

**Municipality of Chatham-Kent**  
**Infrastructure and Engineering Services**  
**Engineering and Transportation Division**

**To:** Mayor and Members of Council  
**From:** Mark Ceppi, Engineering Technologist I  
**Date:** December 14, 2021  
**Subject:** Bridge and Culvert Weight Limit By-law Amendment

---

**Recommendation**

It is recommended that:

1. Schedule II (Bridge and Culvert Weight Limits) of the Chatham-Kent Traffic and Parking By-law #245-2004 be amended as outlined in Appendix A of this report.

**Background**

Ontario Regulation 104/97 (Standards for Bridges) of the *Public Transportation and Highway Improvement Act*, R.S.O. 1990 requires every bridge to be kept safe and in good repair. In addition, each bridge must be inspected once every two years under the direction of a professional engineer in accordance with the Ontario Structure Inspection Manual.

The *Highway Traffic Act*, R.S.O. 1990 allows for a municipality to pass by-laws that limit the maximum gross vehicle weight (i.e. weight of the vehicle, or combination of vehicles, plus load) permitted on a bridge. The by-law may limit a bridge to a single gross weight for all vehicles, or separate gross weight ratings for three different classes of vehicle. These classes include single vehicle (e.g. a cube truck), two vehicle combination (e.g. a tractor and trailer), and three vehicle combination (e.g. a tractor and two trailers). The appropriate weight restriction signs are installed at the bridge in accordance to Ontario Regulation 615 (Signs) of the Highway Traffic Act and Ontario Traffic Manual guidelines.

Traffic and Parking By-law #245-2004 regulates the designation of weight limits for bridges and culverts in the Municipality of Chatham-Kent.

**Comments**

The Engineering and Transportation Division has retained a structural engineering consultant to undertake the required inspections for all bridges having a span of 3.0 m or more. Structural assessments submitted by the consultant have recommended new or updated weight limits for some bridges. In addition, some weight limit restrictions have been removed due to the rehabilitation or replacement of the bridge structure through the bridge lifecycle program. Table 1 provides a summary of all current weight

limit restrictions on bridges.

**Table 1: Current Bridge and Culvert Weight Limit Summary**

<b><u>BRIDGE LOCATION</u></b>	<b><u>WEIGHT LIMIT</u></b>	<b><u>NOTES</u></b>
Arnold Road over Skinner Drain	12.5 / 22.5 / 33 tonnes	No change.
Booth Road over Otter Creek	11 / 21 / 31 tonnes	No change.
Brook Line over Big Creek	10 / 18 / 26 tonnes	No change.
Clachan Road over Thames River	- / 36 / 48 tonnes	No change.
Claymore Line over Big Creek Drain	24 / 42 / 60	New weight limit.
Dashwheel Road over Forbes Drain	17 / 30 / 42 tonnes	No change.
Dauphin Road over Dauphin Internal Drain	<del>8 / 15 / 20 tonnes</del>	Bridge rehabilitated or replaced and weight limit is removed.
Dover Center Line over Big Creek	8 / 14 / 20 tonnes	No change.
Ella Street South over Malott Diversion Drain	20 / 35 / 50 tonnes	No change.
Jacob Road over Rivard Drain	13 / 24 / 33 tonnes	No change.
Maple Leaf Cemetery Bridge (North) over McGregor Creek	10 / 24 / 34 tonnes	No change.
Maple Leaf Cemetery Bridge (South) over McGregor Creek	0 tonnes (Closed to Vehicular Traffic)	No change.
McDougall Line over Government Drain 1	7 / 12 / 17 tonnes	No change.
Mint Line over Baptiste Creek	0 tonnes (Closed to Vehicular Traffic)	Add 0 tonne weight limit to the "Closed to Vehicular Traffic" designation.
Stewart Line over Skinner Outlet Drain	11 / 20 / 28 tonnes	No change.
Third Street over Thames River	<del>40 / 18 / 25 tonnes</del>	Currently closed for reconstruction and will not have weight limit when reopened.

The purpose of implementing weight limit restrictions on bridges is to mitigate further damage to the structure and to prevent a structural failure involving a vehicle. Weight restrictions also allow a bridge to remain open for lighter vehicles, which typically makes up the majority of traffic on Chatham-Kent roadways.

A by-law to amend Traffic and Parking By-law #245-2004 (Schedule II - Bridge and Culvert Weight Limits) according to the summary provided in Table 1 of this report is included in the Council package for reading and approval.

### **Areas of Strategic Focus and Critical Success Factors**

The recommendation in this report supports the following areas of strategic focus:

- ☐ Economic Prosperity:  
Chatham-Kent is an innovative and thriving community with a diversified economy
- ☒ A Healthy and Safe Community:  
Chatham-Kent is a healthy and safe community with sustainable population growth
- ☐ People and Culture:  
Chatham-Kent is recognized as a culturally vibrant, dynamic, and creative community
- ☐ Environmental Sustainability:  
Chatham-Kent is a community that is environmentally sustainable and promotes stewardship of our natural resources

The recommendation in this report supports the following critical success factors:

- ☐ Financial Sustainability:  
The Corporation of the Municipality of Chatham-Kent is financially sustainable
- ☐ Open, Transparent and Effective Governance:  
The Corporation of the Municipality of Chatham-Kent is open, transparent and effectively governed with efficient and bold, visionary leadership
- ☐ Has the potential to support all areas of strategic focus & critical success factors
- ☒ Neutral issues (does not support negatively or positively)

### **Consultation**

Other Engineering and Transportation Division staff contributed information for this report.

### **Financial Implications**

There are no financial implications associated with the recommendation described in this report.

Prepared by:

Reviewed by:

\_\_\_\_\_  
Mark Ceppi  
Engineering Technologist I  
Engineering and Transportation Division

\_\_\_\_\_  
Mark McFadden, P.Eng.  
Manager, Engineering  
Engineering and Transportation Division

Reviewed by:

Reviewed by:

\_\_\_\_\_  
Chris Thibert, P. Eng.  
Director, Engineering  
Engineering and Transportation Division

\_\_\_\_\_  
Thomas Kelly, P.Eng., MBA  
General Manager,  
Infrastructure and Engineering Services

Attachments: Appendix A: By-law Amendment

C:     Director, Public Works

(P:\RTC\Infrastructure and Engineering\I & ES\2022\4452 – Bridge and Culvert Weight  
Limit By-law Amendment.docx

**Appendix A**

By-law Number \_\_\_\_\_

Of The Corporation  
of the Municipality of Chatham-Kent

A By-law to amend By-law Number 245-2004 of the Municipality of Chatham-Kent.

(Bridge and Culvert Weight Limits for Various Structures in the Municipality of Chatham-Kent)

Finally Passed the \_\_\_\_ day of \_\_\_\_\_, 2022.

Whereas the Corporation of the Municipality of Chatham-Kent did enact By-Law 245-2004 for the purpose of regulating traffic on highways in the Municipality of Chatham-Kent.

And Whereas the Corporation of The Municipality of Chatham-Kent now deems it expedient to amend certain provisions of said By-law 245-2004.

Be it Therefore Enacted by the Municipal Council of the Municipality of Chatham-Kent as follows:

1. Schedule "II" (Bridge and Culvert Weight Limits) of By-law 245-2004 be and the same is hereby amended by deleting therefrom;

<b>COLUMN 1</b>	<b>COLUMN 2</b>	<b>COLUMN 3</b>
<b><u>BRIDGE LOCATION</u></b>	<b><u>BRIDGE INVENTORY NUMBER</u></b>	<b><u>WEIGHT LIMIT</u></b>
a) Dauphin Road over Dauphin Internal Drain	4687448N17387037E	8 / 15 / 20 tonnes
b) Mint Line over Baptiste Creek	4683158N17392402E	Closed to Traffic
c) Third Street over Thames River	4695547N17402078E	10 / 18 / 25 tonnes

**Appendix A**

2. Schedule "II" (Bridge and Culvert Weight Limits) of By-law 245-2004 be and the same is hereby amended by adding thereto and inserting therein;

<b>COLUMN 1</b>	<b>COLUMN 2</b>	<b>COLUMN 3</b>
<b><u>BRIDGE LOCATION</u></b>	<b><u>BRIDGE INVENTORY NUMBER</u></b>	<b><u>WEIGHT LIMIT</u></b>
a) Claymore Line over Big Creek Drain	4702964N17395814E	24 / 42 / 60
b) Mint Line over Baptiste Creek	4683158N17392402E	0 tonnes  (Closed to Vehicular Traffic)

3. By-law 245-2004 of the Corporation of the Municipality of Chatham-Kent as heretofore amended from time to time are hereby ratified and confirmed in all respects save and except as amended hereby.

This By-law shall come into full force and effect upon the final passing thereof.

Read a First, Second and Third Time this \_\_\_\_ day of \_\_\_\_\_, 2022

---

Mayor – Darrin Canniff

---

Clerk - Judy Smith