Recommendation

It is recommended that:

1. The speed limit on Eighth Line at the intersection of Bloomfield Road remain at the current 80 km/h.

Background

The following Notice of Motion was approved by Chatham-Kent Council at the August 13, 2018 meeting:

“Whereas increased congestion and ongoing safety issues on the 401 have pushed both local and far reaching traffic to find permanent alternative routes.

Whereas local secondary roads are narrow and not engineered to withstand the increase in heavy truck traffic.

Whereas 'No engine braking' signs are ineffectual, unenforceable, and open up potential liability issues.

Therefore be it resolved that the speed limit on 8th Line at a distance of 800m in both directions from the Bloomfield intersection be reduced to 60km/h.”

Following the approval, Engineering and Transportation Division (Engineering) received inquiries from several area residents that were concerned about the lack of public awareness of the speed changes and secondly, how the motion would impact their properties and noise levels. In response, Engineering hosted a Public Information Centre (PIC) meeting on October 3, 2018 at Wesley United Church, which is located at 22108 Bloomfield Road in the Community of Raleigh. The purpose of the PIC was to present information on the reason for the motion and the effects it will have on Eighth
Line traffic. All residents and commercial properties located within 400 m of the proposed 60 km/h speed limit zone on Eighth Line and Bloomfield Road north to King’s Highway 401, were mailed an invitation to attend the meeting. A total of 19 persons attended and signed the meeting list.

At the PIC, Engineering presented information regarding the causes for some of the traffic concerns in the Eighth Line and Bloomfield Road area. These include:

- Increased traffic volumes due to Highway 401 overpass closures at Highway 40 and Charing Cross Road in 2017 and 2018, respectively.
- Increase of collisions on Highway 401 due to construction activity caused higher frequency of Emergency Detour Route (EDR) activations which pushed high volumes of traffic, including trucks, onto local roadways.
- Rerouting of Ridge Landfill Haul Route onto Bloomfield Road during the Highway 40 overpass closure.

Regardless of these issues, Engineering indicated that Chatham-Kent Police had not received any speeding or noise complaints on Eighth Line during the 2017 and 2018 time period.

Engineering also presented concerns regarding the implementation of a 60 km/h speed limit zone on Eighth Line. The first was that the noise concerns raised by some residents regarding engine braking noise created by heavy trucks decelerating would not be solved. Trucks would still have to decelerate in order to safely turn onto Bloomfield Road. In addition, two new deceleration zones would be created 800 m east and west of Bloomfield Road where engine braking could occur as trucks are required to reduce speeds to the 60 km/h speed limit.

Engineering also presented alternative solutions to a 60 km/h speed limit on Eighth Line. The issue of garbage hauling trucks using Bloomfield Road had already been identified by Chatham-Kent staff. The Ridge Landfill had been contacted and they have been instructing drivers to use the designated haul route on Drury Road and Communication Road to Highway 401.

Concerns about traffic overflow onto Municipal roadways during a Highway 401 closure is an ongoing concern in many Ontario communities located near a 400 series highway. While vehicles are supposed to follow the EDR, alternative routes are often taken as a result of directions provided by GPS devices. The Ministry of Transportation Ontario (MTO) is meeting with municipalities and attempting to develop solutions to this problem. Regulations requiring heavy trucks to adhere to the EDR is being considered. Also, the MTO is developing technology that would send Highway 401 road closure and information to GPS providers which in turn would be used to keep motorists on the EDRs.

Engineering also explained that the increased traffic volumes experienced recently in the area have been a direct result of construction activity along the Highway 401 corridor, which is not long term. At the time of the PIC meeting, Eighth Line and the
Bloomfield Road overpass was significantly affected by the closure of the Charing Cross Road overpass. Since the reopening of the overpass on October 22, 2018 the traffic volumes have normalized.

Comments submitted at the PIC include:

- 60 km/h speed limit will increase safety and reduce noise,
- the reduced speed limit will not make a difference in safety and noise,
- will create new problems further away from the Bloomfield Road intersection,
- the vehicle noise problem originates at the Highway 401 and Bloomfield Road interchange, not on Eighth Line,
- need to enforce the EDR routes,
- need to improve the sight lines at Bloomfield Road intersection,
- the reduced speed limit was a self serving request that would benefit a few residents at the expense of others,
- the issue is pitting neighbour against neighbour.

**Comments**

Following the PIC both the Chatham-Kent Police Services Traffic Section and Engineering conducted speed enforcement and observation studies on Eighth Line before October 12th and after October 25th upon the reopening of the Charing Cross Road overpass.

Traffic Section officers conducted enforcement operations on Eighth Line both east and west of Bloomfield Road and reported the following results:

- **October 10th, 2018 (3.5 hours) – CK18047739**
  - 350 vehicles 500m-2.0km west of Bloomfield (0 tickets issued)
  - 250 vehicles 500m-2.0km east of Bloomfield (0 tickets issued)
  - 100% compliance found for all vehicles, in both directions
  - 65 commercial motor vehicles observed (0 engine braking infractions = 100% compliance)

- **October 25th, 2018 (3 hours) – CK18050238**
  - 75 vehicles (500m-2.0km west of Bloomfield (2 tickets issued for speeding)
  - 125 vehicles (500m-2.0km east of Bloomfield (1 ticket issued for speeding)
  - 97% compliance from vehicles travelling west to east & 99% compliance for vehicles traveling east to west
  - 50 commercial motor vehicles observed (0 engine braking infractions = 100% compliance)

The Engineering speed studies were conducted on Eighth Line east of Bloomfield Road. The results are presented in Table 1.
Table 1: Eighth Line Before/After Speed Study – East of Bloomfield Road

<table>
<thead>
<tr>
<th>Data Criteria</th>
<th>Before Overpass Opened (Study Date: October 18, 2018)</th>
<th>After Overpass Opened (Study Date: October 30, 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles Recorded</td>
<td>254</td>
<td>217</td>
</tr>
<tr>
<td>Average Speed</td>
<td>70.7 km/h</td>
<td>73.7 km/h</td>
</tr>
<tr>
<td>Mode</td>
<td>80 km/h</td>
<td>80 km/h</td>
</tr>
<tr>
<td>Pace Speed</td>
<td>71 - 85 km/h</td>
<td>66 - 80 km/h</td>
</tr>
<tr>
<td>Pace Speed %</td>
<td>54.7%</td>
<td>59.4%</td>
</tr>
<tr>
<td>85th %-ile Speed</td>
<td>82.7 km/h</td>
<td>83.4 km/h</td>
</tr>
<tr>
<td>Compliance</td>
<td>78.3%</td>
<td>75.6%</td>
</tr>
<tr>
<td>Heavy Vehicles</td>
<td>11.4%</td>
<td>14.7%</td>
</tr>
</tbody>
</table>

The following is a description of the criteria presented in Table 1:

- **Average Speed**: The mean average speed of all the vehicles recorded.
- **Mode**: Most frequently recorded speed value.
- **Pace Speed**: 15 km/h range which contains maximum volume of vehicles. Pace % = percent of vehicles in the pace range.
- **85th %-ile Speed**: The speed below which 85% of the vehicles travel.
- **Compliance**: Percentage of vehicles travelling at or below the posted speed limit.
- **Heavy Vehicles**: Percentage of traffic recorded that are classed as heavy vehicles.

A significant drop in traffic volume was observed while the October 30 speed study was conducted. The slight increase in operating speed observed is likely a result of the reduced traffic volumes.

A review of the collision records on Eighth Line at the Bloomfield Road intersection indicated that in the five year period between 2012 and 2016 there were no speed related collisions.

**Discussion**

Based on comments received at the PIC meeting, not all residents in the Eighth Line and Bloomfield Road area are in favour of a new 60 km/h speed limit. In particular, residents located where the 80 km/h speed zone would transition to 60 km/h are concerned about potential increase in noise generated from decelerating vehicles.

The Traffic Section enforcement report and Engineering’s speed study results indicate that operating speeds on Eighth Line are very close to the posted 80 km/h posted speed limit. This suggests that the posted speed limit is correct and reducing it will negatively affect compliance, resulting in the need for increased police enforcement in the area.
Many of the traffic concerns regarding the intersection of Eighth Line and Bloomfield Road, including garbage hauling trucks, has been a by-product of the heavy construction activity along the Highway 401 corridor over the past 2-3 years. Additional work is scheduled for 2019, including reconstruction of the eastbound lanes and closure of the eastbound lane interchange ramps at Bloomfield Road. The short term traffic increases tend to revert back to normal following the completion of these projects.

In summary, speeding has not been a problem on Eighth Line and therefore a reduction of the speed limit to 60 km/h is not recommended.

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

The recommendation in this report support 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

The Chatham-Kent Police Services Traffic Section conducted enforcement operations on Eighth Line. A report of the enforcement statistics was then provided to Engineering.

Financial Implications

There are no financial impacts associated with the recommendations of this report.

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Reviewed by: Reviewed by:

_________________________  ________________________
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Attachment: None

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