



100 John West Way  
Aurora, Ontario  
L4G 6J1  
(905) 727-3123  
aurora.ca

Town of Aurora

## Committee of the Whole Report

No. PDS24-044

---

**Subject:** Traffic Calming Measures and All-way Stop Control Request on Tamarac Trail

**Prepared by:** Michael Ha, Transportation and Traffic Analyst

**Department:** Planning and Development Services

**Date:** May 7, 2024

---

### Recommendation

1. That Report No. PDS24-044 be received.

### Executive Summary

This report presents to Council the results of traffic calming and all-way stop controlled intersection warrant assessments on Tamarac Trail between McClellan Way and Henderson Drive (Attachment 1).

- Based on the requirements outlined in the Traffic Calming Policy, traffic calming measures are not warranted at the subject locations on Tamarac Trail.
- Based on the requirements outlined in the OTM Book 5, the conversion of the intersection of Tamarac Trail and Albery Crescent from a two-way stop control to an all-way stop control is not warranted.

### Background

In response to requests received from an area resident, staff have undertaken traffic calming and all-way stop controlled intersection warrant assessments on Tamarac Trail between McClellan Way and Henderson Drive (Attachment 1).

Town staff completed traffic calming warrant analyses following the procedures and methodologies outlined in the Town's Traffic Calming Policy at the following locations:

- Tamarac Trail east of Ardill Crescent
- Tamarac Trail west of Alberly Crescent
- Tamarac Trail west of Milgate Place

An all-way stop control warrant assessment has been undertaken at Alberly Crescent at its westerly intersection with Tamarac Trail following the procedures and methodologies outlined in the Ontario Traffic Manual (OTM) Book 5 – Regulatory Signs.

## Analysis

### Traffic Calming Warrant Analysis

**Based on the requirements outlined in the Traffic Calming Policy, traffic calming measures are not warranted at the subject locations on Tamarac Trail**

As set out in the Town's Traffic Calming Policy, there are three requirements (warrants) that must be met for traffic calming measures to be considered:

Warrant No. 1 (Petition):	To ensure that residents in the immediate area are in support of traffic calming measures. The minimum threshold is 70% of households on the street.
Warrant No. 2 (Safety Requirements):	To ensure traffic calming measures are installed to improve traffic safety. A continuous sidewalk must be on at least one side of the street and the road grade be less than 5%.
Warrant No. 3 (Technical Requirements):	To ensure that traffic calming measures are implemented on streets that have a proven need for such measures. The 85 <sup>th</sup> percentile speed over a seven-day period must be a minimum of 15 km/h over the posted speed limit, and the minimum traffic volume is 1,500 vehicles per day.

The subject locations have satisfied warrant no. 1 and warrant no. 2. Traffic data was collected at the subject locations over a seven-day period to complete warrant no. 3 (Table 1).

**Table 1: Traffic Calming Warrant Analysis Summary (Warrant No. 3)**

Locations		Requirements		Yes / No
No.	Descriptions	Minimum Speed (85 <sup>th</sup> Percentile Minimum 15 km/h Over Posted Speed Limit)	Minimum Volumes (Between 1,500 and 8,000 Vehicles Per Day)	
1	Tamarac Trail east of Ardill Crescent	13 km/h Over Posted Speed Limit	1,862 Vehicles Per Day	No
2	Tamarac Trail west of Albery Crescent	13 km/h Over Posted Speed Limit	1,999 Vehicles Per Day	No
3	Tamarac Trail west of Milgate Place	10 km/h Over Posted Speed Limit	2,220 Vehicles Per Day	No

**All-Way Stop Warrant Analysis**

Based on the requirements outlined in the OTM Book 5, the conversion of the intersection of Tamarac Trail and Albery Crescent from a two-way stop control to an all-way stop control is not warranted

In response to the request to convert the intersection of Tamarac Trail and Albery Crescent (at its westerly end) from a two-way stop to an all-way stop controlled intersection, staff have undertaken warrant assessments in accordance with OTM Book 5 using vehicle and pedestrian data collected during the weekday morning peak period (6:30 AM to 10:30 AM) and afternoon peak period (2:30 PM to 6:30 PM).

In accordance with OTM Book 5, installation of an all-way stop control can be considered if one of the following warrants are met:

Volume Warrant (Table 2):

- Total vehicle volume on all intersection approaches exceeds 200 for each of the highest four hours recorded.
- The combined vehicle and pedestrian volume on the minor street exceed 75 units per hour (vehicles plus pedestrians) for each of the same four hours.

- The minor street volume (vehicles plus pedestrians) must not be less than 25% of the total volume entering the intersection as measured over the entire four-hour count period.

**Table 2 – OTM Book 5: Volume Warrant (All-way Stop)**

Warrant Criteria	Minimum Threshold	Recorded Volumes	Yes/No
Warrant 1: Total vehicle volume on all intersection approaches exceeds 200 per hour for each of the highest four hours of the day	200 vehicles	Hour 1: 216 Hour 2: 184 Hour 3: 181 Hour 4: 158	No
Warrant 2: The combined vehicle and pedestrian volume on the minor street exceed 75 units per hour (vehicles plus pedestrians) for each of the same hours as Warrant 1	75 vehicles and pedestrians	Hour 1: 7 Hour 2: 9 Hour 3: 4 Hour 4: 7	No
Warrant 3: The minor street volume must not be less than 25% of the total volume entering the intersection as measured over the entire four-hour count period.	25% split	6% Split	No
All Warrants Satisfied	No		

**Collision Warrant:**

For the purposes of this warrant, a high accident frequency is an average of four collisions per year over a three-year period.

Based on the information provided by York Regional Police, no collisions have been reported at the intersection of Tamarac Trail and Alberty Crescent for the past three years.

**Advisory Committee Review**

A memorandum (Report No. PDS24-037) was presented at the Active Transportation and Traffic Safety Advisory Committee (Committee) meeting on March 27, 2023. The Committee provided the following recommendations (Table 3).

**Table 3: ATTSAC Comment Summary**

Comments	Responses
Implement flexible signs to create a “narrowing” effect on the lane to discourage division and lower the operating speeds.	As adopted by Council, the implementation of flexible signs will need to follow the procedures outlined in the Traffic Calming Policy (Warrant not met per Table 1). To facilitate winter maintenance activities, these signs are removed in November and reinstated in the spring.
Implement an urban shoulder which consists of a white line painted anywhere from 1.0 to 2.5 metres away from a curb to create a lane narrowing effect.	<p>This can be considered but requires Council direction. Typically, urban shoulders are implemented for wider roadways. Currently Tamarac Trail has a pavement width of 8.5m therefore implementation of urban shoulders is not recommended on Tamarac Trail.</p> <p>Should Council decide to proceed with the installation of urban shoulders, centerlines (directional dividing lines) are also recommended to be implemented.</p>

## Legal Considerations

None.

## Financial Implications

There are no direct financial implications as a result of this report.

However, should Council decide to proceed with the installation of traffic calming measures on Tamarac Trail between McClellan Way and Henderson Drive, convert the intersection of Tamarac Trail and Alberly Crescent from a two-way stop control to an all-way stop control, or implement urban shoulders, the estimated costs are provided below.

1. Speed cushions on Tamarac Trail between McClellan Way and Henderson Drive can be implemented at a cost of approximately \$40,000. This can be funded from Capital Project No. GN0046 (formally Project No. 34519) – Traffic Calming as per the 2019 DC Study which has total of \$245,100 in approved budget authority. Of this amount \$120,758 remains unspent or committed.

2. Installation of flexible signs on Tamarac Trail between McClellen Way and Henderson Drive at a cost of approximately \$3,000. This can be funded from Capital Project No. GN0046 (formally Project No. 34519) – Traffic Calming as per the 2019 DC Study which has total of \$245,100 in approved budget authority. Of this amount \$120,758 remains unspent or committed.
3. Installation of All-way Stop at the intersection of Tamarac Trail and Alberly Crescent at a cost of approximately \$2,000. This can be funded from the Town's Public Work Department's Operating Budget.
4. Installation of urban shoulder and centerlines on Tamarac Trail between McClellen Way and Henderson Drive at a cost of approximately \$12,000 that can be funded from the Public Work Department's Operating Budget for Pavement Markings.

## **Communications Considerations**

None.

## **Climate Change Considerations**

None.

## **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**

This report presents to Council the results of traffic calming and all-way stop controlled intersection warrant assessments on Tamarac Trail between McClellan Way and Henderson Drive (Attachment 1).

Based on the requirements outlined in the Traffic Calming Policy, traffic calming measures including speed cushions and flexible signs are not warranted at the subject

locations on Tamarac Trail. Flexible signs are removed typically in November to facilitate winter maintenance activities and reinstated in the spring. However, should Council decide implement speed cushions or flexible signs, funds are available within Project No. GN0046 (formally called Project No. 34519) – Traffic Calming as per the 2019 DC Study.

Typically, urban shoulders are implemented for wider roadways and are not recommended on Tamarac Trail. Should Council decide to implement urban shoulders on Tamarac Trail between McClellan Way and Henderson Drive, it is recommended that the estimated cost of \$12,000 be added to Public Work Department's Operating Budget for Pavement Markings.

Based on the requirements outlined in the OTM Book 5, the conversion of the intersection of Tamarac Trail and Albery Crescent from a two-way stop control to an all-way stop control is not warranted. Should Council decide to implement an All-way Stop at the intersection of Tamarac Trail and Albery Crescent, funds can be sourced from the Town's Operations Department Operating Budget.

## **Attachments**

Attachment 1 – Traffic Calming and All-way Stop Control Assessment Locations

## **Previous Reports**

PDS24-037, Memorandum Request for Traffic Calming Measures and All-way Stop Control on Tamarac Trail, March 27, 2024

## **Pre-submission Review**

Agenda Management Team review on April 18, 2024

## **Approvals**

Approved by Marco Ramunno, Director, Planning and Development Services

Approved by Doug Nadorozny, Chief Administrative Officer