Municipality of Lakeshore – Report to Council

Operations



Capital Projects

Subject:	Caille Avenue Drainage and Traffic Calming Improvements	
Date:	January 12, 2024	
	Marco Villella, Division Leader – Engineering & Infrastructure	
From:	Jill Fiorito, Drainage Superintendent – Drainage	
То:	Mayor & Members of Council	

Recommendation

This report is for information only.

Background

Because of various drainage concerns received by the residents over the last several years, four (4) Section 78 requests under the Drainage Act were received by the Municipality of Lakeshore to make improvements to the Caille Avenue Drainage System(s).

Several other concerns were received by residents along this corridor related to speed and pedestrian safety. It was noted that pedestrian use has increased along this corridor during the summer months to access West Beach and Lakeview Park area (without a pedestrian facility being present) and has contributed to these concerns. Based on the above, the Municipality of Lakeshore sent a letter dated May 2, 2023, to the affected landowner/s who reside along Caille Avenue advising of an open house to discuss and review both the drainage and speed and pedestrian concerns along Caille Avenue.

The Caille Avenue Drainage & Traffic Calming Open House was held on May 24, 2023. at the Atlas Tube Recreation Center. During this meeting one of the four Section 78 requests was withdrawn.

A traffic consultant also presented at the open house. This presentation outlined existing conditions with respect to speed, pedestrian safety and potential traffic measures along Caille Avenue that could be implemented to assist with the concerns received by the residents.

Several options were considered for implementation. It was recommended that the installation of flexible delineators would be the best suited interim measure in this case.

The flexible delineators will be seasonally implemented, with installation in the month of May and removal in the month of November, in advance of winter control operations by Public Works. This option was chosen; however, the preferred option was to include a pedestrian facility which was not conducive to the existing conditions along Caille Avenue. For this option to be viable, drainage works would be required to be undertaken under the Drainage Act (see below) and clearing of the roadway boulevard area to the south (VIA property) would be required to provide enough space for a pedestrian facility. Currently residents use this area for the purposes of storage facilities/structures, parking, gardens, etc.

Based on the information presented (attached), along with the feedback received during this meeting, the Municipality developed the following questionnaire to gain a deeper understanding of the preference of each landowner regarding the drainage system improvements (to also accommodate a temporary pedestrian facility). This information was used to help guide the Municipality in establishing an appropriate direction for this project.

Comments

Section 78 requests under the Drainage Act

In September 2023 the Municipality provided a questionnaire to residents who may be impacted by the maintenance and/or improvement of the Caille Avenue Drainage System. A total of 159 questionnaires were mailed out and the Municipality received 71 returned responses, which equates to a return rate of 45%.

The following is a summary of the results:

Options:	Responses Received	Percentage
Option 1 - Proceed with undertaking maintenance on the existing drains along Caille Avenue under Section 74 of the Drainage Act.	9	12.7
Option 2 - Proceed with improvements to the existing drainage systems along Caille Avenue under Section 78 of the Drainage Act.	5	7
Option 3 - Defer the maintenance and/or improvements of the Caille Avenue Drainage System under Section 74 or Section 78 of the Drainage Act – Do Nothing until road reconstruction is funded.	57	80.3
Total	71 (of 159)	100% (of 45%)

Based on the receipt of the questionnaire the Municipality will, as requested proceed with the below option:

Option 3

Defer the maintenance and/or improvements of the Caille Avenue Drainage System under Section 74 or Section 78 of the Drainage Act – Do Nothing until road reconstruction is funded.

Traffic Calming Implementation and Analysis

Engineering staff conducted a field investigation to determine the best suited location for each of the flexible delineators based on sight lines and any potential obstruction to driveway access. Operations field staff installed ten (10) flexible delineators along the centre median of Caille Avenue on July 18, 2023.

In September 2023, it was reported that two (2) delineators were missing and the other eight (8) were vandalized. Soon after this was reported to Operations, the flexible bollards were removed from the field.

None of the vandalized bollards were salvageable and if reimplemented, all will require replacement.

Traffic data was collected using a hidden traffic data tracker that can capture the actual driving behaviour of motorists without any visible speed display signage. Data was collected in two separate periods in 2023. The first period was June 5 to June 19 (without any delineators) and a second period from August 15 to August 31 (with the presence of flexible delineators).

The following is a summary of the traffic data collected prior and during the implementation:

	Caille Avenue (without traffic calming – flexible delineators)	Caille Avenue (with traffic calming – flexible delineators)
Posted Speed Limit (km/h)	40	40
Average Speed (km/h)	43	39
85 th Percentile Speed (km/h)	51	48

The data recorded prior to any traffic calming indicated a slight speeding concern but it is not considered excessive. Motorists were travelling at speeds slightly in excess of 10 km/h greater than the posted speed limit, which is typically an indicator for enhanced enforcement.

The presence of flexible bollards did decrease speeds to some extent as the the 85th percentile speed reduced by 3 km/h. This is within the anticipated typical speed reduction levels (expected up to 5km/h speed reduction) for such a traffic calming measure.

Although the results do yield a slight decrease in speed, the concern of pedestrian use of the roadway will not be resolved as the drainage works (and boulevard clearing) will not be completed to assist to rectify this issue.

Operations staff plan to replace the delineators and install them again along Caille Avenue this year (in mid-May). Traffic data collection will be conducted throughout the season again to confirm the impact of placement and continue to monitor speed along Caille Avenue.

If vandalized again, the delineators will not be replaced.

Others Consulted

The residents of Caille Avenue and Paradigm Transportation were consulted as part of this process.

Financial Impacts

The 2024 budget did include costs to implement a pedestrian facility in advance of Caille Avenue receiving full road reconstruction, however drainage works under the Act would be required to be completed as well as clearing of the property along the railway tracks to accommodate the drainage improvements and a separated facility.

As noted above, the resident's questionnaire did not support this direction and therefore the pathway costs were deferred from the draft 2024 budget.

The flexible delineators (post and sign) were \$260 (excluding applicable HST) per sign, which was funded from the Public Works Traffic Calming budget. Installation of the delineators is conducted by Operations field staff.

The anticipated costs to replace all ten (10) delineators is approximately \$4,000 (excluding applicable HST) and includes the Operations staff time and resources for installation. This will be funded from the Public Works Traffic Calming budget.

Attachments:

Attachment 1) Caille Avenue Letter to residents

Attachment 2) Caille Avenue Resident Open House presentation

Attachment 3) Drainage questionnaire letter to residents

Report Approval Details

Document Title:	Caille Avenue Drainage and Traffic Calming Improvements.docx
Attachments:	 Caille Avenue Letter to residents.pdf Caille Avenue Resident Open House presentation.pdf Drainage questionnaire letter to residents.pdf
Final Approval Date:	Feb 9, 2024

This report and all of its attachments were approved and signed as outlined below:

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Submitted by Krystal Kalbol

Approved by Justin Rousseau and Truper McBride