



THE CORPORATION OF THE TOWN OF AMHERSTBURG

OFFICE OF ENGINEERING AND PUBLIC WORKS

MISSION STATEMENT: Committed to delivering cost-effective and efficient services for the residents of the Town of Amherstburg with a view to improve and enhance their quality of life.

Author's Name: Eric Chamberlain	Report Date: October 21, 2017
Author's Phone: 519 736-3664 ext. 1312	Date to Council: November 6, 2017
Author's E-mail: echamberlain@amherstburg.ca	Resolution #: N/A

To: Mayor and Members of Town Council

Subject: Sidewalk Winter Control

1. RECOMMENDATION:

It is recommended that:

1. The report from the Manager of Public Works dated October 21, 2017 regarding the Sidewalk Winter Pilot Project **BE RECEIVED**; and,
2. The Sidewalk Winter Control Program proposed in the 2018 Budget **BE CONSIDERED** as part of the overall 2018 Operating Budget.

2. BACKGROUND:

During the 2015 winter control season, Administration attempted to utilize and enforce the Council approved sidewalk removal By-law 2005-04, which requires that residents clear the sidewalk adjacent to their property of snow and ice within 12 hours of a 5 centimeter snow fall. There were inconsistencies in meeting the objectives of the By-law due to lack of cooperation from residents in the effort to get the sidewalks cleared and salted. This became a significant concern with properties along Front Road as the amount of snow deposited by the County's plowing operations was significant during snow fall events. As a result of resident complaints, Council opted to place a moratorium on enforcement of By-law 2005-04. Further, Public Works and Parks staff was directed to complete sidewalk winter maintenance on a complaint basis.

On January 9, 2017, Council passed the following motion:

1. *The report from the Manager of Public Works dated December 21, 2016 regarding Sidewalk Winter Control Program BE RECEIVED;*
2. *The moratorium placed on enforcement of Bylaw 2005-04 being a by-law respecting the removal of snow and ice from the sidewalks on the highways in front of, alongside or at the rear of occupied or unoccupied premises BE WAIVED;*
3. *The Manager of Public Works BE AUTHORIZED to implement the proposed pilot program for enhanced winter sidewalk maintenance for 2016/2017.*
4. *The Manager of Public Works BE DIRECTED to bring back a report to Council after the 2016/17 Winter Control season with costing and findings of the 2016/17 season.”*

3. DISCUSSION:

The Roads Division completed winter sidewalk maintenance for all sidewalks throughout the Town in the early 2017 winter months. There are approximately 60 km of sidewalks in the Town. For convenience, attached to this report are maps showing the Town’s sidewalks. The Roads Division rented two Trackless machines and purchased a 3400 Ventrac machine equipped with plows and salting equipment.

The pilot program received many positive comments and responses from residents. There were however, concerns reported to the Public Works department. The following three concerns were raised by the residents:

1. Numerous complaints about damage to grass due to equipment.
2. Residents requesting pet friendly ice melting material.
3. Plow equipment and salt damaging the concrete driveways.

Prior to the pilot project, Public Works would maintain sidewalks on or adjacent to Town owned properties and wide pathways. In addition to Public Works, the Parks Division maintains the sidewalks and pathways throughout parks in the downtown core. The remaining sidewalks were completed only on a complaint driven process through by-law enforcement. When the By-law Officer receives a complaint, the officer issues an order to comply with the property owner adjacent to the sidewalk in question. The following is the process under the current by-law.

	Snow and Ice Accumulation	Time Frame to Clean Sidewalks	By-Law Enforcement
Commercial Properties	Greater than 5 centimetres (2 inches)	Within 12 hours or within 4 hours of the commencement of business day	Written warning and directed to remove the snow and ice within 4 hours. Failure to comply results in Public Works or contractor

			will clean the sidewalk at the expense of the owner.
Residential Properties	Greater than 5 centimetres (2 inches)	Within 12 hours or within 4 hours of the commencement of business day	Written warning and directed to remove the snow and ice within 8 hours. Failure to comply results in Public Works or contractor will clean the sidewalk at the expense of the owner.

Despite municipal by-laws requiring adjacent owners to maintain the sidewalk, if an injury occurs because of the sidewalk being in unreasonable disrepair, the municipality may be liable. In addition, municipalities may be liable for accidents to pedestrians caused by snow and ice on sidewalks. Case law has found municipalities grossly negligent in situations where injury to pedestrians was caused by icy or snow covered sidewalks.

The following are considerations in deciding whether there has been gross negligence:

- Severity and duration of snowfall;
- Time elapsed between snowfall and efforts to clear the sidewalks;
- Whether the municipality knew of the specific problem;
- Other contributing causes to the accident, for example, whether there was a hole in the sidewalk under the snow, or an excessive slope in the sidewalk design;
- Sincerity of efforts to clear the snow.

The Manager of Public Works has received information from local municipalities on their winter control sidewalks procedures. The following is the information gathered:

Municipality	Approved Snow Removal By-law	Level of Service and Resources
Town of Essex	By-law 1108	<ul style="list-style-type: none"> • Only completes snow removal on sidewalks in designated business area of the downtown core. • Service contracted out. • Commercial owners are required to remove snow within 4 hours • Residential owners are required to remove snow within 12 hours
Town of Tecumseh	By-law 2016-06	<ul style="list-style-type: none"> • Completes has designated the snow removal of 35 km of approximately 80 km of sidewalks through the town.

		<ul style="list-style-type: none"> • One (1) Trackless MT6 with attachments and Bobcat. The Bobcat is too big for sidewalks and only works on paths. • It takes Tecumseh staff 16-24 hours to make a single pass over 35 km of sidewalks. • Commercial owners are required to remove snow within 4 hours • Residential owners are required to remove snow within 12 hours
Town of Lakeshore	82-2001	<ul style="list-style-type: none"> • Contracts out 38 km of sidewalks and trails.
Town of LaSalle	No By-law	<ul style="list-style-type: none"> • Commencing a winter control for sidewalks this year.
Municipality of Leamington	No By-law	<ul style="list-style-type: none"> • Town completes approximately 75 km of sidewalks. They do not clear trails. Trails are designated "Recreational Trails". • 3 John Deere utility tractors each with a plow and salter, 1 snow blower attachment if needed • It takes Leamington staff 8-12 hours to make a single pass over 75 km of sidewalks. • Town goal is to have snow removal on sidewalks completed within 24 hours

Due to the overall success and positive feedback received from residents regarding the pilot program, Administration recommends that sidewalk winter maintenance continue to be performed by Town staff and the following sidewalk winter maintenance procedure be implemented moving forward. This procedure will be included in the overall Winter Control Plan for the Town of Amherstburg:

Sidewalks

The Town of Amherstburg is responsible for cleaning all sidewalks clear of snow and ice. Commencing with the Downtown Core Area, sidewalks are divided into two (2) main routes, Primary and Secondary Routes. Upon completion of the primary route, crews will then proceed to the secondary route within the urban maintenance areas. The objective is to ensure that all sidewalks are cleaned within the time period of 24 hours after the cessation of the snow storm. In the event of recurring snow accumulation within the 24 hours, municipal staff will commence in the Downtown Core Area before proceeding with sidewalks in the maintenance areas.

The amount of time required to complete the sidewalks can vary significantly, depending on the accumulation and the overall conditions. Normally, it would take approximately eight (8) to eleven (11) hours to complete the sidewalks. Crews are often sent out for several days after an event to 'spot salt' areas where water from melting snow has run onto the sidewalk and freezes again at night.

Equipment

There are various pieces of equipment that can be utilized for winter sidewalk maintenance. The cost of this equipment can range from \$40,000 to \$175,000 per unit. For the past 2 years, Public Works has utilized Trackless machines at a rental cost of \$3,100.00 per month. In addition, Administration purchased a Ventrac machine to assist the winter sidewalk maintenance. During the winter season, Administration had various equipment suppliers provide demonstrations of their equipment. These included:

1. Holders Tractor
2. Trackless
3. Toro Groundsmaster 7210 – Polar Trac
4. Kioti Tractor
5. John Deere Tractor

All of these units are versatile and provided alternate uses to winter sidewalk maintenance including grass cutting and grooming. If Council approves a permanent winter sidewalk maintenance program, Administration is recommending the purchase of 2 Toro Groundsmaster 7210 units with 72” grass cutting deck and Polar Trac package. The units would be utilized by Public Works to complete winter sidewalk maintenance and will also be utilized by the Parks Department to maintain parks and Town properties. In addition to the 2 Toro units, Administration recommends purchasing a trackless unit. In the future, consideration should be given to purchasing a trackless unit when the Parks Department replaces the Jacobson wide area mower.

4. **RISK ANALYSIS:**

The Town is ultimately responsible for sidewalk winter maintenance and could be held liable for gross negligence in claims that result from snow and ice accumulation on sidewalks. Once the program is implemented and the equipment purchased, the equipment will be outfitted with GPS units to track location and attachment operations (i.e. plow: up/down and salter: on/off). This will provide data that can be used by the municipality during litigation procedures in slip and fall claims.

5. **FINANCIAL MATTERS:**

There are various pieces of equipment that could be purchased in order to complete winter sidewalk maintenance. The cost of winter sidewalk units can range from \$40,000 to \$170,000. Administration recommends that the units should be versatile and used throughout the year by the Public Works department and Parks department. During the past two winters, Public Works has utilized trackless machines at a rental price of \$3,100 per month per unit. In addition, Administration purchased 2013 Ventrac from a local contractor for \$24,000.00.

Administration is recommending the purchase of 2 Toro Grounds Master 7210 units with 72” grass cutting deck and Polar Trac Package. The total cost for these units is \$130,000.00. The unit would be leased-to-own over five year duration with 20% remaining to be paid out at the end of the five years. The monthly amount is

approximately \$2,500.00. This lease will be covered under the Public Work Winter Control Operating budget. These units will replace the 2009 and 2011 602" Exmark Mowers that are currently in the Parks equipment inventory.

In addition to the Toro units, Administration is recommending the purchase of a Trackless MT-7 with winter attachment and boom mower for summer use at a sum of \$189,900.00. The unit would be leased-to-own over a five year duration with 20% remaining to be paid out at the end of the five years. The monthly amount is approximately \$3,100.00. This lease will be covered under the Public Work Winter Control Operating budget.

Based on the past two winter seasons these cost can be borne by the existing budget however in more significant winter seasons variances may be expected.

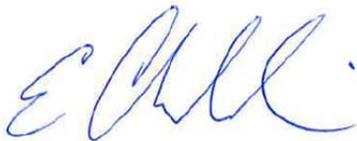
6. CONSULTATIONS:

The Municipal Clerk and the Manager of Licensing and Enforcement were consulted and concur with the recommendations.

7. CONCLUSION:

In January 2107, Council approved a pilot project for winter sidewalk maintenance. The project was initiated due to a moratorium placed on the enforcement of the current bylaw. The Public Works department maintained 60 km of sidewalks through the winter of 2017. Should Council wish to continue this program, the following motion will need to be considered at the December 11, 2017 Council meeting:

1. The Sidewalk Winter Control Program proposed in the 2018 Budget **BE APPROVED**.
2. Bylaw 2005-04 being a by-law respecting the removal of snow and ice from the sidewalks on the highways in front of, alongside or at the rear of occupied or unoccupied premises **BE REPEALED**; and,
3. Administration **BE DIRECTED** to include the Winter Sidewalk Maintenance procedure in the overall Winter Control Plan for the Town.



Eric Chamberlain
Manager of Roads and Fleet

EC/

Report Approval Details

Document Title:	Sidewalk Winter Control.docx
Attachments:	N/A
Final Approval Date:	Nov 6, 2017

This report and all of its attachments were approved and signed as outlined below:



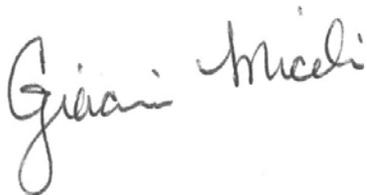
Antonietta Giofu - Nov 3, 2017 - 3:37 PM



Justin Rousseau - Nov 3, 2017 - 4:32 PM



Mark Galvin - Nov 3, 2017 - 4:58 PM



John Miceli - Nov 6, 2017 - 9:14 AM



Paula Parker - Nov 6, 2017 - 9:38 AM