

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Public Works Government Services Canada- Bid
Receiving / Réception des soumissions
189 Prince William Street
Room 405
Saint John
New Brunswick
E2L 2B9

Request For a Standing Offer
Demande d'offre à commandes

Regional Individual Standing Offer (RISO)
Offre à commandes individuelle régionale (OCIR)

Canada, as represented by the Minister of Public Works and Government Services Canada, hereby requests a Standing Offer on behalf of the Identified Users herein.

Le Canada, représenté par le ministre des Travaux Publics et Services Gouvernementaux Canada, autorise par la présente, une offre à commandes au nom des utilisateurs identifiés énumérés ci-après.

Comments - Commentaires

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

Issuing Office - Bureau de distribution
Public Works Government Services Canada- Bid
Receiving / Réception des soumissions
189 Prince William Street
Room 405
Saint John
New Bruns
E2L 2B9

Title - Sujet Quality Assurance & Mat. Testing	
Solicitation No. - N° de l'invitation EC373-152460/A	Date 2015-04-14
Client Reference No. - N° de référence du client EC373-152460	GETS Ref. No. - N° de réf. de SEAG PW-\$PWB-004-3601
File No. - N° de dossier PWB-4-37182 (004)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-05-26	
Time Zone Fuseau horaire Atlantic Daylight Saving Time ADT	
Delivery Required - Livraison exigée See Herein	
Address Enquiries to: - Adresser toutes questions à: Doucet, Gisele PWB	Buyer Id - Id de l'acheteur pwb004
Telephone No. - N° de téléphone (506)636-4541 ()	FAX No. - N° de FAX (506)636-4376
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA CUSTOMS BLDG 4TH FL. 189 PRINCE WILLIAM ST SAINT JOHN New Brunswick E2L2B9 Canada	
Security - Sécurité This request for a Standing Offer does not include provisions for security. Cette Demande d'offre à commandes ne comprend pas des dispositions en matière de sécurité.	

Instructions: See Herein

Instructions: Voir aux présentes

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

Solicitation No. - N° de l'invitation

EC373-152460/A

Amd. No. - N° de la modif.

File No. - N° du dossier

PWB-4-37182

Buyer ID - Id de l'acheteur

pwb004

CCC No./N° CCC - FMS No/ N° VME

**THIS PAGE IS BLANK. SEE ATTACHED
DOCUMENTS.**

Solicitation No. - N° de l'invitation
EC373-152460/A
Client Ref. No. - N° de réf. du client
EC373-152460/A

Amd. No. - N° de la modif.
File No. - N° du dossier
PWB-4-37182

Buyer ID - Id de l'acheteur
pwb004
CCC No./N° CCC - FMS No./N° VME

IMPORTANT NOTICE TO OFFERORS

Support the use of apprentices

Through Canada's Economic Action Plan 2013, the Government of Canada proposes to support the employment of apprentices in federal construction and maintenance projects. To support this initiative, a voluntary certification signaling the Contractor's commitment to hire and train apprentices is available at Annex "D".

REQUEST FOR STANDNG OFFER

QUALITY ASSURANCE AND MATERIAL TESTING VARIOUS LOCATIONS COUNTIES OF CHARLOTTE, ST. JOHN, ALBERT AND YORK NEW BRUNSWICK

TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION

- 1.1 Introduction
- 1.2 Summary
- 1.3 Debriefings

PART 2 - OFFEROR INSTRUCTIONS

- 2.1 Standard Instructions, Clauses and Conditions
- 2.2 Submission of Offers
- 2.3 Former Public Servant
- 2.4 Enquiries - Request For Standing Offers
- 2.5 Applicable Laws

PART 3 - OFFER PREPARATION INSTRUCTIONS

- 3.1 Offer Preparation Instructions

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

- 4.1 Evaluation Procedures
- 4.2 Basis of Selection

PART 5 - CERTIFICATIONS

- 5.1 Certifications Required Precedent to Issuance of a Standing Offer

PART 6 – SECURITY REQUIREMENTS

- 6.1 Security Requirement

PART 7 - STANDING OFFER AND RESULTING CONTRACT CLAUSES

7A. STANDING OFFER

- 7A.1 Offer
- 7A.2 Standard Clauses and Conditions
- 7A.3 Term of Standing Offer
- 7A.4 Authorities
- 7A.5 Identified Users
- 7A.6 Call-up Instrument
- 7A.7 Limitation of Call-ups
- 7A.8 Financial Limitation
- 7A.9 Priority of Documents
- 7A.10 Certifications
- 7A.11 Applicable Laws
- 7A.12 Estimates

7B. RESULTING CONTRACT CLAUSES

- 7B.1 Statement of Work
- 7B.2 Standard Clauses and Conditions
- 7B.3 Term of Contract
- 7B.4 Payment
- 7B.5 Invoicing Instructions
- 7B.6 Insurance
- 7B.7 Voluntary Reports for Apprentices Employed during the Contract

List of Annexes:

- Annex A – Basis of Payment
- Annex B – Certifications
- Annex C - Complete List of names of all individuals who are currently directors of the Offeror
- Annex D - Voluntary Certification to Support the Use of Apprentices
- Annex E - Terms of Reference

PART 1 - GENERAL INFORMATION

1.1 Introduction

The Request for Standing Offers (RFSO) is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Offeror Instructions: provides the instructions applicable to the clauses and conditions of the RFSO;
- Part 3 Offer Preparation Instructions: provides offerors with instructions on how to prepare their offer to address the evaluation criteria specified;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria which must be addressed in the offer, if applicable, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Security, Financial and Insurance Requirements: includes specific requirements that must be addressed by offerors; and
- Part 7 7A, Standing Offer, and 7B, Resulting Contract Clauses:
- 7A, includes the Standing Offer containing the offer from the Offeror and the applicable clauses and conditions;
- 7B, includes the clauses and conditions which will apply to any contract resulting from a call-up made pursuant to the Standing Offer.

The Annexes include the Basis of Payment, Certifications, Complete List of names of all individuals who are currently directors of the Offeror, Voluntary Certifications to Support the Use of Apprentices and the Terms of Reference.

1.2 Summary

Public Works and Government Services Canada has a requirement for the establishment of a Regional Individual Standing Offer (RISO). Work under this Standing Offer includes the testing and inspection of concrete, asphaltic concrete, soils, granular fill and mortar materials (including Heritage Mortar). Inspection of reinforcing bar layout will be required for various projects to be located throughout the following New Brunswick Counties: Charlotte, Saint John, Albert, and York Counties including the Islands of Grand Manan, Whitehead, Deer and Campobello. The period of the Standing Offer will be for two years from the date of award and will be on an "as and when required" basis in accordance with Annex "E", Terms of Reference forming part of the bid document.

As per the Integrity Provisions under section 01 of Standard Instructions 2006, offerors must provide a list of all owners and/or Directors and other associated information as required. Refer to section 4.21 of the Supply Manual for additional information in the Integrity Provisions.

Offerors in receipt of a pension or a lump sum payment must provide the required information as details in article 3 of Part 2 of the Request for Standing Offers (RFSO).

The requirement is subject to the provisions of the World Trade Organization - Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), the Agreement on Internal Trade (AIT) as well as the Canada-Peru, Canada-Columbia and Canada-Panama FTA's.

It is PWGSC's intention to enter into up to three (3) Standing Offers.

The PWGSC Project Authority will establish the Scope of Services to be performed at the time of the call-up. The highest ranked Offeror shall be given first consideration. Should that Offeror be deemed unable to carry out the proposed services due to the required time frame, the next highest ranked Offeror would be approached.

1.3 Debriefings

Offerors may request a debriefing on the results of the request for standing offers process. Offerors should make the request to the Standing Offer Authority within 15 working days of receipt of the results of the request for standing offers process. The debriefing may be in writing, by telephone or in person.

PART 2 - OFFEROR INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the Request for Standing Offers (RFSO) 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.

Offerors who submit an offer agree to be bound by the instructions, clauses and conditions of the RFSO and accept the clauses and conditions of the Standing Offer and resulting contract(s).

The 2006 (2014-09-25) Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the RFSO.

2.2 Submission of Offers

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

Offers by facsimile will be accepted. Facsimile Number is (506) 636-4376.

2.3 Former Public Servant

Contracts with 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, offerors must provide the information required below before the issuance of a standing offer. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of offers is completed, Canada will inform the Offeror 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 offer 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 Offeror a FPS in receipt of a pension? **YES () NO ()**

If so, the Offeror 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, Offerors agree that the successful Offeror'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: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

Work Force Adjustment Directive

Is the Offeror a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive?
YES () NO ()

If so, the Offeror 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.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including the Applicable Taxes.

2.4 Enquiries - Request for Standing Offers

All enquiries must be submitted in writing to the Standing Offer Authority no later than five (5) calendar days before the Request for Standing Offers (RFSO) closing date. Enquiries received after that time may not be answered.

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

Solicitation No. - N° de l'invitation
EC373-152460/A
Client Ref. No. - N° de réf. du client
EC373-152460/A

Amd. No. - N° de la modif.
File No. - N° du dossier
PWB-4-37182

Buyer ID - Id de l'acheteur
pwb004
CCC No./N° CCC - FMS No./N° VME

2.5 Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in New Brunswick.

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

Solicitation No. - N° de l'invitation
EC373-152460/A
Client Ref. No. - N° de réf. du client
EC373-152460/A

Amd. No. - N° de la modif.
File No. - N° du dossier
PWB-4-37182

Buyer ID - Id de l'acheteur
pwb004
CCC No./N° CCC - FMS No./N° VME

PART 3 - OFFER PREPARATION INSTRUCTIONS

3.1 Offer Preparation Instructions

Offerors must submit their financial offer in accordance with Annex "A" – Basis of Payment. The total amount of Applicable Taxes must be shown separately, if applicable.

Offerors must submit certification required required under Part 5.

PART 4 . EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Offers will be assessed in accordance with the entire requirement of the Request for Standing Offer including the technical and financial evaluation criteria.

4.1.1 Financial Evaluation

Offerors will be evaluated on the basis of the lowest overall Total Estimated Amount in Canadian dollars, the Harmonized Sales Tax (HST) excluded. The Total Evaluated Price will be calculated using the estimated usage figures on the Pricing Schedule or their offer may be considered non-responsive.

4.2 Basis of Selection

An offer must comply with the requirements of the Request for Standing Offers to be declared responsive. The responsive offer with the lowest evaluated price will be recommended for issuance of a Standing Offer. Responsive offers with the second, third, fourth and fifth lowest prices will then be ranked in that order. Canada reserves the right to issue up to three (3) Standing Offer.

PART 5 - CERTIFICATIONS

Offerors must provide the required certifications and associated information to be issued a standing offer.

The certifications provided by offerors to Canada are subject to verification by Canada at all times. Canada will declare an offer non-responsive, will have the right to set-aside a standing offer, or will declare a contractor in default in carrying out any of its obligations under any resulting contracts, if any certification made by the Offeror is found to be untrue whether made knowingly or unknowingly or unknowingly during the offer evaluation period, during the Standing Offer period, or during the contract period.

The Standing Offer Authority will have the right to ask for additional information to verify the Offeror's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Standing Offer Authority may render the Offer non-responsive, may result in the setting aside of the Standing Offer or constitute a default under the Contract.

5.1 Certifications Required Precedent to Issuance of Standing Offer

The certifications listed below should be completed and submitted with the offer, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Standing Offer Authority will inform the Offeror of a time frame within which to provide the information. Failure to comply with the request of the Standing Offer Authority and to provide the certifications within the time frame provided will render the offer non-responsive.

5.1.1 Integrity Provisions – Associated Information

By submitting an offer, the Offeror certifies that the Offeror and its affiliates are in compliance with the provisions as stated in Section 01 "Integrity Provisions – Offer of Standard Instructions 2006. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

5.1.2 Additional Certifications – Annex "B"

The certifications listed in Annex "B" Certifications should be completed and submitted with the offer, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Standing Offer Authority will so inform the Offeror and provide the Offeror with a time frame within which to meet the requirement. Failure to comply with the request of the Standing Offer Authority and meet the requirements within that time period will render the offer non-responsive.

Solicitation No. - N° de l'invitation
EC373-152460/A
Client Ref. No. - N° de réf. du client
EC373-152460/A

Amd. No. - N° de la modif.
File No. - N° du dossier
PWB-4-37182

Buyer ID - Id de l'acheteur
pwb004
CCC No./N° CCC - FMS No./N° VME

PART 6 – SECURITY REQUIREMENTS

6.1 Security Requirement

Not Applicable

PART 7 - STANDING OFFER AND RESULTING CONTRACT CLAUSES

A. STANDING OFFER

1. Offer

1.1 The Offeror offers to fulfill the requirement in accordance with the Terms of Reference in Annex "E".

2. Standard Clauses and Conditions

All clauses and conditions identified in the Standing Offer and resulting contract(s) 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.

2.1 General Conditions

2005 (2014-09-25) General Conditions - Standing Offers - Goods or Services, apply to and form part of the Standing Offer.

3. Term of Standing Offer

3.1 Period of the Standing Offer

The period for making call-ups against the Standing Offer will be for two years from the date of award.

4. Authorities

4.1 Standing Offer Authority

The Standing Offer Authority is:

Gisèle Doucet
Public Works and Government Services Canada
Acquisitions Branch
Real Property Contracting
189 Prince William Street, Room 405
Saint John, N.B.
E2L 2B9

Telephone: (506) 636-4541
Facsimile: (506) 636-4376
E-mail address: gisele.doucet@pwgsc.gc.ca

The Standing Offer Authority is responsible for the establishment of the Standing Offer, its administration and its revision, if applicable. Upon the making of a call-up, as Contracting Authority, he is responsible for any contractual issues relating to individual call-ups made against the Standing Offer by any Identified User.

4.2 Project Authority

The Project Authority for the Standing Offer is identified in the call-up against the Standing Offer.

The Project Authority is the representative of the department or agency for whom the Work will be carried out pursuant to a call-up against the Standing Offer and is responsible for all the technical content of the Work under the resulting Contract.

4.3 Offeror's Representative

Name: _____
Telephone: () _____
Fax: () _____
E-mail: _____

5. Identified Users

The Identified User authorized to make call-ups against the Standing Offer is: Public Works and Government Services Canada.

6. Call-up Instrument

The Work will be authorized or confirmed by the Identified User(s) using form CF 942.

7. Limitation of Call-ups

Individual call-ups against the Standing Offer must not exceed \$100,000.00 (Harmonized Sales Tax Included).

8. Financial Limitation

The total cost to Canada resulting from call-ups against the Standing Offer must not exceed the sum of \$403,700.00 (HST extra) unless otherwise authorized in writing by the Standing Offer Authority. The Offeror must not perform any work or services or supply any articles in response to call-ups which would cause the total cost to Canada to exceed the said sum, unless an increase is so authorized.

The Offeror must notify the Standing Offer Authority as to the adequacy of this sum when 75 percent of this amount has been committed, or 4 months before the expiry date of the Standing Offer, whichever comes first. However, if at any time, the Offeror considers that the said sum may be exceeded, the Offeror must promptly notify the Standing Offer Authority.

9. Priority of Documents

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

- a) The call up against the Standing Offer, including any annexes;
- b) The articles of the Standing Offer;
- c) The general conditions 2005 (2014-09-25), General Conditions - Standing Offers - Goods or Services
- d) Supplemental General Conditions 2010C (2014-09-25), General Conditions - Services (Medium Complexity);
- e) Specifications and drawings;
- f) Annex "A", Basis of Payment;
- g) Any amendment issued or any allowable offer revision received before the date and time set for solicitation closing
- h) The Offeror's offer

10. Certifications

10.1. Compliance

Compliance with the Certifications provided by the Offeror is a condition of authorization of the Standing Offer and subject to verification by Canada during the term of the Standing Offer and of any resulting contract that would continue beyond the period of the Standing Offer. In the event that the Offeror does not comply with any certification or it is determined that any certification made by the Offeror in its offer is untrue, whether made knowingly or unknowingly, Canada has the right to terminate any resulting contract for default and set aside the Standing Offer.

11. Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in New Brunswick .

12. Estimates

SACC Manual clause M3800C (2006-08-15) Estimates

7B. RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from a call-up against the Standing Offer.

7B.1 Statement of Work

The Contractor must perform the Work described in the call-up against the Standing Offer.

7B.2 Standard Clauses and Conditions

7B.2.1 General Conditions – Goods or Services

2010C (2014-09-25), General Conditions - Services, apply to and form part of the Contract.

7B.3 Term of Contract

7B.3.1 Period of Contract

The Work must be completed in accordance with the call-up against the Standing Offer.

7B.4 Payment

7B.4.1 Basis of Payment

Refer to Annex "A", Basis of Payment

7B.4.2 Limitation of Price

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

7B.4.3 Single Payment

SACC Manual Clause H1000C (2008-05-12) Single Payment

7B.5 Invoicing Instructions

The Contractor must submit invoices in accordance with the Section 12, entitled "Invoice Submission" of the General Conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

7B.6 Insurance

7B.6.1 Insurance – Specific Requirements

The Contractor must comply with the insurance requirements specified in the following **article 7B.6.2 Commercial General Liability Insurance**. The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.

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

The Contractor must forward to the Contracting Authority within five (5) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. Coverage must be placed with an Insurer licensed to carry out business in Canada. The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

7B.6.2 Commercial General Liability Insurance

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence and in the annual aggregate.
2. The Commercial General Liability policy must include the following:
 - a. Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
 - b. Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.
 - c. Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
 - d. Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
 - e. Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
 - f. Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
 - g. Employees and, if applicable, Volunteers must be included as Additional Insured.
 - h. Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)
 - i. Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
 - j. Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.
 - k. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
 - l. Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.
 - m. Non-Owned Automobile Liability - Coverage for suits against the Contractor resulting from the use of hired or non-owned vehicles.
 - n. Advertising Injury: While not limited to, the endorsement must include coverage piracy or misappropriation of ideas, or infringement of copyright, trademark, title or slogan.
 - o. All Risks Tenants Legal Liability - to protect the Contractor for liabilities arising out of its occupancy of leased premises.
 - p. Amendment to the Watercraft Exclusion to extend to incidental repair operations on board watercraft.
 - q. Sudden and Accidental Pollution Liability (minimum 120 hours): To protect the Contractor for liabilities arising from damages caused by accidental pollution incidents.
 - r. Litigation Rights: Pursuant to subsection 5(d) of the *Department of Justice Act*, S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to:

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

For other provinces and territories, send to:

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

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

7B.7 Voluntary Reports for Apprentices Employed during the Contract

The Contractor should compile and maintain records on the number of apprentices that were hired to work on the contract and their trade specialty.

The Contractor should provide this data in accordance with the format below. If no apprentices were hired during the contract period, the Contractor should still provide a "nil" report.

The data should be submitted to the Contracting Authority six months after contract award or at the end of the contract, whichever comes first.

Number of apprentices hired	Trade specialty

(Add lines if needed)

**ANNEX A
 BASIS OF PAYMENT**

**QUALITY ASSURANCE AND MATERIAL TESTING
 VARIOUS SITES, N.B.**

Item	Class of Service	Unit of Measure	Estimated Quantity	Price/Unit	Total
1	Technician/Technologist,/Gauge Operator Where Ferry Access isn't Required	Hour	1500	\$_____	\$_____
2	Technician/Technologist,/Gauge Operator Where Ferry Access isn't Required	Hour	1500	\$_____	\$_____
Laboratory Testing					
1	Micro-Deval	Each	20	\$_____	\$_____
2	Freeze-Thaw	Each	20	\$_____	\$_____
3	Absorption	Each	20	\$_____	\$_____
4	Flat & Elongated Particles	Each	20	\$_____	\$_____
5	Percent Fractures	Each	20	\$_____	\$_____
6	Uncompacted Void content of fine aggregate ASTM D 2726	Each	20	\$_____	\$_____
7	Percent Compaction, Asphalt Concrete pavement as per ASTM D 2726	Each	20	\$_____	\$_____
8	Marshall Stability as per ASTM D 1559	Each	20	\$_____	\$_____
9	Flow Valve as per ASTM D 5581	Each	20	\$_____	\$_____
10	Air Voids in Mixture as per ASTM D 1045	Each	20	\$_____	\$_____
11	Voids in Mineral Aggregate as per ASM ASTM D 2726/ASTM D 3203	Each	20	\$_____	\$_____
12	Index of Retained Stability	Each	20	\$_____	\$_____
13	Determination of Maximum Theoretical Specific Gravity	Each	20	\$_____	\$_____
14	Determination of Bulk Specific Gravity of Compacted Paving Mixture	Each	20	\$_____	\$_____
Asphalt Binder as per following Tests:					
15	Flash and Fire Points as per AASHTO T 48 or ASTM D 92	Each	20	\$_____	\$_____
16	Viscosity as per AASHTO T316 or ASTM D4402	Each	20	\$_____	\$_____

17	Rheological Properties as per AASHTO T315	Each	20	\$ _____	\$ _____
18	Rolling Thin Film Over as per AASHTO T 240	Each	20	\$ _____	\$ _____
19	Accelerated Aging (PAV) as per AASHTO R28	Each	20	\$ _____	\$ _____
20	Flexible Creep Stiffness as per AASHTO T313	Each	20	\$ _____	\$ _____
21	TSR (Average of Conditioned & Freeze/Thaw TSR Values) as per ASTM D 4867	Each	20	\$ _____	\$ _____
Review of Asphalt Mix Design		Each	20	\$ _____	\$ _____
22	Concrete Strength Test as per CSA A23.1	Each (All Cylinders for one pour)	60	\$ _____	\$ _____
23	Mortar Strength Test	All Samples collected from one day	50	\$ _____	\$ _____
24	Heritage Mortar Strength Test	All Samples collected from one day	60	\$ _____	\$ _____
Soil and Aggregate					
25	Maximum Dry Density ASTM D 698	Each	60	\$ _____	\$ _____
26	Maximum Dry Density ASTM D 4718	Each	60	\$ _____	\$ _____
Reports					
27	Reports	Units	300	\$ _____	\$ _____
Additional Services					
28	Technologist	Hour	90	\$ _____	\$ _____
29	Engineer	Hour	40	\$ _____	\$ _____
Total :					\$ _____

Note: The estimated quantity entered in column four for each item is an estimate only for services as and when requested and does not infer that all the quantities for that item will be utilized or that the quantities may not be exceeded.

ANNEX B

Certifications Precedent to Standing Offer Award

1. Workers' Compensation Certification - Letter of Good Standing

Within five (5) days and prior to award, provide proof that the Offeror has an account in good standing with the applicable provincial or territorial Workers' Compensation Board.

2. The Offeror will be a Professional Engineering Firm, licensed to practice in the Province of New Brunswick or other equivalent license. Proof of such must be provided to PWGSC within five (5) days of request from Standing Offer Authority and prior to award of Standing Offer Agreement.

3. The Offeror will have at least one full-time staff capable of assessing qualifications of applicant to meet job specifications and of evaluation performance relevant to requirements. Proof of such must be provide to PWGSC within five (5) days of request from Standing Offer Authority and prior to award of Standing Offer Agreement.

4. The Offeror must have five (5) years experience in quality assurance and material testing. Proof of such must be provide to PWGSC within five (5) days of request from Standing Offer Authority and prior to award of Standing Offer Agreement.

5. Proof of liability insurance for a minimum amount of two million (\$2,000,000) as specified in **7B.6.2 Commercial General Liability Insurance**.

Solicitation No. - N° de l'invitation
EC373-152460/A
Client Ref. No. - N° de réf. du client
EC373-152460/A

Amd. No. - N° de la modif.
File No. - N° du dossier
PWB-4-37182

Buyer ID - Id de l'acheteur
pwb004
CCC No./N° CCC - FMS No./N° VME

ANNEX C

COMPLETE LIST OF NAMES OF ALL INDIVIDUALS WHO ARE CURRENTLY DIRECTORS OF THE OFFEROR

***NOTE TO OFFERORS
WRITE DIRECTOR'S SURNAMES AND GIVEN NAMES IN BLOCK LETTERS***

ANNEX D

Voluntary Certification to Support the Use of Apprentices

1. To encourage employers to participate in apprenticeship training, Contractors bidding on construction and maintenance contracts by Public Works and Government Services Canada (PWGSC) are being asked to sign a voluntary certification, signaling their commitment to hire and train apprentices.
2. Canada is facing skills shortages across various sectors and regions, especially in the skilled trades. Equipping Canadians with skills and training is a shared responsibility. In Economic Action Plan (EAP) 2013, the Government of Canada made a commitment to support the use of apprentices in federal construction and maintenance contracts. Contractors have an important role in supporting apprentices through hiring and training and are encouraged to certify that they are providing opportunities to apprentices as part of doing business with the Government of Canada.
3. Through the Economic Action Plan 2013 and support for training programs, the Government of Canada is encouraging apprenticeships and careers in the skilled trades. In addition, the government offers a tax credit to employers to encourage them to hire apprentices. Information on this tax measure administered by the Canada Revenue Agency can be found at: www.cra-arc.gc.ca. Employers are also encouraged to find out what additional information and supports are available from their respective provincial or territorial jurisdiction.
4. Signed certifications will be used to better understand contractor use of apprentices on Government of Canada maintenance and construction contracts and may inform future policy and program development.
5. The Contractor hereby certifies the following:

In order to help meet demand for skilled tradespeople, the Contractor agrees to use, and require its subcontractors to use, reasonable commercial efforts to hire and train registered apprentices, to strive to fully utilize allowable apprenticeship ratios¹ and to respect any hiring requirements prescribed by provincial or territorial statutes.

The Contractor hereby consents to this information being collected and held by PWGSC, and Employment and Social Development Canada to support work to gather data on the hiring and training of apprentices in federal construction and maintenance contracts.

¹ The journeyman-apprentice ratio is defined as the number of qualified/certified journeymen that an employer must employ in a designated trade or occupation in order to be eligible to register an apprentice as determined by provincial/territorial (P/T) legislation, regulation, policy directive or by law issued by the responsible authority or agency.

Solicitation No. - N° de l'invitation
EC373-152460/A
Client Ref. No. - N° de réf. du client
EC373-152460/A

Amd. No. - N° de la modif.
File No. - N° du dossier
PWB-4-37182

Buyer ID - Id de l'acheteur
pwb004
CCC No./N° CCC - FMS No./N° VME

Name:

Signature:

Company Name:

Company Legal Name:

Solicitation Number:

Optional information to provide:

Number of apprentices planned to be working on this contract:

Trades of those apprentices

Solicitation No. - N° de l'invitation
EC373-152460/A
Client Ref. No. - N° de réf. du client
EC373-152460/A

Amd. No. - N° de la modif.
File No. - N° du dossier
PWB-4-37182

Buyer ID - Id de l'acheteur
pwb004
CCC No./N° CCC - FMS No./N° VME

ANNEX E

TERMS OF REFERENCE

Terms of Reference
Quality Assurance and Material Testing
Various Locations - Counties of Charlotte, St John, Albert, and York,
including the Islands of Whitehead, Deer, Campobello and Grand Manan
in the Province of New Brunswick

Part 1 - Introduction

- .1 It is Public Works and Government Services Canada's intent to enter into an agreement, on a required basis, with a successful Material Testing Firm for a two year agreement.
- .2 The successful Material Testing Firm on this Standing Offer will not be permitted to perform quality assurance for both PWGSC and the Contractor on site.
- .3 The successful Material Testing Firm will submit a Health and Safety Plan within ten (10) days after award of the contract.
- .4 The Material Testing Firm will be responsible, at no cost to Public Works and Government Services Canada, to ensure that his/her employees are on site with proper safety gear and material to carry out their duties. In particular, Personnel Protective Equipment (PPE) for construction safety protection as per applicable safety laws and regulations such as safety boots, hard hats, life jackets, and also ensure that employees have proper clothing for wet and/or cold weather.
- .5 The Material Testing Firm will also provide Safety Training for the related work to the position and as required by Work Safe New Brunswick and Federal Health and Safety Act and Regulations at no cost to this contract. The Consultant Firm will be responsible for ensuring that all safety plans and hazard assessments related to their Consultant Firm's assignments are carried out and implemented.
- .6 The Material Testing Firm will ensure that all personnel follow proper code of conduct for the position assigned. If a person's conduct is deemed unsuitable, the Consultant Firm will be responsible to have that person removed immediately and replaced with a suitable person.
- .7 Material Testing Firm will be responsible to supply and maintain as necessary equipment for the specified tests.
- .8 The Consultant will be a C.S.A. accredited firm for concrete inspection. The firm will provide written proof of accreditation upon request of all technicians performing the work.

- .9 The Consultant is to note that it will be necessary to provide the required services with a twenty four (24) hour prior notice of when a Technician/Technologist is required on site.
- .10 The Field Technician/Technologist/Operator is to advise the Departmental Representative after or during each visit as to the work performed, and any difficulties encountered. The onsite Technician/Technologist/Operator must be equipped with a cellular phone/smartphone/ blackberry to be able to communicate between the field and the Project Manager.
- .11 The Material Testing Firm is to perform the required laboratory testing or engineering analysis immediately upon delivery of samples, mix designs, etc. Results are to be forwarded to PWGSC Project Manager immediately upon completion of findings.
- .12 All laboratory and field testing results are to be arranged in tabular forms, signed by the consultant reviewer and copies of all correspondence are to be provided per the following requirements:
 - One copy of test results via facsimile or email is to be provided to PWGSC Project Manager.
 - PWGSC's Project Manager will be identified on each call-up form.
 - The test results will include the engineering analysis, site testing and discussion of test results.
- .13 Upon completion of all testing, engineering analysis, and site testing, the Consultant will provide a consolidated report complete with:
 - Project description
 - Project Number
 - Call-up Number
 - All test data sheets
 - Data on testing completed
 - Description of methods and procedures used for testing
 - Results of testing in a tabular form
 - Discussion of test results
 - Report will be signed by the Consultant appointed Reviewer.
- .14 PWGSC Project Manager must be informed of all results from the testing and the onsite inspection immediately after performance of these additional requirements.
- .15 The final report is to be submitted in duplicate, mailed to the Project Manager, and one electronically copy sent in PDF form. No separate payment will be made for the supply of results. Cost of reports to be considered incidental to the pay items listed in the cost breakdown.

- .16 Work is carried out in a safe and efficient manner as per Work Safe New Brunswick.
- .17 The Consultant Firm must comply with the Labour Conditions and Fair Wages and Hours of Labour Act.

Part 2 – Qualifications of Bidding Firms

- .1 Offers from firms who do not meet the following minimum qualifications will not be considered for retention:
 - .1 Professional Engineering Firm, licensed to practice in the Province of New Brunswick or other equivalent license.
 - .2 Have at least one full-time staff capable of assessing qualifications of applicant to meet job specifications and of evaluation performance relevant to requirements.
 - .3 The Consultant firm must have five (5) years experience in quality assurance and material testing.
- .2 The Offerer submitting the lowest price will be required to submit documentation to demonstrate its compliance with these minimum qualifications within five (5) days of being requested by the Departmental Representative.

Part 3 – Scope of Work

- .1 Scope of work will include Testing and inspection of concrete, asphaltic concrete, soils, granular fill and mortar materials (including Heritage Mortar). Inspection of reinforcing bar layout will be required for various projects to be located throughout the following New Brunswick Counties: Charlotte, Saint John, Albert, and York Counties including the Islands of Grand Manan, Whitehead, Deer and Campobello.
- .2 PWGSC will issue individual call-ups for each work site with a description of services required.

Part 4 – Integrity Check

.General

Integrity Framework – PWGSC’s Integrity Framework which was established in 2012, increases due diligence, reduces the opportunity for fraud and manages the reputational risk to the Department. The framework enables the Department to cease business or to refuse to do business with companies and individuals convicted of offences that are considered to pose a high risk to the integrity of government procurement and real property processes.

Before each call-up, the Consultant Firm will fill-out the waiver and the integrity check.

No call-up can be issued until these forms have been submitted:

SI01 INTEGRITY PROVISIONS - ASSOCIATED INFORMATION

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section GI01 Integrity Provisions - Bid of General Instructions - Construction Services - Bid Security Requirements, R2710T. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

Part 5 - Call-up

Process:

- .1 The Department Representative will contact the Consultant Firm to indicate the type of testing, location, date schedule start time.
- .2 Consultant Firm will submit an Estimate of cost, using bid items and will include a signed integrity form and Waiver from the Consultant Firms, board of Directors.
- .3 If the Department Representative agrees with the estimate, a call-up will be issued to the Consultant.
- .4 Invoicing cannot exceed the amount indicated in the call-up.
- .5 Payment: See Part 9 - Invoicing. Appendix "A"

Part 6 - Personnel

6.1 Field Material Technician/Technologist/Gauge Operator

- .1 The Material Testing Firm will provide the services of an experienced Technician/Technologist to perform material sampling, concrete batch plant inspections, on-site testing and inspection of concrete placement, asphaltic concrete, granular fill, mortar materials and the positioning of the reinforcing bars, when requested.
- .3 Inform Departmental Representative all non-compliance Health & Safety and Environmental Issues, if any arise while they're on site.
- .4 In instances where the Contractor's activities are not in compliant to project plans and specifications, the Technician/Technologist is to inform the Departmental Representative and Contractor immediately.
- .5 General inquiries from the public are responded to in a pleasant and courteous manner and the Departmental Representative is notified of any serious concerns.

- .6 Material Technician/Technologist/Gauge Operator will have a minimum of five years related experience in soil testing, asphalt testing, compaction testing, Concrete and Mortar Testing, material sampling, and quality control procedures related to the specified material testing in this contract.
- .7 Must have a valid driver's license.
- .8 Must have a valid passport in case material testing is required on Campobello Island during the winter months while the ferry isn't working.
- .9 Must be completely conversant with the Work Safe New Brunswick Occupational Health and Safety Acts and Regulations.

6.2 Asphalt Road Technician/Technologist's Duties will also include, but not necessarily be limited to:

- .1 Contractor's equipment (eg. Spreader, roller, etc) is monitored to ensure proper functioning.
- .2 Spreader rate and slope, asphalt keys and joints are monitored to ensure proper function.
- .3 Temperature of asphalt mix to be checked regularly.
- .4 Asphaltic Concrete sampling is performed and forwarded to the lab for testing.
- .5 Weigh slips (ie. Asphalt, shoulder material, tack, etc) are forwarded to the Departmental Representative in a timely manner.

Laboratory Testing will Carry out the following Asphalt Testing, among others:

Superpave	
Test Description	Test Method
Sampling Mixes	ASTM D 979
Coring	ASTM D 5361
Ignition Method	DTI Asphalt Concrete Quality Assurance Technician Certification Manual, Procedure No. 9
Percent Fracture	ASTM C136/ASTM C117 or DTI Method
Sieve Analysis	ASTM C136/ASTM C117
Bulk Relative Density	ASTM D 2726
Theoretical Maximum Relative Density	AASHTO T209
Voids Calculations, Asphalt Concrete Specimens	ASTM 3203
Percent Compaction, Asphalt Concrete Pavement	ASTM D 2726
Forming Superpave Specimens, Field	AASHTO T 312

Method	
Moisture Content, Oven Method Asphalt Concrete Mix	ASTM D 2172
Asphalt Binder: Flash and Fire Points	AASHTO T 48 OR ASTM D 92
Viscosity	AASHTO T316 OR ASTM D4402
Rheological Properties	AASHTO T315
Rolling Thin Film Oven	AASHTO T 240
Accelerated Aging (PAV)	AASHTO R28
Flexible Creep Stiffness	AASHTO T313
TSR (Average of Conditioned & Freeze/Thaw TSR Values)	ASTM D 4867
In all test methods used as reference in this specification, metric sieves as specified in ASTM E11 shall be substituted for any other specified wire cloth sieves.	
Asphalt Cement Grade (PG) asphalt binder shall meet the requirements of AASHTO M320, Table 1 - Performance Graded Asphalt Binder Specification. See New Brunswick Standard Specifications and Infrastructure.	

Marshall Mix	
Marshall Stability	ASTM D 1559
Flow Value	ASTM D5581
Air Voids in Mixture	ASTM D 1045
Voids in Mineral Aggregate	ASTM D2726 /ASTM D3203
Index of Retained Stability	ASTM D1559
Determination of Maximum Theoretical Specific Gravity	ASTM D2041
Determination of Bulk Specific Gravity of Compacted Paving Mixture	ASTM D1188

.8 Asphalt concrete sampling and testing are performed daily.

6.3 Review of Asphalt Concrete Mix Design

The Consultant will be required to review asphaltic concrete mix designs. Mix designs as specified to be by either Superpave or Marshall Mix designs. The Consultant will be required to make recommendations for any changes he or she feels may be required.

The Consultant will be required to determine if the mixes supplied specification requirements. Included in the testing requirement

6.4 Grading and Nuclear Gauge Operator/Technician Duties will include but not necessarily be limited to:

- .1 Materials encountered on site are properly identified (eg. Tag inside and outside bag, material type, tests required, etc) and sent to the lab for testing.
- .2 Ensure areas of segregation are identified to the contractor, and corrective measures are taken.
- .3 Operator will be completely familiar with the operation, maintenance and safety procedures of the Nuclear Density Gauge.
- .4 Conditions as set out as per the Canadian Nuclear Safety Commission (CNSC) must be strictly adhered to. Any infractions resulting in fines/penalties by CNSC will be paid by the Material Testing Consulting Firm awarded this contract.
- .5 Compaction is checked on all requested material including soils, rock subbase, base, borrow, etc, to ensure PWGSC's standards are met. (spec sections for each project will be forwarded to the Consultant for each call-up.)
- .6 Tests results are forwarded to the Departmental Representative, in a timely manner.
- .7 Perform assigned work in a conscientious, diligent and efficient manner.
- .8 Sampled aggregates to be obtained at source and tested within one week of notification. The Consultant will perform sieve analysis to ASTM C136-82 and ASTM C117-80.
- .9 The Consultant is to determine the maximum dry density for each material to ASTM D698, Method C, Standard Proctor Density.

6.5 Concrete and Mortar Material Testing will include but not necessarily be limited to:

- .1 All tests required to meet CSA A23.1
- .2 All materials and methods used in performance of the concrete testing and inspection are to be performed to CAN3-A23.1-00 - Concrete Materials and Methods of Concrete Construction. All testing of concrete to be performed to CAN3-A23.2-00 - Methods of Test for Concrete.
- .3 All tests required for Historic Mortars to meet CSA A179-04, Mortar and Grout for Unit Masonry.
- .4 All materials and methods used in performance of Historic Mortars to be performed to CSA - A3000-08, Cementitious Materials Compendium (Consists of A3001, A3002, A3004 and A3005).
Properties:
 - .1 Bedding and Backpointing mortar for stonework:
 - .1 Mixed Type O mortar 1:2:8 white Portland cement:
hydrated lime: aggregate mix.

- .2 Range for Compressive Strength at 28 days: 2.0 Mpa to 3.5 Mpa.
- .3 Range for compressive strength at 7 days: 1.2 Mpa to 2.8 Mpa.
 - .1 Range for compressive strength at 7 days is 60% to 80% of 28 day compressive strength.
 - .2 7 day Range Compressive strength above the maximum 28 day compressive strength is considered a failure.
- .2 Frontpointing mortar for Stonework:
 - .1 Mixed type O mortar 1:2:8 White Portland Cement: hydrated lime: aggregate mix.
 - .2 Range for compressive strength: 2.0 Mpa to 3.5Mpa at 28 days.
 - .3 Range for compressive strength at 7 days: 1.2 Mpa to 2.8 Mpa.
 - .1 Range for compressive Strength at 7 days is 60% to 80% of 28 day compressive strength.
 - .2 7 day compressive strength above the maximum 28 day compressive strength is considered failure.
- .3 Vicat cone penetration for stonework:
 - .1 Frontpointing mortar: 15-22mm.
 - .2 Bedding and backpointing mortar: 20-35mm.
- .4 Allowable air content for all mortars: 8% to 12%.
- .5 All firms responding to this invitation for services must substantiate that they are accredited under C.S.A. to perform testing requirements.
- .6 Concrete Testing
 - .1 Fine and coarse aggregates:
 - a) Sieve Analysis and Fineness Modulus
 - b) Specific Gravity and Absorption
 - c) Soundness of Aggregate
 - d) Resistance to Abrasion by use of Los Angeles Machine
 - e) Organic Impurities
 - .2 Concrete Trial Mix: Prepare concrete trial mix and provide recommendations to improve mix, the compressive strength results of the trial mix, etc.
- .7 Field preparations of concrete test cylinders including supply molds, field testing for percent air voids and slump tests. Laboratory testing of concrete test cylinders, for compressive strength at 3 days if requested, 7 and 28 days. Consultant to check sizes, quantity and placing of all reinforcing steel. One hour of field work verification will be allowed prior to each pour. The Consultant will

maintain a continuous supply of at least six cylinder moulds on site during periods of construction.

- .8 Concrete work shall be tested according to the schedule indicated in Table 4.2a below.
- .9 Pre-cast Concrete: Consultant to supply cylinder moulds to take cylinders as well as check sizes, quantity and placing of all reinforcing steel. Consultant is to verify that all pre-cast concrete work is in accordance with CAN3-A23.4-78 and CAN-A23.3-M77 and plans and specifications.

Quality Assurance and Material Testing
Table 4.2a
Frequency of Testing (Concrete)

Number of Cubic Metres In Placing Operations	Minimum No. Of Cylinders	Minimum No. Of Tests (See Note 1)
Up to 25	5	1
26 to 50	7	1
51 to 100	10	2
101 to 200	12	2
Over 200	See Note 2	
Note 1: A test is defined as 2 cylinders to be broken at 28 days. Cylinders shall be sampled in accordance with CSA A23.2-1C.		
Note 2: An additional test will be taken for each additional 100 cubic metres of concrete placed.		
Note 3: The cost of each cylinder will be incidental to the testing.		

- .8 The cost for transportation of concrete cylinders and mortar cubes to and from site will be included in the lab testing for each item.

6.6 Concrete Inspection

- .1 Upon request from PWGSC, inspect concrete batch plants to insure that the plants, equipment and all materials to be used in concrete mixes meet requirements of CAN3-A23.1-M90. Sampling of aggregates to be performed when requested.
- .2 Review of concrete mix designs proposed by the Supplier/Contractor. Mix designs will be forwarded to the Consultant after receipt from the Contractor. The Consultant will be required to review the mix design proposed to be used for the method selected by the Contractor to place the concrete. The Consultant's Engineer will review the mix proportions, acceptability of aggregates, etc. The Consultant will provide, if required, recommendations for any changes which he may feel will be necessary to improve the mix. Comments on the effects of admixtures should they be requested to be used will be required.

6.7 Reinforcing Bars Inspection

- .1 Reinforcing bars shall be free of oil, dirt, mil scale, loose excessive rust or other coatings that reduce bond to concrete.
- .2 Reinforcing bars shall be fastened at all intersections, except where the spacing is less than 300mm in each direction in which case fastening at alternate intersections.
- .3 The minimum reinforcing bars cover for structures shall be 75mm.
- .4 Plastic bar supports shall be used as chairs for supporting and/or spacing the reinforcing bars. Bricks are not allowed.
- .5 The reinforcing bars shall be secured so they will remain in position during depositing and vibration of the concrete.

6.8 Mortar Testing and Inspection Requirements

- .1 All materials and methods used in the performance of the mortar testing and inspection are to be performed to CAN3-A371-94, CSA A179-94, and CAN3-A370-94.
 - .1 Heritage mortar: Unless specified otherwise, heritage mortar to meet CSA A179.
- .2 Departmental Representative is to be informed of results of testing and inspection immediately after performance of work.
- .3 Mortar Testing and Inspection
 - Testing:**
 - .1 Inspect cementitious materials and aggregates and confirm in conformance with requirements of specified standards.
 - .2 Field preparation of cubes including supply of moulds. Laboratory testing of test cylinders for compressive strength at 7 and 28 days.
 - .3 The Consultant will maintain a continuous supply of at least six test moulds on site during periods of construction.
 - Mortar Inspection:**
 - .1 Inspect mixing equipment to insure that the equipment and all materials to be used in mortar mixes meet requirements of specified standards.
 - Heritage Mortar:**
 - .1 Quality control includes tests for compressive strength or mortar cubes, bulking of sand (change in volume due to moisture content of the sand), air content of the fresh mortar, binder/sand ratio, and mortar consistency. The Vicat cone test can be used to immediately check the consistency of the mortar mix and to monitor water loss during hot weather.

- .2 Mortar tests will be done on a weekly basis during projects which require this item. Mortar for testing are to be taken randomly from a batch on site.
- .3 Air content for all lime mortars, and penetration using Vicat cone Penetrometer for mortars used in stonework, must be tested at the same frequency as strength tests, or more frequently as required by the Departmental Representative.
- .4 Consultant must supply a fully functioning and well maintained Vicat Penetrometer.

PART 7 - ADDITIONAL SERVICES

- .1 PWGSC Project Manager may request from the Consultant to perform additional services based on the results of the above testing. This may include a request for the Consultant's comments on the test results and recommendations for remedial action.
- .2 The method of payment for the provision of this service will be in accordance with the Engineer and Technologist rates established in the Unit Table of this service contract. PWGSC Project Manager must pre-approve the time and rate of payment before the service is carried out.

PART 8 - PAYMENT MEASUREMENTS

- .1 Hourly rate for Material Technician/Technologist or Gauge Operator where Ferry access isn't required listed in the unit price table shall include all overhead costs associated with salaries, meals, transportation, accommodations, and any other materials and equipment necessary to complete the inspections, materials testing, safety gear, GPS, smart phone, etc.
- .2 Hourly rate for Material Technician/Technologist or Gauge Operator where Ferry access is required listed in the unit price table shall include all overhead costs associated with salaries, meals, transportation (including ferries), accommodations, and any other materials and equipment necessary to complete the inspections materials testing, safety gear, GPS, smart phone, etc.
- .3 Material Testing listed in the Unit Price Table under Laboratory Testing will be paid by the unit. Included, but no limited will be all necessary materials and equipment. Also included, is all overhead cost associated with salaries, meals, transportation and any other materials and equipment necessary to complete the materials testing, including safety gear, etc

- .1 Approval of asphalt concrete mix design and modifications will be paid by the unit, as indicated in the Unit Price Table.
- .4 Only items in the Unit Price Table will be measured for payment. All other work necessary to complete the work will be considered incidental to this contract and will not be measured separately for payment.
- .5 There will not be any separate payment for cost of sending copies of and PDF results described in this Term of Reference. These costs including stationary, stamps, labour and transmission essences, etc will be incidental to Part 6 - .1, .2 and .3.
- .6 There will not be any separate cost for telephone services or calls made by the Consultant or his representative, or by the Departmental Representative to the Consultant.

PART 9 - INVOICING

- .1 The Consultant will Use Appendix "A" for invoicing. Invoices received without using Appendix "A" will be returned to the Consultant to be corrected.
 - 1. Copies of Original Invoice to go to the Project Manager who initiated the call-up at the following address, unless specified otherwise:

Public Works and Government Services Canada
4th Floor
189 Prince William Street
Saint John, NB.
E2L 2B9

Appendix A

Appendix "A" Invoicing

Project Name: _____

Project Number: _____

Call-up Number: _____

Project Manager who Initiated the Call-up: _____

ITEM	CLASS OF SERVICE	UNIT OF MEASUREMENT	QUANTITY	Bid Price	TOTAL
1	Technician/Technologist/Gaude Operator Where Ferry Access isn't Required	Hour			
2	Technician/Technologist/Gaude Operator Where Ferry Access is Required	Hour			

Laboratory Testing

Asphalt Concrete Testing:

1	Micro-Deval	Each			
2	Freeze-Thaw	Each			
3	Absorption	Each			
4	Flat & Elongated Particles	Each			
5	Percent Fractures	Each			
6	Uncompacted Void content of fine aggregate ASTM D 2726	Each			
7	Percent Compaction, Asphalt Concrete Pavement as per ASTM D 2726	Each			
8	Marshall Stability as per ASTM D 1559	Each			
9	Flow Value as per ASTM D5581	Each			
10	Air Voids in Mixture as per ASTM D 1045	Each			
11	Voids in Mineral Aggregate as per ASM ASTM D 2726/ASTM D 3203	Each			
12	Index of of Retained Stability	Each			
13	Determination of Maximum Theoretical Specific Gravity	Each			
14	Determination of Bulk Specific Gravity of Compacted Paving Mixture	Each			

Asphalt Binder as per following Tests:

15	Flash and Fire Points as per AASHTO T 48 or ASTM D 92	Each			
16	Viscosity as per AASHTO T316 or ASTM D4402	Each			
17	Rheological Properties as per AASHTO T315	Each			
18	Rolling Thin Film Over as per AASHTO T 240	Each			
19	Accelerated Aging (PAV) as per AASHTO R28	Each			
20	Flexible Creep Stiffness as per AASHTO T313	Each			
21	TSR (Average of Conditioned & Freeze/Thaw TSR values) as per ASTM D 4867.	Each			

Review of Asphalt Mix Design	Each				
-------------------------------------	------	--	--	--	--

Concrete Testing:

22	Concrete Strenght Test as per CSA A23.1	Each (all cylinders for one pour)			
23	Mortar Strength Test	All samples collected from one day			
24	Heritage Mortar Strenght Test	All samples collected from one day			

Soil and Aggregate

25	Maximum Dry Density ASTM D698	Each			
26	Maximum Dry Density ASTM D4718	Each			

Reports

27	Reports	Each			
----	---------	------	--	--	--

Additional Services

28	Technologist	Hour			
29	Engineer	Hour			

Sub-Total: _____

HST: _____

Total: _____

Check Mark if this is the Final Invoice on this project:

Indicate Outstanding Call-up amount remaining: \$ _____

Consultant Signature: _____

Date: _____