



Report to: Development Services Committee

Meeting Date: January 25, 2021

SUBJECT: South Park Road and Saddle Creek Drive Proposed All-way Stop (Ward 8)

PREPARED BY: David Porretta, Manager, Traffic Engineering, ext. 2040

RECOMMENDATION:

- 1) That the report entitled “South Park Road & Saddle Creek Drive Proposed All-way Stop (Ward 8)” be received; and
- 2) That Schedule 12 of Traffic By-law 106-71, pertaining to compulsory stops, be amended to include all approaches to the intersection of South Park Road and Saddle Creek Drive; and
- 3) That the Operations Department be directed to install the appropriate signs and pavement markings at the subject location; and
- 4) That the cost of materials and installation for the traffic signs and pavement markings in the amount of \$1,000, be funded from capital project account #083-5350-21178-005 (Traffic Operational Improvements); and
- 5) That York Region Police be requested to enforce the all-way stop control upon installation of these stop signs and passing of the By-law; and further
- 6) That staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

This report recommends implementing an all-way stop at the intersection of South Park Road and Saddle Creek Drive, to improve intersection operations and pedestrian safety.

BACKGROUND:

Traffic Engineering staff have received requests from multiple residents regarding traffic safety concerns at the intersection of South Park Road and Saddle Creek Drive. Specifically, residents have expressed challenges entering the intersection from Saddle Creek Drive and a high volume of pedestrians crossing South Park Road to access Ada Mackenzie Park is creating a potential safety concern.

The subject intersection is located in the Leitchcroft community, south of Highway 7 and west of Leslie Street. Both South Park Road and Saddle Creek Drive are classified as 2-lane minor collector streets. Stop control at the intersection is currently assigned to Saddle Creek Drive only, giving traffic on South Park Road the right-of-way. An illustration of the intersection and surrounding area is provided in Attachment “A”.

South Park Road, between Saddle Creek Drive and Highway 7, was recently open to through traffic. A new residential subdivision development to the west is currently under development. Both factors are contributing to increased traffic volume through the subject intersection.

OPTIONS/ DISCUSSION:

All-way stop control warrant analysis was conducted at the subject intersection

An all-way stop control may be considered where the minimum provincial warrant criteria are satisfied, as outlined by the Ministry of Transportation of Ontario (MTO). The warrant considers both the total vehicular volume and the volume distribution between the intersecting roadways during the busiest hour of the day.

In November 2020, Traffic Engineering staff conducted an all-way stop warrant analysis during the busiest one-hour period of a typical weekday at the intersection. The warrant analysis results are as follows:

Figure 1: South Park Road & Saddle Creek Drive - All-way Stop Study Results

CRITERIA #1 Peak Hour Traffic Volume <i>(All Approaches)</i>			CRITERIA #2 Volume Assigned to “Minor” Street <i>(Saddle Creek Drive)</i>		
Minimum Criteria	Recorded Value	Criteria Met?	Minimum Criteria (3-way)	Recorded Value	Criteria Met?
350	309	NO	25%	39%	YES

Results of the study have concluded that the minimum justification criteria has not been satisfied. Specifically, the peak hour traffic volume fell below the minimum criteria by 41 vehicles.

There is a high volume of pedestrians crossing at the intersection

Ada Mackenzie Park is located on the south side of the intersection. This facility is a significant pedestrian generator; the intersection analysis identified 120 pedestrians crossing South Park Road over an 8-hour period, of which a significant portion consist of children. Under current conditions, pedestrians crossing South Park Road are required to wait for a safe gap in traffic before crossing. They are also exposed to potential conflicts with vehicles on Saddle Creek Drive turning onto South Park Road.

All-way stop control at the intersection is recommended

Traffic data collection and intersection analysis at the intersection was conducted during the COVID-19 pandemic. As such, traffic volumes across the City are well below what is considered “typical”. It is expected that traffic volume at the intersection will increase post-pandemic and the minimum requirements for an all-way stop will be achieved.

Due to a combination of these factors, it is recommended that an all-way stop control at the intersection of South Park Road and Saddle Creek Drive be implemented. The provision of an all-way stop will improve intersection operations and safety by requiring

all vehicles to come to a complete stop at the intersection and provide pedestrians with opportunities to cross.

FINANCIAL CONSIDERATIONS

The cost of materials and installation for the traffic signs and pavement markings in the amount not exceeding \$1,000 will be funded from capital project account #083-5350-21178-005 (Traffic Operational Improvements). On-going maintenance costs will be managed within the Operations Department's existing operating budget.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The recommendations identified within this report align with the strategic focus for a Safe & Sustainable Community, through the ongoing management of the City's transportation network.

BUSINESS UNITS CONSULTED AND AFFECTED:

Operations Department has been circulated this report, and acknowledges the operating impacts associated with the additional regulatory signs and pavement markings.

RECOMMENDED BY:

Brian Lee, P.Eng
Director, Engineering

Arvin Prasad, MPA, RPP, MCIP
Commissioner, Development Services

ATTACHMENTS:

Attachment "A" – Map: South Park Road & Saddle Creek Drive Proposed All-way Stop
Attachment "B" – All-way Stop Control By-Law Amendment