



**CORPORATION OF THE TOWNSHIP OF AUGUSTA**

**BY-LAW NUMBER 2952**

**BEING A BY-LAW TO  
AWARD THE TENDER CONTRACT FOR  
RECONSTRUCTION OF NORTH CAMPBELL AND BLUE CHURCH ROAD**

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**WHEREAS** the Municipal Act, 2001 c. 25 S.O. 2001 section 8 allows for the Powers of a Natural Person and those powers may include the entering into an agreement for service;

**AND WHEREAS** it is deemed expedient to provide a for the double surface treatment of North Campbell Road and Blue Church Road as per tender 2012-09 and to award the contract to the successful bidder

**NOW THEREFORE** the Council of the Township of Augusta authorizes and accepts the submitted tender offer of Smiths Construction Company in the amount of \$166,880.50 plus HST, pursuant to all the terms and conditions therein, as hereto attached.

**READ** a first and second time this 9<sup>th</sup> day of July, 2012.

**READ** a third time and passed this 9<sup>th</sup> day of July, 2012.

  
\_\_\_\_\_  
REEVE

  
\_\_\_\_\_  
CLERK

**REPORT NUMBER:** 2012-144  
**REPORT TO COUNCIL** JULY 9, 2012  
**RE:** ENTER INTO A CONTRACT WITH SMITHS  
CONSTRUCTION CO. FOR DOUBLE SURFACE  
TREATMENT ON NORTH CAMPBELL ROAD AND BLUE  
CHURCH ROAD.  
**AUTHOR:** KEVIN HART  
PUBLIC WORKS MANAGER

**RECOMMEND**

THAT Council authorize the CAO to enter into a contract with Smiths Construction Co. at \$166,880.50 for Double Surface Treatment on North Campbell Road and Blue Church Road.

**Attachment 1**

**BACKGROUND**

It was budgeted for 2012 to reconstruct and double surface treat North Campbell Road and Blue Church Road. One tender was received for Double Surface Treatment on North Campbell Road and Blue Church Road.

Smiths Construction Co.


**@ \$166,880.50 plus H.S.T.**

The tenderer met the require specifications and deposit requirements.

**FINANCE**

\$1,000,000 has been budgeted in the Road Capital a/c 445-01-090 to reconstruct and double surface treat North Campbell and Blue Church Road. Sufficient funds are available to fund both projects.

  
\_\_\_\_\_  
KEVIN HART  
PUBLIC WORKS MANAGER

  
\_\_\_\_\_  
RAY MORRISON  
TEMPORARY ACTING TREASURER

\_\_\_\_\_  
MIKE LAROCQUE  
CAO/CLERK

# AUGUSTA TOWNSHIP

CONTRACT NO. 2012-09

*SMITHS CONSTRUCTION Co.  
A DIVISION OF MILLER GROUP INC.*

Name of Tenderer (The Contractor)

*P.O. Box 218, ARNPRIOR, ONT. K7S 3H4*

Address of Tenderer, including Postal Code

*613-623-3144*

Telephone Number

*613-623-8769*

Fax Number

*jackw@millergroup.ca*

Email

*JACK WANNAMAKER - SURFACE TREATMENT MANAGER*

Name and Position of Person Signing for Contractor

**TENDER FOR: Final Grade and Double Surface Treatment**

**LOCATIONS:**

**Location 1:** North Campbell Road (from McIntosh Road to County Road 26, 1,900m)

**Location 2:** Blue Church Road (from County Road 26 to Lords Mills Road, 2,000m)

**TENDER CLOSING DATE: 12:00 p.m. Thursday, July 5<sup>th</sup>, 2012**

Tenders Received by:

Mike Larocque – CAO/CLERK  
Corporation of the Township of Augusta  
3560 County Rd 26, RR2  
Prescott, ON K0E 1T0

**ITEMIZED BID:**

In accordance with the first paragraph of this tender, the Bidder hereby offers to complete the work specified herein for the following unit prices:

ITEM NO.	SPEC. NO.	DESCRIPTION OF ITEM	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
<b>LOCATION 1: North Campbell Road – 1,900 m</b>					
1	501, 506 S.P.	Final Grading, Compaction and Water	13,490 m <sup>2</sup>	\$ <u>1.45</u> per m <sup>2</sup>	\$ <u>19,560.<sup>50</sup></u>
2	304 S.P.	Double Surface Treatment	12,730 m <sup>2</sup>	\$ <u>4.85</u> per m <sup>2</sup>	\$ <u>61,740.<sup>50</sup></u>
<b>LOCATION 2: Blue Church Road – 2,000 m</b>					
3	506,01 S.P.	Final Grading, Compaction and Water	14,200 M <sup>2</sup>	\$ <u>1.45</u> per m <sup>2</sup>	\$ <u>20,590<sup>m</sup></u>
4	304 S.P.	Double Surface Treatment	13,400 m <sup>2</sup>	\$ <u>4.85</u> per m <sup>2</sup>	\$ <u>64,990.<sup>rs</sup></u>

To: The Reeve and Council  
Corporation of the Township of Augusta

Ladies and Gentlemen:

The Bidder has carefully examined the Plans, Provisions, Specifications and Conditions described herein as part of the work to be done under this Contract. The Bidder understands and accepts the said Plans, Provisions, Specifications and Conditions and, for the prices set forth in this Tender, hereby offers to furnish all materials, except as otherwise specified in the Contract, and to complete the work in strict accordance with the said Plans, Provisions, Specifications and Conditions.

The Bidder understands and accepts that the quantities shown are approximate only, and are subject to increase, decrease or deletion entirely if found not to be required. **Part or whole of this Contract is contingent upon the budget approval of the Township of Augusta.**

Attached to this Tender is a <sup>BID BOND JW</sup>~~certified cheque~~ for the sum of:

TEN THOUSAND Dollars \$ 10,000<sup>00</sup>

which is equal or greater than the amount specified in the "Table of Contractor's Tender Minimum Deposit Required, as provided in this tender document and made payable to the Corporation of Augusta Township. The cheque shall constitute a deposit which shall be forfeited to the Corporation if the successful Bidder fails to fulfil his obligation under the terms of this Contract.

The work required by this Contract shall be performed in accordance with the following schedule of specifications and provisions:

**Tender Forms:**

General	Pages 1 and 2
Itemized Bid	Pages 3 and 4
Schedule of Tender Data	Page 5

**Special Provisions - General** Pages 6 to 14, inclusive

**Special Provisions - Items** Pages 15 to 20, inclusive

**Key Map** N/A

**Patching Location Map** N/A


**Typical Cross Sections** N/A

**Standard Specifications:** OPSS-304 November 2006  
OPSS-314 November 2004  
OPSS-501 November 2005  
OPSS-506 November 2005  
OPSS-510 November 2006

**OPSS.MUNI 100 General Conditions of Contract dated November 2006.**

The Contractor, by this tender, offers to complete the work of this Contract in accordance with the terms contained herein.

Dated at ARNPRIOR this 5TH day of JULY, 2012

  
Signature

SURFACE TREATMENT MANAGER  
Position

**TOTAL TENDERED PRICE**

\$ 166,880.<sup>50</sup>

## **SPECIAL PROVISIONS - GENERAL**

### **1. Tender Closing**

**SEALED TENDERS** clearly marked as to contents, will be received by the undersigned or his designated representative until 12:00 p.m., July 5, 2012 at the Township of Augusta Administration Office. Bids received after closing time will not be considered. Tenders shall be addressed to: Mr. Mike Larocque, CAO/Clerk, Township Administration Building, 3560 County Road 26 RR2 Prescott, ON K0E 1T0. Tenders will be opened in public at the Township Administrative Office Building at 12:30 p.m., on the closing date.

Augusta Township  
Public Works Department  
3560 County Road 26 RR2  
Prescott, Ontario K0E 1T0  
Attention: Mr. Mike Larocque, CAO/Clerk  
Phone: (613) 613-925-4231  
Fax: (613) 925-3499

### **2. Tender Submission**

One copy of the **completed tender** shall be submitted on the forms provided. All information shall be shown in the spaces provided including the signature of the Bidder with his/her address and telephone number. Tender Forms must be properly signed and witnessed, or signed and sealed if the bidder is a Corporation. Any Tender Offer sent by fax will be disqualified.

The Tender must be legible, written in ink or typewritten, where stipulated, with the unit price for every item clearly shown. Tenders which are incomplete, conditional or obscure, or which contain erasures or alterations not properly initialled, or irregularities of any kind, may be rejected. Submissions must not be restricted by a statement added to the Township form or by a covering letter, or by alterations to the form supplied, unless otherwise provided in the Special Provisions.

The contract documents shall consist of all pages of the Tender or Quotation documents issued by the Township, and the Contractor's submission. Do not remove any pages from the Township form(s).

### **3. Order of Precedence**

Order of precedence shall be per *General Condition 2.02* with the exception that General Condition 2.01.01 a) is hereby replaced with the following:  
*2.01.01 a) The location of all mainline underground Utilities that may affect the Work shall be determined and arranged by the Contractor.*



#### **4. Clarification of Documents**

Any clarification of the Township documents required by the Bidder prior to submission shall be requested in writing through the Township of Augusta. Any such clarifications so given shall not in any way alter the Township documents and the Contractor and Township agree that in no case shall oral arrangements be considered.

No officer, agent or employee of the Township is authorized to alter orally any portion of these documents during the period prior to submissions. Alterations will be issued to Bidders as written addenda only. In the submission, the Bidder shall enclose all addenda that were considered when the submission was prepared

#### **5. Right to Accept or Reject Tenders**

The Owner reserves the right to reject any or all tenders or to accept any tender should it be deemed to be in its best interest to do so. No liability shall accrue to the Township for its decision in this regard.

Tenders which are incomplete, conditional or obscure, or which contain additions not called for, erasures, alterations, or irregularities of any kind, may be rejected as informal.

**The acceptance of any Submission is subject to appropriate funding acceptable to the Township.**

The placing in the mail or delivery of a notice of award to the Company address given in the Submission, shall constitute notice of acceptance of the tender.

#### **6. Unacceptable Tenders**

Each item in the Tender Form shall be a reasonable price for such item. Under no circumstances will an unbalanced Tender be considered. The Owner and the Engineer will be the sole judges of such matters, and should any Tender appear to be unbalanced, then it will be rejected by the Owner.

**7. Tender Deposit**

The Tender must be accompanied by a deposit, enclosed in the same envelope as the tender. The deposit shall be a certified cheque, or bid bond, made payable to the Township of Augusta, equal or greater than the amount shown in the following Table.

<b>Total Amount of Contractor's Tender Minimum Deposit Required</b>	
<b>\$ 20,000.00 or less</b>	<b>\$ 1,000.00</b>
<b>\$ 20,000.01 to \$ 50,000.00</b>	<b>\$ 2,000.00</b>
<b>\$ 50,000.01 to \$ 100,000.00</b>	<b>\$ 5,000.00</b>
<b>\$ 100,000.01 to \$ 250,000.00</b>	<b>\$ 10,000.00</b>
<b>\$ 250,000.01 to \$ 500,000.00</b>	<b>\$ 25,000.00</b>
<b>\$ 500,000.01 to \$1,000,000.00</b>	<b>\$ 50,000.00</b>
<b>\$1,000,000.01 to \$2,000,000.00</b>	<b>\$ 100,000.00</b>
<b>\$2,000,000.01 and over</b>	<b>\$ 200,000.00</b>

**8. Tender Results**

The names of the Bidders and total bid prices will be made available at the Public Opening.

**9. Release of Tender Deposit**

All Tender Deposits will be returned to the respective bidders within five days after the Tenders have been opened except those which the Owner elects to retain until the successful bidder has executed the Contract documents.

The Tender Deposit of the successful bidder will be returned when he has fully complied with the conditions outlined in the Tender Documents, and has completed at least 25% of the work under the Contract.

**10. Holdback**

Holdback is accrued at the rate of 10%, on all work performed after the date of the application for payment at Substantial Performance.

Upon the passing of 45 days, the contractor supplies Augusta Township with a Statutory Declaration that all bills and sub contractors are paid.

The Township then reduces hold back to 2½%.

At the end of the calendar year of final completion the 2½% is released (if no deficiencies)

## 11. Layout

*General Conditions 3.05 – Layout is hereby deleted and replaced with the following:*

Layout will be the responsibility of the Contractor.

## 12. Clarification of Work

Where the Contractor requests clarification on items provided herein to complete the work, the Contractor and the designated Township Representative(s) will agree upon the work required and a written Clarification Document will be agreed upon and signed by both the Contractor and the Township prior to the work being completed.

## 13. Progress of the Work and Time of Completion

Time shall be of the essence in this contract.

The Contractor shall diligently prosecute his work on this Contract to completion on, or before, the

***24<sup>th</sup> day of August, 2012***

If this time limit above specified is 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 equipment and/or augmented daylight shifts will be required through the life of the Contract to the extent deemed necessary by the Contractor to ensure that the work will be completed within the 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 therefore.

Working time shall be charged until the date of acceptance of the work by the Township at which time all work required in the Contract, including all final clean-up and trimming, shall be completed.

An extension of time may be granted, in writing, by the Engineer in the event of the work being delayed beyond the prescribed time for completion. Such extensions shall be for such time as the Engineer may prescribe, and the Engineer shall fix the terms on which the said extension may be granted. An application for an extension of time shall be made, in writing, by the Contractor to the Township at least fifteen (15) days prior to the date of completion fixed by the Contract as per GC 3.06. The date of expiry of all bonds or other surety furnished to the Township by the Contractor shall be extended at the expense of the Contractor to at least two (2) months beyond the extended date of completion, and the Contractor shall furnish the Township with evidence of such extension of the bond 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 Township whatsoever under this Contract, and all such rights shall continue in full force and effect after the time limited in this Contract for the completion of the work and whenever in this contract power or authority is given to the Township or the Engineer or any person to take any action consequent upon the act, default, neglect, delay, breach, 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 and not only in the event of the happening of such contingencies before the time limited in this Contract for the completion of the work but also in the event of the same happenings after the time so limited in case of the Contractor being permitted to proceed with the execution of the work under time granted by the Township. In the event of the Township granting an extension of time, time shall continue to be deemed of the essence of this Contract.

#### **14. Changes in the Work**

*General Condition 3.10.01* stipulates that the Owner or Contract Administrator where so authorized, may, by order in writing, make a Change in the Work without invalidating the Contract. The Contractor shall not be required to proceed with the Change in the Work until in receipt of a Change Order or Change Directive. Upon the receipt of such Change Order or Change Directive the Contractor shall proceed with the Change in the Work.

In addition to the above *General Condition 3.10.01* the Township of Augusta requires that the amendment to the contract or item(s) of contract will be in the form of a Change Order or Change Directive and will be signed in agreement by the Contractor and the Contract Administrator prior to proceeding with the work.

#### **15. Insurance**

The Contractor must provide to the Township, a copy of a "Certificate of Liability Insurance" prior to commencement of the work as per *General Conditions 6.03.01*.

#### **16. Execute Contracts**

Unless otherwise specified in these documents, this tender constitutes an irrevocable offer to provide the goods and/or service described herein for a period of 60 days from the closing date of the receipt of tender. After this time, the Tender may only be accepted with the consent of the successful bidder.

*General Condition 6.04 Bonding is hereby deleted and replaced with the following:  
No bond is required.*

## **17. Ability and Experience of Bidder**

The Owner reserves the right to reject the Tender of any bidder who does not furnish satisfactory evidence of sufficient capital, plant and experience to successfully prosecute and complete the work in the specified time.

## **18. Governmental Requirements**

The Contractor shall obey all Federal, Provincial and Municipal laws, Acts, Ordinances, Regulations, Orders-in-Council and By-laws, which could in any way pertain to the work outlined in the Contract or to the Employees of the Contractor.

## **19. Definition of Owner and Engineer**

Wherever the word "Corporation", "Authority" or "Owner" appears in this Contract, it shall be interpreted as meaning the "Corporation of the Township of Augusta".

Wherever the word "Engineer" or "Contract Administrator" appears in this Contract, it shall be deemed to mean the "CAO/Clerk of the Township of Augusta, or his designate".

## **20. Health and Safety**

The Township of Augusta is committed to ensuring that a high standard of health and safety is provided and maintained for all employees, visitors, guests, contractors, agents and others on our premises.

The Contractor shall be the "Constructor" under the provisions of the Occupational Health and Safety Act.

*Accordingly all Contractors shall comply with General Condition 7.01 and the following:*

- a. Demonstrate establishment and maintenance of a health and safety program with objectives and standards consistent with applicable legislation, and with the Corporation of the Township of Augusta.
- b. Submit their Workplace Safety Insurance Board number.
- c. Include health and safety provisions in their management systems to reach and maintain a consistently high level of health and safety.
- d. Prior to commencement of work the Contractor will notify the Owner of all products controlled under the Workplace Hazardous Materials Information System (WHMIS) as per *General Condition 7.01.09* and ensure that workers in their employ are aware of hazardous substances that may be in use at their

place of work, and wear appropriate personal protective equipment as may be required.

- e. Provide a copy of the applicable WSIB Certificate of Clearance before starting a project, and upon completion as stipulated in *General Condition 6.05*.
- f. Provide upon request a copy of your Company Health and Safety Policy as noted in *General Condition 7.01.08*.
- g. Upon request at any time from the awarding to the completion of the contract, submit proof of fulfilment of the above noted responsibilities.

## **21. Working Area**

Working Area Conditions will comply with *GC 7.03* with the addition of the following:

Where no specific requirements for erosion and sedimentation control are defined in the contract, the Contractor shall take all necessary precautions to ensure that no deleterious materials enter any ditch, stream, pond, lake or other water body as a result of the work on this contract.

The Contractor shall provide and maintain a portable toilet for the term of the contract.

## **22. Road to Remain Open to Traffic**

The Contractor is advised that per *General Condition 7.07*, County Road(s), on which the work under this Contract is located, shall remain open to normal highway traffic at all times during the execution of the work. The Contractor shall plan and carry out his operations in such a manner that this normal traffic is not unduly disrupted.

No detouring of traffic will be permitted without the written permission of the Contract Administrator in advance. Traffic may be reduced to a single lane during daylight hours with the use of traffic control persons and appropriate temporary signing but the road must be re-opened for regular two-way traffic at the end of each work day.

## **23. Other Contractors Within or Adjacent to the Limits of the Contract**

The Contractor is advised that as other work may be in progress within and adjacent to the limits of this Contract. He shall coordinate with other Contractors and Utility Companies and they shall be allowed free access to their work at all possible times as per *General Condition 7.14*

## **24. Estimated Quantities**

General Conditions of the Contract, GC 8.01.02, Variations in Tender Quantities, shall be deleted and replaced by the following:

**“The estimated quantities set forth in the Tender are approximate only, and the basis of payment under this Contract will be the actual amount of work done and materials supplied.”**

## **25. Taxes**

Federal Goods and Services Tax is applicable to all payments made under this Contract the Contractor shall provide the Contract Administrator with his H.S.T. registration number which will be shown on all payment certificates issued by him. The Contract Administrator will add the 13% H.S.T. to all payments made under the Contract. Accordingly, the Contractor will not make any provision for H.S.T. in the prices tendered under this Contract.

## **26. Certification and Payment**

Certification and Payment of the Contract shall be per *General Conditions GC 8.02.03 with the exception that GC 8.02.03.02 and 8.02.03.03 are hereby deleted.*

## **27. Liquidated Damages – GC 8.02.09**

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 prescribed time as set forth in the Special Provisions, damage will be sustained by the Township and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the Township will sustain in the event of and by any reason of such delay and the parties hereto agree that the Contractor will pay to the Township the sum of

**Five Hundred Dollars (\$500.00)**

per day for liquidated damages for each and every calendar day's delay in finishing the work in excess of the time limit prescribed and it is agreed that this amount is an estimate of the actual damage to the Township which will accrue during the period in excess of the prescribed number of working days.

The Township may deduct any amount due under this paragraph from any moneys 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 Township.

The Contractor shall not be assessed with Liquidated Damages for any delay caused by Acts of God, or of the Public Enemy, Acts of the Province or of any foreign state, fire, flood, epidemics, quarantine restrictions, embargoes or delay of sub-contractors due to such causes.

If the time available for the completion of the work is increased or decreased by reason of alterations or changes made under the General Conditions, the completion date shall be adjusted as determined by the Engineer



## **SPECIAL PROVISIONS – ITEMS**

### **GENERAL FOR ALL ITEMS:**

The Contractor shall be responsible for all phases of the work including signing, traffic control and project management.

It shall be the Contractor's responsibility under the items provided herein to complete the work except as specifically otherwise provided. Any work required not specifically detailed herein shall be performed by Township Forces either before or after the Contractor's work under this contract.

The Contractor shall be the "Constructor" under the provisions of the Occupational Health and Safety Act.

Where no specific requirements for erosion and sedimentation control are defined in the contract, the Contractor shall take all necessary precautions to ensure that no deleterious materials enter any ditch, stream, pond, lake or other water body as a result of the work on this contract.

### **CONSTRUCTION**

#### **Binder**

The Owner reserves the right to require the Contractor to provide additional field binder samples for testing purposes.

#### **Aggregates**

The Owner reserves the right to sample the aggregate for testing purposes.

#### **Process Control**

The Contractor shall conduct such process control procedures, including sampling and testing, as is necessary to ensure that all aggregates and all asphalt binder to be used in the Work conform to the requirements of the Contract. The Contractor shall determine the type and amount of process control sampling and testing to be completed.

The Contractor shall be responsible for the interpretation of the test results and the determination of any action to be taken to ensure that all materials and Work conform to the requirements of the Contract.

Upon the request of the Owner, the Contractor shall supply copies of any or all test results.

## **Traffic Control**

The Contractor is responsible to control traffic in accordance with the Ontario Traffic Manual, Book 7.

A single lane closure not exceeding 2.0 km in length is allowable at any one time and the maximum queue or waiting times for this closure shall not exceed a 10 minute time period.

## **Damage to Vehicles Caused by Loose Aggregate**

The Contractor shall ensure that there are no occurrences of damage to vehicles caused by loose aggregate while traveling through the Site at the time of construction. All claims for damage of this nature shall be dealt with directly by the Contractor.

## **WARRANTY REQUIREMENTS**

### **Warranty Period**

The warranty shall be for twenty four months from the date of Total Performance of the Work. Any repair work shall be completed prior to the end of the warranty period.

### **Letter of Credit**

Prior to release of the basic holdback, the Contractor shall provide to the Owner, an irrevocable letter of credit from a Canadian Chartered Bank equal to twenty five percent (25%) of the Contract amount in Canadian Currency.

The letter of credit shall be in effect for twenty four months from the date of Total Performance of the Work.

### **Draws on the Letter of Credit**

The Owner will provide written notice informing the Contractor at any time within the first twenty three months of the warranty period of the need for repairs or replacements.

When the pavement condition is a safety concern, the Contractor shall, within fourteen Days of receipt of the written notice and in all other cases, no later than fourteen Days prior to the warranty expiration date, have completed the repairs or replacements.

If the repairs or replacements are not completed within the time frame specified above or are unsatisfactory, the Owner may draw on and up to the aggregate total of the Letter of Credit referred to in Section, *Letter of Credit*, to apply to the repair of the Work.

Alternatively, the Owner may be receptive to receive an extension of the Letter of Credit to allow the Contractor to carry out further repairs or replacements.

The Owner shall have full and sufficient authorization and direction to make the aforesaid draws.

### **Completion of Warranty Period**

The Letter of Credit will not be returned to the Contractor until all of the specified performance requirements have been met and any repairs under the twenty four month warranty have been completed.

### **PERFORMANCE REQUIREMENTS**

The completed surface course shall be free of flushing, streaking or loss of cover aggregate, including delamination, as described by the Ministry of Transportation of Ontario's Manual for Condition Rating of Surfaced Treated Pavement (SP-021).

Any materials used in the repair or replacement areas shall be consistent with the materials originally specified in the Contract. The use of alternate aggregates meeting the specified Physical Requirements may be permitted in the repair or replacement areas when approved by the Owner.

The Contractor shall not be responsible for any damage when determined by the Owner to have been caused by snow-plough operations.

A distress survey shall be completed by the Owner at the end of twelve months from the date of Total Performance of the Work and forty five Days prior to the end of the twenty four month warranty period. The results of both surveys will be sent to Contractor.

The Owner will determine the types of distress, their severity, their extent and the exact dimensions of the warranty repairs or replacements.

All repair or replacement areas shall not have transverse or longitudinal ripples of six millimetres or more as measured with a three metre straight edge.

Table 2 indicates the performance requirements by the end of the warranty period and the necessary repair or replacement methods where required.

The descriptions of the surface defects and severity are in accordance with the Ministry of Transportation, Ontario, Manual for Condition Rating of Surface Treated Pavement (SP-021).

**TABLE 2**

Surface Defects	Severity	Density or Extent (per 100m of lane length)	Repair / Replacement Method
Loss of Cover Aggregate	Slight	Intermittent, frequent or extensive	None
	Moderate/Severe	Intermittent or frequent	Patching and then a double seal coat of the affected area
	Moderate/Severe	Extensive**	Patching and then a double seal coat of the affected area
Flushing	Slight	Intermittent, frequent or extensive	None
	Moderate	Intermittent***, frequent** or extensive**	Lean double seal coat of the affected area
	Severe	Intermittent***, frequent** or extensive**	Removal and replacement of the affected area
Streaking	Slight	Intermittent, frequent or extensive	None
	Moderate	Intermittent***, frequent** or extensive**	Double seal coat of the affected area
	Severe	Intermittent***, frequent** or extensive**	Compacted aggregate curtain or sand seal followed by double seal of the affected area

**NOTE:**

\*\* Area of the repair / replacement shall not be less than one lane width x 50 m in length.

\*\*\* Area of the repair / replacement shall not be less than one lane width x 10m in length. If there is less than 10m between two sections in the lane designated for repair / replacement, the repair or replacement shall be continuous.

**MEASUREMENT FOR PAYMENT**

Measurement will be by horizontal area measured in square metres of the double seal coat placed.

**BASIS OF PAYMENT**

Payment at the Contract unit price for the above tender item shall be full compensation for all labour, equipment and materials to do the Work.

When repairs or removals are warranted, the Contractor shall be responsible for, and shall carry out, all associated work at no cost to the Owner.

**Item No. 1, 3: Final Grading, Compaction and Water**

**The contractor is responsible to final graded, compaction and water.**

Compaction shall be as specified in OPSS 501.

Dust suppressants shall be according to OPSS 506

**Item No 1:**

Final Grading, Compaction and Water Estimated Quantity

Length:	1,900 m		
Width:	7.1 m	Estimated Quantity:	13,490m <sup>2</sup>

**Item No 3:**

Final Grading, Compaction and Water Estimated Quantity

Length:	2,000 m		
Width:	7.1 m	Estimated Quantity:	14,200 m <sup>2</sup>

**Total Estimated Quantity: 27,690 m<sup>2</sup>**

**Item No. 2, 4: Double Surface Treatment, (m<sup>2</sup>)**

Work under this item shall consist of the supply, placement Double Surface Treatment consisting of HF-150 P (polymer) emulsion and 5/8" aggregate for the first lift plus HF-150P and 3/8" clean quarry source stone for the top lift.

- HF-150 P (Polymer) Double Application Rate = 3.2 litres per square metre.
- HF-150 P (Polymer) emulsions are to conform to OPSS 1103.
- All aggregates are to conform to OPSS 304.
- First lift aggregate application rate = 19.3 kg/m<sup>2</sup>
- Top lift aggregate application rate = 17.1 kg/m<sup>2</sup>

**MEASUREMENT FOR PAYMENT**

*Payment shall be based on the area of roadway surface completed in square metres and shall include all labour, equipment and materials required to complete the work.*

*Damaged areas requiring repair prior to the acceptance of the work shall be repaired by the Contractor at no extra cost to the Owner.*

**Item No 2:**

Double Surface Treatment Estimated Quantity

Length:	1,900 m		
Width:	6.7 m	Estimated Quantity:	12,730m <sup>2</sup>

**Item No 4:**

Double Surface Treatment Estimated Quantity

Length:	2,000 m		
Width:	6.7 m	Estimated Quantity:	13,400 m <sup>2</sup>

**Total Estimated Quantity: 26,130 m<sup>2</sup>**