification or declaration.

G12 Definitions

In this Request for Proposal (RFP), the following words or phrases have the corresponding meaning.

"Applicable Taxes":

The Goods and Services Tax (GST), the Harmonized Sales Tax (HST), and any provincial tax, by law, payable by Canada such as, the Quebec Sales Tax (QST) as of April 1, 2013.

"Consultant Team":

The team of consultants, specialists and sub-consultants, including the Proponent, proposed by the Proponent to perform the services required.

"Key Personnel":

Staff of the Proponent, sub-consultants and specialists proposed to be assigned to this project.

"Price Rating":

A rating assigned to the price component of a proposal and subsequently used to establish a Price Score for inclusion as a percentage of the total score to be established following the evaluation and rating of technical proposals.

"Proponent":

The person or entity (or, in the case of a joint venture, the persons or entities) which submits a proposal. It does not include the parent, subsidiaries or other affiliates of the Proponent, or its sub-consultants.

"PWGSC Evaluation Board":

The board established to evaluate and rate proposals. Board members represent a broad cross-section of professional qualifications and experience.

"Technical Rating":

A rating assigned to the technical component of a proposal in the selection procedure and subsequently used to establish a Technical Score for inclusion as a percentage of the total score.

G13 Overview of selection procedure

The following is an overview of the selection procedure.

G13.1 Proposal

1. Proponents submit the "technical" component of their proposal in one section and the proposed price of the services (price proposal) in a second section in accordance with the instructions

contained in the proposal documents.

2. The information that Proponents are required to provide is set out in detail elsewhere in the RFP.
3. In response to the RFP, interested Proponents submit a proposal in which they:
 - a. indicate whether the proposal is submitted by an individual firm or by a joint venture;
 - b. if the proposal is submitted by a joint venture, describe the proposed legal and working relationships of the joint venture and the benefits to be gained by the formation of the joint venture;
 - c. identify the prime consultants and key sub consultants and specialists proposed for inclusion in the Consultant Team, and the proposed organizational structure of the Team;
 - d. describe the extent to which proposed members of the Consultant Team have successfully performed services for projects comparable to the project which is the subject of the proposal;
 - e. identify the professional accreditation, experience, expertise and competence of the Consultant Team and Key Personnel proposed to be assigned to perform the required services.
 - f. comply with all other requirements set out in the RFP.

G13.2 Proposal evaluation and rating

1. Technical components of all responsive proposals are reviewed, evaluated and rated by a Public Works and Government Services Canada (PWGSC) Evaluation Board in accordance with the criteria, components and weight factors set out in the RFP. Upon completion of the evaluation, Technical Ratings are established.
2. Proposals achieving the minimum Technical Score specified in the Submission Requirements and Evaluation section of the RFP are further considered.
3. The price proposals of all responsive proposals are considered upon completion of the technical evaluation. When there are three or more responsive proposals, an average price is determined by adding all the price proposals together and dividing the total by the number of price proposals opened. This calculation will not be conducted when one or two responsive proposals are received.
4. All price proposals which are greater than 25 percent above the average price will cause their respective complete proposals to be set aside and receive no further consideration.
5. The remaining price proposals are rated as follows:
 - a. The lowest price proposal receives a Price Rating of 100.
 - b. The second, third, fourth and fifth lowest prices receive Price Ratings of 80, 60, 40, and 20 respectively. All other price proposals receive a Price Rating of 0.
 - c. On the rare occasion where two (or more) price proposals are identical, these price proposals receive the same rating and the corresponding number of following ratings are skipped.

- d. The Price Rating is multiplied by a predetermined percentage factor to establish a Price Score.
6. A price proposal in excess of any maximum funding limit, when this limit has been set in the Supplementary Instructions to Proponents, may result in disqualification of the complete proposal.

G13.3 Total score

1. The total overall score (Total Score) assigned to each Proponent's complete proposal is calculated as the aggregate of:
 - a. the Technical Score, and
 - b. the Price Score.
2. The Proponent receiving the highest Total Score is the first entity that the PWGSC Evaluation Board will recommend for the provision of the required services.

G13.4 Notification

PWGSC normally expects to advise in writing unsuccessful Proponents within one week after PWGSC has entered into a contractual arrangement with the successful Proponent.

G14 Procurement Business Number

Proponents are required to have a Procurement Business Number (PBN) before contract award. Proponents may register for a PBN online at [Supplier Registration Information \(https://srisupplier.contractscanada.gc.ca/index-eng.cfm?af=ZnVzZWJdGlVbj1yZWdpc3Rlci5pbmRybyZpZD0y&lang=eng\)](https://srisupplier.contractscanada.gc.ca/index-eng.cfm?af=ZnVzZWJdGlVbj1yZWdpc3Rlci5pbmRybyZpZD0y&lang=eng).

G15 Responsive proposals

To be considered responsive, a proposal must meet all of the mandatory requirements set out in the RFP. No further consideration in the selection procedure will be given to a Proponent submitting a non-responsive proposal.

G16 Completion of submission

The Proponent shall base the proposal on the applicable proposal documents listed in the Supplementary Instructions to Proponents.

G17 Proposal price

Unless specified otherwise elsewhere in the proposal documents:

- a. the price proposal shall be in Canadian currency, and
- b. the price proposal shall not include any amount for Applicable Taxes, and
- c. the requirement does not offer exchange rate fluctuation risk mitigation. Requests for exchange rate fluctuation risk mitigation will not be considered. All proposals including such provision will render the proposal non-responsive.

G18 Communications—solicitation period

To ensure the integrity of the competitive bid process, enquiries and other communications regarding the RFP must be directed only to the Contracting Authority identified in the RFP. Failure to comply with this requirement may result in the proposal being declared non-responsive.

To ensure consistency and quality of information provided to proponents, significant enquiries received and their replies will be posted on the Government Electronic Tendering Service (GETS).

G19 Limitation of submissions

1. A Proponent may not submit more than one proposal. This limitation also applies to the persons or entities in the case of a joint venture. If more than one proposal is received from a Proponent (or, in the case of a joint venture, from the persons or entities), all such proposals shall be rejected and no further consideration shall be given.
2. A joint venture is defined as an association of two or more parties which combine their money, property, knowledge, skills, time or other resources in a joint business enterprise agreeing to share the profits and the losses and each having some degree of control over the enterprise.
3. An arrangement whereby Canada contracts directly with a prime consultant who may retain sub-consultants or specialist consultants to perform portions of the services is not a joint venture arrangement. A sub-consultant or specialist consultant may, therefore, be proposed as part of the Consultant Team by more than one Proponent. The Proponent warrants that it has written permission from such sub-consultant or specialist consultant to propose their services in relation to the services to be performed.
4. Notwithstanding paragraph 3. above, in order to avoid any conflict of interest, or any perception of conflict of interest, a Proponent shall not include in its submission another Proponent as a member of its consultant team, as a sub-consultant or specialist consultant.
5. Any joint venture entered into for the provision of professional services or other services must be in full compliance with the requirements of any provincial or territorial law pertaining thereto in the Province or Territory in which the project is located.

G110 Licensing requirements

1. Consultant Team members and Key Personnel shall be, or be eligible to be licensed, certified or otherwise authorized to provide the necessary professional services to the full extent that may be required by provincial or territorial law in the Province or Territory in which the project is located.
2. By virtue of submission of a proposal, the Proponent certifies that the Proponent's Consultant Team and Key Personnel are in compliance with the requirements of subsection 1 above. The Proponent acknowledges that PWGSC reserves the right to verify any information in this regard and that false or erroneous certification may result in the proposal being declared non-responsive.

G111 Rejection of proposal

1. Canada may reject a proposal where any of the following circumstances is present:
 - a. the Proponent has been declared ineligible for selection, following unsatisfactory performance in a previous project as determined in accordance with the department's performance review procedures;
 - b. an employee, sub-consultant or specialist consultant included as part of the proposal has been declared ineligible, for selection for work with the department in accordance with the performance review procedure referred to in paragraph 1.(a), which would render the employee, sub-consultant or specialist consultant ineligible to bid on the requirement, or

the portion of the requirement the employee, sub-consultant or specialist consultant is to perform;

- c. the Proponent is bankrupt or where, for whatever reason, its activities are rendered inoperable for an extended period;
 - d. evidence, satisfactory to Canada, of fraud, bribery, fraudulent misrepresentation or failure to comply with any law protecting individuals against any manner of discrimination, has been received with respect to the Proponent, any of its employees, any sub-consultant or any specialist consultant included as part of the proposal;
 - e. evidence satisfactory to Canada that based on past conduct or behavior, the Proponent, a sub-consultant, a specialist consultant or a person who is to perform the Services is unsuitable or has conducted himself/herself improperly;
 - f. with respect to current or prior transactions with the Government of Canada,
 - i. Canada has exercised its contractual remedies of taking the services out of the consultant's hands, suspension or termination for default with respect to a contract with the Proponent, any of its employees, any sub-consultant or any specialist consultant included as part of the proposal;
 - ii. Canada determines that the Proponent's performance on other contracts, including the quality of the services provided and the quality and timeliness of the delivery of the project, is sufficiently poor to jeopardize the successful completion of the requirement being bid on.
2. Where Canada intends to reject a proposal pursuant to subsection 1.(f), the Contracting Authority will so inform the Proponent and provide the Proponent ten (10) days within which to make representations, before making a final decision on the proposal rejection.

GI12 Not applicable

Not applicable

GI13 Insurance requirements

The successful Proponent shall be required to obtain and maintain Professional Liability and Commercial General Liability insurance coverage in accordance with the requirements set out elsewhere in the proposal documents.

GI14 Joint venture

1. A joint venture is an association of two or more parties who combine their money, property, knowledge, expertise or other resources in a single joint business enterprise, sometimes referred as a consortium, to bid together on a requirement. Proponents who bid as a joint venture must indicate clearly that it is a joint venture and provide the following information:
 - a. the name of each member of the joint venture;
 - b. the Procurement Business Number of each member of the joint venture;
 - c. the name of the representative of the joint venture, i.e. the member chosen by the other members to act on their behalf, if applicable;
 - d. the name of the joint venture, if applicable.

2. If the information is not clearly provided in the proposal, the Proponent must provide the information on request from the Contracting Authority.
3. The proposal and any resulting contract must be signed by all the members of the joint venture unless one member has been appointed to act on behalf of all members of the joint venture. The Contracting Authority may, at any time, require each member of the joint venture to confirm that the representative has been appointed with full authority to act as its representative for the purposes of the bid solicitation and any resulting contract. If a contract is awarded to a joint venture, all members of the joint venture will be jointly and severally or solidarily liable for the performance of any resulting contract.

GI15 Composition of Consultant Team

By submitting a proposal, the Proponent represents and warrants that the entities and persons proposed in the proposal to perform the required services will be the entities and persons that will perform the services in the fulfillment of the project under any contractual arrangement arising from submission of the proposal. If the Proponent has proposed any person in fulfillment of the project who is not an employee of the Proponent, the Proponent warrants that it has written permission from such person (or the employer of such person) to propose the services of such person in relation to the services to be performed.

GI16 Submission of proposal

GI16.1 Submission of proposal

1. Canada requires that each proposal, at solicitation closing date and time or upon request from the Contracting Authority, be signed by the Proponent or by an authorized representative of the Proponent. If a proposal is submitted by a joint venture, it must be in accordance with [section GI14](#).
2. It is the Proponent's responsibility to:
 - a. submit a proposal, duly completed, in the format requested, on or before the solicitation closing date and time set;
 - b. send its proposal only to the Bid Receiving Unit of Public Works and Government Services Canada (PWGSC) specified below, by the date and time indicated on page 1 of the bid solicitation.

In the case of submission of a hard copy proposal, send its proposal only to:

Bid Receiving - PWGSC
1045 Main Street
Moncton, NB
E1C 1H1

In the case of submission by [epost Connect](#), see instructions in GI16.2.1 below.
In the case of submission by [Facsimile](#), see instructions in GI16.2.2 below.

- c. obtain clarification of the requirements contained in the RFP, if necessary, before submitting a proposal;
- d. ensure that the Proponent's name, return address, the solicitation number and description, and solicitation closing date and time are clearly visible on the envelope or

the parcel(s) containing the proposal; and

- e. provide a comprehensive and sufficiently detailed proposal that will permit a complete evaluation in accordance with the criteria set out in this RFP.
3. The technical and price components of the proposal must be submitted in separate sections in accordance with the instructions contained in the proposal documents.
4. Timely and correct delivery of proposals to the office designated for receipt of proposals is the sole responsibility of the Proponent. PWGSC will not assume or have transferred to it those responsibilities. All risks and consequences of incorrect delivery of proposals are the responsibility of the Proponent.
5. Proposals and supporting information may be submitted in either English or French.
6. Canada will make available Notices of Proposed Procurement (NPP), bid solicitations and related documents for download through the Government Electronic Tendering Service (GETS). Canada is not responsible and will not assume any liabilities whatsoever for the information found on websites of third parties. In the event an NPP, bid solicitation or related documentation would be amended, Canada will not be sending notifications. Canada will post all amendments using GETS. It is the sole responsibility of the Proponent to regularly consult GETS for the most up-to-date information. Canada will not be liable for any oversight on the Proponent's part nor for notification services offered by a third party.

GI16.2 Transmission by epost Connect or facsimile

1. epost Connect
 - a. Proposals may be submitted by using the epost Connect service provided by Canada Post Corporation

TPSGC.RARceptionSoumisNBPE-ARBidReceivingNBPE.PWGSC@tpsgc-pwgsc.gc.ca

Note: Proposals will not be accepted if emailed directly to this email address. This email address is to be used to open an epost Connect conversation, as detailed in b., or to send proposals through an epost Connect message if the proponent is using its own licensing agreement for epost Connect.

- b. To submit a proposal using epost Connect service, the Proponent must either:
 - i. send directly its proposal only to the specified PWGSC Bid Receiving Unit, using its own licensing agreement for epost Connect provided by Canada Post Corporation; or
 - ii. send as early as possible, and in any case, at least six business days prior to the solicitation closing date and time (in order to ensure a response), an email that includes the bid solicitation number to the specified PWGSC Bid Receiving Unit requesting to open an epost Connect conversation. Requests to open an epost Connect conversation received after that time may not be answered.
- c. If the Proponent sends an email requesting epost Connect service to the specified Bid Receiving Unit in the bid solicitation, an officer of the Bid Receiving Unit will then initiate an epost Connect conversation. The epost Connect conversation will create an email notification from Canada Post Corporation prompting the Proponent to access and action the message within the epost Connect conversation. The Proponent will then be able to transmit its

proposal afterward at any time prior to the solicitation closing date and time.

- d. If the Proponent is using its own licensing agreement to send its proposal, the Proponent must keep the epost Connect conversation open until at least 30 business days after the solicitation closing date and time.
- e. The bid solicitation number should be identified in the epost Connect message field of all electronic transfers.
- f. It should be noted that the use of epost Connect service requires a Canadian mailing address. Should a Proponent not have a Canadian address, they may use the Bid Receiving Unit address specified in the solicitation in order to register for the epost Connect service.
- g. For proposals transmitted by epost Connect service, Canada will not be responsible for any failure attributable to the transmission or receipt of the proposal including, but not limited to, the following:
 - i. receipt of a garbled, corrupted or incomplete proposal;
 - ii. availability or condition of the epost Connect service;
 - iii. incompatibility between the sending and receiving equipment;
 - iv. delay in transmission or receipt of the proposal;
 - v. failure of the Proponent to properly identify the proposal;
 - vi. illegibility of the proposal;
 - vii. security of proposal data; or
 - viii. inability to create an electronic conversation through the epost Connect service.
- h. The Bid Receiving Unit will send an acknowledgement of the receipt of proposal document(s) via the epost Connect conversation, regardless of whether the conversation was initiated by the supplier using its own license or the Bid Receiving Unit. This acknowledgement will confirm only the receipt of proposal document(s) and will not confirm if the attachments may be opened nor if the content is readable.
- i. Proponents must ensure that they are using the correct email address for the Bid Receiving Unit when initiating a conversation in epost Connect or communicating with the Bid Receiving Unit and should not rely on the accuracy of copying and pasting the email address into the epost Connect system.
- j. A proposal transmitted by epost Connect service constitutes the formal proposal of the Proponent and must be submitted in accordance with [section GI16.1](#).

2. Facsimile

- a. Proposals may be submitted by facsimile.

Bid Fax: (506) 851-6759

- b. For proposals transmitted by facsimile, Canada will not be responsible for any failure attributable to the transmission or receipt of the faxed proposal including, but not limited to, the following:
 - i. receipt of garbled, corrupted or incomplete proposal;
 - ii. availability or condition of the receiving facsimile equipment;
 - iii. incompatibility between the sending and receiving equipment;
 - iv. delay in transmission or receipt of the proposal;

- v. failure of the Proponent to properly identify the proposal;
- vi. illegibility of the proposal; or
- vii. security of proposal data.

- c. A proposal transmitted by facsimile constitutes the formal proposal of the Proponent and must be submitted in accordance with [section GI16.1](#).

GI17 Late submissions

1. PWGSC will return or delete proposals delivered after the stipulated solicitation closing date and time, unless they qualify as a delayed proposal as described in GI17.2. For late proposals submitted using means other than the Canada Post Corporation's epost Connect service, the physical proposal will be returned. For proposals submitted electronically, the late proposal will be deleted. As an example, proposals submitted using Canada Post Corporation's epost Connect service, conversations initiated by the Bid Receiving Unit via the epost Connect service pertaining to a late proposal, will be deleted. Records will be kept documenting the transaction history of all late proposals submitted using epost Connect.
2. A proposal delivered to the specified bid receiving unit after the solicitation closing date and time but before the contract award date may be considered, provided the proponent can prove the delay is due solely to a delay in delivery that can be attributed to the Canada Post Corporation (CPC) (or national equivalent of a foreign country). Private courier (Purolator Inc., Fedex Inc., etc.) is not considered to be part of CPC for the purposes of delayed proposals.
 - a. The only pieces of evidence relating to a delay in the CPC system that are acceptable to PWGSC are:
 - i. a CPC cancellation date stamp;
 - ii. a CPC Priority Courier bill of lading;
 - iii. a CPC Xpresspost label;that clearly indicates that the proposal was sent the day before the solicitation closing date.
 - b. The only pieces of evidence relating to a delay in the epost Connect service provided by CPC system that are acceptable to PWGSC is a CPC epost Connect service date and time record indicated in the epost Connect conversation history that clearly indicates that the proposal was sent before the solicitation closing date and time.
3. Misrouting, traffic volume, weather disturbances, labour disputes or any other causes for the late delivery of proposals are not acceptable reasons for the proposal to be accepted by PWGSC.
4. Postage meter imprints, whether imprinted by the Proponent, the CPC or the postal authority outside Canada, are not acceptable as proof of timely mailing.

GI18 Not applicable

GI19 Acceptance of proposal

1. Canada may accept any proposal, or may reject any or all proposals.
2. In the case of error in the extension or addition of unit prices, the unit price will govern.
3. While Canada may enter into an agreement or contractual arrangement without prior negotiation, Canada reserves the right to negotiate with Proponents on any procurement.
4. Canada reserves the right to cancel or amend the RFP at any time.

GI20 Legal capacity

The Proponent must have the Legal capacity to contract. If the Proponent is a sole proprietorship, a partnership or a corporate body, the Proponent must provide, if requested by the Contracting Authority, a statement and any requested supporting documentation indicating the laws under which it is registered or incorporated together with the registered or corporate name and place of business. This also applies to Proponents submitting a proposal as a joint venture.

GI21 Debriefing

Should a Proponent desire a debriefing, the Proponent should contact the person identified on the front page of the RFP within 15 working days of the notification of the results of the solicitation. The debriefing will include an outline of the strengths and weaknesses of the submission, referring to the evaluation criteria. The confidentiality of information relating to other submissions will be protected. The debriefing may be provided in writing, by telephone or in person.

GI22 Financial capability

1. Financial capability Requirement: The Proponent must have the financial capability to fulfill this requirement. To determine the Proponent's financial capability, the Contracting Authority may, by written notice to the Proponent, require the submission of some or all of the financial information detailed below during the evaluation of proposals. The Proponent must provide the following information to the Contracting Authority within fifteen (15) working days of the request or as specified by the Contracting Authority in the notice:
 - a. Audited financial statements, if available, or the unaudited financial statements (prepared by the Proponent's outside accounting firm, if available, or prepared in-house if no external statements have been prepared) for the Proponent's last three fiscal years, or for the years that the Proponent has been in business if this is less than three years (including, as a minimum, the Balance Sheet, the Statement of Retained Earnings, the Income Statement and any notes to the statements).
 - b. If the date of the financial statements in (a) above is more than five months before the date of the request for information by the Contracting Authority, the Proponent must also provide, unless this is prohibited by legislation for public companies, the last quarterly financial statements (consisting of a Balance Sheet and a year-to-date Income Statement), as of two months before the date on which the Contracting Authority requests this information.
 - c. If the Proponent has not been in business for at least one full fiscal year, the following must be provided:
 - i. the opening Balance Sheet on commencement of business (in the case of a corporation, the date of incorporation); and
 - ii. the last quarterly financial statements (consisting of a Balance Sheet and a year-to-date Income Statement) as of two months before the date on which the Contracting Authority requests this information.
 - d. A certification from the Chief Financial Officer or an authorized signing officer of the Proponent that the financial information provided is complete and accurate.
 - e. A confirmation letter from all of the financial institution(s) that have provided short-term financing to the Proponent outlining the total of lines of credit granted to the Proponent and the amount of credit that remains available and not drawn upon as of one month

prior to the date on which the Contracting Authority requests this information.

- f. A detailed monthly Cash Flow Statement covering all the Proponent's activities (including the requirement) for the first two years of the requirement that is the subject of the bid solicitation, unless this is prohibited by legislation. This statement must detail the Proponent's major sources and amounts of cash and the major items of cash expenditures on a monthly basis, for all the Proponent's activities. All assumptions made should be explained as well as details of how cash shortfalls will be financed.
 - g. A detailed monthly Project Cash Flow Statement covering the first two years of the requirement that is the subject of the bid solicitation, unless this is prohibited by legislation. This statement must detail the Proponent's major sources and amounts of cash and the major items of cash expenditures, for the requirement, on a monthly basis. All assumptions made should be explained as well as details of how cash shortfalls will be financed.
2. If the Proponent is a joint venture, the financial information required by the Contracting Authority must be provided by each member of the joint venture.
3. If the Proponent is a subsidiary of another company, then any financial information in 1. (a) to (e) above required by the Contracting Authority must be provided by the ultimate parent company. Provision of parent company financial information does not by itself satisfy the requirement for the provision of the financial information of the Proponent, and the financial capability of a parent cannot be substituted for the financial capability of the Proponent itself unless an agreement by the parent company to sign a Parental Guarantee, as drawn up by Public Works and Government Services Canada (PWGSC), is provided with the required information.
4. Financial Information Already Provided to PWGSC: The Proponent is not required to resubmit any financial information requested by the Contracting Authority that is already on file at PWGSC with the Contract Cost Analysis, Audit and Policy Directorate of the Policy, Risk, Integrity and Strategic Management Sector, provided that within the above-noted time frame:
 - a. the Proponent identifies to the Contracting Authority in writing the specific information that is on file and the requirement for which this information was provided; and
 - b. the Proponent authorizes the use of the information for this requirement.

It is the Proponent's responsibility to confirm with the Contracting Authority that this information is still on file with PWGSC.

5. Other Information: Canada reserves the right to request from the Proponent any other information that Canada requires to conduct a complete financial capability assessment of the Proponent.
6. Confidentiality: If the Proponent provides the information required above to Canada in confidence while indicating that the disclosed information is confidential, then Canada will treat the information in a confidential manner as permitted by the [Access to Information Act \(https://laws-lois.justice.gc.ca/eng/acts/A-1/\)](https://laws-lois.justice.gc.ca/eng/acts/A-1/), R.S., 1985, c. A-1, section 20(1) (b) and (c).
7. Security: In determining the Proponent's financial capability to fulfill this requirement, Canada may consider any security the Proponent is capable of providing, at the Proponent's sole expense (for example, an irrevocable letter of credit from a registered financial institution drawn in favour of Canada, a performance guarantee from a third party or some other form of security, as determined by Canada).

8. In the event that a proposal is found to be non-compliant on the basis that the Proponent is considered not to be financially capable of performing the subject requirement, official notification shall be provided to the Proponent.

GI23 Performance evaluation

Proponents shall take note that the performance of the Consultant during and upon completion of the services shall be evaluated by Canada. The evaluation includes all or some of the following criteria: Design, Quality of Results, Management, Time and Cost. Should the Consultant's performance be considered unsatisfactory, the Consultant may be declared ineligible for future contracts. The form [PWGSC-TPSGC 2913-1 \(https://www.tpsgc-pwgsc.gc.ca/app-acq/forms/2913-1-eng.html\)](https://www.tpsgc-pwgsc.gc.ca/app-acq/forms/2913-1-eng.html), SELECT - Consultant Performance Evaluation Report, is used to record the performance.

GI24 Proposal costs

No payment will be made for costs incurred in the preparation and submission of a proposal in response to the Request for proposal. Costs associated with preparing and submitting a proposal, as well as any costs incurred by the Proponent associated with the evaluation of the proposal, are the sole responsibility of the Proponent.

GI25 Conflict of interest—unfair advantage

1. In order to protect the integrity of the procurement process, Proponents are advised that Canada may reject a proposal in the following circumstances:
 - a. if the Proponent, any of its sub-consultants, any of their respective employees or former employees was involved in any manner in the preparation of the bid solicitation or in any situation of conflict of interest or appearance of conflict of interest;
 - b. if the Proponent, any of its sub-consultants, any of their respective employees or former employees had access to information related to the bid solicitation that was not available to other Proponents and that would, in Canada's opinion, give or appear to give the Proponent an unfair advantage.
2. The experience acquired by a Proponent who is providing or has provided the goods and services described in the bid solicitation (or similar goods or services) will not, in itself, be considered by Canada as conferring an unfair advantage or creating a conflict of interest. This Proponent remains however subject to the criteria established above.
3. Where Canada intends to reject a proposal under this section, the Contracting Authority will inform the Proponent and provide the Proponent an opportunity to make representations before making a final decision. Proponents who are in doubt about a particular situation should contact the Contracting Authority before bid closing. By submitting a proposal, the Proponent represents that it does not consider itself to be in conflict of interest nor to have an unfair advantage. The Proponent acknowledges that it is within Canada's sole discretion to determine whether a conflict of interest, unfair advantage or an appearance of conflict of interest or unfair advantage exists.

GI26 Limitation of liability

Except as expressly and specifically permitted in this RFP, no Proponent or Potential Proponent shall have any claim for any compensation of any kind whatsoever in relation to this RFP, or any aspect of

the procurement process, and by submitting a proposal each Proponent shall be deemed to have agreed that it has no claim.

GI27 Code of Conduct for Procurement—proposal

The [Code of Conduct for Procurement \(https://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html\)](https://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html) provides that Proponents must respond to bid solicitations in an honest, fair and comprehensive manner, accurately reflect their capacity to satisfy the requirements set out in the bid solicitation and resulting contract, submit bids and enter into contracts only if they will fulfill all obligations of the Contract. By submitting a bid, the Proponent is certifying that it is complying with the *Code of Conduct for Procurement*. Failure to comply with the *Code of Conduct for Procurement* may render the bid non-responsive.

GI28 Bid Challenge And Recourse Mechanisms

- (a) Several mechanisms are available to potential Proponents to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages Proponents to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
 - Office of the Procurement Ombudsman (OPO)
 - Canadian International Trade Tribunal (CITT)
- (c) Proponents should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Proponents should therefore act quickly when they want to challenge any aspect of the procurement process.

PART 3 - TERMS, CONDITIONS AND CLAUSES

AGREEMENT

1. The Consultant understands and agrees that upon acceptance of the offer by Canada, a binding Agreement shall be formed between Canada and the Consultant and the documents forming the Agreement shall be the following:

- (a) the Front Page and this Agreement clause;
the General Terms, Conditions and Clauses, as amended, identified as:

R1210D	2018-06-21	General Condition (GC) 1 - General Provisions – Architectural and/or Engineering Services
R1215D	2016-01-28	General Condition (GC) 2 - Administration of the Contract – Architectural and/or Engineering Services
R1220D	2015-02-25	General Condition (GC) 3 - Consultant Services
R1225D	2015-04-01	General Condition (GC) 4 - Intellectual Property
R1230D	2018-06-21	General Condition (GC) 5 - Terms of Payment – Architectural and/or Engineering Services
R1235D	2011-05-16	General Condition (GC) 6 – Changes
R1240D	2018-06-21	General Condition (GC) 7 - Taking the Services Out of the Consultant's Hands, Suspension or Termination
R1245D	2016-01-28	General Condition (GC) 8 - Dispute Resolution – Architectural and/or Engineering Services
R1250D	2017-11-28	General Condition (GC) 9 - Indemnification and Insurance
Supplementary Conditions		
Agreement Particulars		

- (b) Project Brief / Terms of Reference;
(c) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";
(d) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
(e) the proposal, the Declaration/Certifications Form and the Price Proposal Form.
2. The documents identified above by title, number and date are hereby incorporated by reference into and form part of this Agreement, as though expressly set out herein, subject to any other express terms and conditions herein contained.

The documents identified above by title, number and date are set out in the Standard Acquisition Clauses and Conditions (SACC) Manual, issued by Public Works and Government Services Canada (PWGSC). The SACC Manual is available on the PWGSC Web site:

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>

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

- (a) any amendment or variation in the Agreement that is made in accordance with the terms and conditions of the Agreement;
- (b) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
- (c) this Agreement clause;
- (d) Supplementary Conditions;
- (e) General Terms, Conditions and Clauses;
- (f) Agreement Particulars;
- (g) Project Brief / Terms of Reference;
- (h) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";
- (i) the proposal.

PART 4 - SUPPLEMENTARY CONDITIONS (SC)

SC1 LANGUAGE REQUIREMENTS

1. Communication between Canada and the Consultant shall be in the language of choice of the Consultant Team, which shall be deemed to be the language of the Consultant's proposal.
2. The Consultant's services during construction tender call (such as addenda preparation, tenderers' briefing meetings, technical answers to questions by bidders, including translation of bidder's questions) shall be provided expeditiously in both languages, as necessary.
3. The Consultant's services during construction shall be provided in the language of choice of the Contractor. The successful Contractor will be asked to commit to one or other of Canada's official languages upon award of the Construction Contract and, thereafter construction and contract administration services will be conducted in the language chosen by the Contractor.
4. Other required services in both of Canada's official languages (such as construction documentation) are described in detail in the Project Brief.
5. The Consultant Team, including the Prime Consultant, Sub-Consultants and Specialists Consultants shall ensure that the services being provided in either language shall be to a professional standard.

PART 5 – SUBMISSION REQUIREMENTS AND EVALUATION (SRE)

SRE 1 GENERAL INFORMATION

1.1 Reference to the Selection Procedure

An 'Overview of the selection procedure' can be found in General instructions 3 (GI3), Overview of selection procedure.

1.2 Calculation of Total Score

For this project the Total Score will be established as follows:

Technical Rating x 80 %	=	Technical Score (Points)
Price Rating x 20%	=	Price Score (Points)
Total Score	=	Max. 100 points

SRE 2 PROPOSAL REQUIREMENTS

2.1 Proposal via Epost Connect service

This bid solicitation allows and encourages proponents to use the epost Connect service provided by Canada Post Corporation to transmit their proposal electronically.

If the Proponent chooses to submit its proposal electronically through epost Connect service, Canada requests that the Proponent submits its proposal in accordance with section GI16, [Submission of proposal](#), of the General Instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

Canada requests that the proposal be gathered per separate electronic document (attachment) as follows:

Section I: Technical Proposal;

Section II: Price Proposal.

The electronic attachment should be labelled with the name of the section and the Solicitation Number.

If the Proponent is simultaneously providing copies of its proposal using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through epost Connect service, the wording of the electronic copy provided through epost Connect service will take precedence over the wording of the other copies.

2.2 Proposal in Hard Copies

If the Proponent chooses to submit its proposal in hard copies, Canada requests that the Proponent submits its proposal in separately bound sections as follows:

Section I: Technical Proposal (submit one (1) bound original)

Section II: Price Proposal (submit one (1) bound original) in a separate sealed envelope.)

Double-sided submissions are preferred.

2.3 Proposal by Facsimile

Due to the nature of the bid solicitation, proposals transmitted by facsimile is not recommended for administrative reasons but offered to proponents to provide an alternative opportunity in case of incompatibility or inability to transmit by epost Connect service.

If the Proponent submits its proposal by facsimile, Canada requests that the following sections be clearly identified and separated in the proposal:

Section I: Technical Proposal

Section II: Price Proposal

2.4 Requirement for Proposal Format

The following proposal format information should be implemented when preparing the proposal.

- Paper (or page) size should be - 216mm x 279mm (8.5" x 11")
- Minimum font size - 11 point Times or equal
- Minimum margins - 12 mm left, right, top, and bottom
- One (1) 'page' means one side of a 216mm x 279mm (8.5" x 11") sheet of paper
- 279mm x 432 mm (11" x 17") papers (or pages) for spreadsheets, organization charts etc. will be counted as two pages.
- The order of the proposals should follow the order established in the Request for Proposal SRE section

2.5 Specific Requirements for Proposal Format

The maximum number of pages (including text and graphics) to be submitted for the Rated Requirements under SRE 3.2 is [thirty (30)] pages.

The following are not part of the page limitation mentioned above;

- Covering letter
- Cover page
- Tab/Dividers used to solely identify the sections of the proposal, provided they are free of all other text and/or graphics
- Table of Contents
- Consultant Team Identification ([Appendix A](#))
- Declaration/Certifications Form ([Appendix B](#))
- Integrity Provisions – Required Documentation

Solicitation No. - N° de l'invitation
EC373-221781/A
Client Ref. No. - N° de réf. du client

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
PWJ005
CCC No./N° CCC - FMS No./N° VME

- Front page of the RFP
- Front page of revision(s) to the RFP
- Price Proposal Form ([Appendix C](#))

Consequence of non-compliance: any pages which extend beyond the above page limitation and any other attachments will be extracted from the proposal and will not be forwarded to the PWGSC Evaluation Board members for evaluation.

SRE 3 SUBMISSION REQUIREMENTS AND EVALUATION

3.1 MANDATORY REQUIREMENTS

Failure to meet the mandatory requirements will render the proposal as non-responsive and no further evaluation will be carried out.

3.1.1 Licensing, Certification or Authorization

The proponent shall be an Engineer licensed, or eligible to be licensed, certified or otherwise authorized to provide the necessary professional services to the full extent that may be required by provincial or territorial law in the province of New Brunswick.

3.1.2 Consultant Team Identification

The consultant team to be identified must include the following:

Proponent (prime consultant)
Marine/Structural Engineering

Key Sub-consultants / Specialists
Electrical Engineering
Architectural Services
Mechanical Engineering
Coastal Engineering
Civil Engineering
Geotechnical Engineering
Project Management
Cost Consultant

If the proponent proposes to provide multidisciplinary services that might normally be provided by a sub-consultant, this should be indicated here.

Information required - name of firm, key personnel to be assigned to the project. For the prime consultant indicate current license and/or how you intend to meet the provincial or territorial licensing requirements. In the case of a joint venture identify the existing or proposed legal form of the joint venture (refer to [General instructions 9 \(GI9\) Limitation of submissions](#)).

An example of an acceptable format (typical) for submission of the team identification information is provided in [Appendix A](#).

3.1.3 Declaration/Certifications Form

Proponents must complete, sign and submit the following:

- [Appendix B](#), Declaration/Certifications Form as required.

3.1.4 Integrity Provisions – Required documentation

In accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Proponent must provide, **as applicable**, to be given further consideration in the procurement process, the required documentation as per General instructions 1 ([G11](#)), [Integrity Provisions – Proposal](#), **section 3a**.

3.2 RATED REQUIREMENTS

Proposals will be rated on the criteria as outlined in the following sections. Information supplied outside of these criteria will not be considered in the technical rating.

3.2.1 Understanding of the Project:

The proponent should demonstrate understanding of the goals of the project, the functional/technical requirements, the constraints and the issues that will shape the end product.

Information that should be supplied:

- The functional and technical requirements
- Broader goals (federal image, sustainable development, sensitivities)
- The relationship between this commission and any earlier studies completed for PWGSC
- Significant issues, challenges and constraints
- Project schedule and cost. Review schedule and cost information and assess risk management elements that may affect the project

3.2.2 Scope of Services:

The proponent should demonstrate capability to perform the services and meet project challenges and to provide a plan of action.

Information that should be supplied:

- Scope of Services - detailed list of services
- Work Plan - detailed breakdown of work tasks and deliverables
- Project schedule - proposed major milestone schedule
- Risk management strategy

3.2.3 Management of Services:

The Proponent should describe how they propose to perform the services and meet the constraints; how the services will be managed to ensure continuing and consistent control as well as production and communication efficiency; to describe how the team will be managed.

The proponent is also to identify sub-consultant disciplines and specialists required to complete the consultant team, clearly showing competencies and experiences requested on projects of similar scope and magnitude.

If the Proponent proposes to provide multi-disciplinary services which might otherwise be performed by a sub-consultant, this should be reflected here.

Information that should be supplied:

- Clearly describe how the services and team will be managed

- Confirm the makeup of the full project team including the names of the consultant sub-consultants and specialists' personnel and their role on the project.
- Organization chart with position titles and names of the full team, including years of experience and years with the firm. Joint Venture business plan, team structure and responsibilities, if applicable
- What back-up will be committed
- Outline of an action plan of the services with implementation strategies and sequence of main activities
- Reporting relationships
- Communication strategies, frequency, feedback
- Response time: Demonstrate how the response time requirements will be met

3.2.4 Design Philosophy / Approach / Methodology

The proponent should elaborate on aspects of the project considered to be a major challenge which will illustrate design philosophy / approach / methodology. This is the opportunity for the Proponent to state the overall design philosophy of the team as well as their approach of resolving design issues and in particular to focus on the unique aspects of the current project.

Information that should be supplied:

- Design Philosophy / Approach / Methodology
- Describe the major challenges and how your team approach will be applied to those particular challenges. Be project specific and discuss preliminary solutions that will be looked at to overcome the challenges.
- Include discussion on:
 - Strategies for phasing to maintain continual operation of salt water intake lines
 - Achieving the aggressive design schedule
 - Bilingual document production
 - Collection of site information

3.2.5 Achievements of Proponent on Projects

Describe the Proponent's accomplishments, achievements and experience as prime consultant on projects.

Select a **maximum** of 3 projects undertaken within the last 6 years. Joint venture submissions are not to exceed the maximum number of projects. Only the first 3 projects listed in sequence will receive consideration and any others will receive none as though not included.

Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project.
- brief project description and intent. Narratives should include a discussion of design philosophy / approach to meet the intent, design challenges and resolutions.
- budget control and management - i.e. contract price & final construction cost - explain variation
- project schedule control and management - i.e. initial schedule and revised schedule - explain variation
- client references - name, address, phone and fax of client contact at working level - references may be checked
- names of key personnel responsible for project delivery
- awards received

The Proponent (as defined in R1410T General Instructions to Proponents, GI2 Definitions) must possess the knowledge on the above projects. Past project experience from entities other than the Proponent will not be considered in the evaluation unless these entities form part of a joint venture Proponent.

Please indicate those projects which were carried out in joint venture and the responsibilities of each of the involved entities in each project.

3.2.6 Achievements of Key Sub-consultants and Specialists on Projects

Describe the accomplishments, achievements and experience either as prime consultant or in a sub-consultant capacity on projects. If the Proponent proposes to provide multi-disciplinary services which might otherwise be performed by a sub-consultant, this should be reflected here.

Select a **maximum** of 3 projects undertaken within the last 6 years per key sub consultant or specialist. Only the first 3 projects listed in sequence (per key sub-consultant or specialist) will receive consideration and any others will receive none as though not included.

Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project.
- brief project description and intent. Narratives should include a discussion of design philosophy / approach to meet the intent, design challenges and resolutions.
- budget control and management
- project schedule control and management
- client references - name, address, phone and fax of client contact at working level - references may be checked
- names of key personnel responsible for project delivery
- awards received

3.2.7 Achievements of Key Personnel on Projects

Describe the experience and performance of key personnel to be assigned to this project regardless of their past association with the current proponent firm. This is the opportunity to emphasize the strengths of the individuals on the team, to recognize their past responsibilities, commitments and achievements.

Information that should be supplied for each key personnel:

- professional accreditation
- accomplishments/achievements/awards
- relevant experience, expertise, number of years experience
- role, responsibility and degree of involvement of individual in past projects
- Profile key members of the design team and clearly demonstrate key member experience (as requested below) on projects of similar scope and magnitude, including their specific assignments and responsibilities. Project team must include the following:

Member	Requirements
Project Manager	<ul style="list-style-type: none">• Experience managing challenging design schedules and multidiscipline teams• Demonstrate how the team and schedule will be managed and outline communication and management tactics

Structural Marine Engineer, Lead Designer	<ul style="list-style-type: none"> • Minimum 10 years experience in design of marine structures • Professional Engineer registered to practice in province of work • Demonstrate the following experience as Lead Designer (construction must be complete) <ul style="list-style-type: none"> ○ Design of concrete caisson structures ○ Design of rock socketed piles and pile structures
Structural Marine Engineer, Senior Reviewer	<ul style="list-style-type: none"> • Minimum 10 years structural marine design experience • Professional Engineer registered to practice in province of work • Demonstrate experience in all criteria listed under Structural Marine Lead Designer. • Demonstrate ability to backfill position of Lead Designer
Geotechnical Engineer	<ul style="list-style-type: none"> • Minimum 5 years experience working on marine projects • Professional Engineer registered to practice in province of work • Demonstrate experience in design of gravity structures, rock sockets, pile design and slope stability
Coastal Engineer	<ul style="list-style-type: none"> • Minimum 10 years experience working on marine projects • Professional Engineer registered to practice in province of work • Demonstrate experience in design and analysis of design water level (must account for extreme water levels), wave parameters, wave forces, wave agitations, and overtopping
Architect	<ul style="list-style-type: none"> • Minimum 5 years experience working on building projects • Professional Architect registered to practice in province of work
Mechanical Engineer	<ul style="list-style-type: none"> • Minimum 10 years experience in mechanical design • Professional Engineer registered to practice in province of work • Demonstrate experience in design of design of building systems and salt water pump systems
Electrical Engineer	<ul style="list-style-type: none"> • Minimum 10 years experience in Electrical design • Professional Engineer registered to practice in province of work • Demonstrate experience in design of site service upgrades, vessel shore power service. • Demonstrate knowledge of operational challenges in a marine environment.
Civil Engineer	<ul style="list-style-type: none"> • Minimum 5 years experience in civil design • Professional Engineer registered to practice in province of work
Structural Engineer	<ul style="list-style-type: none"> • Minimum 5 years experience in structural design • Professional Engineer registered to practice in province of work
Cost Specialist	<ul style="list-style-type: none"> • Minimum 10 years experience in cost planning • Hold PQS (Professional Quantity Surveyor) designation with the Canadian Institute of Quantity Surveyors and shall be a member in good standing. • Demonstrate experience in Marine projects

3.3 EVALUATION AND RATING

Only the technical components of the proposals which are responsive will be reviewed, evaluated and rated by a PWGSC Evaluation Board in accordance with the following to establish Technical Ratings:

Criterion	Weight Factor	Rating	Weighted Rating
Understanding of the Project	1.0	0 - 10	0 – 15
Scope of Services	1.0	0 - 10	0 – 10
Management of Services	1.0	0 - 10	0 – 10
Design Philosophy / Approach / Methodology	2.0	0 - 10	0 - 20
Achievements of Proponent	2.0	0 - 10	0 - 20
Achievements of Key Sub-consultants / Specialists	1.5	0 - 10	0 - 10
Achievements of Key Personnel on Projects	1.5	0 - 10	0 – 15
Technical Rating	10.0		0 - 100

Generic Evaluation Table

PWGSC Evaluation Board members will evaluate the strengths and weaknesses of the Proponent's response to the evaluation criteria and will rate each criterion with even numbers (0, 2, 4, 6, 8 or 10) using the generic evaluation table below:

	INADEQUATE	WEAK	ADEQUATE	FULLY SATISFACTORY	STRONG
0 point	2 points	4 points	6 points	8 points	10 points
Did not submit information which could be evaluated	Lacks complete or almost complete understanding of the requirements.	Has some understanding of the requirements but lacks adequate understanding in some areas of the requirements.	Demonstrates a good understanding of the requirements.	Demonstrates a very good understanding of the requirements.	Demonstrates an excellent understanding of the requirements.
	Weaknesses cannot be corrected	Generally doubtful that weaknesses can be corrected	Weaknesses can be corrected	No significant weaknesses	No apparent weaknesses

	Proponent do not possess qualifications and experience	Proponent lacks qualifications and experience	Proponent has an acceptable level of qualifications and experience	Proponent is qualified and experienced	Proponent is highly qualified and experienced
	Team proposed is not likely able to meet requirements	Team does not cover all components or overall experience is weak	Team covers most components and will likely meet requirements	Team covers all components - some members have worked successfully together	Strong team - has worked successfully together on comparable projects
	Sample projects not related to this requirement	Sample projects generally not related to this requirement	Sample projects generally related to this requirement	Sample projects directly related to this requirement	Leads in sample projects directly related to this requirement
	Extremely poor, insufficient to meet performance requirements	Little capability to meet performance requirements	Acceptable capability, should ensure adequate results	Satisfactory capability, should ensure effective results	Superior capability, should ensure very effective results

To be considered further, proponents **must** achieve a minimum Technical Rating of fifty (50) points out of the hundred (100) points available as specified above.

No further consideration will be given to proponents not achieving the pass mark of fifty (50) points.

SRE 4 PRICE OF SERVICES

All price proposals corresponding to responsive proposals which have achieved the pass mark of fifty (50) points will be considered upon completion of the technical evaluation. When there are three or more responsive proposals, an average price is determined by adding all the price proposals together and dividing the total by the number of price proposals being opened. This calculation will not be conducted when one or two responsive proposals are received.

All price proposals which are greater than twenty-five percent (25%) above the average price will be set aside and receive no further consideration.

The remaining price proposals are rated as follows:

- A. The lowest price proposal receives a Price Rating of 100
- B. The second, third, fourth and fifth lowest prices receive Price Ratings of 80, 60, 40, and 20 respectively. All other price proposals receive a Price Rating of 0.
- C. On the rare occasions where two (or more) price proposals are identical, the matching price proposals receive the same rating and the corresponding number of following ratings are skipped.

The Price Rating is multiplied by the applicable percentage to establish the Price Score.

SRE 5 TOTAL SCORE

Total Scores will be established in accordance with the following:

Rating	Possible Range	% of Total Score	Score (Points)
Technical Rating	0 - 100	80	0 - 80
Price Rating	0 - 100	20	0 - 20
Total Score		100	0 - 100

The Proponent receiving the highest Total Score is the first entity that the Evaluation Board will recommend for the provision of the required services. In the case of a tie, the proponent submitting the lower price for the services will be selected.

SRE 6 SUBMISSION REQUIREMENTS - CHECKLIST

The following list of documents and forms is provided with the intention of assisting the Proponent in ensuring a complete submission. The Proponent is responsible for meeting all submission requirements.

Please follow detailed instructions in General instructions 16 (GI16) Submission of proposal. Proponents may choose to introduce their submissions with a cover letter.

- ☐ Team Identification - see typical format in [Appendix A](#)
- ☐ Declaration/Certifications Form - completed and signed - form provided in [Appendix B](#)
- ☐ Integrity Provisions – Required documentation – **as applicable** in accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>) and as per General instructions [1 \(GI1\)](#), [Integrity Provisions](#) – Proposal, **section 3a**.
- ☐ Integrity Provisions - Declaration of Convicted Offences – **with its bid, as applicable** in accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>) and as per General instructions [1 \(GI1\)](#), [Integrity Provisions](#) – Proposal, **section 3b**.
- ☐ Proposal
- ☐ Front page of RFP
- ☐ Front page(s) of any solicitation amendment
- ☐ Price Proposal Form completed and submitted in a separate section.

For hard copy Proposal:

- ☐ Proposal - one (1) original plus
- ☐ Price Proposal Form – only one (1) Price proposal Form completed and submitted in a separate envelope

For epost Connect Proposal:

- ☐ Proposal - one (1) electronic document attached to the message
- ☐ Price Proposal Form – one (1) Price proposal Form completed and submitted in a separate electronic document attached to the message

APPENDIX A - TEAM IDENTIFICATION FORMAT

For details on this format, please see SRE in the Request For Proposal.

The prime consultant and other members of the Consultant Team shall be, or eligible to be, licensed, certified or otherwise authorized to provide the necessary professional services to the full extent that may be required by provincial or territorial law.

I. Prime Consultant (Proponent - Marine / Structural Engineering):

Firm or Joint Venture Name:

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

II. Key Sub Consultants / Specialists:

Electrical Engineer

Firm Name

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

Architectural

Firm Name

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

Mechanical Engineering

Firm Name

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

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Coastal Engineering

Firm Name

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

Civil Engineering

Firm Name

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

Geotechnical Engineering

Firm Name

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

Project Management

Firm Name

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

Solicitation No. - N° de l'invitation
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Cost Consultant

Firm Name

Key Individuals and provincial professional licensing status and/or professional accreditation:

Role	Name of Firm	Name of Key Individuals	Professional Licence(s) or Accreditations

APPENDIX B - DECLARATION/CERTIFICATIONS FORM

Project Title			
Name of Proponent		Street Address	
Telephone number:		Mailing Address	
Fax number:			
Proponent's Proposed Site or premises Requiring Safeguard Measures (refer to SI? Security Requirement): <i>Street number / name</i> <i>Unit/Suite/Apartment number</i> <i>City, Province / Territory</i> <i>Postal Code</i>			N/A
Email Address:			
Procurement Business Number:			

Type of Organizations		Size of Organization	Number of Employees
	<input type="checkbox"/> Sole Proprietorship		_____
	<input type="checkbox"/> Partnership		Graduate Architects / Professional Engineers _____
	<input type="checkbox"/> Corporation		Other Professionals _____
	<input type="checkbox"/> Joint Venture		Other _____

Federal Contractors Program for Employment Equity - Certification

I, *the Proponent*, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a proposal non-responsive, or will declare a consultant in default, if a certification is found to be untrue, whether during the proposal evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Proponent's certifications. Failure to comply with any request or requirement imposed by Canada may render the proposal non-responsive or constitute a default under the contract.

For further information on the Federal Contractors [Program for Employment Equity visit Employment and Social Development Canada \(ESDC\)-Labour's website](#).

Date: _____ (YY/MM/DD) (If left blank, the date will be deemed to be the bid closing date.)

Complete both A and B.

A. Check only one of the following:

- ☐ A1. The Proponent certifies having no work force in Canada.
- ☐ A2. The Proponent certifies being a public sector employer.
- ☐ A3. The Proponent certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- ☐ A4. The Proponent certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Proponent has a combined work force in Canada of 100 or more employees; and

- ☐ A5.1. The Proponent certifies already having a valid and current [Agreement to Implement Employment Equity \(AIEE\)](#) in place with ESDC-Labour.

OR

- ☐ A5.2. The Proponent certifies having submitted the [Agreement to Implement Employment Equity \(LAB1168\)](#) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- ☐ B1. The Proponent is not a Joint Venture.

OR

- ☐ B2. The Proponent is a Joint Venture and each member of the Joint Venture must provide the Contracting Authority with a completed Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the General Instructions)

Former Public Servant (FPS) - Certification

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, proponents must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of proposals is completed, Canada will inform the Proponent of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the proposal non-responsive.

Definitions

For the purposes of this clause,

"former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- (a) an individual;
- (b) an individual who has incorporated;
- (c) a partnership made of former public servants; or
- (d) a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament Retiring Allowances Act*, R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Proponent a FPS in receipt of a pension?

☐ Yes | ☐ No

If so, the Proponent must provide the following information, for all FPS in receipt of a pension, as applicable:

- (a) name of former public servant;
- (b) date of termination of employment or retirement from the Public Service.

By providing this information, proponents agree that the successful Proponent's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2019-01 and the Guidelines on the Proactive Disclosure of Contracts.

Work Force Adjustment Directive

Is the Proponent a FPS who received a lump sum payment pursuant to the terms of a work force reduction program? ☐ Yes | ☐ No

If so, the Proponent must provide the following information:

- (a) name of former public servant;
- (b) conditions of the lump sum payment incentive;
- (c) date of termination of employment;
- (d) amount of lump sum payment;
- (e) rate of pay on which lump sum payment is based;
- (f) period of lump sum payment including start date, end date and number of weeks;
- (g) number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

Name of Proponent:

DECLARATION:

I, the undersigned, being a principal of the proponent, hereby certify that the information given on this form and in the attached proposal is accurate to the best of my knowledge. If any proposal is submitted by a partnership or joint venture, then the following is required from each component entity.

Name

Signature

Title

I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture

Name

Signature

Title

I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture

Name

Signature

Title

I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture

During proposal evaluation period, PWGSC contact will be with the following person:

Name

Telephone Number: () _____ Fax Number: () _____

E-mail: _____

The above certifications should be completed and submitted with the proposal, but may be submitted afterwards as follows: if the above certifications are not completed and submitted with the proposal, the Contracting Authority will inform the Proponent of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the above certifications within the time frame provided will render the proposal non-responsive.

COVID-19 VACCINATION REQUIREMENT CERTIFICATION

I, _____ (first and last name), as the representative of
_____ (name of business) pursuant to _____
(insert solicitation number), warrant and certify that all personnel that _____
(name of business) will provide on this Contract who access federal government workplaces within
Canada where they may come into contact with public servants will be:

- (a) fully vaccinated against COVID-19;
- (b) for personnel that are unable to be vaccinated due to a certified medical contraindication, religion or other prohibited grounds of discrimination under the *Canadian Human Rights Act*, subject to accommodation and mitigation measures that have been presented to and approved by Canada; or
- (c) partially vaccinated against COVID-19 for a period of up to 10 weeks from the date of their first dose and subject to temporary measures that have been presented to and approved by Canada, immediately after which period the personnel will meet the conditions of (a) or (b) or will no longer access federal government workplaces where they may come into contact with public servants under this Contract; until such time that Canada indicates that the mandatory vaccination requirements of the Mandatory Vaccination Policy for Supplier Personnel are no longer in effect.

I certify that all personnel provided by _____ (name of business) have been notified of the vaccination requirements of the Government of Canada's COVID-19 Vaccination Policy for Supplier Personnel, and that the _____ (name of business) has certified to their compliance with this requirement.

I certify that the information provided is true as of the date indicated below and will continue to be true for the duration of the Contract. I understand that the certifications provided to Canada are subject to verification at all times. I also understand that Canada will declare a contractor in default, if a certification is found to be untrue, whether made knowingly or unknowingly, during the bid or contract period. Canada reserves the right to ask for additional information to verify the certifications. Failure to comply with any request or requirement imposed by Canada will constitute a default under the Contract.

Signature: _____

Date: _____

Optional

For data purposes only, initial below if your business already has its own mandatory vaccination policy or requirements for employees in place. Initialing below is not a substitute for completing the mandatory certification above.

Initials: _____

Information you provide on this Certification Form and in accordance with the Government of Canada's COVID-19 Vaccination Policy for Supplier Personnel will be protected, used, stored and disclosed in accordance with the Privacy Act. Please note that you have a right to access and correct any information on your file, and you have a right to file a complaint with the Office of the Privacy Commissioner regarding the handling of your personal information. These rights also apply to all individuals who are deemed to be personnel for the purpose for the Contract and who require access to federal government workplaces where they may come into contact with public servants.

APPENDIX C - PRICE PROPOSAL FORM

INSTRUCTIONS:

- Complete this Price Proposal Form and submit in accordance with the instructions in this solicitation;
- Price Proposals are not to include Applicable Taxes;
- PROPONENTS SHALL NOT ALTER THIS FORM

Project Title: Saint Andrews Biological Station Wharf Replacement & Site Redevelopment

Name of Proponent:

The following will form part of the evaluation process:

REQUIRED SERVICES

Fixed Fee R1230D (2018-06-21) [GC 5 - Terms of Payment – Architectural and/or Engineering Services](#)

NOTE: Fixed Fees shall include all fees associated with the project, whether they be fees associated with the use of in-house resources or the fees associated with services provided by third party sub-consultants; e.g.; surveying, geotechnical, coastal services. The Fixed Fee shall include all fees and expenses for travel, software fees, site visits, field data collections, etc. There will be no separate disbursement payment for these costs. Only items identified under Disbursements in the Price Proposal Form will be reimbursed separately.

REQUIRED SERVICES (RS)	FIXED FEE
PA 1 Project Administration (All Stages)	\$
RS 1 Pre-Design Services	
-Package 1: Wharf Replacement, Electrical Upgrades, Pumphouse and Site Redevelopment	\$
-Package 2: Net Shed Building	\$
RS 2 Concept Design	
-Package 1: Wharf Replacement, Electrical Upgrades, Pumphouse and Site Redevelopment	\$

-Package 2: Net Shed Building	\$
RS 3 Design Development	
-Package 1: Wharf Replacement, Electrical Upgrades, Pumphouse and Site Redevelopment	\$
-Package 2: Net Shed Building	\$
RS 4 Construction Drawings	
-Package 1: Wharf Replacement, Electrical Upgrades, Pumphouse and Site Redevelopment	\$
-Package 2: Net Shed Building	\$
RS 8 Estimating and Cost Planning (All Stages)	\$
MAXIMUM FIXED FEES REQUIRED SERVICES (A)	\$

OPTIONAL SERVICES

Fixed Fee R1230D (2018-06-21) [GC 5 - Terms of Payment – Architectural and/or Engineering Services](#)

OPTIONAL SERVICES	FIXED FEE
RS 5 Tender Call, Bid Evaluation and Construction Contract Award	
-Package 1: Wharf Replacement, Electrical Upgrades, Pumphouse and Site Redevelopment	\$
-Package 2: Net Shed Building	\$
RS 6 Construction & Contract Administration & Post Construction Warranty Review	
-Package 1: Wharf Replacement, Electrical Upgrades, Pumphouse and Site Redevelopment	
-Package 2: Net Shed Building	
MAXIMUM FIXED FEES OPTIONAL SERVICES (B)	

OPTIONAL SERVICES (CONT'D)

Time Based Fees R1230D (2018-06-21) [GC 5 - Terms of Payment– Architectural and/or Engineering Services](#)

RS 9 Resident Construction Services

IDENTIFY SERVICE	ESTIMATED HOURS Column A	HOURLY RATES** Column B	TIME BASED FEE Columns A x B
<i>Package 1: Wharf Replacement, Electrical Upgrades, Pumphouse Phase 2 and Site Redevelopment</i>	1200	\$	\$.
<i>Package 2: Net Shed Building</i>	600	\$	\$
MAXIMUM TIME BASED FEES OPTIONAL SERVICES (C)			\$

*Payment will be based on actual hours spent. Travel time and/or expenses will not be reimbursed separately (Refer to R1230D (2018-06-21), GC 5.12 – Disbursements).

**All inclusive hourly rate is applicable to both normal working hours and any other shift work as required.

TOTAL FEES FOR OPTIONAL SERVICES ADDITIONAL SERVICES (B) + (C)	\$
---	-----------

TOTAL COST OF SERVICES FOR PROPOSAL EVALUATION PURPOSE

Total Fee for Required Services (A)	\$
Total Fee for Optional Services (B) + (C)	\$
Total Evaluated Fee (A+B+C)	\$

The following will NOT form part of the evaluation process

Canada may accept or reject any of the following fees, disbursements and/or hourly rates.
Canada reserves the right to negotiate on these fees, disbursements and/or hourly rates.

DISBURSEMENTS

At cost without allowance for mark-up or profit, supported by invoices/receipts - see clause R1230D (2016-01-28), GC 5 - Terms of Payment– Architectural and/or Engineering Services, section GC5.12 Disbursements.

Hydrographic & Topographic Surveying	\$ 35,000.00
Geotechnical Investigation	\$ 30,000.00

MAXIMUM AMOUNT FOR DISBURSEMENTS **\$ 65,000.00**

THE FOLLOWING HOURLY RATES MAY BE USED FOR FUTURE CONTRACT AMENDMENTS

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

The following hourly rates may be used for future contract amendments

Principals:

Name	Rate (\$/hour)

Staff:

Name	Rate (\$/hour)

END OF PRICE PROPOSAL FORM

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APPENDIX D - DOING BUSINESS WITH PWGSC DOCUMENTATION AND DELIVERABLES MANUAL

Doing Business with PWGSC can be found in the following link:

<https://gcdocs.gc.ca/tpsgc-pwgsc/lisapi.dll/Overview/239013073>

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APPENDIX E - PROJECT BRIEF / TERMS OF REFERENCE

Attachment

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1 PROJECT BRIEF

For standards relating to the service provisions herein please refer to the document “Doing Business with PWGSC”. The standards in “Doing Business with PWGSC” must be adhered to in conjunction with this scope of services.

2 DESCRIPTION OF PROJECT

2.1 PD 1 PROJECT INFORMATION

Public Works and Government Services Canada (PWGSC) intends to retain a multi discipline engineering team for the provision of the services required for this project.

PWGSC Project Title:	Wharf Replacement & Site Redevelopment
Location of the Project:	St. Andrews Biological Station, St. Andrews, NB
PWGSC Project Number:	R.082684.002
Client/User:	DFO Real Property Safety and Security
PWGSC Project Manager:	TBD

2.2 PD 2 PROJECT BACKGROUND AND IDENTIFICATION

2.2.1 Description

The St. Andrews Biological Station (SABS) was established in 1908 and is the oldest marine research laboratory in Canada. Research on aquaculture, oceanography, the sustainability of fisheries and their habitats, stock assessments and the biology of commercially harvested fish and invertebrates is carried out at SABS.

The SABS facility covers 9.3 hectares at Brandy Cove including offices, both freshwater and saltwater laboratories, workshops, a chemical storage building, a conference centre, computer facilities, and the wharf. SABS is a part of a network of fisheries research and educational institutions in the area including the Huntsman Marine Science Centre, the Atlantic Salmon Federation and the St. Andrews campus of the New Brunswick Community College.

Over the years the facility has grown, legislative and regulatory requirements have changed, and some infrastructure on site no longer meets the operational and the functional requirements of SABS. The purpose of this project is to engage a Consultant team to produce contract documents for the following:

- **MARINE** - Provide a new rigid wharf complete with; protected berthage, floating docks and gangways/strong arms, permanent pumphouse access, electrical services and lighting, fresh water supply (seasonal), jib cranes, communications, and fuel station.
- **PUMPHOUSE** - Design modified pumphouse building (entirely or in-part), considering improved functionality and access from shore (or new wharf structure).
- **NET SHED** - Provide a new Net Shed Replacement facility on a new rubblemound infill area sufficient to support it.

- SITE ELECTRICAL UPGRADE - Provide upgraded electrical service to the facility and convert existing overhead power and communications to underground.
- SITE REDEVELOPMENT - Provide uplands redevelopment to transition the existing site and infrastructure into the new Net Shed and Wharf.

The various aspects of this projects were initiated as separate projects and were developed separately to date. As the scope was refined, overlapping technical elements were identified as well as challenges with implementation on site. The intention of this project is to engage a consultant team to deliver tender ready construction documents for the full scope of work. Consultant services during RS 5 Tendering and RS 6 Construction Contract Administration will be optional services.

2.2.2 Existing Conditions

2.2.2.1 MARINE

The SABS wharf was constructed in 1959 as a timber crib gravity structure. In the mid 1980's the existing structure was removed to the low-water line and reconstructed as a timber frame structure. The original cribwork below low water served as a gravity foundation sub-structure while heavy timber members provided the upper structure of the wharf which supports regular SABS operations. The newer timber components are restrained at the gravity base by the remnant original foundations and by struts, beams and bracing in the interconnected framework of the visible wharf structure. The deck consists of simply supported precast reinforced concrete panels.

A comprehensive inspection and structural review of the wharf was completed in early 2009 by Mitchelmore Engineering. This review noted a severely deteriorated but largely intact substructure below LNT (original timber cribwork construction). It also noted deterioration and signs of distress in the superstructure timber components indicating an inability to continue carrying original design loadings. A berthing load assessment was not completed at this time, but was recommended due to the deteriorated state of the fender, wales, and bracing system. The 2009 inspection concluded that the overall condition of the wharf was poor to good condition, and emphasised the deterioration and unpredictability of the original construction substructure cribwork.

Original drawings from 1959 indicate allowable design loads of 200 lbs/ft² and 4 tons concentrated; record drawings from the partial reconstruction in the mid 1980's indicate considering an MS150 design truck or 12 kPa uniformly distributed live load. Following the 2009 inspection, the SABS wharf was restricted to allow only passenger cars and light trucks with gross vehicle weight (GVW) postings of 9000kg for the stem and 4500kg for the inner and outer ells. Minor repairs were completed to ensure another 10 years of operation under this restricted access. Ultimately, replacement of the wharf was recommended.

Gemtec was engaged by PSPC on behalf of DFO in the Fall of 2020 to complete an updated inspection and structural review of the wharf. The resulting report determined the structure has reached the end of its useful service life and is unsafe for use. This review has restricted vehicle access to the wharf and as a result significantly impacted the facility's ability to respond to potential issues in the pump house as well as ongoing maintenance activity. A separate project is currently underway to design and construct a temporary access trestle allowing pedestrian and vehicle traffic to access the Pumphouse without traversing the wharf until redevelopment of the site is completed under this project.

Permanent access for the pumphouse will be via redevelopment works covered under this project, and design work must include integration of new works and the existing new or renovated pumphouse to permit this access.

With this RFP DFO is moving forward with the design of a new wharf that is designed for future sea level rise.

Safe access to smaller vessels is provided by floating docks and gangways supported by the rigid wharf on a rail system that rises and lowers with the tide. The existing floating docks and gangways are showing signs of deterioration and are unlikely to meet the functional requirements with the new wharf configuration and deck elevation, they are to be replaced as part of the project.

The electrical services on the wharf no longer meet the needs of the vessel fleet and are to be replaced as part of the project.

There is an existing above ground 4546 L double wall marine diesel tank near the wharf that is to be assessed for re-use or replacement in the new design.

A previous RS1/RS2 study was completed by SNC Lavalin in 2019 which reviewed coastal exposure conditions and assessed harbour redevelopment configurations against projected future needs for the facility. User requirements have been redefined in terms of the number and size of vessels to be served by the redevelopment harbour, resulting in a significant reduction in berthage requirements as well as associated site services. This project will include a new RS1/RS2 phase that will explore options for harbour redevelopment and layout against updated user requirements. This new Options Analysis must also examine structure construction types and should include cost estimates, risk assessment and schedule impacts including varying permit timelines for a comparison. Life cycle costs need to be considered as part of the options analysis.

The previous RS1/RS2 study recommended an option for harbour configuration with the new wharf in a similar footprint to the existing, offering similar protection to coastal exposures and conditions. As this project will develop new options for the harbour configuration and structure types, the scope of work must include coastal modelling as part of option development and comparisons. Further details are described in subsequent sections of this Terms of Reference.

2.2.2.2 PUMPHOUSE

In 1998, there was an upgrade to the salt water and filter system at the facility. The old pump house on the west side of the wharf was decommissioned and a new pump house and electrical building was constructed on the south end of the wharf.

The 2021 Gemtec Report has restricted vehicle access to the wharf and as a result significantly impacted the facilities ability - to respond to potential issues in the pump house as well as ongoing maintenance activity. The pump house is a vital aspect of the facility providing continuous salt water to the laboratories for research. A separate project is currently underway to design and construct a temporary access trestle from the shoreline to the pump house, allowing pedestrian and vehicle access without traversing the restricted wharf. The temporary access project will include modifications to the

deck span that currently goes from the wharf to the pump house. Design work covered under this wharf replacement and harbour redevelopment project must coordinate with the temporary access trestle design, and allow the new wharf to be constructed without affecting the temporary access to the pump house.

Work of this project will include assessment of permanent options for the pumphouse. The analysis is to include at minimum the following 3 options:

- Modification of the existing pumphouse by extension of the wetwell (while providing temporary diversion),
- Replacement of the entire pumphouse to a water-based location.
- Replacement of the entire pumphouse to a land-based location.

All options to consider how continuous supply of salt water will be maintained throughout the work, provide access for maintenance vehicles and personnel from shore (or via the new wharf) and must include provisions phased integration with other site structures

Options analysis to include cost estimates, risk assessment and schedule impacts including varying permit timelines for a comparison. Life cycle costs need to be considered as part of the options analysis.

2.2.2.3 NET SHED

The St. Andrews Biological Station has a requirement for a new and expanded gear storage building of approx. 362.5 m² footprint to replace the present Net Shed located on the existing wharf. The replacement is necessitated in part by the planned demolition of the existing wharf on which the current net shed is located, as well as the need to update the facility to better accommodate an evolving research program. It is proposed that the new facility be constructed on an infill area to be located northwest of the Broodstock Building. Consideration shall be given to an infill with armourstone slopes and to an infill with a gravity or pilework perimeter structure pending geotechnical review. As noted above, the possibility exists that the new facility could be accommodated without the need to infill a portion of the cove, and this investigation will form part of the work of this contract. Options analysis on constructability of site, subgrade and building construction for both cost and schedule of each scenario to be included.

Legislative changes have increased the monitoring and operational requirements for oceanographic and environmental activities for programs such as the Ocean Protection Program (OPP) and Canadian Environmental Protection Act-Disposal At Sea (CEPA-DAS). The Net Shed is intended to be a shared multipurpose building for Environmental oceanographic (physical, chemical and biological) sampling equipment as well as a maintenance shop. There is a need for a location to store, fabricate and maintain survey nets, etc. as well as accommodate future Science needs. The shop will be used to maintain and repair operational oceanographic and environmental monitoring equipment. It will be a working shop and not simply a storage facility. It will also be used to fabricate and mend trawl nets (for both Maritimes and Gulf Region).

2.2.2.4 SITE ELECTRICAL UPGRADE

The existing electrical services on the wharf are at the end of their life and are no longer adequate for the vessel fleet shore power requirements. A preliminary study of the existing service has determined

that the service must be upgraded to provide adequate shore power for the proposed vessel fleet identified by SABS.

The facility is presently served by a combination of overhead and underground 12 470 V / 7 200 V electrical circuit. The SABS campus presently has approximately 10-12 utility poles. There are 4 riser poles that convert overhead service to underground, 3 poles to which pole mounted transformers are mounted and 3-5 poles with only overhead wiring.

The main access road to the facility was reconstructed in the last five years and several overhead power lines were moved underground. The intention of this project is to completely remove all remaining overhead services and replace with underground services.

An updated options analysis to be included noting cost estimates, schedule impacts and potential risks based on options presented in the noted study.

2.2.2.5 SITE REDEVELOPMENT

The access to the existing wharf is via a paved road that runs along the adjacent boat ramp and the salt water filtration building. The area is generally at a similar elevation to the wharf deck. With the raising of the new wharf deck the uplands infrastructure and buildings will be impacted and require significant modifications. The new design is to incorporate electric vehicle charging stations in the parking area.

An options analysis including impacts to site based on the elevation of the wharf construction to be included. This analysis is to highlight traffic patterns on site, access points for structures, cost estimates, schedule impacts and potential risks.

2.2.3 General Scope of Work

Under this contract, the Design Consultant Team is to provide contract documents, including but not limited to, construction cost estimates, drawings and specifications for the full scope. The description of activities below is not intended to be an exhaustive list of the required work, but is intended to provide an overview of the project requirements. Further details are provided in Section 3 Description of Services.

The project is currently in the planning stage, aspects of the project have been developed to varying stages. The Consultant is responsible to review all background information and make recommendations on the full project scope prior to moving into the Detailed Design phase. Elements of the project will include the following:

1. Review all historical information available for the works covered under this project, including but not limited to: record drawings, maintenance records, operation procedures, previous reports, and facility operations.
2. Meet with DFO staff to identify their needs, concerns, operation methodology, mooring procedures, berthing procedures, past events, and repair/maintenance activities. Ensure all field work is coordinated with the Departmental Representative and accommodates continued use of the facility in accordance with the approved schedule. The Consultant is required to incorporate Covid-19 health and safety protocols and travel restrictions in their planning and execution of field work and meetings with users. A source of advice is found in the Canadian Construction Association COVID-19 Standardized Protocols for All Canadian Construction Sites.

3. Develop a plan for any additional site investigation and collection of data by the full project team. Include geotechnical investigations, topographical surveying (as-required), arm's length field verification of all areas pertinent to the project, verification of as-built information, site access, and detailed measurements as required to complete the Work.
4. Ensure full project team is aware of local tides, currents, climate, exposure conditions and any other site conditions that will affect the Work.
5. Complete a site-specific Health and Safety Plan covering all tasks included in the proposed site investigation and project design phase. Include specifics on how special provisions to accommodate COVID-19 Health and Safety restrictions imparted by the Departmental Representative, Province(s), and all other authorities having jurisdiction as well as internal procedures within the proponent's own company.
6. Some record information has been included with this solicitation. Additional information may be available upon request to the Departmental Representative. Should additional investigation or information be required, inform Departmental Representative and do not proceed until instructed to do so in writing by the Departmental Representative.
7. Provide PA 1 Project Administration throughout all stages of the project.
8. Submit combined RS1/RS2 reports, separated as described in PD 2.2.3.-10. As a minimum, include:
 - Summary of site investigation;
 - Design reference codes and standards;
 - Design parameters for all aspects of the design. Ensure that tidal range, wave and coastal climate are considered.
 - Summary of consultations with the Departmental Representative and DFO staff outlining operational needs and requirements.
 - Summary of review of record information and development of recommendations for facility upgrades. Previous reports have been included with this solicitation for reference only. It is the responsibility of the successful proponent to review the information and supplement as required.
 - Preliminary concepts for layout, proposed technology, methods of construction and phasing for all aspects of the project. All concepts and options to be determined in consultation with Departmental Representative prior to development and inclusion in the report.
 - Complete coastal modelling required to adequately develop design parameters and compare and contrast all harbour redevelopment options explored under this project, as further indicated in PD 2.2.4. The proposal should include modeling approaches including model validation and calibration methods to be used for the study
 - Study extreme water levels, nearshore waves, design wave parameters, wave forces on the structures, hydrodynamics, harbour agitation, potential erosion, deposition, dredging requirements and navigational aspect due to proposed development options.
 - Options analysis as indicated in PD 2.2.2.1 to PD 2.2.2.5
 - Provide estimating and cost planning as indicated in RS8
 - Options investigated and developed throughout work of this project are to include all aspects of the fully functioning site.

- Analyze the constructability of the project and advise on the construction phasing and timelines. The facility will be operational throughout all phases of the project, minimizing interruption of operations.
 - Provide a project and preliminary construction schedule indicating both project and construction milestones, lead times for materials, permits, phasing and logistics.
9. Submit RS3 reports, separated as described in PD 2.2.3.-10 As a minimum, include:
- Further develop options selected for each component of the project from the completed RS2 report.
 - Provide Design Development drawings for each discipline.
 - Provide estimating and cost planning as indicated in RS8
 - Outline of project specifications and materials.
 - Updated design schedule.
 - Updated project and preliminary construction schedule indicating both project and construction milestones, lead times for materials, permits, phasing and logistics
 - -Collection of all assumptions and justification for all major design decisions to date.
10. Develop detailed design deliverable packages for RS 4 including methodology, phasing, drawings, specifications and schedule for review at 33 / 66 / 99 and Issued for Construction stages. Obtain Departmental Representative approval prior to moving to subsequent stage. Final Issued for Construction submission to be stamped by a Professional Engineer registered to practice in the province of Work. Provide estimating and cost planning as indicated in RS8
11. All Issued for Construction packages to be Bilingual (French/English). Designs are to be separated into 2(two) stand-alone tender packages as follows:
- - Package 1 – Wharf Replacement, Electrical Upgrades, Pumphouse Phase 2 & Site Redevelopment
 - Package 2 – Net Shed Building
12. Provide RS 7 Risk Management throughout all stages of the project. This service will not be priced separately.
13. Provide RS 8 Cost Estimating and Planning throughout all stages of the project.
14. *Optional Service RS5.0 – Tender Call, Bid Evaluation and Construction Contract Award*
- Assist in obtaining and evaluating bids from qualified contractors to construct the project as per the Tender Documents. Services included under this item are to be Bilingual (French/English). Further description of services are available in Section 3 Description of Services.
 - Separate pricing for this optional service for each project package as outlined in the price form.
15. *Optional Service RS6.0 – Construction and Contract Administration and Post Construction Warranty Review.*

- Ensure the implementation of the project in compliance with the Contract Documents and to direct and monitor all necessary or requested changes to the scope of work during construction. Services included under this item are to be Bilingual (French/English). Further description of services are available in Section 3 Description of Services.
- Separate pricing for this optional service for each project package, as outlined in the price form.

16. *Optional Service RS 9 – Resident Construction Services*

- Implement the project in compliance with the Construction Contract Documents and to ensure construction contractor compliance with their contract. The consultant shall provide a Resident Construction Services Representative for the duration of construction contract stage. Services included under this item are to be Bilingual (French/English). Further description of services are available in Section 3 Description of Services.
- Separate pricing for this optional service for each project package, as outlined in the price form.

2.2.4 Detailed Requirements

The functional and technical requirements of the project are outlined in this section. All details provided are to be confirmed by the successful proponent during Work of this project.

2.2.4.1 MARINE

RIGID WHARF

Significant concept work has been completed for new rigid wharf design under a previous set of user requirements, however rework of concept development is required under this project because of new berthing requirements established by users and presented in Table 1 below. . The Consultant is to review all work completed to date. The Consultant is required to generate additional configuration options for analysis during the concept design stage, developed in consultation with the Departmental Representative, Users, and in accordance with the user requirements listed below.. The intent under the Options Analysis stage is to develop a minimum of three (3) concepts for the redeveloped harbour layout meeting the berthage, access and protection needs of the Users. A minimum of three (3) construction types are also to be reviewed for the rigid wharf proposed. The Consultant is to summarize their review of the background information and new Options Analysis, compare and contrast all options, and make recommendations on harbour layout and structure types.

Design new rigid wharf to meet the following criteria:

- Loading Criteria

TABLE 1 – Loading Criteria						
Vessels	Berthing	Length (m)	Width (m)	Draft (m)	Gross Tonnage (MT)	Net Tonnage (MT)
CCG Viola Davidson	Year round	20.0	7.0	3.0	60	45
Rossboroughs Quantity =3	Year round	10.0	3.0			
Rigid Inflatable Boats Quantity = 2	Year round	3.0	1.0			
DFO C&P Vessel	Year Round	10.5	3.0	0.9	6061 kg	
Truck (Rigid Wharf)	CL-625 (In areas where CL-625 cannot maneuver, design for CL1-625, CL2-625 or CL3-625 as per CAS S6 as appropriate.)					
Crane (Rigid Wharf)	Two cranes are required, one in the range of 2-3 tonne capacity for larger vessels moored on face of wharf and a second to services vessels at the floating docks.					
Uniform Live (Rigid Wharf)	15 kPa					
Uniform Live load (Floats)	4.8 kPa					

- Width: To match existing stem and to suit geotechnical requirements. The existing structure is wider at the 'L' extension to accommodate the existing net shed building. A new net shed building will be located on the land, so a wider structure will not be required for this purpose.
- Length: To be determined upon review of berthing requirements.
- Deck Elevation: To be determined by coastal analysis. The existing wharf elevation (+8.6m) is anticipated to require increasing to account for future sea level rise and wave effects.
- Deck System: Structural concrete slab
- Fendering System: To suit design Vessels and structure type.
- Mooring Cleats: To suit design vessels, located on top of continuous wheel guard. Spacing to be confirmed with users.
- Ladders: Timber uprights c/w galvanized rungs & horizontal / vertical holdfasts at typical 15 m spacing. Minimum 60 m spacing for safety.
- Wheel Guard: 300 X 300 concrete c/w galvanized wearing strip.

- Drains: To provide adequate drainage
- Include demolition of the existing wharf structure and removal of existing Net Shed building and fuel tank on the wharf.

COASTAL

- The facility will be used year-round in all conditions.
- The CCG Viola Davidson must be protected from Northwest winds.
- Previous work for the SABS wharf replacement included an Options Analysis with coastal modelling that explored and ultimately recommended a layout for the new wharf to be constructed on a similar footprint as the existing. As such, coastal conditions within the harbour saw very little change from the existing, other than adding provisions for an increased deck elevation to accommodate future sea level rise. Work under this project will explore new harbour configurations, and therefore detailed coastal modelling is required during development and comparisons of concepts.
- The Consultant is to investigate extreme water levels, wave parameters, wave forces, wave agitations, storm surges, and overtopping analysis and crest elevations, and all other hydrodynamic effects on the structures as appropriate for the proposed design development of the wharfs, floating docks and armour protections.
Provide a detailed Coastal Engineering report summarizing the analyses results and all requested parameters. Wave modeling results should be presented in maps showing wave height contours inside and adjacent area.

FLOATING DOCKS

- Floating docks and gangways are required along the interior of the wharf to provide safe access to smaller vessels and to avoid “rafting” that complicates equipment transfer.
- Width: 4-5 meters to accommodate transfer of equipment from shore to vessels
- Freeboard: 900mm
- Gangway width: 1.5-2m between handrails with ANTI- SLIP walking surface. Must include a 0.6-1m slide-ramp on one side to allow gear to be moved down the gangway safely.
- Gangway slope: To be determined in conjunction with deck elevation, must provide safe slope in all tidal conditions. Transitions to be designed for equipment transfer in a wagon of some sort.
- Construction Details: Treated timber cribwork, timber decking (planed one side for uniform thickness), timber guard, polyurethane coated expanded polystyrene buoyancy billets, aluminum gangways, mooring cleats every 5 meters and safety ladders.

ELECTRICAL

- Significant work has been completed for the electrical components of the new rigid wharf design. The Consultant is to review all background information and ensure the following requirements are met:
 - Lighting for safe berthing/offloading
 - Power for 2 cranes
 - Shore power pedestals for CCG Viola Davidson as well as mid-sized periodic vessels.
Sizing of electrical service to be in accordance with Section 78 of the Canadian Electrical Code. Consultant will need to verify the power requirements for each vessel prior to determining the exact service size. Electrical service will need to be housed in a room large enough to accommodate the service equipment, transformers and other electrical equipment. Presently the pump house is fed from an electrical room built on the wharf.

- That electrical room could possibly be enlarged (and likely moved from the wharf to an off-wharf location) to accommodate the wharf electrical service.
 - Provide 20A, 110V power stations on the floating docks or lower part of the outside gangway to service small vessels.
 - Provide 50A, 120 V power pedestal on the wharf for mid-size periodic vessels.
- . All power for lighting, pedestals, and cranes to be supplied from a new electrical building, location to be determined.

UTILITIES / MISCELLANEOUS

- Provide safety equipment, emergency life rings and rope that are long enough to reach persons during the lowest tides
- Provide fresh water supply system on the wharf for larger vessels. Due to freezing conditions in the winter, include details for seasonal drainage and plan to provide via truck or temporary lines in the winter.
- Provide Network connection to allow Computer access for secure communication and file transfer
- Provide attachment points for suspending temporary scientific equipment (e.g., current meters, water quality meters, plankton nets, video cameras etc.)
- Re-establish tidal gauge and water monitoring station
- Provide new fuel station. Provide simple and flexible refuelling system for smaller vessels including gas (new) and diesel. Existing equipment and tank to be assessed for reuse or replacement in terms of the following; existing condition, lifecycle costing and ability to meet the operational requirements on site. Analyse layout options for new fuel station. Grade changes may require change in location.

2.2.4.2 PUMPHOUSE

- Review all existing information to understand how the existing pump house is constructed, how it functions and how it is maintained.
- Develop a plan for a site investigation to confirm the existing conditions in the field and discuss operational procedures as well as current challenges with the users on site.
- Pumphouse Permanent Replacement / Modifications
 - Assess permanent replacement/modification options for the pumphouse- Include at a minimum assessment of the following 3 options:
 - Modification of the existing pumphouse by extension of the wetwell (while providing temporary diversion) with maintenance access via the new wharf structure.
 - Replacement of the entire pumphouse to a water-based location, including maintenance access considerations.
 - Replacement of the entire pumphouse to a land-based location, including maintenance access considerations.
 - All options to consider how continuous supply of salt water will be maintained throughout the work and consideration given to modify or replace saltwater intake lines.
 - Water based options to consider - the addition of a branch to the saltwater intake line to allow "PIG launching" from above the water line. Currently, when the intake line has to be cleaned, divers have to isolate the wet well and insert the pig underwater. This is a

costly and dangerous process. Review the option of adding a wye to the intake line in order to extend a branch to the floor level of the pump house, to improve safety. This would also include the addition of valves in order to properly isolate the section of piping to be cleaned.

- Provide structural design of chosen options.
- Provide structural design of new or modified to maintain personnel and maintenance equipment access.
- Provide structural design of new or modified pumphouse crane-Consider new wharf deck elevation and note the pumps must be able to be lifted to the wharf deck for maintenance.
- Design mechanical and electrical systems for new or modified pumphouse.
- Evaluate ventilation requirements and provide adequate ventilation.
- Provide phasing sequence for the work and commissioning plans.

2.2.4.3 NET SHED

The intent is that the Net Shed will be used to maintain and repair operational oceanographic and environmental monitoring equipment. It is a working shop and not simply a storage facility. It can also be used to fabricate and mend trawl nets (for both Maritimes and Gulf Region).

- Program net footprint to be 362.5m² (14.5m x 25m)
- One large (14' high by 22' wide or 4.3m x 6.7m) garage style door in the centre front (preferably same size as boat bay doors) and man doors for staff access as required by Code.
- Inside clear height of building to be at least 5.7m but preferably 7.25m as much of the equipment would need to be raised between the beams to work on due to their size.
- Heating to the main open area to be on-demand. See below for additional area heating requirements.
- Open floor space 10m x 20m with 4.5m deep storage area on back wall and 5m deep area on the left-hand side wall. A portion of each of these spaces will accommodate shelving units (2 pallets deep-2.4m) and the other 2.6m will accommodate forklift access to the shelving.
- Shelving to be made with non-corrosive material (such as fibreglass - ideally similar to the head tank stands installed in the wet lab) to withstand exposure to marine environment. Shelving to endure large weight (1 ton +). All UV sensitive equipment will be stored inside (nets, etc.) Existing forklift can raise pallets/equipment 137" or 3.5 m so the shelving would be no more than 3.25m high. This shelving would be used for equipment currently stored in and around lumber storage and/or nets, etc.
- Heated (5 degrees C minimum), key card accessed mechanical room with dual communications/power bank. The room will require an eyewash station, large handwashing station, as well as frost proof hydrant with freshwater hose to bring into shop area to wash equipment. The heat would provide space to allow tool batteries and other liquids to be stored there year-round (such as paints, etc.). Preferred location would be the rear left corner, below the mezzanine.
- Trench drain in the main work area with a screen to catch nuts and bolts
- Crane would be preferred but multiple hoist points (2 lifts and 1 rail with hoist) are a minimum necessity on each beam with one ton rail in middle of open floor space. These hoists will be used to raise oceanographic and environmental monitoring equipment. Much of the equipment would need to be raised between beams to work on if height of building is less than 7.25m clear
- Canadian Coast Guard require their portion of work and storage space (approx. 4.5 m deep x 3 m wide) to be secured using a chain link cage placed along the rear wall of the shed. A

gate/doors allowing forklift access to this area must also be provided. The storage space would be for a gear drying rack, tools (removable hoists, winches, nets traps and other science-related equipment and spare parts). It is recommended that this function be adjacent to either the Mechanical Room or the exterior wall to limit the amount of chain link enclosure required.

- Frost proof hose bib required to provide water outside the shed
- Mezzanine workspace and storage over the 4.5m and 5m deep shelving areas for storage of buoys, ropes, etc. Access stairs to be provided at both ends of the mezzanine.
- There will be 2 enclosed, heated workshops on the Mezzanine level, approx. 3 m x 5 m in size. Each workshop will have hot and cold water supply for a sink, office lighting levels, etc. The workshops will also accommodate one workbench and storage cabinets (numbers and sizes to be confirmed by user group for concept layout planning).
- A stand-alone storage area of approx. 4 m² is required as an add-on at the front of the building. It requires only outside access with electrical service for lighting and a ventilation fan similar to the chemical storage building. This would allow the storage of petroleum, oil and lubricants outside the main Shed.
- New services to tie in to existing drainage system.

2.2.3.4 SITE ELECTRICAL UPGRADE

- Review Shore Power Study completed by PWGSC in April 2020. Report was based on requirements for vessels that will not be required at the redeveloped wharf so the power requirements will be much less than presented in the report.
- The site is known to have high bedrock along the East bank, review all existing geotechnical information and undertake additional topographic survey and geotechnical investigation as required to fully capture the area of work. The consultant will determine the exact site area impacted.
- Provide new electrical services to the site to meet the needs of the new wharf, net shed and any modifications to existing systems impacted by the project.
- Consult with users to determine any communications infrastructure required as part of this work.
- Convert existing overhead electrical services and communication services to underground services.

2.2.3.5 SITE REDEVELOPMENT

- Review existing topographic survey and identify any gaps in information.
- Undertake additional topographic survey and geotechnical investigation of the uplands area to capture the full area of work. The uplands area will include the full area from the wharf to the Broodstock building, the Filtration Building area, and south to the Science Building (full parking area). The consultant will determine the exact site area impacted.
- Once the new wharf elevation and Net Shed building final grades are established from the coastal analysis, review new and existing topographical information to determine the extent of the grading changes that can be accomplished while maintaining access to the existing buildings/facilities;
- Provide layout and design of vehicle circulation and parking areas to suit new grades, with new curb and gutter, drainage, landscaping.
- Establish design vehicle and model turning movements to demonstrate access to all areas of the site.

- Provide layout and design of electric vehicle charging stations in the parking area.
- Undertake all design calculations;
- Redesign site grading;
- Provide design of pedestrian routes and access to buildings, including stairs and ramps. Providing accessible design where required.
- Identify and design changes required to existing services resulting from new uplands layout and elevation (i.e., hydrant relocation, manhole extensions, pipe replacement as required, etc.); Include tie-in of new services for Net Shed building.
- Redesign site lighting to correspond to new uplands layout;
- Redesign site drainage;
- Design extension to existing slipway including retaining wall extension (as required);
- Design access ramps to existing buildings with appropriate slopes for access by small equipment (forklifts) as required for site operations including retaining walls (as required);
- Prepare detailed civil/electrical/structural drawings including all plans/sections/details, and specifications

2.2.3.6 PROJECT PHASING

The Consultant must develop the construction phasing with the support of DFO and PWGSC representatives. This phasing will take into consideration that the facility is operational 24 hours day, 365 day per year. The following rationale should be taken into consideration when preparing the phasing of this project.

- Designs are to be separated into 2(two) stand-alone tender packages as follows:
 - Package 1 – Wharf Replacement, Electrical Upgrades, Pumphouse & Site Redevelopment
 - Package 2 – Net Shed Building
- One salt water intake line must remain active at all times. Phasing of Pumphouse work and wharf construction along the stem will require a detailed phasing plan.
- The wharf work may be limited seasonally.
- Electrical services will be required throughout construction.

The contract documents shall clearly reflect the extent of the work and proposed phasing to allow a full grasp of the challenges and minimize the impact on the schedule and budget.

2.2.5 Project Cost Estimates

Construction Elements	Indicative Estimates
Wharf Replacement	\$22,800,000.00
Net Shed Building	\$1,500,000.00
Uplands Redevelopment	\$400,000.00
Site Electrical Upgrade	\$600,000.00

Pumphouse Modifications	\$1,600,000.00
Subtotal	\$26,900,000.00
Contingency allowance 15%	\$4,035,000.00
Total indicative estimate	\$30,935,000.00

These estimates were completed without any significant design calculations and will be refined during the design process, informing the project funding request. They do not include any design or PWGSC quality assurance fees. All estimates are indicative and do not include HST.

2.2.6 Schedule

Milestone	Completion Date
Start-up meeting with PWGSC	1 week from Award of contract
Start-up meeting with PWGSC and DFO	2 weeks from Award of contract
Package 1 & Package 2	
Combined RS 1 / 2 Report	16 weeks from Award of contract
RS 3 Report & Concept Design	24 weeks from Award of contract
Tender Package – 33%	30 weeks from Award of contract
Tender Package – 66%	42 weeks from Award of contract
Tender Package – 99%	52 weeks from Award of contract
Final Design Submissions – 100%	54 weeks from Award of contract
Tendering	TBD
Construction on site	TBD

Schedule submissions to be in Microsoft Project format.

2.3 PD 3 EXISTING DOCUMENTATION

2.3.1 Existing Documentation Available for all proponents

1. S-4387 Inventory Plan of SABS (PDF Format)
2. S-2359 Plan Showing Lands Covered by Water at SABS (PDF Format)
3. SABS Site Plan 2016 (PDF Format)
4. SABS Topographic Survey 2010 (PDF Format)

5. SABS Hydrographic Survey 2010 (PDF Format)
6. C101 Grading Plan Part 'A' (PDF Format)
7. Aerial View of Site (PDF Format)
8. Geotechnical Study Roy Consultants 2017 (PDF Format)
9. Geotechnical Investigation Report Conquest Engineering 2017 (PDF Format)
10. Borings and Soil Samples 1958 (PDF Format)
11. Shore Power Study PWGSC 2020 (PDF Format)
12. Saltwater System Upgrade Drawings 1997 (PDF Format – 4 files)
13. Wharf As-Built Drawings (PDF Format – 5 files)
14. Doing Business with PWGSC (PDF Format)

2.3.2 Existing Documentation to be made available for successful Proponent

1. Design of Wharf Replacement RS 2 Report, SNC Lavalin – April 2019
2. Design of Wharf Replacement RS 3 Report, SNC Lavalin – August 2019
3. Wharf Inspection Report Gemtec – March 2021
4. Hydrographic / Topographic Survey – March 2021

2.4 PD 4 PROGRAM

St. Andrews Biological Station (SABS) is located on Passamaquoddy Bay in St. Andrews, New Brunswick. It was founded in 1908 and is the oldest marine research laboratory in Canada. The facility is comprised of offices, both freshwater and saltwater laboratories, workshops, a chemical storage building, a conference centre, computer facilities, and the wharf. The wharf is the home berth of speciality research vessel, CCGS Viola M. Davidson, along with other vessels that support research and programs at the facility.

The research undertaken covers a variety of fields including; Aquaculture, Biodiversity, Climate Change, Coastal Oceanography and Fisheries and Species at risk.

In addition to providing support for SABS activity the Wharf also provides support to other organizations including RCMP, SAR, CCG and DFO C&P.

The new wharf and Net shed will support SABS status as a world class oceanographic facility.

SABS accommodates approximately 80 full-time employees along with post-doctoral fellows, visiting scientists and students. Depending on the research that is underway, the facility can be operating in some capacity 24 hour a day, 365 days a year. The Department of Fisheries and Oceans is the property owner and has Real Property administration staff responsible for the management of the facility. A Steering Committee will be struck to ensure the implementation of this project is carried out with minimal impacts to operation, construction schedules and construction costs. The proposed work under this project is intended to upgrade the facility to meet existing requirements and does not take in consideration future expansion of the facilities.

2.5 PD 5 PROJECT OBJECTIVES

The objective of this project is to undertake the following at St. Andrews Biological Station to meet existing operational and functional requirements; replace the existing wharf facilities, modify the pump house to maintain access from the new wharf structure and improve functionality, provide a new Net

Shed building, upgrade the electrical services to the facility, and redevelop the site to transition the existing infrastructure with the new Net Shed and Wharf.

2.5.1 Quality

Consultant to ensure that the drawing standards and work as defined in the Doing Business with PWGSC guide is followed. PWGSC Quality Review process will be followed.

Design Principles – General

PWGSC expects the Consultant to maintain a high standard of engineering design, based upon recognized contemporary design principles. All design elements must be fully coordinated and consistent in adherence to good design principles.

The level of quality is to be consistent with other Government of Canada projects. The project is to be implemented in an environmentally responsible manner.

Quality of materials and construction methods shall be commensurate with the type of structure and the budget. Only proven materials and technologies are to be considered.

2.5.2 Sustainable Development

The Canadian federal government has begun a series of initiatives to ensure that sustainable development principles are built into the policy of all federal organizations. Public Works and Government Services Canada (PWGSC) like all federal departments requires a Sustainable Development Strategy (SDS). Real Property Services Branch of PWGSC has developed their Strategy Plan that sets out principles, goals and actions for integrating sustainable development principles into its policies and operations. The proposals will be evaluated according to sustainable strategies intended to be used. The proponents should clearly state their proposed sustainable development strategies. The successful proponent shall investigate and make application for utility-based grants and incentives as applicable.

2.5.3 Waste Management

The Construction, Renovation, and Demolition (CRD) Non-hazardous Solid Waste Management Protocol to which Real Property Services (RPS) is bound, provides directions on the undertaking of non-hazardous solid waste management actions for CRD projects. The protocol is designed to meet the requirements of federal and provincial policies and the objectives of the RPS Sustainable Development Strategy (SDS) as these relate to non-hazardous solid waste generated in CRD projects.

2.5.4 Code Compliance

Codes, regulations, by laws and decisions of “authorities having jurisdiction” will be observed. In cases of overlap, the most stringent will apply. The Consultant shall identify other jurisdictions appropriate to the project.

The consultant will be required to do a code review at design development and final design submission at a minimum. Because life safety systems are involved, a presentation for stakeholders and project team will be required at each submission.

2.5.5 Risk Management

A risk management strategy is crucial for PWGSC Project Management and integrates project planning into procurement planning. All the stakeholders of a project will be an integral part of the risk management strategy, culminating in an integrated project team. Specific services required for project delivery are outlined in Required Services. PWGSC will facilitate an all Stakeholder Risk Management workshop/session annually through the life of the project. The Consultant will attend and participate in these sessions, and update the Risk Plan between annual reviews. Technical Risks that may not be included in the Stakeholder Questionnaire will be added by the Consultant.

2.5.6 Health & Safety

Public Works and Government Services Canada (PWGSC) recognizes the responsibility to ensure the health and safety of all persons on Crown construction projects and the entitlement of both federal employees and private sector workers to the full protection afforded them by occupational health and safety regulations. In keeping with the responsibility and in order to enhance health and safety protection for all individuals on federal construction sites, PWGSC will voluntarily comply with the applicable provincial/territorial construction health and safety acts and regulations, in addition to the related Canada Occupational Safety and Health Regulations.

2.6 PD 6 ISSUES**2.6.1 Major Cost Issues**

The continual operation of the facility during construction will require prudent management of costs at all stages of design and construction to ensure the project budget is maintained.

2.6.1.1 STRATEGY TO CONTROL COST

PWGSC, DFO RPSS and the Management of DFO-SABS have created a governance structure including a Steering Committee, which will keep DFO-SABS informed and engaged throughout the design and implementation phases. By involving the end users' representatives in the design phase, not as reviewers or approvers of the design but as informed stakeholders, will help them prepare for construction phases. The ability of the SABS staff to be flexible and mobile will come from gaining 'buy in' early. The intention is to tender the construction as one or two contracts, eliminating the need for one contractor to rely on another to complete his work before proceeding, and providing the entire facility as the work site. With proper schedule control and planning, the contractor should always have somewhere to work, reducing potential delay claims, and increasing schedule efficiency. Refer to RS8 for scope of services and deliverables in cost planning and estimating which are a critical part of continuing cost control.

2.6.1.2 TOOLS FOR MANAGING RISK AND COST

PWGSC expects the consultant to provide at a minimum the following:

DESIGN PHASE REPORTING

Monthly meetings to be held during design. Consultant will be responsible to provide updates on the items below and issue minutes following the meetings:

- Design progress update
- Risk Management Plan
- 3 month look ahead for design schedule

- Overall project schedule update
- Cost Plan
- Issues Management Tracker

DESIGN QUALITY REVIEWS AND PRESENTATIONS

At each design submission, Consultants shall attend a meeting with PWGSC reviewers after reviews are completed. The Consultant will prepare and deliver a presentation with appropriate level of detail for the Steering Committee at DFO-SABS. This type of engagement with the steering committee will serve the project well by helping DFO-SABS flag operational issues well in advance of the construction start.

CONSTRUCTION PHASE REPORTING

Monthly Reports will be submitted detailing at a minimum:

- Progress during previous month
- Risk Management Plan update
- Cost and Change Management update
- Schedule update
- 1 month look ahead
- 3 month look ahead
- Issues Management Tracker

2.6.2 Major Time Issues

This project is critically important due to the condition of the existing wharf at SABS. As a result, the schedule of the design submissions and cost estimates is critical. It is expected that the design consultant will dedicate staff, manage issues and proceed with the design in an efficient and timely manner to meet all milestone dates as detailed in this document.

2.7 PD 7 CONSULTANT SERVICES

The consultant team for this project must be capable of providing the following services:

- Marine Engineering
- Project Management
- Structural Engineering
- Coastal Engineering
- Geotechnical Engineering
- Architectural
- Civil Engineering
- Electrical Engineering
- Mechanical Engineering
- Cost Specialist
- Scheduling

3 DESCRIPTION OF SERVICES

3.1 PA 1 PROJECT ADMINISTRATION

3.1.1 Intent

The following administrative requirements apply during all phases of project delivery:

3.1.2 PWGSC Project Management

The Project Manager assigned to the project is the Departmental Representative. The Project Manager is the Departmental officer directly concerned with the project and responsible for its progress. The Project Manager is the liaison between the Consultant, Public Works and Government Services Canada and the Client Departments. Public Works and Government Services Canada administers the project and exercises continuing control over the Consultant's work during all phases of development. Unless directed otherwise by the Project Manager, the Consultant obtains all Federal requirements and approvals necessary for the work.

3.1.3 General Project Deliverables

Where deliverables and submissions include summaries, reports, drawings, plans or schedules, six (6) hard copies shall be provided plus one (1) copy shall be provided in electronic format and loaded to the SharePoint site. Consultant will be responsible to load submissions to the project SharePoint site. Documents will not be circulated through email or FTP sites.

3.1.4 Lines of Communication

Unless otherwise arranged with Project Manager, the Consultant shall communicate with the Project Manager, and other PWGSC staff and contractors as approved. There shall be no direct contact between client departments and the Consultant. During construction tender call, Public Works and Government Services Canada conducts all correspondence with bidders and makes the contract award.

3.1.5 Media

The consultant shall not respond to requests for project related information or questions from the media. Such inquiries are to be directed to the Project Manager.

3.1.6 Meetings

The Project Manager shall arrange meetings throughout the entire project development period, for all members of the project team, including representatives from:

- Client Department(s) DFO-RPSS
- Public Works and Government Services Canada
- Consultants

The Consultant shall attend the meetings on site, and when requested, record the issues and decisions and prepare and distribute minutes within 48 hours of the meeting. PWGSC is developing a Stakeholders Engagement Plan, which will highlight several times when the Consultant will be required to make presentations to the stakeholder group, and senior management of the client groups. As the project proceeds the consultant will provide information as required to inform SABS of project progress for use on their internal communication system.

3.1.7 Project Response Time

It is a requirement of this project that the key personnel of the successful proponent and sub consultant or specialist firms be personally available to attend meetings or respond to inquiries within 2 days.

3.1.8 Submissions, Revisions and Approvals

Work in progress is to be reviewed by the Project Manager as well as the following:

PWGSC in-house services

- Submission Format: report, drawings and specifications, etc.
- Submission Schedule: Submissions are reviewed when completed work has been forwarded to the Project Manager.
- Expected Turnaround Time: 1 week
- Number of Submissions: until approval has been received

Stakeholder Management – Steering/Sub Committee

- Submission Format: Presentation
- Submission Schedule: Approximately 2 weeks after each design phase submissions and at significant milestones during construction phase (assume 4 times per year, for 3 years). These presentations shall take place on site.

Design review Committee – PWGSC

- Submission Format: drawings and specifications, oral presentation.
- Submission Schedule: Submissions are reviewed when completed work has been forwarded to the Project Manager. PWGSC will schedule meetings at a minimum two weeks in advance.

Municipal authorities

- Submission Format: drawings and specifications
- Submission Schedule: as required by Municipality bylaws
- Expected Turnaround Time: 1 month
- Number of Submissions: two (2)

Chart of Reviews and Approvals	PWGSC		DFO		DFO-SABS		Municipality	
	R	A	R	A	R	A	R	A
RS 1 / 2 Design Concept								
Design Options		x	x					
Class D Estimate(s)		x	x					
Recommended Design Option		x		x				
Class C Estimate(s)		x		x				
RS 3 Design Development								
Design Development Documents		x	x		x			

Class B Estimate(s)		x		x				
RS 4 Construction Documents								
33% Construction Drawings		x	x		x			
66% Construction Drawings and Specs		x	x		x		x	
99% Construction Drawings and Specs		x	x		x			
Class A Estimate(s)		x		x			x	
Issued for Construction Tender Documents		x	x		x			

R = Review A = Approval

	Design Submission Requirements					
Deliverables		Submissions				
		Design Development	33%	66%	99%	Issued for Construction
Drawings		x	x	x	x	x
Specifications			x	x	x	x
Design Brief		x				
Code Analysis		x			x	
Project Schedule		x	x	x	x	
Risk Management Plan		x	x	x	x	
Project Phasing Plan		x	x	x	x	
Health and Safety Plan		x			x	x
Submission for Municipality			x	x		x
Cost Estimate		x	x	x	x	

3.1.9 Official Languages

St. Andrews Biological Station is located in a bilingual region. Any presentations to the Stakeholders must be in both official languages (French and English). All tender documents must be provided in both official languages. Consultant may choose to translate the documents in-house or arrange and pay for

third party translation services. In-house or third-party translation costs must be included in the consultant fee.

Inquiries in both languages and should be responded in a reasonable timeline.

3.2 RS 1 PRE-DESIGN SERVICES

3.2.1 Intent

The purpose of this stage is to develop, as required by the scope of work:

- Implementation Strategy and Schedule;
- Environmental Protection Requirements

3.2.2 Details

Implementation Strategy and Schedule:

1. Prepare a detailed implementation strategy that documents, in a report, all activities, milestones and deliverables required for the effective delivery of the project including time frames for submissions, reviews and approvals;
2. Prepare a project schedule that identifies, in a graphic format such as Critical Path Method (CPM) or Program Evaluation Review Technique (PERT), all activities, milestones including critical deadlines, long lead delivery items and drop-dead dates, required for the effective delivery of the project deliverables, including time frames for submissions, reviews and approvals;
3. The Implementation Strategy and Schedule described above shall include as a minimum:
 - (1) Site Master Plan;
 - (2) Sequencing of project tasks including items not included as part of constructed works;
 - (3) Client construction requirements (i.e., Security and training, etc.);
 - (4) Construction strategy;
 - (5) Advise the Project Manager of any changes to the scope that may affect schedule or are inconsistent with instructions or written approvals previously given. The Consultant shall detail the extent and reasons for the changes and obtain written approval before proceeding;
 - (6) Submit the Implementation Strategy and Schedule for review. Revise as required. Resubmit for final approval. The original approved schedule will become the "Baseline" schedule to monitor project progress;
 - (7) Throughout the project, monitor critical path and deadlines for submissions, revisions and approvals and as a minimum submit monthly updates.

Environmental Protection Requirements:

The Departmental Representative will submit all applications for environmental permitting and approvals, with support services provided by the Consultant, to the Authorities having jurisdictions. The purpose of this stage is to outline the requirements for discharge off site, erosion control and water management, environmental protection, waste management and permitting.

1. Identify environmental protection requirements and make appropriate recommendations.
2. Prepare requirements for a water management, waste management and environmental protection plans for construction and post construction stages.

3. Support Departmental Representative applications for environmental approvals and permitting, including recommendations on environmental protection, preparing and revising permitting drawings, providing measurements of impacted areas, and other support of the applications as required by the Departmental Representative.

3.3 RS 2 DESIGN CONCEPT

3.3.1 Intent

To translate the project requirements into a design concept. To explore design options and analyze them against priorities and program objectives previously identified. Out of this process, one option will be recommended to proceed to Design Development.

3.3.2 General

Scope and Activities:

- Present alternative design options which are viable and have potential for development
- Analyze each solution with regard to the project goals including life cycle cost and schedule
- Recommend one option for further development with all supporting background and technical justifications

3.3.3 Details

Scope and Activities:

3.3.3.1 PROJECT PHASING

- Provide site plan showing buildings/infrastructure outlines, orientation, main accesses and traffic patterns, proposed sequencing of work, options and potential impacts to facility operations.

3.3.3.2 MARINE

RIGID WHARF

- Significant concept work has been completed for new rigid wharf design under the previous set of user requirements, however rework is anticipated under this project because of new berthing requirements established by users. The Consultant is to review all work completed to date. The Consultant is required to generate additional configuration options for analysis during the concept design stage, developed in consultation with the Departmental Representative, Users, and in accordance with the user requirements. The intent under the Options Analysis stage is to develop a minimum of three (3) concepts of harbour layout meeting the berthage, access and protection needs of the user. A minimum of three (3) construction types are also to be reviewed for the rigid wharf proposed. The Consultant is to summarize their review of the background information and new Options Analysis, compare and contrast all options, and make recommendations on harbour layout and structure type.
- Include cost estimates, risk assessment and schedule impacts including varying permit timelines for a comparison. Life cycle costs need to be considered as part of the options analysis.

COASTAL

- The Consultant is to review the coastal studies completed previously and to identify and conduct additional coastal modeling and analysis, as would be required for the proposed design development. The proposal shall include the required coastal modeling and analysis to be done for design of the wharf, floating dock and other marine works within the scope of this RFP, which would be part of evaluations.
- Previous work for the SABS wharf replacement included an Options Analysis with coastal modelling that explored and ultimately recommended a layout for the new wharf built to be constructed on a similar footprint as the existing. As such, coastal conditions within the harbour saw very little change from the existing, other than adding provisions for an increased deck elevation to accommodate future sea level rise. Work under this project will explore new harbour configurations, and therefore detailed coastal modelling is required during development and comparisons of concepts.
- The Consultant is to investigate extreme water levels, wave parameters, wave forces, wave agitations, storm surges, and overtopping analysis and crest elevations, and all other hydrodynamic effects on the structures as appropriate for the proposed design development of the wharfs, floating docks and armour protections.
- The proposed wharf elevation has a significant impact on the uplands and pumping station modifications and is therefore a critical element of the new design. Provide design crest elevation(s) based on design water level and overtopping analysis.
- Provide conceptual design (i.e., cross section, crest elevation, stone sizes, toe protection etc.) of required armour protections and breakwaters.
- Provide a detailed Coastal Engineering report summarizing the analyses results and all requested parameters, conceptual design drawings and recommendations on armour protections and breakwaters.
-

FLOATING DOCKS

- Options for the new floating docks and gangways have not been analysed to date. The Consultant is to review design information and present two options for configuration, structural systems and structure type with analysis.

ELECTRICAL

- Significant work has been completed for RS2 for the electrical services on the new wharf. The Consultant is to review all work completed to date. The Consultant is not expected to generate additional options for analysis but can propose modifications with a case to support them. The Consultant is to summarize their review of the background and make recommendations on electrical systems and provide schematic design plan showing:
 - Routing of the electrical service.
 - Service pole location.
 - Electrical Building location
 - Light Pole locations and standard details.
 - Power centre locations and standard details.
 - General routing of electrical feeders.

- Derrick/crane locations.

UTILITIES

- Significant work has been completed for RS2 for the utilities on the new wharf. The Consultant is to review all work completed to date. The Consultant is not expected to generate additional options for analysis but can propose modifications with a case to support them.
- The concept submission shall include recommended technology and layout for utilities including; fresh water supply line, cranes, communications, and fuel station.

3.3.3.3 PUMPHOUSE

MECHANICAL

-
- Work under a separate contract is being completed for establishing access to the existing pumphouse via a temporary access trestle. The intent of the temporary trestle is to maintain access until after the new wharf is built and permanent access to a new or renovated pumphouse will be established.
- Assess permanent replacement/modification options for the pumphouse. Include at a minimum assessment of the following 3 options:
 - Modification of the existing pumphouse by extension of the wetwell (while providing temporary diversion),
 - Replacement of the entire pumphouse
 - Replacement of the entire pumphouse to a land-based location.
- All options to consider how continuous supply of salt water will be maintained throughout the work and how the transition to the permanent access and services will be established, including phasing and integration with the existing.
- Water based option(s) to consider the addition of a branch to the saltwater intake line to allow “pig launching” from above the water line. Currently, when the intake line has to be cleaned, divers have to isolate the wet well and insert the pig underwater. This is a costly and dangerous process. Review the option of adding a wye to the intake line in order to extend a branch to the floor level of the pump house, to improve safety. This would also include the addition of valves in order to properly isolate the section of piping to be cleaned.
- The concept submission shall include a description of general mechanical requirements and function for the project.

ELECTRICAL

- Show proposed basic electrical systems of significance.
- Prepare schematic floor plans complete with locations of major electrical equipment and distribution centres.
- Identify proposed electrical connections for wetwell extension/new pump house and submersible pumps to restore operations.
- Provide an electrical design synopsis, describing the electrical work in sufficient detail for assessment by the Department. Include feasibility of proposed systems complete with estimated loads.

STRUCTURAL

- Identify structural options for extension of the wetwell and proposed methodology for reconnection of the existing wetwell on the extension and proposed options for a new pump house.
- Identify proposed structural systems or modifications to the existing to maintain personnel access to extended wetwell.
- Identify proposed structural modifications to the pump house crane to maintain functionality at new pump house elevation and option of new system for new pump house. Note the pumps must be able to be lifted to the wharf deck for maintenance.

3.3.3.4 NET SHED

ARCHITECTURAL

Provide schematic site plan showing proposed building outlines, orientation, main accesses and traffic patterns;-Provide sketch elevations and sections indicating the basic design approach.

STRUCTURAL

- Propose structural systems including foundation methods, explanatory sketches, etc. and a copy of the site report on which the design is based;
- Review initial seismic and geotechnical report and provide analysis and recommendations.

MECHANICAL

- The concept submission shall include a description of general mechanical requirements and function for the project.
- Identify any unique or specialized equipment required by the subject facility. Incorporate in the submission a schedule of requirements and identify the mechanical building services to be provided.
- Explain in the concept submission the manner in which the proposed mechanical systems correlate with user requirements.
- Identify location of entry point of all mechanical services into the building.
- Identify the general area and location required for mechanical rooms,
- Carry out preliminary energy analysis on system alternatives.
- Establish an energy budget for the building and compare it to energy consumption of other similar buildings. Total energy consumed in the building shall be expressed in kWh/m2.
- Submit a preliminary energy analysis.

ELECTRICAL

- Show proposed basic electrical systems of significance to the early design.
- Identify any unique or specialized equipment required by the subject facility
- Prepare schematic site plan showing location of service entrances.
- Prepare schematic Floor plans complete with locations of major electrical equipment and distribution centres.
- Provide an electrical design synopsis, describing the electrical work in sufficient detail for assessment by the Department. Include feasibility of proposed systems complete with estimated loads.

- The Net Shed requires standby and normal power. There is likely sufficient standby power on site to provide all required power in the Net Shed. Evaluate standby power requirements and verify that existing standby system has adequate capacity.

CIVIL

- Provide concept site plan showing site services and connection locations for domestic water, fire protection hydrants, sanitary sewer services, and storm water management. Site plan to show notional grading and surface finishes around the building and blending to existing grade and proposed uplands grades to provide positive drainage away from the building.

GRADE LEVEL & EROSION PROTECTION

- The Consultant is to design necessary erosion protection at the site and adjacent shorelines should the partial infill of Brandy Cove be required to accommodate the new building.

SUSTAINABLE DEVELOPMENT

- Design and evaluate Schematic Design Options exploring positive environment strategies.

3.3.3.5 SITE ELECTRICAL UPGRADE

- Show proposed basic electrical systems of significance to the early design.
- Identify any unique or specialized equipment required by the subject facility.
- Prepare schematic site plan showing location of service entrances, existing distribution lines and areas of potential upgrades including proposed electrical building location
- Provide an electrical design synopsis, describing the electrical work in sufficient detail for assessment by the Department. Include feasibility of proposed systems complete with estimated loads.

3.3.3.6 SITE REDEVELOPMENT

- Provide concept site plan showing site services and connection locations for domestic water, fire protection hydrants, sanitary sewer services, and storm water management. Site plan to show notional grading and surface finishes around the building and blending to existing grade to provide positive drainage away from the buildings.
- Provide concept layout and design of vehicle circulation and parking areas to suit new grades, new pavement structure, with new curb and gutter, drainage, landscaping and retaining walls.
- Provide concept layout and design of electric vehicle charging stations in the parking area.
- Provide concept layout of pedestrian routes and access to buildings, including stairs and ramps. Providing accessible design where required.

3.3.4 Deliverables

- Provide interim report with class D Estimates of all options, as indicated in RS8.
- Combined RS 1 / RS 2 written reports complete with description of the options with recommendation of preferred solutions.
- Provide detailed Coastal Engineering report clearly summarising the coastal study, results, and comparison of all harbour layout options
- Design Concept Drawings

- Provide estimating and cost planning as indicated in RS8
- Provide Risk Management as indicated in RS7
- Plan to incorporate the recommendations of decisions for the CEAA (prepared by others), if required/requested.
- Report on deviation from schedule and recommend corrective measure or updated timeline.

3.4 RS 3 DESIGN DEVELOPMENT

3.4.1 Intent

To further develop one of the options presented at the Design Concept stage. The Design Development documents consist of drawings and other documents to describe the size and character of the entire project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate.

3.4.2 General

Scope and Activities:

- Obtain written approval from Project Manager for development of selected options based on the RS 2 report.
- If any alterations are demanded, document all required changes, analyze the impact on all project components, and resubmit for approval if required.
- Expand and clarify the Concept Design intent for each design discipline.
- Present the design materials to the client, design review or other committees as indicated by the project manager.
- Present the design to the government or local authorities where required.
- Analyze the constructability and propose phasing of the project and advise on the construction process and duration.
- Based on the material available at the time, prepare a milestone schedule for the consideration with special attention to the impact on facility operations.
- Continue to review all applicable statutes, regulations, codes, and by-laws in relation to the design of the project.
- Define Commissioning Requirements.
- Provide a list and draft specification sections of all NMS sections to be used. Submit outline specifications for all systems and principal components and equipment. Provide in the outline specifications, the manufacturers literature about principal equipment and system components proposed for use in this project.

3.4.3 Details

3.4.3.1 PROJECT PHASING

- Provide site plan showing buildings/infrastructure outlines, orientation, main accesses and traffic patterns, proposed sequencing of work, options, and potential impacts to facility operations.

3.4.3.2 MARINE

RIGID WHARF

- The Consultant is to provide design development drawings showing structure layout, cross sections, elevations, and all major systems.
- Provide demolition plans for existing wharf.

COASTAL

- Confirm design crest elevation(s) based on design water level and overtopping analysis.
- Consider coastal design parameters including extreme water levels, wave parameters, wave forces, wave agitations, storm surges, and overtopping analysis and crest elevations, and all other hydrodynamic effects on the structures as appropriate for the proposed design development of the wharfs, floating docks, and armour protections. Provide detail design (i.e., cross section, crest elevation, stone sizes, toe protection etc.) of required armour protections and breakwaters.
-

FLOATING DOCKS

- Provide drawings that include, layout of new work, cross sections and elevations of new floating docks and gangway. Include details on structural support system.

ELECTRICAL

- Provide drawings showing the development of the following
 - Single line diagram of the power circuits
 - Routing of the electrical service.
 - Electrical Building location.
 - Complete lighting layout with light Pole locations and standard details.
 - Power centre locations and standard details.
 - General routing of electrical feeders.
 - Derrick/crane locations.

UTILITIES

- Provide drawings that include layout and details for utilities including fresh water supply line, cranes, communications, and fuel station.

3.4.3.3 PUMPHOUSE

MECHANICAL

- Provide drawings showing locations of and all major equipment in mechanical rooms, proposed removals/demolition, and new work.
- Include analysis of selected equipment with schematics and calculations.
- Describe the mechanical systems to be provided and the components of each system. Describe the perceived operation of the mechanical system.
- Explain what operating staff will be needed to operate the building systems and the expected functions of the operation staff.
- Provide preliminary mechanical control schematics, and sequence of operation

ELECTRICAL

- Provide single line diagram of the power circuits with their metering and protection, including:
 1. Complete rating of equipment
 2. Maximum short circuit levels on which design is based
 3. Identification and size of services
- Provide electrical plans with:
 1. Floor elevations
 2. Legend of all symbols used
 3. Circuit numbers at outlets and control switching identified
 4. All conduit and wire sizes except for minimum sizes which should be given in the specification
 5. A panel schedule with loadings for each panel
- Riser diagrams for lighting, power, telephone and telecommunication cable systems, fire alarm and other systems
- Elementary control diagrams for each system
- Schedule for motor and controls
- Complete lighting layout and fixture schedule clearly indicating methods of circuiting, switching and fixture mounting
- Provide the following data:
 1. Total connected load
 2. Maximum demand -Sizing of standby load
 3. Short-circuit requirements and calculations showing the ratings of equipment used

STRUCTURAL

- Structural drawings for pump house (new or extended), access platform and crane modifications. Include preliminary sizing of structural members.

3.4.3.4 NET SHED

ARCHITECTURAL

- Provide Floor Plans showing all accommodation required with room names, calculated areas, and ancillary spaces for service use. Indicate building grids, modules, etc., and key dimensions;
- Provide preliminary Furniture and Equipment plans;
- Provide preliminary Reflected Ceiling plans showing proposed grids and for future coordination with mechanical and electrical services.
- Provide Preliminary Sections of walls, building envelope design features or other special design features requiring illustration and explanation at this stage, including fireproofing methods.
- Provide preliminary finish schedules, door/window schedules, etc.
- Provide Building Elevations;

STRUCTURAL

- Provide Preliminary Drawings indicating the proposed structural framing system, structural materials, and other significant or unusual details proposed.
- Include a copy of the site report on which the design is based;

MECHANICAL

- Provide Site Plan showing service entrances for water supply, sanitary and storm drains and connections to public utility services, including all key invert elevations;
- Provide drawings showing preliminary sizing of ventilation, cooling and heating systems showing locations, and all major equipment layouts in mechanical rooms;
- Provide Preliminary Drawings of plumbing system, showing routing and sizing of major lines and location of pumping and other equipment where required;
- Update the energy analysis and energy budget established at the schematic design stage;
- Provide information of all internal and external energy loads in sufficient detail to determine the compatibility of the proposal with existing services, accepted concept and energy budget;
- Provide Analysis of selected equipment and plant with schematics and calculations sufficient to justify the economy of the selected systems;
- Describe the perceived operation of the mechanical systems;
- Describe the building systems control architecture. Provide preliminary EMCS network architecture and mechanical control schematics,
- Explain what acoustical and sound control measures are to be included in the design.

ELECTRICAL

- Provide drawings showing design development of the following
 - Single line diagram of the secondary distribution showing major loads.
 - Electrical plans with:
 - i. Floor plans and room identification.
 - ii. Preliminary Telephone conduits system layout for ceiling/floor distribution.
- Provide Preliminary Riser diagrams for lighting, power, telephone and telecommunication cable systems, fire alarm and other systems.
- Provide Elementary control diagrams for each system.
- Provide Preliminary Electric heating layout.
- Provide the following estimated data:
 - i. Total connected load.
 - ii. Maximum demand.
 - iii. Sizing of standby load.
 - iv. Short-circuit requirements and calculations showing the ratings of equipment used.

CIVIL

- Provide updated site plan showing site services and connection locations for domestic water, fire protection hydrants, sanitary sewer services, and storm water management. Site plan to show overall grading and surface finishes around the building and blending to existing grade to provide positive drainage away from the building.

SUSTAINABLE DEVELOPMENT

- Develop Design and evaluate options exploring positive environment strategies.
- Provide updated sustainable development strategy report.

3.4.3.5 SITE ELECTRICAL UPGRADE

- Provide drawings showing design development of the following:
 - Single line diagram of the primary and secondary distribution

- Electrical site plans
- Provide Preliminary Riser diagrams for lighting, power, telephone and telecommunication cable systems and other systems.
- Provide Elementary control diagrams for each system.
- Provide the following estimated data:
 - Total connected load.
 - Maximum demand.
 - Short-circuit requirements and calculations showing the ratings of equipment used.
- Show details for conversion of overhead to underground services both electrical and communications. Details to include proposed locations for pad mount switches, pad mount transformers, and duct bank routing

3.4.3.6 SITE REDEVELOPMENT

- Provide plan showing site services and connection locations for domestic water, fire protection hydrants, sanitary sewer services, and storm water management. Site plan to show grading and surface finishes around the building and blending to existing grade to provide positive drainage away from the buildings.
- Provide plan and design of vehicle circulation and parking areas to suit new grades, new pavement structure, with new curb and gutter, drainage, landscaping and retaining walls.
- Provide plan and design of electric vehicle charging stations in the parking area
- Provide plan of pedestrian routes and access to buildings, including stairs and ramps. Providing accessible design where required.
- Indicate all relocated and new lighting standards.
- Show all electrical duct banks

3.4.4 Deliverables

- Plans including all relevant disciplines showing all elements and services to detail all design decisions and to substantially estimate the cost of the project.
 - Demolition Plans
 - Project Phasing Plans
 - Elevations
 - Outline Specifications for all systems and principal components or equipment
- Provide estimating and cost planning as indicated in RS8
- Provide Risk Management as indicated in RS7
- Preliminary construction schedule including long term delivery items
- Project dossier detailing the basic assumptions of the project and the justifications for all major decisions.

3.5 RS 4 CONSTRUCTION DOCUMENTS

3.5.1 Intent

To prepare drawings and specifications setting forth in detail the requirements for the construction and final cost estimate of the project.

- 33% indicates technical 33% completeness of all working documents

- 66% indicates substantial technical development of the project - well advanced architectural and engineering plans, details, schedules and specifications
- 99% is the submission of complete Construction Documents ready for tender call and submission to local authorities for pre-permit purposes
- Issued for Construction package incorporates all revisions required in the 99% version and is intended to provide PWGSC with complete construction documents for tender call, in accordance with the "Doing Business with PWGSC" Guide

3.5.2 General

Activities are similar at all three stages; completeness of the project development should reflect the stage of a submission.

Scope and Activities:

- Obtain Project Manager's approval for Design Development submissions (33%, 66%, 99% and Issued for Construction)
- Confirm format of drawings and specifications
- Clarify special procedures (i.e., phased construction)
- Submit drawings and specifications at the required stages (33%, 66%, 99%)
- Provide written response to all review comments and incorporate them into Construction Documents where required.
- Update the project schedule
- Estimating and cost planning as indicated in RS8
- Develop Project Phasing strategy

3.5.3 Details

Scope and Activities:

3.5.3.1 TECHNICAL AND PRODUCTION MEETINGS

- Production of construction documents will be reviewed during the meetings arranged by Project Manager and Consultant. Also, consultant presentations should be given during various stages of design.
- Representatives from Client Department(s) and PWGSC support staff will be present as arranged by the Project Manager.
- Consultant shall ensure that their staff and the sub-consultant representatives attend the technical and production meetings as required.
- Consultant shall arrange for all necessary data, progress prints, etc.
- Consultant shall prepare minutes of the meetings and distribute copies to all participants.

3.5.3.2 PROGRESS REVIEW

- As work progresses on construction drawings, submit drawings, schedules, details, pertinent design data and updated Cost Plan and Project Schedule as required.
- Mechanical:
 1. Flow diagrams, system layouts, equipment selections and sizes, floor plan layouts showing major equipment.
 2. All major ductwork sized and shown on drawings including layout of all major mechanical and transformer rooms.

3. EMCS network architecture, mechanical control schematics, sequence of operation for each mechanical system, electrical control schematics, DDC input/output point schedules.
4. Update the building load calculation, energy analysis and energy budget. This will be eventually used to compare with initial energy analysis and final systems performance.

3.5.4 Deliverables

Deliverables are similar at all three stages; completeness of the project development should reflect the stage of a submission.

3.54.4.1 99% SUBMISSION

- Complete specification and working drawings
- One copy of support data, studies, calculations, etc., if required by PWGSC Engineering disciplines for final checking and record
- One copy of updated Project and construction Schedule
- Cost estimates and planning as indicated in RS8
- Provide Risk Management as indicated in RS7

3. 54.4.2 ISSUED FOR CONSTRUCTION SUBMISSION:

This submission incorporates all revisions required by the review of the 99% submission. Provide the following:

- Complete bilingual set of originals of the working drawings
- Complete bilingual sets of original specifications
- Class A Estimate as indicated in RS8
- As a safeguard against loss or damage to the originals, retain a complete set of drawings in reproducible form and one copy of specification.

3.6 RS 5 TENDER CALL, BID EVALUATION & CONSTRUCTION CONTRACT AWARD (OPTIONAL SERVICE)

3.6.1 Intent

To obtain and evaluate bids from qualified contractors to construct the project as per the Tender Documents. To award the construction contract according to government regulations, including Federal Rules for Bid Depositories. It is expected that after effective project approval is achieved, the optional services will be added to the contract.

3.6.2 General

Scope and Activities:

- Attend tender briefing meeting(s)
- Prepare addenda based on questions arising in such meetings for issue by the Project Manager
- Provide the Project Manager with all information required by bidders to fully interpret the Construction Documents. The Project Manager will issue the addenda to all participants.
- Refer all bidders to the PWGSC Contracting authority with any questions raised during the tender period and copy the PWGSC Project Manager.
- Assist in tender evaluation by providing advice on the following:
 1. The completeness of tender documents in all respects.

2. The technical aspects of the tenders.
 3. The effect of alternatives and qualifications which may have been included in the tender.
 4. The tenderers capability to undertake the full scope of work.
 5. The availability of adequate equipment to carry out the work.
- If PWGSC decides to re-tender the project, provide advice and assistance to the Project Manager
 - Revise and amend, at your cost, the construction documents to bring the cost of the work within the limits stipulated
 - Examine and report on any cost and schedule impact created by the issue of tender / contract addenda

3.6.3 Deliverables

- Originals of drawings and specifications
- Electronic copies of drawings and specifications
- Addenda where needed
- Changes to the documents if re-tendering is necessary
- Issued for construction set of drawings and specification incorporating all addenda
- Updated cost estimate and schedule

3.7 RS 6 CONSTRUCTION AND CONTRACT ADMINISTRATION AND POST CONSTRUCTION WARRANTY REVIEW (OPTIONAL SERVICE)

3.7.1 Intent

To ensure the implementation of the project in compliance with the Contract Documents and to direct and monitor all necessary or requested changes to the scope of work during construction.

3.7.2 - Scope and Activities

- During the implementation of the project, act on PWGSC's behalf to the extent provided in this document;
- Carry out the review of the work at intervals appropriate to determine if the work is in conformity with the Contract Documents;
- Attend on-site and virtual meetings as required throughout construction;
- Keep PWGSC informed of the progress and quality of the work and report any defects or deficiencies in the work observed during the course of the site review
- Act as interpreter of the requirements of the Contract Documents
- Provide cost advice during construction
- Advise the Project Manager of all potential changes to scope, schedule and cost for the duration of the implementation
- Review the Contractor's submittals
- Prepare and justify change orders for issue by the Department Representative
- Indicate any changes or material/equipment substitutions on Record Documents
- During the twelve (12) month warranty period investigate all defects and alleged defects and issue instructions to the Contractor
- Finalize Systems Operations Manual
- Assist in commissioning activities as requested

- Conduct a final warranty review and coordinate as built of the final work

3.7.3 Deliverables

1. Written reports from site visits including persons involved;
2. Written reports on the progress of the work and the cost of the project at the end of each month;
3. Additional detail drawings when required to clarify, interpret or supplement the Construction Documents
4. Post contract drawings (As-Built Drawing);
5. Interim or Final certificates;
6. Debrief of Commissioning Activities;
7. As built records;
8. Warranty deficiency list;
9. Report on Final Warranty Review.

3. RS 7 RISK MANAGEMENT (ALL STAGES)

3.8.1 Intent

The consultant shall provide support to the Departmental Representative in identifying risks throughout the project life cycle.

3.8.2 Scope and Activities

- Identify risk events based on past experience and using proposed checklist (PWGSC and/or Consultant) or other available lists;
- Qualify/quantify probability of risk event (Low, Medium, High) and their impact (Low, Medium, High);
- Quantify risk impacts directly to costs in dollars and schedule in days;
- Prioritize risk events (i.e., concentrate efforts on risk events with High probability and Medium to High impact);
- Develop risk response (i.e., evaluate alternatives for mitigation. This is the real added-value of risk management) and;
- Implement risk mitigation.

3.8.3 Deliverables

- Prepare Risk Management Reports at Design Development, 66% Design Documents, and 100% Design Document stages.
- Include input from all sub-consultants and from Client/Users.
- Take steps to implement risk mitigation as required. This may include (but is not limited to) further recommendations, analysis, investigations, site meetings, site supervision, etc.

3.9 RS 8 ESTIMATING AND COST PLANNING (ALL STAGES)

3.9.1 Cost Specialist

Delivering projects on time and within budget is a high priority. A fully qualified cost estimating, cost planning and cost control resource(s), referred to herein as the Cost Specialist, with a demonstrated

record of successful cost management on construction projects is required. This Cost Specialist must be conversant with all aspects of construction cost estimating during the design stages including the use of Canadian Institute of Quantity Surveyors Elemental Cost Analysis and ASTM Uniformat II, risk analysis, life cycle costing and value management and value engineering methods. The Cost Specialist shall be familiar with the National Project Management System (NPMS) and the Cost Management Knowledge Area at the link provided below:

<https://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/couts-cost/index-eng.html>

The purpose of cost planning and cost control is to assist in the accomplishment of project cost objectives. It is a continuous and interactive process involving planning, action, measurement, evaluation and revision.

The Cost Specialist shall hold a PQS (Professional Quantity Surveyor) designation with the Canadian Institute of Quantity Surveyors and shall be a member in good standing.

For projects budgeted at more than \$5,000,000 construction value, an independent cost consulting firm shall be hired to perform the Cost Planning and Estimating functions.

All estimates submitted to PWGSC must be covered by a "sign-off" sheet encompassing the names and signatures of all those sub consultants who contributed to the estimate. The submitting cost specialist will also verify, by signature, that the estimate has been coordinated, to properly contain all required elements relevant to the "class" of the submission.

3.9.2 Scope and Deliverables

All estimates shall conform to the submission requirements specified in the "Doing Business with PWGSC" document.

The Cost Specialist shall provide an interactive cost consulting service throughout the entire duration of the contract and shall include the preparation of complete estimates for all construction trades, escalation, inflation and contingency costs.

The Cost Specialist shall provide to PWGSC and the Consultant, a cost advising, and cost monitoring / reporting service.

The Cost Specialist shall attend project and production meetings throughout the design phases and be prepared to present and defend the estimates directly to the Departmental Representative.

Cost estimate reports must be broken down into the following phases and elemental summary provided for each package and noted scope items in the format requested:

- Package 1
 - a. Wharf Replacement
 - b. Electrical Upgrades
 - c. Pumphouse Phase 2
 - d. Site Redevelopment
- Package 2 Net Shed Building

Cost estimate reports must include a measured area table indicating the measured areas utilized for costing. The method of measurement used shall be indicated in the cost estimate report.

As subsequent estimates are developed and submitted, a comparison table must be provided indicating the comparison to the previous estimate submission and the variance for both cost and area of each allocated space. Variances greater than 15% when compared to the previous estimate submission must be explained as part of a variance report.

Cost estimate reports must be included simultaneously with each design submission to PWGSC.

3.9.2.1 ESTIMATE DELIVERABLES

3.9.2.1.1 PACKAGE 1 DELIVERABLES

Stage	Description	Deliverables
RS1 / RS2	Options Analysis/Concept Design	Class D Estimate submission for each option Class C Estimate submission for selected option with variance to Class D Estimate
RS3	Design Development 99%	Class B Estimate submission with variance to Class C Estimate
RS4	Construction Documents 99%	Class A Estimate with variances to Class B Estimate submission
RS5	Tender	Tender review with variances to Class A Estimate

3.9.2.1.1 PACKAGE 2 & 3 DELIVERABLES

Stage	Description	Deliverables
RS1 / RS 2	Options Analysis/Concept Design	Class D Estimate submission for each option Class C Estimate submission for each option with variance to Class D Estimate
RS3	Design Development 66%	Class C Estimate review and update
RS3	Design Development 99%	Class B Estimate submission with variance to Class C Estimate
RS4	Construction Documents 66%	Class B Estimate review and update
RS4	Construction Documents 99%	Class A Estimate with variances to Class B Estimate submission
RS5	Tender	Tender breakdown review with variances to Class A Estimate

3.9.2.2 Cost Planning Services

Specific tasks include, but are not limited to:

- Prepare life-cycle cost analysis and cost plans from project briefs, preliminary concepts or other preliminary information;
- Prepare cost analysis / cash flows
- Prepare option analysis for various construction scenarios, and to aid in selection of materials;

- Provide advice and recommendations on project planning in order to achieve the most cost-effective project sequence including alternative procurement and construction strategies;
- Identify and quantify potential risks and make contingency recommendations in order to minimize negative cost impacts;
- Advise on alternative procurement and construction strategies to create efficiencies wherever possible;
- Identify, forecast and analyze project-related issues including possible market shortages and potential price fluctuations.

3.9.2.3 Cost Estimating Services

Specific tasks include, but are not limited to:

- Develop detailed cost estimates at each stage of the project as indicated in 3.8.2.1 Estimate Deliverables;
- Provide estimate backup quantities and detail, unit pricing, assumptions and calculations for each estimate submission;
- Provide variance comparison summaries for each estimate submission to the previous submission ;
- Estimate reviews noted in 3.8.2.1 Estimate Deliverables should include a written summary of any expected fluctuations in the estimate and their potential impact on the project;
- Estimate updates noted in 3.8.2.1 Estimate Deliverables should be a full estimate update submission;
- Provide allowance assumption descriptions and calculations for all contingencies and allowances;
- Quantify design and construction costs, contingencies and risks;
- Investigate and report on life-cycle costs;
- Document the methodology of all unit pricing, analysis, and valuation.

3.9.3 Exception Report

The Cost Specialist is to provide cost monitoring, timely identification and early warning of all changes which affect or potentially affect the estimated construction costs of the project.

If the estimate falls short of or exceeds the construction cost limit by 15% due to such changes, the Consultant shall advise the Departmental Representative. The Consultant shall submit to PWGSC proposed alternative design solutions at the expense of the Consultant.

An Exception Report will include sufficient description and cost detail to clearly identify:

- Scope Change: Identifying the nature, reason and total cost impact of all identified and potential project scope changes affecting Construction Cost Estimate.
- Cost Overruns and Underruns: Identifying the nature, the reason and the total cost impact of all identified and potential cost variations.
- Options Enabling a return to the Construction Cost Estimate: Identifying the nature and potential cost effects of all identified options proposed, in order to return the project within the Construction Cost Estimate

3.9.4 Responsibilities to PWGSC

PWGSC will review all respects of the Cost Specialist's work on a continuing basis to determine the validity and completeness of the information provided. In the event PWGSC identifies areas of concern including errors and omissions as well as areas of inadequate detail or areas that require further explanation, the Cost Specialist shall re-examine the estimates provided and make such revisions as are subsequently agreed to be necessary and/or provide ample acceptable evidence that such corrections or amendments are unnecessary. The Cost Specialist must respond within 5 working days and will be held accountable for delays if proper and timely responses do not occur. The Cost Specialist is responsible for any such errors or omissions regardless of any review by PWGSC.

3.9.5 No Action Abrogates Consultant's Responsibilities

No acceptance by PWGSC, whether expressed or implied, shall be deemed to relieve the Cost Specialist, or the Consultant, of professional or technical responsibility for the estimates and cost reports.

Neither does acceptance of an estimate by PWGSC in any way abrogate the Consultant Team's responsibility to maintain the specified Construction Cost Limit throughout the life of the project, or the requirement to redesign should the lowest acceptable bid differ significantly (more than 10% above) the accepted Class A estimate, unless and until the Departmental Representative indicates otherwise in writing.

3.10 RS 9 RESIDENT CONSTRUCTION SERVICES (OPTIONAL SERVICE)**3.10.1 Intent**

The intent of the provision of Resident Construction Service is to implement the project in compliance with the Construction Contract Documents and to ensure construction contractor compliance with their contract. The Consultant shall provide a Resident Construction Services Representative for the duration of the construction contract stage. Services included under this item are to be Bilingual (English and French).

The purpose of the Resident Construction Services Representative is responsible to:

- ensure the presence of the Consultant on site for the project;
- to inspect, coordinate and monitor all aspects of the work during key periods of the construction of the facility, and liaise with the contractor, Public Works And Government Services Canada and other agencies as appropriate to the work.;
- to provide resident inspection during key periods of construction work and maintaining records of all construction work placed on behalf of the design engineer and Project Manager;
- ensure that a sufficient level of communication is maintained with the Project Manager, Consultant, Contractor and any other organization applicable to the construction and construction contract administration of the individual detachment construction contract.

Resident Construction Services Representative(s) should:

- be a registered Professional Engineer or be eligible for registration in the Province of Work; or
- be a registered Certified Engineering Technologist or be eligible for registration in the province of Work; or
- be a registered Certified Engineering Technician or be eligible for registration in the province of Work;

- Other combinations of education and experience will be considered considering the requirements and complexity of the service(s) required.

The Resident Construction Services Representative shall:

- be directly responsible to the Consultant;
- become thoroughly familiar with all pertinent documents for the construction including as a minimum the National Building Code. They shall be aware of all Federal, Provincial and Municipal standards for the health and safety of construction workers;
- become thoroughly familiar with the requirements of the Consultant Project Brief and project responsibilities of others which relate to these services;

3.10.2 Scope and Activities

General

- The Resident Construction Services Representative's service shall commence on the date the contractor physically mobilizes on a site and finish on the date of Certificate of Substantial Performance unless otherwise stated by the Project Manager.
- The Consultant shall be responsible to distribute and assign the Construction Services Representative in such a manner that the intent of these services, as stated above is assured. The consultant shall ensure, via his planned allotment of the Construction Resident Construction Services Representative.
- The Consultant shall, prior to the construction contract tender of the facility provide Detail Project Schedule, identifying the key stages of construction and the planned allotment of hours when the Resident Construction Services Representative shall be on site.
- The PWGSC representatives may, at their discretion, request additional amounts and/or less amounts of services of the Resident Construction Services Representative. Those additional and/or reduced services shall be calculated utilizing the hourly rate identified by the Consultant.

Duties and Responsibilities

- Provide Resident Construction Services including inspection, coordination and monitoring during the construction work and be responsible to the Consultant.
- Maintain daily records, while on site, of all construction work placed and ensure constant communication amongst Project Manager, the Consultant and Contractor.
- The Consultant shall ensure that the Resident Construction Services Representative maintains, records and submits time sheets. The Consultant shall forward time sheets of the Resident Construction Services Representative to Project Manager after verifying accuracy and approving. The Consultant shall submit reviewed and approved time sheets to the Project Manager, within two weeks after completion of 40 hours of service by the Resident Construction Services Representative, for review.

Inspection and Reporting

- The Resident Construction Services Representative shall:
 - a. inspect all phases of the work in progress, for the purpose of bringing to the attention of the Contractor, after checking with the Consultant, and Project Manager any discrepancies between the work, the contract documents and accepted construction procedures;
 - b. keep a daily log of such inspections and issue a weekly written report to the Consultant in the form directed.

- The Consultant shall review and approve weekly reports prior to distribution to the Departmental Representative (Project Manager). Reports shall be distributed within five (5) working days of the report's week ending date.
- The Resident Construction Services Representative shall make any other reports or surveys as may be requested by the Project Manager through the Consultant.

Interpretation of the Contract Documents

- Interpretation of the contract documents shall be the responsibility of the Consultant. The Consultant may, however, have the Resident Construction Services Representative provide him with information regarding job conditions and may require him to relay day-to-day instructions to the Contractor.
- It shall be the duty of the Resident Construction Services Representative to assist the Consultant and further inform the Consultant of any anticipated problems which may delay the progress of the work. The method of relaying such information shall be determined by the Consultant.

Changes in the Work

- The Resident Construction Services Representative shall not authorize or order any change in the work which will constitute a change in design or in the value of the contract except as delegated by the Project Manager.
- The Consultant may call upon the Resident Construction Services Representative to assist in the evaluation of changes in the work, where a knowledge of job conditions is required.

Communication and Liaison

The Resident Construction Services Representative shall:

- Convey the Consultant's instructions regarding the required standards of workmanship to the Contractor(s);
- Check specifications, confer and obtain guidance on these findings with the Consultant. The matter is then to be brought to the attention of the Contractor's Superintendent. Although informal discussions with Sub-trade Superintendents are usually permissible, (but only with the agreement of the Contractor), the Resident Construction Services Representative should not deal directly with foreman or tradesmen, or interfere with the progress of the work;
- Communicate formally with the Contractor via memorandum form only. When this form is issued the Resident Construction Services Representative must immediately file copies with PWGSC and the Consultant;
- Contact the Consultant immediately when it is apparent that information or action is required of the Consultant, e.g., general instructions, clarifications, sample of shop drawing approvals, requisitions, contemplated change orders, site instructions, details, drawings, etc.;
- Accompany PWGSC & DFO-RPSS representatives on inspections and report to the Consultant requirements, comments or instruction of PWGSC forces. Note the Resident Construction Services Representative should encourage such requirements, comments or instructions to be provided to him in writing;
- Consider and evaluate any suggestions or modifications to the documents advanced by the Contractor and immediately report these to the Consultant with comments;
- Ensure that PWGSC, DFO-RPSS, and the Consultant are notified promptly when key pieces and/or components of materials and equipment are delivered, so that these parties can arrange for the appropriate personnel to have an opportunity to inspect same prior to installation.

Inspection of the Work

- The Resident Construction Services Representative shall make on site observations and spot checks of the work to determine whether the work, materials and equipment conform with the contract documents and supplementary conditions. The Resident Construction Services Representative shall advise the Contractor of any deficiencies or unapproved deviations via memorandum and report immediately to the Consultant and Project Manager any of these on which the Contractor is tardy or refuses to correct.
- The Resident Construction Services Representative shall arrange for the Consultant's architectural, structural, mechanical, electrical and other consultants to make the periodic inspections required by the Consultant's contract, and for these inspections to be made timely with respect to the progress of the work.
- The Resident Construction Services Representative shall also report if materials and equipment are being incorporated into the project prior to approval of relative shop drawings or samples.
- The Resident Construction Services Representative shall assist in the preparation of all deficiency reports, interim, preliminary, and final, in collaboration with the PWGSC and Consultant's representatives.
- The Resident Construction Services Representative shall be responsible for the measurement of all work to be done by the Contractor

Site Meetings

- The Resident Construction Services Representative shall attend and participate in all job-site meetings held during key periods of construction.

Inspection and Testing

- The Resident Construction Services Representative must see that the tests and inspections required by the contract documents are conducted, and should observe these tests and report the results in the daily log.
- The Consultant should be notified if the test results do not meet the specified requirements, or if the Contractor does not have tests undertaken as required.

Emergencies

- In the case of emergency where safety of persons or property is concerned or work is endangered, to safeguard the interests of PWGSC, the Resident Construction Representative shall give immediate written notice and verbal contact to PWGSC and DFO-RPSS of the possible hazard.

Limitations

The Resident Construction Services Representative shall not:

- Authorize deviations from the contract documents;
- Approve shop drawings or samples unless requested by project manager for project use;
- Accept any work or portions of the build works;
- Enter into the area of responsibility of the Contractor.

Hazardous Construction Operations

The Resident Construction Services Representative is to communicate regularly with the Construction Safety Professional regarding any issues of site safety. All safety related issues must be forwarded immediately to the Safety Professional, as well as the Project Manager.

Equipment Required and Provided by Consultant

- Costs of all equipment required shall be covered in the quoted fixed hourly rate. Equipment required shall include as a minimum:
 - a. Digital Camera;
 - b. Personal Protective Equipment;
 - c. Office Supplies required to perform services;
 - d. Cell Phone or other acceptable means of communication;
 - e. Laptop computer.
 - f. Provision of a site trailer and cover costs associated with same, including: fax machine and furniture will be supplied by construction Contractor.

3.10.3 Deliverables

Daily Log

- The Resident Construction Services Representative shall keep a daily log while on site. This will record the following;
 - a. weather & tide conditions, particularly unusual weather relative to construction activities in progress;
 - b. major material and equipment deliveries;
 - c. daily activities and major work done;
 - d. number of workers on site (full day or part day) and trade represented;
 - e. start, stop or completion of activities;
 - f. presence of inspection and testing firms, tests taken, results, etc.;
 - g. unusual site conditions experienced;
 - h. significant developments, remarks, etc.;
 - i. special visitors on site;
 - j. authorities given Contractor to undertake certain or hazardous works;
 - k. Environmental, Safety or other notable incidents;
 - l. reports, instructions from Appropriate Authorities Response Actions.
- Based on site/ project specific conditions, the items recorded may expand or be reduced. The log is the personal property of the Resident Construction Services Representative. Copies of the log book, certified as copies, are to be provided at the end of the project.

Weekly Records

- The Resident Construction Services Representative shall prepare weekly reports for the Consultant in the form directed:
 - a. progress relative to schedule;
 - b. major activities commencing or completed during the week; main activities now in progress;
 - c. major deliveries of materials and/or equipment;
 - d. difficulties which may cause delays in completion;
 - e. materials and labour needed immediately;
 - f. cost estimates of work completed, and materials delivered (cost plus contracts);
 - g. outstanding information or action required by Consultant or PWGSC;
 - h. work force;
 - i. weather;
 - j. remarks;

- k. accidents on site;
 - l. safety hazards caused by the work, the Contractor or his agents.
- The items may be expanded or reduced based on site/ project specific conditions.

Site Records

- The Resident Construction Services Representative shall maintain up to date files at the site for the use as follows:
 - Contract and Tender Documents;
 - Approved Shop Drawings;
 - Approved Samples;
 - Samples;
 - Site Instructions;
 - Contemplated Change Orders;
 - Change Orders;
 - Memoranda;
 - Test and Deficiency Reports;
 - Correspondence and Minutes of Meeting;
 - Names, addresses, telephone numbers of Client representatives, Consultant and all Contractors, sub-trades key personnel associated with the contract; including home telephone numbers in case of emergencies.
- The items may be expanded or reduced based on site/ project specific conditions.
- In addition, the Resident Construction Services Representative shall maintain an up-to-date progress schedule.

A reproduction of the original contract drawings shall be carefully preserved and shall be kept marked up to date with all addenda, change orders, site instructions, details, as-built conditions, etc., issued subsequent to the award of the contract.