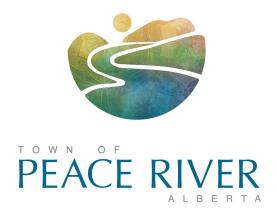
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l	Addendam	NO.	Date.	

CONTRACT NUMBER: 2131-00611-09

# CONTRACT AND SPECIFICATIONS TOWN OF PEACE RIVER



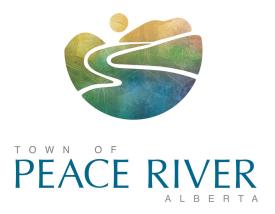
For

## **ASPHALT OVERLAY & SIDEWALK REPLACEMENT PROGRAM 2023**

91st Street and Misc. Asphalt / Concrete Sites

**Cold Milling, Base Course, Asphalt Concrete Pavement and Concrete Work** 

# CONTRACT AND SPECIFICATIONS TOWN OF PEACE RIVER



For

#### **ASPHALT OVERLAY & SIDEWALK REPLACEMENT PROGRAM 2023**

91st Street and Misc. Asphalt / Concrete Sites

**Cold Milling, Base Course, Asphalt Concrete Pavement and Concrete Work** 

Prepared by: McElhanney Ltd. Project #: 2131-00648-09

**July 2023** 

## **NOTE TO BIDDERS**

For information regarding this project, you may contact the Town of Peace River, Department of Engineering & Infrastructure at 780-624-2574 or their representing Consultant:

Josh Warkentin McElhanney Ltd. 9410 – 100<sup>th</sup> Street Peace River, AB T8S 1H7 Phone: 780-618-6727

Email: jwarkentin@mcelhanney.com

Tenders must be received no later than **2:00 p.m.** local time on **August 15, 2023** at the Tender Deposit (reception) Counter of the Town of Peace River office in Peace River, Alberta.

It shall be the Bidder's responsibility to confirm with the owner that its Tender has been received prior to Tender closing.

Tenders will be opened at **2:01 p.m.** local time on **August 15**, **2023** at the Town of Peace River office. Public may be present.

Email changes to the unit price schedule will be accepted. Electronic Submissions will be permitted but must be received one hour before the tender close time. Bidders must submit all electronic submissions prior to 1:00 p.m. local time on **August 15, 2023**. Changes to the Tender can be submitted via email to <a href="tenders@peaceriver.ca">tenders@peaceriver.ca</a> with the subject line "ATTENTION: the Town of Peace River (Project Number: CB23B), CONTRACT OPENING" and include a copy of Form C58 found in this Tender package. To be acceptable, the form must be received no later than the time and date set for the receipt of the Tender.

The owner reserves the right to accept or reject any or all Tenders and to waive irregularities and informalities at its discretion. The owner reserves the right to accept a Tender other than the lowest Tender without stating reasons. The owner has the right to award the work to whomever it chooses, in its sole and unfettered discretion, and for whatever reasons the owner deems appropriate. By the act of submitting its bid, the Bidder agrees that any claim the Bidder may have in relation to the award of the work by the owner is limited to damages for the reasonable cost of preparing the bid and that the Bidder has no right to seek loss of anticipated profit. Without limiting the generality of the foregoing, the owner may consider any other factor besides price and capability to perform the work that it deems in its sole discretion to be relevant to its decision including but not limited to the following:

- any past experience with the Bidder, or lack thereof;
- the results of any reference check done by the owner;
- information relating to the financial state of the Bidder, however obtained

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#### **INSTRUCTIONS TO BIDDERS**

#### **INSTRUCTIONS TO BIDDERS** <u>1.</u>

#### 1.1 **CONDITIONS FOR TENDER SUBMISSIONS**

Bidders may submit Tenders at the following location only:

Town of Peace River Town of Peace River Office Reception Desk 9911 100th Street, PO Box 6600 Peace River, AB T8S 1S4 Phone: 780-624-2574

Bidders may submit Tenders only up to 2:00 p.m. local time on August 15, 2023.

Bidders must submit Tenders on the forms issued with this Tender Document.

It shall be the Bidder's responsibility to confirm with the owner that its bid has been received prior to Tender closing.

When submitting a Tender, all pages entitled "Tender Forms" and all Addenda issued by the Town of Peace River and/or McElhanney must be submitted sealed in an envelope; addressed to the Town of Peace River, Department of Engineering & Infrastructure at the above-noted address, marked "Tender for Construction (Project Number: CB23B)" with the Tender number. time and date of Tender opening clearly marked on the lower right-hand corner of the envelope.

Electronic Submissions will be permitted. To ensure proper receipt, the tender should be received one hour before the tender close time. Bidders may submit electronic submissions, Tenders only, up to 1:00 p.m. local time on August 15, 2023. Electronic Tenders can be submitted via email to tenders@peaceriver.ca.

A Bidder must indicate its name and address clearly in the upper left-hand corner of the envelope so that the Tender submission can be identified. The pre-addressed envelope issued with the Tender documents should be used whenever possible.

#### 1.2 COMPLETING TENDER FORMS

The "Unit Price Schedule" must be completed by:

- showing the Unit Price (where applicable), and the total for each item in the "Total Bid" column; (in case of discrepancy, the unit price figure will take precedence), and
- showing the Tendered lump sum (where applicable) in the "Total Bid" column, and
- showing the sum of all Tender item totals in the space marked "Total Tender".

The Tender must be signed by:

- an authorized representative of the Bidder; and
- the official title of the Bidder must be shown, and
- the official seal of the Bidder must be affixed, or the signature must be witnessed and the Affidavit of Execution of the Witness must be completed.

The bid bond accompanying the Tender, in the amount of *ten percent (10%)* of the Tender and made out to the Town of Peace River, must be signed and sealed in the space provided, by both the Bidder or his authorized representative, and the Bonding Company. If a certified

#### Contract: 2131-00611-09 Asphalt Overlay and Sidewalk Replacement Program 2023 **INSTRUCTIONS TO BIDDERS**

cheque or bank draft is used in lieu of a bid bond, it shall be made payable to the "Town of Peace River ".

As part of the Tender, the Bidder shall provide a Consent of Surety stating that the Surety providing the bid bond is willing to provide the Performance and Labour and Materials Payment bonds required. All costs associated with acquiring bonding will be covered within the Bidder's bid price.

#### 1.3 ADDENDA

Addenda, when issued, form part of the Tender Document. The Bidder shall acknowledge receipt of each Addendum in the space provided on the Tender forms. The individual items included in the Addendum shall be added, deleted or changed in accordance with the instructions contained in the Addendum letter.

During the Tendering period, all Addenda issued by the owner will be sent by fax, email, or courier to the address for all Parties recorded by the owner or Consultant as having received hard copy Bid Documents, at the time the Addenda is issued. Bidders who have obtained Bid Documents from any source other than the owner may not automatically receive Addenda via fax, email, or courier. Notwithstanding any other provision of this Tender, each Bidder shall ascertain, prior to the time fixed for receiving tenders, that it has received all Addenda issued by the owner.

When an Addendum is issued by the owner, the covering letter containing instructions regarding the Addendum shall be attached to the inside front cover of the "Contract and Specifications" book. The individual items included in the Addendum shall be inserted in accordance with the covering letter. Addenda, when issued, form part of these Contract Documents.

#### CHANGES OR WITHDRAWALS OF TENDER SUBMISSIONS

General Specifications in this document refer to Specification 1.2, "General" of the Government of Alberta, Ministry of Transportation publication titled "General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction, Edition 16, 2019."

Bidders are advised that requests for withdrawal of Tender submissions must comply with the General Specifications.

A Bidder wishing to make changes to its Tender before the time set for receiving Tenders may withdraw the Tender submission in accordance with the conditions of Specification 1.2, General. The modified Tender may then be resubmitted in the same sealed envelope, up to the time and date set for receiving tenders.

Alternatively, if this change is to the unit price schedule only, the Bidder may send the tender amendment form in an email message to the Town of Peace River "ATTENTION: the Town of Peace River (Project Number: CB23B & CB2C), CONTRACT OPENING" on a copy of Form C58 found in this Tender package. To be acceptable, the form must be received by the time and date set for receiving tenders.

The owner and the Consultant accept no responsibility for emailed changes. It is the Bidder's responsibility to confirm receipt of any emailed changes.

#### Contract: 2131-00611-09 Asphalt Overlay and Sidewalk Replacement Program 2023

#### **INSTRUCTIONS TO BIDDERS**

#### **PROJECT INQUIRIES**

For information regarding this project, you may contact:

Josh Warkentin, P.Eng. McElhanney 9410 - 100<sup>TH</sup> Street Peace River, AB T8S 1H7 Phone: 780-618-6727

Email: jwarkentin@mcelhanney.com

#### PRE-TENDER MEETING

There will be **no** pre-tender meeting for this contract.

#### SIGNED CONTRACT PACKAGE

The Contract Forms, Statutory Declarations and any other applicable forms and schedules will be completed by the successful Bidder and included in the signed Contract.

#### 1.8 SAFETY PRE-QUALIFICATION

Contracts will only be awarded to Bidders who, prior to the time fixed for receiving tenders, possess a valid Certificate of Recognition (COR) or a valid Temporary Letter of Certification (TLC) for a standard COR, or a COR Equivalency Letter (COREL) for out of province Bidders, as issued by the Alberta Construction Safety Association (ACSA) or another certifying partner authorized by the Alberta Ministry of Labour to issue CORs, TLCs or CORELs. The COR, TLC or COREL must be relevant to the work. Possession of a Certificate of Recognition other than a standard COR, TLC or COREL, such as a Small Employer Certificate of Recognition (SECOR) is not acceptable.

It is the Bidder's responsibility to ensure his registration in the program is properly documented with the issuing certifying partner and the Client will assume no liability for errors or omissions in this regard.

Confirmation that the Bidder possesses a COR, a valid TLC or a COREL will be obtained through the Alberta Construction Safety Association.

Prospective Bidders who do not possess a COR and wish to obtain information about obtaining a COR, TLC or COREL are advised to contact:

The Alberta Construction Safety Association

**Edmonton Office** Calgary Office

# 101, 292060 Wagon Wheel Link # 225 Parsons Road SW Edmonton, AB T6X 0W6 Rocky View, AB T4A 0E2 Phone: 780-453-3311 Phone: 403-291-3710

Fax: 780-455-1120 Fax: 403-250-2852

Email: edmonton@acsa-safety.org Email: calgary@acsa-safety.org

#### Toll Free Numbers:

Phone: 1-800-661-2272 Phone: 1-800-661-6090 Fax: 1-877-441-0440 1-877-258-5881

#### Contract: 2131-00611-09 Asphalt Overlay and Sidewalk Replacement Program 2023

#### **INSTRUCTIONS TO BIDDERS**

#### **CONTRACT INFORMATION DOCUMENTS**

#### 1.9.1 Reference Plans and Drawings

Referenced plans and drawings which are not bound in this Tender Document or found in Government of Alberta Transportation's Standard Specifications for Highway Construction (Edition 16, 2019) will be available for viewing in the McElhanney office in Peace River, Alberta. These plans will be included in the contract document presented to the successful bidder.

#### 1.9.2 Full Size Plans and Drawings

Full size plans and drawings for this Tender are available for viewing at the McElhanney office in Peace River, Alberta.

Bidders wishing to order copies of the plans during the Tendering period may purchase them for \$50.00 per set from McElhanney, 9410 - 100th Street, Peace River, Alberta, T8S 1H7. Telephone: 780- 624-1234.

#### 1.10 AWARD CONSIDERATIONS

The owner reserves the right to accept or reject any or all Tenders, to waive irregularities and informalities at its discretion, and to accept a Tender other than the lowest bid without stating reasons.

By submitting its Tender, the Bidder waives any right to contest in any legal proceeding or action the right of the owner to award the work to whomever he chooses, in his sole and unfettered discretion, and for whatever reasons the owner deems appropriate. By submitting its Tender, each bidder acknowledges and agrees that it waives any right to contest in any legal proceedings, the decision of Town of Peace River to award points in respect of the criteria noted below. The criteria and the maximum number of points for each criterion are as follows:

#### Contract: 2131-00611-09 Asphalt Overlay and Sidewalk Replacement Program 2023 **INSTRUCTIONS TO BIDDERS**

PROPONENT				
EVALUATION CATEGORY	SCORE (1-10)	CATEGORY WEIGHTING (%)	TOTAL SCORE	
The ability and skill of the Tenderer to provide the goods and services requested		15%		
the ability of the Tenderer to perform the Contract or provide the services promptly or at the time indicated without delay or interference		10%		
The character, integrity, reputation, judgement, experience, and efficiency of the Tenderer		10%		
The quality and performance of previous Contracts, Goods, or Services, provided by the Tenderer		15%		
The sufficiency of the financial resources and the ability of the Tenderer to perform the Contract or provide the Goods or Services		10%		
The quality, availability, and adaptability of the goods or Contractual Services to the particular use required and ability to best meet the owner's operational needs		10%		
The ability of the Tenderer to provide future maintenance and services for the items acquired		10%		
Equalized Project Pricing		20%		
Total Score				

The evaluation of references will be completed on references submitted on the reference submission submittal sheet (within the Tender Forms section). The owner reserves the right to use its own judgement in rating each of the submissions with any objective not just minimizina risks.

The ranking will be carried out on the criteria and scoring weight listed above. The total scores will be added together, and the highest score will be considered for the award of the tender, subject to all other required submittals being included and approved. Should there be a tie in total points the Town will select the contractor with the highest score in the highest weighted section of the evaluation.

In addition to price, total acquisition cost, and the evaluation categories consideration may be given to other factors in determining the successful bidder, including, but not limited to:

- 1) Identification of sub-contractors; company information and related past project history,
- 2) The number and scope of conditions attached to the bid,
- 3) Project schedule and scheduled site off days
- 4) The ability of, and skill of the bidder to provide the goods or services requested,
- 5) The ability of the bidder to perform the contract or provide the services promptly or at the time specified without delay or interference,
- 6) The character, integrity, reputation, judgement, experience, and efficiency of the bidder,

#### Contract: 2131-00611-09 Asphalt Overlay and Sidewalk Replacement Program 2023

#### **INSTRUCTIONS TO BIDDERS**

- 7) The quality and performance of previous contracts, goods, or services, provided by the bidder,
- 8) The sufficiency of the financial resources and the ability of the bidder to perform the contract or provide the goods or services,
- 9) Any litigation between the bidder and the owner; whether pending, past, threatened or suggested.

Only one Tender from an individual, firm, partnership, or corporation will be considered. Reasonable grounds for believing that any Bidder is interested in more than one Tender for the work will cause the rejection of all Tenders in which such Bidder is interested. Any or all Bidders will be rejected if there is reason for believing that collusion exists among them, and none of the participants in such collusion will be considered in future proposals.

Please note the entire Town of Peace River tendering policy is available for viewing at the Town of Peace River office in Peace River, Alberta.

#### Contract: 2131-00611-09 Asphalt Overlay and Sidewalk Replacement Program 2023

\_\_\_\_ initial

## INSTRUCTIONS TO BIDDERS

## 1.11 CONTRACTOR'S CHECKLIST

13) All pages headed "Tender Forms"

The following items have been included in the tender package submission:					
1) Bidder's Schedule for Work	initial				
2) Tender for Construction Form	initial				
3) Addenda (if applicable)	initial				
4) Bid Bond or Certified Cheque (Bid Security – All Bidders)	initial				
5) Consent of Surety	initial				
6) Certificate of Recognition (Copy or Certificate Number)	initial				
7) Unit Price Schedule	initial				
8) Reference Submittal Form	initial				
9) Proposed Construction Schedule	initial				
10) Extra Work Labour Rates	initial				
11) Signed and Sealed Tender	initial				
12) Tender Amendments (if applicable)	initial				

#### TENDER FORMS

2.	TEN	DER	<b>FORMS</b>

#### 2.1 TENDER FOR CONSTRUCTION

To TOWN OF PEACE RIVER the Town of Peace River, Department of Engineering & Infrastructure for the Town of Peace River of the Province of Alberta:

(Name of Contractor)

the undersigned hereby Tenders and agrees to execute and construct all work of every description required in the construction and final completion of the following work:

#### ASPHALT OVERLAY & SIDEWALK REPLACEMENT PROGRAM 2023

91st Street and Misc. Asphalt / Concrete Sites

Cold Milling, Base Course, Asphalt Concrete Pavement and Concrete Work

in strict accordance with the plans and specifications, for the unit prices in the unit price schedule enclosed.

The undersigned acknowledges receipt of the following Addenda,

which shall form part of the Tender Document.

## 2.2 UNIT PRICE SCHEDULE

Bid Item	Description	Unit	Est. Quantity	Unit Price	Total Bid
1.01	Mobilization (GCS 1.2.9)	L.S.	1	\$	\$
1.02	Site Occupancy (GCS 1.2.41.9)	Days		\$1,500.00	\$
1.03	Cold Milling Asphalt Pavement (0-40 mm depth) (HCS 3.16.6)	m²	660	\$	\$
1.04	Asphalt Concrete Pavement - EPS Mix Type M1 (PG 52-34) (50 mm) (HCS 3.50.7) (HCS 5.2.5) (Special Provision)	m²	2245	\$	\$
1.05	Asphalt Concrete Pavement (Preliminary Levelling) (HCS 3.50.5.2) (Special Provision)	tonnes	5.5	\$	\$
1.06	Full Depth Repair (Special Provision)	m²	1054	\$	\$
1.07	Concrete Curb & Gutter – Remove & Dispose (HCS 2.17.4)	l.m.	460	\$	\$
1.08	Concrete Curb & Gutter – Supply & Install (HCS 4.2.5) (Special Provision)	l.m.	460	\$	\$
1.09	Concrete Surface – Remove & Dispose (HCS 2.17.4)	m²	93	\$	\$
1.10	Monolithic Sidewalk Curb and Gutter – Supply & Install (Various Widths) (HCS 4.2.5) (Special Provision)	m²	70	\$	\$
1.11	Steel Reinforcement – Supply and Install	l.m.	95	\$	\$
1.12	Catch-basin Repair (Type 1) (HCS 2.10.5) (Special Provision)	each	1	\$	\$
1.13	Adjustment Manholes and Valves (HCS 2.10.5)	each	9	\$	\$

	TEMBERT ORMO					
1.14	Site Restoration (Special Provision)	m²	293	\$	\$	
1.15	Remove and Replace Driveway – Gravel (Special Provision)	m²	70	\$	\$	
1.16	Remove and Replace Driveway – Asphalt (Special Provision)	m²	11	\$	\$	
1.17	Remove and Replace Driveway – Concrete (Special Provision)	m²	36	\$	\$	
1.18	Pararamp – Supply and Install (HCS 4.2.5) (Special Provision)	each	6	\$	\$	
	Material Testing	Cash Allowance	1	\$10,000	\$10,000	
		•	SCHEDULE -	- SUB-TOTAL	\$	

## 2.3 REFERENCE SUBMITTAL FORM

REFERENCE #1 PROJECT NAME	
PROJECT DESCRIPTION & CONSTRUCTION YEAR.	
REFERENCE COMPANY	
ADDRESS	
PHONE NUMBER	
FAX NUMBER	
REFERENCE NAME/POSITION	
REFERENCE EMAIL	JECT: □ PRIME CONTRACTOR □ SUBCONTRACTOR
REFERENCE #2	JECT:   PRIME CONTRACTOR   SUBCONTRACTOR
PROJECT NAME	
PROJECT DESCRIPTION &	
CONSTRUCTION YEAR.	
REFERENCE COMPANY	
ADDRESS	
PHONE NUMBER	
FAX NUMBER	
REFERENCE NAME/POSITION	
REFERENCE EMAIL	
ROLE/RESPONSIBILITY ON PRO-	JECT:   PRIME CONTRACTOR   SUBCONTRACTOR
REFERENCE #3 PROJECT NAME	
PROJECT DESCRIPTION &	
CONSTRUCTION YEAR.	
REFERENCE COMPANY	
ADDRESS	
PHONE NUMBER	
FAX NUMBER	
REFERENCE NAME/POSITION	
REFERENCE EMAIL	
ROLE/RESPONSIBILITY ON PROJ	JECT:   PRIME CONTRACTOR   SUBCONTRACTOR

**NOTE:** Due to the limited information that can be provided by the Provincial Government, the use of reference employed by Alberta Transportation <u>WILL NOT</u> be considered acceptable.

## TENDER FORMS

## BIDDER'S SCHEDULE FOR WORK

Bidders are required to submit, along with their Tender, this schedule sheet showing their proposed starting date and completion date of this project.

Project	Starting Date	*Completion Date
Other Projects		
*N.B. Completion dates that excee conditional or alternative bid and may	d the Contract Completion Da be rejected.	te will be considered a
Contractor's Signature		Date

## 2.5 EXTRA WORK LABOUR RATES

	EXTRA WORK LABOUR RATES					
Item No.	Position	Hourly Rate				
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
Comment	ds:					
		Page 1 of 1				

#### **TENDER FORMS**

#### 2.6 **TENDER AGREEMENT**

The owner reserves the right to accept or reject any or all Tenders and to waive irregularities and informalities at its discretion. The owner reserves the right to accept a Tender other than the lowest Tender without stating reasons. The owner has the right to award the work to whomever it chooses, in its sole and unfettered discretion, and for whatever reasons the owner deems appropriate. By the act of submitting its bid, the Bidder agrees that any claim the Bidder may have in relation to the award of the work by the owner is limited to damages for the reasonable cost of preparing the bid and that the Bidder has no right to seek loss of anticipated profit. Without limiting the generality of the foregoing, the owner may consider any other factor besides price and capability to perform the work that it deems in its sole discretion to be relevant to its decision including but not limited to the following:

- any past experience with the Bidder, or lack thereof;
- the results of any reference check done by the owner;
- information relating to the financial state of the Bidder, however obtained.

#### 2.6.1 Tender Security

The Undersigned encloses herewith as a deposit, a bid bond (along with a Consent of Surety) or a certified cheque payable to the Town of Peace River of the Province of Alberta for ten percent (10%) of the Tender Bid Amount.

The undersigned hereby agrees that if, within twenty-one (21) days after the Contract is presented to him for signature, hand delivered or sent by registered mail or courier addressed to him at the address stated in the Tender, the undersigned refused or fails:

- a) to sign and return to the Town of Peace River the Contract for the performance of the Work and the supplying of Materials covered by this Tender; or
- b) to provide security and insurance as required by the Specifications,

the bid bond or deposit shall be subject to forfeiture to the Town of Peace River, and if a Contract for that Work and Material is then entered into with some other person for a greater amount, the Undersigned is liable to the Town of Peace River in the amount equal to the difference between the amount of his Tender and the amount of the Contract actually entered into; the maximum not exceeding the amount of the security required under this section.

#### 2.6.2 Tender Withdrawal

The undersigned hereby agrees that he will not withdraw this Tender after the time fixed for receiving Tenders,

- c) until some other person has entered into a Contract with the Town of Peace River for the performance of the work and/or the supplying of the materials specified in the notice inviting Tenders, or
- d) until thirty-five (35) days after the time fixed for receiving this Tender, whichever first occurs.

## TENDER FORMS

#### **TENDER SIGNING AND SEALING**

An authorized signing officer shall affix his signature to this Tender. The Tender shall be either sealed with the Company Seal, or the Affidavit of Execution of the Witness shall be completed. Failure to comply may result in the Tender being rejected.

CANADA	
CANADA	
PROVINCE OF ALBERTA (Seal)	
TO WIT:	
I,	
o.g. ata. o i i into	
SWORN before me at theof	
in the Province of Alberta, thisday of	
Postal Code	
Witness Sign Here	
Contractor's Telephone Number	
A Commissioner for Oaths in and for the Province of Alberta.  Witness	-
Date Date	

**CONTRACT FORMS** 

#### **CONTRACT FORMS** 3. **TOWN OF PEACE RIVER**

**CONTRACT** (Page 1)

This Agreement made and concluded in triplicate as of this	day_of	,20,
between the Town of Peace River (hereinafter called	"the Town") of the f	
of the	in the Province of _	
(hereinafter called "the Contractor") of the second part.		

WITNESSETH, that for and in consideration of the covenants and agreements on the part of the Town, hereinafter contained and the prices hereinafter mentioned, the Contractor for himself, his executors, administrators and assigns, covenants and agrees with the Town to do, furnish and perform the works, materials, matters, and things required to be done, furnished and performed, in the manner hereinafter described, in connection with the following work or works, namely:

#### ASPHALT OVERLAY & SIDEWALK REPLACEMENT PROGRAM 2023

91st Street and Misc. Asphalt / Concrete Sites

Cold Milling, Base Course, Asphalt Concrete Pavement and Concrete Work

in strict accordance with the plans and specifications of said work hereto attached, and to deliver the same over, complete and fully finished in every particular to the Town on or before October 31, 2023.

**CONTRACT FORMS** 

#### **TOWN OF PEACE RIVER**

**CONTRACT (Page 2)** 

It is mutually agreed that the attached Tender or proposal and bond of the Contractor, together with the plans, specifications and any special provisions herein designated and referred to are hereby made and shall be considered part of this Agreement the same as if herein fully set forth.

IN CONSIDERATION WHEREOF, and upon the Contractor fully completing and executing in every particular the work herein contracted for within the time hereinbefore set out, and upon the said Contractor satisfying the said Town that all just claims for labour and materials and for damages in connection with the work have been paid, the said Town covenants, promises and agrees to pay unto and to the said Contractor for the actual amount of work done and materials in place at the unit prices stated in the Contractor's attached proposal or Tender.

IN WITNESS WHEREOF, the Contractor has hereunto set his hand and seal as of the day and year herein mentioned, and these presents have been signed and sealed by the representatives of the Town, on behalf of the Town of Peace River.

SIGNED, SEALED AND DELIVERED BY THE CONTRACTOR IN THE PRESENCE OF:	Contractor (Authorized Signature)
Witness	
	Contractor (Printed Name)
SIGNED AND SEALED ON BEHALF OF THE Town of Peace River	
per	
per	
Witness	

4.	<b>TENDER</b>	<b>AMENDMENT</b>	FORMS
----	---------------	------------------	-------

We,											
		(	Name	e of Co	ontractor	.)					
the und	the undersigned, modify the unit price schedule for our Tender as shown in the following table:										
		JLE CHANGES us Unit Price Schedule o	hange	s							
Item No.	-	Description			Quantity	Unit + or		Change	Th	tal Ch is Iter or -	ange For n
Increase	e (+) or Redu	ce (–) Total Tender By									
IIICICase	e (·) or neau	ce (-) Total Telluel By									
		e list of Addendum I ubmitted Tender For							at wa	as inc	dicated
We also	o acknowle	dge and agree that:									
,	•	supersedes all pro ubmitted changes a			•	luding	those	e to othe	er bi	id ite	ms.
<ol> <li>We accept full responsibility for any lack of confidentiality arising from the use of this process.</li> </ol>							this				
<ol> <li>Failure of these revisions to arrive on time, accurately or completely for any reason will render these revisions null and void.</li> </ol>						on will					
being					_						
	Signature Position in Company										
of _				_	c	lated _					
		oany Name						Da	te		
Neither amendi		n of Peace River being received.	nor	The	Consu	Itant	is r	esponsik	ole	for	faxed

Contract: 2131-00611-09

#### 5. SPECIAL PROVISIONS

#### 5.1 STANDARD SPECIFICATIONS, SPECIFICATION AMENDMENTS AND TYPICAL DRAWINGS

All reference to "Specifications" in this Tender document will be understood to mean Government of Alberta – Transportation's *Standard Specifications for Highway Construction* (Edition 16, 2019) unless otherwise noted.

#### 5.1.1 Definitions

The word "owner" or "Department" shall mean the "Town of Peace River".

The word "Minister" shall mean the person holding the position or acting in the capacity of the Chief Administrative Officer for the Town of Peace River or his duly appointed representative.

#### 5.1.2 Goods and Services Tax (G.S.T.)

Bid prices are to exclude the Goods and Services Tax on all materials and services supplied by the Contractor and incorporated into the work.

The owner will include the applicable Goods and Services Tax payment on the monthly and final progress payments.

#### 5.1.3 Government of Alberta – Transportation Name Change

Due to government reorganization, the Government of Alberta – Transportation name has changed. As a result, some specifications, drawings, plans and other documents in this contract may continue to reference Alberta Infrastructure and Transportation, Alberta Infrastructure, Alberta Transportation and Utilities, or Alberta Transportation. Please be advised that any references to Alberta Infrastructure and Transportation, Alberta Infrastructure, Alberta Transportation and Utilities, or Alberta Transportation shall mean Government of Alberta – Transportation.

#### 5.1.4 Standard Specifications for Highway Construction Work

The specifications for highway construction work, which shall form part of the Contract Agreement, are published in the following Government of Alberta – Transportation manuals:

- Standard Specifications for Highway Construction, Edition 16, 2019
- General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction, Edition 16, 2019

#### 5.1.5 Typical Plans and Drawings

The following additional specifications, typical plans and drawings, which form part of the Contract Agreement, are available for viewing and/or download from the Alberta Transportation web site at the following address: www.transportation.alberta.ca.

 Typical minimum requirements for traffic accommodation and construction zone temporary signing are included in the manual entitled "Traffic Accommodation in Work Zones Manual, 2nd Edition, 2018".

It may be necessary for the Contractor to modify these drawings and/or develop new drawings to address non-typical situations when developing the Traffic Accommodation Strategy in accordance with specification 7.1, Traffic Accommodation and Temporary Signing.

- Typical minimum requirements for pavement markings are included in the Alberta Transportation manual entitled "Alberta Highway Pavement Marking Guide, 2nd Edition, issued March 2003".
- Drawings showing the typical minimum requirements for permanent highway signage are available through the "Typical Signage Drawings" link.
- Drawings showing the typical minimum requirements for barriers are available through the "Typical Barrier Drawings" and "Roadside Design Guide" links.
- Typical minimum requirements for erosion and sediment control devices are available in the most recent edition of the "Erosion and Sediment Control Manual". Government of Alberta – Transportation.
- Typical minimum requirements for highway street lighting devices are included in the Alberta Transportation manual entitled "Highway Lighting Guide - 2003".
- All other typical plans and drawings are included in the Alberta Transportation manual entitled "CB-6 Highway Standard Plates - Revised August 2002".

Hard copy versions of select manuals are available for purchase from Alberta Transportation, Strategic Procurement Branch, Suite 303 3rd Floor, Twin Atria Building, 4999 - 98 Avenue, Edmonton, AB, T6B 2X3. Telephone: 780-415-1068.

Bidders are advised that, from time to time, the Government of Alberta – Transportation may issue revisions to existing drawings, and/or may insert drawings into the above-mentioned manuals without re-printing hard-copy editions of the manual. These new and/or revised drawings will be available on the Government of Alberta – Transportation website.

Bidders are further advised that any drawing revisions and/or new drawings that are posted on the Government of Alberta – Transportation website as of five calendar days prior to the date set for the opening of tenders, will apply to this Project.

Any standard drawings that are not available on the Government of Alberta – Transportation website will be included in the Contract documents.

#### **5.1.6 Specification Amendments**

The following checked-off specification amendments as contained in the Government of Alberta – Transportation manual entitled General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction (Edition 16, 2019) are applicable for this Tender. Those items not checked off do not apply to this Tender. These documents may contain modifications to the pay clauses for those specifications which are amended.

X	AMENDMENTS TO SPECIFICATIONS							
	Designation General Description							
	SECTION 1 - GENERAL SPECIFICATIONS							
	AMC_C125.2	Priority Line Painting for Site Occupancy						
	AMC_C125.3	Non-Priority Line Painting for Site Occupancy						
X	AMC_S53.1	Amendment to Specification 1.2, General, Re: Construction Staking and Survey – Majority by Contractor						
	AMC_S53.2	Amendment to Specification 1.2, General Re: Construction Staking and Survey – Majority by Consultant						
	AMC_S53.3	Amendment to Specification 1.2, General Re: Construction Staking and Survey for Bridge Construction						
	AMC_C230	Amendment to Specification 1.2, General Re: Diesel Fuel Cost Adjustment						
		SECTION 3 - SURFACING						
X	AMC_S116	Amendment to Specifications 2.3, Grading, 3.1, Subgrade Preparation, and all Base Course Specifications, Re: Tolerances for Surface Finish						
	AMC_S155	Amendments to Specification 3.50, Asphalt Concrete Pavement (EPS), Re: Hot In-Place Recycled Asphalt Pavement						
X	AMC_S201	Amendments to Specification 3.50, Asphalt Concrete Pavement (EPS), Re: Acceptance Testing for Contracts with Small Quantities (less than 1,000 tonnes) of Asphalt Concrete Pavement						
	SECTION 5 - MATERIALS							
	AMC_S9.4	Supply of Aggregate – Contractor's Supply With Option						
X	AMC_S9.5	Supply of Aggregate – Contractor's Supply With No Option						
	AMC_S9.6	Supply of Aggregate - Designated Source						
	AMC_C218	Interim Payment for Supply of Materials						

#### 5.2 CONTRACT INFORMATION DOCUMENTS

Contract Information Documents including, but not limited to, geotechnical reports, miscellaneous documents, and reference drawings that may have been provided to the Contractor or made available to the Contractor for viewing during the Tender period shall not be considered part of the Contract Documents.

The Contractor is not entitled to rely upon the factual information or factual data in any Contract Information Document, nor any opinions or interpretations contained therein. Contract Information Documents shall not be considered accurate, complete or appropriate, and are made available solely for the purpose of providing the Bidder with access to the information available to the owner.

#### 5.3 CONSULTANT

For this Tender, the Consultant as defined in Section 1.1.7, "Consultant" and as referenced in the specifications, will be **McElhanney Ltd. (McElhanney)**.

#### 5.4 PRIME CONTRACTOR

The Contractor's attention is drawn to the General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction, Edition 16, 2019, Specification 1.2.44, "Occupational Health and Safety Act," and Section 1.2.44.1, "Prime Contractor."

#### HOLDBACK ON MONTHLY PROGRESS PAYMENTS 5.5

Holdback will be assessed as per Section 1.2.26 in the General Specifications. The Holdback will be ten (10%) percent for this contract and held for a minimum period of forty-five (45) days after project completion.

#### **BUDGETARY CONSTRAINTS**

Award of this Contract is pending budgetary approval by the Town of Peace River. Due to budgetary constraints, the Town reserves the right to modify the Work and/or make quantity adjustments or alterations to meet their budgetary needs or cancel the tender in its entirety. NO adjustment to a rate or price for any unit bid items within the Contract will be considered regardless of the size or amount of variation or adjustment from the tendered estimated quantity contained in the Unit Price Schedule. The Contractor shall have no claim against the Town of Peace River or the Consultant due to changes to the quantities or cancellation of the project or portions thereof.

#### 5.7 SITE OCCUPANCY

As per standard specification 1.2.21.2, calculation of calendar days, site occupancy will be charged for work completed on each respective schedule. Each schedule shall be administered separately in regard to Site Occupancy calculations. Therefore, each schedule that has work performed on the same day shall be assessed as site occupancy day.

#### 5.8 CONSTRUCTION STAKING

The Contractor is responsible for field engineering survey services to control the installation of the Work, using the horizontal and vertical survey control reference points established or set by the Consultant.

The Contractor is responsible for determining that all survey information is correct prior to starting construction.

#### **5.8.1 Construction Survey Layout**

The Consultant will set a reference point hub line, for elevations and lines, with hubs at intervals which the Consultant deems suitable for the performance of the Work.

Only one set of reference points will be established for the Work.

The Contractor shall give forty-eight (48) hours' notice of need for reference points. The Contractor shall discontinue work and advise the Consultant immediately if an error is suspected in drawings, specifications, reference points, string lines, grade sheets or any other aspect of the work. To proceed with the Work where an error in survey is suspected constitutes full acceptance for costs associated with correction of the Work.

Any further or additional staking shall be the responsibility of the Contractor. The Contractor shall be required to provide a survey aid occasionally to assist the Project Manager in any

measurements or survey requirements during construction.

#### 5.9 ACCOMMODATION OF TRAFFIC

The Contractor's attention is drawn to Section 7.1, Traffic Accommodation and Temporary Signing, of the Standard Specifications for Highway Construction.

The owner reserves the right to modify the Contractor's operations if in the opinion of the Consultant, traffic is being unduly hindered.

Traffic shall be maintained on the existing roadway throughout the duration of this Contract. Prior to any prolonged shut down of construction, the Contractor shall ensure that any disturbed roadway surface is restored to a condition suitable for traffic operations as directed by the Consultant.

#### 5.10 HAUL ROAD AND DETOUR ROAD MAINTENANCE AND RESTORATION

#### 5.10.1 Haul Road Maintenance

The Contractor shall be responsible for the maintenance and restoration of all haul roads. Contrary to Section 4.5.3.3. and 4.5.5.2. of Specification 4.5 "Hauling", no payment will be made by the owner for the restoration of the Haul Roads damaged by the Contractor's Operations. This will include, but will NOT be limited to, any gravel surfacing, dust abatement, asphalt stabilized base course or asphalt concrete pavement materials. The Contractor will also be responsible for repairing any and all damage to public or private property resulting from their equipment, manpower, or sub-contractors during construction.

#### 5.10.2 Road Use Agreement

The Contractor shall enter into a Local Road Use Agreement with the Town of Peace River. The agreement will cover the use of local roads as haul roads and detour roads and will address maintenance and restoration of roads used under this contract. The Town contact is:

Alisha Mody

Town of Peace River

Phone: 780-624-2574 Ext. 1027 Email: amody@peaceriver.ca

#### 5.11 TOWING TRAFFIC

Contrary to Section 2.3.6.2, Towing Traffic, **no** separate or additional payment will be made for towing traffic through the work. Any costs for towing traffic shall be included in the unit price bid for "Common Excavation". The Contractor shall supply operators and equipment for towing at the request of the Consultant.

#### 5.12 CONTRACTOR'S USE OF LIME

Contrary to Section 2.3.6.13.5, Drying Wet Material of the Standard Specifications for Highway Construction, the Municipality/Town will **not** reimburse the Contractor for fifty percent (50%) of the cost for the supply of lime for drying wet materials. If the Contractor elects to use lime for drying, no separate or additional payment will be made for the work.

#### 5.13 CONTROL OF WEEKS AND PESTS

The Contractor shall ensure all equipment, vehicles, tools and other items are clean of soil, aquatic organisms and plant matter (especially seed heads) prior to entering and leaving the

site.

The Contractor shall submit the proposed procedure for weed and pest control to the Consultant a minimum of two weeks prior to the pre-construction meeting for review and acceptance.

The Contractor's equipment, vehicles, materials or personnel will not be permitted to enter the site prior to acceptance of the Contractor's procedure for weed and pest control.

#### 5.14 WORK IN THE VICINITY OF UTILITIES

#### 5.14.1 General

The Contractor's attention is drawn to Section 1.2.49, Safequarding Utility Installations, of the General Specifications.

Additional specific requirements for work in the vicinity of utilities and coordination with the owners and/or operators are listed under the particular utility.

The known utility companies, owners and operators and their representatives are as follows:

Town of Peace River Town Office: 780-624-2574 Manager of Planning and Development Fax: 780-624-4664

Alisha Mody 9911 100th Street

Peace River, Alberta T8S 1S4

**TELUS Communications** 

Road Move Coordinator: Telephone: 780-668-0285

Don Cooke (Telecom)

ATCO Gas Ltd. Telephone: 780-296-3704

Distribution Foreman

Rob Dingledein

ATCO Electric Telephone: 780-926-4491 Jerry Krahn Cell: 780-841-1875

NW Region - Peace River

**ATCO Pipelines** Telephone: 780-219-7094

**Transmission Operator** 

**Devon Smith** 

It is the Contractor's responsibility to locate all underground and aboveground utilities and pipelines. The Contractor is responsible for the cost of repairing any gas line, telephone cables or any utilities and pipeline damaged as a result of the construction.

#### 5.15 GENERAL SPECIFICATION 1.2.56 "DIESEL FUEL COST ADJUSTMENT" ADDITION

General specification 1.2.58 "Diesel Fuel Cost Adjustment" will not be used on this project.

#### 5.16 FORCE MAJEURE EVENT

"Force Majeure Event" means any war, invasion, insurrection, armed conflict, act of foreign enemy, revolution, terrorist act, interference by military authorities, nuclear explosion,

contamination by ionizing radiation, forest fire or flood, earthquake or other natural disaster, discovery of a historical resource, epidemic, or quarantine restriction that prevents, delays or interrupts the performance of any obligation under the Contract, other than any obligation to pay any money, and provided such event does not occur by reason of:

- (i) the negligence of the party relying on the Force Majeure Event (or those for whom it is in law responsible); or
- (ii) any act or omission of the party relying on the Force Majeure Event (or those for whom it is in law responsible) that is in breach of the provisions of the Contract.

#### 5.16.1 Force Majeure Delay

Neither party will be considered in default in the performance of its obligations hereunder to the extent that performance of such obligations is delayed, hindered, or prevented by a Force Majeure Event.

If the Contractor claims that he has been or will be delayed by reason of a Force Majeure Event in the progress of the Work, the Contractor must, as soon as possible after the Force Majeure Event and not later than fourteen (14) calendar days after becoming aware of the Force Majeure Event, make a written request to the owner for an extension of time within which to complete the Work or any portion of it. The request must state the reasons for the delay and the amount of additional time the Contractor considers necessary. The applicable scheduled completion date or other time for performing the Work will be extended by an equitable period of time to allow for the delay resulting from the Force Majeure Event. No extension of time will be granted unless the Contractor makes a written request within fourteen (14) calendar days. No additional compensation other than extension of time will be considered against any delays due to Force Majeure.

The Contractor does not have any further recourse or claim against the owner, nor does the Contractor have any right of action or claim against the owner, for loss or damage suffered by reason of such delay.

Both the owner and the Contractor must be prompt and diligent to remove all causes of interruption or delay in the Work, insofar as each is able to do so.

#### 5.17 REMOVAL, SALVAGE AND RE-ERECTION OF EXISTING SIGNS

All existing signs, guideposts and mailboxes, which must be removed in the prosecution of the Work, shall be carefully salvaged by the Contractor, and reinstalled at a location as directed by the Consultant.

Critical signs necessary for the protection of traffic such as railroad crossing signs or stop and curve signs shall be maintained. Maintenance, removal, salvage and reinstallation of signs, quideposts and mailboxes will not be paid for separately but shall be considered incidental to the Work.

#### 5.18 LANDOWNER'S RELEASE

The Contractor may have to enter private or crown owned land for supply of borrow and/or aggregate during completion of the project. Copies of the initial agreements for supply of borrow shall be supplied to the Town of Peace River for their records.

The Contractor is required to obtain the landowners permission and a "Landowner Release" outlining the landowner's acceptance of the condition of which his property has been left for

any disruption to private or crown property. These landowner releases shall be supplied to the Consultant prior to the release of the final holdback on the project.

In addition, the Contractor shall indemnify and hold harmless the Town of Peace River and their Consultant for any claims the landowners may have regarding the Contractor's work on private or crown lands.

#### 5.19 Supply of Aggregate (Contractor Supply With No Option)

The Contractor shall supply aggregates entirely from sources of his own choice. Supply of aggregate will not be paid for separately. The cost of supplying aggregate is considered incidental to the work or included in the unit price bid for the work for which the aggregate is being produced.

#### 5.20 NOTICE TO AFFECTED HOME AND BUSINESS OWNERS

One week prior to the commencement of construction, the Contractor shall hand-deliver to each household or business in the construction area a notice identifying:

- the name of the Contractor
- a 24-hour telephone number for the Contractor's site representative
- the name and office number of the McElhanney Ltd. site representative
- the nature of the construction to be carried out
- the start date and completion date for the identified construction work
- an alternate access and parking plan for residents and businesses
- a site plan

The notice is to be provided to McElhanney for review and approval at least seven (7) days prior to distribution.

#### 5.21 SCOPE OF WORK

The scope of work for this project shall include but is not limited to the following:

- Subgrade Excavation
- Asphalt and Concrete Removals
- Cold Milling
- Granular Base Course
- Asphalt Concrete Pavement
- Concrete Works

Unless otherwise specified, the Contractor shall supply all materials necessary to complete the Work. A complete job is called for. Therefore, any labour, material, equipment, tools or incidental item not specifically mentioned, but necessary for completeness will be considered incidental to the Work and no separate or additional payment will be made.

#### 5.22 CATCH BASIN REPAIR

The Contractor will be responsible for cleaning out all catch basins 48 hours prior to beginning

Contract: 2131-00611-09

#### SPECIAL PROVISIONS

of construction. A notification shall be sent to the Engineer upon completion of the cleaning. All manholes shall be inspected prior to and after paving. The Contractor shall give 24 hours' notice to the Engineer prior to paving for scheduling the inspection.

The Contractor is responsible for all catch basin and manhole repairs, including supply of grade rings. Catch basin and manhole repair types are as follows:

- **Type 1** Remove existing frame and cover and grade rings. Adjust rim to proposed grade with new grade rings and install new or existing frame and cover as directed by the Engineer.
- **Type 1B** Remove existing slab top frame and cover and grade rings to fix infiltration between slab top and barrel sections. Re-install existing slab top and existing frame and cover as directed by the Engineer.
- **Type 2** Remove existing frame and cover, grade rings and slab top (CB) or conical top (MH). Install new slab top or conical top, adjust rim to proposed grade with new grade rings, and install new or existing frame and cover as directed by the Engineer.
- **Type 3** Remove existing frame and cover, grade rings, slab top (CB) or conical top (MH), and barrel sections. Install new barrel sections, slab top or conical top, adjust rim to proposed grade with new grade rings and install new or existing frame and cover as directed by the Engineer.
- **Type 4** Remove frame and cover, grade rings, slab top (CB) or conical top (MH), and entire barrel sections and base. Install new barrel sections and base, slab top or conical top, adjust rim to proposed grade with new grade rings, and install new or existing frame and cover as directed by the Engineer.

Repairs are to consist of the following, where necessary (may not include all):

- Removal of adjacent concrete curb, curb/gutter, curb/gutter/sidewalk to match existing elevations.
- Replacement of rubber neck sealant.
- New catch basin installations will require an inside barrel diameter of 900 mm.
- When replacing complete barrel, also replace 2.0m of lead line at the same inside diameter, if needed use Furnco fitting or equivalent.
- Replacement of catch basin or manhole frame and cover.
- Re-grout the existing outlet pipe.
- The Town may, at its discretion, request a sliding top sleeve be installed prior to placement of the catch basin frame and cover. The sleeve would be installed inside the existing barrel and formed into the curb and gutter concrete.

#### 5.22.1 Measurement and Payment

Payment shall be full compensation based on the unit prices provided in the unit price schedule. Tying into the system shall represent either cutting into an existing manhole or connecting to an existing storm pipe. The unit price shall include supply and installation of all materials necessary to complete the Work including benching, Furnco fittings (or equivalent), concrete and/or grout, but not limited to the aforementioned items. The unit price shall also include the proper disposal of all materials and not to be reused in the installations. The supply

and use of all labour, equipment, materials, and tools shall be considered incidental to the Work and no separate payment shall be made.

Payment for storm catch basin and manhole repairs will be per unit and shall be considered full compensation for the procurement of all permits and processes, the supply and the installation of all materials, the supply and use of all equipment, the supply and use of all labour and supervision, and coordination with utility companies, all being necessary to complete the Work to specification at the construction site.

#### 5.23 FULL DEPTH REPAIR

Full Depth Repair work shall include but not be limited to:

- Waste Excavation
- Biaxial Geogrid Supply and Install
- Non-Woven Geotextile (Type B) Supply and Install
- Granular Base Course
- Asphalt Concrete Pavement

The Contractor shall complete the Full Depth Repair work as shown on the Drawings or as directed by the Consultant. Each portion of work shall be completed in accordance with the Standards and Specifications detailed within this Tender.

#### 5.23.1 Waste Excavation

Materials to be removed for Waste Excavation shall be neatly saw cut, excavated and removed as shown on the drawings or as directed by the Consultant. The Contractor shall assume ownership of any excavated subgrade, granular or asphalt material and shall remove it from the roadway to his own storage or disposal site or otherwise dispose of the material to the satisfaction of the Consultant. Saw cutting and disposal of said material will be considered incidental to the Work and no separate or additional payment will be made. Any additional materials that may be necessarily removed in order to achieve the required subgrade depth will be considered incidental to the Work included in Waste Excavation.

Written approval from the Owner of the disposal site, including proof of the disposal site cleanup, shall be submitted to the Consultant before full payment for this work will be made.

#### 5.23.2 Biaxial Geogrid - Supply and Install

The Contractor shall supply and install biaxial geogrid approved by the Consultant and meet the following material specifications:

Index Properties	Units	MD Values1	XMD Values1
Aperture Dimensions2	mm (in)	25 (1.0)	33 (1.3)
Minimum Rib Thickness2	mm (in)	0.76 (0.03)	0.76 (0.03)

#### Contract: 2131-00611-09 Asphalt Overlay and Sidewalk Replacement Program 2023

#### SPECIAL PROVISIONS

Tensile Strength @ 2% Strain3	kn/m (lb/ft)	4.1 (280)	6.6 (450)
Tensile Strength @ 5% Strain3	kn/m (lb/ft)	8.5 (580)	13.4 (920)
Ultimate Tensile Strength3	kn/m (lb/ft)	12.4 (850)	19.0 (1,300)

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. True resistance to elongation when initially subjected to a load determined in accordance with ASTM D6637-01 without deforming test materials under load before measuring such resistance or employing "secant" or "offset" tangent methods of measurement so as to overstate tensile properties.

#### Material Installation and Fill Placement

The beginning of a biaxial geogrid installation shall be anchored in place with washers & pins or heavy gauge staples. The biaxial geogrid shall be installed with a minimum overlap of 0.3 m at any seam. The overlap shall be maintained by anchoring the mat to the subgrade or using connection ties between mats. The overlap shall be shingled to reduce the possibility of separation with fill placement. Fill shall be placed on the biaxial geogrid in a manner that minimizes the formation of a wave in the sheets of geogrid in front of the advancing fill. Wave formation in the geogrid mat may require the Contractor to use alternate fill placement or anchoring/connection methods.

Tracked equipment shall not travel directly on the geogrid. At the Contractor's risk, rubbertired equipment may be allowed to travel directly on the geogrid at very low speeds. Any damaged geogrid shall be removed or repaired to the satisfaction of the Consultant.

Biaxial geogrid shall be placed in conjunction with woven geotextile after excavation of deleterious materials from the roadway.

Supply and installation of biaxial geogrid, lapping of the geogrid, stapling or pinning, connection ties will be considered incidental to the Work. The estimated quantities provided for biaxial geogrid does not include adjustment for overlapping material and no additional payment will be made.

#### 5.23.3 Granular Base Course

The Contractor shall supply and place granular base course as shown on the Drawings or as directed by the Consultant.

#### > Placement

The granular base course material shall not be placed until the underlying subgrade or granular subbase course has been inspected and approved by the Consultant. The subgrade or subbase shall be shaped to cross-section shown on the drawings, or as directed by the Consultant, and shall be maintained free of ruts, waves, and undulations by whatever means are necessary.

#### Compaction

The material shall be compacted by rolling with a pneumatic tired or vibrating roller of a type approved by the Engineer. The material shall be compacted at the optimum moisture content to ninety-eight percent (98%) Standard Proctor Density.

#### > Shaping and Finishing

A motor grader shall be used in conjunction with compaction equipment to keep the finished surface of each layer even and uniform. The finished surface of the granular base course shall conform to the required cross section and grade as shown on the drawings, or as directed by the Consultant, within a tolerance of plus or minus 10 mm. The granular base course shall be uniform and show no signs of segregation of the material placed.

#### > Testing

Field density, moisture content and sieve analysis tests will be carried out by a third-party engineer to ensure that the material is satisfactory. Testing will be paid for under the Cash Allowance based on invoices submitted to the Town.

The frequency of field density and moisture content tests shall be approximately 1 test per 100 linear metres of constructed roadway, and at various locations offset left and right of center line, or as directed by the Consultant.

The Contractor will, as the Consultant requires, provide a loaded gravel truck with operator for visual proof rolling of soft spots. The granular surface course shall show no visible subsidence of deflection under the wheels of the truck.

#### 5.23.4 Measurement And Payment

Full Depth Repairs shall be measured in square metres for the thickness of repair specified. Quantities will be calculated from dimensions shown on the design drawings or from in-place field measurements for the work to be done.

Payment will be made at the unit price bid for "Full Depth Repair" and shall include all work specified in the Drawings and Specifications. This payment will be full compensation for all necessary saw-cuts, removal and disposal of all waste material, including granular and asphalt material, processing, hauling and placing the material on the roadway, supplying water and adjusting the moisture content, preparing the surface the supply and application of asphalt material for prime coat, maintaining the treated surface, quality control, and all labour, equipment, tools and incidentals necessary to complete the Work to the satisfaction of the Consultant.

No payment will be made for work outside the project limits without prior written approval. Separate payment will not be made for any material required to repair failures or rejected areas which occur in the granular base course. All costs associated with the repair of failed or rejected areas will be the responsibility of the Contractor.

#### 5.24 ASPHALT CONCRETE PAVEMENT

The Contractor shall submit an asphalt mix design (Mix Type M1, PG 52-34) to the Consultant for approval prior to construction. The Work shall be performed in accordance with Section 3.50, Asphalt Concrete Pavement (EPS), of the "Standard Specifications for Highway Construction", with the exception of the following sections:

#### 5.24.1 Joints

The mixture shall be laid so that all longitudinal joints are made while the first mat of the two being laid is still hot. A narrow strip along the edge of a mat that is joined with another asphalt mat shall be left without rolling until the adjoining mat has been placed against it. The joint that is formed shall be rolled immediately after the adjacent mat has been placed, to ensure a bonding of the material while the asphalt is still hot.

Transverse joints shall be carefully constructed and thoroughly compacted to provide a smooth riding surface. Joints shall be straight edged to assure smoothness and true alignment and shall be offset at least one metre (1 m) from joints of adjacent mats.

All concrete or metal structures, such as gutters, manholes, water valves etc., shall be painted with an approved bituminous material prior to placing the asphalt.

#### 5.24.2 Tolerances

The finished pavement shall have the thickness specified on the drawings. Areas suspected to be deficient shall be cored, as directed by the Consultant, on the basis of one (1) core for every one thousand square meters (1,000 m<sup>2</sup>) of pavement. At least one (1) core shall be taken at the designated Marshall location.

Should the asphalt be found to be deficient in thickness, the Contractor will be permitted to take two (2) additional cores in an effort to isolate and confirm the deficient areas. The location of the two (2) additional cores shall be located no further than halfway between the deficient core and the next adjacent core or contract boundary.

The exact location of the core locations are to be determined by the Contractor and approved by the Consultant. The Contractor shall be responsible for all costs associated with the recoring of the asphalt.

Areas found to be twenty percent (20%) less than the design thickness shall be repaired at the Contractor's expense. No additional payment will be made to the Contractor for greater thicknesses.

The Asphalt Concrete Pavement shall be placed as to be 10mm higher than the lip of gutter.

The Contractor shall fill all core holes within a maximum period of 24 hours.

#### 5.24.3 Densities

Densities shall be based on core samples, each of which shall represent approximately one thousand square metres (1,000 m<sup>2</sup>) per constructed lift. Asphalt densities are specified as ninety seven percent (97%) of the standard laboratory Marshall. A minimum of one (1) Marshall per day shall be performed, with one (1) core sample taken at a designated Marshall location.

If any core fails to meet the density specified, no more than two (2) additional cores may be taken by the Contractor within one (1) metre of the first core sample, and the average density of the three (3) cores shall represent the area. No additional rolling to achieve a more favorable density shall be allowed without authorization of the Consultant. The Contractor shall be responsible for all costs associated with the re-coring of the asphalt.

If the densities are less than specified, a deficiency penalty shall be assessed in accordance with the following:

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Field Density (%)	Payment Reduction Factor (%)
≥ 97.0	0
96.0 to 96.9	3
96.0 to 96.9	12
95.0 to 95.9	25
Less than 95.0	*Remove and replace

\*Note: For densities results less than ninety five percent (95%), the Owner will determine whether removal and replacement is necessary. For material that is allowed to remain in place, payment will be at fifty percent (50%) of the unit price bid. Asphalt areas below ninety five percent (95%) standard Marshall Density and identified for removal, shall be removed and replaced at the Contractor's expense.

No adjustment to the unit price is to be made for areas with a density higher than that specified.

### 5.24.4 Testing

All testing required by the specifications will be carried out by a third-party engineer to ensure that the material is satisfactory. Testing will be paid for under the Cash Allowance based on invoices submitted to the Town.

#### 5.24.5 Smoothness

The surface of the compacted pavement shall be true to the required grade and cross section with a smooth riding quality acceptable to the Consultant.

In addition to the above, when checked with a three metre (3m) straight edge held in successive positions parallel or perpendicular to the center line and in contact with the surface, the pavement surface shall not deviate from the straight edge by more than three millimeters (3mm).

If, in the opinion of the Consultant, an objectionable riding surface exists or a depression or a bump, the Contractor shall either grind and resurface with an asphalt overlay or remove and replace the asphalt surface.

#### 5.24.6 Texture

The completed pavement shall have a tightly knit texture and shall be free from segregation and surface cracking. Mixes that are excessively tender, or difficult to roll, shall be redesigned by the Contractor's Engineer to remedy the situation. The new design shall meet all the requirements of this section and shall be submitted to the Consultant for approval at least three (3) working days prior to its use.

#### 5.24.7 Traffic

No traffic shall be allowed on the finished surface until it has cooled to atmospheric temperature.

#### 5.24.8 Segregation

Contrary to Specification 3.50.7.2.2, bonus adjustments for segregation will not apply.

However, this will not relieve the Contractor for his responsibility to repair any segregation as per Specification 3.50.4.8.1 of the Standard Specifications for Highway Construction.

The Consultant will assess any segregation of the finished pavement and measure the segregated areas. A deficiency penalty shall be assessed on segregated square meters of asphalt concrete pavement according to the following:

Segregation Rating	Unit Price Payment Reduction Factor (%)
Slight	3%
Moderate	10%
Severe	Remove and replace

#### **5.24.9 Measurement and Payment**

Asphalt will be paid at the unit price bid per square metre for "Asphalt Concrete Pavement – EPS Mix Type M1 (PG 52-34)" for the thickness specified in the contract drawings.

The price bid shall be full compensation for the furnishing, mixing, transportation, gutter and appurtenance tacking, placing, rolling, compacting and all other labour and materials required to complete the work in accordance with these specifications.

## 5.25 ASPHALT CONCRETE PAVEMENT (PRELIMINARY LEVELING)

## 5.25.1 Preliminary Leveling

Areas that require preliminary leveling will be as shown in the drawings and/or as identified in the field by the consultants. The leveling process includes removing any irregularities and roughness, filling low spots, and compacting the surface to create a uniform profile. A minimum of one pneumatic tired roller shall be used for compaction, and a minimum density of 91% of the Marshall density, as determined by the consultant is required. The material type for Preliminary Leveling shall be the same designation and class as per specified for the subsequent lift of asphalt concrete pavement. The Preliminary Leveling is intended to be a separate operation and shall not be done as part of the construction of the subsequent lift of asphalt concrete pavement. According to unit price adjustments listed in Table 3.50 A and lump sum Sublot assessments listed in Table 3.50 C1, Highway Construction Standards, preliminary leveling will not considered to be a lift.

#### 5.25.2 Measurement and Payments

Accepted asphalt concrete pavement for levelling course will be measured in tonnes and paid for at the unit price bid for "Asphalt Concrete Pavement (Preliminary Levelling)". Unit price adjustments will not apply to material used for levelling. No payments will be made for unacceptable materials.

#### 5.26 Driveway / Lane Restoration

Exact limits of all Driveway and Lane Restoration will be determined and marked by the Engineer in the field prior to construction.

#### 5.26.1 Concrete and Exposed Aggregate Driveways (Residential)

Concrete driveways shall be sawcut parallel to the road. The existing concrete shall be removed, and the base excavated to a total depth of 300mm from finished concrete grade.

The base shall consist of 150mm of 20mm GBC material compacted to 100% of the Standard Proctor Density. A 150mm thick concrete slab will complete the driveway. This slab cannot be connected to the sidewalk and must be poured separately. A fiber board or alternative will be placed between the curb and driveway to provide an isolation joint. The slab shall be dowelled to the existing driveway with 10M bars and reinforced with 152mmx152mm NV22.6/NV22.6 wire mesh or 10M rebar at 400mm o/c installed 50mm above the bottom of the slab.

Exposed aggregate driveways shall be completed as close as possible to the existing driveway.

#### 5.26.2 Asphalt Concrete Pavement Driveways

ACP driveways shall be saw-cut parallel to the road. The existing ACP shall be removed, and the base excavated to a total depth of 375mm from finished ACP grade. The base shall consist of 300mm of 20mm GBC material compacted to 100% of the Standard Proctor Density. A 75mm thick lift of ACP will complete the driveway. The mix type of the ACP for driveways shall be the same as the overlay on the road to the property fronts.

#### 5.26.3 Gravel Driveways

The existing gravel shall be excavated to a total depth of 300mm from finished GBC grade. The driveway shall consist of 300mm of 20mm GBC material compacted to 100% of the Standard Proctor Density.

#### 5.26.4 Brick Driveways

Brick pavers shall be removed and salvaged for re-use. The base shall be excavated to a total depth of 200mm from the bottom of the adjacent bricks. The base shall consist of 150mm of 20mm GBC material compacted to 100% of the Standard Proctor Density with a 50mm lift of levelling sand. The salvaged brick pavers shall then be installed to the satisfaction of the Engineer. Any damage to existing pavers shall be the responsibility of the Contractor, and no separate payment for replacement will be considered.

#### 5.26.5 Decorative Rock Gardens

All materials for a decorative rock garden within the working limits shall be removed and salvaged for re-use. The disturbed areas shall be backfilled to the satisfactions engineer, supply and placement of mulch, and the salvaged materials replaced. This restoration shall be considered incidental to the Work, and no separate payment will be made.

## 5.26.6 Concrete Curbs

Driveway concrete curbs shall be saw-cut parallel to the road. The existing concrete shall be removed, and the base excavated to a total depth of 300mm from finished driveway grade. The base shall consist of 150mm of 20mm GBC material compacted to 100% of the Standard Proctor Density. The concrete curb shall be reinstalled to match the existing profile.

#### 5.26.7 Payment

No additional payment shall be made for driveway and lane restoration. The work shall be considered incidental to the concrete work which shall be considered full compensation for the procurement of all permits and processes, excavating, removing, loading, hauling and disposal of material, the supply and the installation of all materials, finishing; and all labour, equipment, tools and incidentals necessary to complete the Work to the satisfaction of the Engineer.

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Saw cutting for removal will be considered incidental to the Work, and no separate payment will be made.

#### 5.27 CONCRETE INSTALLATION

The Contractor shall supply and install all concrete work as shown in the drawings and/or as directed by the Consultant. Unless otherwise stated, concrete shall be Type S2 and supplied in accordance with CSA A23.1 Standard Specifications. The Contractor will be required to submit a concrete mix design to the Consultant for approval prior to construction.

Quantities may vary at the time of construction. The exact locations for installation of concrete structures will be determined on site by the consultant at the time of construction. The contractor shall have no claim against the Town or the Consultant for changes to the estimated quantities provided in the unit price schedule.

#### 5.27.1 General Concrete Installation

In addition to the specification requirements, the Contractor is to ensure new curb and gutter will have adequate drainage. The Contractor is to check all grades and ensure correct drainage will be provided prior to pouring concrete. This is considered incidental to curb installations and no separate payment will be made.

Any base material that is not suitable shall be removed and disposed of as directed by the Consultant and replaced with approved material.

The Contractor will use lean concrete mix of strength 0.7 MPa - 1.5 MPa (or as outlined in the CSA Standards) in areas around Catch Basins, adjacent to curb and gutter, swales, in areas within the roadway less than 0.3 m in width or where compaction may be unachievable. This lean concrete mix can be used within a maximum of 0.06 meters below ACP surface.

All backfill material placed along the front edge of the curbs and sidewalk including Granular Base Course and lean mix will be considered incidental to the Work and shall not be paid for separately.

#### 5.27.2 Compaction

In addition to the specification requirements, all GBC (Des. 2 Class 20) installed under the concrete curbs and sidewalks shall have a minimum of ninety eight percent (98%) of standard proctor density; at optimum moisture content. If the embankment fails to pass the density test, it shall be re-compacted at adjusted moisture content so that it will pass the density test.

The GBC should extend a minimum of 200 mm beyond the edge of the concrete.

## 5.27.3 Concrete Testing

Quality control testing will be the responsibility of the contractor as per Specification 5.5.4 of the Standard Specifications. Results of all Quality Assurance testing shall be submitted to the Consultant as they become available. Payment for all concrete work will be reduced by twenty-five percent (25%) until the 7-day test results are received. Testing will be paid for under the Cash Allowance based on invoices submitted to the Town.

## 5.27.4 Backfilling

For curb and gutters, sidewalks and monolithic curb, gutter and sidewalks, the Contractor shall backfill as soon as possible after the removal of forms. The backfill shall be mechanically tamped and trimmed. Organic soils shall not be permitted for backfilling, except where topsoil

is specified for the top 100 mm of fill.

For curb and gutter the Contractor shall backfill behind the curb with suitable material after the seven (7) day curing and protection period has elapsed. The backfill shall extend to at least 600 mm behind the curb and shall be compacted in two lifts. Backfill material shall be compacted to ninety-five percent (95%) S.P.D. which shall be obtained by means of a hand operated mechanical tamper or other equipment as approved by the Consultant.

## Backfill conditions must match or exceed preconstruction conditions unless otherwise directed by the Consultant.

## 5.27.5 Sidewalk (Pin-on)

In addition to the specification requirements, pin-on sidewalks shall be constructed as per the "Standard Details" as identified on the design drawings. The work shall consist of saw cutting concrete, removal and disposal of the existing subgrade to the limits identified by the Consultant, subgrade preparation, supply, placement and compaction of 150 mm of granular base course and the supply and placement of concrete (125 mm depth). Reinforcing steel bars will be required at driveway locations, utility repair locations and commercial crossings as per the drawings, specifications and as directed by the Consultant. The sidewalk is to be constructed with the same concrete mix as is used for the concrete curb and gutter installation.

#### 5.27.6 Monolithic Sidewalk, Curb and Gutter

The work shall consist of saw-cutting concrete, removal and disposal of the existing subgrade to the limits identified by the Consultant, subgrade preparation, supply, placement and compaction of 150 mm of granular base course and the supply and placement of reinforced concrete (125 mm depth). Reinforcing steel bars will be required at driveway locations, utility repair locations and commercial crossings as per the drawings, specifications and as directed by the Consultant. The sidewalk is to be constructed with the same concrete mix design as is used for the concrete curb and gutter installation.

#### 5.27.7 Para-ramps

All para-ramps shall be constructed as per the "Standard Details" as identified on the design drawings or to the satisfaction of the Consultant.

#### 5.27.8 Concrete Swale

In addition to the specification requirements, all concrete swale work is to be constructed as per the "Standard Details" as identified on the design drawings. Saw-cuts for the swale installation shall be a minimum of 1.00 m from each proposed edge of the swale as laid out by the construction survey. Saw-cuts are incidental to the price of the concrete swale. The concrete swale is to be constructed with the same concrete mix design as is used for the concrete curb and gutter installation.

### 5.27.9 Measurement and Payment

Measurement will be made in linear metres to the nearest 0.1 metre and payment will be made at the applicable unit price bid for:

- (i) Standard Curb and Gutter, measured along the length of lip of gutter.
- (ii) Concrete Swale measured along the length of the flow line in accordance with the width specified in the bid item.

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- (iii) Monolithic Sidewalk, Curb and Gutter measured from lip of gutter to back of walk and paid by the square metre.
- (iv) Concrete Sidewalks measured per square metre (length and width).
- (v) Concrete Sidewalks (Pin-on) measured by the meter along the back of curb in accordance with the width specified in the bid item.

Excavation, base preparation and bedding will not be measured and paid for separately but will be included in the Contract unit price for the concrete structure.

Dowels bars will be considered incidental to the Work and no separate or additional payment will be made.

Steel reinforcing bars will be paid for under Bid Item 1.11 – Steel Reinforcement – Supply and Install and will be measured by the lineal meter of curb.

The payment for the various types of concrete specified will be full compensation for excavation, backfilling, base preparation, bedding, granular material, lean mix, supply and application of curing compound and surface sealing, and all labour, materials, equipment, tools and incidentals necessary to complete the Work to the satisfaction of the Consultant.

#### 5.28 APPEAL CORES FOR CONCRETE

If the 28-day lab cure cylinders fail to meet the requirements of CSA A23.1-17.6.7.1, appeal cores may be collected using a Town approved testing agency at the Contractor's expense. The Contractor has a maximum of thirty (30) days from the date of the 28-day compressive strength test, to take appeal cores from the failed section. One set of three (3) cores may be taken within three (3) meters of the failed test location. The cores will be taken in accordance with CSA A23.2-14C and conditioned using the dry conditioning method. The average strength of the three (3) cores shall equal 100% of the specified strength. If the cores do not meet 100% of the specified strength, then the unit price reduction will be calculated using the original lab cured cylinders for the representative section of concrete. The area may be delineated with a maximum of one set of three (3) cores obtained in each direction of the failed concrete section. Appeal core holes are to be filled with concrete within five (5) working days. Contractor is responsible for filing, arranging, and costs associated with appeal core process.

Core hole filling and/or core hole rehabilitation shall be considered incidental to the work, and no additional payment will be made.

#### 5.29 SITE RESTORATION

All sites must be restored to the same condition or better than prior to construction commencing. This work shall include but not be limited to:

- Topsoil supply and place
- Broadcast seeding

Each portion of work shall be completed in accordance with the Standards and Specifications detailed within this Tender.

#### 5.29.1 Topsoil - Supply and Place

Topsoil shall be capable of supporting the grass growth which is to be planted in it. It shall be neither heavy clay nor excessively sandy in nature and contain a minimum of four percent

(4%) organic matter for clay loams and six percent (6%) for sand loams to a maximum of twenty percent (20%) (by volume). Topsoil shall be free from non-organic subsoils, roots, grass, weeds, gravel and stones greater than 12 mm in diameter.

Topsoil shall have an acidity range (pH) of 6.5 to 7.5 and an Electrical Conductivity rating of less than 2 dS-m (deci-Siemens per metre) for acceptable salinity.

If deemed necessary, the Contractor shall provide test results to the Consultant with the analysis done on the topsoil by a qualified testing laboratory.

#### 5.29.2 Broadcast Seeding

Seed mix shall be supplied and placed by the Contractor.

#### Seed Mix

A turf-grass mixture shall be used that is capable of withstanding salt splash, drought conditions, limited fertility and northern winters. The mixture on a weight basis shall be:

- 40% Agropyron trichophorum Pubescent Wheat Grass
- 22% Elymus dahuricus Dahurian Wildrye
- 30% Festuca ovina Sheep Fescue
- 8% Lolium perenne Perennial Ryegrass

This seed mix shall be applied at a rate of 1.0 kg/100 m<sup>2</sup>.

#### > Fertilizer

Fertilizer shall be standard commercial grade with a guaranteed chemical analysis. Fertilizer shall be water-soluble granular type. Fertilizer content requirements are:

- 12% Total Nitrogen
- 51% Available Phosphoric Acid
- 0% Potash

This fertilizer shall be applied at a rate of 12.0 kg/100 m<sup>2</sup>.

#### 5.29.3 Measurement and Payment

Site Restoration will be measured in square metres to the nearest 0.1 square metre based on horizontal measurements as determined by the Consultant. No allowance will be made for uneven or sloping ground, overlap.

Payment will be made at the unit price bid per square metre for "Site Restoration". This payment will be considered full compensation for the placement of topsoil to a depth of at least 100 mm and re-grading of landscaping behind all new concrete works and other locations specified, the supply and placement of seed, fertilizer, harrowing and reseeding as applicable, and includes all labour materials, equipment, tools and incidentals necessary to complete the Work to the satisfaction of the Consultant.

#### SPECIFICATION AMENDMENTS

## **6. SPECIFICATION AMENDMENTS**

## 6.1 AMENDMENT TO SPECIFICATION 1.2, GENERAL, RE: SAFETY PREQUALIFICATION

The first five paragraphs of Subsection 1.2.5.2, Safety Prequalification, are replaced with the following:

Contracts will only be awarded to Bidders who, prior to the time fixed for receiving tenders, possess a valid Certificate of Recognition (COR) or a valid Temporary Letter of Certification (TLC) for a standard COR, or a COR Equivalency Letter (COREL) for out of province Bidders, as issued by the Alberta Construction Safety Association (ACSA) or another certifying partner authorized by the Alberta Ministry of Labour to issue CORs,TLCs or CORELs. The COR, TLC or COREL must be relevant to the work.

It is the Bidder's responsibility to ensure his registration in the program is properly documented with the issuing certifying partner and the Client will assume no liability for errors or omissions in this regard.

## 6.2 AMENDMENT TO SPECIFICATION 1.2, GENERAL, RE: INSURANCE

Section 1.2.10, "Insurance" of the General Specifications shall be modified to require the inclusion of the owner and McElhanney Ltd. as additional insured for this project.

Sub-section 1.2.10(i) is modified to read: "General Liability Insurance in an amount not less than five million dollars (\$5,000,000) inclusive per occurrence, ..."

## 6.3 AMENDMENT TO SPECIFICATION 1.2, GENERAL, RE: CLAIMS AND DISPUTE RESOLUTION

Delete the contents of Section 1.2.54.1.2 <u>Resolution of Claims</u> and 1.2.54.2, <u>Dispute</u> Resolution Process and replace with:

#### 1.2.54.1.2 Resolution of Claims

Where the owner (or their Representative) or the Contractor considers that a Claim has arisen under the Contract, the owner (or their Representative) or the Contractor shall issue a Notice of Claim to the other party.

A Notice of Claim shall be in writing and shall state the details of the claim. A Notice of Claim issued by the Contractor to the owner pursuant to this Contract shall be served to the Consultant.

A Notice of Claim shall be served as soon as possible after the occurrence of the circumstance giving rise to the Claim and not later than seven (7) days after the occurrence of the circumstance, or the claimant becoming aware of the circumstance. Failure to serve a Notice of Claim within the prescribed time period will preclude the claimant from proceeding with the Claim.

The Parties shall make bona fide efforts to resolve a claim and the Work shall proceed without delay during the claims resolution process. This shall include both parties actively participating in the resolution of the claim, neither of whom may delegate the resolution of the claim to another party. Attempts to resolve claims shall sequentially follow the administrative review structure as follows:

1) Consultant - Project Manager / Area Manager / Regional Manager

## SPECIFICATION AMENDMENTS

2) The Chief Administrative Officer for the Town of Peace River

If there is failure to reach agreement through this administrative review, either party may proceed to litigation either with or without the agreement of the other party.

## 6.4 AMENDMENT TO SPECIFICATION 1.2, GENERAL, RE: DAMAGES FOR DELAY

The references to "\$1,350.00" in Clause 1.2.20(i)(a) of Section 1.2.20, <u>FAILURE TO</u> COMPLETE ON TIME, are revised to \$3,000.00.

## 6.5 AMENDMENT TO HIGHWAY CONSTRUCTION SPECIFICATION 7.1, RE: TRAFFIC ACCOMMODATION AND TEMPORARY SIGNING

Delete the third paragraph of Section 7.1.15.2, Bonus and Penalty Assessment. A lump sum bonus payment will not be considered for this Contract.

# 6.6 AMENDMENT TO SPECIFICATION 3.50 ASPHALT CONCRETE PAVEMENT – EPS, RE: REQUIREMENTS FOR MOISTURE SUSCEPTIBILITY TESTING

i. The contents of Subsection 3.50.3.2, Requirements for Mix Design, are replaced in their entirety with the following:

Asphalt mix designs shall follow the Marshall method of Mix Design as described in design procedure TLT-301. The mix design, at the Design Asphalt Content, shall meet the requirements shown in Table 3.50.3.2 for the Asphalt Concrete Mix Type specified, and the following.

Mixes, both untreated and treated with an anti-strip additive, shall be evaluated for moisture susceptibility in accordance with AASHTO test procedure T-283, Resistance of Compacted Bituminous Mixture to Moisture Induced Damage, using either gyratory or Marshall compacted specimens. All specimens shall be formed using the same procedure. For projects with more than one mix type using the same aggregate source and asphalt supplier the Contractor shall complete the AASHTO T- 283 testing, as a minimum, using the mix type with the largest contract tonnage. All mix design submissions shall include the test results as outlined in test procedure T- 283, including the visual estimate of the degree of moisture damage.

All asphalt mixes shall be treated with a liquid anti-strip additive regardless of test results reported for evaluation of moisture susceptibility on the untreated mixture. The minimum dosage rate is based upon the supplier's recommendation and shall be 0.3% for Group A anti-strip additives and 0.05% for Group B additive products as identified on the Alberta Transportation Products List. Dosage rates greater than 0.5% by weight of virgin binder will only be allowed if the Contractor completes rheology testing using the AASHTO R 29 Standard Practice for Grading or Verifying the Performance Grade (PG) of an Asphalt Binder to confirm that the treated virgin binder meets the specified PG criteria. Dosage rates are by weight of virgin asphalt binder.

The treated mix will be considered suitable for mix production if the TSR value is 60% or higher and is improved over the untreated TSR value. If the TSR value for the treated mix is less than 60% or less than the untreated TSR value, the mix will be considered unsuitable and shall not be used for mix production.

Liquid anti-strip additives acceptable for use are listed on the Alberta Transportation Products List. Liquid anti-strip additives which do not increase the TSR value when compared to the untreated mix shall not be used. Warm Mix Asphalt (WMA) chemical products that display

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anti-stripping characteristics and are listed on the Alberta Transportation Products List will be treated as a liquid anti-strip additive for payment purposes.

The Contractor shall include the following information with the mix design submission:

- Full details on the type of liquid anti-strip additive proposed for use; including product name, manufacturer and supplier
- Additive rate
- TSR values for the treated and untreated mixes
- The proposed method for incorporating the additive into the plant-produced mix
- When the liquid anti-strip is not added by the asphalt supplier, the Contractor shall provide documentation from the asphalt binder supplier that the proposed anti-strip additive is compatible with the asphalt crude source and grade contained in the mix design when added within the dosage range recommended by the additive supplier

In lieu of using a liquid anti-strip additive, the Contractor may use hydrated lime at an additive rate of 1.4% by weight of dry aggregate. Hydrated lime shall meet the requirements of AASHTO M303 Lime for Asphalt Mixtures. If selected for use, the Contractor shall include details of his proposed procedure for uniformly incorporating hydrated lime into the asphalt mix as part of the mix design submission.

The Contractor shall supply the Consultant with copies of all invoices or bills of lading for asphalt mix treated by the supplier, or for anti-strip additive or lime added by the Contractor.

All costs associated with the supply and incorporation of liquid anti-strip additive or hydrated lime into the asphalt concrete pavement mix, regardless of whether the additives are incorporated by the asphalt supplier or the Contractor, shall be included in the unit prices bid for "Asphalt Concrete Pavement – EPS" for the applicable asphalt Mix Type. No separate or additional payment will be made.

The following is added after the last paragraph of Subsection 3.50.5.1.2, Mixing Plant:

When liquid anti-strip additive is added to the asphalt cement at the mixing plant, the additive shall be introduced through a separate, calibrated pumping and metering system electronically interlocked with the operating controls of the mixing plant. The Contractor shall have a procedure in-place enabling the safe sampling of treated asphalt including, where practicable, an in-line valve and sampling system.

When hydrated lime is used, the feed system shall be calibrated to provide a consistent and accurate feed of dry hydrated lime into the mixing plant prior to the asphalt cement injection point. The feed system shall be synchronized to the rate of aggregate feed, and shall be electronically interlocked with the operating controls of the mixing plant. Other methods of incorporating lime into the aggregate feed or stockpile will be subject to approval by the Consultant prior to implementation.

The Contractor shall have monitoring procedures in-place to provide daily "bulk" measurements of all materials used; including anti-strip and warm mix additives, as applicable, to verify that usage quantities match targeted values. The Contractor shall provide daily bulk quantity checks to the Consultant as part of the QC inspection reports.

## SPECIFICATION AMENDMENTS

# 6.7 AMENDMENTS TO SPECIFICATION 5.7, SUPPLY OF ASPHALT, RE: MULTIPLE STRESS CREEP RECOVERY (MSCR) TESTING

The contents of Subsection 5.7.2.1, General, of Section 5.7.2, MATERIALS, are replaced in their entirety with the following:

The Contractor shall supply the types and grades of asphalt specified in the Contract. Asphalt suppliers' materials must be pre-qualified by the Department. Pre- qualified suppliers are listed in the Alberta Transportation Products List.

All asphalt binders shall be prepared from petroleum oils. They shall be free from impurities. Solvents used in the manufacture of cut-back asphalt shall be derived from petroleum oils. Emulsifiers used to stabilize asphalt emulsions shall not be harmful to the performance of the asphalt in service.

Re-refined Engine Oil Bottoms (REOB), also known as Vacuum Tower Asphalt Extenders (VTAE) shall not be added in any proportion to PGAC. The Department may perform a chemical composition analysis to determine if REOB has been used.

The Contractor shall ensure that the asphalt supplied meets all requirements for the types and grades specified. The Contractor may be required to use more than one type or grade of asphalt for a particular purpose. Any change in asphalt type or grade must be approved by the Consultant. The Contractor shall notify the Consultant of any changes in asphalt material suppliers.

Performance grade asphalt cement (PGAC) shall meet the requirements of AASHTO M320 Standard Specification for Performance Graded Asphalt Binder (Table 1) with modifications for certain grades as outlined within the specification.

Suppliers of the following PG asphalts will be required to meet the following additional "quality stipulations" prior to receiving approval for listing on the Products list.

- For the PG 58-28 designation the Department will not pre-qualify an asphalt product that grades to a low temperature warmer than -30°C when tested according to AASHTO T313 Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR).
- For the PG 46-34 designation the Department will not pre-qualify an asphalt product that grades to a low temperature warmer than -37°C when tested according to AASHTO T313.

For asphalts designated as a PG 58-37, Table 1, Performance Graded Asphalt Binder Specification contained in AASHTO M320 shall be modified in accordance with the following criteria:

- The test temperature for creep stiffness and direct tension shall be -27°C.
- Dynamic Shear criteria on the PAV residue shall be met at a temperature of 14.5°C or lower.

For asphalts designated as a PG 64-37, Table 1, Performance Graded Asphalt Binder Specification contained in AASHTO M320 are modified in accordance with the following criteria:

- The test temperature for creep stiffness and direct tension shall be -27°C.
- Dynamic Shear criteria on the PAV residue shall be met at a temperature of 17.5°C or

## SPECIFICATION AMENDMENTS

lower.

## **Elastic Recovery Requirements for Selected PGAC Grades**

Selected grades of PGAC will be tested at a temperature of  $58^{\circ}$ C to determine the average percent recovery at 3.2 kPa ( $R_{3.2}$ ) according to the requirements of AASHTO T 350 Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer. The minimum  $R_{3.2@58^{\circ}\text{C}}$  value for selected grades shall be as outlined in Table 5.7.2.1

Table 5.7.2.1 ELASTIC RECOVERY REQUIREMENTS		
PGAC Grade	Minimum <sub>R 3.2@58℃</sub>	
58-34, 64-28	25%	
58-37, 58-40, 64-34, 70-28	40%	
64-37, 76-28	55%	

Asphalt cements that have been enhanced to meet AASHTO M320 specifications through the use of polymer additives or other chemical means shall be referred to as modified asphalt.

Liquid anti-strip additives listed on the Alberta Transportation Products List may be added to the asphalt product at a rate not to exceed 1% by weight of liquid asphalt. The anti-strip additive shall be heat stable and shall have no injurious effect on the asphalt product. The anti-strip additive/asphalt combination shall meet the AASHTO M320 requirements with modifications as outlined within this specification. The type and percentage of anti-strip additive used shall be listed on the delivery weigh-bills by the asphalt supplier.

The Department reserves the right to discontinue the use of any asphalt product that fails to perform to the expectation or satisfaction of the Consultant or Department, regardless of its compliance with the Specifications.

The Department no longer specifies Penetration-Viscosity grades for Asphalt Cement and those associated tables have been removed from this specification. Historical information can be found in the 2013 Standard Specifications for Highway Construction.

- i. The first paragraph of Subsection 5.7.3.3, Quality Assurance, of Section 5.7.3, SAMPLING AND TESTING, is replaced with the following:
  - The Contractor shall deliver all quality assurance samples to the Consultant on the day they were sampled. The Consultant will forward the samples to the Department's designated quality assurance laboratory for testing and will accept or reject asphalt material based on the test results. Quality assurance testing for PGAC will be in accordance with AASHTO R29 Grading or Verifying the Performance Grade of an Asphalt Binder, and determination of  $R_{3.2@58^{\circ}C}$  according to AASHTO T 350.
- ii. The last paragraph of Subsection 5.7.4, ACCEPTANCE, is replaced with the following:
- iii. Asphalt materials which pass AASHTO M 320 specifications and minimum average percent recovery from Table 5.7.2.1, yet fail to meet the low temperature quality stipulations outlined in Subsection 5.7.2, Materials, will be accepted; however, products from approved suppliers with a history of frequent test results indicating non-compliance

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to these quality stipulations, as determined by the Department, will be removed from the Products list.

- The Specification Tables and Charts are revised as follows: ίV.
  - a) Tables ASPH-1, ASPH-2 and ASPH-3, are deleted.
  - b) The contents of Table ASPH-8b, SPECIFICATIONS FOR POLYMER- MODIFIED CATIONIC RAPID-SETTING EMULSIFIED ASPHALT, are replaced with the following:

ASPHALT TYPE AND GRADE	CRS-2P		A.S.T.M.	
REQUIREMENTS	min.	max.	TEST METHOD	
Viscosity at 50°C, SFs	100	400	D244	
Residue by Distillation, % by mass (1)	65		D6997	
Oil Portion of Distillate, % by volume of emulsion		3.0	D6997	
Storage Stability Test, 24 h, % by mass (2)		1.5	D6930	
Demulsibility, 35 ml of 0.5% by weight solution of sodium dioctyl sulphosuccinate, % by mass	60		D6936	
Sieve Test, % retained on a 1 000 μm sieve, % by mass <sup>(2)</sup>		0.1	D6933	
Particle Charge Test			D244	
Test on Residue from Distillation				
Penetration at 25°C, 100 g, 5 s, dmm	100	250	D5	
Elastic Recovery at 10°C by Ductilometer, %	55		D6084 Test B	
Solubility in Trichloroethylene, % by mass (3)	97.5		D2042	
Ash Content, % by mass of residue (3)		1.0	TLT-229	

#### **PLANS, DRAWINGS AND PERMITS** <u>7.</u>

## 7.1 **SEPARATE DRAWINGS**

The following plans included in this contract shall form part of the Contract Documents:

Drawing Number	Plan Type and Description
C00	Cover Sheet
G01	Legends and Notes
C01	Overall Site Locations
C02	91st Street – Existing Site Plan & Removals
C03	91st Street – Design Plan & Profile
C04	Miscellaneous Sites – Asphalt & Concrete Work
C05	Miscellaneous Sites – Asphalt & Concrete Work
D01	Typical Details

Contractors are advised that drawings issued for tender and photocopy reproductions and, due to file conversion and / or reproduction variation, scaling off these drawings shall not be relied upon as accurate.

## 8. ADDENDA