

THE REGIONAL MUNICIPALITY OF NIAGARA PUBLIC WORKS COMMITTEE AGENDA

PWC 7-2019
Tuesday, July 9, 2019
9:30 a.m.
Council Chamber
Niagara Region Headquarters, Campbell West
1815 Sir Isaac Brock Way, Thorold, ON

Pages 1. CALL TO ORDER DISCLOSURES OF PECUNIARY INTEREST 2. 3. **PRESENTATIONS** Negotiated Request for Proposals – General Overview 3.1 Bart Menage, Director, Procurement and Strategic Acquisitions To be distributed. **DELEGATIONS** 4. 5. ITEMS FOR CONSIDERATION 4 - 13 5.1 PW 38-2019 Community Safety Zones 14 - 20 5.2 PW 41-2019 St. David's Road Interchange Reconstruction and Multi-Use Path Construction

	5.3	PW 42-2019 Construction Contract: Dain City Sewage Pumping Station Forcemain Replacement	21 - 28
	5.4	PW 40-2019 Niagara Specialized Transit Service Delivery Amending Agreement 2019-2020	29 - 34
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	6.1	PW 39-2019 Niagara Specialized Transit Operations Review	35 - 41
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	6.5	PWC-C 20-2019 Status of the new Niagara-on-the-Lake Wastewater Treatment Plant Testing and Commissioning Process	55 - 56
7.	OTHE	R BUSINESS	
8.	CLOS	ED SESSION	
	8.1	PW 31-2019 A Matter Of Advice That Is Subject To Solicitor-Client Privilege - 2019 Waste Collection RFP.	
		This item was referred to the Public Works Committee at the Regional Council meeting held on June 20, 2019.	
	8.2	PW 28-2019 A Matter Of Advice That Is Subject to Solicitor-Client Privilege Supplemental Information To Confidential Report PW 31-2019 - 2019 Waste Collection RFP	
	8.3	PW 43-2019 A Matter Of Advice That Is Subject To Solicitor-Client Privilege - 2019 Wast Collection RFP - Next Steps.	

A verbal presentation will precede this report.

9. BUSINESS ARISING FROM CLOSED SESSION ITEMS

10. NEXT MEETING

The next meeting will be held on Tuesday, August 6 at 9:30 a.m. in the Council Chamber, Regional Headquarters.

11. ADJOURNMENT

If you require any accommodations for a disability in order to attend or participate in meetings or events, please contact the Accessibility Advisory Coordinator at 905-980-6000 (office), 289-929-8376 (cellphone) or accessibility@niagararegion.ca (email).



Subject: Community Safety Zones **Report to:** Public Works Committee **Report date:** Tuesday, July 9, 2019

Recommendations

- 1. That the designation of Community Safety Zones (CSZs) **BE APPROVED** for:
 - Regional Road 81 (York Road) from Queenston Road to Concession 3
 Road in the Town of Niagara-on-the-Lake, length of 1.10 km; and
 - Regional Road 24 (Victoria Avenue) from Frederick Avenue to Regional Road 81 (King Street) in the Town of Lincoln, length of 1.20 km
- That the necessary By-law BE PREPARED and PRESENTED to Regional Council for consideration; and
- That Regional Staff REPORT BACK with potential future CSZ locations by the end of 2019.

Key Facts

- The purpose of this report is to seek Council approval to implement Community Safety Zones (CSZs) at the locations listed above.
- CSZs are sections of roadways where public safety is of a special concern and traffic offences are subject to double the fines.
- The goal of the CSZ programme is to modify driver behaviour and improve safety on certain sections of road, particularly vulnerable road users like children and seniors.
- Among the last five years from 2013 2017, 2016 was the highest in the number of pedestrian and cyclist fatalities and injuries on Niagara Regional roads.
- The maximum collision frequency in 2017 was during peak hours, in the weekdays
 of schools months.
- Recent traffic studies in the proposed school zones show the following percentage of vehicular traffic that exceeds the posted speed limit:

- Regional Road 81, York Road: 56% and 35% during the weekdays, and 74% and 57% during the school hours for east and westbound traffic respectively, and;
- Regional Road 24, Victoria Avenue: 73% and 76% during the weekdays, and 88% and 73% during the school hours for north and southbound traffic respectively.

Financial Considerations

The cost to establish a Community Safety Zone is minimal in terms of signage installation within the limits of each zone. The costs are covered under the approved 2019 Transportation Services Operating budget.

The community education programs and police enforcement resources have already been discussed with the Niagara Regional Police, Strategic Communications and Public Affairs, Legal & Court Services and Public Health Staff.

Analysis

Background

In June 1998, the Province of Ontario passed Bill 26 - to promote public safety through the creation of community safety zones (CSZs). This Bill, and its regulatory changes, are targeted at improving road safety in Ontario. The proposed amendments to the Highway Traffic Act (RSO 1990) allow Municipal Councils to designate CSZs by Municipal by-law along sections of roadway where public safety is of special concern (i.e., around schools, retirement facilities, parks, etc.). Within CSZs, traffic fines will be increased for violations committed at the CSZs (i.e. speeding).

With the passing of Bill 26, Niagara Regional Council has the authority, under section 214.1 of the Highway Traffic Act, to pass by-laws where deemed necessary to ensure the safety of Niagara residents. In establishing CSZs, this will aid in safe communities.

Objective

The objectives of the CSZs are:

- Traffic safety measures to reduce the number or severity of collisions and/or speeding within designated CSZs;
- A traffic management tool to reduce the rate of Highway Traffic Act (HTA) offences committed within CSZs; and,
- To maintain an enforcement program that is achievable within the current financial and human resources available to Niagara Regional Police.

Enforcement

Niagara Regional Police enforcement and their partnership are required for CSZs to be successful. Regional Staff are working with Niagara Regional Police on enforcing the CSZs in the two locations outlined in the report. Niagara Regional Police resourcing will have to be taken into account as the program grows.

Public will be made aware that a traffic violation occurring within a designated CSZ will have consequences. The intent is to ensure that a CSZ is not just another signed regulation that is sporadically enforced. Therefore, Regional Staff will continue to work with Niagara Regional Police on this safety initiative with enforcement strategies throughout Niagara region.

Criteria

No Provincially recommended technical criteria for the establishment of CSZs currently exists, other than locations where public safety is of special concern, such as in the vicinity of schools, day care centres, retirement homes or areas with high collision rates.

Regional Staff continue to review and evaluate strategically potential high priority locations of CSZs with coordination of enforcement with Niagara Regional Police.

Education and enforcement are key factors in the success of this initiative. Therefore, Transportation Services Staff recommended two (2) locations of CSZs to gain first-hand experience, and then based on that experience, future recommendations for additional CSZs will be formulated and brought back to Committee for further consideration.

Site Selection

Site selection includes locations that have safety concerns or complaints near sensitive areas such as schools, retirement homes and daycares.

Staff considered as part of the site selection the following to prioritize locations:

- Number of safety and speeding complaints at location.
- Percentage of students/families walking to/from school.
- Speeding study results and number of violations.

Area Municipalities share Staff's concern about public safety and also wish to implement CSZs on their roads. The Corporation of the Town of Niagara-on-the-Lake requested Niagara Region to implement a Community Safety Plan in St. Davids, specifically the intersection of Four Mile Creek Road and York Road, to address traffic and pedestrian safety issues around St. Davids Public School. Similarly, concerns have been raised over the last few years for the speeding in the neighbourhood of 20 Valley

School, from Niagara Student Transportation Services, residents and Niagara Region Public Health Staff. This area is also a preferred truck route in the Town of Lincoln.

Staff are targeting that the two (2) CSZs, outlined in Table 1, t commence Monday, September 16, 2019, (after school returns) to ensure the required communication material and education programs are in place during the first week of the school term.

Staff will conduct studies to evaluate CSZs to determine their effectiveness through data collection. Data collection studies consist of "before" and "after" speed and general regulation compliance surveys.

Table 1
Community Safety Zone locations on Regional Roads

Road	Section	Municipality	School
RR 81 (York Rd)	Queenston Rd to	Town of Niagara-	St. Davids Public
	Concession 3 Rd	on-the-Lake	School
RR 24 (Victoria	Frederick Ave to	Town of Lincoln	Twenty Valley
Ave)	RR 81 (King St)		Public School

All Community Safety Zone designations are in effect 24 hours a day, seven (7) days per week. Location plans showing each location are attached to this report (See Appendices 1 and 2).

Education

To maximize the effectiveness of CSZs, being an unfamiliar new traffic safety management tool in Niagara region, it will be necessary to educate the public on their meaning, what it means to contravene a traffic regulation within such a zone, and how to identify a zone. Research has demonstrated that changes in traffic control and regulations require an extensive public education campaign in order to be effective.

Part of the overall review process, Regional Staff will coordinate with the District School Board of Niagara through Niagara Student Transportation Services and Public Health. Staff to identify potential routes to school and opportunities for safety improvements in an effort to encourage active and safe route to school.

The recommendations gathered from the ongoing public consultations will be taken into consideration as part of the overall school zone safety review process. Each time a CSZ is approved, Niagara Region will undertake the following education efforts:

 Have CSZ information brochures distributed, at least two weeks in advance of implementation, to places of public gathering within the newly designated CSZ.

- Prepare a media release explaining the size and location of the CSZ, the consequences associated with committing a violation in the CSZ, and the Niagara Regional Police's commitment to providing strict enforcement in these areas.
- The Community Relations Branch of the Niagara Regional Police will include CSZs in their presentations and appearances at local functions and assemblies.
- The Strategic Communications and Public Affairs Branch of the Niagara Region will ensure all communications and awareness programs are in place with the residents, and local Councillors to provide appropriate notice in advance of implementation.

Stakeholders Engagement

To establish a consistent uniform, set of designation criteria and a co-ordinated approach to the design and implementation of CSZs within Niagara Region, Staff in Transportation Services will establish a Cross-Niagara CSZ Working Group (CNCSZWG). Invitations will include all the local area Municipalities, Niagara Regional Police, Legal and Court Services, Public Health and District School Board of Niagara.

Relevant Consultation

This report has been written in consultation with Regional Staff from Legal and Court Services, Niagara Regional Police, Strategic Communications and Public Affairs, Public Health and the members of the Niagara Student Transportation Services.

Alternatives Reviewed

The Region has implemented various measures to address safety concerns within school zones, including the use of flashing lights, decreasing speed limits during school hours, monitoring, education and awareness.

Relationship to Council Strategic Priorities

Alignment to Niagara Region Transportation Master Plan

Niagara Region is undergoing significant change and by 2041 will have grown and evolved on economic, demographic, social and technological fronts. This recommendation will support growth and enhance Niagara globally by promoting an integrated network of roads and highways for the safe movement of people and goods.

Also, this is a step forward to adopting a Vision Zero Road Safety Plan in Niagara Region; helping to reduce aggressive driving and speeding in areas within Niagara Region that have higher concentrations of school children and families.

Other Pertinent Reports

None.

Prepared by:

Sulaf Alkarawi, P.Eng. Associate Director Transportation Planning Public Works Department Recommended by:

Catherine Habermebl Acting Commissioner Public Works Department

Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

This report was prepared in consultation with Carolyn Ryall, Director Transportation Services, Brian McMahon, Program Financial Specialist and Donna Gibbs, Director Legal and Court Services.

Appendices

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Appendix 1: Details of Signage and Fines

Signage Details

Each Community Safety Zone will require signage at the beginning and end of each zone as per the Highway Traffic Act. Given the requirements, each school would require a minimum of four (4) signs (i.e. two (2) per direction) and possibly additional signs midblock depending on the length of the defined section as seen in the images below.





Figure 1 - Example of Community Safety Zone signage to be installed

Fines

The Highway Traffic Act has been amended to double the legislated minimum penalty provisions for moving offences committed within a CSZ. Demerit points associated with each offence has not been increased from current levels. The designated offences to which increased fines will apply can, for discussion purposes, be divided into three general areas, for which a brief description follows.

(a) <u>Speeding</u> - speeding penalties are based on a specified cost per kilometre as opposed to a general fine range. Both the legislated minimum fine range and the set fines have been doubled for speeding offences.

Example: speeding 22 kilometres over the posted speed limit

Set fine \$3.75/km over the limit \$7.50/km over the limit Fine amount \$87.50 + \$15 VFS \$170.00 + \$30 VFS (Note: fine amount includes \$5 court costs, VFS means Victim Fine Surcharge)

Some speeding offences (i.e. 35-49 kilometres over the posted limit) when committed within a CSZ will result in the issuance of a Part III summons (court appearance).

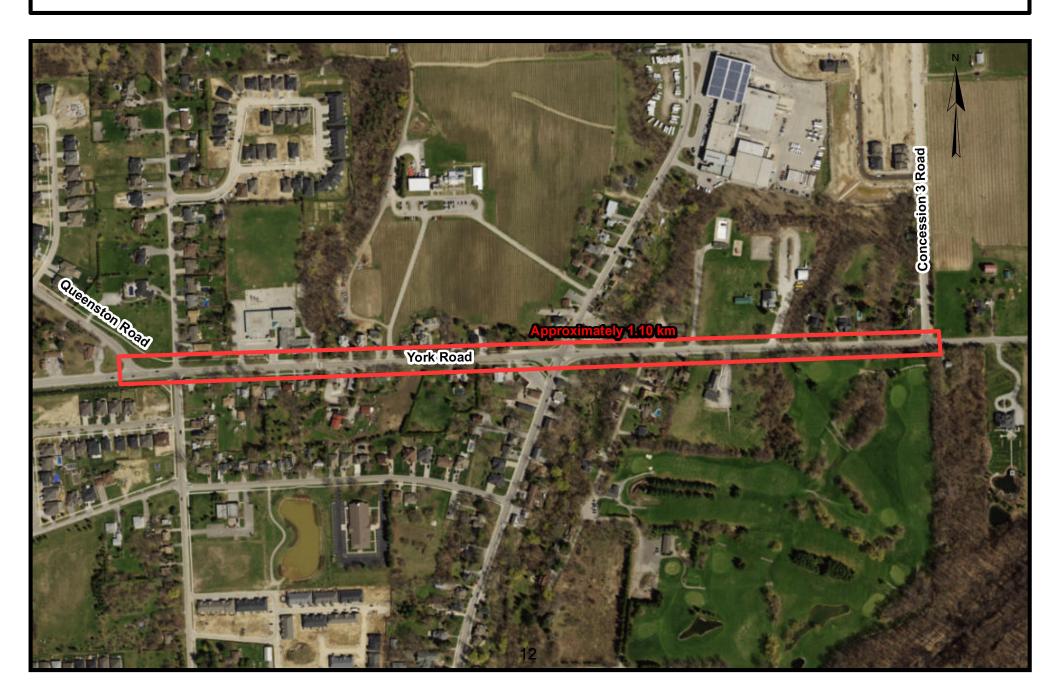
- (b) <u>Careless Driving / Racing</u> careless driving offences have a penalty range of \$200 to \$1,000 outside a CSZ. There is no set fine for this offence if committed within a CSZ, and a Part III summons (court appearance) will be issued. Racing a motor vehicle does not carry a set fine and would result in the issuance of a Part III summons (court appearance) whether committed within or outside a CSZ.
- (c) Other Offences A significant number of other moving offences are subject to increased penalties if committed within a CSZ. The general penalty provisions of the Highway Traffic Act apply a penalty range of \$60 \$500, with a set fine range of \$90 plus a \$15 Victim Fine Surcharge. Within a CSZ, the penalty range is increased to \$120 \$500, with a set fine of either \$125 or \$155 (Victim Fine Surcharge of \$20 and \$30 respectively).

It should also be noted that the minimum legislated fines for failing to stop at red or amber lights were recently increased from \$60 to \$150. If either of these offences is committed within a CSZ, the fine amount is doubled. For example:

	Red/Amber light	Red/Amber Light
	<u>Offence</u>	Offence in a CSZ
Penalty Range	\$150 - \$500	\$300 - \$500
Set Fine	\$155 + \$30 VFS	\$305 + \$60 VFS

APPENDIX 2 PW 38-2019

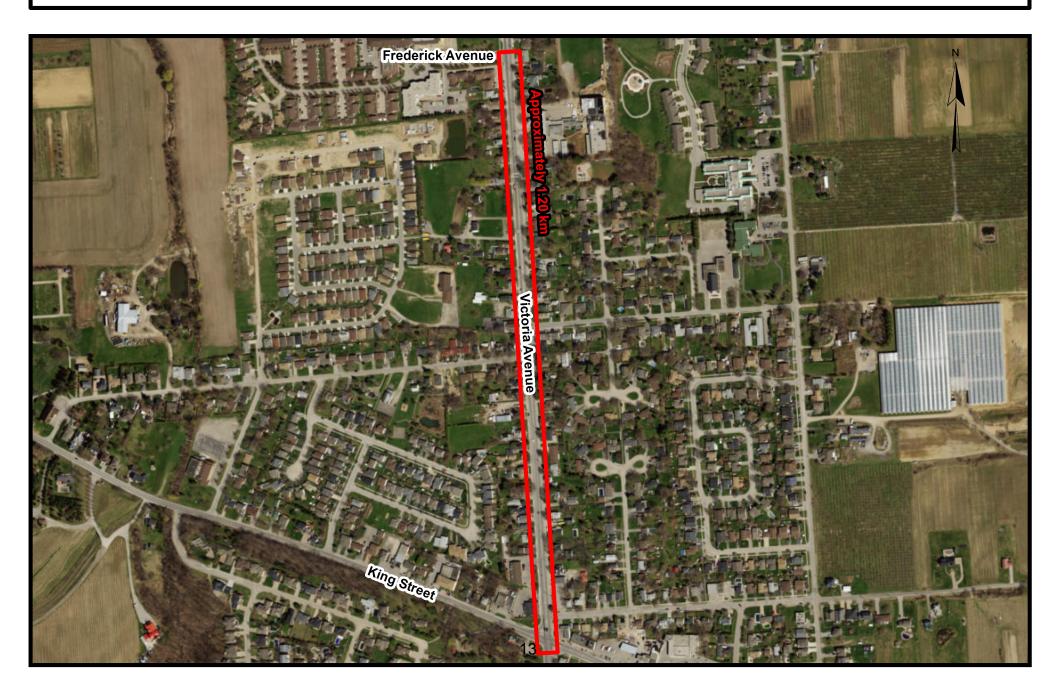
COMMUNITY SAFETY ZONE REGIONAL ROAD 81 (YORK ROAD) TOWN OF NIAGARA-ON-THE-LAKE



APPENDIX 3 PW 38-2019

COMMUNITY SAFETY ZONE REGIONAL ROAD 24 (VICTORIA AVENUE) TOWN OF LINCOLN







Subject: St. David's Road Interchange Reconstruction and Multi-Use Path

Construction

Report to: Public Works Committee **Report date:** Tuesday, July 9, 2019

Recommendations

- That the Chief Administrative Officer BE AUTHORIZED to execute the agreement between the Regional Municipality of Niagara (Niagara Region) and the Ministry of Transportation (MTO) pertaining to the construction, cost sharing and future maintenance of the Multi-Use Path (MUP) and associated interchange reconfiguration works for the St. David's Road Interchange.
- 2. That a gross capital budget adjustment in the amount of \$1,470,784 gross and \$0 net BE RECEIVED (and INITIATED) for the St. David's Road Interchange Reconstruction and Multi-Use Path Construction, and that the project BE FUNDED from cost sharing agreements with both the City of St. Catharines and City of Thorold and with Provincial Funding through the Ontario Municipal Commuter Cycling (OMCC) Program as outlined in Appendix A.

Key Facts

- The purpose of this report is to seek Council approval for the CAO to execute an
 agreement between Niagara Region and the MTO related to the construction of a
 MUP on St. David's Road from the most westerly interchange ramp to the most
 easterly interchange ramp and realign the capital budget for this project with known
 costs and external funding/cost sharing.
- Region Staff have coordinated with City of St. Catharines and City of Thorold Staff on a cost sharing arrangement for this work.
- Once completed, MUP will contribute to a major link that is required to move pedestrians and cyclists from residential areas east of Hwy 406 to the Brock District.
- Updating costing, cost sharing and external funding associated with this project require a budget adjustment to increase the gross expenditure budget by \$1,470,784 to reflect the total amounts owed to the MTO for the project.
- This proposed budget adjustment is fully funded by external funding and updated cost sharing amounts between the City of St. Catharines and the City of Thorold.
- Per Budget Control By-Law, Council approval is required if the gross adjustment amount being requested is greater than \$1,000,000.

Financial Considerations

Region Staff have worked together with the MTO, City of St. Catharines and the City of Thorold on a plan to extend pedestrian and cycling facilities across the Hwy 406 corridor. In order to construct these facilities in a manner that is safe for the future users, modifications to the existing interchange ramps are necessary.

The cost of these works is in the order of \$3,982,016 (including 1.76% non-refundable HST), of which Niagara Region is responsible for 50%, the City of St. Catharines is responsible for 25% and the City of Thorold is responsible for 25%.

In addition to the works related to the MUP, the MTO has also completed the sign change on Hwy 406 to reflect the previous renaming of St. David's Road to Sir Isaac Brock Way. The cost of the sign change over is in the order of \$288,768 (including 1.76% non-refundable HST).

The total cost due to the MTO is \$4,270,784 (including 1.76% non-refundable HST) inclusive of the MUP construction and the sign change over.

All three cost sharing partners applied to the MTO's OMCC Program Grant and all three partners received varying levels of funding through the Program to offset costs on this project.

Niagara Region received OMCC Program Grant funds in the order of \$2,066,367, which will be partially utilized to offset a portion of the cost of this project as noted in Appendix A. The OMCC Program Grant requires a minimum contribution of 20% by Niagara Region toward the total eligible costs of the project.

In 2018, Council approved project 20000497 (St. David's Road Interchange Improvements at HWY 406) in the amount of \$2,800,000 of gross costs. Updated costing, external funding, and cost sharing associated with the project require an additional \$1,470,784 be added to the project for a total revised gross budget of \$4,270,784.

Funding for the proposed budget adjustment will be provided by the OMCC grant and additional cost sharing from the City of St. Catharines and the City of Thorold. This adjustment would also result in less Capital Levy funding required in the amount of \$627,506, and less development charges required in the amount of \$418,337 associated with this project. See details of the budget adjustment to funding in Appendix A – Total Estimated Project Cost.

Once the project is complete and Niagara Region has received the invoice and made payment to the MTO, Staff will invoice the City of St. Catharines and the City of Thorold for their respective cost share amounts for the project.

Analysis

In 2015, the MTO commenced an Environmental Assessment on a group of structures in and around Hwy 406 and Hwy 58 including the St. David's Road interchange. Region Staff sent a request to the MTO related to this program requesting that the MTO include provisions for pedestrians and cyclists on their bridge structure over Hwy 406.

Conversations between the parties occurred around the ability to safely add these features to the road section given the close proximity to high-speed highway ramps. Region Staff presented a case for the addition of these features on behalf of Niagara Region and our local Municipal partners.

Staff worked with MTO to review and provide guidance on the preferred treatments on the intersecting high-speed ramps. In late 2016, MTO and Region Staff arrived at a design that all parties felt was safe and accomplished the goals of the affected road authorities.

In March 2017, a MUP was solidified by the tender call of the MTO bridge structure project including the requested active transportation facilities.

In order to complete the connections to the MUP constructed by the MTO Niagara Region has planned works on both the east and west ends as follows:

On the east end of the MUP Niagara Region has a project extending from the east ramp terminal to Collier Road. This project includes the replacement of aging infrastructure, illumination upgrades, urbanization and the extension on the MUP through the entire limits. This Regional project is planned for late 2019/2020 construction.

On the west end, Niagara Region has a project planned to extend the MUP from the west ramp terminal back to Schmon Parkway. This project includes for the extension of the MUP and the construction of two gateway features into the Brock District. Funding for this project was approved in 2019, and construction is planned for late 2019/early 2020.

Other work in the surrounding area will complete further connectivity such as the International Plaza that is being constructed along the frontage of the Niagara Region building. This project is inclusive of a MUP that will fill in the last link between the above mentioned extensions and the previous constructed MUP on Merrittville Hwy.

Once completed, connectivity for pedestrians and cyclists will be realized from Richmond Street at Decew Road in the City of Thorold to St. David's Road at Collier Road in the City of St. Catharines/Thorold. The City of St. Catharines and City of Thorold have future plans to extend this MUP further to the east in a subsequent joint project.

Region Staff have negotiated a maintenance agreement with the City of Thorold for the previous completed sections of the MUP and have obtained agreement in principle to extend that maintenance agreement to include future portions of the MUP.

See Appendix A for Key Map.

Alternatives Reviewed

A number of crossing alternatives at the interchange were reviewed; however, the current alternative was the safest alternative to address the need for active transportation facilities ensuring safety for all users.

Relationship to Council Strategic Priorities

Active transportation improvements is a key strategy in the Region's Transportation Master Plan under Moving People and Goods. The Brock District Plan is a catalyst for future development of the Brock area and will transform the surrounding area into a best in class experience for visitors, students and those working/living in the area. This is in line with positioning Niagara globally with the experience when visiting this district.

Other Pertinent Reports

PDS 34-2016	Brock District Plan
PW 45-2015	Rehabilitation of the St. David's Road Overpass
PW 90-2014	Proposed Street Name Change, Regional Road 71 St. David's Road, City of St. Catharines and City of Thorold

Prepared by:

Frank Tassone Associate Director, Transportation Engineering Public Works Department Recommended by:

Catherine Habermebl Acting Commissioner Public Works Department

Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

This report was prepared in consultation with Carolyn Ryall, Director, Transportation Services, and reviewed by Brian McMahon, Program Financial Specialist.

Appendices

Appendix A Total Estimated Project Cost 6
Appendix B Key Map 7

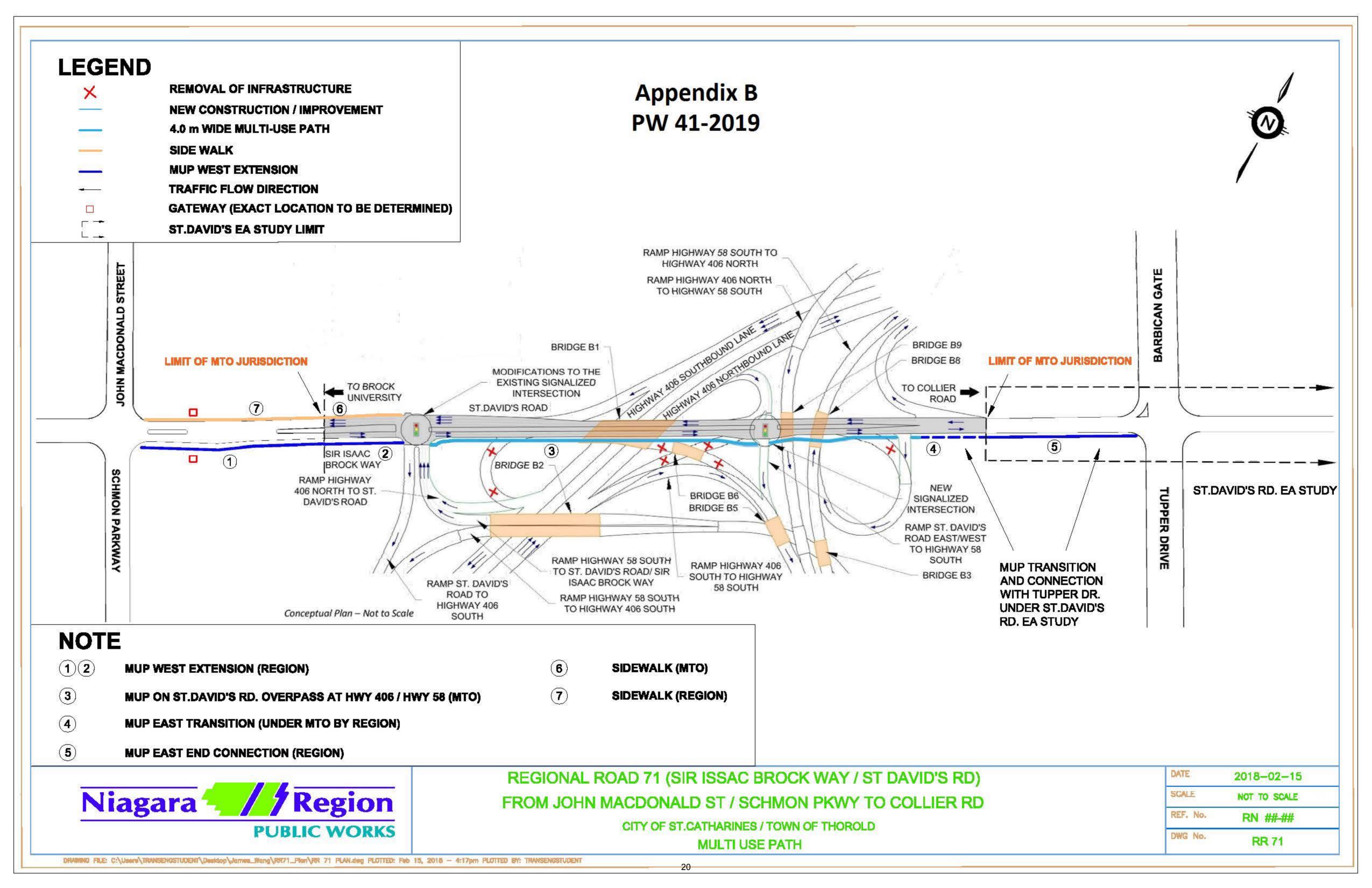
PW 41-2019 APPENDIX A

Total Estimated Project Cost

Gross Budget Increase with External Funding and Cost Sharing St. David's Road Interchange Reconstruction and Multi Use Path Construction

	Council Approved Budget	Budget Increase/ Reallocation	Revised Council Approved Budget	Expended & Committed as of 06/01/2019	Forecast	Budget Remaining
	(A)	(B)	(C) = (A) + (B)	(D)	(E)	(F) = (C)-(D)-(E)
Total Estimated Project Cost (20000497)*						
Total Estimated Project Cost - Construction	2,800,000	1,470,784	4,270,784	-	4,270,784	-
Project Funding Sources						
Reserve-Infrastructure Deficit / Capital Levy Development Charges - Roads Cost Sharing - St. Catharines Cost Sharing - Thorold Provincial Funding - Ontario Municipal Commuter Cycling (OMCC) Program	(1,140,000) (760,000) (900,000) -	627,506 418,337 (95,504) (995,504) (1,425,620)	(512,494) (341,663) (995,504) (995,504) (1,425,620)	- · · · · · · · · · · · · · · · · · · ·	627,506 (341,663) (995,504) (995,504) (1,425,620)	- - - -
· · · · · · · · · · · · · · · · · · ·	(2,800,000)	(1,470,784)	(4,270,784)	(1,140,000)	(3,130,784)	-

^{*}All costs include 1.76% non-refundable HST.





Subject: Construction Contract: Dain City Sewage Pumping Station Forcemain

Replacement

Report to: Public Works Committee Report date: Tuesday, July 9, 2019

Recommendation

1. That Council **AUTHORIZE** staff to proceed with an award to V. Gibbons Contracting Ltd. in the amount of \$1,544,091 (including contingency and HST) to construct/replace the temporary forcemain in Dain City in accordance with Section 17 of Procurement By-law No. 02-2016, as amended on February 28, 2019.

Key Facts

- During a rain event on April 16, 2018, several basements in Dain City experienced flooding. Region staff investigated the situation and found large quantities of a glycerine based substance had been deposited throughout the local sewage collection system.
- On January 1, 2019, the Dain City forcemain was found to be plugged, which
 necessitated staff hiring tanker trucks to haul sewage directly to the Welland
 Wastewater Treatment Plant (WWTP).
- The nature of the event met three of the requirements for consideration as a Special Circumstance occurrence as defined in the Region's Procurement By-law, namely:
 - i. an event that is exceptional or could not be foreseen and is likely to pose a threat to the health, safety or welfare of the public;
 - ii. an event that, unless immediately addressed, is likely to cause significant loss or damage to property;
 - iii. an event that has disrupted any essential service that needs to be reestablished without delay;
- Staff, with the assistance of V. Gibbons Contracting Ltd., installed a temporary forcemain from the pump station to approximately 150 meters north of Forks Road in an effort to bypass the known blockage (Phase 1). The costs incurred to complete this work was funded with operating dollars.
- Staff are now recommending awarding with Council approval, a further single source contract to V. Gibbons Contracting Ltd. for the construction/replacement of the temporary forcemain (Phase 2) due to the risk that another blockage could result in increased costs of hauling sewage along with negative impacts to the environment and the public.
- As per Schedule B Purchasing and Execution Authority of the Region's Purchasing Bylaw,the purchasing authority for Special Circumstance awards over \$1,000,000 is Regional Council.

 Design is under way for Phases 3 to 5 (refer to Appendix 1) with construction occurring from the fall of 2019 to late 2020. Design was procured through a competitive process and construction of these subsequent phases will be awarded through a competitive process.

Financial Considerations

Operating Costs

To date, staff have invested a considerable amount of time managing this special circumstance event including retaining many third party contractors to assist with the hauling of sewage, cleaning of piping, and construction of an overland forcemain to temporarily rectify the issues. The operating costs expended to date are summarized below (including 1.76% non-refundable HST if applicable):

Summary of Expenditures/Resources	Amount		
Third party vendors (8 vendors) Estimated internal staff time and fleet resources		\$ 1,042,889 167,719	
	Total	\$ 1,210,608	

These costs have been identified as a pressure to the 2019 forecasted financial results.

Any further breaks and/or blockages occurring on the forcemain will result in further costs to Niagara Region in the amount of approximately \$226,300/month (\$51,900 /week) plus costs for repair/replacement of piping. In addition to the above expenditures, there will be a rental cost of \$9000 plus taxes per month for the temporary forcemain piping commencing July 1, 2019.

Capital Costs

Staff have obtained an estimate from V. Gibbons Contracting Ltd. for the replacement in the amount of \$1,390,502 (including 1.76% non-refundable HST and including 20% contingency). Staff has reviewed this estimate and find that it is inline with past costs for like work. Sufficient budget exists in the project for these amounts (see Appendix 2 for a full budget breakdown.

Water and Wastewater Engineering staff have been providing a significantly higher than normal amount of resources throughout the project in order to manage the project and related issues.

Analysis

The Dain City Sewage Pump Station (SPS) serves approximately 800 residents/workers in Dain City (Welland) by pumping sewage to the gravity sewer system on Gordon Street some three (3) km away.

During a rain event on April 16, 2018, several basements in Dain City experienced flooding. During that event, Region staff were relief pumping to the environment with the objective of minimizing the sanitary sewer surcharging and flooding.

Region staff investigated the situation and found large quantities of a glycerine based substance had been deposited throughout the local sewage collection system. The City of Welland staff carried out a flushing program to clean the local collection system. Subsequent to the City's cleaning efforts, Region staff further investigated the issue and found that the glycerine based deposits were present through out the pump station piping and the forcemain. In addition, the forcemain was found to have damage typical of that caused by hydrogen sulphide build up in the pipe. Staff then put the processes in place for budgeting to begin design and replacement of the entire forcemain.

Maintenance Staff cleaned out all of the pump station piping and the forcemain in the immediate area of the pump station and replaced the lift station pumps.

On January 1, 2019, the Dain City forcemain was found to be plugged, which necessitated staff hiring tanker trucks to hall sewage directly to the Welland Wastewater Treatment Plant (WWTP) in order to protect residents' basements and avoid spills of untreated sewage to the environment.

On average, one and a half 43,000 litre trucks were filled every hour for the duration of the bypass effort. Total cost of trucking sewage from January 1st to February 26th was \$415,520 (\$226,300/month) excluding taxes.

Staff, with the assistance of Kerry T. Howe Engineering Limited and V. Gibbons Contracting Ltd., established a method to locate the blockage and by February 26, 2019, Gibbons installed a temporary forcemain (temporary in-ground and above ground piping) from the pump station to approximately 150 meters north of Forks Road, connecting to the existing forcemain in an effort to bypass the known blockage.

While this temporary main has allowed staff to avoid the continuing high cost of trucking the sewage, it is temporary and above ground, and thus could be subject to damage. It is staff's opinion that the forcemain needs to be replaced as soon as possible with a permanent, in-ground forcemain to avoid further risk to public safety and the environment.

On April 25, 2019, a new forcemain break was discovered along the railway lines in the area north of Humberstone Road and sewage was again hauled by sewage haulage tankers to the Welland WWTP for a two (2) day period to enable staff to make repairs.

These issues (blockage and leaks) were unforeseen and would pose a risk to the public and/or environment if left unchecked. The forcemain is now monitored on a daily basis so that immediate action can be taken if necessary due to the additional concerns associated with operating the temporary above ground pressurized sewage main. This temporary forcemain needs replacement to restore confidence in at least this section of the forcemain until the entire system is designed and constructed, thus providing continued sewage services to the residents of the Dain City area. There is pressure from the Dain City residents to remove the above ground forcemain. Any delay in completion of this work increases the already high chances of sewage spills to the environment, continued safety and liability concerns with the overland piping, and continuing high costs for trucking of sewage if blockages/leaks occur again.

Design of the replacement is complete and will replace the temporary above ground piping. V. Gibbons Contracting Ltd. have given their commitment to proceed immediately with this construction upon receiving approval from Niagara Region of the sole source award.

Alternatives Reviewed

Tender construction contract with tender period – this alternative will result in at least an additional three (3) months time for development and finalization of tender documents and facilitating the tender period and award, resulting in further delayed completion of the work to eliminate the temporary overland forcemain. This delay will increase the risk to the public and environment related with long term operation of the temporary overland forcemain.

Any further breaks and/or blockages occurring on the forcemain will result in further costs to the Region in the amount of approximately \$226,300/month (\$51,900 /week) plus costs for repair/replacement of piping.

Relationship to Council Strategic Priorities

This recommendation is related to the public safety and servicing strategic priority since the planned upgrades will ensure reliable and safe infrastructure within the Niagara Region.

Other Pertinent Reports

None

Prepared by:

Richard Gabel, P.Eng. Senior Project Manager, Area 2 Water & Wastewater Services Public Works Department Recommended by:

Catherine Habermebl Acting Commissioner Public Works Department

Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

This report was prepared in consultation with Pamela Hamilton, Program Financial Specialist W-WW, and reviewed by Tony Cimino, Associate Director W-WW and Joseph Tonellato, P.Eng., Director W-WW.

Appendices

Appendix 1	Key Map	6
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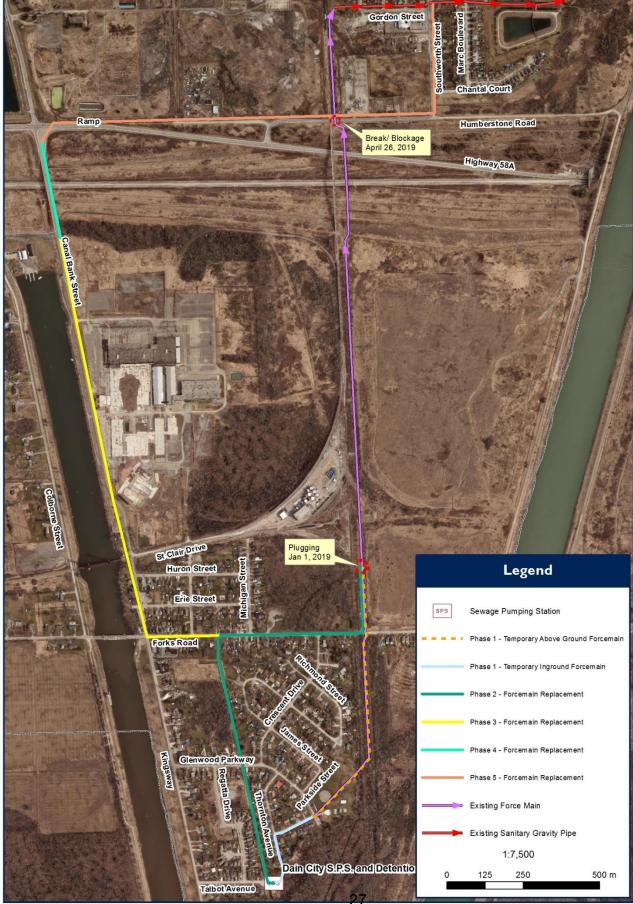
Niagara // Region

Dain City SPS Forcemain Replacement

PW 42-2019 - Appendix 1







PW 42-2019 APPENDIX 2 TOTAL ESTIMATED PROJECT COST **Contract Award**

Dain City Forcemain Replacement

Total Council

Budget

Revised Council Expended &

	Total Council Approved Budget	Budget Increase / Reallocation	Revised Council Approved Budget	Expended & Committed as of June 12, 2019	Forecasted Costs	Budget Remaining
	(A)	(B)	(C) = (A) + (B)	(D)	(E)	(F) = (C)-(D)-E
Total Estimated Project Cost 20000881 *						
(a) Construction (includes contract contingency)** 1. Sole Source Award 2. Remaining Construction	5,129,999	(25,000)	5,104,999	163,061	1,390,502 3,551,436	4,941,938 (1,390,502) (3,551,436)
 (b) Project Contingency (c) Consulting Engineering Services (Design, Contract Administration, & Inspection) (d) Project Management & Internal Costs 	500,000 220,000 175,000	25,000	500,000 245,000 175,000	- 242,354 12,476	500,000 2,646 162,524	- - -
Total Estimated Project Cost	6,024,999	-	6,024,999	417,892	5,607,107	-

^{*} All costs above include the non-refundable 1.76% portion of HST.

** Total contract award is equal to i) \$1,366,452; ii) \$1,390,502 including 1.76% non-refundable HST; iii) \$1,544,091 including 13% HST



Subject: Niagara Specialized Transit Service Delivery Amending Agreement

2019-2020

Report to: Public Works Committee Report date: Tuesday, July 9, 2019

Recommendations

 That the Chief Administrative Officer BE AUTHORIZED to execute the Niagara Specialized Transit (NST) Service Delivery Amending Agreement 2019-2020 between the Regional Municipality of Niagara and The BTS Network Inc. such that the Agreement meets the approval of the Director of Niagara Region Legal and Court Services.

Key Facts

- The purpose of this report is to seek Council's approval of the NST Service Delivery Amending Agreement 2019-2020 which is compliant with the Region's Procurement By-law.
- A new structure limiting the provision of trips provides certainty with regards to budget containment while ensuring continuity of service.
- The two year term of this Amending Agreement provides stability to the service to the end of 2020 while a transit governance decision is sought in Q1/Q2 2020 for both conventional and specialized transit services.
- Phase II of the Stoney Creek Transfer Hub Pilot will be in effect for the duration of the Agreement where the provision of trips directly to Hamilton is to be suspended in favour of utilizing a transfer hub in Stoney Creek that is available for all trip purposes.
- The results of the NST Operations Review (LNTC 9-2018 and PW 39-2019) which will include recommendations for future service delivery models and standards, is expected by the start of Q4 2019.
- Results from the NST Operations Review (PW 39-2019), will be addressed through revisions to existing Standard Operating Procedures and only if required, through another amending agreement.

Financial Considerations

The negotiated Amending Agreement ensures that the net expense of NST service is contained within the forecasted operating budget(s) by establishing a maximum number of trips delivered annually (31,200). The 2019 NST operating budget, while consistent with the baseline approved 2018 budget, realizes an increase of 3.8% in the total number of trips over 2018 (equivalent to an average of 600 trips per week) which was

achieved through reductions in the average trip rate. The reduced average trip rate was a key requirement in the contract negotiations to ensure sufficient service levels could be provided within the approved operating budget. It should be noted that this multi-year contract allows for the 2020 rate to be amended to include a Consumer Price Index (CPI) adjustment ahead of the formal budget approval process; however this is discussed further in the "Alternatives Reviewed" section below. The financial projections of the Amending Agreement are provided in Table 1 below.

Table 1 – NST Operating Actuals vs. Cost Projections for 2019 and 2020

Details	2018 Actual	2019 Projected	2020 Projected		
		,	Estimated @ 2.7% CPI***		
# of Trips	30,057	31,200	31,200		
Operator Payments*	\$2,627,753	\$2,164,527	\$2,222,969		
Fare Revenue**	(\$151,123)	(\$156,870)	(\$156,870)		
Net Expense	\$2,476,630	\$2,007,657	\$2,066,099		

^{*} Includes Service Provider payments for late cancellations, handling charges and 1.76% non-refundable HST

Analysis

The NST Service Delivery Amending Agreement 2019-2020 was structured as an amendment to the original Service Delivery Agreement as a means of simplifying the process, the expectations of both parties, and ensuring compliance with Niagara Region's Procurement By-law. That said, a number of elements have changed from one agreement to the next and are summarized below.

<u>Trip Volume</u> – This Amending Agreement seeks to provide greater certainty for Niagara Region as it relates to budget containment while guaranteeing levels of service. BTS is now limited to a general average of 600 trips per week (average of 100 trips per day). This translates to a maximum of 31,200 trips (600 trips/week for 52 weeks) per year. Within this average, BTS is given some flexibility as to the actual number of daily trips being booked in order to compensate for the variability that trip cancellations and holidays cause. This will result in some days being slightly above or below the average but will ensure continuity of the service throughout the year and predictability for NST users.

<u>Operating Rates</u> – The operating rates in the original Agreement were dependent on the number of zones traveled by the rider; however this was a holdover from an outdated zone-based revenue model. Once provincial accessibility legislation mandated fare parity between conventional and specialized services, revenues for NST were altered to

^{** 2019} Operator Payments and Fare Revenue were estimated using 2018 averages

^{***} Estimated 2020 Consumer Price Index is assumed to be equal to the Municipal Price Index of 2.7%

reflect a flat fare as is charged in the conventional transit delivery model. In order to streamline the billing process, a weighted average was produced based on the typical trip distribution to produce an operating rate for all trips regardless of distance. As a result of the negotiation process, the operating rate was reduced in October of 2018 from \$78 to \$75, and further reduced to \$68 for 2019. A semi-annual CPI adjustment will be calculated and approved by both parties prior to its implementation for the start of 2020.

Stoney Creek Transfer Hub, Phase II - In PW 51-2017, staff identified a program change relating to trips that NST was delivering to Hamilton. These trips present numerous operational challenges for BTS and are exceptionally expensive for Niagara Region as they cost approximately 60% more than the average operating rate. Staff has since developed a successful transfer hub in Stoney Creek where NST riders are able to transfer to the specialized transit service in Hamilton (DARTS) to complete their journey within the City of Hamilton. With the introduction of the hub in 2018, staff were able to streamline the process of booking transfers across two (2) systems to minimize the impact on the rider. Utilizing the transfer hub has two additional benefits. The first being that riders will no longer be limited to traveling for trips which are medical in nature (which is the current policy direction as Hamilton). The second is that the oneway fare for a trip to Hamilton from Niagara is reduced from \$15.00 to approximately \$9.00. With the key elements of the transfer hub in place, staff are set to suspend the direct trips to Hamilton so that the transfer hub's effectiveness can be properly evaluated. This second phase is expected to last for the duration of this Amending Agreement.

Agreement Duration - The duration of this Amending Agreement has been defined as two (2) years with the start date being back-dated to January 1, 2019 to coincide with the official termination date of the original Agreement. Thus the end date is defined as December 31, 2020. This provides stability to the NST service while potential future transit governance models can be examined. An early termination clause has been included which would require Niagara Region to pay \$100,000. That amount would rise to \$200,000 if at the time of early termination BTS is meeting all of the conditions of the Amending Agreement. This will supply BTS a measure of security, as there are significant challenges in ensuring the provision of a suitable fleet with an uncertain duration. If the full term of the Amending Agreement is reached, Niagara Region is not required to pay this fee.

On-board Duration – Under the original Agreement, a passenger was not to be on board an NST vehicle for a duration greater than two times the travel distance and thus not more than 90 minutes. For the Amending Agreement, the "two times the travel distance" has been removed in favour of an overall duration of 75 minutes. This is reflective of the elimination of the direct trips to Hamilton while also providing BTS some additional flexibility to combine similar trips for the sake of operational efficiency.

NST Client Communication – BTS has agreed to supply each client with a formal confirmation of their trip request within 24 hours of that request being received. This confirmation of receipt shall contain the relevant trips details as well as a "Booking ID" (reference number) and will be delivered via text message, email, or phone as preferred by the client. In addition, no less than 24 hours prior to the date of the desired trip, BTS will confirm or deny the availability of the requested trip with the client via the same delivery method as noted above. Clients will be notified that a trip is not confirmed simply by their submission of a request. Only trips that have been confirmed by this second notification are scheduled for delivery. In the event that a trip is delayed, or projected to be delayed, by more than 10 minutes, BTS shall notify the client via text, email and/or phone as preferred by the client. The requirements noted in this section should help alleviate some of the concerns staff have heard from clients regarding confusion in the trip booking/confirmation process as well as reducing the uncertainty for clients when the vehicle is running behind schedule. Staff will continue to work closely with NST clients as well as BTS and make refinements as necessary to enhance and streamline the service.

On-time Performance – BTS is required to maintain an on-time performance of 95 percent. On-time is defined as arriving up to 15 minutes prior, or up to 10 minutes later than the scheduled pick-up time.

The Specialized Transit Service Review is a component of the Inter-Municipal Transit Working Group's work plan under the direction of the Linking Niagara Transit Committee. This two-staged study is intended to provide a jurisdictional scan of specialized transit services within the region, recommend improvements that align with the larger conventional transit governance discussion, and also consists of a thorough review of the existing Service Provider's adherence to the original Agreement. This study is well under way with the results being expected prior to the end of 2019.

That said, staff has recently been provided an initial summary of the NST Operations Review as outlined in PW 39-2019. As these results only highlight opportunities for improvement at a high level, staff will engage with BTS to revise the Standard Operating Procedures to mitigate/eliminate those concerns. Should the necessary changes fundamentally alter the scope of the Amending Agreement, staff will examine opportunities for another amending agreement and/or supplemental service solutions. That summary document will also serve as a reference for monitoring BTS's improvements going forward.

Alternatives Reviewed

Staff have begun reviewing alternative service delivery options in conjunction with the Specialized Transit Service Review; however due to timing limitations, it was determined that the priority should be placed on maintaining service continuity until decisions are made relating to the larger transit governance model.

Staff are currently developing options for an on-demand, dynamic transit service to be deployed in the western and potentially the southern, municipalities of Niagara. In addition, staff have been reviewing alternative service delivery models in conjunction with the Specialized Transit Service Review. There is a strong potential for alignment between these new opportunities and the existing specialized transit system. This alignment would likely yield a significant opportunity to leverage value and service delivery efficiencies rather than providing two distinct, but similar systems. However, due to timing constraints, it was determined that the priority should be placed on maintaining service continuity until decisions relating to the larger transit governance model are made.

As this multi-year Amending Agreement allows for the 2020 rate to be amended to include a Consumer Price Index (CPI) adjustment outside of the formal budget approval process, the Region may need to reduce the number of trips it can deliver to offset the price increase should a commensurate budget increase not be approved by Council and/or should the CPI adjustment exceed the Municipal Price Index of 2.7%.

Relationship to Council Strategic Priorities

This report is being brought forward to seek approval to execute a Niagara Specialized Transit Service Delivery Amending Agreement. Supporting transit was a priority of the previous Council under the Moving People and Goods segment and will continue through the consolidation process.

Other Pertinent Reports

PW 39-2019 – NST Operations Review

PW 23-2019 - NRT and NST 2018 Ridership and Revenue Summary

LNTC 9-2018 – Niagara Specialized Transit Service Review Terms of Reference

PW 40-2018 – NST Negotiations and Program Changes

PW 51-2017 – NST Program Change Options

CAO 8-2017 – Niagara Region's Transit Service Delivery and Governance Strategy

Prepared by:

Robert Salewytsch Program Manager, Transit Services Public Works Department Recommended by:

Catherine Habermebl Acting Commissioner Public Works Department

Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

This report was prepared in consultation with Heather Talbot, Financial and Special Projects Consultant, and reviewed by Matt Robinson, Director, GO Implementation Office.



Subject: Niagara Specialized Transit Operations Review

Report to: Public Works Committee **Report date:** Tuesday, July 9, 2019

Recommendations

 That the findings and recommendations outlined in this report BE CONSIDERED in conjunction with the Niagara Specialized Transit Service Extension recommended in PW 40-2019.

Key Facts

- The purpose of this report is to present major findings and near-term recommendations based on an audit of Niagara Specialized Transit (NST) operations and related customer feedback.
- In December 2015, Niagara Region entered into a Service Agreement with The BTS Network Inc. (BTS) for delivery of NST Service.
- In December 2018, Niagara Region initiated a Specialized Transit Study that included a review of current NST operations and retained IBI Group (IBI) as the consultant. A summary of the key findings are as follows:

Key Operational Issues Identified with BTS

- o Deficiencies in on-time performance 86.4% against required 95%
- Inconsistencies with trip data including erroneous reporting and data-integrity issues
- Inefficiencies with trip scheduling software indirectly affecting customer service
- Deficiencies in NST client communication missed trips (client believes the trip has been booked where BTS has no record of the trip request)
- Non-compliance with the contractual requirements for signage (decal) on vehicles operating NST service

Key Challenges

- High trip cancellation rate by service users (almost twice the industry average)
- Continued and significant increase in the number of new applicants
- Financial constraints due to Niagara Region budget pressures resulting in unattainable performance standards
- Contractor compensation on a per passenger trip (and zone) basis may not be well suited to the current trip volumes and Niagara's geography

Key Recommendations

- Wholesale or significant restructuring of the contract with BTS is not recommended in light of the Specialized Transit Study recommendations coming later in the year
- Reduce advance booking requirement from 48 hours to 24 hours, to reduce trip cancellation rates
- BTS to immediately improve upon the on-time performance, fully comply with timely supply of management reports, have a traceable log of all trip requests with any subsequent changes, fully comply with required decaling and signage on vehicles operating for NST trips

Financial Considerations

There are no financial impacts directly related to this report; however, there could be financial impacts arising out of changes to the NST Service Delivery due to this report's recommendations. Should these changes require funding over the approved annual NST budget, a subsequent report shall be brought for Committee's consideration.

Analysis

As part of the NST Operations Review, IBI carried out a comprehensive audit of NST policies, procedures, and processes as well as the contract compliance by the service provider, BTS. Additionally, IBI obtained feedback from NST customers through onboard surveys and Public Information Sessions.

The audit included consideration of service costs, effectiveness, business processes, data management and reporting, regulatory compliance, fleet suitability, and an analysis of performance measures/metrics. IBI, accompanied by Regional staff, made site visits to the BTS Operations Centre in Niagara, and Customer Service Center in Vaughan.

The findings, observations and the recommendations below are for the near-term. The longer-term recommendations will come as part of the Specialized Transit Review study that includes NST as well as local municipal specialized transit systems.

The findings of the audit and customer feedback need to be viewed in the context of some of the challenges outlined below for context:

- In December 2017, Niagara Region issued a termination notice effective January 1, 2019 per the NST Service Agreement terms and invited BTS to enter into negotiations and continuation of NST service delivery in the interim.
- In 2018, the service delivery parameters were adjusted to keep the operating expenses within the defined NST Operating Budget for the year. This resulted in the adjustment of the number of trips being delivered to an average daily maximum. This

was a change from the previous Service Agreement that did not place any limitation on average daily trips, however placed an upper threshold on the maximum trips that would be a trigger point for termination of the Service Agreement

The NST client base continues to grow consistently and significantly each year
through the application process, which continues to drive demand for the Regional
service. Any effort to accommodate this increase will require corresponding
investments in the program to meet the increasing needs of the community. This will
be further reviewed as part of the Specialized Transit Review study.

Key Findings and Near-term Recommendations

On-Time Performance (2018 Trips) Criteria 95% NST pick-ups operate within the on-time window of 10 min earlier or 10 min later (allowance of 5 minutes for early arrival) Findings 2018 Trips • 0-10 min. (On-time) - 86.5% • 11-30 min. (Late) - 10.4% • > 30 min. (Late) - 3.1%

Observation: BTS is falling short of meeting the performance criteria **Recommendation:** BTS to immediately address this gap to bring up the ontime performance to 95% or better. To address this gap, BTS needs to improve its scheduling processes. For additional details refer below to the box on Trip Scheduling Process (Page 4 of this report).

Data/ Management Reports (2018)		
Criteria	Findings	
Generate financial and operating	 BTS has the ability to generate robust data management reports, maintains record of operator training, staffing schedules, etc. 	
reports for both accounting and general monitoring	 Review of operating, call-log, staffing, complaint, etc. data revealed inconsistencies including erroneous reporting and missing data to Niagara Region BTS recognized the need to hire a statistician to review and ensure data integrity 	
purposes	 'Missing' trip data was primarily attributed to human error (failure to hit 'perform' function on MDT/<i>Ridetrack</i>) BTS misses deadlines in forwarding management reports to Niagara Region even after several reminders, sometimes with inordinate delays in forwarding key reports 	
01 4:	DTC is falling a short of reacting the market reaches a with ris	

Observations: BTS is falling short of meeting the performance criteria Recommendation:

 BTS to immediately comply with the supply of the trip data records with the agreed upon data-fields properly populated ______

Data/ Management Reports (2018)

 BTS needs to deliver agreed upon management reports within the scheduled timeframe as dictated by the Reporting Requirements Tracker

Trip Scheduling Process

Criteria

NST pick-ups operate within a window of \pm 10 min (5 min. allowance on early arrival time)

Passenger on-board time shall not exceed two (2) times the direct travel time, and at no time exceed 90 minutes in total

Findings

- Around 13.5% trips not picked-up within scheduled window
- Passenger on-board time exceeds two times travel time and exceeds 90 minutes

Observations:

- BTS scheduling processes including building of operator runs appear to present an opportunity for enhanced scheduling efficiencies (route optimization)
- BTS' own scheduling software is used to schedule/build runs it does not appear the scheduling algorithm runs optimization based on the spatial and temporal distribution of trips
- Google Map Services is used to determine 'typical' travel times. There
 does not appear to be user defined parameters reflecting performance
 metrics that may trigger violations noted by scheduling staff

Recommendation:

- BTS to review on-board client duration time with Regional staff
- Establish trip booking and scheduling parameters in predefined time increments
- Develop performance metrics (including max. travel times) reflecting zonal service delivery parameters
- Although not a contract requirement, BTS is advised to review its scheduling software for operational efficiencies as this indirectly affects customer service

NST Client Communication

Criteria

Provide a means of notifying passengers in the event of delay, planned and unplanned service disruptions, and a means of recording missed trips and cancellations.

Findings

- Clients complain regarding lack of information when trip changes are made
- Issue with "missing trips" seem to be common, where a customer believes they have a trip

NST Client Communication				
	scheduled but Service Provider has no record of trip			

Observations:

- According to BTS staff, routing is completed 48 hours in advance, so CSRs can issue a text, email, or phone call to all riders of their pending scheduled trips. CSRs make three (3) attempts to reach each rider (two (2) at 48 hours, and one (1) at 24 hours)
- BTS scheduling policy indicates that if a time change is needed, said change is scheduled within the original pick-up window
- Client-based feedback suggest that these policies/processes are not being followed fully

Recommendation:

 BTS to review and update NST client notification procedure to have a traceable communication log of the requested trip and any subsequent changes

BTS Vehicles Used for NST Operations				
Criteria	Findings			
Ensure signage approved by the	Branding and signage (decal) on			
Region appears on each vehicle to	vehicles indicating NST service,			
enable it to be readily recognizable	has not been in compliance with			
as an NST vehicle	contract requirements			
Observations				

Observations:

• BTS is not in compliance with the contract

Recommendation:

 BTS to review with Regional staff the appropriate signage to appear on the NST service delivery vehicles and ensure compliance

Additional Observations

- Trip cancellations are at 23%, with 20.6% on-time cancellations (close to twice industry norm) resulting in service capacity going unused and unnecessary administrative effort being expended. Reduction in the advance booking requirement will help reduce cancellation rates (i.e. reducing trip booking time from 48 hrs. to 24 hrs.)
- NST drivers are courteous and professional
- Significant growth in the number of new clients for 2018 an average of 61 new approved applicants per month
- Region could consider revising the basis of Service Provider compensation per trip basis may not be in the best interest of Niagara Region given the

- size/area of service, distribution of trip origins/destinations, and the need to reflect the *shared-ride* nature of specialized transit service delivery. Alternatives including per revenue hour may be considered.
- It is difficult for the contractor to fully comply with the requirement to accommodate 97.5% of trip requests (as per the Original Agreement) given the financial constraints including limits placed on total trip volume resulting in an unaccommodated trip rate averaging close to 14%. As such, both parties agreed to remove this requirement in the Amending Agreement (PW 40-2019).

Alternatives Reviewed

Based on the NST Operations Review, it is possible to go through a formal procurement process with minor updates to the current service delivery model. This alternative is not recommended at this time for the reasons outlined below:

- The Specialized Transit Study is reviewing the future service delivery models that will feed into conventional transit governance review (currently under initiation) which will consider all of Niagara's specialized transit systems as part of a consolidated transit model. The outcome from this review is anticipated by the first quarter of 2020.
- Any new procurement process ahead of the governance review will require a short-term duration for the agreement. This would create logistical issues in terms of start-up time and resource commitments for potential suppliers of the service and would likely require financial offsets.

Other Pertinent Reports

PW 40-2019 NST Service Agreement 2019-2020 PW 51-2017 Niagara Specialized Transit (NST) Program Change Options PW 61-2015 Niagara Specialized Transit Service Delivery – Contract Award

Prepared by:

Kumar Ranjan, P.Eng. Transportation Lead GO Implementation Public Works Department Recommended by:

Catherine Habermebl Acting Commissioner Public Works Department

Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

This report was prepared in consultation with Robert Salewytsch, Program Manager – Transit Services, and reviewed by Matt Robinson, Director GO Implementation Office.



Subject: Red Light Camera

Report to: Public Works Committee **Report date:** Tuesday, July 9, 2019

Recommendations

1. That Report PW 36-2019 BE RECEIVED for information.

Key Facts

- Niagara Region Staff are developing a business case to study the feasibility of operating a Red Light Camera (RLC) program throughout Niagara Region.
- Niagara Region Staff will report to Public Works Committee as a component of the Road Safety Plan for Niagara Region on the business case results and final recommendations to operate a RLC system by the end of the 2019 calendar year.
- Collisions involving pedestrians, cyclists or vehicles occur at signalized intersections with a high chance of causing serious injury or death.
- Approximately 20% of reportable collisions on Niagara Regional roads in 2016 and 2017 were angle collisions, with a 1.2% increase in 2018.
- In total, there were 947 collisions at Niagara Regional intersections from 2008 to 2017.
- The Province of Ontario legislated that Municipalities can operate a "Red Light Camera" system since November 2000. The cameras are proven to be an effective means to reduce the incidences of red light infractions making streets safer for all users. Appendix 1 provides futher details on red light camera operations and those Municipalities already implementing the program.
- Since the introduction of RLCs, the number of angle collisions have been decreased within those Municipalities that have adopted RLCs (fatality collisions by 40%, Injury collisions by 37%), and the numbers of serious injury for rear-end collisions have decreased by 14% (no record of fatality collisions in rear-end collisions). These benefits also transfer to driver behavior at other intersections that do not have RLCs (a recent study showed a 10.7% reduction in overall collisions and a 22.7% reduction in severe collisions at none-RLC intersections).

Financial Considerations

Funding for this business case will be provided from the 2019 Transportation Services Operating Budget. An RFP will be issued to engage a Consultant to develop a business case for Niagara Region. This will include the associated cost-benefit analysis and setting out the targets, policies, and action plans that will guide Niagara Region in creating safer roads by reducing the number and severity of motor vehicle collisions at intersections.

Future capital and operating costs associated with this program will be considered as part of future budget deliberations by Council.

Analysis

The Province of Ontario introduced the RLC enforcement pilot project for prosecuting red light offenders using photo evidence in 2000. The resulting evaluation study indicated the program was a success and in August 2004, legislation became permanent. Currently, the program is running under Phase 3 which started in 2017 and will be operational through 2021, with an option to join a five (5) year period from 2022 to 2026. Niagara Region will be investigating potential start dates to join the red light camera program and will be bringing this back for consideration in a future report to Council.

Collisions resulting from red light running tend to be more severe than other intersection collisions because they usually involve at least one vehicle travelling at higher speeds. In the most severe collisions, the vehicles hit each other at right angles. The resulting side-impact collisions cause severe injuries, sometimes leading to death.

It can be a challenge, time-consuming and expensive for police enforcement of red light infractions at intersections which add high operational costs to policing and the overall municipal tax burden on residents.

RLCs are a well-established safety enforcement tool in Ontario. The enforcement, along with an education component, have proven to reduce the number of right-angle collisions at intersections.

Based on the business case recommendation, coordination with the Ministry of Transportation and Joint Processing Center, Niagara Regional Staff will report back to the Public Works Committee on options to join, that include safety effectiveness measures, a financial update and cost and revenue potential.

What is Red Light Camera Enforcement?

As a vehicle approaches a red light at or above a set speed, loops immediately in front of the intersection stop bar trigger the red light camera system. Two photographs are

taken; the first photograph shows the red signal and the vehicle positioned at the stop bar before entering an intersection while the second photograph shows the red signal and usually the vehicle positioned in the intersection. Both of the photos are taken of the rear of the vehicle and must clearly show a licence plate.

If the images clearly show a red light violation, then an infraction notice is mailed to the registered owner of the vehicle. Similar to parking tickets, RLC infraction notices are the responsibility of the vehicle owner, no demerit points are involved. It should be noted that vehicles that are in the intersection when the red light comes on are not photographed and are not subject to a RLC violation.

Superimposed on the photograph is identifying information related to the offence to clearly show that the vehicle was moving at the time (i.e., location, time, speed).

The effectiveness of red light cameras can be viewed in terms of reductions in crash frequency, crash severity, and frequency of red light running violations.

Joint Processing Centre (JPC):

Operated by the City of Toronto, the JPC views the photos and requests vehicle plate ownership information from MTO to match the ownership information with photos and form the belief that an offence was committed and issues a ticket. Accordingly, Provincial Offences Officers file charges (certificate of offence with the Court at the designated Municipality).

The City of Toronto chairs the RLC Program Steering Committee that manages and updates agreements between Municipalities; whereas the JPC obtains approval from existing Municipalities for 'new' partners and provides approval in principle to the Municipality and MTO.

Role of the Ministry of Transportation

The Province provides plate registrant information to Municipalities via the JPC and monitors contractual obligations between the Province and participating Municipalities. Operational Agreements include provisions for:

- Site-specific signage advising of camera enforcement;
- Municipally-led public awareness campaigns on red light running;
- Monitoring of safety effectiveness; and,
- Funding all aspects of the program, including reimbursement of Provincial costs.

Role of Municipality

The Municipalities lead and fund the Red Light Camera Program. The program is a partnership between the Provincial Government and Municipalities.

Municipalities must enter into three (3) agreements to operate RLC in their jurisdiction. The Vendor Agreement is to supply, install, operate and maintain camera equipment, and will pay for all equipment, technical and installation costs for the cameras.

The second agreement is the Processing Agreement with the City of Toronto Joint Processing Centre for the operation and cost-sharing of the Processing Centre, which issues offence notices. The last agreement is the Operational Agreement with MTO to provide plate registrant information to the JPC for distribution to Municipalities for prosecution purposes, including certified documents when required at trial.

Over the years, this approach ensures unified and consistent prosecution of offences protecting the overall integrity of the legislative regime.

Financial Implication

The cost to implement a RLC includes the operating cost of the RLC contract, RLC processing fees (City of Toronto), vehicle license information (Province), as well as an education/awareness program. The RLC contract is a fixed fee per location.

A red light camera costs approximately \$30,000 annually which includes the lease, installation and operational costs of each camera (the Vendor cost). There are also additional costs associated with the program such as supporting the Toronto Joint Processing Centre (approximately \$6,000 annually per camera), costs associated with retrieving data from the Ministry of Transportation (approximately \$30,000 per Municipality annually), and other related costs.

Over time, the number of right-angle collisions at the intersections will decrease, which has an associated social cost; however, the fine revenue will also decrease as there is improved compliance with the red lights.

Alternatives For Consideration

Potential alternatives will be provided in a future report to the Public Works Committee once costs and implications are defined through the finalization of the evaluation and administration process.

Relationship to Council Strategic Priorities

Alignment to Niagara Region Transportation Master Plan

Niagara Region is undergoing significant change and by 2041 will have grown and evolved on economic, demographic, social and technological fronts. This recommendation will support growth and enhance Niagara's position globally by ensuring the road network is safe.

This is a critical step forward to adopting Vision Zero Road Safety Plan in Niagara Region, by ensuring safe speed limits, conflict-free street design, and up-to-date driver enforcement to prioritize the safe passage of our most vulnerable populations.

Other Pertinent Reports

None.

Prepared by:

Sulaf Alkarawi, P.Eng. Associate Director Transportation Planning Public Works Department Recommended by:

Catherine Habermebl Acting Commissioner Public Works Department

Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

This report was prepared in consultation with Carolyn Ryall, Director Transportation Services, Brian McMahon, Program Financial Specialist and Donna Gibbs, Director Legal and Court Services.

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Appendix 1

Check sheet: Additional Information and Facts

1. What is red light running and how do cameras work?

"Red light running" is when a driver enters an intersection after the light has turned red.

Red Light Cameras (RLC) are installed to photograph vehicles that run red lights.

The cameras are in operation 24 hours a day, seven (7) days a week. They are connected to the traffic light (signal) and to sensors that are installed just before the stop bar. The system constantly monitors the traffic light (signal), and the camera takes a picture of any vehicle that does not stop at the red light.

The camera records the:

- Date
- Time of day
- The exact time the car crossed the stop line and the length of time that the red was active
- Vehicle speed
- License plate

The Provincial Offence Officers review these photos, and mail tickets to owners of the vehicles within three (3) weeks from the time of the violation.

2. How do red light cameras increase safety?

Red light cameras are adopted as a safety initiative at intersections to prevent motorists from running red lights.

Red light cameras cause people to slow down as drivers know that a camera is there; which cause a change in driver behavior. This awareness helps to reduce the accidents and injuries at intersections and changes driver behaviour over time.

Red light cameras have demonstrated a reduction of right-angle collisions at intersections.

3. Is red light running a safety problem in Ontario?

- Based on Ontario data, red light running accounts for:
- Approximately 0.80% of all HTA convictions. (2015 Ontario data)
- In 2014, approximately 24% of fatal collisions at municipal intersections with traffic signals (13 of 55 such collisions) were due to red light running. (2014 Ontario collision data).

- The participating RLC municipalities issued a total of 974,276 red light camera offence notices to Ontario plate holders between January 1, 2001, and December 31, 2017.
- The most serious type of collision at a municipal intersection is an angle collision.
 Results from the Red Light Camera pilot evaluation showed cameras successfully reduced this type of collision by 25%.

4. Which municipalities currently participate in the Red Light Camera Enforcement Program?

- Toronto, Hamilton, Ottawa, London, Peel Region, Waterloo Region, Halton Region, and York Region currently participate in the Red Light Camera Enforcement Program.
- The participating municipalities by the end of 2018 will be utilizing 336 cameras at 331 high-risk intersections:
 - Toronto (149 cameras; 144 intersections),
 - Ottawa (52 cameras; 51 intersections),
 - o Hamilton (24 cameras; 24 intersections),
 - o Regional Municipality of Peel (28 cameras; 28 intersections),
 - o Regional Municipality of Waterloo (16 cameras; 16 intersections),
 - Regional Municipality of Halton (17 cameras; 17 intersections),
 - o Regional Municipality of York (40 cameras; 40 intersections),
 - City of London (8 cameras; 8 intersections).



Subject: Automated Speed Enforcement – Safer School Zones Act

Report to: Public Works Committee **Report date:** Tuesday, July 9, 2019

Recommendations

- 1. That Regional Staff BE AUTHORIZED to partner with the Ministry of Transportation, the Ministry of the Attorney General, and other partnering Municipalities in the Ontario Traffic Council's (OTC) Automated Speed Enforcement (ASE) Working Group (WG) to set-up a consistent program for all Municipalities in which to operate ASE technology in Ontario, with a target date of Fall 2019 for Legislative Approval.
- 2. That Regional Staff REPORT BACK to Public Works Committee upon completion of the OTC working group review and RFP findings, on the award terms and conditions for the Province approved Vendor to supply, install, operate and maintain the ASE System throughout Niagara Regional roads, for a five-year period from 2019 to 2023 with the option to extend up to five additional years; including Transportation operating costs.

Key Facts

- Speeding is a primary crash factor and a leading road safety problem, often contributing to one-third of fatal crashes and serving as an aggravating factor in most crashes.
- In 2016, fatal and serious injury collisions on Niagara Regional roads increased by 9.31% over 2015 recorded statistics.
- The statistical analysis of 2016 ranked Niagara Region 20% higher in the number of collisions than similar jurisdictions within Ontario.
- There were approximately 2,648 traffic collisions on Niagara Regional roads in 2017, of which, approximately 17 collisions resulted in traffic fatalities and 324 in serious injuries.
- For many years, Niagara Regional Staff have been dealing with concerns raised by residents regarding speeding; in particular in school zones.
- Bill 65 Safer School Zones Act, 2017 allows Municipalities, through by-law, to implement and operate technology-based enforcement in community safety zones and school zones on roads under their jurisdiction.

- Automated speed enforcement is complementary to traditional enforcement, focusing on school safety zones and community safety zones.
- The OTC has formed a multi-Municipal working group consisting of Municipalities across Ontario, the Ministry of Transportation Ontario and the Ministry of the Attorney General to develop and cost-share an ASE program for Municipalities throughout the Province.
- By participating in the Working Group Committee, Niagara Regional Staff will have the opportunity to ensure that the needs of Niagara Region will be incorporated in the ASE program and Staff will understand the requirements associated with implementing this new safety tool.

Financial Considerations

Initial funding of this safety initiative will be covered under the approved 2019 Transportation Services Operating Budget for the cost of partnership with the other Municipalities and OTC resources to discuss threshold speeds, site selection criteria, prosecuting issues, legal agreement, communications, joint processing centre requirements, RFP evaluation and other important program details.

Regional Staff will be finalizing and reporting back to the Public Works Committee details of implementation, operation and cost for further consideration. This will be jointly discussed and finalized with Legal and Court Services Staff and introduced as part of that upcoming report.

Analysis

On May 30, 2017, the Ontario Legislature passed Bill 65, the Safer School Zones Act that amended the Ontario Highway Traffic Act (HTA) to, among other things, authorize Municipalities to use ASE technology (known as photo radar) as a tool to address vehicle speed concerns and collision patterns involving speeding.

The Ministry of Transportation is currently preparing the necessary regulations to allow for the implementation of Bill 65. It is anticipated that these changes will be brought forward in Fall 2019, following which municipalities will be able to employ the use of the ASE in community safety and schools zones.

Bill 65 - Safer School Zones Act

Bill 65 amendments to the HTA permits Municipalities to utilize ASE in school zones and in community safety zones where the prescribed rate of speed is less than 80 km/h, and to reduce speed limits on roads with statutory speed limit of 50 km/h by designating areas (by by-law) where speed limits may be lower.

The Ministry of Transportation, in coordination with Ontario Traffic Council, the City of Toronto and 15 other Municipalities is currently developing the necessary regulatory changes to allow for the above.

Ontario Traffic Council (OTC)

The OTC mission statement is "OTC is the voice for enhancing the engineering, education and enforcement sectors of the traffic management sector in Ontario". As part of their mandate, OTC organized the ASE Working Group that includes to date 15 Municipalities, the Ministry of Transportation and the Ministry of the Attorney General to discuss the development and implementation of ASE. Niagara Regional Staff aim to work in partnership with all parties in the working group to set-up a consistent program for Municipalities in which to operate ASE in Ontario.

A RFP for the supply, installation, operation and maintenance of ASE equipment was issued by the City of Toronto in April 2019. All participating Municipalities will be able to partake in the execution of the ASE contract. This process ensures the same equipment is used throughout the Province with cost savings associated with group purchasing. Similar to the red light camera program, the Ontario Highway Traffic Act would have to be amended to include the specific model of ASE equipment. Municipalities will only use the equipment specified in the Highway Traffic Act.

The ASE WG is also drafting guidelines for the use of temporary and permanent ASE equipment. The guidelines will include recommendations for where ASE should be used, not used and suggestions to help Municipalities optimize the use of the ASE. At this stage, the proposed ASE will be restricted to school zones and community safety zones only. ASE outside those areas are not anticipated at this time.

Provincial Offences Act Court Implications

Speeding infractions are handled by the Municipal Provincial Offences Act Courts pursuant to a Memorandum of Understanding with the Province. In some municipalities there is a concern that Automated Speed Enforcement may overwhelm the court system and that the Province will not be able to supply enough Justices of Peace for trials. This is not anticipated to be the case in Niagara Region.

To facilitate the prosecution of offences, a Joint Processing Centre will be introduced as the best model to ensure consistency and integrity in the operations of ASE. This process would allow Municipalities to share and reduce Municipal operating costs associated with processing infractions. The City of Toronto will establish the Joint Processing Centre for ASE infractions in the Province for all Municipal partners.

Details of Fall 2019 Report to Public Work Committee

To date, nine Municipalities are designated to introduce automated speed enforcement by December 1, 2019, namely, City of Toronto, City of Mississauga, City of Burlington, City of London, City of Brampton, City of Ottawa, Town of Ajax, Regional Municipality of Peel, Regional Municipality of Waterloo, and Regional Municipality of Durham to place 189 automated speed cameras. In total, sixty (60) cameras will be fully operational by December 2019.

With the approval of the Public Works Committee, this will also allow Niagara Region to be a partner of this program.

The Staff report will be prepared to provide an update to the Public Works Committee on:

- Information on how the automated speed enforcement program will be administered and operated throughout the Province
- Financial impact of the program for the proposed 2020 budget
- Results of the Request for Proposal (RFP) 9148-19-0048 for the provision of Automated Speed Enforcement Services in the Province issued by City of Toronto
- Request authority to award the contract to the recommended bidder
- Request authority to enter into operational agreements with Joint Processing Center and Ontario Ministry of Transportation
- Details of communication and education plan

Relevant Consultation

This report has been written in consultation with Staff from Legal and Court Services, Public Health, and the members of the Niagara Student Transportation Services, the Ontario Traffic Council and Steering Committee Automated Speed Enforcement Working Groups.

Alternatives Reviewed

Potential alternatives will be provided in a future report to the Public Works Committee once costs and implications are defined through the finalization of the evaluation and administration process.

Relationship to Council Strategic Priorities

Alignment to Niagara Region Transportation Master Plan

Niagara Region is undergoing significant change and by 2041 will have grown and evolved on economic, demographic, social and technological fronts. This

recommendation will support growth and enhance Niagara globally by promoting an integrated network of roads and highways for the safe movement of people and goods.

Also, this is a step forward to adopting a Vision Zero Road Safety Plan in Niagara Region; helping to reduce aggressive driving and speeding in areas within Niagara Region that have higher concentrations of school children and families.

Other Pertinent Reports

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Prepared by:

Sulaf Alkarawi, P.Eng. Associate Director Transportation Planning Recommended by: Catharine Habermebl

Acting Commissioner
Public Works Department

Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

This report was prepared in consultation with Carolyn Ryall, Director Transportation Services, Brian McMahon, Program Financial Specialist and Donna Gibbs, Director Legal and Court Services.



Waste Management Services 1815 Sir Isaac Brock Way, Thorold, ON L2V 4T7 905-980-6000 Toll-free: 1-800-263-7215

MEMORANDUM

PWC-C 19-2019

Subject: Waste Collection Contract RFP Schedule

Date: Tuesday, July 9, 2019
To: Public Works Committee

From: Sherri Tait, Acting Manager, Policy and Planning

In addition to confidential report, PW 43-2019, this memorandum is to provide Public Works Committee members information on the proposed timelines for the next waste collection RFP.

Proposed Timeline of Next Collection Contract RFP

Date	Action	
July 2019	Release of RFP for next Collection Contract	
August 2019	Closing Date of RFP	
September / October	Review and Evaluation of RFP, Draft and Finalization of	
2019	Report to Council	
October / November		
2019	Council Award	

Respectfully submitted and signed by

Sherri Tait
Acting Manager, Policy and Planning
Waste Management Services



MEMORANDUM

PWC-C 20-2019

Subject: Status of the new Niagara-on-the-Lake Wastewater Treatment Plant

Testing and Commissioning Process

Date: Tuesday, July 9, 2019
To: Public Works Committee

From: Joe Tonellato, Director, Water and Wastewater Services

The purpose of this memorandum is to inform Public Works Committee members about the status of the new Niagara-on-the-Lake Wastewater Treatment Plant testing and commissioning process.

On Tuesday, June 25, Niagara Region Operations and Maintenance Staff, working with Varcon Construction and Procon Constructors, began to direct sewage flows into the new wastewater treatment plant from three sewage pumping stations; namely Lakeshore Road PS, Garrison PS and William Street PS. As a result of this specific work, the 30-day commissioning test of treating residential sewage commenced. Appendix 1 provides an outline of the testing and commissioning process.

Staff will carefully monitoring the plant operations over the next 30 days and if there are no further deficiencies identified, and we are confident all issues have been addressed by the contractor and all processes are working at full function, Niagara Region will be ready to place the plant into full operation.

Niagara Region appreciates the patience of the residents of Niagara-on-the-Lake as we have worked through this process and look forward to a positive outcome. Staff will continue keep stakeholders informed of the progress.

Respectfully submitted and signed by	
Joe Tonellato	
Director, Water and Wastewater Services	

Appendix 1 Niagara on the Lake WWTP – Testing and Commissioning Process

Niagara on the Lake WWTP - Testing and Commissioning Process

