

Presented To:	Operations Committee
Presented:	Monday, Dec 02, 2019
Report Date	Friday, Nov 15, 2019
Type:	Managers' Reports

## Request for Decision

### Right of Way Reassignment - Beatrice Crescent at Hawthorne Drive

#### Resolution

THAT the City of Greater Sudbury directs staff to prepare a by-law to amend Traffic and Parking By-Law 2010-1 to implement the recommended changes, as outlined in the report entitled "Right of Way Reassignment – Beatrice Crescent at Hawthorne Drive", from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting on December 2, 2019.

#### Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters

#### Report Summary

This report will provide a recommendation to reassign the right-of-way at the intersection of Beatrice Crescent at Hawthorne Drive in order to implement standard uniform systems of traffic control.

#### Financial Implications

Recommendations of this report may be carried out within existing approved operating budget.

#### Signed By

**Report Prepared By**

Soutsay Boualavong  
Traffic/Trans Eng Analyst  
*Digitally Signed Nov 15, 19*

**Manager Review**

Joe Rocca  
Traffic and Asset Management  
Supervisor  
*Digitally Signed Nov 15, 19*

**Division Review**

Akli Ben-Anteur  
Project Engineer  
*Digitally Signed Nov 15, 19*

**Financial Implications**

Liisa Lenz  
Coordinator of Budgets  
*Digitally Signed Nov 18, 19*

**Recommended by the Department**

Tony Cecutti  
General Manager of Growth and  
Infrastructure  
*Digitally Signed Nov 18, 19*

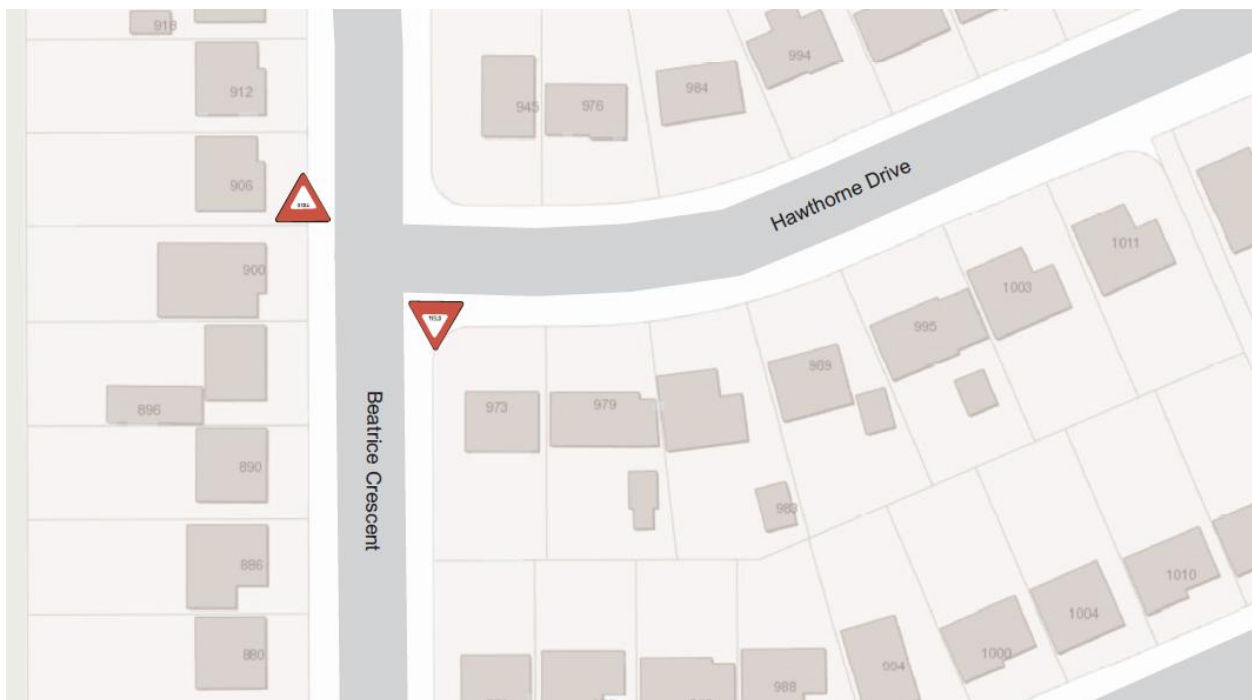
**Recommended by the C.A.O.**

Ed Archer  
Chief Administrative Officer  
*Digitally Signed Nov 20, 19*

## **Right of way Reassignment Beatrice Crescent at Hawthorne Drive**

The City's Transportation and Innovation Services section received requests from area residents to review the intersection of Hawthorne Drive at Beatrice Crescent where a non-standard system of traffic control is currently implemented.

Hawthorne Drive intersects Beatrice Crescent forming a "T" intersection. Currently, traffic at this intersection is controlled by Yield signs facing both northbound and southbound traffic on Beatrice Crescent (see Figure 1 below). This is not a standard form of traffic control at a "T" intersection. Typically at a "T" intersection, vehicles on the intersecting road are required to stop or yield to vehicles on the through road. Intersections with a non-standard system of traffic control may create driver confusion and conflicts between various turning movements.



**Figure 1 – Existing Traffic Control at the intersection of Beatrice Crescent and Hawthorne Drive**

Staff first reviewed whether an all-way stop was warranted at this intersection. A turning movement count was completed on August 20, 2019 at this intersection. Applying the data to the City's minimum vehicle volume warrant indicates that the total vehicle volume meets 74% of the minimum volume requirements (see Exhibit A). A review of the City's collision data from 2015 to 2019 year to date revealed that there were no

reported collisions at this intersection during this period. Based on traffic volume and collision history, an all-way stop is not warranted at this intersection.

In order to improve safety and to implement a standard uniform system of traffic control, it is recommended that traffic be controlled with a STOP sign facing westbound traffic on Hawthorne Drive. It is recommended that a by-law be passed to amend the Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury, to implement this change.

The process for reassigning the right-of-way at an intersection is a multiple step process which can be confusing to drivers. To try and minimize the risk of a collision, the Ontario Traffic Manual (OTM) has provided a procedure that is to be followed to safely carry out the transition. The intent of the procedure is to change driver expectation and behavior by alerting drivers to a state of operational change. The following is a summary of the required procedure:

- i. The process will begin by replacing existing yield signs with stop signs on Beatrice Crescent and installing a new stop sign on Hawthorne Drive with appropriate tabs to create an all-way stop at the intersection. The all-way stop is to remain in effect for at least 15 days.
- ii. At the same time, large signs will be installed on Hawthorne Drive indicating "cross traffic does not stop". Below this sign, a tab sign is installed stating "After", with the month and day indicating when the stop sign will be removed.
- iii. After minimum of 15 days, remove the stop signs facing both northbound and southbound on Beatrice Crescent. The tab signs with the month and day are also removed.
- iv. After an additional period of a minimum of 15 days, the "cross traffic does not stop" signs are removed.

Besides utilizing the above sign installation procedure, staff will utilize the media to advise the public of the change in traffic control at the intersection. Greater Sudbury Police Services will also be requested to increase the level of enforcement at the intersection during the transition period.

**Resources Cited:**

Ontario Traffic Manual, Book 5 – Regulatory Signs, March 2000.



# EXHIBIT A CITY OF GREATER SUDBURY ALL-WAY STOP WARRANT

Location: Beatrice Crescent at Hawthorne Drive Date: 9/27/2019  
 Date of TM Count: 8/20/2019 Analyst: SB  
 Type of Intersection: T

## All-Way Stop Warrant Summary

Warrant #1	Minimum Vehicle Volume	74%	%
Warrant #2	Collision History	0%	%
Warrant #3	Traffic Control Signals	NO	Y/N
All-Way Stop Warranted?		NO	Y/N

### Warrant #1 - Minimum Vehicle Volume

Roadway Type	Arterial/Major Collector	Minor Collector	Local	Vehicles per hour	Percent Compliance
AADT	> 5000	1000 - 5000	< 1000		
Count Period	7 hours	4 peak hours	4 peak hours		
Total vehicle volume from all approaches is $\geq$	500	350	250	260	74%
Veh + Pedestrian volumes from side street is $\geq$	200/hr	140/hr	N/A		
Traffic Split	70/30	70/30	70/30	70/30	100%

### Warrant #2 - Collision History

Roadway Type	Arterial/Major Collector	Minor Collector	Local	Number of Collisions per year	Percent Compliance
Collisions per Year over 3 year period	4*	3*	2*	0	0%

<b>Warrant #3</b>	<b>Traffic Control Signals are warranted and urgently needed, signs to be used as interim measures.</b>	<b>NO</b>	<b>Y/N</b>
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\* Only those collisions susceptible to relief through multi-way stop control must be consider (i.e. right angle and turning types).

- If the intersection meets warrant # 1, then the all-way stop is recommended regardless of the remaining warrants.
- If the intersection does not meet warrant #1 and does not meet warrant #2, then the all-way stop is not recommended.
- If the intersection does not meet warrant #1 and does meet warrant #2, then the all-way stop is recommended.