

TRAFFIC SAFETY COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

SUBJECT: TRAFFIC CONGESTION AT MOSCROP SECONDARY SCHOOL

RECOMMENDATIONS:

1. THAT Council approve the installation of turn restrictions at Moscrop Street and Barker Crescent as outlined in this report to mitigate traffic congestion at Moscrop Secondary School.
2. THAT a copy of this report be forwarded to: Ms. Victoria Lee, Principal, Moscrop Secondary School, 4433 Moscrop Street, Burnaby, BC, V5G 2G3 and Mr. David B. Fairey, 4778 Fernglan Place, Burnaby, BC, V5G 3W1 for information.

REPORT

The Traffic Safety Committee, at its meeting held on 2010 February 02, received and adopted the attached report reviewing and mitigating traffic congestion at Moscrop Secondary School.

Respectfully submitted,

Councillor Sav Dhaliwal
Chair

Councillor Colleen Jordan
Vice Chair

Councillor Paul McDonell
Member

Copied to: City Manager Director Engineering

TO: CHAIR AND MEMBERS
TRAFFIC SAFETY COMMITTEE

DATE: 2010 January 28

FROM: DIRECTOR ENGINEERING

FILE: 38000 20
Ref: Traffic Safety

SUBJECT: TRAFFIC CONGESTION AT MOSCROP SECONDARY SCHOOL

PURPOSE: To review and mitigate traffic congestion at Moscrop Secondary School

RECOMMENDATIONS:

1. **THAT** the Committee recommend that Council approve the installation of turn restrictions at Moscrop St and Barker Cres as outlined in this report to mitigate traffic congestion at Moscrop Secondary School.
2. **THAT** a copy of this report be forwarded to: Ms. Victoria Lee, Principal, Moscrop Secondary School, 4433 Moscrop St, Burnaby, BC, V5G 2G3 and Mr. David B. Fairey, 4778 Fernglen Pl, Burnaby, BC, V5G 3W1 for information.

REPORT**1.0 BACKGROUND**

In 2009, the Traffic Safety Committee received correspondence from Mr. Fairey expressing concerns about the pedestrian and traffic congestion westbound on Moscrop St at Moscrop Secondary School. The correspondence was referred to staff for review and report.

Moscrop Secondary School is located on the northwest corner of Willingdon and Moscrop. The intersection of Willingdon and Moscrop/Deer Lake Pkwy is fully signalized with left turn bays in all four directions. Moscrop, directly in front of the school, has two westbound lanes transitioning to one lane between Willingdon and Barker. At Barker, there are corner bulges, a centre median, and a marked crosswalk across Moscrop to facilitate pedestrian crossings (See *Figure 1*). At the north leg of the intersection is one of the main driveway accesses to the school. The other major driveway access is located off of Huxley Ave one block west.

2.0 OBSERVATIONS

Observations at the intersections confirm that there is traffic congestion along Moscrop St in front of Moscrop Secondary School just before the start of school (9am) and after school (3pm). The duration of the congestion is approximately half an hour and is directly related to the

increased number of pedestrians and vehicles passing through the intersection of Moscrop and Barker on school days. The westbound traffic congestion during these times can impact the nearby intersection of Moscrop and Willingdon. The eastbound traffic congestion often blocks the intersection at Barker. This blocks turning movements at the intersection which, in turn, contributes to the westbound traffic congestion.

3.0 ANALYSIS

Pedestrian and traffic counts were made at the intersection of Barker and Moscrop. An analysis of the crossing conditions confirms that the existing marked crosswalk is an appropriate pedestrian facility for the intersection. The curb bulges and center median further enhance pedestrian safety by reducing the crossing distance. Drivers were observed to be generally courteous and yielding to pedestrians crossing. Based on the above, the marked crosswalk should be retained. It has been suggested that the intersection should be signalized; however, this would not resolve the congestion problems and may in fact increase it. As well, a signal may not necessarily improve pedestrian safety in this instance because some pedestrians may cross against the signal given the very short crossing distance and nature of pedestrians in this specific situation.

The following conditions were found to be the main contributors to the congestion at Moscrop and Barker:

- The volume of pedestrians crossing Moscrop,
- The volume of traffic along Moscrop,
- Eastbound traffic queues across Barker,
- Conflicts from turning movements.

There is no direct ability to control the first two conditions. The ability to reduce the eastbound traffic queues across Barker by modifying the traffic signal timings at Willingdon is extremely limited because of the negative impact it would have on the existing transit signal pre-emption for the Willingdon bus lanes and the required minimum signal timings for the left turn bays and pedestrian crossings. There are, however, two regulatory traffic control signs that can be installed to reduce turning conflicts that would then help to improve traffic flow along Moscrop.

The first is the installation of a left turn prohibition sign for vehicles westbound on Moscrop at Barker. Many vehicles were observed making this left turn and were found to be delaying the movement of westbound through traffic because of the eastbound traffic queue blocking their passage. To minimize inconvenience and reduced access to the neighbourhood, it is recommended that this restriction be only in effect between 8am-9am and 3pm-4pm during school days.

The second is the installation of a right turn only sign for southbound vehicles exiting the school's driveway at Moscrop and Barker. The resulting restriction of the southbound through and left turn movements at the driveway would eliminate conflicts with the eastbound traffic

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queue. This conflict often results in the blockage of the westbound through movement on Moscrop. Again, to minimize inconvenience and reduced egress options, it is recommended that this restriction be only in effect between 8am-9am and 3pm-4pm during school days.

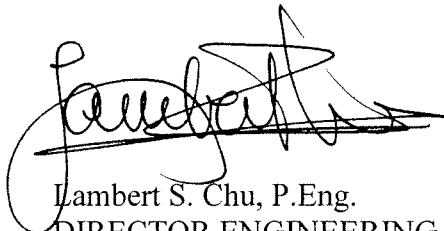
Elimination of the conflicts with the eastbound traffic queue on Moscrop across Barker will help to improve westbound traffic flows. At the same time, it will reduce potential conflicts with pedestrians and enhance general safety by simplifying traffic movements during the peak periods just before school starts and after school.

The principal of Moscrop Secondary School and the school's police liaison officer have been consulted on the proposed changes and are supportive.

The recommended changes can be implemented within existing Operating Budgets.

4.0 CONCLUSION

To reduce traffic congestion along Moscrop in front of Moscrop Secondary School, it is recommended the left turn restrictions be installed for westbound traffic at Barker between the hours of 8am-9am and 3pm-4pm during school days. In addition, southbound vehicles exiting the school's driveway at the same intersection will be required to turn right only during the same time period. These restrictions will reduce the conflicts with the eastbound traffic queue across Barker, which often leads to a backup of traffic in the westbound direction. The restrictions will also enhance general safety by reducing conflicts with pedestrians and other traffic movements. The limited time periods of the restrictions will help to reduce any resulting inconvenience to the neighbouring streets.



Lambert S. Chu, P.Eng.
DIRECTOR ENGINEERING

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Attachment

Copied to: City Manager

**Figure 1 – Proposed Turn Restrictions
Moscrop St at Barker Cr**

