

Municipality Of Chatham-Kent
Infrastructure and Engineering Services

Public Works

Information Report

To: Mayor and Members of Council

From: Miguel Pelletier
Director, Public Works

Date: April 18, 2018

Subject: Pothole Repairs

This report is for the information of Council.

Background

It was requested at the Council meeting on April 16, 2018 that Administration bring forward a report regarding the number of potholes in Chatham and how they will be managed with regards to future operations.

By definition, a pothole is a structural failure in a road surface, usually asphalt pavement, due to water in the underlying soil structure and traffic passing over the affected area. Water first weakens the underlying soil; traffic then fatigues and breaks the poorly supported asphalt surface in the affected area. Continued traffic action ejects both asphalt and the underlying soil material to create a hole in the pavement.

Potholes recur every year with each freeze thaw cycle and with vehicular traffic. It is not uncommon for potholes in one area to be repaired one day and more to appear shortly after (attributed to another freeze thaw cycle or additional traffic volume). When there are multiple freeze thaw cycles in a row, keeping up with pothole repairs is a challenge.

O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways (MMS) under Municipal Act, 2001, S.O. 2001, c. 25 establishes the level of service for the repair of potholes. This service level is described below in Table 1.

Table 1: Ontario Minimum Maintenance Standards for Pothole Repair

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	14 days
5	1,000 cm ²	8 cm	30 days

The same regulation also stipulates how often a road should be patrolled to check conditions. The service level for highway patrol is described below in Table 2.

Table 2: Ontario Minimum Maintenance Standards for Highway Patrol

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

In addition to regular road patrols, the Public Works Department appreciates members of the public who report potholes by phone to the Municipal Call Centre at 519.360.1998 or by email to ckinfo@chatham-kent.ca. Each Active Citizen Request (ACR) case that is logged automatically generates a work order that is sent to a Public Works Supervisor. The reports are also tracked and followed up as necessary.

The Public Works methodology for pothole repairs has been the same for the last two years. Trials were conducted using a new material to fill potholes in 2014 and 2015. Trials using a product from Unique Paving Materials Corporation (USA-based) were successful, and a local supplier, Pebbles Gravel and Top Soil, received a license to produce the mix locally. Subsequently, Pebbles Gravel and Top Soil has been providing the material to the Municipality of Chatham-Kent. The contract to supply the material is in its last year, and the upcoming contract will go through the procurement process, allowing suppliers with new materials to compete.

Comments

Each Public Works area has a one person (usually the Road Supervisor) patrolling the roads, and each area can deploy a crew or two for potholes. Each crew is assigned a section of roads and fills all the potholes in their assigned section. As a general rule, there is not sufficient urgency to deploy pothole repair crews after hours that would incur overtime. However, for extremely poor areas, repair crews can be called in on weekends as necessary.

Should higher priority work be required, or if the weather is not favourable for pothole repair, then the pothole repair is put on hold until the required resources are available.

The repair of potholes in 2018 has already begun. Table 3 (below) summarizes the year-to-date pothole repairs completed to April 13, 2018. Public Works will continue to deploy resources for road patrols and to repair potholes with the goal to meet or exceed MMS.

Table 3: 2018 Year-to-Date Pothole Repairs

Area	Estimated Person Hours	Estimated Tonnes Placed
Raleigh	203.50	2.89
Ridgetown	516.00	8.32
Thamesville	121.00	6.74
Tilbury East	337.00	13.98
Wallaceburg	593.00	21.73
Dover	239.00	10.26
Chatham Township	266.00	0
Chatham	1,180.00	27.08
Kent Centre	564.00	18.86
Total	4,019.5	109.86

Consultation

There was no consultation for this report.

Financial Implications

A budget of \$424,051 has been approved for pothole repair in 2018, and as of April 13, 2018, \$243,748 has been expended. Past annual expenditure for pothole repairs has been \$511,530 (2017) and \$450,058 (2016).

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Attachments: None

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