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Staff Report

Infrastructure and Public Works

Report To:	Committee of the Whole
Meeting Date:	January 14, 2019
Report Number:	CSPW.19.006
Subject:	Updates to the Town's Winter Maintenance Standards and Level of
	Service Policy
Prepared by:	Cameron Wilson, Public Works Maintenance and Compliance
	Coordinator

A. Recommendations

THAT Council receive Staff Report CSPW.19.006, entitled "Updates to the Town's Winter Maintenance Standards and Level of Service Policy";

AND THAT Council repeal Policy POL.COR.13.22 entitled "Minimum Winter Maintenance Standards and Level of Service";

AND THAT Council adopt Policy POL.COR.19.XX entitled "Winter Maintenance Standards and Level of Service" as attached to this Staff Report CSPW.19.006.

B. Overview

The purpose of this Staff Report is to review the amendments to the Minimum Maintenance Standards for Municipal Highways (O. Reg. 239/02) and to update the Town's policy for Winter Maintenance Standards and Level of Service.

C. Background

Recent changes were made to the Provincial Minimum Maintenance Standards for Municipal Highways (O. Reg. 239/02) ("the MMS Regulation") made under the Municipal Act, 2001. The changes to the MMS Regulation came into effect May 3rd, 2018. The revised MMS Regulation is provided as Attachment #1 with the recent amendments highlighted.

The MMS Regulation is designed to provide municipalities with a "due diligence" defense in the event of a vehicular accident, slips, trips and falls, or other incidents. The standards outlined in the MMS Regulation are not mandatory. As such, the Town does need to explicitly follow the MMS Regulation. If the Town cannot meet the MMS Regulation as set out, it can still use Section 44 (1) of the Municipal Act to demonstrate that the service provided was reasonable in the circumstances for both weather and road conditions. In short, the Town can set its own Winter Maintenance Standards based on its needs and resources.

Committee of the Whole CSPW.19.006

Without a doubt, the Town has an obligation to maintain its road network at an appropriate safe level of service. To achieve this, the Town utilizes the MMS Regulation as a framework and benchmark for determining the Town's maintenance standards and to ensure that appropriate winter maintenance practices are developed and implemented to meet the Common Law test of reasonableness.

The Town's Winter Maintenance Standards were last updated in October 2013 (Attachment #2) to reflect the previous changes to the MMS Regulation which came into effect in January of 2013.

D. Analysis

The 2018 amendments to the MMS Regulation include:

- 1. The introduction of winter maintenance standards for bicycle lanes;
- 2. The introduction of winter maintenance standards, including patrol obligations, for sidewalks;
- 3. The ability for municipalities to declare a "significant weather event" with implications for winter maintenance on roadways, bicycle lanes and sidewalls for the duration of the event; and,
- 4. Inspection standards for areas "adjacent to sidewalks"
- 5. Sidewalk Surface Discontinuities
- 6. Pothole repairs
- 7. Road classification system

The proposed revised Town policy for Winter Maintenance Standards and Level of Service (the "Policy") is provided as Attachment #3, and matches or exceeds, the amendments to the MMS Regulation. A discussion of the modifications to the Policy to reflect the above amendments is provided as Attachment #4 for information. A summary Road Classification Map and Level of Service Chart is given as Attachment #5.

Of particular note, the proposed Town Policy does not achieve one aspect of the MMS Regulation - Snow Accumulation and Icy Roadways (Section 4). This is not new but continues the level of services established within the October 2013 Policy. The Town's Policy mirrors the level of service established in the pre-2013 MMS Regulation. The 2013 amendments to the MMS Regulation made it difficult for municipalities without dedicated 24 /7 winter maintenance coverage to achieve the winter maintenance requirements for snow and ice removal.

When a municipality is not resourced or able to adopt the MMS Regulation as written, the municipality can set a municipal specific prescribed level of service. With respect to Section 4 of the MMS Regulation, the Town's Policy is to start the response clock once Road Operation's Staff has determined that the snow accumulation on the roadway is equal to, or greater than,

the depth set out in Table 1 of the Policy. For example, a Class 4 Road¹ would be plowed within 16 hours after it has been determined that there is 8cm of snow accumulated on the road surface. Conversely the MMS Regulation sets out that a Class 4 Road should be cleared within 16 hours or before the accumulation of snow reaches a depth of 8cm. The Town is unable to consistently achieve Section 4 of the MMS Regulation with its current complement of staff and equipment.

In order for the Town to achieve Section 4 of the MMS Regulation the Town would need to create an afternoon or second shift for each route, or have sufficient on-call contracted positions to field a full crew within the time limits prescribed. The Town currently operates eleven winter control vehicles; ten of the vehicles are operated on a single shift while the patrol truck is operated with two shifts. To provide a second shift would require ten additional contract drivers for the winter control period. With the additional drivers, an additional supervisor would also be required. Winter control costs would also increase due to fuel usage, winter material costs, additional repairs to equipment and a reduced life cycle of equipment from 10 years to 7 years. The Town would also require improvements to the Ravenna Yard and/or an additional facilities to accommodate additions to the Town's Staff and fleet storage and maintenance needs. A needs assessment completed in April 2010 identified expansion at the Ravenna Works Yard as the preferred solution as the Town's fleet grow. The cost of the improvements are carried in the Development Charges Background Study. An update to the 2010 Needs Assessment is planned for 2019 to address the question of internal or contract snow removal and the resulting facility requirements.

It is important to clarify that the proposed Policy is not a reduction in service from previous years but that the proposed Policy ensures residents and visitors will continue to receive the same level of service that has historically been provided.

It should be noted that compliance with the MMS Regulation or a municipal established winter maintenance policy is not an absolute defense against litigation and/or liability but instead shows due diligence and proactive consideration of winter maintenance challenges. There is marginal enhanced risk associated with not fully complying with the MMS Regulation but in the end is a balance between the level of risk and the increased cost.

The word "minimum" is being removed from the MMS Regulation and the Town's Policy based on the advice of industry legal advice. The title of the MMS Regulation will be changed when an update to the Municipal Act, 2001 is undertaken.

Staff are recommending that Council repeal Policy POL.COR.13.22 entitled "Minimum Winter Maintenance Standards and Level of Service" and adopt Policy POL.COR.19.XX entitled "Winter Maintenance Standards and Level of Service" as attached to this Staff Report CSPW.19.006.

¹ The road class is established through a combination of posted road speed limit and the volume of traffic. Generally, the higher the road speed and the higher the traffic volume, the higher the expected level of service. A road classification table is provided in Attachment #3.

E. The Blue Mountains Strategic Plan

Goal #2:	Engage Our Communities & Partners
Objective #1	Improve External Communication with our Constituents
Goal #3:	Support Healthy Lifestyles
Objective #4	Commit to Sustainability
Goal #5:	Ensure Our Infrastructure is Sustainable
Objective #3	Implement Best Practices in Sustainable Infrastructure
Objective #4	Ensure that Infrastructure is Available to Support Development

F. Environmental Impacts

Winter Patrolling and Maintenance Operations involve the use of vehicles and equipment which generate greenhouse gas emissions. Salt used to treat roads and sidewalks can have a detrimental effect on the environment as well as on infrastructure and private property. Additionally, the mining and transportation of salt and abrasives generate greenhouse gas emissions.

G. Financial Impact

The Town's Policy was written to conform to the MMS Regulation while also recognising that the Policy doesn't achieve Section 4 - Snow Accumulation and Icy Roadways as amended in 2013. The Policy describes the level of service resourced within the Roads and Drainage Winter Maintenance budget.

The stated purpose of MMS Regulation is to clarify the scope of the statutory defense available to a municipality under the maintenance clause (44) of the Municipal Act, 2001 through the establishment of maintenance standards. These are non-prescriptive as to the methods or materials to be used in complying with the MMS Regulation or Policy but instead describe a desired outcome. By not fully complying with the MMS Regulation the Town may be open to litigation involving incidents on its road network. The Town is limiting due diligence defense. However, the adoption and adherence to a Town set maintenance standard for winter maintenance, the Town is mitigating liability concerns.

In order to achieve the level of service outlined in the MMS Regulation, the Town would need to spend at least \$470,000 annually in labour costs alone for 10 contract winter maintenance operators and one fulltime supervisor. A full accounting of the costs can be prepared at the direction of Council.

H. In Consultation With

Jim McCannell, Manager of Roads and Drainage Brian Kane, Roads and Drainage Foreman Serena Wilgress, Manager of Purchasing and Risk Management

I. Public Engagement

The topic of this Staff Report has not been subject to a Public Meeting and/or a Public Information Centre as neither a Public Meeting nor a Public Information Centre are required. Comments regarding this report should be submitted to Manager of Roads and Drainage, <u>managerroadsdrainage@thebluemountains.ca</u>

J. Attachments

- 1. Attachment #1 O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways with 2018 amendments highlighted.
- 2. Attachment #2 Minimum Winter Maintenance Standard & Level of Service Policy (POL.COR.13.22)
- 3. Attachment #3 Update to Winter Maintenance Standard & Level of Service Policy
- Attachment #4 Summary Discussion of Town Policy Modifications to Reflect Amendments to O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways
- 5. Attachment #5 Road Classification Map & Level of Service Chart

Respectfully submitted,

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Municipal Act, 2001 Loi de 2001 sur les municipalités

ONTARIO REGULATION 239/02

MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS

Historical version for the period January 25, 2013 to May 2, 2018.

Consolidation Period: From May 3, 2018 to the e-Laws currency date.

Last amendment: 47/13366/18.

Legislative History: 288/03, 613/06, 23/10, 47/13, 366/18.

This Regulation is made in English only.

Definitions

1. (1) In this Regulation,

"bicycle facility" means the on-road and in-boulevard cycling facilities listed in Book 18 of the Ontario Traffic Manual;

"bicycle lane" means,

- (a) a portion of a roadway that has been designated by pavement markings or signage for the preferential or exclusive use of cyclists, or
- (b) a portion of a roadway that has been designated for the exclusive use of cyclists by signage and a physical or marked <u>buffer;</u>

"cm" means centimetres;

"day" means a 24-hour period;

"encroachment" means anything that is placed, installed, constructed or planted within the highway that was not placed, installed, constructed or planted by the municipality;

"ice" means all kinds of ice, however formed;

- "motor vehicle" has the same meaning as in subsection 1 (1) of the *Highway Traffic Act*, except that it does not include a motor assisted bicycle;
- "non-paved surface" means a surface that is not a paved surface;
- "Ontario Traffic Manual" means the Ontario Traffic Manual published by the Ministry of Transportation, as amended from time to time;
- "paved surface" means a surface with a wearing layer or layers of asphalt, concrete or asphalt emulsion;
- "pothole" means a hole in the surface of a roadway caused by any means, including wear or subsidence of the road surface or subsurface;

"roadway" has the same meaning as in subsection 1 (1) of the Highway Traffic Act;

- "shoulder" means the portion of a highway that provides lateral support to the roadway and that may accommodate stopped motor vehicles and emergency use;
- "sidewalk" means the part of the highway specifically set aside or commonly understood to be for pedestrian use, typically consisting of a paved surface but does not include crosswalks, medians, boulevards, shoulders or any part of the sidewalk where cleared snow has been deposited;
- <u>"significant weather event" means an approaching or occurring weather hazard with the potential to pose a significant danger</u> to users of the highways within a municipality;
- "snow accumulation" means the natural accumulation of any of the following that, alone or together, covers more than half a lane width of a roadway:
 - 1. Newly-fallen snow.
 - 2. Wind-blown snow.
 - 3. Slush;

"substantial probability" means a significant likelihood considerably in excess of 51 per cent;

"surface" means the top of a <u>sidewalk</u>, roadway or shoulder;

- "utility" includes any air, gas, water, electricity, cable, fiber-optic, telecommunication or traffic control system or subsystem, fire hydrants, sanitary sewers, storm sewers, property bars and survey monuments;
- "utility appurtenance" includes maintenance holes and hole covers, water shut-off covers and boxes, valves, fittings, vaults, braces, pipes, pedestals, and any other structures or items that form part of or are an accessory part of any utility;

"weather" means air temperature, wind and precipitation.

"weather hazard" means the weather hazards determined by Environment Canada as meeting the criteria for the issuance of an alert under its Public Weather Alerting Program. O. Reg. 239/02, s. 1 (1); O. Reg. 23/10, s. 1 (1); O. Reg. 47/13, s. 1; O. Reg. 4-366/18, s. 1 (1, 2).

(2) For the purposes of this Regulation, every highway or part of a highway under the jurisdiction of a municipality in Ontario is classified in the Table to this section as a Class 1, Class 2, Class 3, Class 4, Class 5 or Class 6 highway, based on the speed limit applicable to it and the average annual daily traffic on it. O. Reg. 239/02, s. 1 (2); O. Reg. 366/18, s. 1 (3).

(3) For the purposes of subsection (2) and the Table to this section, the average-annual daily traffic on a highway or part of a highway under municipal jurisdiction shall be determined,

- (a) by counting and averaging the daily two-way traffic on the highway or part of the highway; or
- (b) by estimating the average daily two-way traffic on the highway or part of the highway. O. Reg. 239/02, s. 1 (3); O. Reg. 23/10, s. 1 (2): O. Reg. <u>366/18</u>, s. 1 (3).

(4) For the purposes of this Regulation, unless otherwise indicated in a provision of this Regulation, a municipality is deemed to be aware of a fact if, in the absence of actual knowledge of the fact, circumstances are such that the municipality ought reasonably to be aware of the fact. -O. Reg. $\frac{23/10366/18}{366/18}$, s.-1 (34).

TABLE CLASSIFICATION OF HIGHWAYS

Column 1	Posted or	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Average Annual Daily Traffic	Statutory Speed	<u>81 - 90 km/h</u>	<u>71 - 80 km/h</u>	<u>61 - 70 km/h</u>	51 - 60	<u>41 - 50 km/h</u>	<u>1 - 40 km/h</u>
(number of motor vehicles)	Limit	speed limit	speed limit	speed limit	km/h speed	speed limit	speed limit
	(kilometres per		-	-	limit	-	-
	hour)Column 2						
	<u>91 - 100 km/h</u>						
	speed limit						
<u>53,000 or more</u>	91 - 100<u>1</u>	81 - 90<u>1</u>	71 - 80<u>1</u>	<u>61 - 701</u>	51 - 60<u>1</u>	<u>41 - 501</u>	1-40
1523,000 or more 52,999	1	1	1	2	2	2	2
15,000 - 22,999	<u>1</u>	1	2	2	2	3	<u>3</u>
12,000 - 14,999	1	1	<u>+2</u>	2	2	3	3
10,000 - 11,999	1	1	2	2	3	3	3
8,000 - 9,999	1	1	2	3	3	3	3
6,000 - 7,999	1	2	2	3	3	<u>34</u>	34
5,000 - 5,999	1	2	2	3	3	<u>34</u>	34
4,000 - 4,999	1	2	3	3	3	<u>34</u>	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	4 <u>5</u>	4 <u>5</u>
1,000 - 1,999	1	3	3	3	4	4 <u>5</u>	5
500 - 999	1	3	4	4	4	4 <u>5</u>	5
200 - 499	1	3	4	4	5	5	5 6
50 - 199	1	3	4	5	5	5 6	5 6
0 - 49	1	3	6	6	6	6	6

O.-_Reg. 613/06366/18, s.-_1-(5).

Application

2. (1) This Regulation sets out the minimum standards of repair for highways under municipal jurisdiction for the purpose of clause 44 (3) (c) of the Act. O. Reg. 288/03, s. 1.

(2) REVOKED: O. Reg. 23/10, s. 2.

(3) This Regulation does not apply to Class 6 highways. O. Reg. 239/02, s. 2 (3).

Purpose

2.1 The purpose of this Regulation is to clarify the scope of the statutory defence available to a municipality under clause 44 (3) (c) of the Act by establishing maintenance standards which are non-prescriptive as to the methods or materials to be used in complying with the standards but instead describe a desired outcome. O. <u>Reg. Minimum</u>366/18, s. 2.

MAINTENANCE STANDARDS

Patrolling

3. (1) The minimum standard for the frequency of patrolling of highways to check for conditions described in this Regulation is set out in the Table to this section. O. Reg. 23/10, s. 3(1); O. Reg. 366/18, s. 3(2).

(2) If it is determined by the municipality that the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on roadways, ice formation on roadways or icy roadways, the minimum standard for patrolling highways is, in addition to that set out in subsection (1), to patrol highways that the municipality selects as representative of its highways, at intervals deemed necessary by the municipality, to check for such conditions. O. Reg. 47/13, s. 2; O. Reg. -366/18, s. 3 (2).

(3) Patrolling a highway consists of observing the highway, either by driving on or by electronically monitoring the highway, and may be performed by persons responsible for patrolling highways or by persons responsible for or performing highway maintenance activities. O. Reg. 23/10, s. 3(1).

(4) This section does not apply in respect of the conditions described in section 10, subsections 11 (0.1) and 12 (1) and section 16.1-, 16.2, 16.3 or 16.4. O. Reg. 23/10, s. 3 (1); O. Reg. 366/18, s. 3 (3).

Class of Highway	Patrolling Frequency
1	3 times every 7 days
2	2 times every 7 days
3	once every 7 days
4	once every 14 days
5	once every 30 days

TABLE PATROLLING FREQUENCY

O. Reg. 239/02, s. 3, Table; O. Reg. 23/10, s. 3 (2).

Weather monitoring

3.1 (1) From October 1 to April 30, the minimum standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once every shift or three times per calendar day, whichever is more frequent, at intervals determined by the municipality. O. Reg. 47/13, s. 3; O. Reg. 366/18, s. 4.

(2) From May 1 to September 30, the minimum standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once per calendar day. O. Reg. 47/13, s. 3; O. Reg. 366/18, s. 4.

Snow accumulation, roadways

- 4. (1) The minimumSubject to section 4.1, the standard for addressing snow accumulation on roadways is,
- (a) after becoming aware of the fact that the snow accumulation on a roadway is greater than the depth set out in the Table to this section, to deploy resources as soon as practicable to address the snow accumulation; and
- (b) after the snow accumulation has ended, to address the snow accumulation so as to reduce the snow to a depth less than or equal to the depth set out in the Table within the time set out in the Table,
 - (i) to provide a minimum lane width of the lesser of three metres for each lane or the actual lane width, or
 - (ii) on a Class 4 or Class 5 highway with two lanes, to provide a total width of at least five metres. O. Reg. 47/13, s. 4.4; O. Reg. 366/18, s. 5 (1).

(2) If the depth of snow accumulation on a roadway is less than or equal to the depth set out in the Table to this section, the roadway is deemed to be in a state of repair with respect to snow accumulation. O. Reg. 47/13, s. 4.

(3) For the purposes of this section, the depth of snow accumulation on a roadway <u>and, if applicable, lane width under</u> <u>clause (1) (b)</u>, may be determined in accordance with subsection (4) by a municipal employee, agent or contractor, whose duties or responsibilities include one or more of the following:

- 1. Patrolling highways.
- 2. Performing highway maintenance activities.
- 3. Supervising staff who perform activities described in paragraph 1 or 2. O. Reg. 47/13, s. 4.4; O. Reg. 366/18, s. 5 (2).
- (4) The depth of snow accumulation on a roadway and lane width may be determined by,
- (a) performing an actual measurement;

- (b) monitoring the weather; or
- (c) performing a visual estimate. O. Reg. 47/13, s. 4.4; O. Reg. 366/18, s. 5 (3).
- (5) For the purposes of this section, addressing snow accumulation on a roadway includes, but is not limited to,
- (a) plowing the roadway;
- (b) salting the roadway;
- (c) applying abrasive materials to the roadway; or
- <u>(d</u> (d) applying other chemical or organic agents to the roadway;
- (e) any combination of the methods described in clauses (a), (b) and (c) to (d). O.-Reg. 47/13366/18, s.-5 (4-).
 - (6) This section does not apply to that portion of the roadway-

(a) designated for parking-:

(b) consisting of a bicycle lane or other bicycle facility; or

(d) used by a municipality for snow storage. O.-Reg. 47/13366/18, s.-5 (4-).

TABLE SNOW ACCUMULATION - ROADWAYS

Class of Highway	Depth	Time
1	2.5 cm	4 hours
2	5 cm	6 hours
3	8 cm	12 hours
4	8 cm	16 hours
5	10 cm	24 hours

O. Reg. 47/13, s. 4.4; O. Reg. 366/18, s. 5 (5).

Snow accumulation on roadways, significant weather event

4.1 (1) If a municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on roadways until the declaration of the end of the significant weather event is,

(a) to monitor the weather in accordance with section 3.1; and

(b) if deemed practicable by the municipality, to deploy resources to address snow accumulation on roadways, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 7.

(2) If the municipality complies with subsection (1), all roadways within the municipality are deemed to be in a state of repair with respect to snow accumulation until the applicable time in the Table to section 4 expires following the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 7.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

(a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and

(b) address snow accumulation on roadways in accordance with section 4. O. Reg. 366/18, s. 7.

Snow accumulation, bicycle lanes

4.2 (1) Subject to section 4.3, the standard for addressing snow accumulation on bicycle lanes is,

- (a) after becoming aware of the fact that the snow accumulation on a bicycle lane is greater than the depth set out in the Table to this section, to deploy resources as soon as practicable to address the snow accumulation; and
- (b) after the snow accumulation has ended, to address the snow accumulation so as to reduce the snow to a depth less than or equal to the depth set out in the Table to this section to provide a minimum bicycle lane width of the lesser of 1 metre or the actual bicycle lane width. O. Reg. 366/18, s. 7.

(2) If the depth of snow accumulation on a bicycle lane is less than or equal to the depth set out in the Table to this section, the bicycle lane is deemed to be in a state of repair in respect of snow accumulation. O. Reg. 366/18, s. 7.

(3) For the purposes of this section, the depth of snow accumulation on a bicycle lane and, if applicable, lane width under clause (1) (b), may be determined in the same manner as set out in subsection 4 (4) and by the persons mentioned in subsection 4 (3), with necessary modifications. O. Reg. 366/18, s. 7.

(4) For the purposes of this section, addressing snow accumulation on a bicycle lane includes,

(a) plowing the bicycle lane;

(b) salting the bicycle lane;

(c) applying abrasive materials to the bicycle lane;

(d) applying other chemical or organic agents to the bicycle lane;

(e) sweeping the bicycle lane; or

(f) any combination of the methods described in clauses (a) to (e). O. Reg. 366/18, s. 7.

		SNOW ACCUMUL	ATION – BICYCLE LANES
Column 1	Column 2	Column 3	
Class of Highway or	Depth	Time	
Adjacent Highway			
1	<u>2.5 cm</u>	8 hours	
2	<u>5 cm</u>	<u>12 hours</u>	
<u>3</u>	<u>8 cm</u>	24 hours	
<u>4</u>	<u>8 cm</u>	24 hours]
<u>5</u>	<u>10 cm</u>	24 hours]

O. Reg. 366/18, s. 7.

Snow accumulation on bicycle lanes, significant weather event

4.3 (1) If a municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on bicycle lanes until the declaration of the end of the significant weather event is,

TABLE

- (a) to monitor the weather in accordance with section 3.1; and
- (b) if deemed practicable by the municipality, to deploy resources to address snow accumulation on bicycle lanes, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 7.

(2) If the municipality complies with subsection (1), all bicycle lanes within the municipality are deemed to be in a state of repair with respect to snow accumulation until the applicable time in the Table to section 4.2 expires following the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 7.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

(a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and

(b) address snow accumulation on bicycle lanes in accordance with section 4.2. O. Reg. 366/18, s. 7.

Ice formation on roadways and icy roadways

5. (1) The-minimum standard for the prevention of ice formation on roadways is doing the following in the 24-hour period preceding an alleged formation of ice on a roadway:

- 1. Monitor the weather in accordance with section 3.1.
- 2. Patrol in accordance with section 3.
- 3. If the municipality determines, as a result of its activities under paragraph 1 or 2, that there is a substantial probability of ice forming on a roadway, treat the roadway, <u>if practicable</u>, to prevent ice formation within the time set out in <u>the Table_1</u> to this section, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose. O.-Reg. <u>47/13366/18</u>, s.<u>58</u>.

(2) If the municipality meets the minimum standard set out in subsection (1) and, despite such compliance, ice forms on a roadway, the roadway is deemed to be in a state of repair until the earlier of,applicable time set out in Table 2 to this section expires after the municipality becomes aware of the fact that the roadway is icy. O. Reg. 366/18, s. 8.

-(a) the time that the municipality becomes aware of the fact that the roadway is icy; or

(b) the applicable time set out in the Table (3) Subject to this section for treating the roadway to prevent ice formation expires. 5.1, the O. Reg. 47/13, s. 5.

- (3) The minimum standard for treating icy roadways after the municipality becomes aware of the fact that a roadway is icy is to treat the icy roadway within the time set out in the Table <u>2</u> to this section, and an icy roadway is deemed to be in a state of repair until the applicable time set out in the Table for treating to this section expires after the municipality becomes aware of the icyfact that a roadway expires is icy. O.-Reg. 47/13366/18, s.-58.

(4) For the purposes of this section, treating a roadway means applying material to the roadway, including but not limited to, salt, sand or any combination of salt and sand. O.-Reg. 47/13366/18, s.-58.

(5) For greater certainty, this section applies in respect of ice formation on bicycle lanes on a roadway, but does not apply to other types of bicycle facilities. O. Reg. 366/18, s. 8.

TABLE 1 ICE FORMATION PREVENTION AND ICY ROADWAYS

Class of Highway	Time
1	36 hours
2	48 hours
3	<u>816</u> hours
4	1224 hours
5	1624 hours

O.-_Reg. 47/13366/18, s.-58.

TABLE 2
TREATMENT OF ICY ROADWAYS

TTEET TTTTEET T
Time
<u>3 hours</u>
<u>4 hours</u>
<u>8 hours</u>
<u>12 hours</u>
<u>16 hours</u>

O. Reg. 366/18, s. 8.

Icy roadways, significant weather event

<u>5.1</u> (1) If a municipality declares a significant weather event relating to ice, the standard for treating icy roadways until the declaration of the end of the significant weather event is,

(a) to monitor the weather in accordance with section 3.1; and

(b) if deemed practicable by the municipality, to deploy resources to treat icy roadways, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 8.

(2) If the municipality complies with subsection (1), all roadways within the municipality are deemed to be in a state of repair with respect to any ice which forms or may be present until the applicable time in Table 2 to section 5 expires after the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 8.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

(a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and

(b) treat icy roadways in accordance with section 5. O. Reg. 366/18, s. 8.

Potholes

6. (1) If a pothole exceeds both the surface area and depth set out in Table 1, 2 or 3 to this section, as the case may be, the minimum standard is to repair the pothole within the time set out in Table 1, 2 or 3, as appropriate, after becoming aware of the fact. O. Reg. 239/02, s. 6 (1)-); O. Reg. 366/18, s. 8 (1).

(1.1) For the purposes of this section, the surface area and depth of a pothole may be determined in accordance with subsections (1.2) and (1.3), as applicable, by a municipal employee, agent or contractor whose duties or responsibilities include one or more of the following:

1. Patrolling highways.

2. Performing highway maintenance activities.

3. Supervising staff who perform activities described in paragraph 1 or 2. O. Reg. 366/18, s. 8 (2).

(1.2) The depth and surface area of a pothole may be determined by,

(a) performing an actual measurement; or

(b) performing a visual estimate. O. Reg. 366/18, s. 8 (2).

(1.3) For the purposes of this section, the surface area of a pothole does not include any area that is merely depressed and not yet broken fully through the surface of the roadway. O. Reg. 366/18, s. 8 (2).

(2) A pothole is deemed to be in a state of repair if its surface area or depth is less than or equal to that set out in Table 1, 2 or 3, as appropriate. O. Reg. 239/02, s. 6 (2); O. Reg. 47/13, s. 6.

TABLE 1POTHOLES ON PAVED SURFACE OF ROADWAY

Class of Highway	Surface Area	Depth	Time
1	600 cm ²	8 cm	4 days
2	800 cm ²	8 cm	4 days
3	1000 cm ²	8 cm	7 days
4	1000 cm ²	8 cm	14 days
5	1000 cm ²	8 cm	30 days

O. Reg. 239/02, s. 6, Table 1.

 TABLE 2

 POTHOLES ON NON-PAVED SURFACE OF ROADWAY

Class of Highway	Surface Area	Depth	Time
3	1500 cm ²	8 cm	7 days
4	1500 cm ²	10 cm	14 days
5	1500 cm ²	12 cm	30 days

O. Reg. 239/02, s. 6, Table 2.

 TABLE 3

 POTHOLES ON PAVED OR NON-PAVED SURFACE OF SHOULDER

Class of Highway	Surface Area	Depth	Time
1	1500 cm ²	8 cm	7 days
2	1500 cm ²	8 cm	7 days
3	1500 cm ²	8 cm	14 days
4	1500 cm ²	10 cm	30 days
5	1500 cm ²	12 cm	60 days

O. Reg. 239/02, s. 6, Table 3.

Shoulder drop-offs

7. (1) If a shoulder drop-off is deeper than 8 cm, for a continuous distance of 20 metres or more, than the depth set out in the Table to this section, the minimum the standard is to repair the shoulder drop-off within the time set out in the Table to this section after becoming aware of the fact. -O.-Reg. $\frac{239/02366/18}{239/02366/18}$, s.7-9(1).

(2) A shoulder drop-off is deemed to be in a state of repair if its depth is less than or equal to that set out in the Table. 8 cm. O.-Reg. $\frac{239}{02366/18}$, s. $7 \cdot (2 \cdot 9 \cdot (1) \cdot)$; O. Reg. $\frac{47}{13}$, s. 7.

(3) In this section,

"shoulder drop-off" means the vertical differential, where the paved surface of the roadway is higher than the surface of the shoulder, between the paved surface of the roadway and the paved or non-paved surface of the shoulder. O. Reg. 239/02, s. 7 (3).

	1	
Class of Highway	Depth	Time
1	8 cm	4 days
2	8 cm	4 days
3	8 cm	7 days
4	8 cm	14 days
5	8-cm	30 days

TABLE SHOULDER DROP-OFFS

O.-_Reg. 239/02366/18, s. 7, Table. 9 (2).

Cracks

8. (1) If a crack on the paved surface of a roadway is greater, than 5 cm wide and 5 cm deep for a continuous distance of three metres or more, than both the width and depth set out in the Table to this section, the minimumthe standard is to repair the crack within the time set out in the Table to this section after becoming aware of the fact. -O.-Reg. $\frac{239}{02366}$, s.-8 10 (1).

(2) A crack is deemed to be in a state of repair if its width or depth is less than or equal to that set out in the Table. 5 cm. O.-Reg. $\frac{239/02366/18}{3239/02366/18}$, s.-8 (210 (1).); O. Reg. $\frac{47}{13}$, s. 8.

TABLE CRACKS

Class of Highway	Width	Depth	Column 2 Time
1	5 cm	5 cm	30 days
2	5 cm	5 cm	30 days
3	5 cm	5 cm	60 days
4	5 cm	5 cm	180 days
5	5 cm	5 cm	180 days

O.-_Reg. 239/02366/18, s. 8, Table. 10 (2).

Debris

9. (1) If there is debris on a roadway, the minimum standard is to deploy resources, as soon as practicable after becoming aware of the fact, to remove the debris. O. Reg. 239/02, s. 9 (1):); O. Reg. 366/18, s. 11.

(2) In this section,

"debris" means any material (except snow, slush or ice) or object on a roadway,

- (a) that is not an integral part of the roadway or has not been intentionally placed on the roadway by a municipality, and
- (b) that is reasonably likely to cause damage to a motor vehicle or to injure a person in a motor vehicle. O. Reg. 239/02, s. 9 (2); O. Reg. 47/13, s. 9.

Luminaires

10. (0.1) <u>REVOKED: O. Reg. 366/18, s. 12.</u>

(1) The minimum standard for the frequency of inspecting all luminaires to check to see that they are functioning is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. -O.-Reg. 23/10366/18, s. 6; O. 12.Reg. 47/13, s. 10 (1).

(42) For conventional illumination, if three or more consecutive luminaires on the same side of a highway are not functioning, the minimum-standard is to repair the luminaires within the time set out in the Table to this section after becoming aware of the fact. -O.-Reg. $\frac{239/02366/18}{239/02366/18}$, s.-10 (1)-12.

(23) For conventional illumination and high mast illumination, if 30 per cent or more of the luminaires on any kilometre of highway are not functioning, the minimum standard is to repair the luminaires within the time set out in the Table to this section after becoming aware of the fact. -O.-Reg. 239/02366/18, s. 10(2)-12.

(34) Despite subsection (2), for high mast illumination, if all of the luminaires on consecutive poles <u>on the same side of a highway</u> are not functioning, the <u>minimum</u> standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the luminaires. -O.-Reg. <u>239/02366/18</u>, s.<u>10 (3).12</u>.

(45) Despite subsections (1), (2) and (3), for conventional illumination and high mast illumination, if more than 50 per cent of the luminaires on any kilometre of a Class 1 highway with a speed limit of 90 kilometres per hour or more are not functioning, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the luminaires. -O.-Reg. 239/02366/18, s. -10 (4), -12.

 $(\underline{56})$ Luminaires are deemed to be in a state of repair,

- (a) for the purpose of subsection (<u>+2</u>), if the number of non-functioning consecutive luminaires <u>on the same side of a highway</u> does not exceed two;
- (b) for the purpose of subsection (23), if more than 70 per cent of luminaires on any kilometre of highway are functioning;
- (c) for the purpose of subsection (<u>34</u>), if one or more of the luminaires on consecutive poles <u>on the same side of a highway</u> are functioning;
- (d) for the purpose of subsection (45), if more than 50 per cent of luminaires on any kilometre of highway are functioning. O.-Reg. 239/02366/18, s. 10 (5); O. 12.Reg. 47/13, s. 10 (2).

(6) Subsections (1), (2) and (3) only apply to,

- (a) Class 1 and Class 2 highways; and
- (b) Class 3, Class 4 and Class 5 highways with a posted speed of 80 kilometres per hour or more. O. Reg. 239/02, s. 10 (6).

(7) In this section,

"conventional illumination" means lighting, other than high mast illumination, where there are one or more luminaires per pole;

"high mast illumination" means lighting where there are three or more luminaires per pole and the height of the pole exceeds 20 metres;

"luminaire" means a complete lighting unit consisting of,

- (a) a lamp, and
- (b) parts designed to distribute the light, to position or protect the lamp and to connect the lamp to the power supply. O. Reg. 239/02, s. 10 (7).

Class of Highway	Time	
1	7 days	
2	7 days	
3	14 days	
4	14 days	
5	14 days	

TABLE LUMINAIRES

O. Reg. 239/02, s. 10, Table.

Signs

11. (0.1) The minimum standard for the frequency of inspecting signs of a type listed in subsection (2) to check to see that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 7 (1); O. Reg. 47/13, s. 11 (1):); O. Reg. 366/18, s. 13.

(0.2) A sign that has been inspected in accordance with subsection (0.1) is deemed to be in a state of repair with respect to the retro-reflectivity requirements of the Ontario Traffic Manual until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the sign has ceased to meet these requirements. O. Reg. 47/13, s. 11 (2).

(1) If any sign of a type listed in subsection (2) is illegible, improperly oriented, obscured or missing, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair or replace the sign. O. Reg. 239/02, s. 11 (1); O. Reg. 23/10, s. 7 (2)-; O. Reg. 366/18, s. 13.

- (2) This section applies to the following types of signs:
- 1. Checkerboard.
- 2. Curve sign with advisory speed tab.
- 3. Do not enter.
- 3.1 Load Restricted Bridge.
- 3.2 Low Bridge.
- 3.3 Low Bridge Ahead.
- 4. One Way.
- 5. School Zone Speed Limit.
- 6. Stop.
- 7. Stop Ahead.
- 8. Stop Ahead, New.
- 9. Traffic Signal Ahead, New.
- 10. Two-Way Traffic Ahead.
- 11. Wrong Way.
- 12. Yield.
- 13. Yield Ahead.
- 14. Yield Ahead, New. O. Reg. 239/02, s. 11 (2); O. Reg. 23/10, s. 7 (3).

Regulatory or warning signs

12. (1) The minimum standard for the frequency of inspecting regulatory signs or warning signs to check to see that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking

place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 8; O. Reg. 47/13, s. 12 (1):): O. Reg. 366/18, s. 13.

(1.1) A regulatory sign or warning sign that has been inspected in accordance with subsection (1) is deemed to be in a state of repair with respect to the retro-reflectivity requirements of the Ontario Traffic Manual until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the sign has ceased to meet these requirements. O. Reg. 47/13, s. 12 (2).

(2) If a regulatory sign or warning sign is illegible, improperly oriented, obscured or missing, the minimum standard is to repair or replace the sign within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 23/10, s. 8; O. Reg. 366/18, s. 13.

(3) In this section,

"regulatory sign" and "warning sign" have the same meanings as in the Ontario Traffic Manual, except that they do not include a sign listed in subsection 11 (2) of this Regulation. O. Reg. 23/10, s. 8.

Class of Highway	Time	
1	7 days	
2	14 days	
3	21 days	
4	30 days	
5	30 days	

TABLE REGULATORY AND WARNING SIGNS

O. Reg. 239/02, s. 12, Table.

Traffic control signal systems

13. (1) If a traffic control signal system is defective in any way described in subsection (2), the minimum standard is to deploy resources as soon as practicable after becoming aware of the defect to repair the defect or replace the defective component of the traffic control signal system. O. Reg. 239/02, s. 13 (1): O. Reg. 366/18, s. 13.

- (2) This section applies if a traffic control signal system is defective in any of the following ways:
- 1. One or more displays show conflicting signal indications.
- The angle of a traffic control signal or pedestrian control indication has been changed in such a way that the traffic or pedestrian facing it does not have clear visibility of the information conveyed or that it conveys confusing information to traffic or pedestrians facing other directions.
- 3. A phase required to allow a pedestrian or vehicle to safely travel through an intersection fails to occur.
- 4. There are phase or cycle timing errors interfering with the ability of a pedestrian or vehicle to safely travel through an intersection.
- 5. There is a power failure in the traffic control signal system.
- 6. The traffic control signal system cabinet has been displaced from its proper position.
- 7. There is a failure of any of the traffic control signal support structures.
- 8. A signal lamp or a pedestrian control indication is not functioning.
- 9. Signals are flashing when flashing mode is not a part of the normal signal operation. O. Reg. 239/02, s. 13 (2).

(3) Despite subsection (1) and paragraph 8 of subsection (2), if the posted speed of all approaches to the intersection or location of the non-functioning signal lamp or pedestrian control indication is less than 80 kilometres per hour and the signal that is not functioning is a green or a pedestrian "walk" signal, the minimum standard is to repair or replace the defective component by the end of the next business day. O. Reg. 239/02, s. 13 (3)-1; O. Reg. 366/18, s. 13.

(4) In this section and section 14,

"cycle" means a complete sequence of traffic control indications at a location;

"display" means the illuminated and non-illuminated signals facing the traffic;

- "indication" has the same meaning as in the *Highway Traffic Act*;
- "phase" means a part of a cycle from the time where one or more traffic directions receive a green indication to the time where one or more different traffic directions receive a green indication;
- "power failure" means a reduction in power or a loss in power preventing the traffic control signal system from operating as intended;

"traffic control signal" has the same meaning as in the Highway Traffic Act;

"traffic control signal system" has the same meaning as in the Highway Traffic Act. O. Reg. 239/02, s. 13 (4).

Traffic control signal system sub-systems

14. (1) The minimum standard is to inspect, test and maintain the following traffic control signal system sub-systems once per calendar year, with each inspection taking place not more than 16 months from the previous inspection:

- 1. The display sub-system, consisting of traffic signal and pedestrian crossing heads, physical support structures and support cables.
- 2. The traffic control sub-system, including the traffic control signal cabinet and internal devices such as timer, detection devices and associated hardware, but excluding conflict monitors.
- 3. The external detection sub-system, consisting of detection sensors for all vehicles, including emergency and railway vehicles and pedestrian push- buttons. O. Reg. 239/02, s. 14 (1); O. Reg. 47/13, s. 13 (1); O. Reg. 366/18, s. 13.

(1.1) A traffic control signal system sub-system that has been inspected, tested and maintained in accordance with subsection (1) is deemed to be in a state of repair until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the traffic control signal system sub-system has ceased to be in a state of repair. O. Reg. 47/13, s. 13 (2).

(2) The minimum standard is to inspect, test and maintain conflict monitors every five to seven months and at least twice per calendar year. O. Reg. 239/02, s. 14 (2); O. Reg. 47/13, s. 13 (3)-); O. Reg. 366/18, s. 13.

(2.1) A conflict monitor that has been inspected, tested and maintained in accordance with subsection (2) is deemed to be in a state of repair until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the conflict monitor has ceased to be in a state of repair. O. Reg. 47/13, s. 13 (4).

(3) In this section,

"conflict monitor" means a device that continually checks for conflicting signal indications and responds to a conflict by emitting a signal. O. Reg. 239/02, s. 14 (3).

Bridge deck spalls

15. (1) If a bridge deck spall exceeds both the surface area and depth set out in the Table to this section, the minimum standard is to repair the bridge deck spall within the time set out in the Table after becoming aware of the fact. O. Reg. 239/02, s. 15 (1)-); O. Reg. 366/18, s. 13.

(2) A bridge deck spall is deemed to be in a state of repair if its surface area or depth is less than or equal to that set out in the Table. O. Reg. 239/02, s. 15 (2); O. Reg. 47/13, s. 14.

(3) In this section,

"bridge deck spall" means a cavity left by one or more fragments detaching from the paved surface of the roadway or shoulder of a bridge. O. Reg. 239/02, s. 15 (3).

Class of Highway	Surface Area	Depth	Time
1	600 cm ²	8 cm	4 days
2	800 cm ²	8 cm	4 days
3	1,000 cm ²	8 cm	7 days
4	1,000 cm ²	8 cm	7 days
5	1,000 cm ²	8 cm	7 days

TABLE BRIDGE DECK SPALLS

O. Reg. 239/02, s. 15, Table.

Roadway surface discontinuities

16. (1) If a surface discontinuity on a roadway, other than a surface discontinuity on a bridge deck, exceeds the height set out in the Table to this section, the minimum standard is to repair the surface discontinuity within the time set out in the Table after becoming aware of the fact. O. Reg. 23/10, s. 9; O. Reg. 366/18, s. 13.

(1.1) A surface discontinuity on a roadway, other than a surface discontinuity on a bridge deck, is deemed to be in a state of repair if its height is less than or equal to the height set out in the Table to this section. O. Reg. 47/13, s. 15.

(2) If a surface discontinuity on a bridge deck exceeds five centimetres, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the surface discontinuity on the bridge deck. O. Reg. 23/10, s. 9; O. Reg. 366/18, s. 13.

(2.1) A surface discontinuity on a bridge deck is deemed to be in a state of repair if its height is less than or equal to five centimetres. O. Reg. 47/13, s. 15.

(3) In this section,

"surface discontinuity" means a vertical discontinuity creating a step formation at joints or cracks in the paved surface of the roadway, including bridge deck joints, expansion joints and approach slabs to a bridge. O. Reg. 23/10, s. 9.

Class of Highway	Height	Time
1	5 cm	2 days
2	5 cm	2 days
3	5 cm	7 days
4	5 cm	21 days
5	5 cm	21 days

TABLE SURFACE DISCONTINUITIES

O. Reg. 239/02, s. 16, Table.

Sidewalk surface discontinuities

16.1 (1) The minimum standard for the frequency of inspecting sidewalks to check for surface discontinuity is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 10; O. Reg. 47/13, s. 16 (1)-; O. Reg. 366/18, s. 13.

(1.1) A sidewalk that has been inspected in accordance with subsection (1) is deemed to be in a state of repair with respect to any surface discontinuity until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge of the presence of a surface discontinuity in excess of two centimetres. O. Reg. 47/13, s. 16 (2).

(2) If a surface discontinuity on <u>or within</u> a sidewalk exceeds two centimetres, the <u>minimum</u> standard is to treat the surface discontinuity within 14 days after acquiring actual knowledge of the fact. O.-_Reg. $\frac{23/10366/18}{23/10366/18}$, s. $\frac{10}{0}$, $\frac{14}{Reg}$, $\frac{47/13}{13}$, s. $\frac{16}{3}$.

(2.1) <u>REVOKED: O. Reg. 366/18, s. 14.</u>

(3) A surface discontinuity on <u>or within</u> a sidewalk is deemed to be in a state of repair if it is less than or equal to two centimetres. O.-Reg. $\frac{47/13366/18}{5}$, s. $\frac{16}{14}$.

<u>(4)</u>.

-(3) For the purpose of subsection (2), treating a surface discontinuity on <u>or within</u> a sidewalk means taking reasonable measures to protect users of the sidewalk from the discontinuity, including making permanent or temporary repairs, alerting users' attention to the discontinuity or preventing access to the area of discontinuity. O.-Reg. <u>23/10366/18</u>, s.<u>10_14</u>.

(45) In this section,

"surface discontinuity" means a vertical discontinuity creating a step formation at joints any joint or erackscrack in the surface of the sidewalk- or any vertical height difference between a utility appurtenance found on or within the sidewalk and the surface of the sidewalk. O.-Reg. 23/10366/18, s. 10_14.

Encroachments, area adjacent to sidewalk

<u>16.2</u> (1) The standard for the frequency of inspecting an area adjacent to a sidewalk to check for encroachments is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 366/18, <u>s. 15.</u>

(2) The area adjacent to a sidewalk that has been inspected in accordance with subsection (1) is deemed to be in a state of repair in respect of any encroachment present. O. Reg. 366/18, s. 15.

(3) For greater certainty, the area adjacent to a sidewalk begins at the outer edges of a sidewalk and ends at the lesser of the limit of the highway, the back edge of a curb if there is a curb and a maximum of 45 cm. O. Reg. 366/18, s. 15.

(4) The area adjacent to a sidewalk is deemed to be in a state of repair in respect of any encroachment present unless the encroachment is determined by a municipality to be highly unusual given its character and location or to constitute a significant hazard to pedestrians. O. Reg. 366/18, s. 15.

(5) If a municipality determines that an encroachment is highly unusual given its character and location or constitutes a significant hazard to pedestrians, the standard is to treat the encroachment within 28 days after making such a determination, and the encroachment is deemed in a state of repair for 28 days from the time of the determination by the municipality. O. Reg. 366/18, s. 15.

(6) For the purpose of subsection (4), treating an encroachment means taking reasonable measures to protect users, including making permanent or temporary repairs, alerting users' attention to the encroachment or preventing access to the area of the encroachment. O. Reg. 366/18, s. 15.

Snow accumulation on sidewalks

16.3 (1) Subject to section 16.4, the standard for addressing snow accumulation on a sidewalk after the snow accumulation has ended is,

a) to reduce the snow to a depth less than or equal to 8 centimetres within 48 hours; and

b) to provide a minimum sidewalk width of 1 metre. O. Reg. 366/18, s. 15.

(2) If the depth of snow accumulation on a sidewalk is less than or equal to 8 centimetres, the sidewalk is deemed to be in a state of repair in respect of snow accumulation. O. Reg. 366/18, s. 15.

(3) If the depth of snow accumulation on a sidewalk exceeds 8 centimetres while the snow continues to accumulate, the sidewalk is deemed to be in a state of repair with respect to snow accumulation, until 48 hours after the snow accumulation ends. O. Reg. 366/18, s. 15.

(4) For the purposes of this section, the depth of snow accumulation on a sidewalk may be determined in the same manner as set out in subsection 4 (4) and by the persons mentioned in subsection 4 (3) with necessary modifications. O. Reg. 366/18, s. 15.

(5) For the purposes of this section, addressing snow accumulation on a sidewalk includes,

(a) plowing the sidewalk;

(b) salting the sidewalk;

(c) applying abrasive materials to the sidewalk;

(d) applying other chemical or organic agents to the sidewalk; or

(e) any combination of the methods described in clauses (a) to (d). O. Reg. 366/18, s. 15.

Snow accumulation on sidewalks, significant weather event

<u>16.4</u> (1) If a municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on sidewalks until the declaration of the end of the significant weather event is,

(a) to monitor the weather in accordance with section 3.1; and

(b) if deemed practicable by the municipality, to deploy resources to address snow accumulation on sidewalks starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 15.

(2) If the municipality complies with subsection (1), all sidewalks within the municipality are deemed to be in a state of repair with respect to any snow present until 48 hours following the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 15.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

(a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and

(b) address snow accumulation on sidewalks in accordance with section 16.3. O. Reg. 366/18, s. 15.

Ice formation on sidewalks and icy sidewalks

16.5 (1) Subject to section 16.6, the standard for the prevention of ice formation on sidewalks is to,

- (a) monitor the weather in accordance with section 3.1 in the 24-hour period preceding an alleged formation of ice on a sidewalk; and
- (b) treat the sidewalk if practicable to prevent ice formation or improve traction within 48 hours if the municipality determines that there is a substantial probability of ice forming on a sidewalk, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose. O. Reg. 366/18, s. 15.

(2) If ice forms on a sidewalk even though the municipality meets the standard set out in subsection (1), the sidewalk is deemed to be in a state of repair in respect of ice until 48 hours after the municipality first becomes aware of the fact that the sidewalk is icy. O. Reg. 366/18, s. 15.

(3) The standard for treating icy sidewalks after the municipality becomes aware of the fact that a sidewalk is icy is to treat the icy sidewalk within 48 hours, and an icy sidewalk is deemed to be in a state of repair for 48 hours after it has been treated. O. Reg. 366/18, s. 15.

(4) For the purposes of this section, treating a sidewalk means applying materials including salt, sand or any combination of salt and sand to the sidewalk. O. Reg. 366/18, s. 15.

Icy sidewalks, significant weather event

<u>16.6 (1)</u> If a municipality declares a significant weather event relating to ice, the standard for addressing ice formation or ice on sidewalks until the declaration of the end of the significant weather event is,

(a) to monitor the weather in accordance with section 3.1; and

(b) if deemed practicable by the municipality, to deploy resources to treat the sidewalks to prevent ice formation or improve traction, or treat the icy sidewalks, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 15.

(2) If the municipality complies with subsection (1), all sidewalks within the municipality are deemed to be in a state of repair with respect to any ice which forms or is present until 48 hours after the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 15.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

- (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
- (b) address the prevention of ice formation on sidewalks or treat icy sidewalks in accordance with section 16.5. O. Reg. <u>366/18, s. 15.</u>

Winter sidewalk patrol

16.7 (1) If it is determined by the municipality that the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on sidewalks in excess of 8 cm, ice formation on sidewalks or icy sidewalks, the standard for patrolling sidewalks is to patrol sidewalks that the municipality selects as representative of its sidewalks at intervals deemed necessary by the municipality. O. Reg. 366/18, s. 15.

(2) Patrolling a sidewalk consists of visually observing the sidewalk, either by driving by the sidewalk on the adjacent roadway or by driving or walking on the sidewalk or by electronically monitoring the sidewalk, and may be performed by persons responsible for patrolling roadways or sidewalks or by persons responsible for or performing roadway or sidewalk maintenance activities. O. Reg. 366/18, s. 15.

Closure of a highway

16.8 (1) When a municipality closes a highway or part of a highway pursuant to its powers under the Act, the highway is deemed to be in a state of repair in respect of all conditions described in this Regulation from the time of the closure until the highway is re-opened by the municipality. O. Reg. 366/18, s. 15.

- (2) For the purposes of subsection (1), a highway or part of a highway is closed on the earlier of,
- (a) when a municipality passes a by-law to close the highway or part of the highway; and
- (b) when a municipality has taken such steps as it determines necessary to temporarily close the highway or part of a highway. O. Reg. 366/18, s. 15.

Declaration of significant weather event

16.9. A municipality declaring the beginning of a significant weather event or declaring the end of a significant weather event under this Regulation shall do so in one or more of the following ways:

- 1. By posting a notice on the municipality's website.
- 2. By making an announcement on a social media platform, such as Facebook or Twitter.
- 3. By sending a press release or similar communication to internet, newspaper, radio or television media.
- 4. By notification through the municipality's police service.
- 5. By any other notification method required in a by-law of the municipality. O. Reg. 366/18, s. 15.

REVIEW OF REGULATION

Review

17. (1) The Minister of Transportation shall conduct a review of this Regulation and Ontario Regulation 612/06 (Minimum Maintenance Standards for Highways in the City of Toronto) made under the *City of Toronto Act, 2006* every five years. O. Reg. 613/06, s. 2.

(2) Despite subsection (1), the first review after the completion of the review started before the end of 2007 shall be started five years after the day Ontario Regulation 23/10 is filed. O. Reg. 23/10, s. 11.

18. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 239/02, s. 18.

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TOWN OF THE BLUE MOUNTAINS

POLICY & PROCEDURES									
Subject Title: Minimum Winter Maintenance Standards and Level of Service									
Corporate Policy (Approved by Council)	Х	Policy Ref. No.:	POL.COR.13.22						
Administrative Policy (Approved by CAO)		By-law No.:	N/A						
Department Policy: (Approved by Mgr.)		Name of Dept.:	Engineering & Public Works						
Date Approved: October 28, 2013	1	Staff Report:	EPW.13.055						

Policy Statement

This Policy is intended to ensure that appropriate winter minimum maintenance standards are developed and implemented to meet the Common Law test of reasonableness.

Purpose

This Policy is intended to provide a guideline for winter minimum maintenance standards and level of service.

Application

This Policy applies to employees of the Roads and Drainage Division of Engineering and Public Works

Definitions

MMS: means the Council approved Town Winter Minimum Maintenance Standards and Level of Service Policy

Procedures

Background

The Town has an obligation to maintain its road and sidewalk network to a safe level of service. To that end, the Town has developed a Winter Minimum Maintenance Standards and Level of Service Policy.

Winter Minimum Maintenance Standards- Roads

Spreading and Plowing Times

Objectives for Class 3, 4, 5 and 6 roads based on the following Average Annual Daily Traffic (AADT) volumes:

<u>CLASS 3 (1000 to 5000 AADT)</u> (80 km/hr) The objective is to make best efforts to achieve center bare or track bare pavement.

<u>Spreading Materials</u> - Class 3 roads will have materials spread within 8 hours after becoming aware that such treatment is required.

<u>Snow Plowing</u> - Class 3 roads will have both sides of the road plowed one time within 12 hours after it has been determined that there is 8 cm of snow accumulated on the road surface.

<u>CLASS 4 (250 to 1000 AADT)</u> (80 km/hr) The objective is to make best efforts achieve center bare or track bare pavement.

Spreading Materials - Class 4 roads will have materials spread within 12 hours after becoming aware that such treatment is required.

<u>Snow Plowing</u> - Class 4 roads will have both sides of the road plowed one time within 16 hours after it has been determined that there is 8 cm of snow accumulated on the road surface.

<u>CLASS 5 (50 to 1000 AADT on 50km/ hr highways</u>) The objective is to make best efforts to provide a smooth snow covered surface.

Spreading Materials - Class 5 roads will have materials spread within 16 hours after becoming aware that such treatment is required. Bituminous roads in the category should not be bared after the storm by applying salt.

<u>Snow Plowing</u> - Class 5 roads will have one lane 5m in width plowed one time within 24 hours after it has been determined that there is 10 cm of snow accumulated on the road surface.

<u>CLASS 6 (under 50 AADT)</u> The objective is to make best efforts to provide a smooth snow covered surface.

Spreading Materials - Class 6 roads may have materials spread within 24 hours after becoming aware that such treatment is required. Gravel roads in this category may be spot sanded only on hills, curves and intersections.

<u>Snow Plowing</u> - Class 6 roads will have one lane 5m in width plowed one time within 24 hours after it has been determined that there is 10 cm of snow accumulated on the road surface.

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<u>Seasonal Roads CLASS 6 (under 50 AADT)</u> The objective is to close these roads and not perform any winter maintenance as signed.

Spreading Materials – N/A- Seasonal Class 6 roads will not have materials spread.

Snow Plowing - N/A- Seasonal Class 6 roads will not have snow plowed or removed.

This Level of Service Policy :

- a. Only applies to one through lane in each direction and does not apply to auxiliary lanes such as parking, passing or turning lanes, and;
 - b. Only applies during the season when the winter highway maintenance is performed.

In this section, "snow accumulation" means the natural accumulation of any of the following that, alone or together, covers more than half a lane width of a roadway:

- a. New fallen snow
- b. Wind-blown snow
- c. Slush

The following table is a guideline for the Town's Winter operations. Once it has been determined by the Roads and Drainage Division Staff that conditions warrant spreading materials and /or snow clearing efforts, the following timelines will be followed.

Class of Highway	AADT	Spreading Time	Plowing Depth	Plowing Time
2	Over 5000	4 hours	5cm	6 hours
3	Over 1000	8 hours	8cm	12 hours
4	Under 1000	12 hours	8cm	16 hours
5	Under 1000	16 Hours	10 cm	24 hours
6	Under 50	24 Hours	10cm	24 hours
Seasonal 6	NA	NA	NA	NA

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The objective of the Town's Roads and Drainage Division is to provide winter maintenance given the resources available for winter control purposes and the weather conditions. It is also recognized that conditions do occur that will preclude the defined Winter Level of Service from being achieved.

The Town will make best efforts to monitor road conditions and weather information.

Winter Minimum Maintenance Standards- Sidewalks

The Town's practice is to clear priority sidewalks in Thornbury, Clarksburg and the Village Commercial Core plus secondary sidewalks in Thornbury and Clarksburg.

Winter sidewalk maintenance are as follows:

- i <u>Priority Routes</u>: Following a winter storm event, plow equipment will be dispatched to priority routes upon the accumulation of: <u>five (5)</u> <u>centimeters of new snow.</u> Plowing operations will remove snow down to a smooth snow packed surface. Priority sidewalks will be cleared within <u>sixteen (16) hours</u> of being dispatched. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.
- ii <u>Secondary Routes:</u> Following a winter storm event, plow equipment will be dispatched to secondary routes after the Priority routes are completed and upon the accumulation of: <u>five (5) centimeters of new</u> <u>snow.</u> Plowing operations will remove snow down to a smooth snow packed surface. Secondary sidewalks will be cleared within <u>twenty-four</u> (24) hours of being dispatched. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.
- iii The Contractor will undertake daily patrol to monitor sidewalk conditions. Town staff will monitor the Contractor's activities and conduct random inspections
- iv Apply sand/salt mix <u>within sixteen hours</u> to increase traction for pedestrians as the operator becomes aware of slippery conditions during non-snow events. (This is the same MMS as a Class 4 road.)
- v Winter maintenance will begin on November 1 in any year to April 15 in the following year.
- vi Sidewalks not included in the defined areas shall not be maintained from November 1 in any year to April 15 in the following year and shall be considered closed during this period.

Winter Minimum Maintenance Standards- Municipal Parking Lots

For the purpose of this Policy, municipal parking lots are those maintained by the Roads and Drainage Division. The Level of Service for municipal parking lots be the same as that prescribed for secondary sidewalks.

Following a winter storm event, equipment will be dispatched to parking lots upon the accumulation of: <u>five (5) centimeters of new snow</u>. Plowing operations will remove snow down to a smooth snow packed surface. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.

Level of Service Summary – Sidewalks and Municipal Parking Lots

- 1. The service area will remain those sidewalks currently cleaned on a priority and secondary basis;
- Priority routes will be cleared upon the accumulation of 5 cm of snow within 16 hours, secondary routes will be cleared upon the accumulation of 5 cm of snow within 24 hours, and sand/salt mix will be applied as necessary for traction;
- 3. Snow removal will be undertaken as a contracted service achieving the Town's MMS criteria at the sole discretion of the Manager of Roads and Drainage or his or her designate;
- 4. The liability for injury claims will be the sole responsibility of the Contractor;
- 5. The contracted service will be bid on an annual lump sum basis .

Furthermore, Staff recommend that the same level of service be adopted for municipal parking lots maintained by the Roads and Drainage Division as that used for secondary sidewalks.

Exclusions

Town road sections and sidewalks that do not receive maintenance on a yearround basis.

References and Related Policies

1. Road Needs Study – 2009 to 2013 – Town of The Blue Mountains

2. The *Municipal Act, 2001*, S.O. 2001, c. 25, Regulation 239/02 and Regulation 23/10.

Consequences of Non-Compliance

Liability in the case of an action brought against the Town as a result of an accident caused by non-compliance with the Winter Minimum Maintenance Standards and Level of Service Policy.

This document can be made available in other accessible formats as soon as practicable and upon request

Review Cycle

This Policy will be reviewed annually by the Manager of the Roads and Drainage Division and the Roads Foreman.

<u>Jim McCannell</u> Jim McCannell Manager, Roads and Drainage <u>Reg Russwurm</u> Reg Russwurm Director, Engineering and

Public Works

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Policy

POL.COR.19<mark>.XX</mark> Winter Maintenance Standards and Level of Service

Policy Type:	Corporate Policy (Approved by Council)
Date Approved:	TBD
Department:	Infrastructure and Public Works – Roads and Drainage
Staff Report:	CSPW.19.006 Updates to the Town Winter Maintenance Standards and Level
	of Service Policy
Policy Number:	POL.COR.2019-

Policy Statement

This Policy is intended to ensure that appropriate winter maintenance standards are developed and implemented to meet the Common Law test of reasonableness.

This Policy was written to generally conform to the Minimum Maintenance Standards for Municipal Highways (O. Reg. 239/02) as well as the Town's needs and expectations while allowing the Roads and Drainage Department to operate within the means of its approved budget.

The stated purpose of O. Reg. 239/02 is to clarify the scope of the statutory defense available to a municipality under the maintenance clause (clause 44) of the Municipal Act by establishing maintenance standards which are non-prescriptive as to the methods or materials to be used in complying with the standards but instead describe a desired outcome.

Purpose

This Policy is intended to provide a guide for Town Staff in determining reasonable level of service and appropriate winter maintenance standards.

Application

This Policy applies to employees of the Roads and Drainage Division of Infrastructure and Public Works as well as contractors.

Definitions

"AADT" means average annual daily traffic.

"significant weather event" means an approaching or occurring weather hazard with the potential to pose a significant danger to users of the highways within a municipality.

"weather hazard" means the weather hazards determined by Environment Canada as meeting the criteria for the issuance of an alert under its Public Weather Alerting Program.

Procedures

Background

The Town has an obligation to maintain its road and sidewalk network to a safe level of service. To that end, the Town developed a Minimum Winter Maintenance Standards and Level of Service Policy (POL.COR.13.22). In order to ensure that the Policy is current and addresses the changes to provincial regulations (O.Reg. 239/02 Minimum Maintenance Standards for Municipal Highways) which came into effect May 3, 2018, Staff undertook a review and update of the Town's current Corporate Policy.

Town Winter Maintenance Standards- Roads

Spreading and Plowing Times

Maintenance objectives for Town roads are based the classification of each road section. Roads are classified from one through six based on the Average Annual Daily Traffic (AADT) volumes and posted speed limits of the individual road section as shown in Table One below.

POL.COR.19.XX

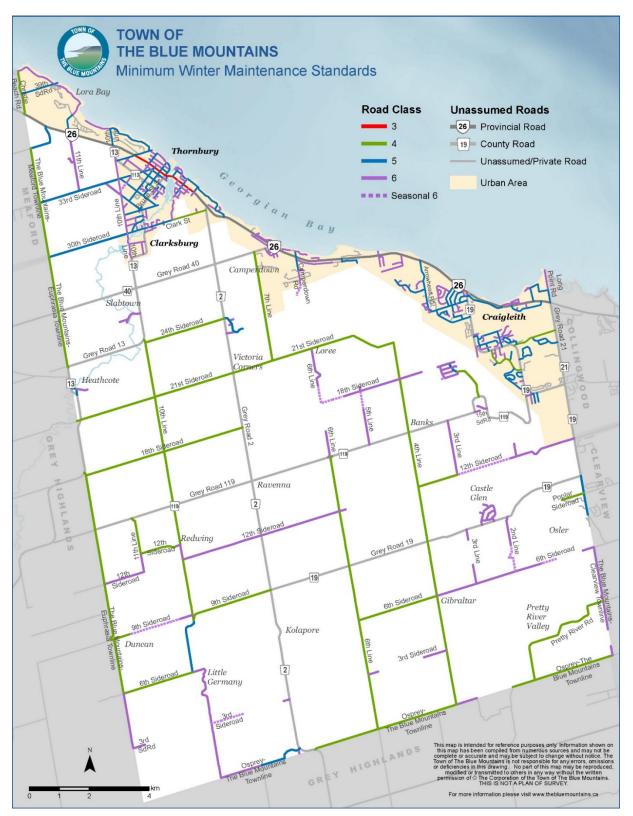
Winter Maintenance Standards and Level of Service Policy

Table One: Classification of Highways								
Average Daily	91 - 100	81 - 90	71 - 80	61 - 70	51 - 60	41 - 50	1 - 40	
Traffic (number of	km/h							
motor vehicles)	speed limit							
53,000 or more	1	1	1	1	1	1	1	
23,000 - 52,999	1	1	1	2	2	2	2	
15,000 - 22,999	1	1	2	2	2	3	3	
12,000 - 14,999	1	1	2	2	2	3	3	
10,000 - 11,999	1	1	2	2	3	3	3	
8,000 - 9,999	1	1	2	3	3	3	3	
6,000 - 7,999	1	2	2	3	3	4	4	
5,000 - 5,999	1	2	2	3	3	4	4	
4,000 - 4,999	1	2	3	3	3	4	4	
3,000 - 3,999	1	2	3	3	3	4	4	
2,000 - 2,999	1	2	3	3	4	5	5	
1,000 - 1,999	1	3	3	3	4	5	5	
500 - 999	1	3	4	4	4	5	5	
200 - 499	1	3	4	4	5	5	6	
50 - 199	1	3	4	5	5	6	6	
0 - 49	1	3	6	6	6	6	6	

Table One: Classification of Highways

Winter Maintenance Standards and Level of Service Policy

Figure One: Town Road Classification Map



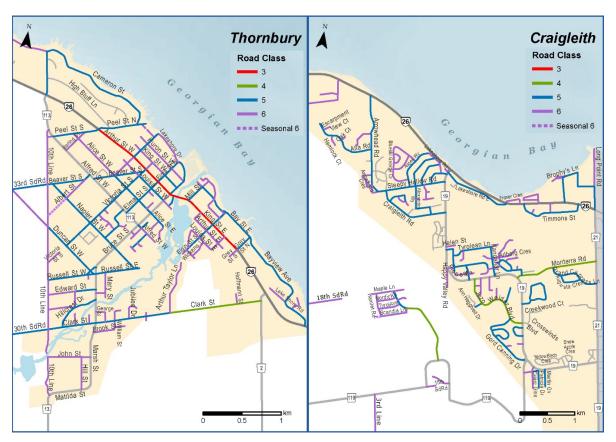


Figure Two & Three: Town Road Classification Map—Thornbury/Clarksburg & Craigleith

CLASS 1 Roads: The Town does not currently have any roads which meet the criteria for class one roads.

CLASS 2 Roads: The objective is to make best efforts to achieve center bare or track bare pavement.

Spreading Materials - Class 2 roads will have materials spread within 4 hours after becoming aware that such treatment is required.

Snow Plowing - Class 2 roads will have both sides of the road plowed one time within 6 hours after it has been determined that there is 5cm of snow accumulated on the road surface.

CLASS 3 Roads: The objective is to make best efforts to achieve center bare or track bare pavement.

Spreading Materials - Class 3 roads will have materials spread within 8 hours after becoming aware that such treatment is required.

Snow Plowing - Class 3 roads will have both sides of the road plowed one time within 12 hours after it has been determined that there is 8cm of snow accumulated on the road surface.

CLASS 4 Roads: The objective is to make best efforts achieve center bare or track bare pavement.

Spreading Materials - Class 4 roads will have materials spread within 12 hours after becoming aware that such treatment is required.

Snow Plowing - Class 4 roads will have both sides of the road plowed one time within 16 hours after it has been determined that there is 8cm of snow accumulated on the road surface.

CLASS 5 Roads: The objective is to make best efforts to provide a smooth snow covered surface.

Spreading Materials - Class 5 roads will have materials spread within 16 hours after becoming aware that such treatment is required. Bituminous roads in the category should not be bared after the storm by applying salt.

Snow Plowing - Class 5 roads will have one lane 5m in width plowed one time within 24 hours after it has been determined that there is 10cm of snow accumulated on the road surface.

CLASS 6 The objective is to make best efforts to provide a smooth snow covered surface.

Spreading Materials - Class 6 roads may have materials spread within 24 hours after becoming aware that such treatment is required. Gravel roads in this category may be spot sanded only on hills, curves and intersections.

Snow Plowing - Class 6 roads may have one lane 5m in width plowed one time within 24 hours after it has been determined that there is 10cm of snow accumulated on the road surface.

Seasonal Roads CLASS 6: The objective is to close these roads and not perform any winter maintenance as signed.

Spreading Materials – Seasonal Class 6 roads will not have materials spread.

Snow Plowing – Seasonal Class 6 roads will not have snow plowed or removed.

This Level of Service Policy:

- i. Only applies to one through lane in each direction and does not apply to auxiliary lanes such as parking, passing or turning lanes, and;
- ii. Only applies during the season when the winter highway maintenance is performed.

In this section, "snow accumulation" means the natural accumulation of any of the following that, alone or together, covers more than half a lane width of a roadway:

- i. New fallen snow
- ii. Wind-blown snow
- iii. Slush

The objective of the Town's Roads and Drainage Division is to provide winter maintenance given the resources available for winter control purposes and the weather conditions. It is also recognized that conditions do occur that will preclude the defined Winter Level of Service from being achieved.

The Town will make best efforts as appropriate to the circumstances to monitor road conditions and weather information.

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Winter Maintenance Standards and Level of Service Policy

The following table is a guideline for the Town's Winter Operations. Once it has been determined by the Roads and Drainage Division Staff that conditions warrant spreading materials and /or snow clearing efforts, the following timelines will be followed.

Table Two: Town Winter Maintenance Standards for Roadways

Class of				Snow Plowing		Spreading Materials
Highway	Winter Maintenance Objective	re Snow Plowing Objective		Spreading Time	Objective	
2	To make best efforts to achieve center bare or track bare pavement	5cm	6 hours	Both sides of the road plowed one time within 6 hours after it has been determined that there is 5cm of snow accumulated on the road surface.	4 hours	Have materials spread within 4 hours after becoming aware that such treatment is required.
3	To make best efforts to achieve center bare or track bare pavement.	8cm	12 hours	Both sides of the road plowed one time within 12 hours after it has been determined that there is 8cm of snow accumulated on the road surface.	8 hours	Have materials spread within 8 hours after becoming aware that such treatment is required.
4	To make best efforts achieve center bare or track bare pavement.	8cm	16 hours	Both sides of the road plowed one time within 16 hours after it has been determined that there is 8cm of snow accumulated on the road surface.	12 hours	Have materials spread within 12 hours after becoming aware that such treatment is required.
5	To make best efforts to provide a smooth snow covered surface.	10cm	24 hours	One lane 5m in width plowed one time within 24 hours after it has been determined that there is 10cm of snow accumulated on the road surface.	16 hours	Have materials spread within 16 hours after becoming aware that such treatment is required. Bituminous roads in the category should not be bared after the storm by applying salt.
6	To make best efforts to provide a smooth snow covered surface. Gravel roads in this category may be spot sanded only on hills, curves and intersections.	10cm	24 hours	One lane 5m in width plowed one time within 24 hours after it has been determined that there is 10cm of snow accumulated on the road surface.	24 hours	Have materials spread within 24 hours after becoming aware that such treatment is required.
Seasonal 6	To close these roads and not perform any winter maintenance as signed.	N/A	N/A	No winter maintenance.	N/A	No winter maintenance.

Winter Maintenance Standards – Sidewalks

The Town's practice is to clear priority sidewalks in Thornbury, Clarksburg and the Village Commercial Core plus secondary sidewalks in Thornbury and Clarksburg. All other Secondary sidewalks shall be signed as "Closed – No Winter Maintenance"

Winter sidewalk maintenance levels of service are as follows:

- i. Priority Routes: Following a winter storm event, plow equipment will be dispatched to priority routes upon the accumulation of five (5) centimeters of new snow. Plowing operations will remove snow down to a smooth snow packed surface. Priority sidewalks will be cleared within sixteen (16) hours of being dispatched. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.
- Secondary Routes: Following a winter storm event, plow equipment will be dispatched to secondary routes after the Priority routes are completed and upon the accumulation of five (5) centimeters of new snow. Plowing operations will remove snow down to a smooth snow packed surface. Secondary sidewalks will be cleared within twenty-four (24) hours of being dispatched. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.
- iii. The Contractor will undertake daily patrol to monitor sidewalk conditions. Town staff will monitor the Contractor's activities and conduct random inspections.
- iv. Apply sand/salt mix within sixteen hours to increase traction for pedestrians as the operator becomes aware of slippery conditions during non-snow events. (This is the same level of service as a Class 4 road.)
- v. Winter maintenance will begin on November 1 in any year to April 15 in the following year.
- vi. Sidewalks not included in the defined areas shall not be maintained from November 1 in any year to April 15 in the following year and shall be considered closed during this period.

Winter Maintenance Standards – Municipal Parking Lots

For the purpose of this Policy, municipal parking lots are those maintained by the Roads and Drainage Division. The Level of Service for municipal parking lots shall be the same as that prescribed for secondary sidewalks.

Following a winter storm event, equipment will be dispatched to parking lots upon the accumulation of five (5) centimeters of new snow. Plowing operations will remove snow down to a smooth snow packed surface. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.

Level of Service Summary – Municipal Parking Lots

- 1. Municipal Parking Lots shall receive the same level of service as secondary sidewalks
- 2. Municipal Parking Lots routes will be cleared upon the accumulation of 5cm of snow within 24 hours. Plowing operations will remove snow down to a smooth snow packed surface. A sand/salt mix will be applied as necessary for traction;
- Snow removal will be undertaken as a contracted service achieving the Town's Winter Maintenance Standards at the sole discretion of the Manager of Roads and Drainage or his or her designate;

Winter Maintenance Standards – Cycling Lanes

Currently, the Town does not have designated Cycling Lanes. Road sections with paved shoulders may be cleared during regular plowing operations and will receive the same level of snow removal service as the adjacent road. Paved shoulders will not have a sand/salt mix applied for traction.

Significant Weather Event

A "significant weather event" is defined as an approaching or occurring weather hazard with the potential to pose a significant danger to users of the highways within a municipality.

The Manager of Roads and Drainage, or designate, may declare a significant weather event when they, through their knowledge, experience and available information, believe that the Town's Winter Maintenance Operations are unlikely to be able to meet the level of service defined in this policy due to a weather hazard or other adverse weather conditions. Winter Maintenance Standards and Level of Service Policy

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The Town's Communication and Economic Development Coordinator, or designate, will declare the beginning, or the end, of a significant weather event in one or more of the following ways:

- 1. By posting a notice on the municipality's website;
- 2. By making an announcement on a social media platform, such as Facebook or Twitter;
- 3. By sending a press release or similar communication to internet, newspaper, radio or television media;
- 4. By notification through the municipality's police service; and/or,
- 5. By any other notification method required in a by-law of the municipality.

The declaration of a "significant weather event" has the same implication for the following sections of the Regulation:

- 1. Snow accumulation on roadways;
- 2. Snow accumulation on bicycle lanes;
- 3. Icy roadways;
- 4. Snow accumulation on sidewalks; and,
- 5. Icy sidewalks.

In each case, during a declared significant weather event, the standard for addressing winter maintenance is for the Town to monitor the weather and to deploy resources to address the issue, if deemed practicable, starting from the time that the Town deems appropriate to do so. After the event, once the Town declares the significant weather event has concluded, the Town shall address the issue according to the regular standards for maintenance.

Exclusions

Town road sections and sidewalks that do not receive maintenance on a year-round basis.

References and Related Policies

- 1. Road Needs Study 2009 to 2013 Town of The Blue Mountains
- 2. The Municipal Act, 2001, S.O. 2001, c. 25
- 3. O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways
- 4. Winter Minimum Maintenance Standards and Level of Service Policy (POL.COR.13.22).
- 5. Preparing For, Initiating and Decommissioning Winter Operations
- 6. No Winter Maintenance Signage
- 7. Winter Patrol Standards
- 8. Winter Weather Monitoring
- 9. Winter Communication Policy (IPW.DEP.POL.18.001)

Consequences of Non-Compliance

Liability in the case of an action brought against the Town as a result of an accident caused by non-compliance with the Winter Maintenance Standards and Level of Service Policy.

Review Cycle

This Policy will be reviewed annually by the Manager of the Roads and Drainage Division and the Roads Foreman and Council once per term or as significant modifications are warranted.

Summary Discussion of Town Winter Maintenance Policy Changes to Reflect Amendments of O.Reg. 239/02

The most recent additions to O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways include are listed below followed by a discussion of each amendment.

- 1. The introduction of winter maintenance standards for bicycle lanes;
- 2. The introduction of winter maintenance standards, including patrol obligations, for sidewalks;
- 3. The ability for municipalities to declare a "significant weather event" with implications for winter maintenance on roadways, bicycle lanes and sidewalls for the duration of the event; and,
- 4. Inspection standards for areas "adjacent to sidewalks"
- 5. Sidewalk Surface Discontinuities
- 6. Pothole repairs
- 7. Road classification system

1. Bicycle Lanes

O. Reg. 239/02 now includes a definition of a bicycle lane and defines them as being a portion of the roadway designated, by pavement markings or signage, for the preferential or exclusive use of cyclists. The new regulation also specifies the level of service for the winter maintenance of bicycle lanes by the classification of road. The snow accumulation standards for bicycle lanes is lower than for the adjacent roadway for most classes of roads with the intent that where maintenance is performed on the roadway and bicycle lane at the same time, the standard should be satisfied.

The Town does not currently have any roadways with designated bicycle lanes. The areas used by cyclists are paved shoulders and are not marked or signed as cycling lanes and therefore do not require a defined level of service. Paved shoulders will be cleared during the regular plowing activities and receive the same level of service as the adjacent road and therefore meet the described level of service.

2. Sidewalks

Snow Accumulation and Ice Formation

O. Reg. 239/02 now includes sections specific to sidewalk winter maintenance. The new regulation specifies that the standard for the removal of snow accumulation on sidewalks is to reduce the snow to a depth of less than or equal to 8cm within 48 hours of the accumulation having ended and provide a minimum sidewalk width of 1m.

O. Reg. 239/02 now also specifies the standard for treating ice formation on sidewalks as being to treat the sidewalk within 48 hours of the municipality first becoming aware of the fact that the sidewalk is icy. Additionally, the regulation states that municipalities are required to treat the sidewalk, if practicable, to prevent ice formation or improve traction within 48 hours of determining that there is a substantial probability of ice forming on the sidewalk, starting from when the municipality determines it is appropriate to deploy its resources for that purpose.

The Town's current Level of Service states that Priority sidewalks will receive maintenance within 16 hours of receiving 5cm of snow while Secondary sidewalks are maintained within 24 hours of receiving 5cm of snow.

Winter Sidewalk Patrol

O. Reg. 239/02 now requires municipalities to undertake a sidewalk patrol when the municipality determines, through its weather monitoring, that there is a substantial probability of snow accumulation in excess of 8cm; ice formation; or icy conditions on its sidewalks. The required patrol may consist of visually observing the sidewalk, either by driving by the sidewalk on the adjacent roadway or by driving or walking on the sidewalk, and may be performed either by persons responsible for patrolling roadways or sidewalks or by persons responsible for or performing roadway or sidewalk maintenance activities.

The sidewalk standards outlined in the amended regulation is lower than the Town's current standard as outlined in the Town's current Policy. The Town currently contracts the winter maintenance of sidewalks in Clarksburg, Thornbury and the Blue Mountain Village area. The contractors are responsible for patrolling the sidewalks, for directing their equipment and staff to maintain the sidewalks to the Town's defined level of service, and for documenting the sidewalk condition and work performed. Town Staff routinely check patrol representative sections of sidewalk to ensure compliance with the Town's defined level of service.

3. Significant Weather Event

Amendments to O. Reg. 239/02 also introduces the concept of a "significant weather event" which is defined as "an approaching or occurring weather hazard with the potential to pose a significant danger to users of the highways within a municipality." The MMS Regulation also now defines the term "Weather hazard" as meaning "the weather hazards determined by Environment Canada as meeting the criteria for the issuance of an alert under its Public Weather Alerting Program." A municipality may declare the beginning, or the end, of a significant weather under O. Reg. 239/02 in one or more of the following ways:

- 1. By posting a notice on the municipality's website;
- 2. By making an announcement on a social media platform, such as Facebook or Twitter;
- 3. By sending a press release or similar communication to internet, newspaper, radio or television media;
- 4. By notification through the municipality's police service; and/or,
- 5. By any other notification method required in a by-law of the municipality.

The declaration of a "significant weather event" has the same implication for the following sections of the Regulation:

- 1. Snow accumulation on roadways;
- 2. Snow accumulation on bicycle lanes;
- 3. Icy roadways;
- 4. Snow accumulation on sidewalks; and,
- 5. Icy sidewalks.

In each case, during a declared significant weather event, the standard for addressing winter maintenance is for the municipality "to monitor the weather" and to deploy resources to address the issue, if deemed practicable, "starting from the time that the municipality deems appropriate to do so." After the event, once the municipality declares the significant weather event has concluded, the municipality shall address the issue according to the regular standards for maintenance.

Roads and Drainage Staff have developed a divisional policy for declaring a "Significant Weather Event" in consultation with the Communications and Economic Development Coordinator. Public notifications will be coordinated by the Communications and Economic Development Coordinator.

4. Area Adjacent to Sidewalks

In addition to amendments addressing winter maintenance standards, O. Reg. 239/02 now also includes a standard for the areas adjacent to sidewalks. The regulation now defines "sidewalk" as meaning "the part of the highway specifically set aside or commonly understood to be used for pedestrian use, typically consisting of a paved surface but does not include crosswalks, medians, boulevards, shoulders or any part of the sidewalk where cleared snow has been deposited". Additionally, the regulation now defines "encroachment" as meaning "anything that is placed, installed, constructed or planted within the highway that was not placed, installed, constructed or planted by the municipality" and "the area adjacent to a sidewalk begins at the outer edges of a sidewalk and ends at the lesser of the limit of the highway, the back edge of a curb if there is a curb and a maximum of 45cm".

The standard for the inspection of sidewalk encroachments is to inspect areas adjacent to sidewalk for encroachments once per calendar year, with each inspection taking place within 16 months of the previous inspection. If it is determined by the municipality that an encroachment is "highly unusual given its character and location or to constitute a significant hazard to pedestrians" the standard is to treat the encroachment within 28 days of making such a determination. O. Reg. 239/02 states that an encroachment which is determined to constitute a significant hazard to pedestrians should be treated by taking reasonable measures to protect users, including making permanent or temporary repairs, alerting users' attention to the encroachment or preventing access to the area of the encroachment.

The encroachment inspection frequency and treatment standards are the same as the standard for sidewalk discontinuities and, as such, have already been added to the Town's annual sidewalk inspection program.

5. Sidewalk Surface Discontinuities

Section 16.1 of the Regulation, Sidewalk Surface Discontinuities, has been amended to add surface discontinuities within the sidewalk; specifically, the definition for "surface discontinuity" has been amended to include "any vertical height difference between a utility appurtenance found on or within the sidewalk and the surface of the sidewalk". Additionally, the Regulation has added the term "utility appurtenance" which includes "maintenance holes and hole covers, water shut-off covers and boxes, valves, fittings, vaults, braces, pipes, pedestals, and any other structures or items that form part of or are an accessory part of any utility". Previously, the regulation defined "surface discontinuity" means a vertical discontinuity creating a step formation at any joint or crack in the surface of the sidewalk.

As with the addition of Areas Adjacent to Sidewalks (encroachments), the inspection frequency and treatment standards remain the same and, as such, the Town has already amended its sidewalk inspection program to identify these items.

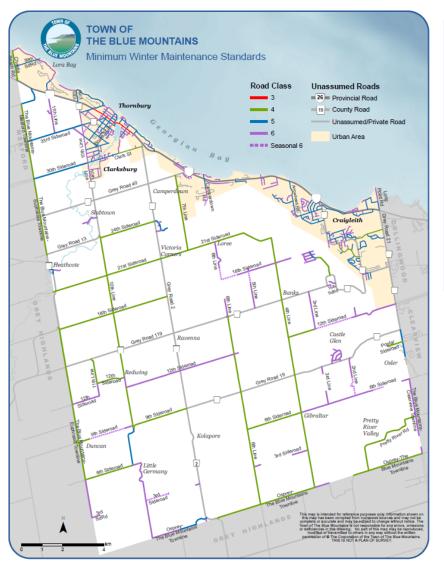
6. Potholes

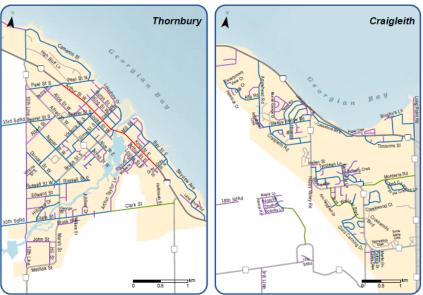
Section 6 of the regulation has been amended to state that the area and depth of potholes may be determined by municipal staff or contractors by performing an actual measurement or performing a visual estimate.

By allowing the area and depth of potholes to be visually estimated, the Regulation now allows for the Town to meet its due diligence, from an evidentiary perspective, more quickly, safely and thoroughly where it was not previously practical or safe to do so regularly.

7. Road Classification System

The amendments to O. Reg. 239/02 included revisions to the classification of highways, which Staff have incorporated into the updated Policy along with a map showing the classification of each road in the Town to better enable residents to determine the level of service provided to any road of interest. Previously, the Town's policy used an overly simplified classification system which was cumbersome for Staff and difficult for residents to understand.





	Winter Maintenance Objective		Sno	w Plowing		Spreading Materials
Class of Highway	Objective	Snow Accumulation	Plowing Time	Objective	Spreading Time	Objective
3	To make best efforts to achieve center bare or track bare pavement.	8cm	12 hours	Both sides of the road plowed one time within 12 hours after it has been determined that there is 8 cm of snow accumulated on the road surface.	8 hours	Have materials spread within 8 hours after becoming aware that such treatment is required.
4	To make best efforts achieve center bare or track bare pavement.	8cm	16 hours	Both sides of the road plowed one time within 16 hours after it has been determined that there is 8 cm of snow accumulated on the road surface.	12 hours	Have materials spread within 12 hours after becoming aware that such treatment is required.
5	To make best efforts to provide a smooth snow covered surface.	10cm	24 hours	One lane 5m in width plowed one time within 24 hours after it has been determined that there is 10 cm of snow accumulated on the road surface.	16 hours	Have materials spread within 16 hours after becoming aware that such treatment is required. Bituminous roads in the category should not be bared after the storm by applying salt.
6	To make best efforts to provide a smooth snow covered surface. Gravel roads in this category may be spot sanded only on hills, curves and intersections.	10cm	24 hours	One lane 5m in width plowed one time within 24 hours after it has been determined that there is 10 cm of snow accumulated on the road surface.	24 hours	Have materials spread within 24 hours after becoming aware that such treatment is required.
Seasonal 6	To close these roads and not perform any winter maintenance as signed.	N/A	N/A	No winter maintenance.	N/A	No winter maintenance.

Classification of Highways have been determined according to the Municipal Act, 2001, S.O. 2001, c. 25, O. Reg. 366/18 as of May 2, 2018 and the Annual Average Daily Traffic (AADT) data from the 2009 - 2013 Road Needs Study. The Town's Winter Minimum Maintenance Standards policy is intended to provide a guideline for winter minimum maintenance standards and level of service which may be subject to change in extreme conditions.