

Council Report

Report Number: ENG2021-022 **Meeting Date:** September 21, 2021 Title: Request for All-way Stop – Victoria Avenue North, Wellington Street, Lindsay Request for Traffic Control **Description:** Joseph Kelly, Senior Engineering Technician **Author and Title: Recommendation(s):** Report ENG2021-022 Request for All-way Stop - Victoria Avenue North, Wellington Street, Lindsay be received; **THAT** an all-way stop be installed at the intersection of Victoria Avenue North and Wellington Street; **THAT** the necessary By-laws for the above recommendations be forwarded to council for adoption; **THAT** the Mayor and Clerk be authorized to execute any documents and agreements required by the approval of this application/agreement/decision.

Department Head: _____

Chief Administrative Officer:

Financial/Legal/HR/Other:

Background:

At the Council Meeting of July 28, 2020, Council adopted the following resolution:

CR2020-205

That the Memorandum from Councillor Dunn, regarding traffic Control at Wellington Street and Victoria Avenue, Lindsay, be received; and

That Staff be directed to conduct a Traffic Control study at the intersection of Wellington Street and Victoria Avenue, Lindsay, and report their findings to Council by the end of Q2, 2021.

This report addresses that direction. The memorandum can be seen in Appendix A.

Victoria Avenue North is an above average volume collector road. Wellington Street is classified as a local road, however volumes indicate that drivers are using this street as a collector, getting from the bridge on Wellington/Lindsay Streets to Adelaide Street. A map of the intersection can be seen in Appendix B.

Staff performed a traffic turning movement count (Appendix C) for an all-way stop warrant (Appendix D) to determine if installing an all-way stop is an appropriate action.

Rationale:

All-way Stop Warrants:

The Ontario Traffic Manual (OTM) has two methods to determine if an all-way stop is warranted:

1) All-way Stop Minimum Volume Warrant (Arterial/Collector)

The OTM suggests that an All-way stop control may be considered on major roads where conditions are met for both of the following:

- a) Total hourly vehicular volume on all approaches to exceed 500 for each hour of an eight-hour period; and
- b) Combined vehicle and pedestrian volume for minor street to average 200 units per hour for an eight-hour period; and
- c) Average delay for vehicles entering the intersection over eight hours is 30 seconds or more
- d) Volume split does not exceed 70/30

As a result of the traffic turning movement count, it was found that total hourly vehicular volume on all approaches for the average hour was 420.

The volume split over an eight-hour period was 2054/1304 (61/39). This meets the criteria.

The only condition met is the volume spilt condition. Therefore, the All-way Stop Minimum Volume Warrant (Arterial/Collector Roads) is not met.

2) All-way Stop Collision Warrant

An All-way stop control may be considered on an intersection with a high accident frequency. For the purpose of this warrant, a high accident frequency is an average of four collisions per year over a three-year period.

The intersection has a reported collision average of 3 collisions per year over the latest three years of available collision data. Therefore, the All-way Stop Collision Warrant is not met.

Engineering Judgement

It should be noted that the warrant is over 80% met for all criteria. The intersection is so close to meeting the restrictive warrant, it would be using good engineering judgment to review if any environmental or geometric conditions exist that would increase collision potential.

Victoria Avenue North consists of two wide lanes of traffic divided by a wide curbed median. As seen in the relatively recent Victoria Avenue North/Orchard Park Road decision to install an all-way stop, the layout of the intersection can create difficulty in making a sound decision when entering the intersection from the minor street. Tracking and judging approaching vehicles while stopped on Wellington is problematic due to the median and trees. Therefore, it is using good engineering judgment to recommend an all-way stop at this intersection

As a result of the justification review carried out by staff, it is recommended that an All-way stop be installed at the intersection of Victoria Ave North and Wellington Street.

Other Alternatives Considered:

N/A

Alignment to Strategic Priorities

Providing life safety and protection, is a priority objective of the City under the Council Adopted Strategic Plan Goal of An Exceptional Quality of Life.

Financial/Operation Impacts:

Cost of installing new signs and painting stop bar

Consultations:

N/A

Attachments:

Appendix A – Council Memorandum



Appendix B – Key Map



Appendix C – Turning Movement Count Results



Appendix D – All-way Stop Warrant Summary



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Department Head: Juan Rojas, Director of Engineering & Corporate Assets

Department File: Engineering and Corporate Assets