



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

Public Works and Government Services  
Canada  
ATB Place North Tower  
10025 Jasper Ave./10025 ave. Jaspe  
5th floor/5e étage  
Edmonton  
Alberta  
T5J 1S6  
Bid Fax: (780) 497-3510

**INVITATION TO TENDER**

**APPEL D'OFFRES**

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

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

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

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

**Comments - Commentaires**

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

Public Works and Government Services Canada  
ATB Place North Tower  
10025 Jasper Ave./10025 ave Jasper  
5th floor/5e étage  
Edmonton  
Alberta  
T5J 1S6

|  |   |
|--|---|
| <b>Title - Sujet</b><br>Asphalt Roads Crack Sealing  |   |
| <b>Solicitation No. - N° de l'invitation</b><br>EW038-162712/B   | <b>Date</b><br>2016-04-28                                       |
| <b>Client Reference No. - N° de référence du client</b><br>Parks EW038-162712  | <b>GETS Ref. No. - N° de réf. de SEAG</b><br>PW-\$PWU-107-10750 |
| <b>File No. - N° de dossier</b><br>PWU-5-38370 (107)   | <b>CCC No./N° CCC - FMS No./N° VME</b>                          |
| <b>Solicitation Closes - L'invitation prend fin</b><br><b>at - à 02:00 PM</b><br><b>on - le 2016-05-13</b>   |   |
| <b>Time Zone</b><br>Fuseau horaire<br>Mountain Daylight<br>Saving Time MDT   |   |
| <b>F.O.B. - F.A.B.</b>   |   |
| <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>   |   |
| <b>Address Enquiries to: - Adresser toutes questions à:</b><br>Anthony, Mary   | <b>Buyer Id - Id de l'acheteur</b><br>pwu107                    |
| <b>Telephone No. - N° de téléphone</b><br>(780) 237-7582 ( )   | <b>FAX No. - N° de FAX</b><br>(780) 497-3510                    |
| <b>Destination - of Goods, Services, and Construction:</b><br><b>Destination - des biens, services et construction:</b><br>DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA<br>ATB PLACE NORTH, 5TH FLOOR<br>10025 JASPER AVENUE<br>EDMONTON<br>Alberta<br>T5J1S6<br>Canada |   |

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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

## INVITATION TO TENDER

### REISSUE OF BID SOLICITATION

This bid solicitation cancels and supersedes previous bid solicitation number EW038-162712/A dated 2016-04-01 with a closing of 2016-04-26 at 02:00 PM MDT. A debriefing or feedback session will be provided upon request to bidders/offerors/suppliers who bid on the previous solicitation.

### IMPORTANT NOTICE TO BIDDERS

#### 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. Refer to SI09.

#### INTEGRITY PROVISIONS - BID

Important changes have been made to the Integrity Provisions - Bid as of July 3<sup>rd</sup> 2015. See GI01, Integrity Provision-Bid of R2710T of the General Instructions for more information.

#### LISTING of SUBCONTRACTORS

As per GI07 of R2710T you should provide using Annex C at Bid closing a list of Subcontractors that have 20% or more of the tendered price value.

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- SI05 Bid Results
- SI06 Insufficient Funding
- SI07 Bid Validity Period
- SI08 Construction Documents
- SI09 Public Works and Government Services Canada, Apprentice Procurement Initiative
- SI10 Web Sites

### **R2710T GENERAL INSTRUCTIONS - CONSTRUCTION SERVICES - BID SECURITY REQUIREMENTS (GI) (2015-07-03)**

The following GI's are included by reference and are available at the following Web Site <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R>

- GI01 Integrity Provisions - Bid
- GI02 Completion of Bid
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N° de l'invitation - Sollicitation No. :EW038-162712/A N° de la modif - Amd.

Id de l'acheteur - Buyer ID : PWU107

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

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N° CCC / CCC No./ N° VME - FMS

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## **SPECIAL INSTRUCTIONS TO BIDDERS (SI)**

### **SI01 INTEGRITY PROVISIONS – DECLARATION OF CONVICTED OFFENCES**

As applicable, pursuant to GI01 of the Declaration of Convicted Offences, paragraph 10 of the General Instructions R2710T, the Bidder must provide with its bid, a completed Declaration Form, to be given further consideration in the procurement process.

### **SI02 BID DOCUMENTS**

1. The following are the bid documents:

- a. Invitation to Tender - Page 1;
- b. Special Instructions to Bidders;
- c. General Instructions - Construction Services - Bid Security Requirements R2710T (2015-07-03)
- d. Clauses & Conditions identified in "Contract Documents";
- e. Drawings and Specifications;
- f. Bid and Acceptance Form and related Appendix(s); and
- g. Any amendment issued prior to solicitation closing.

Submission of a bid constitutes acknowledgement that the Bidder has read and agrees to be bound by these documents.

2. General Instructions - Construction Services - Bid Security Requirements R2710T is incorporated by reference and is 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/5/R>

### **SI03 ENQUIRIES DURING THE SOLICITATION PERIOD**

1. Enquiries regarding this bid must be submitted in writing to the Contracting Officer named on the Invitation to Tender - Page 1 as early as possible within the solicitation period. Except for the approval of alternative materials as described in GI15 of R2710T, enquiries should be received no later than five (5) calendar days prior to the date set for solicitation closing to allow sufficient time to provide a response. Enquiries received after that time may not result in an answer being provided.
2. To ensure consistency and quality of the information provided to Bidders, the Contracting Officer shall examine the content of the enquiry and shall decide whether or not to issue an amendment.
3. All enquiries and other communications related to this bid sent throughout the solicitation period are to be directed ONLY to the Contracting Officer named on the Invitation to Tender - Page 1. Failure to comply with this requirement may result in the bid being declared non-responsive.

#### **SI04 REVISION OF BID**

A bid may be revised by letter or facsimile in accordance with GI10 of R2710T. The facsimile number for receipt of revisions is (780) 497-3510.

#### **SI05 BID RESULTS**

1. A public bid opening will be held in the office designated on the Front Page "Invitation to Tender" for the receipt of bids shortly after the time set for solicitation closing.
2. Following solicitation closing, bid results may be obtained by calling Mary at (780) 237-7582 or via e-mail at: mary.anthony@pwgsc-tpsgc.gc.ca

#### **SI06 INSUFFICIENT FUNDING**

In the event that the lowest compliant bid exceeds the amount of funding allocated for the Work, Canada in its sole discretion may

- a. cancel the solicitation; or
- b. obtain additional funding and award the Contract to the Bidder submitting the lowest compliant bid; and/or
- c. negotiate a reduction in the bid price and/or scope of work of not more than 15% with the Bidder submitting the lowest compliant bid. Should an agreement satisfactory to Canada not be reached, Canada shall exercise option (a) or (b).

#### **SI07 BID VALIDITY PERIOD**

1. Canada reserves the right to seek an extension to the bid validity period prescribed in BA04 of the Bid and Acceptance Form. Upon notification in writing from Canada, Bidders shall have the option to either accept or reject the proposed extension.
2. If the extension referred to in paragraph 1.of SI07 is accepted, in writing, by all those who submitted bids, then Canada shall continue immediately with the evaluation of the bids and its approvals processes.
3. If the extension referred to in paragraph 1.of SI07 is not accepted in writing by all those who submitted bids then Canada shall, at its sole discretion, either
  - a. continue to evaluate the bids of those who have accepted the proposed extension and seek the necessary approvals; or
  - b. cancel the invitation to tender.
4. The provisions expressed herein do not in any manner limit Canada's rights in law or under GI11 of R2710T.

#### **SI08 CONSTRUCTION DOCUMENTS**

The successful Contractor will be provided with one paper copy of the sealed and signed drawings, the specifications and the amendments upon acceptance of the offer. Additional copies, up to a maximum 1, will be provided free of charge upon request by the Contractor. Obtaining more copies shall be the responsibility of the Contractor including costs.

#### **SI09 PUBLIC WORKS AND GOVERNMENT SERVICES CANADA APPRENTICE PROCUREMENT INITIATIVE**

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](http://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 (Appendix 3) 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 trades people, 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 ratios \* 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.

To support this initiative, a voluntary certification signaling the Contractor's commitment to hire and train apprentices is available at Appendix 3.

If you accept fill out and sign Appendix 3.

*\* The journey-person-apprentice ratio is defined as the number of qualified/certified journeypersons 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.*

## **SI10 WEB SITES**

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

Treasury Board Appendix L, Acceptable Bonding Companies  
<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494&section=text#appl>

Buy and Sell <https://www.achatsetventes-buyandsell.gc.ca>

Canadian economic sanctions <http://www.international.gc.ca/sanctions/index.aspx?lang=eng>

Contractor Performance Evaluation Report (Form PWGSC-TPSGC 2913)  
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913.pdf>

Bid Bond (form PWGSC-TPSGC 504) <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/504.pdf>

Performance Bond (form PWGSC-TPSGC 505) <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/505.pdf>

Labour and Material Payment Bond (form PWGSC-TPSGC 506)  
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/506.pdf>

Standard Acquisition Clauses and Conditions (SACC) Manual

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<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R>

PWGSC, Industrial Security Services <http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>

PWGSC, Code of Conduct and Certifications

<http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html>

Construction and Consultant Services Contract Administration Forms Real Property Contracting

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>

Declaration Form

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

## **SUPPLEMENTARY CONDITIONS (SC)**

### **SC01 INDUSTRIAL SECURITY RELATED REQUIREMENTS, DOCUMENT SAFEGUARDING**

There is no document security requirement applicable to this Contract.

### **SC02 INSURANCE TERMS**

#### 1) Insurance Contracts

- (a) The Contractor must, at the Contractor's expense, obtain and maintain insurance contracts in accordance with the requirements of the Certificate of Insurance. Coverage must be placed with an Insurer licensed to carry out business in Canada.
- (b) 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.

#### 2) Period of Insurance

- (a) The policies required in the Certificate of Insurance must be in force from the date of contract award and be maintained throughout the duration of the Contract.
- (b) The Contractor must be responsible to provide and maintain coverage for Products/Completed Operations hazards on its Commercial General Liability insurance policy, for a period of six (6) years beyond the date of the Certificate of Substantial Performance.

#### 3) Proof of Insurance

- (a) Before commencement of the Work, and no later than thirty (30) days after acceptance of its bid, the Contractor must deposit with Canada a Certificate of Insurance on the form attached herein.
- (b) Upon request by Canada, the Contractor must provide originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the Certificate of Insurance.

#### 4) Insurance Proceeds

In the event of a claim, the Contractor must, without delay, do such things and execute such documents as are necessary to effect payment of the proceeds.

#### 5) Deductible

The payment of monies up to the deductible amount made in satisfaction of a claim must be borne by the Contractor.

## CONTRACT DOCUMENTS (CD)

1. The following are the contract documents:
  - a. Contract Page when signed by Canada;
  - b. Duly completed Bid and Acceptance Form and any Appendices attached thereto;
  - c. Drawings and Specifications;
  - d. General Conditions and clauses
 

|  |        |               |
|--|--------|---------------|
| GC1 General Provisions – Construction Services     | R2810D | (2015-07-09); |
| GC2 Administration of the Contract-                | R2820D | (2016-01-28); |
| GC3 Execution and Control of the Work              | R2830D | (2015-02-25); |
| GC4 Protective Measures                            | R2840D | (2008-05-12); |
| GC5 Terms of Payment                               | R2850D | (2016-01-28); |
| GC6 Delays and Changes in the Work                 | R2860D | (2016-01-28); |
| GC7 Default, Suspension or Termination of Contract | R2870D | (2008-05-12); |
| GC8 Dispute Resolution                             | R2880D | (2016-01-28); |
| GC9 Contract Security                              | R2890D | (2014-06-26); |
| GC10 Insurance                                     | R2900D | (2008-05-12); |
| Allowable Costs for Contract Changes Under GC6.4.1 | R2950D | (2015-02-25); |
| Supplementary Conditions                           |        |               |
  - e. Any amendment issued or any allowable bid revision received before the date and time set for solicitation closing;
  - f. Any amendment incorporated by mutual agreement between Canada and the Contractor before acceptance of the bid; and
  - g. Any amendment or variation of the contract documents that is made in accordance with the General Conditions.
2. The documents identified by title, number and date above are incorporated by reference and 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. The language of the contract documents is the language of the Bid and Acceptance Form submitted.

## BID AND ACCEPTANCE FORM (BA)

### BA01 IDENTIFICATION

Asphalt Roads Crack Sealing  
Elk Island National Park, Alberta  
Project #: R.075711.001

### BA02 BUSINESS NAME AND ADDRESS OF BIDDER

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

Procurement Business Number (PBN): \_\_\_\_\_

### BA03 THE OFFER

The Bidder offers to Canada to perform and complete the Work for the above named project in accordance with the Bid Documents for the **TOTAL BID AMOUNT INDICATED IN APPENDIX 1**.

### BA04 BID VALIDITY PERIOD

The bid shall not be withdrawn for a period of thirty (30) days following the date of solicitation closing.

### BA05 ACCEPTANCE AND CONTRACT

Upon acceptance of the Contractor's offer by Canada, a binding Contract shall be formed between Canada and the Contractor. The documents forming the Contract shall be the contract documents identified in Contract Documents (CD).

### BA06 CONSTRUCTION TIME

The Contractor shall perform and complete the Work within six (6) weeks from the date of notification of acceptance of the offer.

### BA07 BID SECURITY

The Bidder is enclosing bid security with its bid in accordance with GI08 - Bid Security Requirements of R2710T - General Instructions - Construction Services - Bid Security Requirements.

### BA08 SIGNATURE

\_\_\_\_\_  
Name and title of person authorized to sign on behalf of Bidder (Type or print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**APPENDIX 1 - COMBINED PRICE FORM (1 page)**

- 1) The prices per unit shall govern in establishing the Total Extended Amount. Any arithmetical errors in this Appendix will be corrected by Canada.
- 2) Canada may reject the bid if any of the prices submitted do not reasonably reflect the cost of performing the part of the work to which that price applies.

**LUMP SUM**

The Lump Sum Amount designates Work to which a Lump Sum Arrangement applies.

- (a) **Work included in the Lump Sum Amount represents all work not included in the unit price table.**

|  |
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| <b>LUMP SUM AMOUNT (LSA)</b><br>Excluding applicable tax(es) |
|--|

**UNIT PRICE TABLE**

The Unit Price Table designates Work to which a Unit Price Arrangement applies.

- (a) Work included in each item is as described in the referenced specification section.
- (b) The Price per Unit shall not include any amounts for Work that is not included in that unit price Item.

| Item #                                | Specification Reference | Class of Labour, Plant or Material | Unit of Measurement | Estimated Quantity (EQ) | Price per Unit applicable tax(es) extra (PU) | Extended amount (EQ x PU) applicable tax(es) extra |
|---------------------------------------|-------------------------|------------------------------------|---------------------|-------------------------|--|--|
| <b>ASPHALT PAVEMENT CRACK SEALING</b> |                         |                                    |                     |                         |  |  |
| 1                                     | 32 01 11.03             | Main Parkway Access Road           | km                  | 19.50                   | \$   | \$ _____   |
| 2                                     | 32 01 11.03             | Golf Course Access Road            | km                  | 0.35                    | \$   | \$ _____   |
| <b>PAVEMENT MARKING</b>               |                         |                                    |                     |                         |  |  |
| 3                                     | 32 17 23                | Main Parkway Access Road           | km                  | 19.50                   | \$   | \$ _____   |
| 4                                     | 32 17 23                | Golf Course Access Road            | km                  | 0.35                    | \$   | \$ _____   |
| <b>TOTAL EXTENDED AMOUNT (TEA)</b>    |                         |                                    |                     |                         |  | \$ _____   |
| Excluding applicable tax(es)          |                         |                                    |                     |                         |  |  |

|  |          |
|--|----------|
| <b>TOTAL BID AMOUNT (LSA +TEA)</b><br>Excluding applicable tax(es) | \$ _____ |
|--|----------|



### APPENDIX 3 - VOLUNTARY CERTIFICATION TO SUPPORT THE USE OF APPRENTICES

*Note; The contractor will be asked to fill out a report every six months or at project completion as per sample "Voluntary Reports for Apprentices Employed during the Contract" provided at Annex C*

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Company Name: \_\_\_\_\_

Company Legal Name: \_\_\_\_\_

Solicitation Number: \_\_\_\_\_

Number of company employees: \_\_\_\_\_

Number of apprentices planned to be working on this contract: \_\_\_\_\_

Trades of those apprentices:

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## **APPENDIX 4 – DEPARTMENTAL REPRESENTATIVE’S AUTHORITY**

### **TO BE PROVIDED AT CONTRACT AWARD.**

Contracting Authority is :

Name : \_\_\_\_\_

Title : \_\_\_\_\_

Department : \_\_\_\_\_

Division : \_\_\_\_\_

Telephone : \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_

e-mail : \_\_\_\_\_

Technical Authority is :

Name : \_\_\_\_\_

Title : \_\_\_\_\_

Department : \_\_\_\_\_

Division : \_\_\_\_\_

Telephone : \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_

e-mail : \_\_\_\_\_

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## **ANNEX - A - CERTIFICATE OF INSURANCE** (Not required at solicitation closing)

See attached



## ANNEX C - LISTING OF SUBCONTRACTORS

- 1) In accordance with GI07 - Listing of Subcontractors and Suppliers of R2710T- General Instructions - Construction Services - Bid Security Requirements, the Bidder should provide a list of Subcontractors with his Bid.
- 2) The Bidder should submit the list of Subcontractors and for any portion of the Work valued at 20% or greater of the submitted Bid Price.

|    | Subcontractor | Division | Estimated value of work |
|----|---------------|----------|-------------------------|
| 1  |               |          |                         |
| 2  |               |          |                         |
| 3  |               |          |                         |
| 4  |               |          |                         |
| 5  |               |          |                         |
| 6  |               |          |                         |
| 7  |               |          |                         |
| 8  |               |          |                         |
| 9  |               |          |                         |
| 10 |               |          |                         |
| 11 |               |          |                         |
| 12 |               |          |                         |
| 13 |               |          |                         |
| 14 |               |          |                         |
| 15 |               |          |                         |



# CERTIFICATE OF INSURANCE

|  |   |
|--|---|
| <b>Description and Location of Work</b><br><br><b>Asphalt Roads Crack Sealing<br/>Elk Island National Park, Alberta</b><br><br><b>Description: Sealing cracks in 20km of paved asphalt roads within Elk Island National Park</b> | <b>Contract #:</b><br><b>EW038-162712</b> |
|  | <b>Project #:</b><br><b>R.075711.001</b>  |

|                                  |                       |      |          |             |
|----------------------------------|-----------------------|------|----------|-------------|
| Name of Insurer, Broker or Agent | Address (No., Street) | City | Province | Postal Code |
|----------------------------------|-----------------------|------|----------|-------------|

|                              |                       |      |          |             |
|------------------------------|-----------------------|------|----------|-------------|
| Name of Insured (Contractor) | Address (No., Street) | City | Province | Postal Code |
|------------------------------|-----------------------|------|----------|-------------|

**Additional Insured**  
**Her Majesty the Queen in Right of Canada as represented by the Minister of Public Works and Government Services**

| Type of Insurance   | Insurer Name and Policy Number | Inception Date<br>D / M / Y | Expiry Date<br>D / M / Y | Limits of Liability |                          |                                |
|---|--------------------------------|-----------------------------|--------------------------|---------------------|--------------------------|--------------------------------|
|   |                                |                             |                          | Per Occurrence      | Annual General Aggregate | Completed Operations Aggregate |
| <b>Commercial General Liability</b><br><b>Umbrella/Excess Liability</b> |                                |                             |                          | \$                  | \$                       | \$                             |
|   |                                |                             |                          | \$                  | \$                       | \$                             |

I certify that the above policies were issued by insurers in the course of their Insurance business in Canada, are currently in force and include the applicable insurance coverage's stated on page 2 of this Certificate of Insurance, including advance notice of cancellation / reduction in coverage.

Name of person authorized to sign on behalf of Insurer(s) (Officer, Agent, Broker)

Telephone number

Signature

Date D / M / Y

## CERTIFICATE OF INSURANCE Page 2 of 2

### General

The insurance policies required on page 1 of the Certificate of Insurance must be in force and must include the insurance coverage listed under the corresponding type of insurance on this page.

The policies must insure the Contractor and must include Her Majesty the Queen in Right of Canada as represented by the Minister of Public Works and Government Services as an additional Insured.

The insurance policies must be endorsed to provide Canada with not less than thirty (30) days notice in writing in advance of a cancellation of insurance or any reduction in coverage.

Without increasing the limit of liability, the policies must protect all insured parties to the full extent of coverage provided. Further, the policies must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

### Commercial General Liability

The insurance coverage provided must not be substantially less than that provided by the latest edition of IBC Form 2100.

The policy must either include or be endorsed to include coverage for the following exposures or hazards if the Work is subject thereto:

- (a) Blasting.
- (b) Pile driving and caisson work.
- (c) Underpinning.
- (d) Removal or weakening of support of any structure or land whether such support be natural or otherwise if the work is performed by the insured contractor.

The policy must have the following minimum limits:

- (a) **\$5,000,000** Each Occurrence Limit;
- (b) **\$10,000,000** General Aggregate Limit per policy year if the policy contains a General Aggregate; and
- (c) **\$5,000,000** Products/Completed Operations Aggregate Limit.

Umbrella or excess liability insurance may be used to achieve the required limits.

Parks Canada Elk Island National Park–  
Roads Renewal Program  
2016 EINP Asphalt Crack Sealing Program  
Project No. R.075711.001

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# **Tender Documents**

Invitation to Tender  
**Elk Island National Park of Canada  
Roads Renewal Program  
2016 EINP Asphalt Crack  
Sealing Program  
PWGSC Project No. R.075711.001**

Technical Specifications

Issued for Tender

CERTIFICATE PAGE

PARKS CANADA  
ELK ISLAND NATIONAL PARK

ROADS RENEWAL PROGRAM

2016 EIMP Asphalt Crack Sealing Program  
Project No. R.075711.001



**PERMIT TO PRACTICE**

Amec Foster Wheeler Environment & Infrastructure  
a Division of Amec Foster Wheeler Americas Limited

Signed By \_\_\_\_\_

Date \_\_\_\_\_

**PERMIT NUMBER: P-04546**

The Association of Professional  
Engineers and Geoscientists of Alberta

| Section Number | Section Title   | No. of Pages |
|----------------|---|--------------|
| 01 00 10       | General Requirements  | 8            |
| 01 29 00       | Methods of Measurement and Payment                            | 1            |
| 01 33 00       | Submittal Procedures  | 2            |
| 01 35 00       | Special Procedure for Traffic Control                         | 3            |
| 01 35 29.06    | Health and Safety Requirements                                | 2            |
| 01 35 43       | Environmental Procedures                                      | 3            |
| 01 45 00       | Quality Control   | 5            |
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| 32 01 11.03    | Asphalt Pavement Crack Sealing                                | 4            |
| 32 17 23       | Pavement Markings   | 3            |
|                |   |              |
| Sheet Number   | Drawing Title   |              |
| C1             | Location Plan -- Elk Island Parkway                           |              |
| C2             | Location Plan -- Astotin Lake Area -- Golf Course Access Road |              |
|                |   |              |

END OF SECTION

**DIVISION 1  
GENERAL REQUIREMENTS**

1.0 GENERAL

The Work covered by this Contract shall include, but shall not be limited to the furnishing of all materials, plant, equipment, tools, implements, machinery, supplies, transportation, labour and supervision necessary for the construction of the work as herein specified and shown on the drawings.

The complete Work under this Contract shall be governed by the dictates of good practice and shall be complete in all details of materials and methods even if not minutely specified. The Work shall be properly coordinated with the requirements of all work specified in other sections. The Work includes testing as specified and assistance with start-up and placing of the work in operation, ready for use by the Departmental Representative.

2.0 SCOPE OF WORK

This Contract is for the site preparation and asphalt pavement crack repair of selected roads and parking lots, line painting of yellow centerline and white shoulders lines and other work in Elk Island National Park. The work covered by this Contract shall include mobilization and demobilization, the furnishing of all materials, labour, equipment, tools, supplies, transportation, survey layout, quality control, Division 1 requirements and supervision necessary for the construction of the work as herein specified and shown on the Drawings.

.1 Description

Work in this Contract includes: cleaning the entire road surface and paved approaches, cleaning adjacent to cracks, supply and application of crack sealant, quality control, traffic accommodation and signing on roads and parking lots and other work in Elk Island National Park. The Work will also include the cleaning of the road roadway and the painting of yellow centerline and white shoulder lines on the roadways after the completion of crack repairs.

.2 Interpretation

If a Contractor finds discrepancies in or omissions from the drawings, specifications or other documents or has any doubt as to the meaning or intent of any part thereof, he shall at once inform Departmental Representative, who may send a written instruction or explanation. Every request for an interpretation shall be made in writing.

Discussions at Bid briefings or other oral discussions shall not become part of the Bid Documents unless confirmed by Amendment.

.3 Location of Work

The Work is located in Elk Island National Park, 35 km east of the City of Edmonton, Alberta. The work will be completed on the following roads and parking areas (as shown on the plans):

1. Main Parkway Access (approx. 8.2 - 8.5m wide)(Sheet 1) including:
  - a. Hayburger Trailhead Parking (area 38m x 12m) and Access (120m x 8m) (no line painting)
  - b. Paved Pullout Area at Administration Access Road (area 55m x 11m and 40m x 8.5m) (no line painting)

2. Golf Course Access Road (approx. 8.2 – 8.5m wide) (Sheet C2)

3.0 MATERIAL SUPPLY

The Contractor shall supply all new materials necessary for the construction of the work as herein specified or shown on the drawings.

4.0 CONTRACT SCHEDULE AND COMPLETION

- .1 Provide within five working days after Contract award, a construction bar chart schedule in weekly increments showing anticipated progress stages, significant milestones, inspections by outside parties and final completion of Work within time period required by Contract and Bid documents.
- .2 The Contractor shall commence the Work and proceed with diligence to perform the Work in accordance with the agreed upon schedule in sufficient time to complete the Work on or before the completion date specified in the contract.
- .3 Interim reviews of work progress based on work schedule will be conducted as decided by Departmental Representative and schedule updated by Contractor in conjunction with and to approval of Departmental Representative.
- .4 Scheduling shall be in accordance with the General Conditions, Supplementary Conditions and General Requirements.

5.0 DOCUMENTS REQUIRED

Maintain at job site, one copy each of following:

- .1 Latest "Construction Issue" of Contract Drawings.
- .2 Specifications.
- .3 Addenda.
- .4 Reviewed shop drawings.
- .5 Change orders.
- .6 Other modifications to Contract.
- .7 Field test reports.
- .8 Copy of latest approved Work Schedule.
- .9 Manufacturers' installation and application instructions.
- .10 Permits, licenses and land use regulations.
- .11 Up-to-date Record Drawings.

6.0 SITE CONDITIONS

The Contractor shall thoroughly examine the site of the work before submitting his Bid, to satisfy himself as to the local conditions and location of existing site conditions, utilities and nature of work. The Contractor shall not seek nor receive any compensation for failing to thoroughly investigate the site conditions and their effect on the tendered unit rates.

Prior to commencing actual construction, check field conditions to obtain actual dimensions required to ensure correct execution of the Work, and notify Departmental Representative, in writing, of all matters which could prejudice proper execution of the work.

Commencement of construction shall constitute acceptance of existing conditions and verification of dimensions.

No extra charges will be allowed for Work resulting from conditions which would have been evident upon a thorough examination of the site.

7.0 CONSTRUCTION LAYOUT

All Work is to be laid out by the Contractor. This shall include, but not be limited to, batter boards, sight rails, stakes and marks, and bench marks as required.

8.0 RESPONSIBILITY FOR WORK

Departmental Representative will not be responsible for the Contractor's means, methods, techniques, sequences or procedures of construction, or for the supervision of the Contractor's performance of this Contract, or for the Contractor's failure to perform the work in accordance with the Contract. However, if at any time Departmental Representative is of the opinion that the number of workmen, pieces of equipment or quality of machinery, tools, plant and equipment or articles is insufficient to meet the schedule, he may so advise the Contractor in writing. The Contractor shall promptly make the necessary changes to ensure that the schedule is adhered to.

Pursuant to the provisions of the General Conditions of the Contract, while it is intended that the Contractor shall be allowed in general to carry out the Contract in such manner that may appear to him to be the most desirable, Departmental Representative at his discretion may direct the order in which and points at which the work shall be undertaken. This control shall be exercised in the interest of the Departmental Representative and it is intended that an agreement be reached between all parties prior to the commencement of the Contract. A schedule of work shall be drawn up for this purpose by the Contractor.

Whenever in the Contract the terms "as ordered", "as directed", "as required", "as allowed" or terms of the like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of the like effect or import are used to describe requirement, direction, review or judgement of Departmental Representative as to the work, it is intended that such requirement, direction, review or judgement will be solely to evaluate the work for compliance with the Contract unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be construed to indicate that Departmental Representative shall have authority to supervise or direct performance of the work.

9.0 MOBILIZATION / DEMOBILIZATION

- .1 Mobilization shall include the necessary work and operation including, but not limited to, the movement of personnel, equipment, supplies and incidentals to the Work, the establishment of offices, camps and other facilities necessary to undertake the Work and for expenses incurred for other work and operations which must be performed prior to the commencement of the Work.
- .2 Demobilization shall include the dismantling and removal from the site of all of the Contractor's equipment and materials, clean-up of the site, and transportation of labour from the site.
- .3 There will be no separate payment made for mobilization and demobilization. The cost to be included in Lump sum.

10.0 CONTRACTOR'S USE OF SITE

- .1 Use of site: The Contractor does not have exclusive use of the site during execution of work in accordance with General Conditions and Special Provisions, except as follows:
  - .1 The Contractor shall maintain access through the work area at all times for the travelling public, staff and other contractors using the road to access park facilities.
  - .2 The Contractor and stored materials shall not interfere with the Departmental Representative's access to the site for operation, maintenance and repair of existing facilities. Provide temporary access to existing facilities as may be required and move materials as requested by the Departmental Representative.
  - .3 The Contractor shall not operate any of the existing facilities without a representative of the Departmental Representative present.
  - .4 At all times cooperate with the Departmental Representative
- .2 The Contractor shall be responsible for site security for the duration of the Contract. Where security is reduced by work of Contract, provide temporary means to maintain security.
- .3 Provide temporary dust screens and barriers to prevent contamination of new or existing facilities.
- .4 Obtain and pay for use of additional storage or work areas as required.

11.0 PROJECT MEETINGS

- .1 Departmental Representative will arrange and set times for project meetings and will record and distribute minutes.
- .2 The Contractor's site superintendent and representatives of the subcontractors shall attend the meetings at the request of Departmental Representative.

12.0 PERMITS, LICENSES, CERTIFICATES AND FEES

- .1 Contractor shall pay for all permits, licenses and all fees required for performance of the Work in accordance with General Conditions and Supplementary Conditions.

13.0 LOCATION OF EQUIPMENT AND FIXTURES

- .1 Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate.
- .2 Locate equipment, fixtures and distribution systems to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
- .3 Inform Departmental Representative of impending installation and obtain Departmental Representative's approval for actual location.

- .4 Submit field drawings to indicate relative position of various services and equipment when required by Departmental Representative.

#### 14.0 HAUL ROADS

- .1 The Contractor shall be responsible for damage and/or spillage on all roads used for hauling materials and equipment to and from the site subject to Departmental Representative being satisfied such damage or spillage was a direct result of the actions of the Contractor or one of the Contractor's agents in the performance of the work required under this Contract.
- .2 The Contractor shall be responsible for regular maintenance of haul roads including dust control.
- .3 Upon notification by Departmental Representative that the remedial work is necessary, immediately clean and/or restore the affected areas designated by Departmental Representative.
- .4 Obtain approval from the Departmental Representative and Departmental Representative prior to using any road as a haul road.

#### 15.0 CONSTRUCTION SIGNAGE AND SAFETY

- .1 The Contractor shall supply and maintain, at his own expense, all barriers, fences, warning signs and other precautions to protect the workmen and general public against accident or injury. All excavations or obstructions shall be clearly marked between sunset and sunrise with proper warning flares or lights. Local or Municipal bylaws governing warning flares or lights shall be strictly observed.
- .2 All signs, barricades, and warning devices shall meet Alberta Transportation and/or Regional Transportation advisory Committee (RTAC) requirements and satisfaction of Departmental Representative. The Contractor shall obtain any permits required by the Departmental Representative with respect to this work.
- .3 Upon notification by Departmental Representative, the Contractor shall remove the construction sign to a location designated by Departmental Representative.

#### 16.0 WORK DURATION

- .1 Work is to commence as soon as possible in the spring of 2016 once weather and site conditions permit in April and May. Work will be allowed Monday to Friday from 7 a.m. to 7 p.m. Written permission is required from the Departmental Representative for any alterations to this schedule.
- .2 The Contractor shall observe all local regulations regarding hours of work. The Contractor shall not work on any other day normally observed as a holiday, without the approval of the Departmental Representative.

17.0 EMERGENCY SITUATIONS

- .1 In emergency situations, endangering life or public property, the Departmental Representative shall proceed with repairs and thereupon advise the Contractor of the failure, and resulting costs shall be paid by the Contractor.

18.0 TRAFFIC ACCOMMODATION

- .1 Prior to construction, provide a Traffic Accommodation Strategy and Work Safety Plan indicating all proposed detour routes and schedules. The plan must be approved by the governing authority and Departmental Representative prior to construction.
- .2 Traffic control shall be in accordance with the provisions of the Uniform Traffic Control Devices of Departmental Representative.
- .3 Supply and maintain all barriers, fences, warning signs and other precautions to protect the workmen and general public against accident or injury.
- .4 All excavations or obstructions shall be clearly marked between sunset and sunrise with proper warning flares or lights.
- .5 Local or Municipal Bylaws governing warning flares or lights shall be strictly observed.
- .6 Should any of the Contractor's work cause interference with any existing public roads, lanes or pedestrian accesses, the Contractor shall provide and maintain detour roads and shall post such signs, lights, barriers, etc., as may be required for public convenience in accordance with governing local or municipal standards.
- .7 Where construction occurs within the right-of-way of Provincial Highways, provide and maintain warning and/or detour signs as required by Alberta Transportation.
- .8 As construction proceeds, clean up all roads and parking lots and make them passable and useable.
- .9 Maintain all detour roads during construction and restore to their original condition at the end of the project.

19.0 NOISE AND DUST CONTROL

- .1 The Contractor shall be responsible for controlling objectionable dust conditions in areas of construction as a result of traffic, construction equipment, or wind.
- .2 All equipment shall be equipped with suitable muffling systems.
- .3 The Contractor shall be cognizant of and abide by Noise Bylaws which affect any work in the area.

20.0 REMOVE AND DISPOSE OF MATERIALS

- .1 Materials to be removed and disposed shall be removed, hauled and disposed of at the Contractor's expense.
- .2 Obtain all necessary approvals and/or permits, from the Departmental Representative of the disposal site, and any governing authority prior to dumping any materials.
- .3 Departmental Representative reserves the right to obtain evidence that disposed materials have been properly disposed of.

21.0 RELICS AND ANTIQUITIES

Give immediate notice to the Departmental Representative if evidence of historical or archaeological finds are encountered during construction, and await the Departmental Representative's written instructions before proceeding with the Work in this area.

22.0 EASEMENTS

This project is located in the National Park. There will be less temporary workspace due to trees on both sides of the gravel roads at certain places. The Contractor shall manage the construction with limited workspace.

23.0 EXISTING UTILITIES AND PIPELINES

- .1 The Contractor shall assume full responsibility for safeguarding all existing and relocated utility installations during the progress of the Work. While Departmental Representative has made every effort to collect and present details concerning utility installations, no responsibility will be assumed by Departmental Representative for the correctness and completeness of the information, and the Contractor shall have no claim on that account. The existence, location, elevation, and condition of existing underground utilities or pipelines is not guaranteed, and notwithstanding any other provisions in the Contract, the Contractor shall be responsible for determining the location and elevation of all sewer, water and gas mains or lines, electric light, power or telephone conduits, or other structures or utilities or pipelines, by non-destructive means acceptable to the Departmental Representative.
- .2 There will be no separate payment made for all incidental work related to utility or pipeline coordination or temporary protection or protection required during the course of the contract (including warranty period) or repair of existing services damaged in the course of the Works.

24.0 DRAINAGE

- .1 Keep all portions of the Work properly drained during the construction and until completion.
- .2 The Contractor will be held responsible for all damage, directly resultant from his operations, which may be caused by or which may result from water backing up or overflowing through, from or along any part of the work.

- .3 Keep all drainage channels and culverts free of silt, sand, debris and gravel and remove such deposits as required by Departmental Representative or any other Authority having jurisdiction.

25.0 FINAL CLEAN-UP

- .1 At the completion of the construction work, all areas on which work has been done shall be left in a neat and presentable condition.
- .2 All culverts and drainage ditches which have been blocked as a result of the work shall be repaired or restored to their original condition or better.
- .3 The Contractor, at his own expense, shall dispose of all surplus excavated material, trees, brush, rock, boulders and debris, including those less than 0.5 m<sup>3</sup> in volume, at a location off site.
- .4 Inspect all valve boxes, hydrants, manholes and catch basin tops, and permanent survey markers with Departmental Representative, and operate all valves to ensure that no damage has occurred during the construction and clean-up operations.

END OF SECTION

1.0 GENERAL

1.1 General Requirements

- .1 Submittals shall conform to the provisions of this section to demonstrate that the specified products, materials, and equipment are furnished and installed in accordance with design intent as expressed in the Contract Documents.
- .2 Individual submittals are required as detailed in other sections of the specifications.
- .3 Until submissions are reviewed, work involving relevant products, materials, and equipment may not proceed.
- .4 At the time of submission the Contractor shall notify Departmental Representative in writing of any deviations in the shop drawings, product data, or samples from the requirements of the Contract Documents.
- .5 Departmental Representative will review and return submittals in accordance with a schedule agreed upon or otherwise with reasonable promptness.
- .6 Departmental Representative's review shall be for conformity to the design concept and for general arrangement only and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the Contract Documents. A specific deviation on the shop drawings from the design concept requested by the Contractor may be approved or rejected in writing by Departmental Representative.

1.2 Identification of Submittals

- .1 Identify each submittal and resubmittal by showing at least the following information:
  - .1 Name, address and telephone number of the submitter, and a name of an individual for contact.
  - .2 Drawing number and specification number to which the submittal applies.
  - .3 Whether an original submittal or resubmittal.
  - .4 Confirmation of prior review by the Contractor.
  - .5 Date of submittal or resubmittal.
  - .6 Authorized signature of the Submitter.

1.3 Coordination of Submittals

- .1 Prior to submittal for Departmental Representative's review, coordinate all material:
  - .1 Determine and verify field dimensions and conditions and conformance with specifications, including Material, catalogue numbers, type numbers and similar data.
  - .2 Coordinate requirements between trades.
  - .3 Coordinate with requirements under laws, regulations, etc.
  - .4 Secure required approvals of public agencies, inspection agencies and standards agencies and show proof of approvals acquisition
  - .5 Indicate any deviations from the intent of design as expressed in the Contract Documents and request specific review of these deviations.

1.4 Review of Submittals

.1 Departmental Representative's review shall be for conformity to the design concept and for general arrangement only and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the Contract Documents. A specific deviation on the shop drawings from the design concept requested by the Contractor may be approved or rejected in writing by Departmental Representative.

.2 Each reviewed shop drawing will be stamped by Departmental Representative with the following form of stamp, or similar:

|                      |     |
|----------------------|-----|
| REVIEWED             | ( ) |
| REVIEWED AS MODIFIED | ( ) |
| REVISE AND RESUBMIT  | ( ) |
| NOT REVIEWED         | ( ) |

This review by Departmental Representative is for the sole purpose of ascertaining conformance with the general design concept. This review shall not constitute approval of the detail design inherent in the submittal, responsibility for which shall remain with the Contractor submitting same. Review by Departmental Representative shall not relieve the Contractor of responsibility for errors or omissions in the submittal or of responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction, for installation, and for coordination of the work of all sub-trades.

.3 The Contractor shall make any changes in shop drawings which Departmental Representative may require, consistent with the Contract Documents, and resubmit unless otherwise directed by Departmental Representative. When resubmitting, the Contractor shall notify Departmental Representative in writing of any revisions made by the Contractor other than those requested by Departmental Representative, in Departmental Representative's previous review.

END OF SECTION

1.0 GENERAL

1.1 MEASUREMENT PROCEDURES

- .1 This work shall be incidental to contract and will not be measured for payment.

1.2 REFERENCES

- .1 The Contractor shall provide traffic control in accordance with the current edition of:  
.1 Alberta Transportation Standard - Traffic Accommodation in Work Zones latest edition.

1.3 GENERAL

- .1 Emergency Park Contact: In the event of emergency call Mark McIntyre (780) 721-1193.  
.2 The Contractor shall develop and implement a Traffic Accommodation Strategy (TAS) prior to commencement of the Work in accordance with the requirements of the current edition of the Alberta Transportation Standard – Traffic Accommodation in Work Zones, except where specified otherwise.  
.3 The Contractor shall submit the TAS to the Departmental Representative for review within five days of Contract award and prior to commencement of any work. The Departmental Representative shall provide review comments to the Contractor within two days. If revisions to the TAS are requested, the Contractor shall resubmit the TAS to the Departmental Representative within two days of receipt of comments.  
.4 During execution of the Work, the Contractor will be required to update the TAS if dictated by changes in site or working conditions, or if requested by the Departmental Representative.  
.5 The Contractor shall design, supply, erect, move and maintain all traffic control devices, signs, temporary pavement markings, other safety measures and provide staff to ensure safe passage of all traffic from commencement of site work to date of acceptance by the Departmental Representative.  
.6 The Contractor shall coordinate traffic management procedures with other Contractors working in the area.

1.4 PROTECTION OF PUBLIC TRAFFIC

- .1 Comply with requirements of Acts, Regulations and By Laws in force for regulation of traffic or use of roadways upon or over which it is necessary to carry out Work or haul materials or equipment.  
.2 When working on existing travelled way:  
.1 Place equipment in a position presenting a minimum of interference and hazard to traveling public.  
.2 Keep equipment units as close together as working conditions permit and preferably on same side of travelled way.  
.3 Do not leave equipment on travelled way overnight.  
.4 Do not close any lanes of road without approval of Departmental Representative.  
.5 Keep travelled way clean and of sufficient width to accommodate one 3.0 m wide lane for traffic.

- .3 The traffic control measures will be monitored by the Departmental Representative, who may require modifications of these measures from time to time to achieve satisfactory traffic flow, safety of traveling public and coordination with adjacent contracts.

1.5 INFORMATIONAL AND WARNING DEVICES

- .1 Provide and maintain signs, flashing warning lights and other devices required to indicate construction activities or other temporary and unusual conditions resulting from Project Work which requires road user response.
- .2 Supply and erect signs, delineators, barricades and miscellaneous warning devices as specified in the current edition of the Alberta Transportation Standard – Traffic Accommodation in Work Zones.
- .3 Place signs and other devices in locations recommended in the current edition of the Alberta Transportation Standard – Traffic Accommodation in Work Zones.
- .4 Continually maintain traffic control devices in use:
  - .1 Check signs daily for legibility, damage, suitability and location. Clean, repair or replace to ensure clarity and reflectance.
  - .2 Remove or cover signs which do not apply to existing conditions.

1.6 CONTROL OF PUBLIC TRAFFIC

- .1 Provide competent flag personnel, trained in accordance with, and properly equipped as specified in the current edition of the Alberta Transportation Standard – Traffic Accommodation in Work Zones, for situations as follows:
  - .1 When public traffic is required to pass working vehicles or equipment that block all or part of travelled roadway.
  - .2 When it is necessary to institute one-way traffic system through construction area or other blockage where traffic volumes are heavy, approach speeds are high and traffic signal system is not in use.
  - .3 Where temporary protection is required while other traffic control devices are being erected or taken down.
  - .4 For emergency protection when other traffic control devices are not readily available.
  - .5 In situations where complete protection for workers, working equipment and public traffic is not provided by other traffic control devices.

2.0 Products  
2.1 Not Used

- .1 Not Used.

3.0 Execution

3.1 Not Used

- .1 Not Used.

END OF SECTION

1.0 General

1.1 References

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2 Province of Alberta
  - .1 Occupational Health and Safety Act, R.S.A. - Updated 2013.

1.2 Action and Informational Submittals

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
  - .1 Results of site specific safety hazard assessment.
  - .2 Results of safety and health risk or hazard analysis for site tasks and operation.
- .3 Submit 1 copy of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative weekly, including minutes of safety toolbox meetings.
- .4 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .5 Submit copies of incident and accident reports.
- .6 Submit WHMIS MSDS - Material Safety Data Sheets to Departmental Representative.
- .7 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 3 days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within 3 days after receipt of comments from Departmental Representative.
- .8 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .9 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.
- .10 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.
  - .1 Emergency Park Contact: In the event of emergency call Mark McIntyre (780) 721-1193.

1.3 Safety Assessment

- .1 Perform site specific safety hazard assessment related to project.

1.4 Meetings

- .1 Schedule and administer Health and Safety meeting with Departmental Representative prior to commencement of Work.

1.5 Regulatory Requirements

- .1 Do Work in accordance with Section 01 41 00 - Regulatory Requirements.

## 1.6 General Requirements

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.
- .2 Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

## 1.7 Responsibility

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.

## 1.8 Compliance Requirements

- .1 Comply with Occupational Health and Safety Act, General Safety Regulation, Alberta Reg.

## 1.9 Unforeseen Hazards

- .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

## 1.10 Posting Of Documents

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province having jurisdiction, and in consultation with Departmental Representative.

## 1.11 Correction Of Non-Compliance

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Departmental Representative may stop Work if non-compliance of health and safety regulations is not corrected.

## 1.12 Work Stoppage

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

## 2.0 PRODUCTS

### 2.1 Not Used

- .1 Not used.

## 3.0 EXECUTION

### 3.1 Not Used

- .1 Not used.

## END OF SECTION

Specifications

- 
- 1.0        GENERAL
- 1.1        Toxic and Hazardous Substances and Materials
- .1        Refer to General Conditions – Toxic and Hazardous Substances and Materials.
- 1.2        Fires
- .1        Fires and burning of rubbish on site is not permitted.
- 1.3        Disposal of Wastes
- .1        Do not bury rubbish and waste materials on site unless approved by Departmental Representative.
- .2        Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner onto ground or into waterways, storm or sanitary sewers.
- 1.4        Drainage
- .1        Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- .2        Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- .3        Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.
- 1.5        Site Clearing and Plant Protection
- .1        Protect grass, trees, shrubbery, plants, fences, poles and other surface structures on site and adjacent properties unless their removal is shown on the drawings or authorized by Departmental Representative.
- .2        Do not cut any trees without the written permission of Departmental Representative.
- .3        All existing grass, trees and shrubbery disturbed by the work shall be restored to equal or better condition than prior to construction. No extra payment will be provided for this work.
- .4        Minimize stripping of topsoil and vegetation.
- 1.6        Pollution Control
- .1        Maintain temporary erosion and pollution control features installed under this contract.
- .2        Control emissions from equipment and plant to local authority's emission requirements.
- .3        Cover dry materials and rubbish to prevent blowing dust and debris and install silt fences around stockpiles to prevent siltation.

- .4 Tightly seal against corrosion and rust all containers of fuel, hazardous or toxic chemicals.
- .5 Vehicle and equipment maintenance shall occur in designated areas. Contain and handle all maintenance fluids in accordance with the current National Fire Code of Departmental Representative. Spillage on the ground is prohibited.
- .6 Hoses and equipment for transfer of fuels and other hazardous fluids shall be in good condition, properly functioning with approved check valves and shall be attended by a qualified person for the duration of transfer of fuels or hazardous fluids.
- .7 Greasy and oily rags and oil waste shall be contained in approved, sealed containers. Remove from the worksite and dispose of this material in accordance with the most stringent of applicable Federal, Provincial and Municipal Regulations.
- .8 Abide by the Alberta Board of Health Regulations 572-57-5 as amended 262-61 regarding air pollution.
- .9 The use of oil for dust control is prohibited. Use only fresh water.
- .10 Comply with any Local, Provincial or Federal Noise Bylaws or Regulations.

1.7 Spillages

- .1 Report immediately to Departmental Representative any accidental spill of chemicals, liquid or dry.
- .2 Report immediately to Departmental Representative all spills of fuel whether contained in a dyke or otherwise.
- .3 Identify the spill, take all safety precautions before approaching it, determine the source of the leak, attempt to stop the flow, and contain the escaped material.
- .4 Report the spill to the appropriate environmental authority if required.

1.8 Inspection

- .1 Provide required facilities and services to assist environmental inspection of the Contractor's construction site.

1.9 Work Adjacent to Waterways

- .1 Do not fuel, lubricate or otherwise service equipment where spillage may enter waterways.
- .2 Do not operate construction equipment in waterways.
- .3 Do not use waterway bed for borrow material unless approved by Departmental Representative.
- .4 Do not dump excavated fill, waste material or debris in waterways.

2.0        PRODUCTS

.1        Not applicable.

3.0        EXECUTION

.1        Contractor to obtain and pay for any necessary permits.

END OF SECTION

1.0 GENERAL

1.1 Related Documents

- .1 Particular requirements for testing to be carried out by local testing laboratory designated by the Departmental Representative or the Departmental Representative are specified under various Sections.

1.2 Inspection and Testing of Work

- .1 Work included: From time to time during progress of the work, the Departmental Representative may require that Quality Assurance Testing be performed to determine that materials and workmanship provided for the work meet the specified requirements. This Quality Assurance work is in addition to and does not replace the Contractor's responsibility for Quality Control.
- .2 Related Work Specified Elsewhere: Requirements for testing may be described in various sections of these specifications. Where no testing requirements are described, but if Departmental Representative decides that testing is required, Departmental Representative may require testing to be performed under current pertinent standards for testing.

1.3 Independent Quality Assurance

- .1 The Departmental Representative has retained the services of an Independent Testing Laboratory or Agency to perform whatever Quality Assurance Testing is deemed necessary by the Departmental Representative to confirm the compliance of the work within the Contract Documents. The Contractor shall correct all work that does not meet the Quality Assurance Testing specifications at his own expense.

1.4 Laboratories/Agencies

- .1 The Contractor shall pay the full cost of all testing required for the approval of materials such as aggregates. The cost of such testing will not be recoverable from the Quality Assurance Cash Allowance.

1.5 Contractor Responsibility for Quality Control

- .1 It is the Contractor's responsibility to carry out whatever quality control, inspections, and testing he feels is required to ensure that the work is in conformance with the Contract Documents and its associated costs.
- .2 The Contractor cannot rely on the testing that will be carried out by the Independent Survey or Testing Agency for quality assurance by the Departmental Representative; the intention of this testing is for determination by the Departmental Representative of satisfactory completed work for Progress Payment.
- .3 All costs required to ensure Quality Control shall be borne by the Contractor.

1.6 Access to Work and Plant

- .1 Allow the Testing Agencies access to all portions of work on site and manufacturing and fabrication plants, as may be necessary to carry out their work. Cooperate to provide reasonable facilities for such access.

1.7 Procedures for Inspection and Testing

- .1 If work is designated for special tests, inspections, or approvals in the Contract Documents, or by the Departmental Representative's instructions or the laws or ordinances of the Place of the Work, give the Independent Testing Agency timely notice requesting inspection. Inspection by the Independent Testing Agency will be made promptly. Arrange for inspections by other authorities and give the Departmental Representative timely notice of the date and time.
- .2 Submit necessary samples and/or materials required for testing, as specifically requested in the Specifications. Submit with reasonable promptness and in an orderly sequence, so as to cause no delay in Work.
- .3 Provide workers and facilities to obtain and handle samples and/or materials on-site.
- .4 If defects are revealed during testing, the appointed agency will request additional testing to ascertain full degree of defects. Correct defects and irregularities as advised by the Departmental Representative. Pay costs for retesting.
- .5 The Contractor shall correct defects and irregularities and pay all costs for all additional testing.

1.8 Covered Work

- .1 If the Contractor covers or permits to be covered work that has been designated for inspections or approvals before they are made, uncover such work, have the inspections or tests satisfactorily completed, and make good such work.
- .2 The Departmental Representative may order any part of the work to be examined if such work is suspected to be not in accordance with the Contract Documents. If, upon examination, such work is found not in accordance with the Contract Documents, correct such work and pay for cost of examination and correction. If such work is found in accordance with the Contract Documents, the Departmental Representative shall pay the cost of examination and replacement.

1.9 Rejected Work

- .1 Defective work, whether the result of poor workmanship, use of defective products or damage through carelessness or other acts of omission of the Contractor, and whether incorporated in the work or not, which has been rejected by the Departmental Representative as failing to conform to the Contract Documents shall be removed promptly from the work and replaced or re-executed by the Contractor in accordance with the Contract Documents at the Contractor's expense.
- .2 Other work destroyed or damaged by such removals, replacement or re-execution shall be made good promptly at the Contractor's expense.

1.12 Reference Standards

.1 Within the test of the Specifications, reference may be made to the following standards:

|            |  |
|------------|--|
| ACI        | - American Concrete Institute                                    |
| AISC       | - American Institute of Steel Construction                       |
| ANSI       | - American National Standards Institute                          |
| ASTM       | - American Society of Testing and Materials                      |
| AWWA       | - American Water Works Association                               |
| CAN        | - National Standard of Canada                                    |
| CEC        | - Canadian Electric Code (published by CSA)                      |
| CGA        | - Canadian Gas Association                                       |
| CGSB       | - Canadian Government Specification                              |
| Board CISC | - Canadian Institute of Steel Construction                       |
| CLA        | - Canadian Lumberman's Association                               |
| CPCA       | - Canadian Painting Contractors Association                      |
| CPCI       | - Canadian Prestressed Concrete Institute                        |
| CRCA       | - Canadian Roofing Contractors Association                       |
| CSA        | - Canadian Standards Association                                 |
| DIN        | - Deutsches Institut Normung                                     |
| EEMAC      | - Electrical and Electronic Manufacturer's Association of Canada |
| EIB        | - Electrical Inspection Branch                                   |
| FMEC       | - Factory Manual Engineering Corporation                         |
| IEEE       | - Institute of Electrical and Electronic Engineers               |
| IPCEA      | - Insulated Power Cable Engineers Association                    |
| NAAMM      | - National Association of Architectural Metal Manufacturers      |
| NACE       | - National Association of Corrosion Engineers                    |
| NBC        | - National Building Code   |
| NEMA       | - National Electrical Manufacturers Association                  |
| NFPA       | - National Fire Protection Association                           |
| NWTI       | - National Wood Tank Institute of the USA                        |
| TTMAC      | - Terrazzo, Tile and Marble Association of Canada                |
| ULC        | - Underwriters Laboratories of Canada                            |

Conform to the latest version of such standards available at the time of bidding, in whole or in part, as specified.

.2 If there are questions as to whether any product of system is in conformance with applicable standards, the Departmental Representative reserves the right to have such products or systems tested to prove or disprove conformance with the Contract Documents, or by the Contractor in the event of non-conformance.

2.0 PRODUCTS

.1 Not Applicable.

3.0 EXECUTION

.1 Not Applicable.

END OF SECTION

Specifications

- 
- 1.0        GENERAL
- 1.1        Requirements Included
- .1        Final cleaning.
- .2        Document submission.
- 1.2        Final Cleaning
- .1        In preparation for partial or final acceptance of the project perform final cleaning.
- .2        Remove debris and surplus materials from site.
- .3        Inspect valve boxes, manholes and hydrants to check for debris and proper operation.
- 1.3        Record Drawings
- .1        Contractor shall have two sets of clean white prints for recording and maintaining record drawing purposes.
- .2        Identify drawings as "Project Record Copy".
- .3        Maintain record drawings in new condition.
- .4        Make record drawings available for inspection on-site by Departmental Representative.
- .5        Record neatly and accurately the locations of all asphalt repairs, cold milling and crack repairs, pavement markings , as well as deviations from Contract Documents.
- .6        Mark changes in red.
- .7        Record following information on one set of prints:
- .1        Horizontal and vertical location of underground utilities and appurtenances, if any, referenced to permanent surface improvement.
- .2        Field changes of dimension and detail.
- .3        Changes made by Change Order or field direction.
- .8        At completion of project and prior to final inspection, neatly transfer notations to second set of prints and submit both sets of record drawings to Departmental Representative.
- .9        Provide as-built survey of all installed Manhole centers, Manhole rims, pipe inverts, spot repair extents, water valves, yard hydrants, water main vertical and horizontal bends, water and sanitary services at the main and at property line
- 2.0        PRODUCTS
- .1        Not used.

3.0        EXECUTION

.1        Not used.

END OF SECTION

**DIVISION 32**

## 1.0 GENERAL

- .1 The purpose of crack sealing is to prolong the life of existing pavements by preventing moisture from penetrating the roadway structure, and by preventing the spalling of material from the edges of the cracks.
- .2 The Work shall consist of sealing cracks with crack sealant between the limits shown on the Drawings or as directed by the Departmental Representative.

## 2.0 REFERENCE

1. The Contractor shall complete the work in accordance to:  
*Alberta Transportation's "Standard Specifications for Highway Construction", Edition 15, 2013 and the "General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction", Edition 15, 2013. (included as an annex)*

## 3.0 EXECUTION

### 3.1 Materials

- .1 The Contractor shall supply all materials necessary for the Work including the crack sealant.
- .2 The Contractor shall supply EC-101 or HC-200 crack sealant in accordance with Specification 5.7, Supply of Asphalt. Products not listed as proven in the Alberta Transportation Products List require Departmental Representative approval prior to use.
- .3 The Contractor shall provide the Departmental Representative with the following information 5 days prior to commencing the Work:
  - .1 Name and mailing address of crack sealant Supplier and Manufacturer
  - .2 Name of crack sealant product to be supplied
  - .3 Written confirmation from the Manufacturer that the crack sealant to be supplied meets all specified requirements along with test results that demonstrate that the product meets all specified requirements.
- .4 The Contractor shall verify that all crack sealant delivered and used in the Work is the type and grade ordered.
- .5 The Contractor shall supply the Departmental Representative with the Manufacturer's quality control test results (as identified in Table 1) for each batch of crack sealant. (TLT Refers to: Alberta Transportation Laboratory Test). These test results shall be supplied at the time of delivery of each batch of crack sealant to the Work.

TABLE 1

| Product   | Quality Control Testing Requirements                       |            |
|-----------|--|------------|
| Cold Pour | a) Uniformity  | TLT-226    |
|           | b) Viscosity   | TLT-227    |
|           | c) Solids Content<br>(residue by evaporation, procedure A) | ASTM D244  |
|           | d) Rate of Curing (24 hour)                                | TLT-230    |
| Hot Pour  | a) Softening Point   | ASTM D36   |
|           | b) Penetration @ 25°C                                      | ASTM D5    |
|           | c) Viscosity   | ASTM D2170 |

- .6 When necessary, the Contractor shall supply one of the following blotting agents:
  - .1 screened sand with a maximum topsize of 2 mm
  - .2 cement
  - .3 flyash
- .7 The use of other products shall be subject to the approval of the Departmental Representative.

3.2 Equipment

- .1 The Contractor shall supply all equipment necessary for completion of the Work including but not limited to the melting kettle (Hot Pour only), crack sealing equipment and all related equipment such as fork lifts, hoists, and transport vehicles.
- .2 The melting kettle shall consist of a double jacketed oil bath kettle with continuous agitation equipment to prevent localized heating. The kettle must be equipped with two thermometers to show the temperature of the crack sealant and the temperature of the heat transfer oil.
- .3 Application equipment must be capable of regulating the application of crack sealant directly to the road.

3.3 Crack Sealing

- .1 All work shall be performed during daylight hours only. No work shall be performed if the visibility is less than 700 m. No Work shall be performed during rain or snow or when the pavement surface or cracks are wet. **The maximum work area shall be 3 km in length.**
- .2 Crack sealant shall not be applied when the atmospheric temperature at the construction site is below 0° Celsius.
- .3 All cracks within the entire width of the pavement surface, which are 5 mm and greater in width shall be sealed.

- .4 Prior to the application of crack sealant, the Contractor shall ensure that the entire road surface, including paved approaches adjacent to the cracks is clean and swept of all debris.
- .5 Hot pour crack sealant shall be heated to the temperature specified by the Manufacturer. Overheating will not be permitted.
- .6 Crack sealant shall be applied within the Manufacturer's specified temperature range.
- .7 Crack sealant shall be applied so that the crack is flush filled immediately following application and a thin overband of sealant extends approximately 25 mm beyond the edges of the crack.
- .8 Excess crack sealant shall be removed from the pavement surface immediately following application. Removal shall involve the use of a squeegee, starting from the centerline and proceeding to the shoulder.
- .9 Traffic shall be kept off sealed cracks until the crack sealant will not track under the action of traffic. At locations such as intersections where this is not practical, the Contractor shall prevent tracking by applying a blotting agent to the crack sealant.
- .10 Fuel, asphalt and any other spills shall be cleaned up to the satisfaction of the Departmental Representative at the Contractor's expense.
- .11 Work that does not meet the foregoing requirements shall be repaired or reconstructed to the satisfaction of the Departmental Representative and at the Contractor's expense.

### 3.4 Acceptance Sampling and Testing

#### 2.4.1 Acceptance Sampling and Testing of Crack Sealant

- .1 All crack sealant supplied shall be subject to inspection, sampling and testing by the Departmental Representative and the Contractor shall cooperate in the inspection and sampling process. The Contractor shall obtain and submit to the Departmental Representative two representative samples of crack sealant material in accordance with ATT-42 for each Lot of production.
- .2 A Lot is defined as a day's production of at least 5 km of roadway. If a day's production is less than 5 km, it shall be added to the production of subsequent days until a minimum of 5 km is obtained for the Lot. If the last day's production is less than 5 km, it shall be added to the previous Lot.
- .3 The Departmental Representative will determine the frequency of testing of sealant. Cold pour materials that do not conform to the Specification limits shall result in a unit price adjustment for each km of roadway in the Lot in accordance with Table 2.

#### 2.4.2 Appeal of Acceptance Test Results and Appeal Testing

The following procedures will apply for an appeal:

- .1 Appeals will only be considered if the Contractor can demonstrate to the satisfaction of the Departmental Representative that there is sufficient cause to support the appeal.
- .2 Acceptance test results for any penalized Lot may be appealed only once.
- .3 The Contractor shall serve notice of an appeal to the Departmental Representative, in writing, within 24 hours of receipt of the test results.
- .4 For an appeal of the materials characteristics testing, the Departmental Representative will conduct a retest on the duplicate material sample for the Lot.
- .5 The results of the original measurements will be averaged with the results of the new tests and the new averages shall form the basis for payment.

## 1.0 GENERAL

### 1.1 References

- .1 CAN/CGSB 1.5 M99, Low Flash Petroleum Spirits Thinner.
- .2 CGSB1 GP 12C 83, Standard Paint Colours.
- .3 CGSB1 GP 71 83, Method, of Testing Paints and Pigments.
- .4 CAN/CGSB 1.74-01, Alkyd Traffic Paint.
- .5 U.S. FED-STD-595B, 1989 - Colours Used in Government Procurement.
- .6 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
  - .1 Material Safety Data Sheets (MSDS).

### 1.2 Action and Informational Submittals

- .1 Submit in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Product Data:
  - .1 Submit manufacturer's printed product literature and data sheets for pavement markings and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Samples:
  - .1 Submit to Departmental Representative following material sample quantities at least seven days prior to commencing work.
    - .1 Two 1 L samples of each type of paint.
    - .2 One 1 kg sample of glass beads.
  - .2 Mark samples with name of project and its location, paint manufacturer's name and address, name of paint, specification number and formulation number and batch number.

### 1.3 Delivery, Storage and Handling

- .1 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .2 Storage and Handling Requirements:
  - .1 Store materials off ground, indoors, in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
  - .2 Replace defective or damaged materials with new.

## 2.0 PRODUCTS

### 2.1 Materials

- .1 Paint and Markings:
  - .1 To CGSB 1-GP-74M-79, Paint, Traffic, Alkyd.
  - .2 Colour: to CGSB 1-GP-12C-68, yellow 505-308, white 513-301.
- .2 Thinner: to CAN/CGSB-1.5.
- .3 Glass reflective beads: type suitable for application to wet paint surface for light reflectance.

## 3.0 EXECUTION

### 3.1 Examination

- .1 Verification of Conditions: verify conditions of substrates and surfaces to receive pavement markings previously installed under other Sections or Contracts are acceptable for product installation in accordance with MPI instructions prior to pavement markings installation.
  - .1 Visually inspect substrate in presence of Departmental Representative.

- .2 Pavement surface: dry, free from water, frost, ice, dust, oil, grease and other deleterious materials.
- .3 Proceed with Work only after unacceptable conditions have been rectified.

### 3.2 Equipment Requirements

- .1 Paint applicator: approved pressure type mobile with positive shut-off distributor capable of applying paint in single, double and dashed lines and capable of applying marking components uniformly, at rates specified, and to dimensions as indicated.
- .2 Distributor: capable of applying reflective glass beads as overlay on freshly applied paint.

### 3.3 Application

- .1 Pavement markings: laid out by Contractor.
- .2 Unless otherwise approved by Departmental Representative, apply paint only when air temperature is above 10 degrees C, wind speed is less than 60 km/h and no rain is forecast within next 4 hours.
- .3 Apply traffic paint evenly at rate of 3 m<sup>2</sup>/L.
- .4 Do not thin paint unless approved by Departmental Representative.
- .5 Paint lines of uniform colour and density with sharp edges.
- .6 Thoroughly clean distributor tank before refilling with paint of different colour.
- .7 Apply glass beads at rate of 200 g/m<sup>2</sup> of painted area immediately after application of paint.

### 3.4 Tolerance

- .1 Paint markings: within plus or minus 12 mm of dimensions indicated.
- .2 Remove incorrect markings to the satisfaction of the Departmental Representative.

### 3.5 Cleaning

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 – Cleaning.
  - .1 Leave Work area clean at end of each day.
  - .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 – Cleaning.

### 3.6 Protection

- .1 Protect pavement markings until dry.
- .2 Repair damage to adjacent materials caused by pavement marking application.

END OF SECTION

1.0 GENERAL

1.1 Asphalt Pavement Crack Sealing

- .1 Measurement will be made of the length of roadway, in kilometres, on which crack sealing has been performed.
- .2 A roadway will include all travel lanes, shoulders, acceleration and deceleration lanes, turnouts, intersections and divided sections at the entrance gates.
- .3 Payment will be made at the unit price bid per kilometre for "Crack Sealing" subject to the unit price adjustments specified herein. This payment will be full compensation for cleaning the road surface adjacent to the cracks, supply and application of the crack sealant, quality control, traffic accommodation and signing necessary to complete the Work to the satisfaction of the Departmental Representative.
- 4 The following unit price adjustments apply only to EC-101 or other approved cold pour materials and do not relieve the Contractor of the requirements to complete the Work in accordance with these specifications.

Table 2  
 LOT UNIT PRICE ADJUSTMENTS

| Requirement  | Unit Price Adjustment |
|--------------|-----------------------|
| Solids (%)   |                       |
| 59           | No Adjustment         |
| 58.9 to 54.0 | 5 %                   |
| 53.9 to 49.0 | 10 %                  |
| < 49         | 15 %                  |

The unit price applicable to each Lot quantity of "Crack Sealing" shall be as follows:  $Lk = BP - (BP * AF)$

Where: Lk is the Lot Unit Price per kilometre;  
 BP is the Contract Bid Price per kilometre; and  
 AF is the Adjustment Factor for the Crack Sealant.

1.2 Pavement Markings

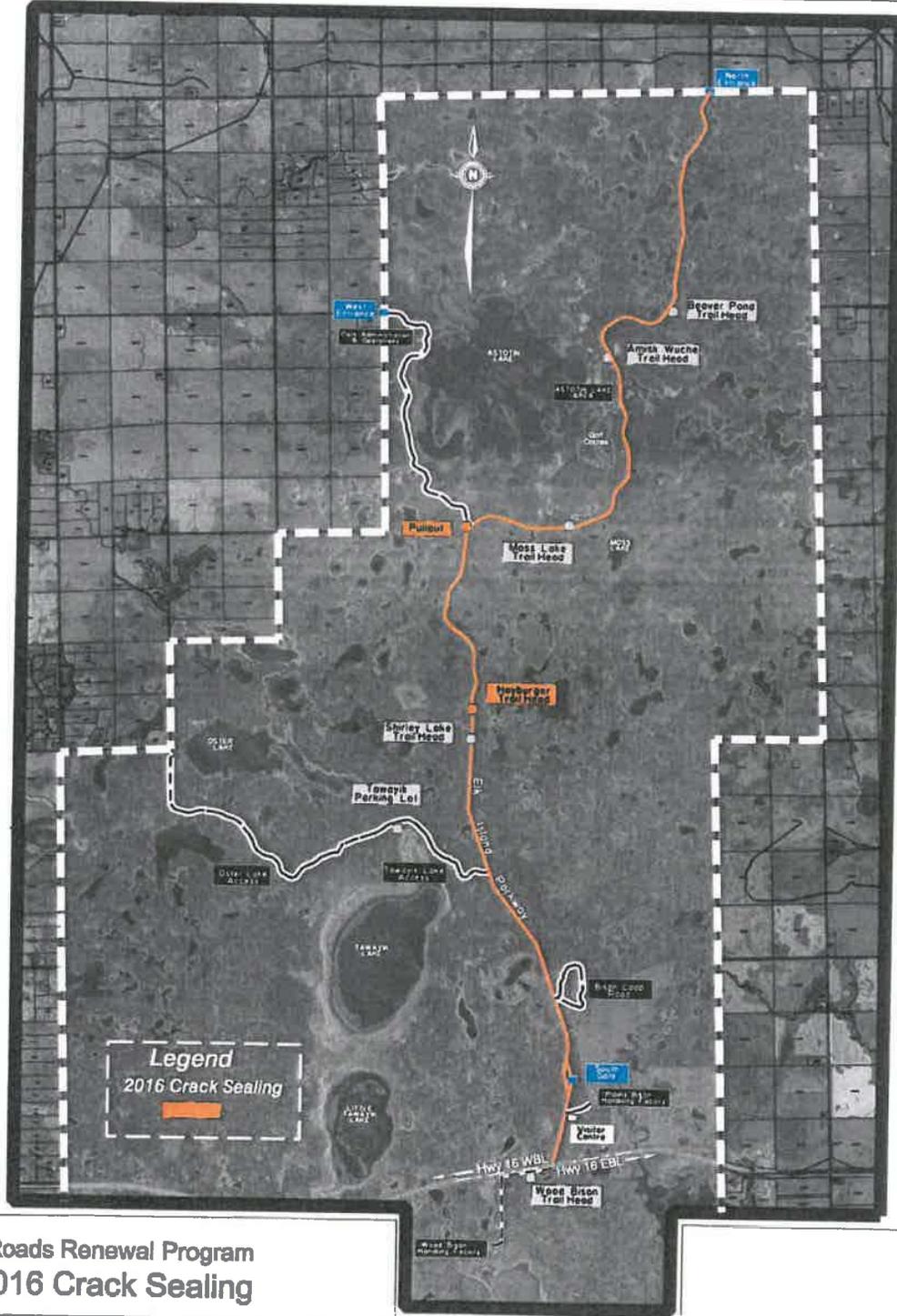
- .1 Measurement will be made of the length of roadway, in kilometres, on which the line painting for the yellow centerline and white shoulder line has been completed.
- .2 A roadway will include all travel lanes, shoulders, acceleration and deceleration lanes, turnouts, intersections and divided sections at the entrance gates.
- .3 Payment will be made at the unit price bid per kilometre for "Pavement Markings". This payment will be full compensation for cleaning the road surface, supply and application

Specifications

of the paint, quality control, traffic accommodation and signing necessary to complete the Work to the satisfaction of the Departmental Representative.

1.2 Applications for Progress Payment

- .1 Date applications for payment last day of agreed monthly payment period and ensure amount claimed is for value, proportionate to amount of Contract, of Work performed and Products delivered to Place of Work at that date.



Project title

Roads Renewal Program  
2016 Crack Sealing

Drawing title

Location Plan  
ELK ISLAND PARKWAY

Drawn by  
**O.S.**

FWGSC Project Manager

Designed by

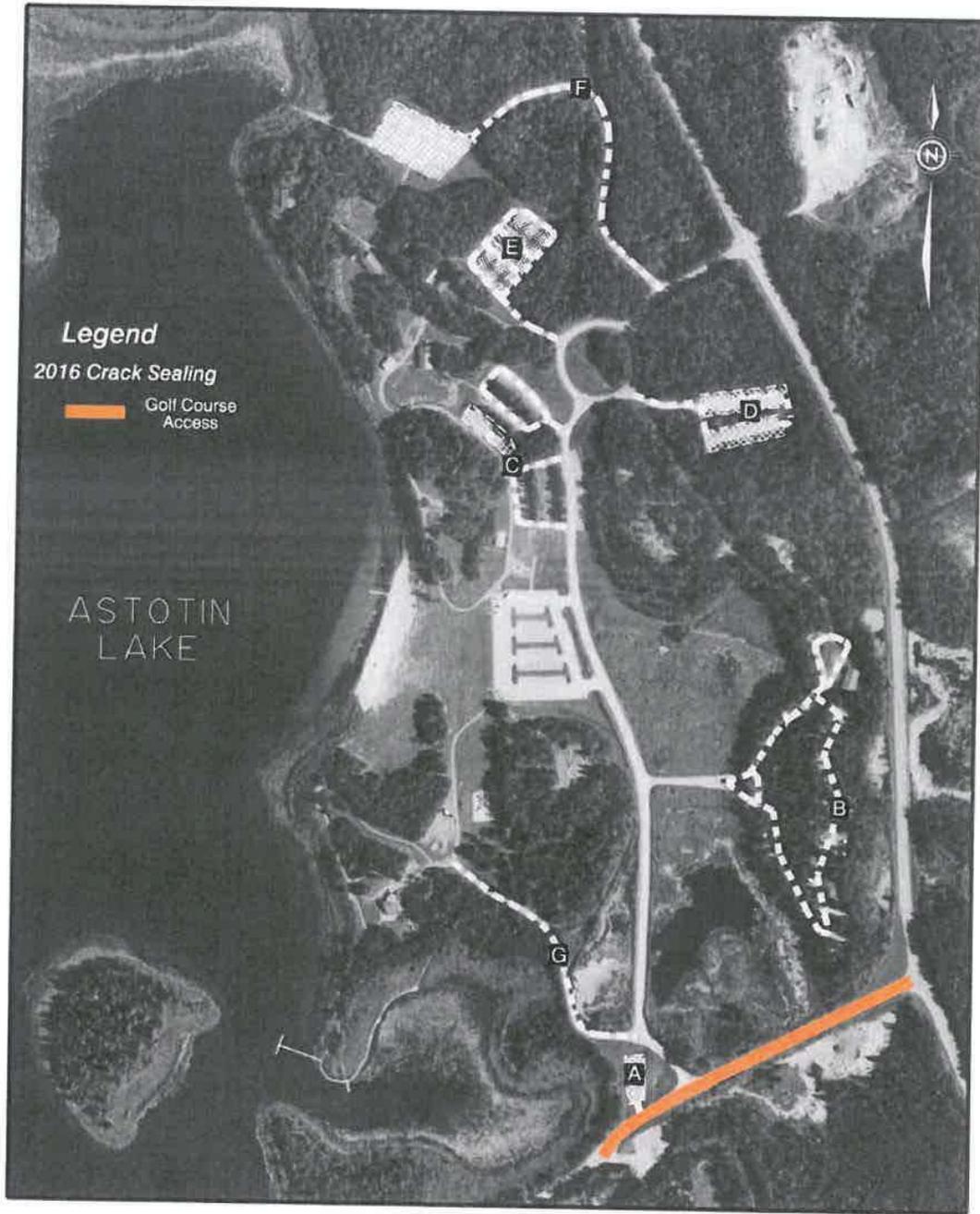
Project no. **R.075 711.001**

Approved by  
**G.H.**

Date  
**December, 2015**

Sheet  
**C1**

Revision



Project title

Roads Renewal Program  
2016 Crack Sealing

Drawing title

Location Plan  
**ASTOTIN LAKE AREA**  
Golf Course Access

Drawn by

O.S.

PWGSC Project Manager

Designed by

Project no. R.075 711.001

Approved by

G.H.

Date  
December, 2015

Sheet  
C2

Revision

**EINP ROADS RENEWAL PROJECT**  
**ADDENDUM No. 1**

---

**ADDITIONS**

- 1 . Include the attached “**Environmental Mitigation Measures**” (3 pages) as part of the Tender package.
- 

**QUESTIONS and ANSWERS from Bidders’ Site Meeting**

- Q<sub>1</sub>**    How will the payment for the parking areas be paid?  
**A<sub>1</sub>**    The area will converted to an equivalent linear length based on an 8.5m width.
- Q<sub>2</sub>**    What days and hours are allowed for work on this contract?  
**A<sub>2</sub>**    Please refer to Article 16.1 in the General Requirements.
- 

**END OF ADDENDUM No. 1**  
(Total 4 pages)



## **Environmental Mitigation Measures**

When upgrades to infrastructure are planned opportunities to decrease the environmental impacts of long term operation should be considered in the engineering design. Some examples are: directing runoff into vegetated areas rather than directly into surface waters to decrease pollution in surface waters, increasing the span length of bridges during replacements to allow for terrestrial wildlife passage underneath and converting smaller culverts to larger culverts or clear span bridges to allow for better fish passage and less restricted flows.

### **1. General Activities Mitigations Module**

Construction activities involve the use of laydown/staging areas, equipment operations, storage and handling of hazardous materials. Potential adverse effects include: destruction of vegetation, erosion and sedimentation, constriction for wildlife movements and introduction/spread of non-native vegetation.

#### **Work Site Conditions/Staging/Laydown**

- 1.1. All employees must attend a briefing with an Impact Assessment Officer (IAO) or Surveillance Officer (SO) before beginning work at the site review and explain the mitigations that are conditions of the project approvals.
- 1.2. Minimize vegetation-clearing activities and ground disturbance by staging on existing hardened areas wherever possible.
- 1.3. Avoid or terminate activities on site that attract or disturb wildlife. Vacate the area and stay away from the immediate location if wildlife display aggressive behaviour or persistent intrusion.
- 1.4. Control materials that might attract wildlife (e.g. petroleum products, human food and garbage).
- 1.5. Notify the SO immediately about dens, litters, nests, carcasses (road kills), wildlife activity or encounters on or around the site or crew accommodation. Other wildlife-related encounters are to be reported to SO within 24 hours.
- 1.6. Delineate the work zone; clearly mark the limits to active construction and the access and egress locations.

#### **Equipment Operations**

- 1.7. Equipment movements and workers' private vehicles shall be restricted to the 'footprint' of the construction area.
- 1.8. Ensure machinery arrives on site in a clean condition and is maintained free of fluid leaks, invasive species, noxious weeds and soils from off-site.

#### **Fuel Storage and Refueling/Emergency Plans**

- 1.9. A Spill Response Plan will be prepared and detail the containment and storage, security, handling, use and disposal of empty containers, surplus product or waste generated in the application of these products in accordance with all applicable federal and provincial legislation. The Plan shall include a list of products and materials to be used or brought



to the construction site that are considered or defined as hazardous or toxic to the environment. Such products include, but are not limited to, waterproofing agents, grout, cement, concrete finishing agents, hot poured rubber membrane materials, asphalt cement and sand blasting agents.

- 1.10. Spill kits shall be provided at re-fuelling, lubrication, and repair locations that are capable of dealing with 110% of the largest potential spill and shall be maintained in good working order. Site staff shall be informed of the location of the spill response kit(s) and be trained in its use.
- 1.11. If potentially hazardous materials (e.g. cement-based products, sealants or paints) are used on site ensure raw material, mixed compounds and wash water are not released to any watercourse or soils. Measures such as collection/drip trays and berms lined with occlusive material such as plastic and a layer of sand, and double-lined fuel tanks can prevent spills into the environment.
- 1.12. Hazardous or toxic products shall be stored no closer than 100 metres from streams, wetlands, water bodies or waterways.
- 1.13. Timely and effective action shall be taken to stop, contain and clean-up all spills as long as the site is safe to enter. The SO shall be notified immediately of any spill. In the event of a major spill, all other work shall be stopped and all personnel devoted to spill containment and clean-up.
- 1.14. The costs involved in a spill incident (the control, clean up, disposal of contaminants and site remediation to pre-spill conditions), shall be the responsibility of the proponent. The site will be inspected to ensure completion to the expected standard and to the satisfaction of Parks Canada.

## **Site Clean Up/Waste Disposal**

- 1.15. Clean tools and equipment off-site to prevent the release of wash water that may contain deleterious substances.
- 1.16. Where possible, sweep up loose material or debris. Any material thought to pose a risk of contamination to soils, surface water or groundwater should be disposed of appropriately off-site.
- 1.17. Construction, trade, hazardous waste and domestic waste materials shall not be burned, buried or discarded at the construction site or elsewhere in Parks Canada protected heritage places. These wastes shall be contained and removed in a timely and approved manner and disposed at an appropriate waste landfill site located outside the Parks Canada protected heritage place. Construction waste storage containers, shall be emptied when 90% full. Waste containers will have lids, be wildlife proof if there attractants and waste loads shall be covered while being transported.

## **2. Paving, Resurfacing, Grading Mitigations Module**

Highway surface management activities are undertaken to ensure public safety on Parks Canada Agency highways by maintaining clean, level, and unbroken road surface conditions through activities such as pavement cleaning, patching, application of surface treatments, and pavement crack sealing.



## **Timing of Works**

- 2.1. Works are preferably undertaken during periods of dry weather (e.g., summer) as this allows easier control of contaminated runoff and sediment.
- 2.2. If the work schedule requires working in the rain, the area of work must be isolated and appropriate sediment controls must be installed to prevent the release of sediment-laden water or any other deleterious substances into surface waters, particularly for surface repair works requiring the application of patching and sealing compounds, tar, asphalt, and chemical surface sealants.

## **Paving and Resurfacing**

- 2.3. Minimize changes to the surface that could affect infiltration and runoff characteristics and maintain effective surface drainage to limit direct runoff into surface waters.
- 2.4. Minimize application of seal coats in wet conditions. Attempt to apply only to dry surfaces and not prior to (within 24 hrs.) or during rainfall. If unforeseen rain arrives ensure runoff from recently seal coated surfaces are prevented from entering surface waters.

## **Pavement Marking and Barrier and Guardrail Reinstatement**

- 2.5. Minimize changes to the surface that could affect infiltration and runoff characteristics and maintain effective surface drainage to limit direct runoff into surface water Pavement marking shall be undertaken pursuant to standard methods applied in National Parks for control of paint products, both in transport and handling. The Contractor shall present a description of methods to be employed for transporting and controlling paint and hazardous products, application of paint, cleaning of equipment, containment and disposal of waste paint and cleaning products, etc. the satisfaction of the Parks Canada Representative.

**EINP ROADS RENEWAL PROJECT**  
**ADDENDUM No. 2**

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**ADDITIONS**

- 1 . Include Specification 01 74 11 "Cleaning" with the Tender Package.
  - 2 . In Section 01 00 10 "General Requirements", 2.0 Scope of Work, item .1 Description - *Change the second sentence to "The Work will also include the painting of yellow centerline and white shoulder lines on the roadways after the completion of crack repairs."*
- 

**QUESTIONS and ANSWERS from Bidders' Site Meeting**

**Q<sub>1</sub>**     What degree of cleaning of the road is required?

**A<sub>1</sub>**     The entire road surface shall be power broomed prior to the crack sealing operations to the satisfaction of the Departmental Representative.

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**END OF ADDENDUM No. 2**  
(Total 2 pages)

## Part 1 General

### 1.1 MEASUREMENT PROCEDURES

- .1 This work shall be incidental to contract and will not be measured for payment.

### 1.2 PROJECT CLEANLINESS

- .1 Entire road surface to be power broomed prior to crack sealing.
- .2 Maintain Work in tidy condition, free from accumulation of waste products and debris.
- .3 Remove waste materials from site at daily regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site.
- .4 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .5 Indicate type of container, i.e. dump container if service is available. Provide on-site containers for collection of waste materials and debris.
- .6 Provide and use marked separate bins for recycling.

### 1.3 FINAL CLEANING

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 Remove waste products and debris, and leave Work clean and suitable for occupancy.
- .3 Prior to final review remove surplus products, tools, construction machinery and equipment.
- .4 Remove dirt and other disfiguration from exterior surfaces.

### 1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling.

## Part 2 Products

### 2.1 NOT USED

## Part 3 Execution

### 3.1 NOT USED

END OF SECTION