

Lunenburg Bridge Rehabilitation

Rehabilitation of a single span concrete rigid frame bridge within the United Counties of Stormont, Dundas and Glengarry, on County Road 18 (Site ID: 18-469), approximately 1.3km east of County Road 12. Work generally includes, but is not limited to: implementation of traffic control measures including temporary traffic signals, removal and replacement of asphalt wearing surface and waterproofing on bridge deck, scarify and overlay concrete bridge deck, removal of existing concrete curb and traffic barrier and replacement with concrete parapet wall with single steel railing, completion of partial depth removals and repairs on deck fascia, soffit, abutment walls and wingwalls, completion of epoxy injection of cracks on soffit, replacement of approach guiderail, replacement of approach asphalt.



TENDER NO. 2025-18-469

Closing Date

1:00:00 p.m., local time, Tuesday December 17th, 2024

Table of Contents

- Section A: Form of Tender (copy to be completed and submitted)**
- Section B: Information to Bidders**
- Section C: General Conditions**
- Section D: Standard Specifications and Standard Drawings**
- Section E: Special Provisions**
- Section F: Drawings**

Section A: Form of Tender

TENDER FOR: THE MUNICIPAL CORPORATION OF THE UNITED COUNTIES OF STORMONT, DUNDAS AND GLENGARRY

CLOSING DATE: 1:00:00 p.m., local time, on Tuesday December 17th, 2024

DESCRIPTION OF WORK:

Rehabilitation of a single span concrete rigid frame bridge within the United Counties of Stormont, Dundas and Glengarry, on County Road 18 (Site ID: 18-469), approximately 1.3km east of County Road 12. Work generally includes, but is not limited to: implementation of traffic control measures including temporary traffic signals, removal and replacement of asphalt wearing surface and waterproofing on bridge deck, scarify and overlay concrete bridge deck, removal of existing concrete curb and traffic barrier and replacement with concrete parapet wall with single steel railing, completion of partial depth removals and repairs on deck fascia, soffit, abutment walls and wingwalls, completion of epoxy injection of cracks on soffit, replacement of approach guiderail, replacement of approach asphalt.

CONTRACT NO.: *2025-18-469 Lunenburg Bridge Rehabilitation*

I/We, the undersigned, having carefully examined the site of the proposed work, and having read, understood and accepted the provisions, plans, specifications and conditions attached hereto, each and all of which forms part of this tender, hereby offer to furnish all machinery, tools, labour, apparatus, plant and other means of construction; all materials, except as otherwise stated in the Contract; and to complete the work in strict accordance with the provisions, plans, specifications and conditions hereto attached for the unit prices shown in the attached "Schedule of Items and Prices", which forms part of this tender.

This Tender shall be open for acceptance for a period of sixty (60) days after the closing date. After this time, the tender may only be accepted with the consent of the Contractor.

I/We hereby agree that notification of acceptance of this tender shall be in writing, and may be sent by prepaid post or courier, and if sent by prepaid post or courier, acceptance shall be deemed to have been made on the date of the mailing of such notification.

I/We hereby agree that the work specified in the Contract will be performed in strict accordance with the Tendered provisions, plans, specifications, and conditions.

NOTES:

Payment certificates shall be submitted by the Contractor in an excel format for review. The submission shall illustrate the holdback, taxes and totals for the proposed invoiced work. Payment certificates shall be broken down by item, unit of measurement, tender quantity, quantity this period, previous certificate, quantity to date, unit price, total this period and total to date. Payment approval will only apply to items accompanied by an SDG submission form confirming all quantities. Each progress payment will require a new sheet illustrating all previously paid items. A sample excel file will be made available to the awarded proponent.

(P) denotes Provisional – therefore, the proponent agrees that they are not entitled to payment should these items be removed from the Contract by the Owner.

STANDARD TENDER REQUIREMENTS

Period of Validity of Tender:

Unless otherwise specified in these tender documents, it is agreed that this tender constitutes an irrevocable offer to provide the goods and/or services described herein for a period of sixty (60) calendar days from the closing date for the receipt of tenders. Acceptance by the Corporation is effective upon approval by its awarding authority without communication or notice to the bidder, although such notice will, of course, be given as expeditiously as possible.

Schedule:

It is anticipated that the commencement date will be on or about May 1, 2025; However, the official start-date shall be mutually established by The Corporation of the United Counties of Stormont, Dundas and Glengarry and the Contractor upon award of the Contract. Substantial completion of the project shall be completed no later than October 3, 2025.

If the time limits above specified are not sufficient to permit completion of the work by the Contractor working a normal number of hours each day or week on a single daylight shift basis, it is expected that additional and/or augmented daylight shifts will be required throughout the life of the contract to the extent deemed necessary by the Contractor to ensure that the work will be completed within the time limit specified. Any additional costs occasioned by compliance with these provisions will be considered to be included in the prices bid for the various items of work and no additional compensation will be allowed.

Delays:

If the Contractor is delayed in the completion of the work:

- i) by reason of changes or alterations made under Section GC3.10 of the "General Conditions of Contract"
- ii) by reason of any breach of Contract or prevention by the Corporation, or other Contractor of the Corporation or any employee of any of them;
- iii) by reason of delay by the Corporation in issuing instructions or information or in delivering materials;
- iv) by any other act or neglect of the Corporation or any other Contractor of the Corporation or any employee of any of them;
- v) for any cause beyond the reasonable control of the Contractor;
- vi) by acts of God, or of the Public Enemy, Acts of the Province or any other Foreign State, Fire, Floods, Epidemics, Quarantine Restrictions, Embargoes or delays of Subcontractors due to such causes,

the time of completion shall be extended, in writing, at any time on such terms and for such period as shall be determined by the Corporation. Notwithstanding such extensions, time shall continue

to be deemed of the essence of this Contract.

An application by the Contractor for an extension of time, as herein provided, shall be made to the Corporation, in writing, on the form prescribed, at least fourteen (14) calendar days prior to the date of completion fixed by the Contract. All bonds or other surety furnished to the Corporation by the Contractor shall be amended, where necessary, at the expense of the Contractor to provide coverage beyond the date of any extension of time granted, and the Contractor shall furnish the Corporation with evidence of such amendment of the bonds or other surety.

Any extension of time that may be granted to the Contractor shall be so granted and accepted without prejudice to any rights of the Corporation whatsoever under this Contract and all of such rights shall continue in full force and effect after the time limited in this Contract for the completion of the Work.

In this Contract, whenever power and authority are given to the Corporation, or the Engineer, or any person to take any action consequent upon the act, default, breach, neglect, delay, non-observance or non-performance by the Contractor in respect of the work or Contract, or any portion thereof, such powers or authorities may be exercised from time to time not only in the event of the happening of such contingencies before the time limit in this Contract for the completion of the work but also in the event of the same happening after the time so limited in the case of the Contractor being permitted to proceed with the execution of the work under an extension of time granted by the Corporation.

Liquidated Damages:

It is agreed by the parties to the Contract that in case all the work called for under the Contract is not finished or completed within the date of completion specified aforementioned damage will be sustained by the Corporation, and that it is and will be impractical and extremely difficult to ascertain and determine the actual damage which the Corporation will sustain in the event of and by reason of such delay and the parties hereto agree that the Contractor will pay to the Corporation the sum of **ONE THOUSAND DOLLARS (\$1000.00)** for liquidated damages for each and every working day delay in finishing the work beyond the dates of completion prescribed. It is agreed that this amount is an estimate of actual damage to the Corporation which will accrue during the period in excess of the prescribed date of completion.

The Corporation may deduct any amount under this paragraph from any monies that may be due or payable to the Contractor on any account whatsoever. The liquidated damages payable under this paragraph are in addition to and without prejudice to any other remedy, action or other alternative that may be available to the Corporation.

Bid Deposit:

A \$50,000.00 bid deposit shall be provided to the County via electronic fund transfer (EFT) with confirmation email sent to tenders@sdgcounties.ca prior to tender close. Bid deposits delayed by Banking institutions and/or not received by the date and time specified at tender closing shall be deemed non-compliant. The proceeds of the entire bid deposit shall be forfeited to the County if the Contractor fails to file with the Municipality an executed form of agreement for the performance of the work within fourteen (14) calendar days from the date of notification of acceptance of this tender by the Municipality or the Contractor fails to commence the work specified as provided elsewhere in the Contract. The County shall retain the bid deposit until the Contract has been completed and accepted by the Owner. Funds from this bid deposit shall also be forfeited should terms of this contract not be completed to the satisfaction of the Owner. Performance Bonds shall not be accepted in lieu of a bid deposit as stipulated.

This bid deposit of the successful bidder shall be deposited in trust for the duration of the contract. All other bid deposits will be returned as soon as a contract agreement has been executed or at the discretion of the Owner. Performance bonds shall not be accepted as bid deposits.

Per the provisions of the *Construction Act*, if the tendered value of the work exceeds \$500,000, prior to the commencement of work, the successful bidder will be required to furnish the County with a labour and material payment bond and performance bond each having a coverage limit of 50% of the total contract price. The \$50,000 bid deposit will additionally be held in trust for the duration of the Contract.

In the event of default or failure on the part of the Contractor to complete the Contract to the satisfaction of the County, the Corporation shall be at liberty to accept the next lowest or any bidder, or call for new Tenders, holding the Contractor and any surety provided liable for any increase in cost to the Corporation. In cases of repeated or persistent faulty work or performance on the part of the Contractor, and in cases where the Contractor becomes insolvent, is declared bankrupt or commits an act of bankruptcy, the County may, by notice in writing, terminate the Contract (or parts thereof) on such day as they may set in the notice.

Failure to perform any or all of the works outlined in this Contract to the satisfaction of the Owner may result in forfeiture of the bid deposit.

Contract Agreement:

This tender is subject to a formal Contract being prepared and executed.

Changes in Work:

The Owner, or Representative, without invalidating the Contract, may make changes by altering, adding to or deducting from the Work, the Contract Price and the Contract Time being adjusted

accordingly.

Fraud or Bribery:

Should the Contractor or any of his agents give or offer any gratuity to, or attempt to bribe any member of the awarding body, Officer or Servant of the Corporation, or to commit fraud against the County, the Corporation shall be at liberty to cancel the Contract forthwith, or to take the whole or any part of the Contract out of the hands of the Contractor, and to invoke the provisions of the “Forfeit” clause.

Section B: Information to Bidders

1. As noted in the "Form of Tender" the bid deposit of the successful bidder shall be deposited in trust for the duration of the contract. All other bid deposits will be returned as soon as a contract agreement has been executed or at the discretion of the Owner.

Per the provisions of the *Construction Act*, if the tendered value of the work exceeds \$500,000, prior to the commencement of work, the successful bidder will be required to furnish the County with a labour and material payment bond and performance bond each having a coverage limit of 50% of the total contract price. The \$50,000.00 bid deposit will additionally be held in trust for the duration of the Contract.

2. Tenders will be opened immediately following the closing time (Eastern Standard Time) noted in the Form of Tender.
3. It shall be the Contractor's responsibility to clarify any points in question with the Owner prior to submitting the tender on this project.
4. Extensions of unit prices and addition of extended unit prices, lump sums and allowances entered in the "Schedule of Unit Prices" in the Form of Tender will be checked by the Owner. The unit prices will be considered correct in the event that there is an arithmetical error between the unit price and extended price. The total amount bid shall be based on the arithmetically correct unit price extensions in the "Schedule of Unit Prices". The bidder will be bound to the corrected extended price.
5. The tender must be legible, and all items must be bid. Tenders which are incomplete, unbalanced, conditional or obscure, or which contain erasures or alterations not properly initialed or irregularities of any kind may be rejected as informal or void.
6. The bid must not be restricted by a statement added to the tender form or by a covering letter or by alterations to the tender form provided. Adjustments to a tender form already submitted will not be considered. A bidder desiring to make adjustments to a tender must withdraw the tender and/or supersede it with a later tender submission.
7. The lowest, or any, tender is not necessarily accepted.
8. The bidder shall familiarize themselves with all aspects of the work including the Form of Tender, the Information to Bidders, the General Conditions and Special Provisions. The bidder shall visit the site of the work if he feels it is necessary and shall confirm all dimensions and conditions pertinent to the work, including verification of the type of material to ensure compatibility. The Contractor will be held to have examined the premises before submitting his tender for the work and satisfied himself as to the present structural and physical condition of such portion thereof as it is the intention to repair, remove, replace or restore;

also the conditions under which he will be obliged to operate or that will in any way affect the execution of the work of the contract. The Owner will accept no responsibility for the failure or negligence of a bidder in doing so.

9. If the bidder finds discrepancies in, or omissions from the contract documents, or if he is in doubt as to their meaning, he shall notify the Owner who may issue a written addendum. The Owner will not make oral interpretations on the meaning of the contract documents nor will they assume responsibility for verbal instruction. Should the bidder not agree that the materials and methods specified will provide an installation to meet the requirements of the project; he shall notify the County in writing, stating his reason for objection and may submit a suggested alternative. In such an event, the County may choose to issue an addendum.
10. The Contractor will be required to obtain and pay for any building permit required for the execution of the work and shall obtain and pay for all other permits required, give all legal notices and pay all legal fees required as incidental to the work generally.
11. The Corporation does not bind itself to accept the whole or any part of any tender, and in particular if only one tender is received, the Corporation of the United Counties of Stormont, Dundas and Glengarry reserves the right to reject it.
12. The Contractor shall supply all labour and materials, transportation, apparatus, tools, scaffolding, etc. for the entire proper and substantial completion of the work; and shall install, maintain and remove all equipment of construction and other tools and things, and be responsible for the safe, proper and lawful construction, maintenance and use of same; and shall construct in the best workmanlike manner a complete job, including everything properly incidental thereto, as stated in the specifications, reasonably implied thereby, evidently necessary or unusually provided in standard practice, all in accordance with the Contract Documents.
13. It is intended that the Work so described is complete in that typographical errors or omissions will not impact a partial or incomplete aspect to the Work. Any situation should be brought to the immediate attention of the Owner prior to the close of the tender.

14. Within 14 calendar days of notification of award the successful bidder must provide the County with a certificate of insurance in compliance with insurance requirements stipulated below. A valid copy of the certificate of insurance shall be in the County's possession at all times.

- i. Commercial General Liability Insurance issued on an occurrence basis for an amount of not less than \$5,000,000.00 per occurrence / \$5,000,000.00 annual aggregate for any negligent acts or omissions by the Contractor relating to its obligations under this agreement. Such insurance shall include, but not be limited to bodily injury and property damage including loss of use; personal injury; contractual liability; premises, property & operations; non-owned automobile; broad form property damage; Owners & Contractors protective; occurrence property damage; products & completed operations; employees as Additional Insured(s); contingent employers' liability; tenants' legal liability; cross liability and severability of interest clause. Such insurance shall add the United Counties of Stormont, Dundas and Glengarry and if applicable, **all Municipal Partners** as an Additional Insured subject to a waiver of subrogation in favour of the County with respect to the operations of the bidder.

This insurance shall be non-contributing with and apply as primary and not as excess of any insurance available to the County. The successful bidder shall indemnify and hold the United Counties of Stormont, Dundas and Glengarry and, if applicable, all Municipal Partners harmless from and against any liability, loss, claims, demands, costs and expenses, including reasonable legal fees, occasioned wholly or in part by negligence or acts or omissions whether willful or otherwise by the bidder, its agents, officers, employees or other persons for whom the bidder is legally responsible.

- ii. Automobile liability insurance with respect to owned or leased vehicles (in excess of 30 days) used directly or indirectly in the performance of the services covering liability for bodily injury, death and damage to property with a limit of not less than \$5,000,000.00 inclusive for each and every loss.

15. The Contractor shall at all times pay, or cause to be paid, any assessment or compensation required to be paid, pursuant to the *Workplace Safety & Insurance Act*. The Contractor shall also be required to supply the County with a Certificate of Clearance issued by the Workplace Safety & Insurance Board. This certificate, along with the insurance certificate, must be received by the County with the signed contract agreement. Updated Clearance Certificates shall be provided as required.

16. Bidders shall be responsible to comply with the latest revision of the *Ontario Health and Safety Act*, including any amendments which come into force during the duration of this contract. All costs for services/ materials required to fulfill these obligations shall be assumed

to be included in the contract price quoted. The Contractor must certify that they have an appropriate Health & Safety Policy in place and be in compliance with the requirements of the Ontario Regulation 297/13 made under the OHSA.

17. The regulations of the *Highway Traffic Act* shall apply.
18. The Contractor shall be responsible for and shall pay any dues and assessments payable under the *Workplace Safety & Insurance Act*, the *Unemployment Insurance Act* or any other Act, whether Provincial or Dominion in respect to all employees or operators. The Contractor shall, upon request, furnish the Corporation with satisfactory evidence that he has complied with the provisions of any such Act.
19. A pre-construction meeting may be called by the Owner. The Contractor cost for such shall be considered to be included in the unit prices bid.
20. The tender submission shall be considered written confirmation of compliance with the *Occupational Health and Safety Act* regulations which includes W.H.M.I.S. training. The successful bidder must be able to produce written confirmation of training of any and all personnel that may perform work under this contract. When proof is requested by a County representative and it is not available the personnel in question may be instructed to leave the site immediately.
21. The Contractor shall also provide the County with Safety Data Sheets (S.D.S.) for all materials being supplied under this contract. These sheets shall be submitted with the signed contract agreement.
22. The Contractor shall be known as the operator with regard to C.V.O.R. (Commercial Vehicle Operator Registration) legislation as defined in the *Highway Traffic Act*.
23. Payment for work done or materials supplied shall not become due until the Contractor has filed, with the Corporation, satisfactory proof that all accounts for labour and material furnished to the project by third parties have been paid. If any lien remains unsatisfied after all payments have been made, the Contractor shall refund to the Corporation all monies that the latter may be compelled to pay in discharging such a lien, including all costs incidental thereto.
24. The Corporation shall have the right to retain, out of any monies payable by the Corporation to the Contractor under this Contract, the total amount outstanding from time to time of all damage claims by third parties arising out of this contract which have not been settled by the Contractor or his insurers. For the purpose of this paragraph, a claim has been settled if a payment has been made to and accepted by the claimant and a complete release obtained from him or if the claim has been fully investigated and a complete denial of liability has been made to the claimant.

25. No tender will be considered from any bidder who is not known to be skilled and regularly engaged in work of a character similar to that covered by Drawings and Specifications. In order to aid the Owner in determining the responsibility of any bidder, the bidder shall, within forty-eight (48) hours after being requested in writing by the Owner to do so, furnish evidence satisfactory to the County as to the bidder's experience and familiarity with work of character specified and his financial ability to execute properly the proposed work to completion within specified time.
26. References must be provided. It is understood that the Owner may contact any or all references; particularly prior to recommendation of award (normally within 3 days after tender closing). Failure to provide said references may result in disqualification.
27. The whole or any part of the contract arising from this tender may not be assigned or subcontracted without the specific written consent of the County, and, if provided, such subcontract shall incorporate all of the terms, conditions and liabilities that can reasonably be applied to the prime contract. A list of any and all intended Subcontractors must be included with the tender submission as noted in the Form of Tender. Changes or additions to the original information provided must receive approval of the County. References may be requested for subcontractors prior to said approval.
28. Subcontractors must have the same coverage (insurance, W.S.I.B., W.H.M.I.S., etc.) as the Contractor. It shall be the Contractors responsibility to provide this same documentation to the County within the 14-calendar day period after contract award or, in the case of changes, at least 48 hours prior to the Subcontractor coming on the jobsite.
29. The SDG Health and Safety Policy and Procedures Manual contains the following: "CONTRACTORS AND SUBCONTRACTORS". This classification is external to the County organization and includes all those individuals or organizations working on a contract for the County. The health and safety responsibilities attached to the classification include the following:
- i. Demonstrate the establishment and maintenance of a health and safety program, with objectives and standards consistent with applicable legislation and this Corporation's health and safety policy requirements.
 - ii. Include health and safety provisions in their management system to reach and maintain a consistently high level of health and safety.
 - iii. Ensure the workers in their employ are aware of the hazardous substances that may be in use at the workplace and wear the appropriate personal protective equipment required for the area.
 - iv. All accidents/incidents and near misses are to be reported to the supervisor of the contract immediately or as soon as possible.
30. Accessibility Standards for Customer Service, *Disabilities Act*.
It is the Proponent's responsibility to ensure that they and all sub-contractors hired under this contract are in full compliance with all accessibility regulations including Section 7 of Ontario Regulation 191/11, Accessibility Standards for Customer Service made under the Accessibility for

Ontarians with Disabilities Act, 2005 as may be amended from time to time.

31. Treatment of Information

The information submitted in response to this request will be treated in accordance with the relevant provisions of the *Municipal Freedom of Information and Protection of Privacy Act* (MFIPPA). The information collected will be used solely for the purposes stated in this request.

If the Bidder believes that any part of its bid reveals any trade secret, intellectual property, scientific, technical, commercial, financial or labour relation information or any other similar secret right of information belonging to the Bidder, the information must be clearly marked as being confidential. This does not apply to the lump sum pricing information that will be read out at the public opening. Unit prices as defined under the MFIPPA will not be provided at the public opening. Any requests for access to submissions will be subject to a formal review based on MFIPPA requirements prior to the release of any third-party information.

32. It is fully understood that the Contract Administrator (Owner or Corporation elsewhere in this tender document) refers to representative(s) of one or more of the municipal partners.

33. Questions pertaining to this contract should be addressed to Katie Coristine, Purchasing Coordinator (613-932-1515) - Ext. 1209 or kcoristine@sdgcounties.ca

The last day for submission of questions or clarifications shall be **Wednesday December 11, 2024, at 1:00:00 P.M. (EST)**

Note: The County Engineer, Benjamin de Haan, P.Eng. is the final authority and shall be involved only in matters of dispute between parties.

34. The Contractor may be rated at the end of the project. The results of the Contractor Rating will be used for the purpose of awarding future contracts.

Section C: General Conditions

General:

The November 2019 Ontario Provincial Standards (OPS) for Roads and Public Works Municipal Oriented General Conditions of Contract (OPSS.MUNI 100) shall apply to this contract for its duration with the following additions / amendments noted below. The submission of a tender by the Contractor signifies that they have reviewed the appropriate OPS General Conditions. The general conditions are available online at

<https://www.library.mto.gov.on.ca/SydneyPLUS/TechPubs/Portal/tp/opsViews.aspx>

A copy of the OPSS General Conditions will be provided to Contractors on request.

Wherever the word “County”, “Counties” or “Corporation” or “Owner” appears in this Contract, it shall be interpreted as meaning the “Corporation of the United Counties of Stormont, Dundas and Glengarry”.

Wherever the word “Engineer” or “Owner” appears in this Contract, it shall be interpreted to mean the County Engineer or any other authority designated by the County.

Supplementary Definitions

“Access Road” – means a private road built or used by the Contractor to gain access to the work or to a source of material but excluding any haul road and the road under contract.

“Culvert” - means a structure which is designated as a culvert in the Contract documents and which is designed to provide an opening under a roadway, railway or side entrance for the passage of surface water, livestock or pedestrians.

“Earth Grade” - means the earth surface, whether in cut or fill, as prepared for the base or sub-base.

“Grade Line” - means the line representing the established elevation of the completed work in profile or longitudinal section taken along a reference line established for the control of the work.

“Grade Point or Transition Point” – means the point where the grade line passes from cut to fill.

“Haul Road” – means any public road excluding the road under contract, which forms part of a materials haul route.

“Minister” – means the Minister of Transportation, and where the word appears M.T.O. Specifications which are included in this contract shall mean the Engineer as defined elsewhere.

“Ministry” – means the Ministry of Transportation and where the word appears in M.T.O. Specifications which are included in this contract shall mean the Corporation as defined

elsewhere.

“Road Allowance” or “Highway” – means the land acquired at any time for the use of the public as a common highway.

“Roadbed” – means the portion of the work which is designed to support the wearing surface and the shoulders of the roadway.

“Rock Grade” – means the rock surface, whether in cut or fill, as prepared for the base or sub-base.

“Sewer” – means a conduit which has been designed as a sewer to carry storm waste, sanitary waste or both, and which is designated as a sewer in the contract documents.

“Tonne” – equals 1000kg. Or two thousand, two hundred and four pounds Imperial measure.

Amendment to Reliance on Contract Documents (GC2.01.01)

It is the Contractor’s responsibility to locate (horizontal and vertical) all underground utilities. Mainline underground utilities shown on the contract drawings are for information only and shall not be interpreted to any tolerance. The cost to locate/ support/ work around any underground utilities will be the responsibility of the Contractor.

Supplemental Requirements for Claims, Negotiations and Mediation (GC3.13)

The successful bidder shall, after the award of contract and before the start of work, submit a schedule of hourly labour rates, showing payroll burden rates separately for the evaluation of extra claims.

Amendment to Approvals and Permits (GC 4.02.01)

The Contractor shall obtain and pay for any building permit required for the execution of the work and shall obtain and pay for all other permits required, give all legal notices and pay all legal fees required as incidental to the work generally.

Supplemental Requirements for Protection of Work, Persons and Property (GC6.01)

Where haul roads are damaged due directly, to the hauling operations, the Contractor shall place such material and perform such work on the haul road as required to provide safe passage and control of traffic thereon: and shall, on completion of the hauling operations, place such material and perform such work necessary to restore the haul roads to their original condition.

The Contractor shall take such steps as may be required to prevent dust nuisance resulting from his operations either within the right-of-way or elsewhere, or by public traffic where it is the Contractor’s responsibility to maintain a roadway through the work. The cost of all preventative measures shall be borne by the Contractor.

Supplemental Requirements within Contractor’s Responsibilities (GC7.0)

- 1) Spills or discharges of pollutants or contaminants under the control of the Contractor, and spills or discharges of pollutants or contaminants that are a result of the Contractor’s operations that cause or are likely to cause adverse effects shall forthwith be reported to the Owner. Such spills or discharges and their adverse effects shall be as defined in the Environmental Protection Act, R.S.O. 1990. This reporting shall not relieve the Contractor of his legislated responsibilities regarding such spills or discharges.
- 2) Maintenance of traffic shall be provided by the Contractor in accordance with Section GC7.06 of Ontario Provincial Standards, “General Conditions of Contract”. Signing and traffic control shall be constructed in accordance with the “Ontario Traffic Manual, Book 7 - Temporary Conditions” published by the Ministry of Transportation of Ontario. Signing shall be erected prior to the commencement of each item and if the signs do not meet Ministry standards they will be placed by the County. All charges associated with additional signing will be borne by the Contractor.

If during construction, proper traffic control is not provided upon 24 hours of written notice of an infraction, the County will supply the required flagger(s) and will deduct from the Contractor’s payment \$450.00 per flag person per day and the required signing at \$50.00 per sign per day.

Amendment to Payment for Equipment (GC8.02.05.06.01)

The Owner shall pay the Contractor for the Working Time of all equipment other than Rented Equipment and Operated Rented Equipment when used on a time and material basis at the OPSS 127 rates with a cost adjustment of 75% of the OPSS 127 rates.

Supervision & Inspection

The Contractor will provide a competent, experienced Supervisor/Inspector who must be present for the entire duration of the work. Should the Contractor’s Supervisor leave the work site without prior notification to the County representative, a cease order may be issued until his return.

No work may be done in the absence of the County appointed Inspector unless specifically authorized by the Owner. Any work done in the absence of the Inspector shall be subject to thorough and critical examination and must, if deemed to be unacceptable, be re-done at the Contractor’s sole expense, but no approval by the Inspector shall be taken as, or construed into an acceptance of defective or improper work or material, which must, in every case, be removed and properly replaced whenever discovered at any stage of the work. Orders given by the Owner relating to the quality of material and workmanship must be obeyed by the Contractor immediately.

The Contractor shall obey the directions/instructions issued by the named Owner representative. Failure to do so may also result in a cease order until such time as all issues have been addressed

to the Owner's satisfaction.

Section D: Standard Specifications and Standard Drawings

Section D1 – Standard Drawings

- 1.1 The Contractor acknowledges that certain standard detail drawings, which are provisions of this Contract, have *not* been reproduced for inclusion in the Contract Documents. These standard drawings are listed in Subsection 1.3. Some of the standard detail drawings may be shown on the Contract Drawings.
- 1.2 The Contractor acknowledges that the standard drawings referred to in Subsections 1.1 and 1.3 are the Ontario Provincial Standard Drawings (OPSD) as produced and amended by the government of the Province of Ontario.
- 1.3 The Ontario Provincial Standard Drawings (OPSD) which are provisions of this Contract are:

OPSD	Rev No	OPSD	Rev No	OPSD	Rev No
600.040	2	912.185	0	3340.100	2
608.010	2	912.235	1	3370.100	2
912.124	0	912.430	3	3390.100	2
912.130	3	922.186	1		

List not fully inclusive of all other referenced OPSD's associated with the work

Section D2 – Standard Specifications

- 2.1 The Contractor acknowledges that certain standard specifications, which are provisions of this Contract, have not been reproduced for inclusion in the Contract Documents. These standard specifications are listed in Subsection 2.3 and in the Schedule of Prices.
- 2.2 The Contractor acknowledges that the standard specifications referred to in Subsections 2.1 and 2.3 are the Ontario Provincial Standard Specifications (OPSS) as produced and amended by the government of the Province of Ontario. Municipal Oriented Specifications shall govern.
- 2.3 The Ontario Provincial Standard Specifications (OPSS) which are provisions of this Contract are (Note: Reference to Material Specifications not listed below):

OPSS	Rev. Date	Description
100.MUNI	Nov. 19	General Conditions of Contract
102.MUNI	Nov. 18	Weighing of Materials
127.PROV	Apr. 24	Schedule of Rental Rates for Construction Equipment, Including Model and Specification Reference
180.MUNI	Nov. 21	Management of Excess Materials
182.MUNI	Nov. 21	Environmental Protection for Construction in Waterbodies and on Waterbody Banks
310.MUNI	Nov. 17	Hot Mix Asphalt
314.MUNI	Nov. 23	Untreated Granular Subbase, Base, Surface, Shoulder, and Stockpiling
341.MUNI	Nov. 21	Routing and Sealing Asphalt Cracks in Hot Mix Asphalt Pavement
353.MUNI	Nov. 21	Concrete Curb and Gutter Systems
491.MUNI	Nov. 17	Preservation, Protection, and Reconstruction of Existing Facilities
501.MUNI	Nov. 17	Compacting
510.MUNI	Nov. 18	Removal
511.MUNI	Nov. 19	Rip-Rap, Rock Protection, and Granular Sheeting
706.MUNI	Apr. 18	Temporary Traffic Control Devices
710.MUNI	Nov. 21	Pavement Marking
721.MUNI	Nov. 18	Steel Beam Guide Rail and Adjustment of Cable Guide Rail
723.MUNI	Nov. 21	Energy Attenuators
732.MUNI	Nov. 19	Guide Rail End Treatment - Steel Beam Energy Attenuating Terminal Systems
741.MUNI	Nov. 21	Temporary Concrete Barriers
802.MUNI	Nov. 19	Topsoil
804.MUNI	Nov. 14	Seed and Cover
805.MUNI	Nov. 21	Temporary Erosion and Sediment Control Measures
904.MUNI	Nov. 23	Concrete Structures
905.MUNI	Nov. 17	Steel Reinforcement for Concrete
906.MUNI	Nov. 21	Structural Steel for Bridges
908.MUNI	Nov. 22	Metal Railings for Structures
914.MUNI	Nov. 14	Waterproofing Bridge Decks with Hot Applied Asphalt Membrane
919.MUNI	Nov. 21	Formwork and Falsework
928.MUNI	Apr. 19	Structure Rehabilitation - Concrete Removal
929.MUNI	Nov. 18	Abrasive Blast Cleaning - Concrete Construction
930.MUNI	Nov. 14	Structure Rehabilitation - Concrete Patches and Overlays
932.MUNI	Nov. 20	Crack Repair – Concrete
1352.MUNI	Nov. 21	Precast Concrete Barriers

Section E: Special Provisions

OPERATIONAL CONSTRAINT - Notification of Emergency Service Providers, School Boards and Area Businesses

The Contractor shall notify the stakeholders below 14 days in advance of work commencing regarding the construction schedule and if any changes to traffic flow are anticipated.

All notification shall be in writing and copied to the Contract Administrator. A draft of the notification shall be submitted to the Contract Administrator for approval a minimum of five (5) days prior to distribution. The notification shall include the contact information of the Contractor and the Contract Administrator.

The Contractor shall notify the Contract Administrator of any inquiries received from the public within 48 hours.

Contact information is provided below:

Emergency Services	
OPP – opp.er.mailroom@opp.ca	South Stormont Fire Department 2 Milles Roches Road, Long Sault, Ontario K0C 1P0 Phone: 613-534-8889
EMS – SDG – emsdutyofficer@cornwall.ca	
School Boards and Transportation	
Upper Canada District School Board 16750 Highway 43, Avonmore, Ontario K0C 1C0 inquiries@ucdsb.on.ca	Student Transportation of Eastern Ontario, P.O. Box 1179, 104 Commerce Drive, Prescott, Ontario K0E 1T0 transportation@steo.ca
Catholic District School Board of Eastern Ontario 2755 Highway 43, Kemptville, Ontario, K0G 1J0 mail@cdsbeo.on.ca	
Interest Groups/Businesses	
Township of South Stormont Phone: 613-534-8889	

OPERATIONAL CONSTRAINT - Installation and Relocation of Temporary Concrete Barrier and Energy Attenuators

Installation and relocation of temporary concrete barriers for staged construction, as indicated in the contract drawings, including end treatments, shall be carried out during one single lane closure period.

OPERATIONAL CONSTRAINT - Working Around Existing Utilities

The locations of all utilities shown are approximate only. Prior to proceeding with the work, the exact locations / depth of all utilities affected by the work shall be determined by the Contractor. The Contractor shall be responsible for locating the utilities and for providing protection to existing utilities during all construction operations. The locations of existing utilities within the project limits shall be determined by contacting the concerned utility companies.

The Contractor shall hand dig around all underground Bell and Hydro line that are located within the limits of construction.

OPERATIONAL CONSTRAINT - Guide Rail Operations

The Contractor shall ensure that guide rail systems adjacent to live lanes remain in place at all times for the duration of the contract. Any guide rail system that is removed shall be replaced with its new installation prior to opening the adjacent lane to traffic. Alternatively, temporary protection (TCB and appropriate end treatments) shall be supplied and placed by the Contractor at no cost to the owner.

OPERATIONAL CONSTRAINT – Control of Emissions

This operational constraint describes the requirements for the control of emissions including but not limited to; dust, abrasive blast medium and other debris generated from work on structures involving abrasive blast cleaning of concrete, structural steel and reinforcing steel, and the cutting and grinding of concrete.

The Contractor shall give the Contract Administrator written notice 3 working days prior to the start of abrasive blast cleaning of concrete, reinforcing steel and structural steel, and of the cutting and grinding of concrete. The Contractor shall submit with the written notice a proposal describing the procedures/plans to control the emissions of dust, abrasive blast medium and other debris from these operations.

The Contractor shall take whatever measures necessary to ensure that dust, abrasive blast medium, and other debris from work on structures involving abrasive blast cleaning of concrete, reinforcing steel and structural steel, and the cutting and grinding of concrete, do not enter any surface waters; or escape beyond the right-of-way.

The measures may include:

- (a) termination of operations during periods of high wind;

- (b) the use of low dust generating technologies such as vacuum abrasive blasting;
- (c) vacuuming of surfaces to remove dust and debris; and
- (d) the use of temporary barrier walls or enclosures.

Excess materials shall be managed as specified in the Contract Documents.

Payment for the control of emissions during work on structures involving abrasive blast cleaning of concrete, reinforcing steel and structural steel, and the cutting and grinding of concrete, shall be deemed to be included in the tender items requiring such control.

OPERATIONAL CONSTRAINT – Start Date on Site

The Contractor will not be permitted to commence any on-site work (including mobilization activities) under this Contract prior to May 1, 2025.

NOTICE TO CONTRACTOR – REFERENCE PLANS AND REPORTS – for information purposes only

The Contractor is hereby notified that the following plans and reports are available for viewing during the tender period:

- Original Design Drawings as obtained from the United Counties of Stormont, Dundas and Glengarry (6 drawings total), dated 1966.
- OSIM Inspection Report, dated July 15, 2021.
- OSIM Inspection Report, dated July 11, 2023.

The above referenced documents will be made available in electronic (PDF) format on Biddingo.

CONCRETE FIELD TESTING REQUIREMENTS

Concrete testing shall be in accordance with OPSS.MUNI 904, November 2023, and the requirements of this Special Provision.

The Contractor shall be responsible for field sampling and testing of concrete as follows:

- Slump of concrete (or slump flow for self-consolidating concrete);
- Air content of plastic concrete;
- Temperature of plastic concrete; and
- The making and curing of concrete cylinders for testing (including the supply of single use concrete cylinder moulds).
- Transportation of the cylinders to a testing facility, laboratory curing and all destructive testing as required.

Compressive strength tests shall be undertaken at 7 and 28 days at a minimum. Any additional early strength testing shall be undertaken in accordance with OPSS 904.07.16 and as specified elsewhere in the Contract Documents.

Field testing and sampling of concrete shall be done by a person certified as a concrete field testing technician by the Canadian Standards Association (CSA), or by the American Concrete Institute (ACI).

The person shall:

- have successfully completed, as part of the certification requirements, written and practical examinations within the last five years verifying his/her competence to carry out field testing of concrete (slump, air content, temperature and casting of cylinders), and
- have in his/her possession, at all times field testing is to be performed, a card issued by the certifying agency verifying the currency of the individual's certification.

All concrete shall be field sampled and tested in conformance with this clause except as stated elsewhere in the Contract.

All work associated with the sampling, field testing, field curing and preparing test cylinders (including the supply of single use concrete cylinder moulds), transportation to a testing facility, laboratory curing and destructive testing shall be the responsibility of the Contractor. The Contractor shall be responsible for all equipment and materials to perform the work. All field and laboratory test data shall be recorded and supplied to the Contract Administrator. Where testing deficiencies have been identified, the Contractor shall provide additional testing of the hardened concrete verifying that the concrete meets the contract requirements. The Contractor shall note that, depending on the sequence of his concrete pouring operations for various components, multiple separate trips to the testing laboratory may be required.

Concrete testing shall be carried out, as a minimum, as follows:

- Slump, air, concrete temperature; 5 consecutive trucks until consistency has been achieved, then every 2nd truck for the remainder of the pour. This criteria shall be applied to each day concrete is placed.
- Concrete cylinders; 1 set of 4 cylinders per 20 cubic metres of concrete with a minimum of 1 set of cylinders cast each day concrete is placed.

Basis of Payment

Payment at the Contract price for the applicable tender item requiring concrete work shall include full compensation for all labour, equipment and material required to do field sampling, field curing, transportation, laboratory curing and destructive testing of concrete.

SURPLUS MATERIAL

All surplus material generated (concrete, asphalt, steel, granular, etc.) from construction activities shall be disposed of off site at the Contractor's expense. All costs associated with off site removal and disposal shall be deemed to be included in the applicable tender items.

CONCRETE DISCHARGE TIME

For all concrete placed under this Contract, OPSS.MUNI 904, November 2023, and OPSS.MUNI 1350, November 2023, shall govern except as amended or extended as follows:

All concrete materials and mixes shall be designed for an extended discharged time from the time of initial batching. As a minimum, the mix design shall include a retarding admixture to meet a minimum discharge time of 2 hours after introduction of mixing water to cement and aggregate. These times may be further extended using a set retarder, provided the Owner approves such use.

SP1 – SITEWORK, INCLUDING MOBILIZATION, DEMOBILIZATION

The following work, activities and costs shall be included in this item:

- a) Bonds, administration and supervisory costs.
- b) Mobilization and demobilization of equipment material and Contractor's forces.
- c) Schedules and cash flow forecast.
- d) Site preparation for work.
- e) Costs of all necessary approvals and permits as applicable.
- f) Cost of building construction depot (laydown area) in a location acceptable to the Owner.
- g) All costs associated with locates, protection or temporary relocation and reinstallation of utilities, if applicable and not specified in other areas of the contract.
- h) Installation of temporary barricades, hoarding, fencing and other protection required.
- i) Cost of supplying and maintenance of adequate sanitary facilities.
- j) Scaffolding and other required access to perform the work, if not specified in other areas of the contract.
- k) Costs associated with submission of shop drawings, rebar schedules, product submissions etc., including engineering and QVE.
- l) Cost of advertising of Substantial Completion in Daily Commercial News.
- m) Costs associated with access to private properties as required and obtaining written release from the affected property Owners. Copy to be submitted to the Engineer.
- n) Maintaining and reinstatement of existing road signs, mailboxes, etc.
- o) All costs of any incidental work not specifically mentioned in the Contract Documents but required by virtue of the work.
- p) All costs associated with required environmental protection measures not specified elsewhere in the Contract.
- q) Contractor's office.
- r) Fencing of the Work area.
- s) Brushing around the structure. All brush and trees within 3m of the wingwall and under the structure are to be removed down to ground level.
- t) Cost of reinstating to their original conditions the Contractor's laydown areas and office sites.
- u) All costs associated with preparation of as-built drawings (red line hard copy mark-ups).
- v) All costs associated with field surveying as specified in the Contract Documents and as required in order to properly layout and complete the work.

The Contractor shall submit a detailed Work Schedule and, if requested, a Projected Monthly Cash Flow Forecast to the Engineer at the Pre-Construction Meeting. The Projected Monthly Cash Flow Forecast shall indicate the projected cost of the work to be completed in each calendar month of the Contract term and shall be based on the Contract prices and be consistent with the Detailed Work Schedule.

The Contractor is advised that no additional payment will be made for any repeated mobilization and demobilization for any of the construction activities covered by this Contract; interrupted by weather or by any other construction activity included in any part of this Contract.

Measurement for Payment:

- a) Payment for this lump sum item will be prorated over the scheduled duration of the Contract per the approved schedule.

Basis for Payment:

- a) Payment at the Contract lump sum price for this item shall be full compensation for all labour, materials, equipment and transportation required to complete the work. Contractor shall bear all immediate, subsequent and consequential costs associated with change in the schedule, staging, and methodology of the work.

SP2 – TRAFFIC CONTROL INCLUDING ALL SIGNAGE, DAILY INSPECTION, AND MAINTENANCE

OPSS.MUNI 706, April 2018, shall govern except as amended or extended herein.

706.01 SCOPE

Section 706.01 of OPSS.MUNI 706, April 2018, is amended by the addition of the following:

Work under this tender item shall include, but not be limited to the following:

- Preparation and submission of a Traffic Control Plan (TCP) as specified elsewhere in the Contract Documents;
- Supply, installation, monitoring, operation, maintenance and removal of all temporary construction signage for both vehicular and pedestrian traffic;
- Coordination and execution of all traffic control activities required to complete the work;
- All other provisions related to traffic control and traffic management as required to carry out the construction and facilitate the Contractor's operations;

- Separate provisions to fully and effectively restrain vehicles from entering the work area when the railings are removed;
- The supply and installation of a physical barrier at the ends of the bridge deck on the roadway to prevent vehicles and pedestrians from entering the work area. The physical barrier shall be adequately illuminated to be clearly visible and distinguishable during night conditions;
- The supply and installation of construction fencing around the construction area at all times;
- Removal, salvage and reinstallation of all existing roadway and information signage within the Contractor's work area.

The Contractor shall be responsible for construction means, methods, techniques, sequences, procedures, coordination and maintenance of all requirements for traffic signing.

706.02 REFERENCES

Section 706.02 of OPSS.MUNI 706, April 2018, is amended by the addition of the following:

Ontario Traffic Manual (OTM): All reference in this Special Provision and the Contract Documents to the Ontario Traffic Manual will indicate the most recent version(s) of the OTM including, and not necessarily be limited to, as applicable:

- Book 1 – Introduction of the Ontario Traffic Manuals
- Book 5 – Regulatory Signs
- Book 6 – Warning Signs
- Book 7 – Temporary Conditions
- Book 11 – Markings and Delineations
- Book 12 – Traffic Signals.

706.03 DEFINITIONS

Section 706.03 of OPSS.MUNI 706, April 2018, is amended by the addition of the following:

Traffic Control Device(s) (TCD)

A generic term used to describe any person, sign, signal, marking or device placed upon, over or adjacent to a roadway by or at the direction of a public authority or official having jurisdiction (such as The United Counties of Stormont Dundas and Glengarry) or their designate, for the purpose of regulating, warning, guiding or informing a vehicle operator or pedestrian of an existing condition or hazard.

Traffic Control Plan (TCP)

A detailed plan for the control of traffic, including vehicular and pedestrian movements, required to allow the Contractor to fulfil all conditions of the contract, taking into account the organized, systematic safe conduct of the project. This includes, as applicable, detours, staging sequences,

work, public and emergency vehicle access and egress, public access and separation from hazardous areas, temporary barriers, removal of old pavement markings, and the selection of appropriate typical layouts and devices necessary for traffic control. The traffic control plan shall contain the information respecting how the applicant intends to complete the work and satisfy the requirements of the Contract including but not limited to the following:

- a) start and completion times of work;
- b) specific location of work;
- c) lane use requirements;
- d) requirements for road closure;
- e) public notification undertaken;
- f) requirement for temporary no stopping signs;
- g) traffic routing and detour requirements where required

Traffic Control Persons (TCP's): A person duly trained and authorized to direct traffic at a work zone through the use of the Traffic Control Sign (STOP/SLOW Paddle)

Traffic Protection Plan (TPP): A plan required by the Occupational Health and Safety Act and its regulations for the protection of workers in a work zone. The plan must contain a written description of the traffic hazards to which workers may be exposed and measures used to protect them.

OPSS.MUNI 706, April 2018, is amended by the addition of Section 706.04 as follows:

706.04 SUBMISSION AND DESIGN REQUIREMENTS

706.04.01 General Requirements

The Ontario Traffic Manual supersedes all references to the Ministry of Transportation, Manual for Uniform Traffic Control Devices, or MUTCD in the Contract Documents.

The Contract Administrator reserves the right to ask for revisions to the Traffic Control Plan at submission time, or reject it if the Plan does not meet the Contract language. In addition, the Contract Administrator reserves the right to instruct the Contractor to revise it at any time during the Contractor's execution of the plan, when the Contract Administrator finds that the Contractor is not providing the commitments shown in the original Traffic Control Plan submission, or the Contractor's Traffic Control Plan proves to be insufficient to address the field conditions.

The Contractor shall be required to review and modify the TCP for errors, omissions, deficiencies, or because of any new hazards that are identified and not previously addressed within the document.

It is the responsibility of the Contractor to ensure that all necessary training has been provided prior to commencement of the work.

The Contractor shall ensure that all workers, including sub-contractors, in the Working Area are aware of the importance of the Traffic Control Plan measures.

706.04.02 Submission Requirements

Two (2) weeks prior to commencing construction, the Contractor shall prepare and submit to the Contract Administrator a Traffic Control Plan that details the specific traffic control layout(s) necessary for the completion of the works. The Traffic Control Plan shall be in the form of drawing(s) and written description(s) of how the Contractor intends to control traffic through and around the work zone. The TCP shall include, and not necessarily be limited to:

- Monitoring and Repair (24 hour contact number);
- Reference to Applicable OTM Book 7 Typical Layouts;
- Traffic control signs (regulatory, warning and temporary);
- Traffic control delineation;
- Traffic Control vehicles and devices (TC-12, Crash Trucks, Temporary Lighting etc.);
- Contract-specific operational requirements;
- Traffic staging and scheduling;
- Construction vehicle access/egress;
- Public access/egress for all existing entrances and side roads;
- Pedestrian safety; barriers and barricades;
- Emergency Vehicle access;
- Locations for removal of existing line painting and proposed temporary pavement markings;
- Parking for Contract Administrator; and
- Any other traffic control measures.

The Contract Administrator will accept the submission of the TCP, and review it to identify any errors, omissions, or improvements as it relates to maintaining public safety and mobility. The acceptance and review of the TCP by the Contract Administrator will make no representation and/or warranty that the document is accurate, complete, or compliant with all applicable legislation. Any errors, omissions or deficiencies within the TCP will remain the sole responsibility of the Contractor. Work shall not commence until the Contract Administrator has reviewed the TCP and the Contractor has addressed all comments.

706.07 CONSTRUCTION

Section 706.07 of OPSS.MUNI 706, April 2018, is amended by the addition of the following:

706.07.04 Additional Requirements

Prior to commencing any construction, on or adjacent to a County Road, the supply and placement of all necessary temporary traffic control devices shall be performed under the sole direction of the Contractor and in accordance with the Contractors submitted/reviewed TCP. The TCP shall be developed in accordance with guidelines established by the most recent version of the OTM, the Occupational Health and Safety Act (OHSA), and the Contract Documents which details the required contents and submission of the TCP.

The Contractor shall designate a person to be responsible for traffic control and work zone safety. The designated person shall be a competent worker who is qualified because of knowledge, training, and experience to perform the duties; is familiar with Book 7 of the OTM; and has knowledge of all potential or actual danger to workers and motorists. Prior to the commencement of construction, the Contractor shall notify the Contract Administrator of the name; address; position and telephone numbers of the designated person, and update as necessary. The designated person may have other responsibilities, including other construction sites, and need not be present in the Working Area at all times.

The condition of all traffic control devices shall be maintained for the duration of the Contract, in accordance with the OTM.

The Contractor shall immediately repair, replace or otherwise make good the practice deemed unsafe or non-compliant when the Owner (or his delegated authority) makes the Contractor aware of any violation of the TCP (or applicable regulations). Should the Contractor disagree, the Ministry of Labour will be consulted to provide clarification of the observed deficiency.

Vehicular and pedestrian traffic control shall remain the sole responsibility of the Contractor as the County delegates this authority to the Contractor in accordance with the submitted/reviewed TCP. Notwithstanding the foregoing, the Contractor shall, at his own expense, remove any equipment or material, which in the Contract Administrator's opinion constitutes a hazard to traffic or pedestrians.

The Contractor shall be fully and solely responsible to ensure the development and implementation of a submitted/reviewed traffic control plan as specified elsewhere in the Contract. The TCP and all required traffic control devices shall be designed/installed, monitored, operated/maintained and removed by the Contractor, utilizing only competent persons and workers as defined under the OHSA.

The Contractor shall not store any equipment or materials on the road or the roadway shoulders or boulevards, unless the storage areas are identified in the TCP and appropriate traffic control devices protect the equipment or materials. The Contract Administrator shall review and approve any storage of equipment and /or materials within the right of way.

The Contractor shall remove all dirt and debris from all paved or concrete surfaces at the close of each workday, to the satisfaction of the Contract Administrator.

Traffic Control Delineation and Operation

Prior to commencing any construction pursuant to this Contract, the Contractor shall supply and place all necessary temporary traffic control devices.

Vehicle Access to Entrances and Side Roads

The Contractor shall not block access to private entrances. Should temporary loss of access/egress be necessary to complete the work outlined in the Contract, the Contractor must provide a minimum of 24 hr prior notification to the business or resident(s), notifying them of the work being undertaken. Such notification regarding the temporary loss of access/egress is the sole responsibility of the Contractor.

This requirement will not be considered for separate payment.

Line Painting

All temporary line painting treatments required for this Contract have been detailed in the Contract Specifications and should be shown in the TCP. Payment for the temporary line painting shall be paid under the appropriate item, as defined elsewhere under the Contract.

Signage

The Contractor shall be responsible for all aspects of traffic control during construction. This includes the removal, installation or modification of any necessary regulatory signage due to the requirements of the traffic control plan and the supply, installation, maintenance and removal of all temporary regulatory/construction signage.

The Contractor shall post speed reduction signage through the designated work zone of 40 km/hr for the duration of the Contract.

Project information signage will be supplied and installed by the County. The County will provide and install all regulatory signage required after the completion of construction.

The Contractor shall not make any claim for extra compensation for the cost of fulfilling the obligations set out in this Special Provision.

Notification to Concerned Bodies

The Contractor shall notify emergency services and applicable school boards of the construction duration and restrictions to regular traffic conditions as specified elsewhere in the Contract.

This requirement will not be considered for separate payment.

706.10 BASIS OF PAYMENT

706.10.01 Traffic Control Signing

Subsection 706.10.01 of OPSS.MUNI 706, April 2018, is deleted in its entirety and replaced by the following:

Payment at the Contract price for the above item shall be full compensation for all labour, equipment and material required to do the work. All research, preparation, implementation of the TCP, supply, installation, monitoring, operation, maintenance and removal of required traffic control devices are deemed to be included with the item.

Payment shall be based upon the following schedule:

- a) 25% upon satisfactory submission of the TCP and installation of the control measures; and
- b) 75% pro-rated into equal payments over the term of the contract.

This payment schedule may only be modified as agreed upon in writing between the Contractor and the Contract Administrator.

SP3 – TEMPORARY ENERGY ATTENUATOR (TL-2 / NARROW / BIDIRECTIONAL)

OPSS.MUNI 723, November 2021, shall govern, except as amended and extended herein.

Under this Item and for the Contract Unit price, the Contractor shall supply all labour, equipment, materials and transportation necessary to supply, install, maintain during construction and remove after construction the temporary energy attenuator as indicated on the Contract Drawings.

723.07 CONSTRUCTION

723.07.03 Temporary Installation

Subsection 723.07.03 of OPSS 723 is amended by the addition of the following:

The Contractor is hereby advised that the existing roadway at the locations identified for installation of the energy attenuators consists of a minimum asphalt thickness of 80 mm over 150 mm min. of compacted granular material.

SP4 – ENVIRONMENTAL PROTECTION / EROSION AND SEDIMENT CONTROL INCLUDING EXCLUSION FENCING AND BIRD NESTING AVOIDANCE

OPSS.MUNI 182, November 2021, and OPSS.MUNI 805, November 2021, shall govern, except as

amended and extended herein.

Under this Item, the Contractor will design, erect, maintain, monitor and remove upon completion the protection schemes necessary for performing the entire work without letting any concrete, debris or any construction materials enter the waterway, to the Authority's approval and satisfaction. Implement, maintain and remove all erosion and sediment control measures and removal of sediment accumulated by control measures.

Navigability and Environmental Protection - General

The Contractor is fully and solely responsible for compliance with the Raisin River Conservation Authority & MNRF as related to protection of fish habitat and protection of the environment. Contractor is fully and solely responsible for compliance with all Federal, Provincial and Municipal Acts and regulations as related to environmental protection.

Local Conservation Authority

The Owner has made contact with the Raisin River Conservation Authority (RRCA) regarding this project and will obtain and pay for the work permit. In order to formalize the process and issue the work permit, the RRCA requires the Contractor's Environmental Protection Plan / Erosion and Sediment control plan. The Contractor shall submit these documents without delay at the outset of the project so as to expediate the overall permit acquisition process. As part of the work under this item, and in addition to all other Environmental and other requirements, the Contractor is fully and solely responsible for abiding by all permit requirements including. The Contractor shall ensure that sufficient time is allotted for Environmental Protection / Erosion & Sediment Control Plan review and approval (including any necessary re-submissions as required), etc.

Contact information for the Raisin River Conservation Authority is as follows:

Raisin River Conservation Authority
18045 County Road 2
P.O. Box 429
Cornwall, Ontario K6H 5T2
Phone: 613-938-3611
Fax: 613-938-3221

Department of Fisheries and Oceans

All applicable measures as specified by the Department of Fisheries and Oceans (DFO) in the attached document shall be adhered to and shall be the responsibility of the Contractor to implement and maintain as required.

Erosion and Sediment Control Plan

General

The Contractor acknowledges that surface erosion and sediment runoff resulting from his

construction operations will have a detrimental impact to any downstream watercourse or sewer, and that all construction operations that may impact upon water quality shall be carried out in a manner that strictly meets the requirements of all applicable legislation and regulations.

As such, the Contractor shall be responsible for carrying out his operations, and supplying and installing any appropriate control measures, so as to prevent sediment laden runoff from entering any sewer or watercourse within or downstream of the Working Area.

The Contractor acknowledges that no one measure is likely to be 100% effective for erosion protection and controlling sediment runoff. Therefore, where necessary the Contractor shall implement sequential measures arranged so as to achieve the required level of sediment and runoff control. Suggested on-site measures may include, but shall not be limited to, the following methods: sediment ponds, silt fences, straw bales, filter cloths, catch basin filters, dams and/or berms, or other recognized technologies and methods available at the time of construction. Specific measures shall be installed in accordance with the requirements of OPSS 577 where appropriate, or in accordance with manufacturer's recommendations.

Where, in the opinion of the Contract Administrator or Regulatory Agency, the installed control measures fail to perform adequately, the Contractor shall supply and install additional or alternative measures as directed by the Contract Administrator or Regulatory Agency. As such, the Contractor shall have additional control materials on site at all times which are easily accessible and may be implemented at a moment's notice.

Before commencing the Work, the Contractor shall submit to the Contract Administrator and the Local Conservation Authority a detailed Environmental Protection / Erosion and Sediment Control (EPESC) Plan. The EPESC Plan will consist of a written description and detailed drawings indicating the on-site activities and measures to be used to control erosion and sediment movement for each step of the Work. The written description shall be signed by, and the drawings shall bear the stamp and signature of a qualified Professional Engineer licensed in Ontario.

Contractor's Responsibilities

The Contractor shall ensure that all workers, including sub-contractors, in the Working Area are aware of the importance of the erosion and sediment control measures and informed of the consequences of the failure to comply with the requirements of all Regulatory Agencies and the specifications detailed herein.

The Contractor shall periodically, and when requested by the Contract Administrator, clean out accumulated sediment deposits as required at the sediment control devices, including those deposits that may originate from outside the construction area. Accumulated sediment shall be removed in such a manner that prevents the deposition of this material into any sewer or watercourse and avoids damage to the control measure. The sediment shall be removed from the site at the Contractor's expense and managed in compliance with the requirements for excess earth material, as specified elsewhere in the Contract.

The Contractor shall immediately report to the Contract Administrator any accidental discharges of sediment material into either the watercourse or sewer system. Failure to report will constitute a breach of this specification and the Contractor may also be subject to the penalties imposed by any applicable Regulatory Agency. Appropriate response measures, including any repairs to existing control measures or the implementation of additional control measures, shall be carried out by the Contractor without delay.

The sediment control measures shall only be removed when, in the opinion of the Contract Administrator, the measures are no longer required. No control measure may be permanently removed without prior authorization from the Contract Administrator. All sediment and erosion control measures shall be removed in a manner that avoids the entry of any equipment, other than hand-held equipment, into any watercourse, and prevents the release of any sediment or debris into any sewer or watercourse within or downstream of the Working Area. All accumulated sediment shall be removed from the Working Area at the Contractor's expense and managed in compliance with the requirements for excess earth material, as specified elsewhere in the Contract.

Where, in the opinion of either the Contract Administrator or a Regulatory Agency, any of the terms specified herein have not been complied with or performed in a suitable manner, or at all, the Contract Administrator or Regulatory Agency has the right to immediately withdraw its permission to continue the work but may renew its permission upon being satisfied that the defaults or deficiencies in the performance of this specification by the Contractor have been remedied. No compensation will be owed or paid to the Contractor for the withdrawal of permission to do the work resulting from noncompliance with the requirements of this specification or the Regulatory Agencies.

In addition to any other remedy and/or penalty provided by law, where there has been default or noncompliance with any of the terms specified herein and the Contractor refuses to perform or rectify same within forty-eight (48) hours of the receipt of the written demand of the Contract Administrator to do so, the Owner is hereby entitled to enter upon the Working Area and either complete the work in conformity with the Contract or have the work done that it considers necessary to complete the Work to its intended condition, whichever, in the Owner's sole opinion, is the most reasonable course of action. The Contractor and the Owner further agree that the costs incurred for any such work shall be retained by the Owner from monies otherwise due to the Contractor, should any such monies be available.

Erosion and Sediment Control details

The sediment control measures include, but are not necessarily limited to the following:

- Silt curtains/fence barriers
- Straw bale flow checkers
- Turbidity curtain installed downstream of construction
- Detention ponds/basins

- Debris and effluent catchment system during removal of structure
- The Contractor shall design and construct the protection scheme as necessary to ensure that sediment run-off does not enter the watercourse or is not transported downstream from the site.
- Before passing water pumped from excavations into a watercourse, all excessive sediment should be removed by means of silt traps or sediment barriers.
- Use erosion-resistant material, such as gravel fill with rip-rap or geotextile lining, in order to prevent the entry of sediment into the watercourse.
- Construction affecting water must not take place during spawning/incubation periods or major fish migration periods, as determined by the Ministry of Natural Resources. Prevent any silt from excavation and backfill from entering the waterway.
- The material used for earth cofferdams when used and approved should be clean granular without a significant content of silt or clay.
- Cofferdam when used and approved should be removed as carefully as possible to minimize sedimentation.
- Equipment and materials should be stored well back from the water's edge.
- Do not clean concrete buckets, wheelbarrows, or shovels in water body. Instead wash them with hoses so that run-off is filtered through vegetation. Prevent the entry of lime, cement or fresh concrete into waterways.
- The Contractor shall ensure that no contamination, waste, debris, construction materials or other substances which may be detrimental to marine life or quality of water shall enter the watercourse as either a direct or indirect result of construction and the Contractor shall meet all requirements of Government authorities and applicable agencies with respect to environmental protection.
- The Contractor shall immediately clean up any spills or contamination, waste, debris, construction materials or other substances which may be either detrimental to marine life or water quality. In the event of a spill, the Contractor shall immediately commence a clean-up operation. The Contractor shall be liable for all damages and/or charges laid which result, either directly or indirectly, from the spill, or contamination of any kind, which result from its construction operations.
- Filters (screens) shall be provided at the water intake of all pumps to prevent the entry of, or damage to, fish and the discharge of the water shall be directed in a manner that will prevent erosion of the watercourse bed and watercourse banks.
- The Contractor shall release any stranded fish to the open portion of the watercourse without harm.

Anticipated Water Flows and Local Conditions

The Contractor must satisfy himself with the local conditions and anticipated water flows, levels and flow velocity to be met with during construction. He shall make his own estimate of the facilities required and difficulties to be encountered, including the nature of subsurface materials and conditions.

Peak Flows

The Contractor shall make his own estimate of the anticipated water flows during construction and construct the work so that flow is not restricted.

Submissions

In addition to requirements as detailed elsewhere, the Contractor shall submit to the Contract Administrator copies of all protection schemes a minimum of 14 calendar days prior to proceeding with the work. The submission shall be comprehensive and shall provide descriptions, working drawings and schedules that detail the sequence of this work and the temporary protection systems.

Permission to proceed with the work will be provided if the Contract Administrator determines that all the details of the Contractor's operations meet the requirements specified in the Contract Documents and by the Local Conservation Authority and applicable Permits obtained by Contractor are filed with Contract Administrator.

The permit application was completed by the Owner and submitted to the Raisin Region Conservation Authority. A copy of the permit will be provided once issued by Raisin Region Conservation Authority.

Ineffectiveness of Installed System

Whenever protection measures are found to be inadequate by the Contract Administrator, changes shall immediately be made, which will ensure watercourse, embankment, stream bed and fisheries protection, at no extra cost to the Owner.

Species at Risk

The Contractor is fully and solely responsible for carrying out his work to comply with the requirements of Ontario's Endangered Species Act (ESA 2007) for all species listed on the Species at Risk in Ontario (SARO) List. All costs associated with the Contractor's failure to take the necessary precautions and abide by the Act including construction delays, fines, etc. shall be borne solely by the Contractor.

More information regarding Species at Risk can be found at the following website:
<https://www.ontario.ca/page/species-risk>.

The Contractor shall refer to the site-specific Species at Risk Screening Assessment Report (GEMTEC, June 27, 2023) for further information on potential species at risk.

Migratory Bird Nesting Prevention

As part of the work under this item, commencing on April 15, 2025 and extending until the completion of the Contract, the Contractor shall ensure that no migratory birds nest on the bridge structure. The Contractor shall solely determine the required methodology to ensure that no migratory birds nest (e.g., bird netting, daily sweeps, etc.).

Turtle Exclusion Fencing

As part of the work under this item, the Contractor shall install exclusionary silt fencing in order to close off the work area and prevent the entrance of turtles. Approximate locations of fencing are indicated on the Contract drawings; however, the Contractor shall make his own assessment as to the required locations (based on his operations) and adjust the locations as deemed necessary. Guidelines from MNRF on turtle mitigation will be provided upon award to the successful bidder. Fencing shall be installed by May 1, 2025.

In Water Work

No in-water work shall be permitted prior to July 16, 2025 or after September 30, 2025 on this Contract. For the purpose of this Contract, scaffolding legs supported on the existing creek bed shall be considered as in-water work and as such, shall not be permitted outside of the specified window.

Basis for Payment

Payment at the Contract lump sum price for the Item shall be full compensation for all labour, materials, equipment and transportation required to complete the work.

Measurement for Payment

Payment for this lump sum Item will be as follows:

- 30% upon installation of environmental protection,
- 55% to be prorated over the scheduled duration of the Contract per the approved schedule,
- 15% upon removal of all environmental protection.

Where, in the opinion of either the Contract Administrator or a Regulatory Agency, any of the terms specified herein have not been complied with or performed in a suitable manner, or at all, the Contract Administrator or Regulatory Agency has the right to immediately suspend work at the site until appropriate measures are implemented to rectify the defaults or deficiencies at the site. No compensation will be owed or paid to the Contractor for suspension of the work resulting from noncompliance with the requirements of this specification or the Regulatory Agencies.

SP5 – ACCESS TO WORK AREA, WORK PLATFORM AND SCAFFOLDING INCLUDING ACCESS FOR ENGINEER’S INSPECTION (WHERE NOT OTHERWISE SPECIFIED)

OPSS.MUNI 928, April 2019, shall govern, except as amended and extended herein.

Scope of work

Under this item, the Contractor will provide all access to the work (including work platforms, suspended work platforms, scaffolding, zoom booms, barges, etc.) for all of the work covered under the Contract Documents. Under this item, the Contractor will also provide full hands-on access to all areas of the structure as required by the Contract Administrator in order for the

Contract Administrator to sound areas, delineate repair areas and to inspect the Contractor's work.

Submissions Required

All access platforms, work platforms, suspended work platforms, scaffolding, etc. required must be designed by a Professional Engineers licenced in the Province of Ontario. The Contractor shall submit detailed shop drawings to the Contract Administrator for review a minimum of 14 calendar days prior to installation of any access platforms, scaffolding, etc. The shop drawings shall be sufficiently detailed and inclusive and shall be signed and sealed by two Professional Engineers licenced in the Province of Ontario (carrying a minimum of \$2,000,000.00 in Professional Liability Insurance). Upon initial installation of the access platforms, work platforms, scaffolding, etc., a certificate of compliance stating that the erected component has been installed in accordance with the signed and sealed by the design Engineer shall be provided to the Contractor Administrator.

The Contractor will not be permitted to utilize the access platform, work platform, scaffolding, etc. until the Certificate of Compliance is submitted to the Contract Administrator.

All shop drawings must be signed, sealed and dated by two Professional Engineers (design and check Engineers) licenced in the Province of Ontario.

Measurement for Payment

There will be no measurement for payment for the item 'Access to Work Area, Work Platform and Scaffolding' as the item will be paid by lump sum and the Contract price, prorated over the duration of the Contract.

Basis for Payment

Payment at the Contract lump sum price shall be full compensation for all labour, equipment and material required to do the work. Contractor shall bear all immediate, subsequent and consequential costs associated with change in the schedule, staging, and methodology of the work.

SP6 – DOWELS INTO CONCRETE

OPSS.MUNI 904, November 2023, shall govern except as amended or extended herein.

904.01 SCOPE

Section 904.01 of OPSS 904 is amended by the addition of the following:

Work under this item includes supply and placement of all dowels. Testing of dowels shall also be the responsibility of the Contractor.

904.07 CONSTRUCTION

Section 904.07.05.04.03 of OPSS 904 is amended by the addition of the following:

Based on the quantity of bent dowels, the Contractor shall install a minimum of 3 straight test dowels per lot to confirm the quality of installation. The dowels shall be of equal size and composition as that being installed and location to be equally distributed within the lot. Test dowels may remain, provided they do not interfere with construction, or shall be cut off at the face of concrete.

Testing of dowels shall be in the presence of the Contract Administrator.

904.10 BASIS OF PAYMENT

Section 904.10.02 of OPSS 904 is amended as follows:

Payment at the Contract price for the “Dowels in Concrete” item shall be in full compensation for all Labour, Equipment, and Material to do the work. The Contractor shall be responsible for the costs for all dowel testing.

SP7 – SITE ACCOMMODATION FOR ENGINEER / CONTRACT ADMINISTRATOR, UNTIL SUBSTANTIAL PERFORMANCE

SCOPE

Under this tender item, the Contractor shall supply and maintain a field office and its associated items for the sole use of the Contract Administrator and staff.

LOCATION

Prior to the commencement of work on this tender item, the Contractor shall receive approval from the Contract Administrator for the location of the field office, and shall have the field office installed and operational.

FIELD OFFICE DIMENSIONS AND CONDITION

The field office shall have a minimum floor area of twenty (20) square metres with a minimum inside clearance of two (2) metres.

All doors shall be solid and capable of being locked with a 25 mm throw dead bolt lock, and two sets of keys will be supplied to the Contract Administrator.

The inside of the field office shall be moisture tight and capable of being lit to a level that is satisfactory to the Contract Administrator. It shall have adequate windows, heating and ventilating equipment capable of maintaining the working area at 21°C during both summer and winter weather conditions.

It is the responsibility of the Contractor to provide and maintain adequate facilities in accordance with the current requirements of the Occupational Health and Safety Act (Part II General Construction O.Reg 145/00, s.15, 527/00, S.1) for the use by County staff and its Consultants.

FIELD OFFICE EQUIPMENT

The Contractor shall supply for the sole use of the Contract Administrator the following furnishings for the appropriate trailer size:

Floor Area 20-34 m²

- 1 desk
- 1 computer chair
- 5 chairs

The Contractor shall supply or arrange to supply a water cooler capable of maintaining a water supply at 7°C. Water shall be potable and supplied at a minimum rate of 18L/week.

UTILITIES

The Contractor shall provide within the floor area of the field office hydro facilities for the sole use of the Contract Administrator. The Contractor shall provide a generator large enough to power all trailer requirements.

The field office is to be equipped with a minimum of 3-120 volt duplex receptacles, in working order.

The field office is to have a high-speed internet connection for the sole use of the Contract Administrator.

MEASUREMENT FOR PAYMENT

Measurement for the supply of a field office, its utilities, services and associated equipment shall be by the week. The Contractor shall also be paid for any portion of a week as one week. Measurement for payment will be made when all utilities and services have been provided.

BASIS OF PAYMENT

Payment at the Contract price for the tender item “Field Office for Contract Administrator” shall be full compensation for all labour, equipment and materials required to supply and maintain a field office.

The Contractor shall bear all expenses in connection with the above facilities, including but not limited to:

- a) Service and connection charges for utilities and services.
- b) Heating and ventilating costs.
- c) All rental costs for the field office.
- d) The provision of at least two (2) parking spaces adjacent to field office, with at least a gravel surface.
- e) Removal of the field office, clean-up and reinstatement of the area occupied by the field office and parking area.

SP8 – Hot Mix

Under this item and for the Contract Unit price, the Contractor shall supply all labour, equipment, materials and transportation necessary to complete the item.

Anticipated Work Flow

It is anticipated that upon completion of stage 1 construction that only the necessary amount of base lift asphalt will be reinstated to switch to stage 2 configuration. All edges are to be properly ramped and maintained for the period of stage 2 construction. It is anticipated that the remaining asphalt removal, grading & paving will be completed upon removal of the temporary concrete barriers and energy attenuators. Appropriate ramping and signage is to be maintained during these times.

Material

1. **Asphalt: HL-3 as per OPSS.MUNI.1150: where specified in the 'Form of Tender'**
2. **Performance Graded Asphalt Cement: PG-AC 58-34 as per OPSS.MUNI.1101**

Amendment to OPSS.MUNI 1101 November 2016 – Material Specification for Performance Graded Asphalt Cement

1101.04 Design and Submission Requirements

1101.04.01 Submission Requirements

1101.04.01.01 PGAC Test Documentation

Clause 1101.04.01.01 of OPSS.MUNI 1101 is amended by the addition of the following:

- Test results for the product demonstrating compliance to the requirements of Table 1.
- A two (2) litre sample of the asphalt cement for each grade of asphalt cement for possible owner testing.

The Contract Administrator shall review the test results submitted and may elect to have quality assurance testing undertaken at the same time on the sample(s) provided. No asphalt mix shall be placed until the Contract Administrator provides written confirmation of the conformance of the PGAC to the requirements of the Contract Documents based on the submitted test results and owner quality assurance testing. Within ten (10) Business Days of receipt of the Contractor samples and test results, the Contract Administrator shall provide confirmation of conformance or shall advise of any non-conformance to the Contract requirements. Confirmation of conformance to Contract requirements does not constitute any guarantee that the mix can be produced or constructed or both to Contract requirements and does not relieve the Contractor of the responsibility for ensuring the specified quality of materials and workmanship.

1101.05 Materials

Delete:

“The asphalt cement shall not contain any of the following additives added for PGAC modification: atactic polypropylene; carbon black; polyisobutylene; polyisoprene; natural rubber; alkaline bases; insoluble particulates or fibres; salts of iron, copper, manganese and/or cobalt; silicates; styrene-butadiene rubber (random copolymer latex); synthetic waxes (paraffin waxes, naphthenic waxes); synthetic and saturated oils (including but not limited to the following: vegetable oils or modified vegetable oils; (paraffin oils, polyalphaolefins (PAO), lube oils, and re-refined lube oils.); waste oils (including but not limited to the following: cracked residues, re-refined high vacuum distillate oils; tall oils, vacuum tower asphalt extenders; waste cooking oils, waste engine oils, waste engine oil residues). Asphalt cement supplier shall declare in writing that they have not added the PGAC additives listed”

And replace with:

“The asphalt cement shall not contain any of the following additives added for PGAC modification: atactic polypropylene; carbon black; polyisobutylene; polyisoprene; natural rubber; alkaline bases; insoluble particulates or fibres; salts of iron, copper, manganese and/or cobalt; silicates; styrene-butadiene rubber (random copolymer latex); synthetic waxes (paraffin waxes, naphthenic waxes); synthetic and saturated oils (including but not limited to the following: vegetable oils or modified vegetable oils; (paraffin oils, polyalphaolefins (PAO), lube oils, and re-refined lube oils.); waste oils (including but not limited to the following: cracked residues, re-refined high vacuum distillate oils; tall oils, vacuum tower asphalt extenders; waste cooking oils, waste engine oils, waste engine oil residues). The asphalt cement supplier shall declare in writing that none of the PGAC additives listed above are contained within the asphalt cement”

1101.08 Quality Assurance

1101.08.03 Sampling

1101.08.03 is amended by the addition of the following:

It shall be the responsibility of the Contractor when using RAP to ensure the liquid asphalt cement in the final mix complies with Table 1.

1101.08.04 Quality Assurance Testing

1101.08.04 is amended by the addition of the following:

The Owner reserves the right to complete quality assurance testing on asphalt cement extracted from the HMA laid in the field as part of this contract. The test results obtained from the extracted asphalt cement may be used by the owner for acceptance.

Table 1 of OPSS.MUNI 1101 is deleted in its entirety and replaced with the following:

Table 1 – Additional testing requirements and acceptance criteria for PGAC grades

PGAC Grade	Property and Attributes (Unit)		Test Method	Results Reported Rounded to the Nearest	Acceptance Criteria	Rejectable
All PGAC Grades	Ash Content, % by mass of residue (%)	PG XX-28	LS-227	0.01	≤ 0.6	> 0.6
		PG XX-34			≤ 0.6	> 0.6
		PG XX-40			≤ 0.6	> 0.6
	Low temperature limiting grade (LTLG) (°C)		LS-308	0.5	$\leq -YY$	$> -YY$
	Grade Loss (°C)		LS-308	0.5	≤ 6.0	> 6.0
	Non-recoverable creep compliance at 3.2 kPa ($J_{nr-3.2}$) (kPa^{-1})		AASHTO T 350 For testing temperature see Note 1	0.01	< 4.5	≥ 4.5
	Average percent recovery at 3.2 kPa ($R_{3.2}$) (%)			0.1	\geq the lesser of [(29.371) ($J_{nr-3.2}$) ^{-0.2633}] or 50	$<$ the lesser of [(29.371) ($J_{nr-3.2}$) ^{-0.2633} -10] or 50
	CTOD, δ_t (mm)	PG XX-28	LS-299	0.1	≥ 8.0	< 8.0
PG XX-34		≥ 12.0			< 12.0	
PG XX-40		≥ 16.0			< 16.0	
Notes:						
1. The testing temperature shall be 58°C (Zone 2)						

Amendment to OPSS.MUNI 1150 November 2008– Material Specification for Hot Mix Asphalt

1150.04.01.01.01 Reclaimed Asphalt Pavement Proportions

Clause 1150.04.01.01.01 Reclaimed Asphalt Pavement Proportions, is amended by the addition of the following:

The use of RAP shall not be permitted in top course mixes. The use of RAP is permitted in base course mixes (where applicable) provided that it can be demonstrated that the extracted AC from the RAP conforms with OPSS MUNI 1101 (above).

Equipment Requirements

Material Transfer Vehicle

Cat AP1000 Paver (Or brand of equivalent size and capabilities)

310.07.11.04 Paving on Bridge Decks

The temperature of the HMA immediately after spreading shall not be less than 115 degrees C. The temperature of the HMA mat ahead of initial rolling shall be measured and recorded. Compaction shall be accomplished using, as a minimum,

- a) a Class S roller with a minimum mass of 9 tonnes and minimum mass of 4.5 kg per mm total roll width, and
- b) Class R roller with a minimum mass of 18 tonnes and minimum mass of 2,500 kg per tire.

The operating speed of Class S rollers shall not exceed 5 km/h and shall be operated in a manner to avoid undue displacement of the HMA. If Class V rollers are used, they shall be used in static mode. Rollers shall operate with the drive wheel forward in the direction of paving.

The mixture shall be uniformly compacted as soon after placing as it can support the rollers without checking or undue displacement. Rolling shall start longitudinally at the lower edge and proceed towards the higher edge of the course, overlapping on successive passes. Alternate passes of the roller shall be staggered.

Passes by the Class R roller shall overlap previous passes. The roller shall be operated to prevent pick-up of the HMA on the tires.

SP9 – SUPPLY AND INSTALL ALCHEMCO BRIDGEDECK WATERPROOING AGENT ON INSIDE FACES AND TOPS OF PARAPET WALL

PART 1 GENERAL

1.1 SECTION INCLUDES

- a) Spray Applied Integral Gel-Forming Concrete Treatment:
 - a. Clear, penetrating, breathable for use on concrete and masonry. No-VOC 0.00. (Alchemco, BridgeDECK Waterproofing Agent)

1.2 REFERENCES

- a) ASTM International (ASTM):
 - a. ASTM C672 - Standard Test Methods for Scaling Resistance
 - b. ASTM E514 - Standard Test Method for Water Permeability Test.
 - c. ASTM 7308 - Standard Test Method for Moisture Vapor Permeability.
 - d. NSF 61 – Potable Water Certification
 - e. Crack Sealing Ability
 - f. Future Crack sealing ability
 - g. ASTM C952 Bond Strength
 - h. Shear adhesion between concrete and asphalt (no issue)
 - i. Tensile strength test (increase by more than 53%)
 - j. Depth of penetration ($\frac{3}{4}$ ")
 - k. Hardness test. Mohs Scale (increase by 2)
 - l. Non-Flammable
 - m. Slip Resistance (no change)
 - n. 0.00% VOC

1.3 SUBMITTALS

- a) Submit under provisions of Section 01300.
- b) Product Data: Manufacturer's specifications and technical data including the following:
 - a. Detailed specification of construction and fabrication.
 - b. Manufacturer's installation instructions.
 - c. Certified test reports indicating compliance with performance requirements specified herein.
 - d. Certification by gel-forming agent manufacturer that product supplied comply with local regulations controlling use of volatile organic compounds (VOC).
 - e. Corporate Letter of Compliance for required Product Performance Characteristics.

- c) Quality Control Submittals:
 - a. Statement of qualifications.
 - b. Statement of compliance with Regulatory Requirements.
 - c. Field Quality Control Submittals as specified.
 - d. Manufacturer's field reports.

1.4 QUALITY ASSURANCE

- a) Installer Qualifications:
 - a. Firm experienced in installation or application of system or trained by manufacturer.
 - b. Acceptable to the manufacturer.
- b) Not less than 3 years' experience with waterproofing systems.

1.5 PRE-INSTALLATION MEETINGS

- a) Convene minimum two weeks prior to starting work of this section.

1.6 DELIVERY, STORAGE, AND HANDLING

- a) Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- b) Products must have lot code and production dates on containers.
- c) Storage and Protection: Comply with manufacturer's recommendations.
- d) Handling: Handle materials to avoid damage.

1.7 PROJECT CONDITIONS

- a) Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
- b) Environmental Requirements:
 - a. Maintain ambient temperature above 40 degrees F during installation.
 - b. Do not proceed with application on materials if ice or frost is covering the substrate.
 - c. Do not proceed with application if temperature of surface exceeds 95-degree F.
 - d. Do not proceed with the application of materials in rainy conditions or if heavy rain is anticipated within 2 hours after application.

- c) Application Coordination:
 - a. Verify compatibility with curing compounds, patching materials, repair mortar, paints, sealants, etc. to be used on concrete surfaces to ensure compatibility with the gel-forming treatment.

1.8 SEQUENCING

- a) Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.9 WARRANTY

- a) The system manufacturer shall furnish the Owner a written single source performance warranty that the Gel-Forming Treatment will be free of defects related to material deficiency from a period from the date of completion of the work provided under this section of the specification.
- b) Warranty Period:
 - a. Bridge Deck Waterproofing Agent 25 years (Project must be registered)

PART 2 PRODUCTS

2.1 MANUFACTURERS

- a) Acceptable Manufacturer: Alchemco, which is located at: 3532 Mayland Court, Henrico, VA 23233. Toll Free: 800-610-2895. info@alchemco.com, www.alchemco.com
- b) Substitutions: Not permitted.

2.2 GEL-FORMING INTEGRAL CONCRETE TREATMENTS

- a) Product: BridgeDECK Waterproofing Agent as manufactured by Alchemco.
 - a. Product shall comply with the following standards and performance:
 - b. Color: Clear liquid.
 - c. Surface Appearance - No change in the surface appearance or texture.
 - d. No Change in Surface Friction when comparing treated to untreated.
 - e. NSF 61 Potable Water Approved
 - f. No VOC (0.00)
 - g. Non-Toxic (safe for humans, marine life and plants) & Biodegradable
 - h. Scaling Resistant.
 - i. Seals Cracks up to 2.0mm.
 - j. Seals future cracks up to 0.4mm

PART 3 EXECUTION

3.1 EXAMINATION

- a) Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions that may be detrimental to proper or timely completion.
- b) Do not proceed until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- a) Surface Preparation:
 - a. Surfaces to receive gel-forming agent shall be cleaned of dirt, oil, grease, laitance, and other contaminants. Oil, grease and other automotive contaminants shall be removed with degreasers. All other surfaces shall be cleaned by high pressure water; 3000 psi. High pressure water is the minimum cleaning that will be accepted, other methods, such as blast-tracking, mobile power scrubbing and sandblasting may be submitted for approval.
 - b. Check the compatibility of all caulking, patching, and traffic marking materials to be used with the penetrating sealer.
- b) Sealants, patching materials, and expansion joints shall have been installed and approved by the Architect.

3.3 FIELD QUALITY CONTROL

- a) **Manufacturer's Field Services:**
 - a. Furnish written certification that surface preparation method and final condition has manufacturer's approval and comply with the warranty.
 - b. Furnish results of tests on each type of substrate to the manufacturer. Test results shall determine application rate for the entire project.

3.4 APPLICATION

- a) Product shall be applied as supplied by the manufacturer without dilution or alteration.
 - a. Apply at temperature and weather conditions recommended by the manufacturer or written in this specification.
 - b. Follow manufacturer's recommendations concerning protection of glass, metal and other non-porous substrates. Contractor will be responsible to clean all surfaces that are contaminated by the product.
 - c. Follow manufacturer's recommendation concerning protection of plants, grass and other vegetation. Contractor will be responsible for

replacing all plants, grass or vegetation damaged by the product.

b) BridgeDECK Waterproofing

- a. Make sure concrete is clean and dry. Cleaning can be achieved by power washing with concrete cleaner or mechanically, depending on the deck.
- b. Using a low-pressure sprayer (backpack) flood the cracks with Bridge Deck Waterproofing Agent. Then apply the Agent to entire deck surface at a rate of 200 sq/ft per gallon. Allow product to dry and penetrate into the concrete. Once product has dried go to step 3. If product has not dried within 5 ½ hours go to step 3. Very important: do not go past 5 ½ hours without watering the concrete surface, even if it is still wet.
- c. Apply water to concrete surface. Different methods can be used as long as the correct amount of water is applied. Do not apply water under pressure. The product creates a look like “soap suds” on the surface when activated. Continue to water until that stops. As a reference, the amount of water for this step is roughly 3 to 6 gals per 100sq/ft.

Once area is dry proceed to step 4

- d. Using a low-pressure sprayer flood the cracks with ACR Crack &Void. Then using low pressure sprayer apply ACR Accelerator Agent to the entire surface at a rate of 200 sq/ft per gallon. Once the area is dry go to step 5. This could be the next day or the same day. The area just needs to be dry. No time restrictions.
- e. Apply water to the concrete surface. There is not activation process during this phase of watering. The watering helps the product penetrate further into the concrete. The area is trafficable as soon as watering process is done.

3.5 CLEANING

- a) As work progresses, clean spillage and overspray from adjacent surfaces using materials and methods as recommended by water repellent manufacturer.
- b) Remove and dispose of all materials used to protect surrounding areas and non-application surfaces, following completion of the work of this section.
- c) Clean site of all unused water repellents, residues, rinse water, wastes, and effluents in accordance with environmental regulations.
- d) Repair, restore, or replace to the satisfaction of the Architect, all materials,

landscaping, and non-masonry surfaces damaged by exposure to water repellents.

3.6 COMPLETION

- a) Work that does not conform to specified requirements shall be corrected and/or replaced as directed by the Owners Representative at Contractor's expense without extension of time.