The Corporation of the
City of St. Catharines

CONTRACT DOCUMENTS

Contract No.: P19-080-1

Title: 2019 RESURFACING PROGRAM – PART 1

Location: CITY OF ST. CATHARINES

Date: APRIL 2019

NOTICE

This contract utilizes the latest revision of the **Niagara Peninsula Standard Contract Document** (Revision 19). This document constitutes the specification for this project and must be utilised in preparing bids for tenders or Tenders.

The Niagara Peninsula Standard Contract Document is available online at the “Bid Opportunities” section of the Regional Municipality of Niagara website.

https://www.niagararegion.ca/business/tenders/npscd/default.aspx

A link to the Niagara Peninsula Standard Contract Document is also available online at the City of St. Catharines’ website at:

http://bids.stcatharines.ca/Module/Tenders/en

Contracts issued through tender calls and Tenders will reference the Standard Document and the responsibility for obtaining or having access to the Document will rest with the bidder. The Standard Document can be utilised on all projects which clearly indicate reference and use of the Niagara Peninsula Contract Document.

TABLE OF CONTENTS

	Reference in Agreement
Title Page	
Notice	
Table of Contents	
Special Instructions to Bidders	B
Instructions to Bidders	B
(Refer to Niagara Peninsula Standard Contract Documents, NPSCD)	
Form of Tender	
- Form of Tender Declaration	
- Schedule of Tender Unit Prices	
- Statement A – Bidder's Experience in Similar Work	
- Statement B – Harmonized Sales Tax	
- Statement C – Declaration of Accessibility Compliance	
- Statement D – List of Sub-Contractors	
- Statement E – Bidder's Senior Staff	
- Statement F – Bidder's Plant	
Agreement to Bond	
Form of Agreement	
Schedule of Drawings and Specifications	D
Special Provisions - General	B
(Refer to Niagara Peninsula Standard Contract Documents, NPSCD)	
Special Provisions - Contract Items	B
(Refer to Niagara Peninsula Standard Contract Documents, NPSCD)	
Special Provisions - Supplementary Special Provisions	B
Supplementary General Conditions of Contract	E
(Refer to Niagara Peninsula Standard Contract Documents, NPSCD)	
OPS General Conditions of Contract	E
(Refer to Niagara Peninsula Standard Contract Documents, NPSCD)	
Appendix	
1. Bid Envelope Submission Labels	
2. Location Schedule	
3. Location Quantities	

Contractor's Signature _____ Date _____

Special Instructions to Bidders

Instructions to Bidders

(Refer to Niagara Peninsula Standard Contract Documents)
Not Enclosed

SPECIAL INSTRUCTIONS TO BIDDERS

TABLE OF CONTENTS

SIB No.	Description	Page
1.	Named Parties	1
2.	Tender Procedure	1
3.	Tender Documents	2
4.	Deadline to Submit Questions	2
5.	Estimated Tender Price	2
6.	Tender Award	3
7.	Maintenance Holdback	3
8.	Liquidated Damages	3
9.	Additional Insured	3
10.	Description of Work	3
11.	Contract Bonding	3
12.	Additions or Deletions to Tender	4
13.	Harmonized Sales Tax (HST)	4
14.	Environmental Concerns	4
15.	Network & Computer Software/Hardware Standardization	5
16.	Third Party Requirements in the Vicinity of Natural Gas Facilities	5
17.	Guideline for Excavation in the Vicinity of Utility Lines	5
18.	Tenderers Involved in Litigation with the City of St. Catharines	5
19.	Clarification, Omission, Discrepancies	6
20.	Confidentiality	7
21.	Exclusion	7
22.	Permits	7

SPECIAL INSTRUCTIONS TO BIDDERS

1. Named Parties

For the purposes of this contract the following parties are identified:

Owner: **The Corporation of the City of St. Catharines (hereinafter referred to as "The City of St. Catharines" or "the City" or "Owner")**

Engineer: **Samantha Downing, P.Eng**.

Contract Administrator: **Ray Vachon, C.E.T., Project Supervisor**

Inspector: **The City of St. Catharines**

Contact for Enquiries: **Ray Vachon, C.E.T., Project Supervisor**

Email: rvachon@stcatharines.ca

Telephone No.: (**905) 688-5601, Extension 1606 Fax No (905) 641-4450**

2. Tender Procedure

The following policy regarding the submission of Bids and the Bid opening procedures will be applicable for this Project. Bidders are requested to adhere strictly to the instructions concerning submission.

(a) **Sealed Bids, on the prescribed Form of Tender, will be received by:**

Name: **Bonnie Nistico-Dunk, City Clerk (or his/her representative)**

Address: **Citizens First, 2nd Floor, 50 Church Street**
City Hall, St. Catharines, Ontario, L2R 7C2

By the following time:

Time: **2:00:00 p.m. local time, as determined by the clock located in the location receiving bids**

Date: **Wednesday, April 17, 2019**

(b) Bids received later than the time specified will not be accepted, regardless of the postal seal date. Bids must be plainly marked to reveal the contents and the Bidder's name and address.

(c) Tenders shall be submitted in two separately sealed envelopes as follows:

i) The first envelope shall be labelled Envelope 1 of 2 and shall contain:

* "Agreement to Bond", duly signed and sealed (no copies or facsimiles will be accepted).
* Tender deposit in the form of a **Certified Cheque, Bid Bond, Money Order or Bank Draft** and in the amount of **$75,000.00**

ii) The second envelope shall be labelled Envelope 2 of 2 and shall contain:

* Form of Tender (including addenda if applicable).

  Please note that the tender specifications shall not be included in the second envelope. In the event the first envelope does not contain the proper documents, the second envelope will not be opened.

iii) Appendix 1 – Bid Envelope Submission Labels:

* Tenderers may use the labels provided in Appendix 1.

(d) Tenders will be opened the same day that tenders close.

Time: **2:30 p.m.**

Location: **Merritt Room, 1st Floor, City Hall, St. Catharines, Ontario**

Firms submitting tenders will be permitted to attend the tender opening.

(e) The total tender price will be announced for each tender opened, (excl. H.S.T.).

(f) Bidders must register on the City's website in order to be obtain all tender documents.

3. Tender Documents

Tender documents are available online for download. Tenderers must register as plan taker for the specific bid opportunity available through www.stcatharines.ca/Bids. Once registered as a plan taker, bidders will have access to all bid documents (including addenda) with the watermark removed.

4. Deadline to Submit Questions

Deadline to Submit Questions: **Friday April 12, 2019 at 12:00:00 p.m.**

5. Estimated Tender Price

The estimated tender price of the project is as follows (excluding H.S.T.).

Estimated Tender Price **$1,050,000.00**

6. Tender Award

The award of this tender is subject to the Owner obtaining approval from: **Council**

Tentatively, construction may commence, but is not guaranteed, by: **May 27, 2019**

Contractors may anticipate to start construction as of **May 27, 2019** however the City will accept a delayed starting date provided all construction is completed prior to the end of the 2019 construction season. Bidders to indicate in the Form of Tender/Schedule of Tender Unit Prices their anticipated start date.

7. Maintenance Holdback

The following maintenance holdback will apply to this contract:

Two percent (2%) of the final contract, for one (1) year from the date of Substantial Performance and shall be held back on each payment. The Maintenance Holdback shall be released in accordance with the terms outlined in Special Provisions – General G18

8. Liquidated Damages

The liquidated damages for this contract shall be Five Hundred Dollars ($500.00) for each and every days delay as outlined in Special Provisions - General.

9. Additional Insured

The following parties are identified to be included as additional insured for this project:

The Corporation of the City of St. Catharines
The Regional Municipality of Niagara

10. Description of Work

This contract is for the supply and delivery of all labour, equipment and materials necessary to restore existing asphalt including asphalt milling, asphalt resurfacing, concrete curb replacement, subdrain installation, sidewalk replacement and other related works. Please refer to the location schedule (Appendix 2) for the locations and brief description of the work to be completed.

11. Contract Bonding

As amended by the Supplementary Special Provisions, Performance Bonds supplied by the successful bidder shall be for 50% of the total tender price or the contract amount less HST.

A certified cheque or irrevocable Letter of Credit for 50% of the total tender price (the contract amount not including HST) is an acceptable alternate for an Agreement to Bond, Performance Bond and Labour and Material Bond. The certified cheque or irrevocable Letter of Credit shall be submitted with the tender in the first envelope in place of the Agreement to Bond as outlined in S.I.B. Item 2(c).

If used, the irrevocable Letter of Credit shall:

- include the name, address and phone number of the bank,
- be payable to the Corporation of the City of St. Catharines,
- include the name of the Contractor,

- include the project number and title,
- include the purpose of the Letter of Credit,
- be for 50% of the contract value, not including HST,
- be irrevocable,
- permit payment on demand, without question, to the Corporation of the City of St. Catharines,
- be automatically renewed, or have an expiry date that is acceptable to the City (at least one year after completion of the project), be signed.

12. Additions or Deletions to Tender

The Contract Administrator can, at his/her discretion, increase or reduce the scope of the Project in order to conform to the budgeted amount for this project. There shall be NO compensation for such increase or reduction in this contract value or scope. In addition, the estimated quantities listed herein may be changed or deleted and there shall be no compensation to the Contractor for such changes. The successful bidder shall not be entitled to any adjustment in its unit prices based on any additions or deletions to the tender. In addition, the successful bidder shall not have any claim against the owner for lost profit or work.

Contractors are required to visit the site and examine all existing conditions to ascertain the amount and character of work. No extras will be allowed for any condition which may arise due to site conditions

13. Harmonized Sales Tax (HST)

Prices quoted will be Unit Prices in Canadian funds and will be based on metric units of measure. Harmonized Sales Tax will be calculated EXTRA and should not be included in the Unit Base Price. The prices will include all cost related to the work to be performed (i.e. vehicle, equipment, labour, material, etc.).

14. Environmental Concerns

In order to contribute to the reduction of waste, toxic or harmful emissions and substances and to increase the development and awareness of environmentally sound purchasing, the Successful Bidder will ensure that wherever possible, terms of reference are amended to provide for expanded use of durable products, reusable products and products (including those used in services) that contain the maximum level of post-consumer waste and/or recyclable content, without significantly affecting the intended use of the products or services. It is recognized that cost analysis is required to ensure that the products are made available at competitive prices.

The City's vision to guide the direction of sustainability initiatives states "A sustainable community works together to take on the challenges ahead" and the related policy can be viewed on the City's website at

http://www.stcatharines.ca/en/governin/CorporateSustainability.asp

Where practical, the City strongly encourages the recycling of or the reuse of any materials removed from the project site and encourages partnerships with "reuse" organizations that may be able to assist with this process.

15. Network & Computer Software/Hardware Standardization

To ensure compatibility with the current City of St. Catharines Systems technical environment all network IP based hardware and all network and/or standalone computer hardware and/or peripherals must be sourced in conjunction with Information Systems. All computer software and application must be approved by Information Systems.

16. Third Party Requirements in the Vicinity of Natural Gas Facilities

All work within the vicinity of natural gas pipeline must adhere to the specification set forth by Enbridge Gas Distribution Inc.

https://www.enbridge.com/~/media/6D45DFB823AC4E8DA86C4091814BF5F8.ashx

Questions regarding work within the vicinity of a natural gas pipeline and the corresponding specifications may be obtained from the following source:

EGD CONTACTS

Rob D'Onofrio, C.Tech., GDP Planning Sr. Specialist
ENBRIDGE Gas Distribution Inc.
Niagara Region
Tel: 905-641-4876 / Fax: 905-704-3683
robert.donofrio@enbridge.com

The contractor is to become familiar with all of Enbridge's requirements pertaining to work within the vicinity of a natural pipe line and these provisions are to be included within the tender bid. No additional cost associated with work within the vicinity of a natural gas pipe line will be entertained.

17. Guideline for Excavation in the Vicinity of Utility Lines

Alectra Utilities has prepared a Guideline package outlining the requirements for **"Excavation in the Vicinity of Utility Lines".** All work within the vicinity of utility lines must adhere to the specifications set forth by Alectra Utilities. A copy of this specification has not been included in the tender but can be found at the link below.

https://www.tssa.org/en/fuels/resources/Documents/Guideline-for-Excavation-in-the-Vicinity-of-Utility-Lines.pdf

The contractor is to become familiar with all of Alectra's requirements pertaining to work within the vicinity of utility lines and these provisions are to be included within the tender bid. No additional cost associated with work within the vicinity of utility lines will be entertained. Alectra Utilities can be contacted at (905) 684-8111.

18. Tenderers Involved in Litigation with the City of St. Catharines

It is a matter of great importance to the City in the administration of this contract that the City's relationship with the successful bidder should be as productive, amicable and harmonious as is reasonably possible. For the purposes of this section:

(a) "Threatening Litigation" refers to the transmission of a written threat to commence a judicial proceeding; and;

(b) “Pursuing Litigation” means actually commencing and / or continuing a judicial proceeding.

When:

(i) A bid is received from a bidder who is threatening litigation or is pursuing litigation against the city in relation to previous contracts awarded to that bidder by the City; or,

(ii) A bid is received from a bidder, against whom the City is pursuing litigation,

The City shall be entitled to reject any bid submission by such bidder, despite the fact that the bid might otherwise have met or exceeded all other conditions for a successful bid. Each bidder expressly agrees in submitting a bid for this contract that, should its bid be rejected in accordance with the foregoing, it shall have no claim for damages from the City in consequence of such rejection whether or not the litigation, or threatened litigation with the City which occasioned the rejection of the bid, has any merits, and whether or not it is successful or unsuccessful.

19. Clarification, Omission, Discrepancies

It is the responsibility of the Bidder to seek clarification of any matter that they consider unclear before submitting a proposal. It is the Bidder’s responsibility to verify the extent of work required under this Tender. No allowances will be made for the Bidder failing to do so. Any item not specifically mentioned in the specifications but implied or required to complete the services will be considered to be included in the total price.

Upon receipt of this Tender, you should examine it carefully and report any errors, omissions or ambiguities. You may direct questions or seek additional information from the City contact by email on or before the Deadline to Submit Questions.

All questions will be deemed to be received once the email has entered into the City contact’s email inbox. No communications are to be directed to anyone other than the City contact.

While the City has used considerable efforts to ensure an accurate representation of information of this Tender, the information contained in this Tender is supplied solely as a guideline for Bidders. The information is not guaranteed or warranted to be accurate, nor is it necessarily comprehensive or exhaustive. Nothing in this Tender is intended to relieve Bidders from forming their own opinions and conclusion in respect of the matters addressed in this Tender.
Bids submitted shall be final and may not be altered by subsequent offerings, discussions or commitments unless the Bidder is requested to do so by the City.

The Bidder shall carefully consider any and all work that may be necessary to complete the services, including labour and materials and all other incidentals necessary to complete the work and all other charges of every kind attributable to the work, and shall allow for the cost of such work during preparation of their financial Tender.

Responses, if not already addressed in the bid, will be addressed in the form of addendum, if required. No oral interpretations will be effective to modify any provisions of the bid.

Any Addendum is the sole responsibility of the Bidder. The City makes no guarantee that an Addendum will be delivered by any means to any Bidder. The Bidder must ensure that all applicable Addenda are contained in Envelope #2 prior to submission.

20. Confidentiality

The City of St. Catharines will treat all bids as confidential. The City will comply with the Municipal Freedom of Information and Protection of Privacy Act, and its retention by-law pursuant to the Municipal Act, in respect of all bids. All reports approved by the Council of The City of St. Catharines will become public information. These reports will not include bid documents. The City will retain all copies of all bids successful or otherwise, and they will be destroyed in accordance with the City's Retention By-Law.

21. Exclusion

Except as expressly and specifically permitted herein, no bidder shall have any claim for any compensation of any kind whatsoever, as a result of participating in this bid, and by submitting a bid each bidder shall be deemed to have agreed that it has no claim.

22. Permits

Niagara Region Encroachment

It will be the responsibility of the successful tenderer obtain any required Construction Encroachment Permits from the Region of Niagara on behalf of the City for the works located within the Region's right of way.

Regional Permit applications can be found at the following website:

http://www.niagararegion.ca/living/roads/permits/application-construction-encroachment.aspx

Form of Tender

City of St. Catharines
Form of Tender

1. Tender for: **2019 RESURFACING - PART 1**

PROJECT NUMBER P19-080-1

2. Tendered by: (Company Name) _____

(Address) _____

___ Declare that the following matters stated in the said Tender are in all respects true:

(i) _____ of lawful age and the only person interested in this Tender; and no person other than herein above named has any interest in this Tender or in the Contract proposed to be taken.

(ii) _____ FURTHER DECLARE that this Tender is made without any connection, knowledge, comparison of figures or arrangement with any other person or persons making a tender for the same work, and is in all respects fair and without collusion or fraud.

(iii) _____ FURTHER DECLARE that no member of City Council, or any officer of the Corporation of the City of St. Catharines is, shall be, or become interested, directly or indirectly as a contracting party, partner, stockholder, surety or otherwise in or in the performance of the contract, or in the supplies, work or business to which it relates or in any portion of the profits thereof, or of any such supplies to be used therein, or in any of the moneys to be derived therefrom.

3) If this Tender is accepted, the undersigned agree(s) to furnish to the City approved Performance and Labour and Materials Payment bonds, a certified copy of _____ insurance policy, and a letter of clearance from the Worker's Compensation Board for the proper fulfillment of the Contract as required under the terms of the Specifications, and to execute and return the Agreement in triplicate within fourteen (14) days after being notified so to do by the City Engineer. And in the event of default or failure on _____ part so to do, _____ agree(s) that the Corporation of the City retain the money deposited by _____ and to accept the next lowest or any Tender; or to advertise for new Tenders; or to carry out the works in any other way they may deem best; and _____ also agree to pay to the said Corporation the difference between this Tender and any greater sum which the said Corporation may expend or incur by reason of such default or failure, or by reason of such action, as aforesaid, on their part, including the cost of any advertisement for new Tenders; and to indemnify and save harmless the said Corporation and their officers from all loss, damage, cost, charges and expense which may suffer or be put to reason of any such default or failure on _____part. And _____ agree(s) that the awarding of the Contract, based on this Tender by City Council, shall be an acceptance of this Tender without communication or notice thereof to _____.

4. And ___ propose _____ as sureties, who are willing to become bound with the undersigned for the due performance of the Contract, for which this is a tender.

5. ___ acknowledge that ___ have received Addendum/Addenda No. ___ to __ inclusive, and that all changes specified in the Addendum/Addenda have been included in the prices submitted.

6. ___ agree to commence work as specified to proceed continuously to the completion and to complete all the work within **_50 working days**

7. The undersigned, having carefully examined the locality and site of the proposed works, as well as all the plans, drawings, profiles, general conditions, form of agreement and bond relating thereto, and all the clauses in the specifications, hereby accept the same as part and parcel of this contract, and do hereby tender and offer to enter into a contract to supply and do all therein called for, on the terms and conditions and under the provisions therein set forth, for the following prices:

SECTION 1 - GENERAL	$_____
SECTION 2 – ROADS	$_____
SECTION 3 - SEWERS	$_____
TOTAL FOR PROJECT NO. P19-080-1	**$**_____

TOTAL TENDER PRICE*: _____

_____

(in writing)

TENDERER'S SIGNATURE(S): _____

DATE: _____ CONTRACTOR'S SEAL

WITNESSES: _____

Tender Deposit accompanying this bid: **$75,000.00**

*Total Tender Price shall not include any allowance for Harmonized Sales Tax (H.S.T.). Please refer to Special Instructions to Bidders for details.

NOTE:

(a) If the Bidder is a Corporation, the Corporate seal must be affixed under the signature of a duly authorized officer or officers of the Corporation.

(b) If the Bidder is not a Corporation or a Partnership, the Bidder must sign in the presence of a witness who must also sign.

(c) If the Bidder is a Partnership, each member of the Partnership must sign in the presence of a witness who must also sign.

St. Catharines

THE CITY OF ST. CATHARINES
2019 RESURFACING PROGRAM - PART 1
PROJECT NUMBER P19-080-1

Schedule of Tender Unit Prices

ITEM	SPEC NO.	DESCRIPTION	EST. QUAN	UNIT	UNIT PRICE	AMOUNT
SECTION 1 - GENERAL						
1.1	**A1**	**Bonding**	**1**	**LS**		
1.2	**A4**	**Construction Layout**	**1**	**LS**		
1.3	**A8**	**Signs**				
	SSP	a) Allowance for Construction Signs, Traffic Plan	**1**	**LS**		
1.4	**SSP**	**Road Sweeping & Cleaning**	**1**	**LS**		
1.5	**A9**	**Contingency Allowance**	**1**	**LS**	**$ 50,000.00**	**$ 50,000.00**
		TOTAL SECTION 1 - GENERAL:				
SECTION 2 - ROADS						
2.1	**B3**	**Granular Materials**				
	SSP	a) Granular 'A' - Base repairs, manhole adjustments, curbs and subdrains	**3200**	**t**		
		b) Granular 'M' - Driveways & Shoulders - varying depths	**140**	**t**		
2.2	**B6**	**Subdrains**				
	SSP	a) Subdrains	**190**	**m**		
		b) Connections of subdrains to existing structures	**4**	**each**		
2.3	**B8**	**Concrete - Curb and Gutter**				
		a) Curb spot repairs - all types	**570**	**m**		
2.4	**B9**	**Concrete Sidewalks Repairs - 125mm thickness**				
	SSP	a) Regular Sidewalk (Provisional)	**10**	**m²**		
		b) Curb Faced Sidewalk (Provisional)	**10**	**m²**		
2.5	**B10**	**Saw-cutting (up to 200mm) in all materials**				
	SSP	a) Base repairs	**3450**	**m**		
		b) Curbs, Subdrains, MH's & CB's	**1620**	**m**		
		c) Sidewalks and Driveways	**580**	**m**		
2.6	**B11**	**Milling**				
	SSP	a) 50mm depth, full width - Asphalt	**19730**	**m²**		
		b) Full depth (<100mm), full width - Asphalt	**10580**	**m²**		
		c) Butt Joints (1.5m wide min.)	**420**	**m²**		
2.7	**B12**	**Supply & Place Tack Coat**	**24500**	**m²**		

THE CITY OF ST. CATHARINES
2019 RESURFACING PROGRAM - PART 1
PROJECT NUMBER P19-080-1

Schedule of Tender Unit Prices

ITEM	SPEC NO.	DESCRIPTION	EST. QUAN	UNIT	UNIT PRICE	AMOUNT
2.8	**B13 SSP**	**Adjustment of Appurtenances**				
		a) Existing Catch Basin Frame & Grate				
		i) up to 300mm	**34**	**each**		
		ii) 300mm to 450mm	**18**	**each**		
		b) Replace Catch Basin Frame & Grate	**43**	**each**		
		c) Valve Chamber, Manhole Frame & Cover				
		i) up to 300mm	**37**	**each**		
		ii) 300mm to 450mm	**21**	**each**		
		d) Replace Manhole Frame & Cover	**31**	**each**		
		e) Valve & Curb Boxes	**1**	**each**		
		f) Supply & Replace Valve & Curb Boxes (Provisional)	**1**	**each**		
		g) Rebuilding brick MHs or CBs (Provisional)				
		i) 0.1m to 0.3m	**4**	**each**		
		ii) 0.3m to 0.6m	**2**	**each**		
		iii) Greater than 0.6m	**1**	**each**		
2.9	**B14 SSP**	**Hot-Mix Asphalt**				
		a) HL8HS - base repairs, curbs, subdrains & MH's - 100mm thickness	**1037**	**t**		
		b) HL8HS - Up to 100mm thickness	**205**	**t**		
		c) HL3HS - 50mm thickness	**3060**	**t**		
		d) HL3HS - Scratch - 25mm thickness	**730**	**t**		
		e) HM3HD - driveways - 50mm thickness	**40**	**t**		
2.10	**B15**	**Asphalt Walkways & Driveways**	**280**	**m²**		
2.11	**B16**	**Concrete Driveways**	**40**	**m²**		
2.12	**B17**	**Interlocking Brick & Patio Slab Driveways and Walkways**	**20**	**m²**		
2.13	**B18**	**Granular Driveways (Provisional)**	**5**	**m²**		
2.14	**B21 SSP**	**Topsoil and Sod**	**200**	**m²**		
2.15	**B27**	**Removal of Existing Items (including disposals)**				
		a) Concrete Curbs - all types	**570**	**m**		
		b) Concrete Sidewalks (Provisional)	**10**	**m²**		
		c) Concrete Driveways	**40**	**m²**		
		d) Asphalt - Base Repairs, Subdrains and Adjustments	**3420**	**m²**		
		e) Manhole and Catchbasin Frames and Grates	**74**	**each**		
		f) Interlocking Brick and Patio Slab Driveways and Walkways	**12**	**m²**		
2.16	**B30/B31 SSP**	**Base Repairs - General/Flexible**				
		a) Asphalt	**3640**	**m²**		
2.17	**B34**	**Tactile Warning Surfaces-Straight Plates (Provisional)**	**2**	**each**		

THE CITY OF ST. CATHARINES
2019 RESURFACING PROGRAM - PART 1
PROJECT NUMBER P19-080-1

Schedule of Tender Unit Prices

ITEM	SPEC NO.	DESCRIPTION	EST. QUAN	UNIT	UNIT PRICE	AMOUNT
2.18	**SSP**	**Asphalt Ramping**				
		a) at butt joints	**290**	**m**		
		b) at adjustments	**70**	**each**		
		c) at crosswalks	**80**	**m**		
2.19	**SSP**	**Supply & Place Pavement Reinforcement Mesh**				
		(Only selected alternative to be extended)				
		a) MacGrid AR 10G.7 (Provisional)	**200**	**m²**		
		b) Titan TE-FGP11 (Provisional)	**200**	**m²**		
2.20	**SSP**	**Shoulder Sealing**	**1070**	**m²**		
2.21	**SSP**	**Pavement Markings (Includes 2 applications)**				
		a) Centrelines (Provisional)	**50**	**m**		
		a) Stop Bars	**80**	**m**		
		a) Pedestrian	**50**	**m**		
		b) Symbols (Provisional)	**3**	**each**		
2.22	**SSP**	**Vehicle Detection Loops (Provisional)**				
		Loops to be cut into base asphalt including sawcutting, wire and sealant to loop junction box				
		a) Supply & install 2.4m x 15.0m - duplex	**1**	**each**		
		TOTAL SECTION 2 - ROADS:				
SECTION 3 - SEWERS						
3.1	**C6**	**Pre-Cast Concrete Catch Basins (Provisional)**				
		a) 600mm x 600mm Catchbasin (OPSD 705.010) c/w Frame and Grate (OPSD 400.100)	**1**	**each**		
3.2	**C1**	**Sewers - Storm CB Leads (Provisional)**				
		Includes coring into and connecting to existing manhole using appropriate connections, and includes mandrel testing upon completion.				
		a) 200mm Dia. PVC Class DR35	**5**	**m**		
		TOTAL SECTION 3 - SEWERS:				
		TOTAL TENDER AMOUNT:				

Statement 'A'

City of St. Catharines

Project Number P19-080-1

Bidder's Experience in Similar Work

Year Completed	Description of Work	For Whom Work Performed	Value

Statement 'B'

City of St. Catharines

Project Number P19-080-1

Harmonized Sales Tax

The Contractor shall **not** include any amount in his Tender price for the added value taxes (H.S.T). Any amount to be levied with respect to the H.S.T. will be included as a separate item on the payment certificate. The appropriate value added taxes (H.S.T.) levy will be paid to the Contractor in addition to the amount approved by the Engineer for work performed under the contract and will, therefore, not affect the amount of the contract. The contractor will be required to make the appropriate remittance to Canada Revenue Agency in accordance with the legislation.

i)	Total Tender Price	$ _____
ii)	Estimated cost of Harmonized Sales Tax	$ _____
iii)	Total Contract Amount ((i) + (ii))	$ _____

iv) HST Registration Number: _____

I/we have the authority to bind the corporation.

_____ _____

Company Name Contractor's Signature(s)

Address Contractor's Seal

_____

_____

_____

Witness:

_____

Statement 'C'

City of St. Catharines

Project Number P19-080-1

Accessibility Statement

The City is committed to the accessibility principles of preventing and removing barriers in accessing goods services for people with disabilities and is bound by the Standards under the Accessibility for Ontarians with Disabilities Act, 2005 as may be amended from time to time.

Regulations enacted under the Act apply to every designated public sector organization and other third parties that provide goods and services to the members of the public.

The consultant/contractor, and all sub-contractors hired by the consultant/contractor in the completion of its work, will meet or exceed compliance with all applicable regulations under the Accessibility for Ontarians with Disabilities Act, 2005 as may be amended from time to time.

It is the consultant/contractors responsibility to ensure they are fully aware of, and meet all requirements under the Act. A Declaration of Accessibility Compliance will be required by the successful bidder.

Accessibility Declaration:

Declaration of Accessibility Compliance

Company Name:	
Print Name:	
Title:	**Dated:**

I/we acknowledge that as a Contractor/Consultant of the City of St. Catharines we are bound to comply with all Accessibility Standards under the Accessibility for Ontarians with Disabilities Act, 2005 as amended from time to time.

I/we declare that I/we have read, understand and will meet or exceed all enacted Accessibility Standards as amended from time to time.

I/we further declare that I/we will undertake to ensure all sub-contractors hired by us in completion of our work will also comply with the above Standards.

Authorized Signature _____ Date _____

Statement 'D'

City of St. Catharines

Project Number P19-080-1

List of Sub-Contractors

The bidders shall list hereunder the names if all sub-contractors intended to be used in the execution of this work subject to the approval of the Contract Administrator.

All work not performed directly by the Contractor's forces shall be included in this list. All changes to this list must be approved by the Contract Administrator.

Sub-Trade	Name of Sub-Contractor	Address of Sub-Contractor

City of St. Catharines

Project Number P19-080-1

Bidder's Senior Staff

NAME	APPOINTMENTS	QUALIFICATIONS AND EXPERIENCE

Statement ‘F’

City of St. Catharines
Project Number P19-080-1
Bidder’s Plant

The Bidder shall list the plant, machinery and equipment he proposes to use on the work.

PLANT UNDER BIDDER'S CONTROL

PLANT TO BE RENTED

PLANT TO BE PURCHASED

City of St. Catharines

Project Number P19-080-1

2019 Resurfacing Program – Part 1

AGREEMENT TO BOND

We, the undersigned, hereby agree to become bound as Surety for:

in a bond totalling Fifty Per Cent (50%) of the total tender price, and conforming to the Instruments of Contract attached hereto, for the full and due performance and maintenance of the works shown as described herein if the Tender for:

is accepted by the Owner. We also agree to a bond as surety for the payment of the cost of all labour and materials for an amount equal to 50% of the total tender price used by the Contractor in due performance of his work.

It is a condition of this Agreement that if the above mentioned Tender is accepted, application for a Performance Bond and Labour and Materials Payment Bond, must be completed with the undersigned within fourteen (14) days of acceptance of the tender related thereto, otherwise this Agreement shall be null and void.

Dated this _____ day of _____ , 2019

_____
Name of Bonding Company

_____
Signature of Authorized Person Signing for Company

_____
Position

(Company Seal)

Form of Agreement

THIS AGREEMENT made this day of , 2019 and authorized by By-Law Number 2019 - of the City of St. Catharines.

BETWEEN:

(hereinafter called the Contractor)
OF THE FIRST PART

AND

THE CORPORATION OF THE CITY OF ST. CATHARINES

(hereinafter called the Corporation)
OF THE SECOND PART

WHEREAS the Council of the Corporation has duly authorized the execution and construction of the works in the City of St. Catharines more particularly hereinafter set forth and described.

AND WHEREAS the Corporation duly advertised for tenders for the execution and construction of the said work according to certain specifications and General Conditions of Contract, copies of which are hereunto annexed, incorporated with and forming part of this contract, and the tender of the contractor therefore, a copy of which is hereunto annexed, has been duly accepted by the Corporation.

NOW THIS AGREEMENT WITNESSETH that the Contractor and the Corporation hereby mutually covenant and agree to and with each other in manner following, that is to say:

1. The Contractor, under the direction and to the satisfaction of the City Engineer of the Corporation or of such Engineer as the Corporation may from time to time, by resolution, appoint for that purpose (either of whom is hereinafter referred to as the Engineer), shall and will provide all materials and do and perform and complete all work mentioned and set out in the said Specifications for the execution and construction of the said works and the necessary work in connection therewith, as set out in the said Specifications, the said works being as follows, that is to say:

   in full accordance and in strict conformity with the said Specifications and Standing General Conditions, Form of Tender (including Schedule of Tender Unit Prices) and Drawings, hereunto annexed or produced, which said Specifications and General Conditions of Contract, Form of Tender, Drawings marked "D" are identified by the signature of the Contractor and are to be considered as embodied in and forming part of this Agreement and shall thereafter maintain the said works as therein provided.

   The Corporation hereby agrees to engage the Contractor to perform the work identified herein for the consideration of **$_____**, including H.S.T.

2. The Engineer may furnish to the Contractor such further drawings or explanations as the Engineer may deem necessary to detail and illustrate the work to be done, and the Contractor shall conform to the same as part of this Agreement.

3. No alterations shall be made in the works shown or described by the Specifications except upon a written order of the Engineer, and when so made the value of the work added or omitted shall be agreed upon in writing, and no extra work shall be allowed or paid for by the Corporation unless the same is so ordered in writing by the Engineer and the price to be paid for the same previously agreed upon in writing between the Engineer and the Contractor.

4. The Contractor shall provide sufficient safe and proper facilities at all times for the inspection of the works by the Engineer or his authorized representative. The Contractor shall, within twenty-four hours after receiving written notice from the Engineer to that effect proceed to remove from the works all materials condemned by the Engineer or his authorized representative, whether worked or unworked, and to remove all portions of the works which the Engineer shall by like written notice condemn as unsound or improper or as in any way failing to conform to the said Specifications.

…3

5. Should the Contractor at any time refuse or neglect to supply a sufficiency of properly skilled workmen, or of materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the agreements herein contained, refusal, neglect or failure being certified by the Engineer, the Corporation shall be at liberty, after three (3) days' written notice to the Contractor, to provide any such labour or materials and to deduct the cost thereof from any money then due or thereafter to become due to the Contractor under this Contract, and if the Engineer shall certify that such refusal, neglect or failure is sufficient ground for such action, the Corporation shall also be at liberty to terminate the employment of the Contractor for the said works and to enter upon the premises and take possession for the purpose of completing the works comprehended under this Contract of all materials, tools and appliances thereon and to employ any other person or persons to finish the works and to provide the materials therefore; and in case of such discontinuance of the employment of the Contractor, he shall not be entitled to receive any further payment under this contract until the said work shall be wholly finished, at which time, if the unpaid balance of the amount to be paid under this contract shall exceed the expense incurred by the Corporation in finishing the works, such excess shall be paid by the Corporation to the Contractor; but if such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Corporation. The expense incurred by the Corporation as herein provided, either for furnishing materials or for finishing works, and any damage incurred through such default, shall be audited and certified by the Engineer whose certificate therefore shall be conclusive upon the parties.

6. The Contractor shall complete the whole of the works comprehended in this Agreement within **working days** from the day written instructions from the City Engineer to begin the said works are given to the Contractor; and if the Contractor shall not have completed the whole of the said works within the said time, then the Contractor will pay to the Corporation for every day after the said time during which the said works remain uncompleted, the sum of Five Hundred Dollars, ($500.00) / One Thousand Dollars, ($1,000.00) per day as and for Inspector's wages, and the said sum of Five Hundred Dollars, ($500.00) / One Thousand Dollars, ($1,000.00) per day is hereby agreed on between the parties hereto as the amount which shall be due and payable by the Contractor to the Corporation for Inspector's wages in case the Contractor shall not have completed the said works within the said period, and may be deducted from any monies due or to become due to the Contractor hereunder or may be recovered by action..

7. Should the Contractor be delayed in the prosecution or completion of the said works by any damage which may happen by fire, lightning, earthquake, or cyclone, or by any strike or lockout of employees through no fault of the Contractor, then the time herein fixed for the completion of the works shall be extended for such period as to the Council of the Corporation may appear reasonable, but no such allowance shall be made unless a claim therefore is presented in writing to the Engineer within twenty-four (24) hours of the occurrence of such delay.

…4

8. The contractor shall be entitled to receive monthly payments at the rate of 90% of the value of the work actually done and materials in place, according to the Engineer's estimate, less all stipulated forfeitures and deductions, including liens received by the Corporation, if any. These payments shall be made on progress certificates, which will be based upon approximate estimates only, and must not be taken or construed as an acceptance of the work so estimated, or as an admission that the Corporation is in any way liable to the contractor in respect thereof.

On the substantial performance of the work, as defined in The Construction Lien Act 1990, as amended (Construction Lien Act) or as soon thereafter as practicable, upon the application of the contractor, a certificate marked "Substantial Performance Certificate for Payment" at the rate of 90% of the whole amount due under the contract, including extras (less forfeitures and deductions as aforesaid, together with the value of any liens received by the Corporation and the value of any work remaining to be done), will be issued payable to the contractor who shall publish a copy of the Certificate of Substantial Performance of the contract in the Daily Commercial News within 7 days of the receipt of the said Certificate. The contractor shall provide to the Corporation proof of such publication within 7 days of publication.

The release of the statutory holdback following substantial performance of the work, together with payments for finishing work, shall be governed by the provisions of The Construction Lien Act, 1990, as amended (Construction Lien Act).

If payment is not made upon the substantial performance of the work, as described in the preceding paragraphs, the provisions contained in this paragraph shall apply. Upon the completion of the work, or as soon thereafter as practicable, a certificate marked "Completion Certificate for Payment", at the rate of ninety per cent (90%) of the whole amount due under the contract, including extras (less forfeitures and deductions as aforesaid) will be issued payable to the contractor.

At the end of the period of guaranteed maintenance (or after 60 days from the completion, if the contract provides for a guaranteed maintenance period, where the contractor has given the bond of a satisfactory guarantee company as security for the due performance of the contract), after the provisions of the contract have been fully complied with, the balance due (less forfeitures and deductions as aforesaid), shall be issued and paid to the contractor. When the period of guaranteed maintenance exceeds 1 year from the date of completion, interest at the rate of 4% per annum from the date of completion will be allowed the contractor on the balance due, as estimated by the engineer, and as shown on the "Completion Certificate for Payment". All payments to the contractor shall be made out of the funds under the control of the Corporation in the public capacity except where otherwise noted and no member of the Council of the Corporation is, or is to be held, personally liable or responsible to the contractor under any circumstances whatsoever.

…5

All holdbacks herein provided for shall be paid in accordance with the provisions of the Construction Lien Act, R.S.O. 1990, Chapter C.30, as amended (Construction Lien Act).

Where there is a conflict between any of the provisions of the contract documents and The Construction Lien Act, R.S.O. 1990, Chapter C.30, the provisions of the Construction Lien Act , as amended (Construction Lien Act) shall prevail.

9. It is agreed between the Contractor and the Corporation that no certificate given or payment made under this Contract shall be conclusive evidence as against the Corporation of the performance of this Contract either wholly or in part, and that no payment shall be construed to be an acceptance of defective work or improper materials.

10. It is agreed that if in any respect the said Specifications marked “A” or the said General Conditions of Contract marked “E” should be inconsistent with this Agreement, then this Agreement shall govern. It is further agreed that if in any respect such Specifications marked “A” should be inconsistent with the said General Conditions of Contract marked “E”, then the said Specifications marked “A” shall govern. And in case any dispute whatsoever shall arise in respect of materials or workmanship, or in respect of the meaning or construction of these presents and the said Specifications and General Conditions of Contract or any of them, or any part thereof respectively, or of anything arising out of or incident thereto, the decision of the Engineer shall in all cases be final, binding and conclusive on the Contractor.

11. And the said Contractor further agrees to indemnify and save harmless the Corporation and the officers, servants and agents thereof, from all and any manner of loss, damage or injury, suit, claims, liens and demands of every nature and description incurred or brought against the Corporation or their officers, servants and agents by any person or persons whomsoever, or for any monies paid by them in settlement of or for or on account of any injuries received or sustained by them, or by any party or parties whomsoever by or from the Contractor or his servants or agents, in the prosecution or performance of said work, or by or in consequence of any negligence whatever in the performance of said work or in guarding the same, or of any improper material used in its construction, or by or on account of any act or omission of the Contractor or his agents, or for monies paid by the Corporation in discharge of any lien upon the said work which may be registered under the provisions of any statute in that behalf, or for any monies paid by the Corporation in respect of any assessment made upon the Contractor under the Workers’ Compensation Act; and the Contractor further agrees that the whole or so much of the monies due to him under and by virtue of this Agreement as shall or may be considered necessary by the Corporation shall or may be retained by the said Corporation until all such loss, damage, injury, suits, claims, liens, and demands aforesaid shall have been settled and evidence to that effect furnished to the satisfaction of the Corporation.

…6

12. And the Contractor hereby authorizes and empowers the Corporation or its Solicitor for the time being on his behalf to settle or defend any such claim or claims, suits, liens, or demands as aforesaid, as the Corporation or its Solicitor may deem expedient, the Contractor hereby agreeing to ratify and confirm the acts of the Corporation or its Solicitor in that behalf, and to pay to the said Solicitor the cost and expense of defending or settling any such suit, lien, claim, or demand as aforesaid, provided, however, that the Corporation before settling or defending any such claim or claims, suits, liens, or demands shall have given to the Contractor notice in writing thereof by registered letter and afforded the Contractor for seven days from the mailing of such notice an opportunity of settling or defending any such claim, suit, lien, or demand; but such proviso shall not discharge the Contractor from any liability to the Corporation or its Solicitor for any payment, expense or costs which are actually incurred by reason of such claim, suit, lien, or demand made against the Corporation and to which the Corporation is made a party.

13. It is hereby declared and agreed by and between the parties hereto that this Contract is entered into on the part of the Corporation in full faith that no member of the Council and no officer or servant of the Corporation has or will have any interest whatever herein, and it is further declared and agreed that the Contractor shall forfeit all claim under this Contract and for all work done or materials, goods, wares, or merchandise furnished under it if it shall appear that any member, officer or servant of the Council of the Corporation is at the time interested herein, or if any interest herein is afterwards given or agreed to be given to any such member, officer, or servant; and it is further agreed that no payment shall be required by the Contractor under this Contract without a declaration to that effect being delivered at the time of requiring the same. It is understood, however, that the foregoing provision shall not apply to any Contractor which is an incorporated company, by reason of any member, officer, or servant of the Council being a shareholder therein.

14. The Contractor agrees with the Corporation in the performance of the said works so far as practicable to employ in the said works only local labour and to pay to the men employed in the said works wages at the local rate for work of a similar kind and to observe the standard hours of labour observed in the City.

15. The Contractor shall personally or by competent officials superintend the said works, and shall not assign or sublet this Contract or any part thereof without an express licence in writing under the seal of the Council.

16. The Contractor shall deliver to the Corporation upon the execution of this Contract a bond in the sum of **……. and 00/100 Dollars, ($_____),** with sufficient sureties approved by the Treasurer of the Corporation for the due observance and performance of this Contract. THIS CONTRACT shall ensure to the benefit of the Contractor, its, his, or their heirs, executors, administrators and authorized successors or assigns, and be binding upon and enforceable against the Contractor, its, his, or their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF the Contractor has caused its Corporate Seal to be affixed under the hands of its duly authorized officers and the Mayor and Clerk have hereunto set their hands and caused the seal of the Corporation to be affixed.

SIGNED, SEALED & DELIVERED)
In the Presence of)

COMPANY NAME

I/WE HAVE THE AUTHORITY TO BIND THE CORPORATION

_____ PRESIDENT OR _____
(Title)

_____ WITNESS

THE CORPORATION OF THE CITY OF ST. CATHARINES

_____ MAYOR

_____ CLERK

Schedule of Drawings

SCHEDULE OF DRAWINGS

1. Contract Drawings

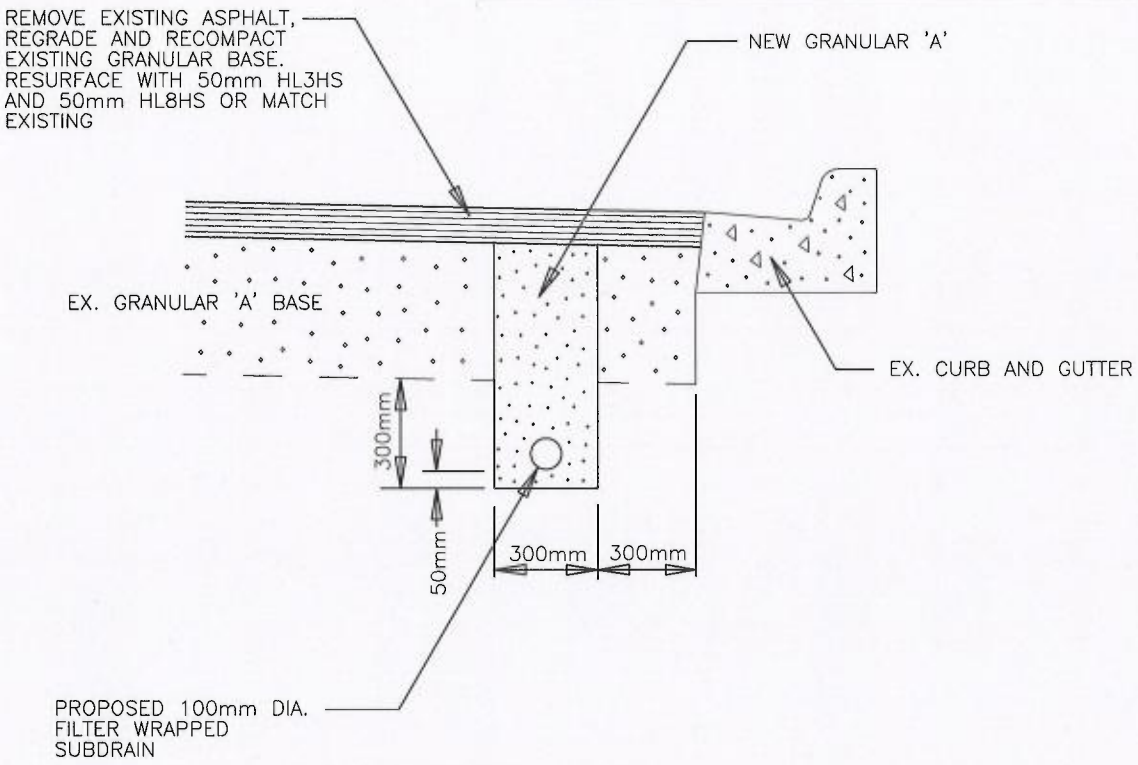
N/A

2. O.P.S.D.

N/A

3. Municipal Standard Drawings

110-2019	Typical Subdrain Installation for Existing Asphalt Road
110-2020	Typical Subdrain Installation for Concrete Base Repairs
NRS 2520	Loop Detector Installation Details



NO.	REVISION	DATE
1	Drawing Number Changed	April, 2013

St. Catharines

TRANSPORTATION & ENVIRONMENTAL SERVICES

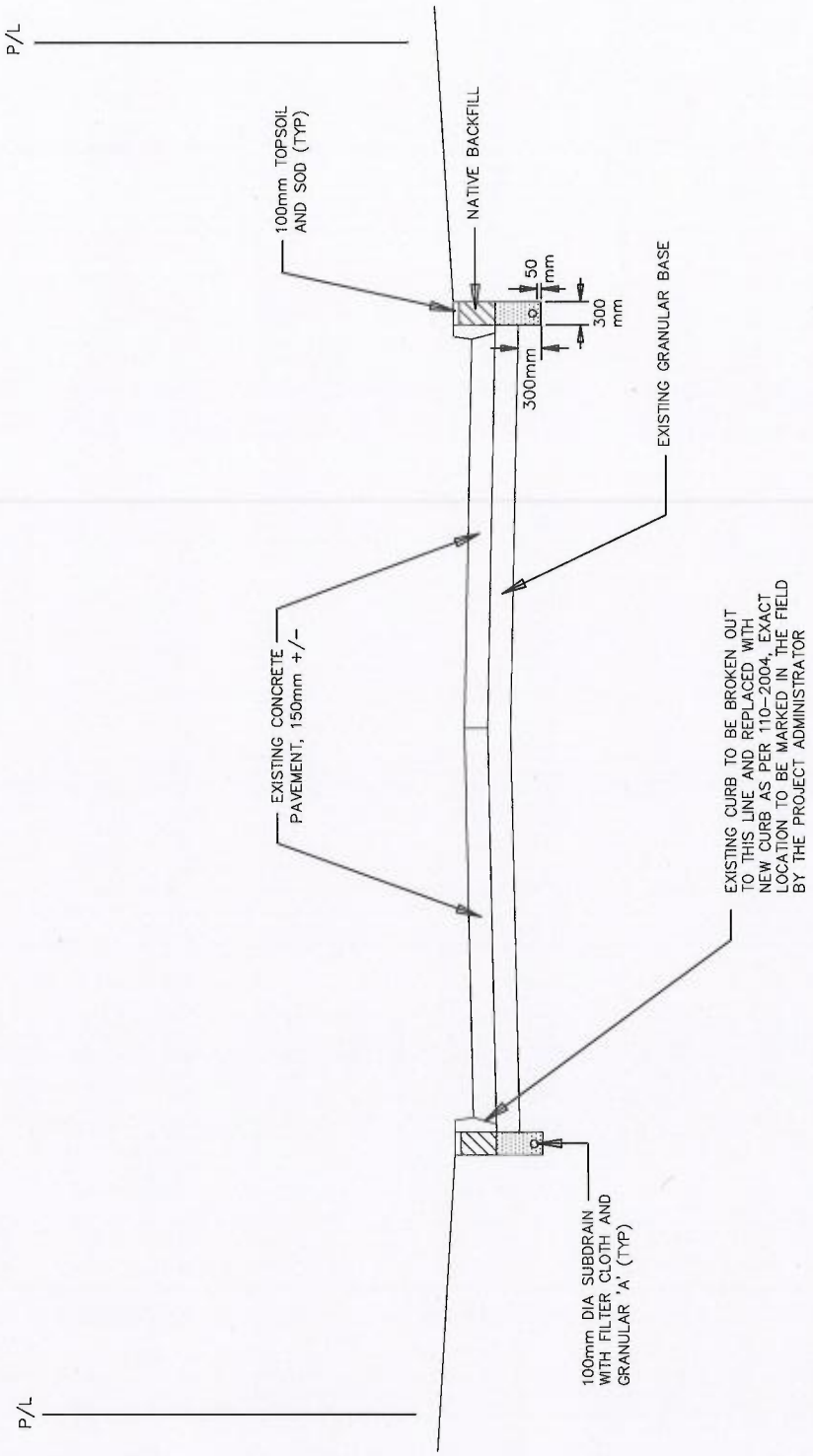
TYPICAL SUBDRAIN INSTALLATION FOR EXISTING ASPHALT ROAD

DATE April 24, 1985 SCALE N.T.S.

DESIGNED BY R.S. DRAWN BY R.W.

FORMERLY 110-1210

DRAWING No. 110-2019 | 1



NO.	REVISION	DATE
1	Drawing Number Changed	April, 2013

St. Catharines

TRANSPORTATION & ENVIRONMENTAL SERVICES

TYPICAL SUBDRAIN INSTALLATION FOR CONCRETE BASE REPAIRS

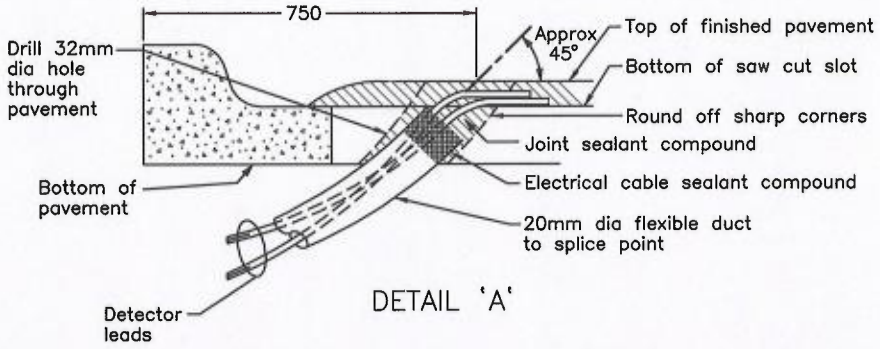
DATE April, 1995 SCALE N.T.S.

DESIGNED BY R.S. DRAWN BY R.W.

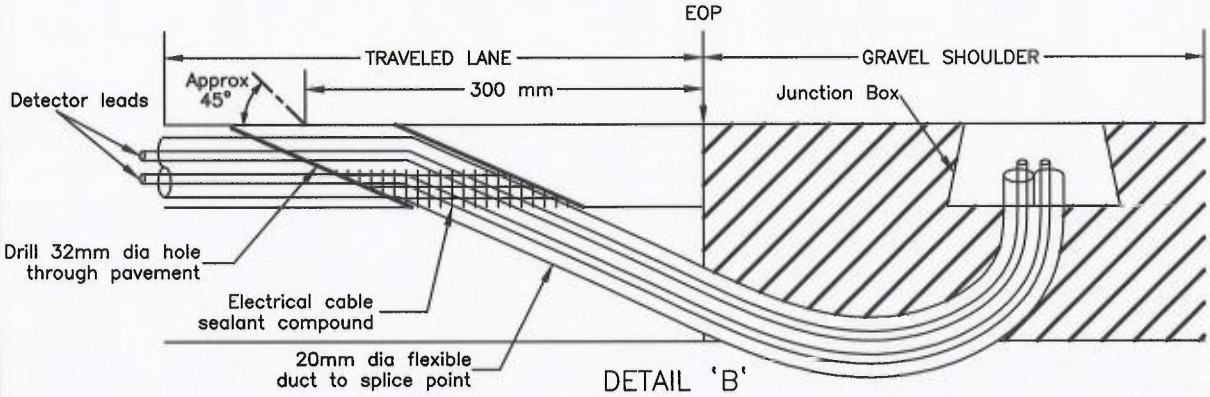
FORMERLY 110--1235

DRAWING No. 110–2020

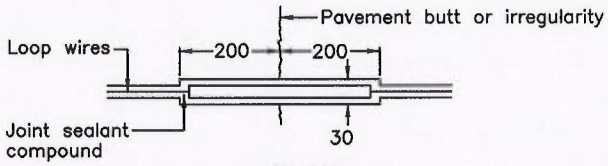
1



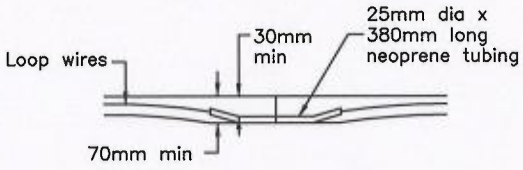
DETAIL 'A'



DETAIL 'B'

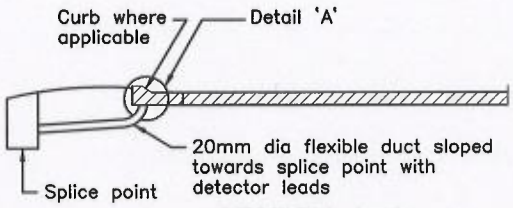


PLAN

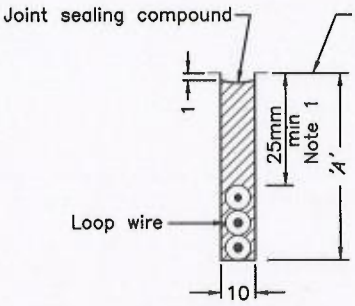


ELEVATION

DETAIL—PAVEMENT BUTT OR IRREGULARITY



SECTION A—A



Number of Loop Wire	'A' mm min.
1	55
2	55
3	55
4	60
5	65
6	70

SECTION B—B

NOTES:

1 Where cable is installed prior to the finished top course paving, the maximum depth of cover shall be 100mm.
2 This drawing shall be read in conjunction with OPSD–2520.01.
3 All dimensions are in millimetres or metres unless otherwise shown.
4 All loops shall be tested and tagged with impedence reading.
5 Loop leads shall be twisted together a minimum of 5 turns per foot exiting the loop.

LOOP DETECTOR INSTALLATION DETAILS		Niagara Region PUBLIC WORKS	
DATE: February 11, 2011	SCALE: NTS		
UPDATED BY: H.D.M.	DRAWN BY: T.C	MODIFIED OPSD – 2520.02	NRS 2520

Special Provisions - General

(Refer to Niagara Peninsula Standard Contract Documents)
Not Enclosed

Special Provisions – Contract Items

(Refer to Niagara Peninsula Standard Contract Documents)
Not Enclosed

Supplementary Special Provisions

SUPPLEMENTARY SPECIAL PROVISIONS

I N D E X

G1	Execution of Contract - G1	1
A8	Signage	2
	a) Construction Signs, Traffic Control and Traffic Management Plan	2
E119	Road Sweeping and Cleaning	4
B3	Granular Materials – Granular 'M'	5
B6	Subdrains	6
B9	Concrete Sidewalks	7
B10	Sawcutting Pavement	8
B11	Asphalt Milling	9
B13	Adjustment of Appurtenances	10
B14	Supply and Place Hot Mix Asphalt	11
B21	Topsoil & Sod	12
B30 / B31	Base Repairs – General/Flexible	14
E34	Asphalt Ramping	15
	Pavement Reinforcement Mesh	16
E36	Shoulder Sealing	17
E102	Pavement Markings	18
E35	Vehicle Detection Loops	19

SUPPLEMENTARY SPECIAL PROVISIONS

G1 EXECUTION OF CONTRACT - G1

The provisions of Niagara Peninsula Standard Contract Documents Item G1 Execution of Contract, Subsection a) be amended to read:

A Labour & Material and Performance Bond in an amount equal to 50% of the total tender price or the contract amount excluding H.S.T. All other provisions of this section remain as is.

A8 SIGNAGE

The provisions of Niagara Peninsula Standard Contract Documents ITEM A8 and shall apply except as amended or extended herein.

a) Construction Signs, Traffic Control and Traffic Management Plan

The Contractor shall be responsible for the preparation of a traffic management and control plan, to be provided to the Contractor Administrator for review and comment within seven (7) days of contract award. This plan shall have details for the following requirements but shall not be limited to:

- traffic flows with regards to work schedule
- traffic storage during boring disruptions
- traffic management during peak traffic flows
- maximum delay time
- number of flagpersons and communication devices (minimum of two at any one location)
- use of Approved temporary traffic control devices (traffic signals).

The plan shall be updated and submitted to the Contract Administrator at each site meeting (every two (2) weeks) and shall incorporate any comments made at these meetings.

The Contractor shall be paid 50% of the lump sum tender price at the first progress payment and the remainder pro-rated for the remainder of the working period.

A minimum of one lane of traffic shall be maintained at all times using appropriate traffic control methods and devices. Two lanes of traffic shall be maintained when possible, specifically after work hours and on weekends or holidays.

A rolling block to block road closure will be accepted for the echelon paving method when applicable. Closure will be limited to the amount of time required to fully compact new asphalt, and when all testing is complete.

During construction under the existing sidewalks, special consideration shall be given to the safety of pedestrian traffic. This shall include but not be limited to signs/directions to alternate routes around construction zones. Such alternate routes shall be maintained at all times to ensure unobstructed and safe movement of pedestrian traffic.

After working hours and on weekends or holidays all disturbed sidewalk sections shall either be covered with cold patch asphalt or steel plates to provide a stable hard surface for pedestrians and wheelchairs.

The Contractor is to be aware of any school crossings in, or near, the work areas. The Contractor shall make every effort to accommodate the crossing guard and the children crossing at that location.

Pedestrian access to all businesses and residences to be maintained at all times. At least one access shall be maintained where possible for vehicles. Access Closures are to be scheduled at least 2 business days in advance between the Contractor and the business owner or residents and approved by the Contract Administrator and/or construction inspector.

The cost for all the requirements noted above shall be deemed to have been included in the appropriate unit prices and no additional payments will be made.

E119 ROAD SWEEPING AND CLEANING

The Lump Sum price bid for this item is to be full compensation for all and any work required to complete the cleaning of the road in preparation for each lift of asphalt paving.

The required tack coat will be paid under the appropriate item.

B3 GRANULAR MATERIALS – GRANULAR 'M'

The provisions of the Niagara Peninsula Standard Contract Documents, Item B3, shall apply except as amended or extended herein.

Shoulders – The proposed work for all the shoulders and granular driveway shall consist of the supply, placing, grading, and compacting of Granular 'M' stone, with approved shouldering equipment, to the required elevations and grades, ready for sealing.

The unit price for the stone shall include all labour and equipment necessary to place, grade, and compact the shoulders and driveways, and for handwork around radii, signs, mailboxes, etc... The unit price shall include the application of sufficient water to provide compacting.

Granular sealing will be paid for under the appropriate item.

B6 SUBDRAINS

The provisions of the Niagara Peninsula Standard Contract Documents, Item B6, shall apply except as amended or extended herein.

The unit price bid shall include all necessary excavation, connections, and reinstatements unless noted otherwise. Sawcutting of asphalt and/or concrete, and granular materials shall be paid for under the appropriate item.

Location of the subdrains will be as per drawings, documents, or at the direction of the Contract Administrator.

Subdrains are to be installed in accordance with the City of St. Catharines standard drawing no. 110-2019 or 110-2020.

Payment shall be full compensation for all equipment, labor and materials required to do the work. Payment shall be by the linear metre of subdrain installed.

B9 CONCRETE SIDEWALKS

The provisions of the Niagara Peninsula Standard Contract Documents, Item B9, shall apply except as amended or extended herein.

Curb Faced Sidewalk – Some of the curb adjustments and necessary curb repairs could be in areas where the curb and sidewalks are integral. If the existing sidewalk is in good condition, then the “curb” is to be sawcut, removed, and replaced without damaging the original sidewalk. If the existing sidewalk is in poor condition, then all the curb faced sidewalk is to be replaced.

When only the “curb” section is replaced, payment for the replacement will be at the unit price bid for Concrete Curb Repairs (Item 2.3a), but when both curb and sidewalk are replaced, payment will be as per unit price bid for Item 2.4b.

Sawcutting will be paid under the appropriate item unit rate.

B10 SAWCUTTING PAVEMENT

The provisions of the Niagara Peninsula Standard Contract Documents, Item B10, shall apply except as amended or extended herein.

Any concrete pavement may contain wire mesh. No additional payment will be made for sawcutting any concrete pavement with wire mesh. The Contractor shall incorporate this into the unit price bid for this item.

The unit price bid is to include for the cost of sawcutting to a minimum depth of 200mm in either concrete or asphalt.

B11 ASPHALT MILLING

The provisions of the Niagara Peninsula Standard Contract Documents, Item B11, shall apply except as amended or extended herein.

Milling asphalt surfaces is required in this contract, with the following applicable requirements:

- 50mm depth, in asphalt for the full road width
- 50mm depth, in asphalt at butt joints
- Up to 100mm depth, in asphalt for the full road width

Also to be included in this item is the cost of a 2nd sweeping with a mechanical vacuum sweeper immediately prior to any tacking and paving operations on each street.

B13 ADJUSTMENT OF APPURTENANCES

The provisions of the Niagara Peninsula Standard Contract Documents, Item B13, shall apply except as amended or extended herein.

Where existing manholes are constructed of brick, they are to be reconstructed with moduloc units. The existing brickwork to be carefully removed down to the main concrete surface of the chamber and then rebuilt to the correct adjusted grade using moduloc units of various thickness. Any brick or rubble dropped into the manhole is to be cleaned out immediately.

When the brick manholes are rebuilt to the correct adjusted grade, the payment for the rebuilding is also to include the cost of adjusting. There will be no additional payment for adjustments when the manholes are rebuilt.

Payment will be for each manhole rebuilt as measured in the field. Each rebuilding includes the removal of the brickwork and the replacement with moduloc units. The grates and frames will not be included in the adjustment calculation.

B14 SUPPLY AND PLACE HOT MIX ASPHALT

The provisions of the Niagara Peninsula Standard Contract Documents, Item B14, shall apply except as amended or extended herein.

For echelon paving method, the pavers shall be equipped with automated grade controls and shall be operated at the same time within 50m of the next paver so that a hot joint is obtained between the lanes of hot mix asphalt being placed. Should one paver break down while placing the surface course, the contract administrator may permit the day's work to be completed with the remaining paver. However, the contractor shall supply and have ready for use a back-up paver in the event of any extended break down.

The supply of asphalt to the site shall be such that the pavers shall operate continuously at a uniform speed necessary to match the output of the HMA plant. In no case shall the paver exceed 18m/min.

All traffic control required for this operation, including but not limited to control through the work zone and traffic control personnel at intersections shall be deemed to be included in the appropriate tender item.

The compaction train (rollers) shall meet the requirements of OPSS 310. Each paver shall be accompanied by a rolling train for the purposes of production/compaction consistency. Back up equipment shall be on site prior to the start of paving in the event of breakdown.

B21 TOPSOIL & SOD

The provisions of Niagara Peninsula Standard Contract Documents OPSS 802 and 803 shall apply except as amended or extended herein.

Topsoil shall be a PREMIUM BLEND with a pH of 6.5 to 7.5, weed free, and naturally sterilized through composting. The blend shall consist of 50% Triple Mix (a 30% mixture of topsoil, sands, and shredded wood mulch; a 30% mixture of black organic compost and manure; and a 30% mixture of peat loam) and 50% Premium Topsoil (a 50% mixture of topsoil, sands, and shredded wood mulch; a 25% mixture of black organic compost; and a 25% mixture of composted cow manure). In general, the resulting topsoil mix should meet the following parameters:

PH:	6.5 - 7.5
Potassium	100 – 120 ppm
Phosphorous	15 – 30 ppm
Magnesium	100 – 120 ppm
Organic Matter	$\geq$ 3%

Unless otherwise specified, the minimum depth of applied Premium Blend Topsoil shall be 100 mm.

Topsoil Testing
Prior to commencement of the project, the contractor shall supply two samples of topsoil from each stockpile to be used, to the contract administrator. Additionally, the contract administrator may randomly sample topsoil arriving on-site. The samples will be tested by Agri-Food.

Laboratories (AFL) using the AFL Base III test package plus % sand, % silt, and % clay. These tests will rate soil in accordance with AFL and Ontario Ministry of Agriculture and Food (OMAF) recommendations. Topsoil with tests resulting in “low, very high, or excessive” ratings for the carious parameters will be rejected.

Preparation and Timing
As soon as practically possible after the main construction is completed, the contractor shall rough grade and level; all of the affected areas to the sub-grade elevation. The contractor must ensure that all granular and foreign material is removed from areas adjacent to any driveway or sidewalk and form behind new curbs prior to the placement of topsoil.

If the areas are lower than the required depth, the contractor may use suitable native fill material properly compacted to prevent undo settlement.

All “cut-in” areas adjacent to the existing sod shall be squared off and removed by means of a mechanical sod cutter. An additional 25mm of existing topsoil shall be removed to accommodate a 25mm dressing thickness of Premium Blend Topsoil to ensure new sod growth at abutting sod areas

In the event of inclement of hot weather conditions, the contract administrator may delay the placement of sod until more appropriate weather conditions prevail. Nevertheless, the contractor shall still prepare and apply the topsoil to all of the affected areas as soon as construction is completed to tidy up the construction zone and reduce the possibility of weed infestation.

Fertilizer
A granular starter fertilizer of 0-20-0 shall be applied at a rate of 2.0 kg per 100m^2 spread on the topsoil immediately prior to sodding. In addition, an application of 20-20-20 water-soluble fertilizer shall be applied 21 days after the sod is laid.

Sod
Sod shall be placed in accordance with OPSS 571.07. Sodded areas shall be rolled with a light roller to ensure a good bond between the sod and topsoil and to remove minor depressions and irregularities. Heavy rolling to correct irregularities in grade will not be permitted.

Initial watering of all sod shall be completed within 12 hours after placement and shall be sufficient to penetrate the root zone of the sod and wet the surface of the topsoil. The contractor shall apply all water required during the 120 day maintenance period to ensure growth. The contractor shall distribute an information door hanger to each affected residence outlining turf care information. The door hanger shall be supplied to the owner.

The maintenance period shall be 120 consecutive days and shall commence once all the sod has been placed. The 120 consecutive days will not include the winter dormant period for Southern Ontario (November 1st to April 30th, inclusive). At the end of the 120 day maintenance period, the contractor shall arrange a suitable time with the contract administrator to inspect all of the sod that has been placed. Deficient areas shall be re-sodded as outlined in OPSS 571.08.

Measurement and Basis for Payment.
This item is to be used only for the restoration of the boulevard areas damaged during the curb installation. The Contractor will be responsible for the restoration of any additional areas damaged beyond the 1.0m width required for the curb installation.

If the placement of sod has been delayed due to weather, yet the area to be sodded has been prepared and top soiled as specified, payment at 50% of the unit price bid for topsoil and sod will be made. The balance will be paid upon satisfactory completion of the sodding.

B30 / B31 BASE REPAIRS – GENERAL/FLEXIBLE

The provisions of the Niagara Peninsula Standard Contract Documents, Items B30 & B31, shall apply except as amended or extended herein.

In areas where base repairs may be required, the road surface is to be milled prior to excavation. The area milling is included in the total of the milling items.

Any section of road requirement base repairs will be extended to the existing gutter line (where applicable) to ensure positive drainage to the edge of the road. The asphalt is to be removed, and the road base excavated to a maximum of 600mm below the milled surface. (See Table below for **Minimum Pavement Structure**) Subdrain (if required) is to be installed along the gutter line at the bottom of the excavation and is to be extended to connect to the nearest catchbasin.

Sawcutting, concrete removal, subdrains, granular 'A' and asphalt are to be paid under the appropriate contract items.

Cleaning and tack coating of the edges of the areas are also included in this item.

All work required to complete base repairs will be paid under this item.

Minimum Pavement Structure			
Road Classification	**Granular 'A' Base (mm Depth)**	**HL8 HS Asphalt Base Course**	**HL3 HS Asphalt Surface Course**
Local	325	50	50
Local – Bus Route	380	75	50
Collector	380	75	50
Arterial	450	100 (2 lifts)	50

E34 ASPHALT RAMPING

The unit price bid for this item shall include the supply, placement, maintenance, and removal prior to paving of the HL8HS asphalt, placed as ramps around adjusted manholes and catchbasins, and ramps placed at all butt joints and crosswalks to provide safe driving and pedestrian conditions. Asphalt millings used to provide ramping will NOT be paid as asphalt ramping.

Asphalt ramps shall be placed at all pedestrian crossings immediately following the milling operations.

Payment for ramping at butt joint and crosswalks will be per linear metre as measured in the field. Payment for ramping at appurtenances will be paid by each as measured in the field.

PAVEMENT REINFORCEMENT MESH

The provisions of OPSS 310 shall apply except as amended or extended herein. This item is for the supply and placement of pavement reinforcement to various streets and offers Tenderers the choice of three different alternative materials.

The three approved materials which are to be placed in accordance with the Manufacturer's specifications and as approved and directed by the Engineer are:

- Glasgrid 8550
- Titan TE-FGP11

Tenderers are advised to price and extend only the option they intend to use. The other alternatives should be left blank.

Payment for the milling and asphalt shall be made under the appropriate items.

The unit price bid per square meter shall constitute full payment for all work required to clear the milled surface and place the reinforcement.

Measurement for Payment for this item shall be the area in square meters as measured in the field.

E36 SHOULDER SEALING

The provisions of OPSS 2510 and OPSD 210.070 shall apply except as amended or extended herein.

All the granular shoulders and driveways are to have a sealant applied to help provide stability and strength. Once the shoulders are graded and compacted, there is no additional work required prior to the application of the sealant.

The sealant, as supplied by Enssolutions or equivalent, is to be applied at the coverage rates specified by the manufacturer and is to be applied by an approved tanker truck with spray bars or a hand wand. The granular material is to be dry at the time of spraying.

Measurement for Payment for this item shall be the area in square meters as measured in the field.

E102 PAVEMENT MARKINGS

The provisions of OPSS 532 shall apply except as amended or extended herein.

Streets requiring lining are to have permanent markings placed within one week of the placement of the surface course asphalt.

A second paint application is required for all areas. This second application is to be placed between 30 and 40 days from the first application.

Included in this work will be the placing of all types of lines and symbols.

The estimated quantities include for all types of lining. Every effort has been made to determine accurate lengths, but actual quantities could vary considerably from the estimates. **No claims** for the variations in the quantities will be considered by the City.

E35 VEHICLE DETECTION LOOPS

This item will include all labour, material (wire, sealing compound and flexible duct for under curb) and equipment to construct the vehicle detection loops as per OPSS 620, Niagara Region Standard (NRS) 2520 and Niagara Region Traffic Signal Standards (NRTSS). Loops shall be located 0.6 meters from the edge of lane being serviced and will be a maximum of 2.4 meters wide. The location of the loop must be confirmed by the Region of Niagara and the inspector. Inductive loop feeds crossing barrier curb must be installed in flexible 19mm conduit below the curb as shown in NRS 2520. Where inductive loops are used, loop feeders must be tagged and terminated at the controller cabinet. Loop leads must include 2.0 meters of slack coil at the base of the controller cabinet and at the junction box feeding the pavement loop cable.

Loops will be duplex and shall be constructed in upper most lift of base asphalt prior to the placement of the top surface.

The Niagara Region Traffic Signal Standard documentation can be located at the following link;

https://www.niagararegion.ca/government/works/traffic-signals-manual.aspx

Measurement for payment will be per loop installed as specified in the schedule of Quantities.

Supplementary General Conditions of Contract

(Refer to Niagara Peninsula Standard Contract Documents)
Not Enclosed

OPS General Conditions of Contract

(Refer to Niagara Peninsula Standard Contract Documents)
Not Enclosed

APPENDIX

1. Bid Envelope Submission Labels
2. Location Schedule
3. Location Quantities

APPENDIX 1 – BID ENVELOPE SUBMISSION LABELS

Submission Labels

Please complete the additional information (bidder's name, address, contact name and phone number) and then attach these labels on the outside of YOUR bid submission envelopes to clearly identify the submission and the tenderer's information.

Please affix the label below to the first bid envelope:

BIDDER'S NAME: _____

ADDRESS: _____

CONTACT PERSON: _____

TELEPHONE NO.: _____

CONFIDENTIAL TO: THE CORPORATION OF THE CITY OF ST. CATHARINES
ATTN: THE CITY CLERK C/O CITIZENS FIRST COUNTER, 2ND FLOOR
CITY HALL, 50 CHURCH STREET
P.O. BOX 3012
ST CATHARINES, ONTARIO L2R 7C2

REQUEST FOR TENDER

P19-080-1 – 2019 RESURFACING PROGRAM – PART 1

Envelope 1 of 2:

a) Completed form of agreement to bond
b) Tender deposit

APPENDIX 1 – BID ENVELOPE SUBMISSION LABELS

Please affix the label below to the second bid envelope:

BIDDER'S NAME: _____

ADDRESS: _____

CONTACT PERSON: _____

TELEPHONE NO.: _____

CONFIDENTIAL TO: THE CORPORATION OF THE CITY OF ST. CATHARINES
ATTN: THE CITY CLERK C/O CITIZENS FIRST COUNTER, 2ND FLOOR
CITY HALL, 50 CHURCH STREET
P.O. BOX 3012
ST CATHARINES, ONTARIO L2R 7C2

REQUEST FOR TENDER

P19-080-1 – 2019 RESURFACING PROGRAM – PART 1

Envelope 2 of 2:

Itemized Form of Tender (including addenda if applicable)

Project No.: P19-080-1
Title: 2019 Resurfacing Program - Part 1
Location: St. Catharines
Location Schedule

Street	To & From	W	L	Proposed Work Summary
ALBANY DRIVE	**GLENHOLME TO JEFFERSON**	**6.2**	**596.00**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Curb Repairs Base Repairs Subdrains Tack Coat Scratch Course 50mm HL3 HS Shoulder Sealing
BOWSTEAD DRIVE	**MARSTEN DR TO GLENHOLME DR**	**6**	**362.80**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Base Repairs Tack Coat 50mm HL3 HS Shoulder Sealing
CHAFFEY	**JEFFERSON DR TO ALBANY DR**	**8**	**92.50**	Full width milling (50mm) - Asphalt Curb Repairs Base Repairs Subdrains Tack Coat 50mm HL3 HS
DORCHESTER BLVD.	**CARLTON ST. TO MEREDITH DR.**	**8.00**	**68.00**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Base Repairs Tack Coat 50mm HL3 HS
GLEN MORRIS DRIVE	**JACOBSON TO BRIARSDALE**	**5.9**	**172.00**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Tack Coat 50mm HL3 HS
GLENHOLME DRIVE	**GENEVA ST TO ALBANY DR**	**6.2**	**174.00**	Full Depth Milling (100mm) - Asphalt Adjustments Appurtenances Base Repairs Tack Coat 50mm HL8 HS 50mm HL3 HS Shoulder Sealing

Project No.: P19-080-1
Title: 2019 Resurfacing Program - Part 1
Location: St. Catharines
Location Schedule

Street	To & From	W	L	Proposed Work Summary
LEEPER STREET	**RYKERT ST TO**	**6.6**	**271.00**	Butt Joint Milling - Asphalt Adjustments Appurtenances Curb Repairs Tack Coat 50mm HL3 HS
MARSTEN DRIVE	**GENEVA ST TO ALBANY DR**	**6.2**	**154.00**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Tack Coat 50mm HL3 HS Shoulder Sealing
MEREDITH DRIVE	**DORCHESTER TO RENDALE AVE**	**8**	**682.00**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Curb Repairs Base Repairs Tack Coat Scratch Course 50mm HL3 HS
MEREDITH DRIVE	**RENDALE TO DORCHESTER**	**8**	**611.00**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Curb Repairs Base Repairs Tack Coat Scratch Course 50mm HL3 HS
ST COLUMBA DRIVE	**GENEVA ST TO ALBANY DR**	**6.5**	**153.20**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Base Repairs Tack Coat 50mm HL3 HS Shoulder Sealing
TUNIS STREET	**PELHAM RD TO HILLVIEW RD**	**6.1**	**177.00**	Full width milling (50mm) - Asphalt Adjustments Appurtenances Base Repairs Tack Coat 50mm HL3 HS

CITY OF ST. CATHARINES
2019 RESURFACING PROGRAM - PART 1
PROJECT NUMBER P19-080-1

LOCATION QUANTITIES

ITEM	SPEC NO.	DESCRIPTION	EST. QTY	ALBANY DRIVE GLENHOLME TO JEFFERSON 6.2 596.00 3695.20 ESTIMATED QUAN	BOWSTEAD DRIVE MARSTEN DR TO GLENHOLME DR 6 362.80 2176.80 ESTIMATED QUAN	CHAFFEY JEFFERSON DR TO ALBANY DR 8 92.50 740.00	DORCHESTER BLVD. CARLTON ST. TO MEREDITH DR. 8 68.00 544.00 ESTIMATED QUAN
Section 1 - General							
1.1	A1	**Bonding**	1				
1.2	A4	**Construction Layout**	1				
1.3	A8	**Signs**					
	SSP	a) Allowance for Construction Signs, Traffic Plan	1				
1.4	SSP	**Road Sweeping & Cleaning**	1				
1.5	A9	**Contingency Allowance**	1				
Section 2 - Roads							
2.1	B3	**Granular Materials**					
	SSP	a) Granular 'A' - Base repairs, manhole adjustments, curbs and subdrains	3200	884.12	517.98	269.21	23.94
		b) Granular 'M' - Driveways & Shoulders - varying depths	140	56.16	34.44	0.00	0.00
2.2	B6	**Subdrains**					
	SSP	a) Subdrains	190			190.00	
		b) Connections of subdrains to existing structures	4			4.00	
2.3	B8	**Concrete - Curb and Gutter**					
		a) Curb spot repairs - all types	570	22.20		3.00	
2.4	B9	**Concrete sidewalks repairs - 125mm thickness**					
	SSP	a) Regular Sidewalk (Provisional)	10				
		b) Curb Faced Sidewalk (Provisional)	10				
2.5	B10	**Saw-cutting (up to 200mm) in all materials**					
	SSP	a) base repairs	3450	1108.60	653.00	30.00	27.00
		b) curbs, subdrains, MH's & CB's	1620	86.20	24.00	193.00	32.00
		c) sidewalks & driveways	580	243.40	140.00		
2.6	B11	**Milling**					
	SSP	a) 50mm depth, full width - Asphalt	19730	3695.20	2176.80	740.00	544.00
		b) Full depth (<100mm), full width - Asphalt	1080				
		c) Butt Joints (1.5m wide min.)	420	12.00		30.00	42.00
2.7	B12	**Supply & Place Tack Coat**	24500	3695.20	2176.80	740.00	544.00
2.8	B13	**Adjustment of Appurtenances**					
	SSP	a) Existing Catch Basin Frame & Grate					
		i) up to 300mm	34				3.00
		ii) 300mm to 450mm	18				
		b) Replace Catch Basin Frame & Grate	43				3.00
		c) Valve Chamber, Manhole Frame & Cover					
		i) up to 300mm	37	3.00	3.00		1.00
		ii) 300mm to 450mm	21	3.00			
		d) Replace Manhole Frame & Cover	31	8.00	3.00		1.00
		e) Valve & Curb Boxes	1				
		f) Supply & Replace Valve & Curb Boxes (Provisional)	1				
		g) Rebuilding brick MHs or CBs (Provisional)					
		i) 0.1m to 0.3m	4	2.00			
		ii) 0.3m to 0.6m	2				
		iii) Greater than 0.6m	1				
2.9	B14	**Hot-Mix Asphalt**					
	SSP	a) HL8HS - base repairs, curbs, subdrains & MH's - 100mm thickness	1037	290.85	169.58	100.22	7.91
		b) HL8HS - Up to 100mm thickness	205				
		c) HL3HS - 50mm thickness	3060	461.90	272.10	92.50	68.00
		d) HL3HS - Scratch - 25mm thickness	730				34.68
		e) HM3HD - driveways - 50mm thickness	40	13.43	8.93	0.00	0.00
2.10	B15	**Asphalt Walkways & Driveways**	280	105.30	70.00		
2.11	B16	**Concrete Driveways**	40	33.50			
2.12	B17	**Interlocking Brick & patio slab driveways and walkways**	20		12.00		
2.13	B18	**Granular Driveways (Provisional)**	5	30.00	20.00		
2.14	B21 SSP	**Topsoil and Sod**	200	75.00	20.00	10.00	
2.15	B27	**Removal of existing items (including disposals)**					
		a) concrete curbs - all types	570	22.20		3.00	
		b) concrete sidewalks	0				
		c) concrete driveways	40	33.50			
		d) asphalt - base repairs, subdrains & adjustments	3420	1172.60	665.00	336.00	
		e) manhole and catchbasin frames and grates	74	8.00	3.00	0.00	4.00
		f) interlocking brick & patio slab driveways and walkways	12	0.00	12.00	0.00	0.00
2.16	B30/B31	**Base Repairs - General/Flexible**					
	SSP	a) Asphalt	3640	1108.60	653.00	222.00	27.00
2.17	B34	**Tactile Warning Surfaces-Straight Plates (Provisional)**	2				
2.18	SSP	**Asphalt Ramping**					
		a) at butt joints	290	8.00	10.00	20.00	28.00
		b) at adjustments	70	8.00	3.00		1.00
		c) at crosswalks	80		5.00		5.00
2.19	SSP	**Supply & Place Pavement Reinforcement Mesh**					
		(Only selected alternative to be extended)					
		a) MacGrid AR 10G.7 (Provisional)	200				
		b) Titan TE-FGP11 (Provisional)	200				
2.20	SSP	**Shoulder Sealing**	1070	438.00	267.00		
2.21	SSP	**Pavement Markings (Includes 2 applications)**					
		a) Centrelines (Provisional)	50				
		a) Stop Bars	80	3.00	6.00	8.00	5.00
		a) Pedestrian	50				40.00
		b) Symbols (Provisional)	3				
2.22	SSP	**Vehicle Detection Loops (Provisional)**					
		Loops to be cut into base asphalt including sawcutting, wire and sealant to loop junction box					
		a) Supply & install 2.4m x 15.0m - duplex	1				
Section 3 - Sewers							
3.1	C6	**Pre-Cast Concrete Catch Basins (Provisional)**					
		a) 600mm x 600mm Catchbasin (OPSD 705.010) c/w Frame and Grate (OPSD 400.100)	1				
3.2	C1	**Sewers - Storm CB Leads (Provisional)**					
		Includes coring into and connecting to existing manhole using appropriate connections, and includes mandrel testing upon completion.					
		a) 200mm Dia. PVC Class DR35	5				

CITY OF ST. CATHARINES 2019 RESURFACING PROGRAM - PART 1 PROJECT NUMBER P19-080-1 LOCATION QUANTITIES			GLEN MORRIS DRIVE JACOBSON TO BRIARSDALE 5.9 172.00 1014.80	GLENHOLME DRIVE GENEVA ST TO ALBANY DR 6.2 174.00 1078.80	LEEPER STREET RYKERT ST TO 6.6 271.00 1788.60	MARSTEN DRIVE GENEVA ST TO ALBANY DR 6.2 154.00 954.80
ITEM	**SPEC NO.**	**DESCRIPTION**	**ESTIMATED QUAN**	**ESTIMATED QUAN**	**ESTIMATED QUAN**	**ESTIMATED QUAN**
Section 1 - General						
1.1	**A1**	**Bonding**				
1.2	**A4**	**Construction Layout**				
1.3	**A8**	**Signs**				
	SSP	a) Allowance for Construction Signs, Traffic Plan				
1.4	**SSP**	**Road Sweeping & Cleaning**				
1.5	**A9**	**Contingency Allowance**				
Section 2 - Roads						
2.1	**B3**	**Granular Materials**				
	SSP	a) Granular 'A' - Base repairs, manhole adjustments, curbs and subdrains	5.76	258.48	16.18	229.62
		b) Granular 'M' - Driveways & Shoulders - varying depths	0.00	16.80	0.00	15.36
2.2	**B6**	**Subdrains**				
	SSP	a) Subdrains				
		b) Connections of subdrains to existing structures				
2.3	**B8**	**Concrete - Curb and Gutter**				
		a) Curb spot repairs - all types			18.50	
2.4	**B9**	**Concrete sidewalks repairs - 125mm thickness**				
	SSP	a) Regular Sidewalk (Provisional)				
		b) Curb Faced Sidewalk (Provisional)				
2.5	**B10**	**Saw-cutting (up to 200mm) in all materials**				
	SSP	a) base repairs	0.00	324.00		287.00
		b) curbs, subdrains, MH's & CB's		20.00	90.00	16.00
		c) sidewalks & driveways		60.00		55.00
2.6	**B11**	**Milling**				
	SSP	a) 50mm depth, full width - Asphalt	42.00			955.00
		b) Full depth (<100mm), full width - Asphalt		1080.00		
		c) Butt Joints (1.5m wide min.)	52.00	30.00	50.00	30.00
2.7	**B12**	**Supply & Place Tack Coat**	1015.00	1078.80	1789.00	955.00
2.8	**B13**	**Adjustment of Appurtenances**				
	SSP	a) Existing Catch Basin Frame & Grate				
		i) up to 300mm			11.00	
		ii) 300mm to 450mm				
		b) Replace Catch Basin Frame & Grate				
		c) Valve Chamber, Manhole Frame & Cover				
		i) up to 300mm	2.00		5.00	2.00
		ii) 300mm to 450mm		2.00		
		d) Replace Manhole Frame & Cover	1.00	2.00		1.00
		e) Valve & Curb Boxes				
		f) Supply & Replace Valve & Curb Boxes (Provisional)				
		g) Rebuilding brick MHs or CBs (Provisional)				
		i) 0.1m to 0.3m				
		ii) 0.3m to 0.6m				
		iii) Greater than 0.6m				
2.9	**B14**	**Hot-Mix Asphalt**				
	SSP	a) HL8HS - base repairs, curbs, subdrains & MH's - 100mm thickness	2.04	84.66	5.10	75.23
		b) HL8HS - Up to 100mm thickness		205.00		
		c) HL3HS - 50mm thickness	126.85	134.85	223.58	119.35
		d) HL3HS - Scratch - 25mm thickness				
		e) HM3HD - driveways - 50mm thickness	0.00	3.83		4.00
2.10	**B15**	**Asphalt Walkways & Driveways**		30.00		28.00
2.11	**B16**	**Concrete Driveways**				
2.12	**B17**	**Interlocking Brick & patio slab driveways and walkways**				
2.13	**B18**	**Granular Driveways (Provisional)**		10.00		5.00
2.14	**B21**	**Topsoil and Sod**		20.00	15.00	20.00
	SSP					
2.15	**B27**	**Removal of existing items (including disposals)**				
		a) concrete curbs - all types			18.50	
		b) concrete sidewalks				
		c) concrete driveways				
		d) asphalt - base repairs, subdrains & adjustments		362.00		325.00
		e) manhole and catchbasin frames and grates	1.00	2.00	0.00	1.00
		f) interlocking brick & patio slab driveways and walkways	0.00	0.00	0.00	0.00
2.16	**B30/B31**	**Base Repairs - General/Flexible**				
	SSP	a) Asphalt		324.00		287.00
2.17	**B34**	**Tactile Warning Surfaces-Straight Plates (Provisional)**				
2.18	**SSP**	**Asphalt Ramping**				
		a) at butt joints	35.00	20.00	33.00	20.00
		b) at adjustments	2.00	2.00	5.00	2.00
		c) at crosswalks	5.00	5.00	5.00	5.00
2.19	**SSP**	**Supply & Place Pavement Reinforcement Mesh**				
		(Only selected alternative to be extended)				
		a) MacGrid AR 10G.7 (Provisional)				
		b) Titan TE-FGP11 (Provisional)				
2.20	**SSP**	**Shoulder Sealing**		130.00		123.00
2.21	**SSP**	**Pavement Markings (Includes 2 applications)**				
		a) Centrelines (Provisional)				
		a) Stop Bars	6.00	3.50	3.50	6.50
		a) Pedestrian			10.00	
		b) Symbols (Provisional)				
2.22	**SSP**	**Vehicle Detection Loops (Provisional)**				
		Loops to be cut into base asphalt including sawcutting, wire and sealant to loop junction box				
		a) Supply & install 2.4m x 15.0m - duplex				
Section 3 - Sewers						
3.1	**C6**	**Pre-Cast Concrete Catch Basins (Provisional)**				
		a) 600mm x 600mm Catchbasin (OPSD 705.010) c/w Frame and Grate (OPSD 400.100)				
3.2	**C1**	**Sewers - Storm CB Leads (Provisional)**				
		Includes coring into and connecting to existing manhole using appropriate connections, and includes mandrel testing upon completion.				
		a) 200mm Dia. PVC Class DR35				

CITY OF ST. CATHARINES			MEREDITH DRIVE	MEREDITH DRIVE	ST COLUMBA DRIVE	TUNIS STREET
2019 RESURFACING PROGRAM - PART 1			DORCHESTER TO RENDALE AVE	RENDALE TO DORCHESTER	GENEVA ST TO ALBANY DR	PELHAM RD TO HILLVIEW RD
PROJECT NUMBER P19-080-1			8	8	6.5	6.1
			682.00	611.00	153.20	177.00
LOCATION QUANTITIES			5456.00	4888.00	995.80	1079.70
ITEM	SPEC NO.	DESCRIPTION	ESTIMATED QUAN	ESTIMATED QUAN	ESTIMATED QUAN	ESTIMATED QUAN
Section 1 - General						
1.1	A1	**Bonding**				
1.2	A4	**Construction Layout**				
1.3	A8	**Signs**				
	SSP	a) Allowance for Construction Signs, Traffic Plan				
1.4	SSP	**Road Sweeping & Cleaning**				
1.5	A9	**Contingency Allowance**				
Section 2 - Roads						
2.1	B3	**Granular Materials**				
	SSP	a) Granular 'A' - Base repairs, manhole adjustments, curbs and subdrains	294.06	246.78	238.98	170.40
		b) Granular 'M' - Driveways & Shoulders - varying depths	0.00	0.00	13.92	0.00
2.2	B6	**Subdrains**				
	SSP	a) Subdrains				
		b) Connections of subdrains to existing structures				
2.3	B8	**Concrete - Curb and Gutter**				
		a) Curb spot repairs - all types	275.00	250.00		
2.4	B9	**Concrete sidewalks repairs - 125mm thickness**				
	SSP	a) Regular Sidewalk (Provisional)				
		b) Curb Faced Sidewalk (Provisional)				
2.5	B10	**Saw-cutting (up to 200mm) in all materials**				
	SSP	a) base repairs	273.00	245.00	299.00	200.00
		b) curbs, subdrains, MH's & CB's	595.00	506.00	16.00	40.00
		c) sidewalks & driveways			75.00	
2.6	B11	**Milling**				
	SSP	a) 50mm depth, full width - Asphalt	5456.00	4888.00	996.00	230.00
		b) Full depth (<100mm), full width - Asphalt				
		c) Butt Joints (1.5m wide min.)	45.00	45.00	30.00	53.00
2.7	B12	**Supply & Place Tack Coat**	5456.00	4888.00	996.00	1080.00
2.8	B13	**Adjustment of Appurtenances**				
	SSP	a) Existing Catch Basin Frame & Grate				
		i) up to 300mm	10.00	10.00		
		ii) 300mm to 450mm	9.00	9.00		
		b) Replace Catch Basin Frame & Grate	20.00	20.00		
		c) Valve Chamber, Manhole Frame & Cover				
		i) up to 300mm	10.00	6.00		5.00
		ii) 300mm to 450mm	9.00	5.00	2.00	
		d) Replace Manhole Frame & Cover	8.00	5.00	2.00	
		e) Valve & Curb Boxes	1.00			
		f) Supply & Replace Valve & Curb Boxes (Provisional)				
		g) Rebuilding brick MHs or CBs (Provisional)				
		i) 0.1m to 0.3m	1.00	1.00		
		ii) 0.3m to 0.6m	1.00	1.00		
		iii) Greater than 0.6m				
2.9	B14	**Hot-Mix Asphalt**				
	SSP	a) HL8HS - base repairs, curbs, subdrains & MH's - 100mm thickness	91.04	75.74	78.29	56.10
		b) HL8HS - Up to 100mm thickness				
		c) HL3HS - 50mm thickness	682.00	611.00	124.48	134.96
		d) HL3HS - Scratch - 25mm thickness	374.82	311.61		
		e) HM3HD - driveways - 50mm thickness	0.00	0.00	5.10	0.00
2.10	B15	**Asphalt Walkways & Driveways**			40.00	
2.11	B16	**Concrete Driveways**				
2.12	B17	**Interlocking Brick & patio slab driveways and walkways**				
2.13	B18	**Granular Driveways (Provisional)**			4.00	
2.14	B21	**Topsoil and Sod**			20.00	20.00
	SSP					
2.15	B27	**Removal of existing items (including disposals)**				
		a) concrete curbs - all types	275.00	250.00		
		b) concrete sidewalks				
		c) concrete driveways				
		d) asphalt - base repairs, subdrains & adjustments			339.00	220.00
		e) manhole and catchbasin frames and grates	28.00	25.00	2.00	0.00
		f) interlocking brick & patio slab driveways and walkways	0.00	0.00	0.00	0.00
2.16	B30/B31	**Base Repairs - General/Flexible**				
	SSP	a) Asphalt	273.00	245.00	299.00	200.00
2.17	B34	**Tactile Warning Surfaces-Straight Plates (Provisional)**				
2.18	SSP	**Asphalt Ramping**				
		a) at butt joints	30.00	30.00	20.00	35.50
		b) at adjustments	20.00	20.00	2.00	5.00
		c) at crosswalks	20.00	20.00	5.00	
2.19	SSP	**Supply & Place Pavement Reinforcement Mesh**				
		(Only selected alternative to be extended)				
		a) MacGrid AR 10G.7 (Provisional)				
		b) Titan TE-FGP11 (Provisional)				
2.20	SSP	**Shoulder Sealing**			112.00	
2.21	SSP	**Pavement Markings (Includes 2 applications)**				
		a) Centrelines (Provisional)				
		a) Stop Bars	16.00	8.00	6.50	8.00
		a) Pedestrian				
		b) Symbols (Provisional)				
2.22	SSP	**Vehicle Detection Loops (Provisional)**				
		Loops to be cut into base asphalt including sawcutting, wire and sealant to loop junction box				
		a) Supply & install 2.4m x 15.0m - duplex				
Section 3 - Sewers						
3.1	C6	**Pre-Cast Concrete Catch Basins (Provisional)**				
		a) 600mm x 600mm Catchbasin (OPSD 705.010) c/w Frame and Grate (OPSD 400.100)				
3.2	C1	**Sewers - Storm CB Leads (Provisional)**				
		Includes coring into and connecting to existing manhole using appropriate connections, and includes mandrel testing upon completion.				
		a) 200mm Dia. PVC Class DR35				