то:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON AUGUST 22, 2016
FROM:	JOHN BRAAM, P.ENG. MANAGING DIRECTOR OF ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	PROVINCIAL MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS – PROPOSED AMENDMENTS 2016

## **RECOMMENDATION**

That, on the recommendation of the Managing Director of Environmental and Engineering Services and City Engineer the following actions be taken with respect to proposed amendments to the Provincial Maintenance Standards for Municipal Highways:

- a) the report **BE RECEIVED** for information; and,
- b) the following comments **BE ENDORSED AND SUBMITTED** to the Ontario Good Roads Minimum Maintenance Standards Task Force, it being noted that the due date for comments is September 2, 2016.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Environment and Transportation Committee April 14, 2003 Minimum Maintenance Standards for Municipal Highways
- Environment and Transportation Committee June 7, 2004 Walkway Winter Policy Review
- Environment and Transportation Committee January 21, 2005 Service Level
   Winter Sidewalk Maintenance
- Environment and Transportation Committee November 16, 2009 Service Level – Winter Sidewalk Maintenance
- Civic Works Committee October 7, 2014 Provincial Minimum Maintenance Standards – 2013 Update
- Civic Works Committee February 3, 2015 CWC Roadway Winter Maintenance Program
- Civic Works Committee June 8, 2016 London ON Bikes Draft Cycling Master Plan

# 2015 - 19 STRATEGIC PLAN

The initiative supports Strategic Plan through the strategic focus area of *Building a Sustainable City* by managing our infrastructure and *Leading in Public Service* by

providing excellent service delivery.

## **BACKGROUND**

The purpose of this report is to provide an update on proposed amendments to the Provincial Minimum Maintenance Standards for Municipal Highways (MMS) and to obtain Council endorsement of comments.

On November 1, 2002 Ontario Regulation 239/02 Minimum Maintenance Standards was enacted. This Provincial regulation under the new Municipal Act has helped reduce claims against municipalities by defining minimum maintenance standards for a variety of roadway functions including regular patrol, winter patrol, winter operations, weather monitoring, potholes, bridges, luminaries, road shoulders and signs.

The City of London adopted this regulation in April 2003. The regulation has been amended since its inception on February 18, 2010 and January 25, 2013. Municipalities can rely on the standards when defending claims provided patrolling and inspection records can be produced and subsequent repairs are performed within the time limits set out in the various sections of the regulation.

The Ontario Good Roads Association manages the amendment process and through the appointed Task Force has released the document to municipalities for comment. Attached to this report is the revised edited version. The underlined sections identify the proposed changes in wording and additional requirements.

The 2015 review, unlike previous reviews that focused on roadway and sidewalk users, has focused on all users of the road allowance. This includes cyclists and transit users. The review also must ensure that the MMS complies with AODA requirements.

The new proposed amendments have been released for consultation and the review period ends September 2<sup>nd</sup> 2016. It is likely that after the review period the amendments will be enacted in 2017.

## **Updates**

The focus of the current amendments is active transportation. The proposed amendments is accompanied by a document that cites the risk factors associated with physical inactivity and obesity and the importance of municipalities to encourage healthy lifestyles and environmentally friendly local transportation choices.

The proposed amendments, which are included in Appendix A, were reviewed from an operational and resourcing perspective.

Highlights of the proposed amendments include:

Changing the name of the regulation by removing the word "Minimum" from the title. Instead of MMS the amended version can be referred to as MS in this report.

No impact to the City operations.

Adding winter sidewalk standards. The City currently relies on a council approved standard that has a threshold to clear snow once 8 cm of accumulation occurs

and allows for 24 hours to clear the sidewalk after a snowfall ends. There are also provisions for icy sidewalks. The MS allows 48 hours and 8 cm.

No operational or financial impact to the City.

Adding a standard for cycling networks. Conventional bicycle lanes will follow a slightly lower standard as the adjacent road. Separated bicycle lanes will have a higher standard.

This may have an operational and financial impact as cycling lanes currently are not maintained to this standard. The higher standard for separated bicycle lanes will add a new cost of approximately \$13,500 to \$25,000 per km.

Revising the Table Classification of Highways to better reflect 2016 traffic volumes, especially in large urban centres.

Operational or financial impact should not be significantly increase.

Adding the ability to declare a 'Significant Event'. When severe weather is approaching or occurring a municipality can suspend its requirement to follow these regulations and other provincial regulation governing hour of service. The declaration allows supervisory staff to effectively plan and maximize resources in anticipation of and/or during a Significant Event when all resources may be exhausted and includes the ability to close a highway.

Operational impact that will require a Council approved policy for such a declaration.

The MS now applies to all street lights whereas the current MMS only applied to higher speed and higher volume roads.

Operational impact from a response time standard which will increase the cost to maintain the street lights. The specified timeline to repair street lights (7 days or 14 days depending on the classification of the road) is achievable in most instances; however, these dates will be exceeded if excavation work is required or electric equipment need to be ordered.

The time required to obtain locates from all of the utilities extends the repair time beyond the specified limits. In these instances troubleshooting will be done within the specified time, locates will be requested from Ontario One Call and the repair will be completed within 7 or 14 days after all locates are received.

The other proposed amendments and wording changes are minor and no concerns have been identified with them.

## **Proposed City of London Comments**

The Ontario Good Roads Association Minimum Maintenance Standards Task Force has requested comments on the proposed amendments. Civic Administration has developed the following comments:

1. The amendments identify a higher level of service for separated bicycle lanes than roadways of the same class. One method to create a separated bicycle lane is via a painted buffer and this may be selected on a particular roadway to enable winter snow clearing under the same operation as the adjacent vehicular lanes. Under the proposed amendments, the bicycle lanes may require a higher level of service which would determine the operations frequencies for the entire

- roadway. Further clarification is required on this standard in the MS as to the definition of a separated bicycle lane.
- 2. The amendments should enable a municipality to designate particular bicycle lane network for winter maintenance. For example, the London ON Bikes Cycling Master Plan identifies a winter cycling network with higher ridership routes that connect key destinations. The proposed winter network includes selected conventional bicycle lanes, separated bicycle lanes and existing boulevard bicycle paths. The boulevard bicycle paths would not be subject to the MS because they are not designated by signage. A municipality should be allowed to designate what portions of the cycling network are to be maintained within the highway right of way.
- 3. The specified timeline to repair street lights (7 days or 14 days depending on the classification of the road) should clarify that the time required to obtain locates or order electrical equipment is above and beyond the specified repair response timeline. Clarity is required as to the trigger and start of the required repair timeline. An exemption process for the response time should be considered for these situations.

	CONCLUSION	

Civic Administration will monitor the changes and report back to Council with the operational service level adjustments and financial impacts adjust once the final amendments are released.

# Acknowledgements

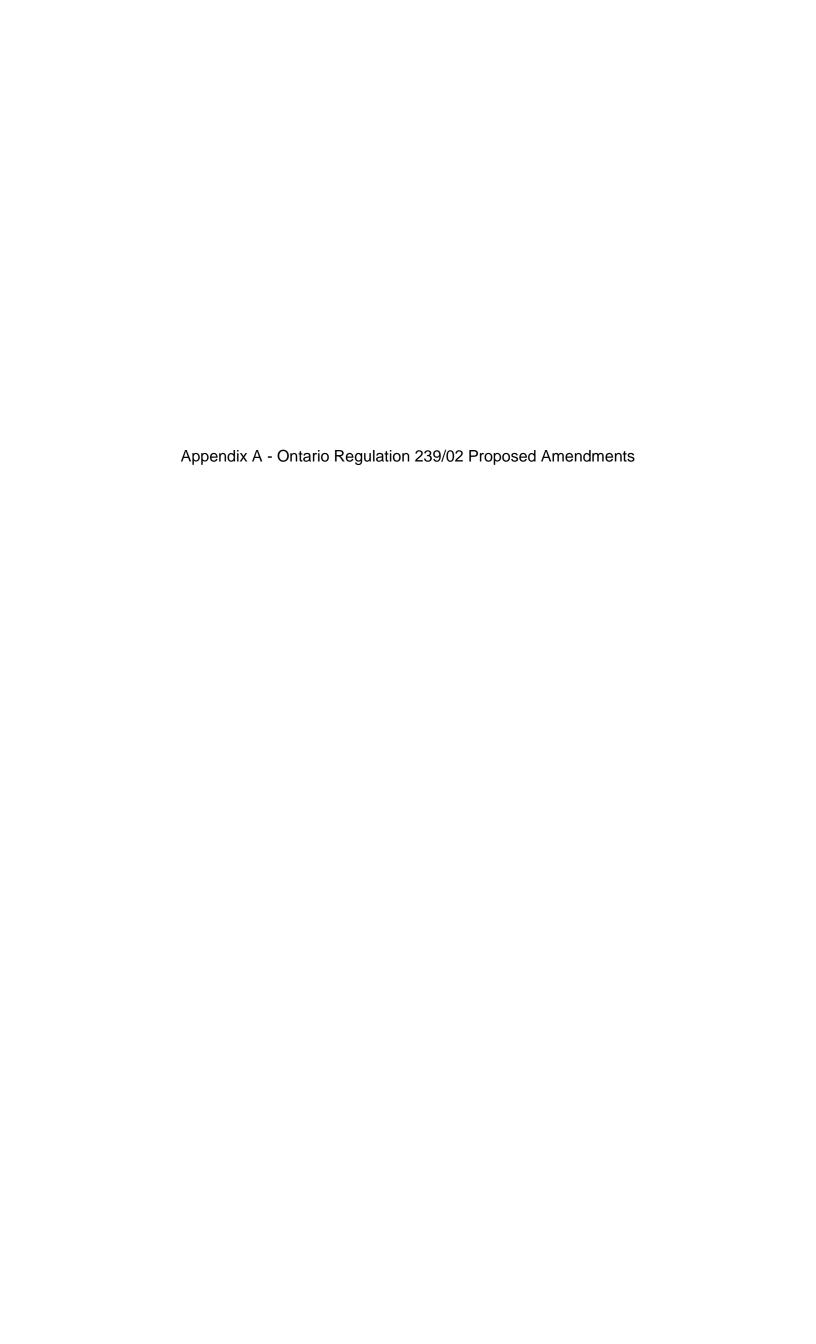
This report was prepared with the assistance of John Parsons, Division Manager Transportation and Roadside Operations, Shane Maguire, P.Eng. Division Manager Roadway Lighting and Control and Doug MacRae, P.Eng. Division Manager Transportation Planning & Design Division.

PREPARED BY:	RECOMMENDED BY:
EDWARD SOLDO, P.ENG.	JOHN BRAAM, P.ENG.
DIRECTOR – ROADS AND	MANAGING DIRECTOR OF
TRANSPORTATION	ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER

August/JP

Appendix A - Ontario Regulation 239/02 Proposed Amendments

cc: Geoff Belch Jason Wills



## Municipal Act, 2001 Loi de 2001 sur les municipalités

# **ONTARIO REGULATION 239/02**

# MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS

Consolidation Period: From January 25, 2013 to the e-Laws currency date.

Last amendment: O. Reg. 47/13.

## This Regulation is made in English only.

#### **Definitions**

1. (1) In this Regulation,

"bicycle facility" includes but is not limited to the various on-road and in-boulevard cycling facilities listed in section 2.3 and its subsections, of Book 18 of the Ontario Traffic Manual;

"conventional bicycle lane" means a portion of a roadway which has been designated by pavement markings and signage for the preferential or exclusive use of cyclists;

"cm" means

centimetres;

"day" means a

24-hour period;

"encroachment" means anything placed, installed, constructed or planted within the public road allowance 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 whatsoever, including wear or subsidence of the road surface or subsurface beneath the pavement;

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

"separated bicycle lane" means a portion of a roadway which has been designated for the exclusive use of cyclists by signage along with a physical or marked buffer;

"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 that part of the highway specifically set aside or commonly understood by a municipality to be for pedestrian use, typically consisting of a paved surface, and which is not used by a municipality for snow storage, and does not include crosswalks, medians or shoulders:

"significant weather event" means an approaching or occurring weather hazard which is deemed by a municipality, in its sole judgment, to pose a significant danger to users of the highways within the municipality, based on the current "threshold criteria" for weather hazards under Environment Canada's Public Alerting Program or threshold criteria defined by a municipality under its applicable policy.

"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;

<sup>&</sup>quot;substantial probability" means a significant likelihood considerably in excess of 51 per cent;1

"surface" means the top of a roadway or shoulder;

"utility" includes but is not limited to any air, gas, water, electricity, cable, fiber-optic, telecommunication, fire hydrant, sanitary sewer, storm sewer, property bar, survey monument, or traffic control system or subsystem;

"utility appurtenance" includes but is

not limited to: (i) maintenance holes

and maintenance hole covers; (ii)

water shut-off covers and boxes;(ii)

valves; (iv) fittings; (v) vaults; (vi)

braces; (vii) pipes;

(viii) pedestals; and,

(viiii) any other structure or item that forms part of or is an accessory part of any utility;

"weather" means air temperature, wind and precipitation.; O. Reg. 239/02, s. 1 (1); O. Reg. 23/10, s. 1 (1); O. Reg. 47/13, s. 1.

"weather hazard" includes the weather hazards enumerated by Environment Canada as ones for which it will issue alerts under its Public Alerting Program. O. Reg. 239/02, s. 1 (1); O. Reg. 23/10, s. 1 (1); O. Reg. 47/13, s. 1; O.Reg /16, s.1

- (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).
- (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).
- (4) For the purposes of this Regulation, <u>unless otherwise indicated herein,</u> 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. 23/10, s. 1 (3).

# TABLE CLASSIFICATION OF HIGHWAYS

Average Annual Daily Traffic	Posted or Statutory Speed Limit (kilometres per hour)						
(number of motor vehicles)							
	91 - 100	81 - 90	71 - 80	61 - 70	51 - 60	41 - 50	1 - 40
<u>53,000 or more</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
23,000 - 52,999	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
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	<u>4</u>	<u>4</u>
5,000 - 5,999	1	2	2	3	3	<u>4</u>	<u>4</u>
4,000 - 4,999	1	2	3	3	3	<u>4</u>	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	<u>5</u>	<u>5</u>
1,000 - 1,999	1	3	3	3	4	<u>5</u>	5
500 - 999	1	3	4	4	4	<u>5</u>	5
200 - 499	1	3	4	4	5	5	<u>6</u>
50 - 199	1	3	4	5	5	<u>6</u>	<u>6</u>
0 - 49	1	3	6	6	6	6	6

O. Reg. 613/06, s. 1

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 and Intent**

- 2.1 (1) The purpose of this Regulation is to set forth outcome-based maintenance standards which are non-prescriptive as to methods or materials to be used, and which instead describe a desired end-result.
- 2.1(2) The intent of this Regulation is to define the scope of the statutory defence available to a municipality pursuant to s.44(3)(c) of the *Municipal Act*, 2001, and provide the Courts with clear rules in respect of liability for those aspects of highway repair addressed by this Regulation, and thereby create greater certainty for both municipalities and users of municipal highways.

## **MINIMUM** 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).
- (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.
- (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 sections 16.1, 16.2, 16.3 or 16.4. O. Reg. 23/10, s. 3 (1).

# TABLE PATROLLING FREQUENCY

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

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

## Weather monitoring and Significant Weather Events

- **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.
- (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.
- (2.1) A municipality may declare a significant weather event in accordance with this Regulation at any time in its sole discretion it elects to do so.
- (3) For the purposes of this Regulation, a significant weather event is declared or ended by a municipality when it has been communicated to the public by the municipality in one or more of the following ways:
  - (i) posting it on the municipal website:
  - (ii) announcing it via social media, including but not limited to Facebook or Twitter;
  - (iii) a press release or similar communication is sent to the media, including internet, newspaper, radio, ortelevision; (iv) notification to the police service; or

(v) notification pursuant to the municipal notification bylaw, if one exists and is applicable.

(4) For the purposes of this Regulation, a municipality is not required to declare a significant weather event at any time, including times when the threshold criteria are met under its applicable policy or times when Environment Canada's threshold criteria for a particular weather hazard are met under Environment Canada's Public Alerting Program, or when Environment Canada has issued an alert under that program. A municipality may declare a significant weather event even if such threshold criteria have not been met and conversely, choose not to do so even if such threshold criteria are met.

#### Snow accumulation-Roadways

- 4. (1) The minimum 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.
- (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 subsection (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) 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.
  - (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;
- (b.1) the application of other chemical or organic agents to the roadway;
- (c) applying abrasive materials to the roadway; or
- (d) any combination of the methods described in clauses (a), (b) and (c). O. Reg. 47/13, s. 4.
- (6) This section does not apply to that portion of the roadway <u>consisting of a conventional or separated</u> <u>bicycle lane, other bicycle facility,</u> designated for parking, <u>or while utilized by a municipality for snow storage.</u>
  O. Reg. 47/13, s. 4.
- (7) When a municipality declares a significant weather event under this Regulation, all roadways within the municipality are deemed to be in a state of repair in respect of any snow accumulation present, until the applicable time under the Table to this section expires following the end of the declared weather emergency.

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

## **Snow Accumulation – Separated and Conventional Bicycle Lanes**

- 4.1(1) The standard for addressing snow accumulation on separated and conventional bicycle lanes is,
- (a) after becoming aware of the fact that the snow accumulation on a separated or conventional 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 within the time set out in the Table to provide a minimum bicycle lane width of the lesser of 1 metre or the actual bicycle lane width,
- (2) If the depth of snow accumulation on a separated or conventional 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 with respect to snow accumulation.
- (3) For the purposes of this section, the depth of snow accumulation on a bicycle lane and, if applicable, lane width under subsection (1)(b), may be determined in the same manner and by the same persons as set out in s.4(3) and s.4(4) of this Regulation.
- (4) For the purposes of this section, addressing snow accumulation on a bicycle lane includes, but is not limited to.
- (a) plowing the bicycle lane;
- (b) salting the bicycle lane;
- (c) the application of other chemical or organic agents to the bicycle lane;
- (d) applying abrasive materials to the bicycle lane;
- (e) sweeping the bicycle lane; or
- (f) any combination of the methods described in clauses (a), (b), (c), (d) or (e).
- (5) When a municipality declares a significant weather event under this Regulation, all bicycle facilities within the limits of any highway within the municipality, including but not limited to separated and conventional bicycle lanes, are deemed to be in a state of repair in respect of any snow accumulation present, until the applicable time under the Table to this section expires following the end of the declared weather emergency.

TABLE- Snow Accumulation – Separated and Conventional Bicycle Lanes

Class of Highway	Separated Bicycle Lanes		Conventional	Bicycle Lanes
or Adjacent	<u>Depth</u>	<u>Time</u>	<u>Depth</u>	<u>Time</u>
<u>Highway</u>				
<u>1</u>	2.5 cm	4 hours	2.5 cm	8 hours
<u>2</u>	2.5 cm	<u>6 hours</u>	<u>5 cm</u>	12 hours
<u>3</u>	2.5 cm	12 hours	8 cm	24 hours
<u>4</u>	<u>4 cm</u>	16 hours	8 cm	24 hours
<u>5</u>	<u>6 cm</u>	24 hours	<u>10 cm</u>	24 hours

## $Ice\ formation\ on\ roadways\ and\ icy\ roadways$

- **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 the Table to this section, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose. O. Reg. 47/13, s. 5.
- (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,
  - (a) the time that the municipality becomes aware of the fact that the roadway is icy-; or and,
  - (b) the applicable time set out in the Table to this section for treating the roadway to prevent ice formation expires. 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 applicable part of the Table to this section, and an icy roadway is

deemed to be in a state of repair until the applicable time set out in the <u>applicable part of the</u> Table for treating the icy roadway expires. O. Reg. 47/13, s. 5.

- (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. 47/13, s. 5.
- (4.1) For greater certainty, this section includes conventional and separated bicycle lanes on a roadway, but does not include other types of bicycle facilities.
- (5) If at any time a municipality declares a significant weather event under this Regulation, then all roadways within the municipality are deemed to be in a state of repair in respect of any ice present or which may form on the roadways, until the applicable time under the Table to this section expires following the end of the declared significant weather event..

TABLE ICE FORMATION PREVENTION AND ICY ROADWAYS

Class of Highway	<u>Time – Roadways and</u>	<u>Time – Conventional Bicycle</u>
	Separated Bicycle Lanes	<u>Lanes</u>
1	3 hours	6 hours
2	4 hours	8 hours
3	8 hours	16 hours
4	12 hours	24 hours
5	16 hours	24 hours

O. Reg. 47/13, s. 5.

#### **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).
- (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.
- (1.2) The depth and surface area of a pothole may be determined by,
  - (i) performing an actual measurement, or,
  - (ii) performing a visual estimate.
- (1.3) The surface area of a pothole shall not include any area that is merely depressed and not yet broken fully through the surface of the roadway.
- (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 1
POTHOLES ON PAVED SURFACE OF ROADWAY

Class of Highway	Surface Area	Depth	Time
1	600 cm <sup>2</sup>	8 cm	4 days
2	800 cm <sup>2</sup>	8 cm	4 days
3	1000 cm <sup>2</sup>	8 cm	7 days
4	1000 cm <sup>2</sup>	8 cm	14 days
5	1000 cm <sup>2</sup>	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 <sup>2</sup>	8 cm	7 days
4	1500 cm <sup>2</sup>	10 cm	14 days
5	1500 cm <sup>2</sup>	12 cm	30 days

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

 ${\it TABLE~3} \\ {\it POTHOLES~ON~PAVED~OR~NON-PAVED~SURFACE~OF~SHOULDER} \\$ 

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

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

## Shoulder drop-offs

- **7.** (1) If a shoulder drop-off is deeper, for a continuous distance of 20 metres or more, than the depth set out in the Table to this section, the minimum standard is to repair the shoulder drop-off within the time set out in the Table after becoming aware of the fact. O. Reg. 239/02, s. 7 (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. O. Reg. 239/02, s. 7 (2); O. Reg. 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).

TABLE SHOULDER DROP-OFFS

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

O. Reg. 239/02, s. 7, Table.

## Cracks

- **8.** (1) If a crack on the paved surface of a roadway is greater, for a continuous distance of three metres or more, than both the width and depth set out in the Table to this section, the minimum standard is to repair the crack within the time set out in the Table after becoming aware of the fact. O. Reg. 239/02, s. 8 (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. O. Reg. 239/02, s. 8 (2); O. Reg. 47/13, s. 8.

TABLE CRACKS

Class of	Width	Depth	Time
Highway			
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. 239/02, s. 8, Table

- **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).
- (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) 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. 23/10, s. 6; O. Reg. 47/13, s. 10 (1).
- (1) 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. 239/02, s. 10 (1).
- (2) 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. 239/02, s. 10 (2).
- (3) Despite subsection (2), for high mast illumination, if all of the luminaires on consecutive poles on the same side of a highway 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. 239/02, s. 10 (3).
- (4) 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. 239/02, s. 10 (4).
  - (5) Luminaires are deemed to be in a state of repair,
  - (a) for the purpose of subsection (1), if the number of non-functioning consecutive luminaires on the same side of a highway does not exceed two;
  - (b) for the purpose of subsection (2), if more than 70 per cent of luminaires on any kilometre of highway are functioning;
  - (c) for the purpose of subsection (3), if one or more of the luminaires on consecutive poles on the same side of a highway are functioning;
  - (d) for the purpose of subsection (4), if more than 50 per cent of luminaires on any kilometre of highway are functioning. O. Reg. 239/02, s. 10 (5); O. 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).
  - (<del>76</del>) 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).

## TABLE LUMINAIRES

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

4	14 days
5	14 days

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).
- (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).
  - (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).
- (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,
  - (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.

TABLE REGULATORY AND WARNING SIGNS

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

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).
  - (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.
- 2. 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).

(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 subsystems 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).
- (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).
- (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).
- (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).

TABLE BRIDGE DECK SPALLS

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

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.
- (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,
- (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.

TABLE SURFACE DISCONTINUITIES

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

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

## Sidewalk surface discontinuities and adjacent area

- **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).
- (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).
- (1.2) The area adjacent to a sidewalk that has been inspected in accordance with subsection (1), is also deemed to be in a state of repair in respect of any encroachment present.
- (1.3) For greater certainty, the area adjacent to a sidewalk as described in subsection 1.2 begins at the outer edges of a sidewalk and ends at the lesser of (i) the limit of the highway, (ii) the back edge of a curb if one is present and (iii) a maximum of 45 cm.
- (2) If a surface discontinuity on a sidewalk exceeds two centimetres, the minimum standard is to treat the surface discontinuity within 14 days after acquiring actual knowledge of the fact. O. Reg. 23/10, s. 10; O. Reg. 47/13, s. 16 (3).
- (2.1) A surface discontinuity on a sidewalk is deemed to be in a state of repair if it is less than or equal to two centimetres. O. Reg. 47/13, s. 16 (4).
- (2.2) An encroachment within the area adjacent to a sidewalk is deemed to be in a state of repair, unless it is determined by a municipality, in its sole discretion, to be highly unusual given the character and location in question or to constitute a significant hazard to pedestrians.
- (2.3) If a municipality determines that an encroachment is highly unusual given the character and location in question or to constitute a significant hazard to pedestrians, the standard is to treat the encroachment within 28 days after making such determination, and such an encroachment is deemed in a state of repair for 28 days from the time of the determination by the municipality.
- (3) For the purpose of subsections (2) and (2.3), treating a surface discontinuity on a sidewalk or an encroachment means taking reasonable measures to protect users of the sidewalk from the discontinuity, or encroachment including making permanent or temporary repairs, alerting users' attention to the discontinuity or encroachment or preventing access to the area of discontinuity or encroachment. O. Reg. 23/10, s. 10.
  - (4) In this section,
- "surface discontinuity" means a vertical discontinuity creating a step formation at <u>any</u> joints or cracks in the surface of the sidewalk <u>or any vertical height difference between a utility appurtenance found on or within the sidewalk and the surface of the sidewalk</u>. O. Reg. 23/10, s. 10.

## **Snow accumulation on Sidewalks**

- 16.2 (1) The standard for addressing snow accumulation on a sidewalk after the snow accumulation has ended, is to address the snow accumulation so as to reduce the snow accumulation to a depth less than or equal to 8 centimetres within 48 hours.
- (2) If, at any time, 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 with respect to snow accumulation.
- (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.
- (4) For the purposes of this section, the depth of snow accumulation on a sidewalk may be determined in the same manner and by the same persons as under s. 4(3) and s.4(4) of this regulation.
- (5) For the purposes of this section, addressing snow accumulation on a sidewalk includes, but is not limited to,
- (a) plowing the sidewalk;
- (b) salting the sidewalk;
- (c) the application of other chemical or organic agents to the sidewalk;
- (d) applying abrasive materials to the sidewalk; or
- (e) any combination of the methods described in clauses (a), (b), (c) or (d).
- (6) If at any time a municipality declares a significant weather event under this Regulation then all sidewalks within the municipality are deemed to be in a state of repair in respect of any snow accumulation present, until 48 hours following the end of the declared significant weather event.

## Ice formation on sidewalks and icy sidewalks

- **16.3.** (1) The standard for the prevention of ice formation on sidewalks is to
  - (a) monitor the weather in accordance with s.3.1 of this Regulation in the 24-hour period preceding an alleged formation of ice on a sidewalk;
  - (b) patrol sidewalks in accordance with s. 16.4; if applicable; and,
  - (c) If the municipality determines, as a result of either its weather monitoring under subparagraph a or its patrolling in accordance with s.16.4 of this Regulation, or both, that there is a substantial probability of ice forming on a sidewalk, treat the sidewalk if practicable to prevent ice formation and/or improve traction within 48 hours, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose.
- (2) If the municipality meets the standard set out in subsection (1) and, despite such compliance, ice forms on a sidewalk, the sidewalk is deemed to be in a state of repair in respect of ice until,
  - (a) the time that the municipality becomes aware of the fact that the sidewalk is icy and,
  - (b) 48 hours elapses thereafter.
- (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 until 48 hours expires after it has been treated.
- (4) For the purposes of this section, treating a sidewalk means applying material to the sidewalk, including but not limited to, salt, sand or any combination of salt and sand.
- (5) If at any time a municipality declares a significant weather event under this Regulation, then all sidewalks within the municipality are deemed to be in a state of repair in respect of any ice present, until 48 hours expires following the end of the declared significant weather event.

## **Winter Sidewalk Patrol**

- 16.4 (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, to check for such conditions.
- (2) Patrolling a sidewalk consists of observing the sidewalk, either by driving or walking on, or by electronically monitoring the sidewalk, and may be performed by persons responsible for patrolling sidewalks or by persons responsible for or performing sidewalk maintenance activities.

## **Closure of a Highway**

- 16.5 (1) When a municipality closes a highway or part of a highway pursuant to its powers to do so under the *Municipal Act*, 2001, the highway is deemed to be in a state of repair in respect to all conditions encompassed within this Regulation, from the time of closure until such time as the highway is re-opened by the municipality, by passage of the requisite bylaw.
- (2) For greater certainty, the time of closure of a highway commences at the earlier of:
  - (a) when a municipality passes a bylaw to close a highway or part of a highway; or (b) when a municipality has taken such steps as in its sole discretion it deems necessary to temporarily close the highway or part of a highway.

## 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.

