

Title: Traffic Signal – Falconbridge Road at St Charles College Entrance, Sudbury

Background

At the June 9, 2020 City Council meeting, Councillor Sizer presented a motion (City Council Resolution CC2020-145) asking staff to review the intersection of Falconbridge Road and the private road for St. Charles College and Holy Trinity Catholic Elementary School (Holy Trinity) for traffic signals and the queuing of school buses impeding access to existing home on Hawthorne Drive.

St. Charles College and Holy Trinity are located on Falconbridge Road in Ward 8. The private road for the site also connects to Hawthorne Drive. Figure 1 below shows the location of the site as well as the connections of the private road to Falconbridge Road and Hawthorne Drive.



Figure 1 – Site Location Map

When reviewing an intersection for traffic signals, staff uses the traffic signal warrants set out in Book 12 of the Ontario Traffic Manual (OTM). These provincial guidelines look at vehicle volume, pedestrian volume and the collision history at the intersection to determine when it is recommended to install traffic signals at an intersection.

The intersection was reviewed during the development of the Holy Trinity in 2015. As part of the development, the school board prepared a traffic impact study that reviewed the requirements for traffic signals. The results of the study concluded that after the school was opened the expected traffic volumes would not meet the minimum requirements as outlined in OTM Book 12 and traffic signals would not be warranted. Staff agreed with the results of the study and did not require the school board install traffic signals as part of the development of the site.

Since Holy Trinity opened in September 2015, and in response to concerns about the operation of the intersection, staff have completed traffic studies to determine if traffic signals were warranted in 2016, 2018 and most recently in 2020.

On March 12, 2020, staff conducted an eight hour turning movement count at the intersection and applied the results to the traffic signal warrant. Based on the recorded traffic volumes, this intersection meets only 47% of the volume requirements to install traffic signals.

A review of the City's collision information from 2017 to 2019, revealed that there was one collision that could have been prevented if traffic signals were present at the intersection. Although no collisions are desirable, for collisions to be considered a factor for installing traffic signals there needs to be 15 or more collisions over a three year period that could be prevented if traffic signals were installed.

In addition to the traffic signal warrant, staff setup a camera and recorded video during peak school bus hours on Hawthorne Drive to see if there was queuing across residential driveways. The camera was set up on the same day as the turning movement count on Hawthorne Avenue west of Claudia Court. After reviewing the video it was determined that there were no instances of queuing on Hawthorne Drive. As of the time of this report being written, site alterations were underway at Holy Trinity which may help alleviate some of the internal site congestion and reduce any queuing that may be occurring on Hawthorne Drive.

Based on the current traffic volume and collision history, staff does not recommend installing traffic signals at Falconbridge Road and the private entrance to St. Charles College and Holy Trinity Catholic Elementary School. Staff will continue to regularly monitor this intersection to see if traffic signals become warranted in the future.

Resources Cited

City Council Meeting, June 9, 2020, City Council Resolutions, Accessed online:

<https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=1471&itemid=rec>