



Staff Report

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Report To: Joint Committees

Date of Meeting: October 25, 2021

Report Number: PWD-027-21

Submitted By: Stephen Brake, Director of Public Works

Reviewed By: Andrew C. Allison, CAO

Resolution#:

File Number:

By-law Number:

Report Subject: Proposed Amendment to By-law 2014-059, being a By-law to Regulate Traffic and Parking on Highways, Private Property and Municipal Property

Recommendations:

1. That Report PWD-027-21 be received;
2. That the By-law attached to Report PWD-027-21, as attachment 1, be approved;
and
3. That all interested parties listed in Report PWD-027-21 and any delegations be advised of Council's decision.

Report Overview

The purpose of this report is to amend the Traffic and Parking By-law 2014-051. The recommended amendments will allow for the installation of a new All Way STOP condition at four locations to help improve safety and intersection right-of-way control. The amendments also include a recommendation to formally recognize the new lane configurations that have recently been implemented at the King Street and Scugog Street intersection in Bowmanville.

1. Background

- 1.1 The Traffic and Parking By-law 2014-051 serves to compliment the Ontario Highway Traffic Act and provides a set of rules to help control traffic and parking in Clarington. As a legislative requirement, STOP and other select signs must be included in the by-law in order to be enforceable. Staff continuously monitor local traffic situations and are recommending four new All Way STOP intersections to be installed by the end of 2021.

2. Recommended All Way STOP intersections

2.1 William Fair Drive at Kenneth Cole Drive

William Fair Drive is currently a free flow local street that runs between two arterial roads, Bowmanville Avenue and Middle Road. The roadway has been designed and built as a local residential street but functions more as a collector roadway. Operating speeds along William Fair Drive were periodically collected and were found to be in the low 40 km/h mark. Due to on-going growth in the area, an All Way STOP warrant was conducted at the intersection of William Fair Drive and Kenneth Cole Drive on December 3, 2020. The study data confirmed that the minimum warrant was met with 87% of the required total intersection volume and 103% of the minor street entering volume, with the traffic split very close to being equal. Continued residential growth in the area, including the development east of Middle Road and a future school on the north side of Northglen Boulevard will contribute to a further increase in traffic volumes at this location.

Staff recommend the installation of an All Way STOP at this intersection.

2.2 Longworth Avenue at Swindells Street

Longworth Avenue is a major street that runs free flow between Mearns Avenue and Liberty Street. There is a municipal park with baseball diamonds, a playground and a splashpad fronting the north side of Longworth Avenue at Swindells Street. The park and the nearby Harold Longworth Public School just east of the park result in increased pedestrian activity at the intersection. Ongoing sightline and parking behavioral complaints at this location have resulted in several public inquiries over time. Parking issue mitigation options were explored by staff but were unsuccessful due to winter

maintenance and other operational reasons. Staff have conducted an All Way STOP warrant analysis based on traffic data from June 2018. The warrant levels were found to be at 183% of the required total intersection volume, and at 99% of the minor street entering volume, however, the 17% traffic split is below the recommended threshold of 33%.

After a thorough review, staff have found that due to the combined intersection volumes and the on-going sightline safety issues at this location, an All Way STOP is justified.

2.3 Avondale Drive @ Farmington Drive

Avondale Drive is a collector road that links Trulls Road and Courtice Road via Sandringham Drive. As Sandringham Drive does not presently connect to Trulls Road, all through traffic is required to use Avondale Road. The future western extension of Sandringham Drive may result in significant changes to local traffic patterns, however, the date of completion is unknown and no progress is currently anticipated by the developer. Additionally, there are two elementary schools and one secondary school in the area that result in high morning and afternoon peak vehicle and pedestrian volumes entering the intersection of Avondale Drive and Farmington Drive. Historically, the split in bell times between the schools was not significant enough to offset traffic volumes and is partially in place to allow for shared school bus transportation between the multiple schools. Staff conducted an All Way STOP warrant justification for the intersection based on traffic data from May 2019. The warrant was justified at 102% of the required total intersection volume and 139% of the required minor street entering volume, with traffic splits being within the required range.

Staff recommend the installation of an All Way STOP at this intersection.

2.4 Old Scugog Road at Concession Road 10

Concession Road 10 runs east/west through Clarington at the southern end of the Hamlet of Burketon. Based on field observations and road user feedback, it has been confirmed that Concession Road 10 serves as an alternate route between Bowmanville Avenue and the significant residential development occurring in north Oshawa. Due to the road alignment and the surrounding environmental characteristics of this location, there is a sense that Concession Road 10 is the through road, despite the STOP condition that exists at Old Scugog Road. Over time, staff have received multiple complaints from local residents, Durham Regional Police Service (DRPS) and various road users that report a high frequency of near misses and rolling or no full stops. The intersection has also been highlighted due to poor sightlines at the southwest corner. Staff addressed some of the concerns, including trimming of roadside vegetation and the relocation of signage in order to improve visibility and awareness of the current STOP condition. Staff also conducted an All Way STOP justification warrant based on a November 2019 traffic study. The overall combined traffic volume threshold was well below the required limit. However, due to the higher proportion of traffic volume entering from the minor street and the limited sightlines at the intersection, justification exists to meet the warrant.

Staff recommend the installation of an All Way STOP at this intersection.

3. New lane configurations at the King Street and Scugog Street intersection

- 3.1 An operational review of the signalized intersection of King Street and Scugog Street in Bowmanville was conducted in partnership with the Region of Durham. The assessment resulted in the reconfiguration of lanes with the purpose of addressing long queues in the southbound right direction due to combined southbound through movements and a high number of drivers using the southbound left turn lane for through movements. The new configuration optimizes the dominant movements by creating a dedicated southbound right turn lane and combining the significantly lower volume of southbound through and left turn movements. The adjustments have also resulted in combining all northbound movements into a single lane. Signs were installed and pavement markings applied in the Summer of 2021 as part of the Vanstone bridge resurfacing contract.

4. Concurrence

This report has been reviewed by the Director of Legislative Services / Municipal Solicitor who concurs with the recommendations.

5. Conclusion

It is respectfully recommended that the above traffic control modifications be approved so that the Traffic and Parking By-law 2014-051 can be updated.

Staff Contact: Slav Potrykus, Traffic Engineering Supervisor, 905-623-3379 extension 2315 or spotrykus@clarington.net.

Attachments:

Attachment 1 – By-law to Report PWD-027-21

Attachment 2 – Redline Changes to Schedule 9, 10 and 19

Interested Parties:

The following interested parties will be notified of Council's decision:

DRPS Constable David Ricard