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Town of Aurora Committee of the Whole Report No. PDS25-003

Subject: Speed Limit Assessment on Stone Road

Prepared by: Michael Ha, Transportation and Traffic Analyst

Department: Planning and Development Services

Date: January 14, 2025

Recommendation

1. That Report No. PDS25-003 be received; and

2. That the existing posted speed limit of 50 km/h on Stone Road (north leg) from Bayview Avenue to Clift Road be maintained.

Executive Summary

This report presents to Council the results of speed limit assessment on Stone Road (north leg) from Bayview Avenue to Clift Road (Attachment 1).

 Based on evaluation methodologies outlined by the Transportation Association of Canada, a posted speed limit of 50km/h is recommended on Stone Road between Clift Road and Bayview Avenue.

Background

In response to requests received from area residents to consider a speed limit reduction on Stone Road from Clift Road to Bayview Avenue, staff have undertaken a speed limit assessment based on the procedures and methodologies outlined in the Transportation Association of Canada (TAC)'s Automated Speed Limit Guidelines

Stone Road is a 12 metre wide collector roadway with an urban cross-section (curbs and gutters), sidewalk on both sides and a 50 km/h speed limit except near the two elementary schools where it is reduced to 40 km/h. On-street parking is permitted on both sides of Stone Road which provides additional parking for area residents and visitors.

Analysis

Staff have undertaken a speed limit assessment based on the procedures and methodologies outlined in the Transportation Association of Canada (TAC) Automated Speed Limit Guidelines to determine whether it would be appropriate to reduce the posted maximum speed limit from 50 km/hr to 40 km/hr on Stone Road from Clift Road to Bayview Avenue (Attachment 1). Two warrants (evaluation tool and speed study) were undertaken as per the TAC guidelines.

Based on evaluation methodologies outlined by the Transportation Association of Canada, a posted speed limit of 50km/h is recommended on Stone Road (north leg) between Clift Road and Bayview Avenue

Warrant 1 - Evaluation Tool

TAC provides an evaluation tool to assess posted speed limits based on engineering factors to determine their effectiveness and if they are appropriate. These engineering factors include:

- Road classification (operating speeds are considered based on whether the roadway is classified as local, collector, or arterial)
- Physical characteristics (horizontal/vertical geometry, lane width, pedestrian/cyclist exposure, pavement surface condition, number of intersections, driveways, and other on-road features)

Based on the above considerations, TAC's evaluation tool recommends a posted speed limit of 50km/h on Stone Road (north leg) between Clift Road and Bayview Avenue.

Warrant 2 - Speed Study

TAC notes that the evaluation tool recommendation must be weighed against how drivers are using the road, as road safety may be enhanced by providing credible posted speed limits that match the expectation of drivers for a given roadway and its surrounding area. Reduction of posted speed limits without changing the characteristics of the roadway to encourage reduced speeds may have minimal impact on vehicle operating speeds. If the 85th percentile speed based on a speed study of the subject roadway is within plus or minus 10 km/h of posted speed limit for urban roads, TAC recommends not changing the speed limit.

Based on speed studies conducted at the various locations on Stone Road (Attachment 1) for 7 days, existing 85th percentile speeds (Table 1) were within the range of plus or

minus 10 km/h of the posted speed limit and therefore consistent with the above recommendation.

Based on the above technical assessment, the current posted speed limit of 50 km/h is appropriate and no change to the posted speed is recommended.

Table 1: Speed Study Summary

Location	Posted Speed Limit	85 th Percentile Speed	Recorded Speed vs. Posted Speed Limit	85 th Percentile within +/- 10 km/h of posted speed limit
Stone Road north of October Lane	50 km/h	53 km/h	3 km/h Over Posted Speed Limit	Yes
Stone Road south of Milloy Place		51 km/h	1 km/h Over Posted Speed Limit	Yes

Advisory Committee Review

At its meeting on November 27, 2024, members of the Active Transportation and Traffic Safety Advisory Committee (ATTSAC) recommended that the speed limits on the subject segment of Stone Road be reduced to 40 km/h to match the existing speed limits west of Clift Road to provide continuity of reduced speeds along Stone Road.

Legal Considerations

If Council would like to change the speed limit, a by-law will be required to amend Parking By-law No. 4574-04.T.

Financial Implications

There are no direct financial implications as a result of this report. However, should Council decide to proceed with a reduction of the posted maximum speed limit from 50 km/hr to 40 km/hr on Stone Road (north leg) from Clift Road to Bayview Avenue, the estimated cost for the replacement of the speed limit signs is approximately \$3,000 to be funded from the Operational Services Department's 2025 operating budget.

Communications Considerations

The Town will inform the public about the information contained in this report by posting this report to the Town's website. The Communications team will also inform the public about any potential traffic disruptions during the installation of the speed limit signs through the Town's regular communications channels.

Climate Change Considerations

The recommendations from this report does not impact greenhouse gas emissions or impact climate change adaptation.

Link to Strategic Plan

This report supports the Strategic Plan goal of Support an Exceptional Quality of Life for All by examining traffic patterns and identify potential solutions to improve movement and safety at key intersections in the community.

Alternative(s) to the Recommendation

1. That Council provide direction.

Conclusions

Staff have undertaken a speed limit assessment based on the procedures and methodologies outlined in the TAC Automated Speed Limit Guidelines to determine whether it would be appropriate to reduce the posted maximum speed limit from 50 km/hr to 40 km/hr on Stone Road (north leg) from Clift Road to Bayview Avenue (Attachment 1).

Based on evaluation methodologies outlined by TAC, a posted speed limit of 50km/h is recommended on Stone Road (north leg) between Clift Road and Bayview Avenue.

Should Council decide to proceed with the reduction of the posted maximum speed limit from 50 km/hr to 40 km/hr on Stone Road (north leg) from Clift Road to Bayview Avenue, funds can be sourced from the Town's Operations Department operating budget.

Attachments

Attachment 1 - Stone Road Speed Limit Assessment Area Map

Previous Reports

None.

Pre-submission Review

Agenda Management Team review on December 12, 2024

Approvals

Approved by Marco Ramunno, Director, Planning and Development Services

Approved by Doug Nadorozny, Chief Administrative Officer