



THE CORPORATION OF THE TOWNSHIP OF MCKELLAR

Contract No. PW-2021-04-DLST

DOUBLE LAYER SURFACE TREATMENT

**1.6 KM OF LYNDSEY LANE
2. KM OF MCKELLAR LAKE ROAD**

Tender Closing Date and Time: Friday, March 26, 2021 at
1:00 p.m. local time.

Tender Opening Date, Time and Location: Friday, March 26, 2021 at
1:10 p.m. local time.
Township of McKellar
Municipal Office,
701 Hwy 124, McKellar, ON

Contact Person: Greg Gostick
Public Works Superintendent
Township of McKellar
701 Hwy 124, P.O. Box 69,
McKellar, ON, P0G 1C0

Telephone: Shop (705) 389-2891
Office (705) 389-2842
Facsimile: (705) 389-1244

(Lowest or any tender not necessarily accepted)

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INFORMATION TO TENDERERS

1) Delivery and Opening of Tenders

Tenderer's name, address, telephone number and fax number shall be recorded on the "Request for Tender Obtained Register" and contract documents and plans (where applicable) will be issued thereafter. All Tenderers must obtain contract documents and be listed on the "Request for Tender Obtained Register".

Tenders, sealed in an envelope and **clearly** marked with the project/contract title, the project/contract number and Tenderer's name, will be received by the Township of McKellar, 701 Hwy 124, P.O. Box 69, McKellar, ON, P0G 1C0, until **1:00 p.m.**, local time on the advertised closing date for receipt of tenders. The use of the mails for delivery of a tender will be at the risk of the Tenderer.

On the closing day, commencing at **1:10 p.m.** local time, the envelopes will be opened and the tenders will be read and recorded publicly at the above mentioned address. Tenders will then be checked and analyzed.

2) Disqualification of Tenders

Under no circumstances will tenders be considered which:

- a) are received after 1:00 p.m. local time on the advertised closing date for tenders.
- b) are not accompanied by a bid deposit (**if applicable**) in the form of a certified cheque, **original** bid bond, money order or bank draft, in the amount specified.
- c) are sent by fax.
- d) are not accompanied by a properly executed Agreement to Bond (**if applicable**).

3) Withdrawal or Qualifying of Tenders

A Tenderer who has already submitted a tender may submit further tenders at any time up to the official closing time. The last tender received shall supersede and invalidate all tenders previously submitted by that Tenderer for this contract. A Tenderer may withdraw his/her tender at any time up to the official closing time by submitting a letter bearing his/her signature and seal as in his/her tender to the Township of McKellar, 701 Hwy 124, P.O. Box 69, McKellar, ON P0G 1C0. Such a submission must be received in sufficient time to be marked before **1:00 p.m.** local time on the date for closing of tenders. The Tenderer shall show his/her name and the project and contract numbers on the envelope containing such letter. No faxes or telephone calls for the withdrawal or qualifying of tenders will be considered.

4) Informal or Unbalanced Tenders

All entries in the "Form of Tender" shall be made in ink, by typewriter or by printer. Uninitialed entries or changes made in pencil shall be deemed invalid. Tenders which are incomplete, illegible or obscure, or that contain additions not called for, erasures, alterations (unless properly and clearly made and initialed by the Tenderer's signing

officer), or irregularities of any kind, shall be rejected. The Township reserves the right to waive formalities at its discretion. Tenderers who have submitted tenders that have been rejected by the Township because of informalities will be notified of the reasons for the rejection within ten (10) days after the closing date for tenders.

Tenders that contain prices which appear to be so unbalanced as likely to affect adversely the interests of the Township may be rejected. Wherever in a tender the amount tendered for an item does not agree with the extension of the estimated quantity and the tendered unit price, the unit price shall govern and the amount and Total Tender Price shall be corrected accordingly, unless otherwise decided by the Township.

If a Tenderer has omitted to enter a price for an item of work set out in the "*Form of Tender*", he/she, unless he/she has specifically stated otherwise in his/her tender, will be deemed to have allowed elsewhere in the "*Form of Tender*" for the cost of carrying out the said item of work and, unless otherwise agreed to by the Township, no increase shall be made in the total Tender Price on account of such omission.

5) Examination of Site

Each Tenderer should visit the site of the work before submitting his/her tender and must satisfy himself/herself by personal examination as to the local conditions to be met with during the construction and conduct of the work. He/she shall make his/her own estimate of the facilities and difficulties to be encountered including the nature of the subsurface materials and conditions. He/she is not to claim at any time later in the submission of his/her tender that there was any misunderstanding of the terms and conditions of the contract relating to site conditions.

Any person who proposes to carry out any investigation of any property relative to the proposed works shall, before entering the said property, and any other property, and before commencing the said investigation, notify the owner and occupant of such other property of the access required and obtain the agreement in writing thereto of all such owners and occupants. The person who was responsible for carrying out such an investigation or for making use of an access as aforesaid shall reinstate the property and shall be responsible for all damage and claims resulting therefrom in accordance with the said agreement of such owners and occupants.

With respect to any matter referred to in the foregoing paragraph, no person referred to therein is authorized to act as agent of or to make any representation on behalf of the owner and the Township shall not be responsible for any disturbance to or reinstatement of any property or for any damage or claims referred to therein.

6) Tender

Each tender shall include the "*Information to Tenderers*" and a completed "*Form of Tender*" together with any further forms or sheets which the Tenderer is instructed elsewhere herein, or in any addendum hereto, to submit with this tender.

7) Omissions, Discrepancies and Interpretations

Should a Tenderer find omissions from or discrepancies in any of the tender documents or should he/she be in doubt as to the meaning of any part of such documents, he/she shall notify the **Public Works Superintendent**, preferably in writing and not later than four days before the closing date for tenders. If the **Public Works Superintendent** considers that a correction, explanation or interpretations is necessary or desirable, he/she will issue an Addendum. No oral examination or interpretation shall modify any of the requirements or provisions of the tender documents.

The Tenderer also declares that in tendering for the work and in entering into the contract he did not and does not rely upon information furnished by the Township or any of its servants or agents respecting the nature or confirmation of the ground at the site of the work, or the location, character, quality or quantity of the materials to be removed, or to be employed in the construction of the work, or the character of the equipment or facilities needed to perform the work, or the general and local conditions and all other matters which could in any way affect the performance of the work under the contract other than information furnished in writing for, or in connection with the tender or the contract by the Township, except information specifically excluded from this sub-section.

8) Quantities are Estimated

The quantities shown for unit price items in the *“Form of Tender”* are estimates only and are for the sole purpose of establishing a dollar amount based on the unit price. For any work done or materials supplied on a unit price basis, the Contractor will be paid for the actual measured quantities at the respective unit prices tendered.

9) Right to Accept or Reject Tenders

The Township shall not be responsible for any liabilities, costs, expenses, loss or damages incurred, sustained or suffered by any Tenderer prior or subsequent to or by reason of the acceptance or the non-acceptance by the Township of any tender or by reason of any delay in the acceptance of a contract being prepared and executed. The Township reserves the right to reject any or all tenders and waive formalities, as the interests of the Township may require, without stating the reasons and the lowest or any tender will not necessarily be accepted.

10) Agreement and Contract Execution

If the successful Tenderer fails to provide the Township, within the ten day period, the executed agreement, together with requirements as specified within, the Township may accept another tender, advertise for new tenders, negotiate a contract or not accept any tender, as the Township may deem advisable.

11) Proof of Ability and Sub-Contractors

In order to aid the Township in determining the responsibility of each Tenderer, the Tenderer shall complete the following statement sheets, which are attached herein:

Statement "A" stating the Tenderer's experience in similar work which he/she has successfully completed.

Statement "B" stating the work and equipment the Tenderer proposes to use to perform the work.

Statement "C" giving a list of any sub-contractor who will be carrying out any part of this contract. This list shall show the names of the proposed sub-contractors and for what work each sub-contractor will be responsible.

12) List of Sub-Contractors

The Tenderer agrees to submit a list of any sub-contractors (Statement "C") who will be carrying out any part of this contract. This list shall show the names of the proposed sub-contractors and for what work each sub-contractor will be responsible. The Township has the right to reject any of the sub-contractors so named. In this event, the Tenderer shall arrange to have the proposed work done by such other sub-contractor as may be approved by the Township. Only one name shall be shown for each sub-trade.

The Tenderer shall not be allowed to substitute the other sub-contractors in place of those named in the tender without written approval from the **Public Works Superintendent**. Should the Tenderer cease operation, under no circumstances shall sub-contractors be allowed to continue to work on the site unless an authorized representative of the Tenderer is present on the site at all times. The Tenderer shall notify the **Public Works Superintendent** in writing of the names and positions of the person, or persons so representing the Tenderer.

13) Workplace Safety and Insurance Board (WSIB) and Harmonized Sales Tax Requirements

The contractor shall at the time of entering into this contract with the Township, make a statutory declaration or furnish a satisfactory clearance letter from the Workplace Safety and Insurance Board stating that all assessments or compensation payable to the Workplace Safety and Insurance Board have been paid. The selected Tenderer shall submit such statutory declaration or clearance letter to the Township in duplicate together with the Agreement executed by the said Tenderer. One copy of the statutory declaration or clearance letter shall be attached to each of the two executed sets of the contract. The proponent certifies that it has met all of its obligations to comply with Workplace Safety and Insurance Board and Harmonized Sales Tax requirements, so that it is able to do business in Ontario.

14)Occupational Health and Safety

For the purposes of the Occupation Health and Safety Act, the successful Tenderer is considered to be the “constructor” as defined in the Act. It is specifically drawn to the attention of the Tenderer that the Occupational Health and Safety Act provides, in addition to other things:

- a) THAT the measures and procedures prescribed by this Act and the regulations are carried out on the project:
- b) THAT every employer and every worker performing work on the project complies with this Act and regulations; and
- c) THAT the health and safety of workers on the project is protected.

15)Inquires During Tendering

Tenderers are advised that inquires regarding the tender documents shall be directed to **Greg Gostick, Public Works Superintendent at (705) 389-2891.**

16)Insurance

General liability insurance in the amount of at least **\$5,000,000.00** coverage for any one claim must be carried by the contractor. In addition, the Township shall be named as an additional insured party. Both owned and non-owned vehicles employed under this contract will require a minimum of **\$5,000,000.00** coverage in any one claim. The Tenderer to whom this contract is awarded shall supply the Township with proof of insurance and a copy of the policy prior to signing of the contract by Township officials and provide coverage throughout the term of the contract in the amounts specified. The insurance policies shall comply with all requirements of the funding agencies herein attached.

17)Hold Harmless

The Contractor shall be responsible for any and all damages, or claims for damages or injuries or accidents done or caused by him/her or his/her employees or resulting from the prosecution of the works, or any of his/her operations, caused by reason of the existence or location or conditions or works, or of any materials, plant, or machinery used therein or which may happen by reason thereof or arising from any failure, neglect or omission on his/her part, or on the part of any of his/her employees to do or perform any or all of the several acts or things required to be done by him/her or them under this agreement and by these conditions and covenants and agrees to hold the Corporation of the Township of McKellar harmless, and indemnified for all such damages and claims for damage.

18)Additional Work

- a) All unforeseen and or additional work to be performed by the Contractor must be approved by the **Public Works Superintendent** (or his/her designate), prior to commencement of the work.
- b) All additional work, of similar nature to this contract, shall be charged at the contract unit price.

19) Security and Bonding Requirements (successful Bidder only)

The Contractor is required to provide a Performance and a Labour and Material Bond as follows, to guarantee his faithful performance of this contract and his fulfillment of all obligations in respect to maintenance and payment for Labour and Materials used on this work.

- a) Performance Bond in the amount of 100% of the contract priced where the contract price is greater than \$150,000.00.
- b) A Labour and Materials bond in the amount of 50% of the contract price where the contract price is greater than \$150,000.00.

Each Bond shall be with a satisfactory Guarantee Surety Company, resident in Canada or authorized to carry on business in Canada. An agreement to Bond must be submitted with the tender bid (where applicable). Bonding company standard 'Agreement to Bond' forms are acceptable.

The Tenderer agrees that he/she will furnish the Bonds as required herein, in duplicate within ten calendar days after the notification of award of the Contract by the Township. One copy of the said bonds shall be attached to each of the two executed sets of the Contract.

If the contract price does not exceed \$150,000.00 there will be no security and bonding requirements.

20) Tender Deposit

A certified cheque, bid bond, bank draft or money order made payable to the Municipality in the amount of 5% of the total tender must be submitted with the tender. The deposit accompanying the unsuccessful tenders will be returned to the Contractors within ten (10) days of the tender opening. The deposit of the successful bidder will be retained until the contract has been executed and the required bonds have been furnished to the satisfaction of the Municipality. Tenders not accompanied by the required deposit will not be considered.

Except as otherwise herein provided, the tenderer guarantees that if his/her tender is withdrawn after the tenders are opened, before the Municipality has made a decision or before or after he/she has been notified that his/her tender has been recommended to the Municipality for acceptance or that if the Municipality does not for any reason receive within the period of ten calendar days as stipulated and as required herein, the Agreement executed by the tenderer, the Performance Bond executed by the tenderer and the surety company and the other documents required herein, the Municipality may retain the tender deposit for the use of the Municipality and may accept any tender, advertise for new tenders, negotiate a contract or not accept any tender as the Municipality deems advisable.

21)Method of Payment:

Payment will be processed within 30 days of the acceptance of the invoice.

Detailed invoices must be submitted in duplicate to:

Township of McKellar
701 Hwy 124, P.O. Box 69,
McKellar, ON P0G 1C0

22)Anticipated Start Date

The anticipated start date for this contract is to be negotiated with the Contractor and the Township. The successful bidder will be notified upon receipt of appropriate documentation exactly when the project will commence.

23)Completion Date

The Contractor shall complete the work for all roads within 7 working days of the start date and no later than September 17, 2021. If this time limit is not sufficient to permit completion by the Contractor working a normal number of hours, the Contractor shall make changes to permit the work to be completed by the above date. Additional costs incurred shall be deemed to be included in the price bid for the works.

24)Fixed Completion Date and Charges

1) Time

Time shall be the essence of this Contract

2) Progress of the Work and Time for Completion

The Contractor shall diligently prosecute the work on this contract pertaining to completion by September 17, 2021.

3) 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 dates of completion specified aforementioned, or as extended in accordance with subsection GC3.07, Extension of Contract Time, of OPS General Conditions of Contract, September 1999, a loss or damage will be sustained by the Owner. Since it is and will be impracticable and extremely difficult to ascertain and determine the actual loss or damage which the Owner will suffer in the event of and by reason of such delay, the parties hereto agree that the Contractor will pay to the Owner the sum of \$1,500.00 as liquidated damages for each and every calendar day's delay in finishing the work beyond the dates of completion prescribed above. It is agreed that this amount is an estimate of the actual loss or damage to the Owner that will accrue during the period in excess of the prescribed dates of completion.

25)Bids

All tender parts must be bid and award will be based on the sum of all the parts.

FORM OF AGREEMENT

THIS AGREEMENT made in duplicate this _____ day of _____ 2021

**BETWEEN: THE CORPORATION OF THE TOWNSHIP OF MCKELLAR
hereinafter called the “Township” of the FIRST PART
-and-**

(Name of Contractor)

Hereinafter called the “Contractor” of the SECOND PART

WITNESSETH that the “Contractor” for and in consideration of the payment provided herein to be made to the “Contractor” by the “Township”, shall supply all labour, materials and equipment required to perform the work as described in

Contract No. PW-2021-04-DLST – Tender For Double Layer Surface Treatment

In accordance with accompanying “Information to Tenderers” and “Form of Tender”, all of which form part of this agreement.

WITNESSETH that the “Township” agrees:

1. To provide the “Contractor” with the access to its land to such extent as may be necessary for the performance of the work under this contract.
2. To pay the “Contractor” as set forth in the “Information to Tenderers” of this Contract.

IN WITNESS WHEREOF the “Contractor” and the “Township” have respectively affixed their corporate seals and the hands of their proper officers on the day and year first above written.

SIGNED, SEALED AND DELIVERED in the Presence of:

“CONTRACTOR”

THE CORPORATION OF THE
TOWNSHIP OF MCKELLAR

Name of Contractor (Print)

Peter Hopkins, Mayor

Signature of Contractor

Clerk

Witness

Witness

Date

Date

FORM OF TENDER

The Tenderer has carefully examined the Provisions, Specifications and Conditions referred to in the Tender Documents hereto as part of the work to be done under this Contract. The Tenderer also understands and accepts the said Provisions, Specifications and Conditions and hereby states that the prices set forth in this tender include full compensation to furnish all machinery, tools, apparatus and other means of construction, furnish all materials, except as otherwise specified in the Contract, and to complete the work in strict accordance with the Provisions, Specifications and Conditions referred to in the said Tender Documents.

The Contractor understands and accepts that the quantities shown are approximate only and are subject to increase or decrease, or deletion entirely if not found to be required.

Attached to this tender, is a certified cheque, bid bond, bank draft or money order for the sum of _____ payable to the Corporation of the Township of McKellar; which meets or is greater than the tender minimum deposit required.

This cheque shall constitute a deposit which shall be forfeited to the Municipality, if the successful Tenderer fails to file with the Municipality, an executed tender document, a Certificate of Insurance in the amount specified and/or a Workplace Safety & Insurance Board Clearance Certificate, satisfactory to the Municipality.

Notification of acceptance may be given and delivery of the *"Form of Agreement"* made by prepaid post, addressed to the Tenderer at the address contained in this Tender.

Project Description: Resurface of 1600m x 7m = 10640 m² of LYNDSEY LANE
Project Location: In the Township of McKellar

Project Description: Resurface 2100m x 7m = 14700 m² of MCKELLAR LAKE ROAD
Project Location: In the Township of McKellar

**TOWNSHIP OF MCKELLAR
TENDER – PW-2021-04-DLST
DOUBLE LAYER SURFACE TREATMENT
MATERIALS AND ITEMIZED BID**

1600 metres of LYNDSEY LANE

Item	Description	Unit	Est. Quantity	Unit Price	Item Total
1	Supply and Apply HF-150 Emulsion	KG	Approx. 35842 kg		
2	Supply and Apply Class II Aggregate	Tonne	Approx. 448 Tonne		
				Sub-Total	
				HST	
				Total	

2100 metres of MCKELLAR LAKE ROAD

Item	Description	Unit	Est. Quantity	Unit Price	Item Total
1	Supply and Apply HF-150 Emulsion	KG	Approx. 47043 kg		
2	Supply and Apply Class II Aggregate	Tonne	Approx. 588 Tonne		
				Sub-Total	
				HST	
				Total	

Offered on behalf of:

Contractor:

Address:

Telephone:

Fax Number:

Authorized Signature: _____ Seal:

Name:
(Please Print or type)

Witness:

Date:

**FORM OF TENDER
STATEMENT "A"
Tenderer's Experience**

As an integral part of this tender, the Tenderer shall list here his/her experience in work of a similar nature to that being tendered, which he/she, has successfully completed

YEAR	DESCRIPTION OF CONTRACT	FOR WHOM PERFORMED	APPROXIMATE VALUE
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**FORM OF TENDER
STATEMENT "B"
Proposed Work and Equipment**

As an integral part of this tender, the Tenderer shall provide below, a statement of the work and equipment he/she proposed to use for the work.

WORK

EQUIPMENT

**FORM OF TENDER
STATEMENT "C"
List of Proposed Sub-Contractors**

Section 11 and 12 of the "Information to Tenderers" requires the Tenderer to list on this statement sheet the name of each proposed sub-contractor.

SUB-TRADE

PROPOSED SUB-CONTRACTORS

GENERAL CONDITIONS:

Ontario Provincial Standards General Condition of Contract – September 1999

General Condition of Contract and the Ontario Provincial standard listed below apply to this Contract unless otherwise stated in the attached Tender documents. The particular version in effect at the time of the Contract is advertised shall apply. Where further detail or clarification is required, reference shall be made to the appropriate Ontario Provincial Standard below.

Spec No.	Date	Spec. No.	Date
127	Apr. 2005	501	Feb. 1996
128	Jun. 2002	506	Nov. 2001
180	Jan. 1994	543	Dec. 1990
301	Nov.2003	1001	Nov. 2002
304	Apr. 1999	1103	Feb. 1996

Payment, Holdback and Completion:

- a) Monthly payment shall be paid for ninety percent (90%) of the estimated value of the work performed, within (30) calendar days of certification of the work estimate by the Contractor. The Municipality shall prepare the estimate.
- b) In addition to the normal ten percent (10%) hold back, additional hold back may be retained to cover any written liens submitted during the Contract.
- c) As soon as possible following the certification of completion of the contract, the Municipality shall prepare the final estimate of payment and submit it for certification by the Contractor and any Subcontractors. The Contractor shall return the certified final estimate and Worker's Compensation Board clearance within thirty (30) calendar days.
- d) Hold back not including an amount retained for unresolved claims will be released to the Contractor forty-five (45) calendar days after certification by the Municipality that the Contract is 'complete' (see construction lien Act).

SPECIAL PROVISIONS:

GENERAL SPECIAL PROVISIONS:

Scope of Work

- 1) The roads that are to have double surface treatment are identified on Schedule 'A' attached hereto
- 2) All class II Aggregate must be made from a quarried product.

Intent of These Provisions

These Special Provisions, forming part of this Contract, are in addition to any specifications and modify the work or cover work not contained therein.

The Standard specifications, read in conjunction with the special Provisions, form the complete specification governing the work to be performed under this contract.

Contractor's Schedule of Work

Prior to the commencement of work, the Contractor shall provide a completed "Schedule of Work". No work shall be carried out on Saturdays and Sundays.

Curve Widening

The application of the Double Surface Treatment will be widened on the inside of all curves. The curve widening will be 0.5m or to the edge of shoulder, whichever is lesser.

Road Intersections

At all gravel side road intersections, the contractor shall surface treat the side roads 10 metres back from the edge of the asphalt including an intersection radius of 12 metres where possible.

Equipment

Subsection 304.06.02 of OPSS 304 is amended by the addition of the following:

Only aggregate spreaders of 1992 vintage or newer will be acceptable for use at any time on this Contract.

The Contractor is responsible to ensure that no washboard is present or likely to occur prior to commencing surface treatment, and that none reflects through after surface treatment.

Weather Conditions

Surface treatment will not proceed when rain is forecasted or imminent.

Binder Application Rate

The first application of binder shall be sprayed directly on the prepared granular surface at 1.65 kg/m².

The second application of binder shall be sprayed at 1.55 kg/m² on the first course before the aggregate has been loosened by traffic.

Aggregate Application Rate

The first application of Class II Aggregate shall be applied at 17+- kg/m² and shall provide uniform coverage of the binder, but shall not be excessive. Traffic shall not be permitted to cross the exposed binder at the centre line joint between lanes and construction traffic crossing the exposed binder shall be kept to a minimum. Spilled aggregate shall be carefully removed before the second application.

The second application of Class II Aggregate shall be applied at 18+- kg/m². Traffic shall not be permitted to cross the exposed binder at the centre line joint between lanes, and construction traffic crossing the exposed binder shall be kept to a minimum.

Rolling

As per Subsection 304.07.09

Determination of Binder and Aggregate Application Rates

Subsection 304.07.03, Trial Areas, of OPSS 304, June 1988, is deleted and replaced by the following:

Equipment

The Contractor shall supply the following equipment:

- 1) A portable electronic balance: Five digit display, accuracy 0.1%, capacity 10 kg, minimum platform size 300m x 400m.
- 2) Sheet metal trays, each 500mm x 500mm inside dimension +- mm, with sides 7mm in height +- 1mm. The sheet metal shall be a minimum of 18 gauge (approximately 1.3mm) with soldered corners.
- 3) one 5 kg test mass.
- 4) A carpenter's level for levelling the balance.

Sampling Frequency

The Contractor shall carry out field sampling to determine the binder application rates:

- 1) At the start of each day's work. If the Contractor provides two distributors, the binder application rate of one distributor shall be determined at this time.
- 2) When approximately half of the total day's production is completed. If the Contractor provides two distributors, the binder application rate of the second distributor shall be determined at this time.

The Contractor shall carry out field sampling to determine the aggregate application rates at the start of each day's work.

Procedure

Each section of road used to obtain the application rates shall be a maximum of 50m. in length. The Contractor shall conduct field sampling, in the presence of the Project Inspector, to determine the binder and aggregate application rates as follows:

- 1) Set up and level the balance in a firm location protected from the wind.
- 2) Check the tolerance of the balance with the 5 kg test mass.
- 3) Obtain the tare mass (in kg to three decimal places) of two clean trays and record.
- 4) Place the two trays in the centre of the lane being treated approximately 30 cm apart and parallel to the centerline
- 5) Remove the first tray after the binder has been sprayed and before the aggregate has been applied.
- 6) Remove the second tray after the binder and aggregate have been applied and before rolling.
- 7) Obtain and record the gross mass (in kg to three decimal places) of each tray.
- 8) Carefully patch the marks left by the trays using the binder and aggregate specified in the contract. The patches shall be rolled.
- 9) Clean the trays for reuse

Calculations

The Contractor shall perform the calculations in the presence of the Public Works Supervisor as follows:

- 1) Obtain the net mass of the binder applied to the first tray.
$$\text{Net Mass of Binder} = \text{Gross Mass} - \text{Tare Mass}$$
- 2) Calculate the binder application rate correct to two decimal places.
$$\text{Binder Application Rate (kg/m}^2\text{)} = \text{Net Mass of Binder} \times 4$$
- 3) Obtain the net mass of binder and aggregate on the second tray
$$\text{Net Mass of Binder and Aggregate} = \text{Gross Mass} - \text{Tare}$$
- 4) Obtain the net mass of aggregate on the second tray.
$$\text{Net Mass of Aggregate} = \text{Net Mass of Binder and Aggregate}$$

(from 3 above) – Net Mass of Binder (from 1 above)
- 5) Calculate the aggregate application rate correct to one decimal place
$$\text{Aggregate application Rate (kg/m}^2\text{)} = \text{Net Mass of Aggregate}$$

(from 4 above) x 4
- 6) The calculations shall be promptly reported to the Public Works Supervisor.

Acceptance

Binder

The binder application rate is acceptable when the test result is within the tolerance of $\pm 5\%$ of the desired rate and work may proceed.

The binder application rate is unacceptable when the test result is outside the tolerance of $\pm 5\%$ of the desired rate and work shall stop. Field sampling shall be repeated in a maximum of 50m sections until two consecutive acceptable test results or four unacceptable test results are obtained.

When two consecutive acceptable binder test results are obtained, work may proceed. When four unacceptable binder test results are obtained before two consecutive acceptable test results, the distributor shall be permanently removed from the job.

Aggregate

The aggregate application rate is acceptable when the result is within the tolerance of $\pm 5\%$ of the desired rate and work may proceed.

The aggregate application rate is unacceptable when the test result is outside the tolerance of $\pm 10\%$ of desired rate and work shall stop. Work may proceed when the application rate has been adjusted to the desired rate.

SCHEDULE 'A'

DOUBLE SURFACE TREATMENT LOCATIONS

1.6 km – LYNDSEY LANE in the Township of McKellar

2.1 km – MCKELLAR LAKE ROAD in the Township of McKellar