

**STAFF REPORT:      Engineering & Public Works Department**



**REPORT TO:**            Infrastructure and Recreation  
                                 Committee

**MEETING DATE:**    February 9<sup>th</sup> 2011

**REPORT NO.:**        EPW.11.017

**SUBJECT:**            Winter Control Levels of Service

**PREPARED BY:**     Jim McCannell, Manager of Roads and  
                                 Drainage Division

**A. Recommendations**

THAT Council receives Report EPW.11.017 and endorses that winter control levels of service be maintained at standards established under Ontario Regulation 239/02.

**B. Background**

The Town of The Blue Mountains has approximately 254 kms of roads within the framework of a classification system, which provide for the safe, efficient and affordable means of surface transportation for all road users. Of those 254 kms, 123 kms are hard topped and subject to possible salt application during the winter months. Transportation users rely on the Town's roadway network throughout the year for transport to the workplace, to recreation and leisure facilities, for the transport of goods and services, and for emergency services.

The Roads Divisions mandate is to provide safe winter conditions for vehicular movement as required by level of service policies and funding guidelines established by the Town of The Blue Mountains' Council.

The Town has four (4) classes of road (3,4,5 and 6) within its road network based on posted speed and traffic volumes. The classes are documented in the Road Needs Study Report 2009 to 2013. The Town's only Class 3 road is the section of Hwy 26 through Thornbury. Class 4 are roads of higher traffic use like Jozo Wider Blvd or Arrowhead Road. Class 5 roads are generally local subdivision roads and rural gravel roads. Class 6 roads are very low use roads.

For the purpose of planning the winter plowing operations, the Town has recognized Ontario Regulation 239/02 made under the Municipal Act and generally conforms to Section 4. The objective of plowing should be to complete one coverage of the road within the timeframe as noted in Table 1 for the class of road. Note that there is no snow accumulation standard for Class 6 roads.

**Ontario Regulation 239/02 - Section 4**

- 1) The minimum standard for clearing snow accumulation is:
  - a) While the snow continues to accumulate, to deploy resources to clear the snow as soon as practicable after becoming aware of the fact that the snow accumulation on a roadway is greater than the depth set out in Table 1 below and
  - b) After the snow accumulation has ended and after becoming aware that the snow accumulation is greater than the depth set in Table 1 below, to clear the snow accumulations in accordance with subsections (2) and (3) or subsections (2) and (4), as the case may be, within the time set out in the table below.
- 2) The snow accumulation must be cleared to a depth less than equal to the depth set out in Table 1 below.
- 3) The snow accumulation must be cleared from the roadway to within a distance of 0.6 metres inside the outer edges of the roadway.
- 4) Despite subsection (3), for a Class 4 highway with two lanes, the snow accumulation on the roadway must be cleared to a width of at least 5 metres.
- 5) This section
  - a) Does not apply to that portion of the roadway designated for parking; and
  - b) Only applies to a municipality during the season when the municipality performs winter highway maintenance.
- 6) In this section,

“snow accumulation”, means the natural accumulation of new fallen snow or windblown snow that covers more than half a lane width of roadway.

<b>Table 1 - Snow Accumulation</b>		
<b>Class of Highway</b>	<b>Depth</b>	<b>Time</b>
3	8 cm	12 hours
4	8 cm	16 hours
5	10 cm	24 hours

### **Winter Operations - Sanding and Salting**

For the purpose of planning the winter spreading operation, the Town recognizes Ontario Regulation 239/02 and generally conforms to Section 5.

Class 3 - The objective of treatment is to achieve centre bare or track bare pavement by applying salt or sand within the timeframe noted in Table 2. It is understood that in cold or windy conditions, sand will be used in place of salt. Winter maintenance on the Highway 26 Connecting Link is undertaken by Contract with the County of Grey.

Class 4 and 5 - The objective is to provide a sanded surface by applying sand within the timeframe as noted in Table 2. Bituminous roads in the category should not be bared after the storm by applying salt. Salt will only be applied to bituminous roads whenever a serious build up occurs on the road or when in a sleet storm. In addition, hills, curves, intersections and bus routes will get first priority. Gravel roads in this category should be spot sanded only on hills, curves and intersections. The gravel roads will only be sanded continuously when in a sleet storm or when the roads become quite slippery.

The Town's current composition for a salt and sand mix is 15% salt to sand (140 tonnes of salt to 4200 cubic metres of sand).

### **Ontario Regulation 239/02 - Section 5**

- 1) The minimum standard for treating icy roadways is:
  - a) To deploy resources to treat an icy roadway as soon as practicable after becoming aware that the roadway is icy and
  - b) To treat the icy roadway within the timeframe set out in Table 2 below after becoming aware that the roadway is icy.
- 2) This section only applies to a municipality during the season when the municipality performs winter highway maintenance.

<b>Class of Highway</b>	<b>Time</b>
3	8 hours
4	12 hours
5	16 hours

### **C. The Blue Mountains' Strategic Plan**

Executing a service agreement with the County furthers the Town's Strategic Goal #2, "Addressing the Town's municipal infrastructure needs".

#### **D. Environmental Impacts**

Staff will continue to monitor the Environment Canada Code of Practice for the Environmental Management of Road Salts. Town Staff and The County continue to review and implement new technologies in an effort to reduce the impact of road salt on the environment. This includes the use of pre-wetting materials before applying them to the road and the use of anti icing agents.

#### **E. Budget Impact**

The object of the Town's Roads and Drainage Division is to provide the best winter maintenance given the resources available for winter control purposes and given the weather conditions. It is understood that budgets for winter maintenance activities are based on average weather conditions and that the actual expenditures may be higher or lower than budgeted. A winter control reserve has been established to either absorb unexpended funds or to pay overages.

#### **F. Attached**

None

Respectfully submitted,

***Jim McCannell***

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