



**CITY OF RICHMOND**

**REPORT TO COMMITTEE**

**TO:** Public Works and Transportation Committee

**DATE:** July 2, 2002

**FROM:** Gordon Chan, P. Eng.  
Director, Transportation

**FILE:** 6450-01

**RE: PROPOSED TRAFFIC CALMING MEASURES – MCNEELY DRIVE AT MCNEELY  
ELEMENTARY SCHOOL**

**STAFF RECOMMENDATION**

That the proposed traffic calming measures on McNeely Drive in front of McNeely Elementary School, as recommended in the attached report, be endorsed.

Gordon Chan, P. Eng.  
Director, Transportation

Att. 2

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ROUTED TO:	CONCURRENCE	SIGNATURE OF GENERAL MANAGER
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R.C.M.P. ....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	

## STAFF REPORT

### ORIGIN

Parents and staff of McNeely Elementary School have requested the City to consider measures to address the traffic safety hazards associated with excessive vehicular travel speed in front of the school on McNeely Drive. The request was partly prompted by a recent incident involving a speeding vehicle which hit a parent's parked vehicle in the vicinity of the school.

This report presents the results of an investigation of the above noted speeding issue and recommends remedial measures to enhance traffic safety in the area.

### ANALYSIS

#### **1. Local Area Traffic Conditions**

McNeely Elementary School is located on McNeely Drive which connects Jackbell Drive to Number 5 Road. Between Cambie Road and Highway 91, the only connection from Jacombs Road to Number 5 Road is through Jackbell Drive and McNeely Drive. As Cambie Secondary school is located at the corner of Cambie Road and Jacombs Road, McNeely Drive serves as a convenient through route for high school students driving to and from the school. (Attachment 1 shows the location of McNeely School and Cambie Secondary School).

#### **2. Traffic Speed and Volume Survey**

Several speed and volume surveys have been conducted in the vicinity of this school over the past year. The surveys concluded that the 85<sup>th</sup> percentile (i.e 85% of traffic is travelling at or below a given speed) of the recorded speed to be between 51 and 63 km/h which were over the legal speed limit of 50 km/h, but considerably over the school zone speed limit of 30 km/h. It is noted the school zone speed restriction is in effect on school days between 8:00 a.m. and 5:00 p.m. Several of the higher speeds (60-80 km/h) recorded during the speed survey correspond to lunch time and afternoon dismissal time at the secondary school. Other "high speeds" occurred mainly in the late evenings (6-9 p.m.) and early mornings (5-7 a.m.). Traffic volume peaks occurred at 8-9 a.m. and at 2-3 p.m. Because these higher speeds and volumes were recorded during times when elementary school students are in the vicinity but are out of their classrooms, it is felt that the proposed traffic calming measures are needed to help improve the safety of those children.

#### **3. Recommended Traffic Calming Measures**

As on-going speed enforcement for this location may not be feasible as a long term solution due to limited RCMP resources, the application of traffic engineering measures as a means to address the speeding concern is therefore examined. The recommended measures will take the form of one set of curb extensions placed on McNeely Drive in front of the school at the existing marked crosswalk. An additional measure to be included in the solution package would involve the installation of traffic delineators along the centre line of the "90 degree bend" in the road where McNeely Drive and Woodhead Road intersect. (Attachment 2 shows the location and general configuration of the proposed traffic calming measures on McNeely Drive).

#### 4. Experiences in Other locations

Staff have installed curb extensions (road narrowing) in other locations in Richmond – e.g. Lassam Road (in front of McKinney School), General Currie Road and Jones Road (in front of General Currie School), Garry Street (in front of McMath School), and 10,000 block River Drive among others. Road narrowing devices, installed independently or in combination with centre medians have been found to be effective in reducing vehicle speeds. These devices also improve traffic safety by decreasing the crossing distance for pedestrians and eliminating any visual obstruction by parked cars.

#### 5. Other Considerations

In reviewing the requirements for traffic calming measures for this section of McNeely Drive, the following alternatives were also examined:

- Speed “Humps” – Based on local experience and experience gained in other jurisdictions, staff do not recommend the use of speed humps on any public roadways except lanes. In some locations, speed humps have generated complaints that they are annoying, noisy, and cause vibrations. For these reasons, some jurisdictions have even removed recently installed speed humps on roadways. Vibrations are especially a concern in Richmond due to the river delta geological qualities of the local sub-grade.
- Traffic Circles - Consideration was given to installing traffic circles at the intersection of McNeely Drive and Cameron Drive and/or the intersection of McNeely Drive and Woodhead Road. Traffic Circles are not recommended in the vicinity of elementary schools since they guide vehicles in the intersection closer to the path of pedestrians crossing that intersection. In this situation, the conditions are even less favourable as the pedestrians crossing this section of McNeely Drive are expected to be mostly young school students.

#### 6. Consultation with Residents

Staff have met with McNeely School and Richmond School District staff on the proposed traffic calming measures. School officials have indicated their support for the recommended solution to enhance traffic safety in the area. It is also proposed that the adjacent residents and property owners be consulted on the recommended traffic calming measures (through a mail-drop survey). The main purpose of the public process is to seek input from residents in the area on the design of details the proposed measures

#### 7. Monitoring of Effectiveness of Proposed Measures

If the project is approved by Council, the traffic patterns in the area will be monitored for one year to determine if the proposed measures are effective in reducing the vehicular travel speed and other irresponsible driving behaviour on this section of McNeely Drive.

FINANCIAL IMPACT

The cost of installing the proposed traffic calming measures is estimated at \$15,000. The funding source, is proposed to be the 2002 Major Capital Works Program for Neighbourhood Traffic Safety Improvements.

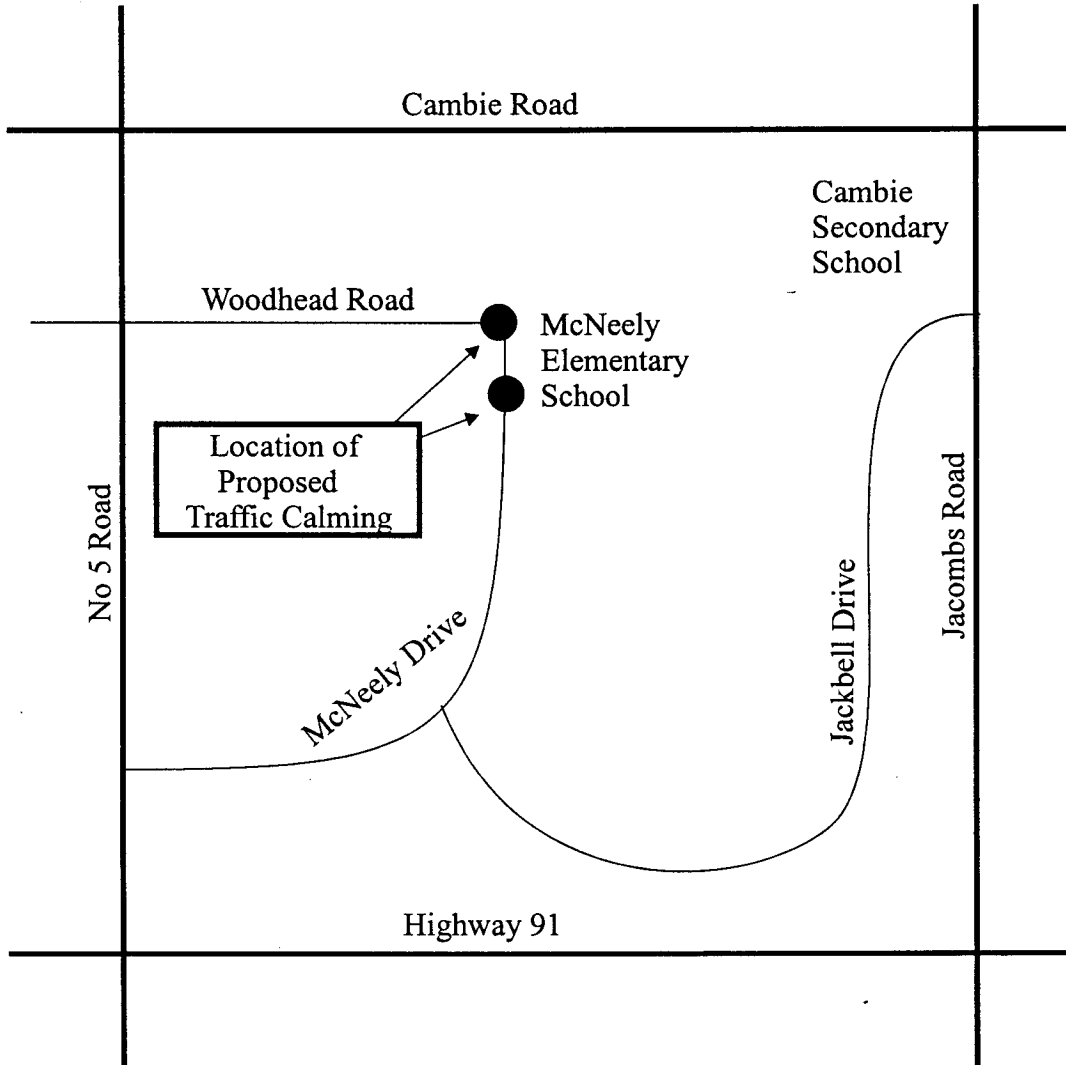
CONCLUSION

Staff recommend that two curb extensions and centre delineators be placed respectively at the existing crosswalk and the curve in the road at the intersection of McNeely Drive and Woodhead Road on McNeely Drive in front of McNeely Elementary School. The adjacent residents and property owners will be consulted on the various improvements before final approval from Council is sought. If the improvements are approved upon completion of the consultation process, the traffic conditions in the area will be monitored further to determine the effectiveness of the measures implemented and further traffic safety enhancement initiatives will be considered as necessary.

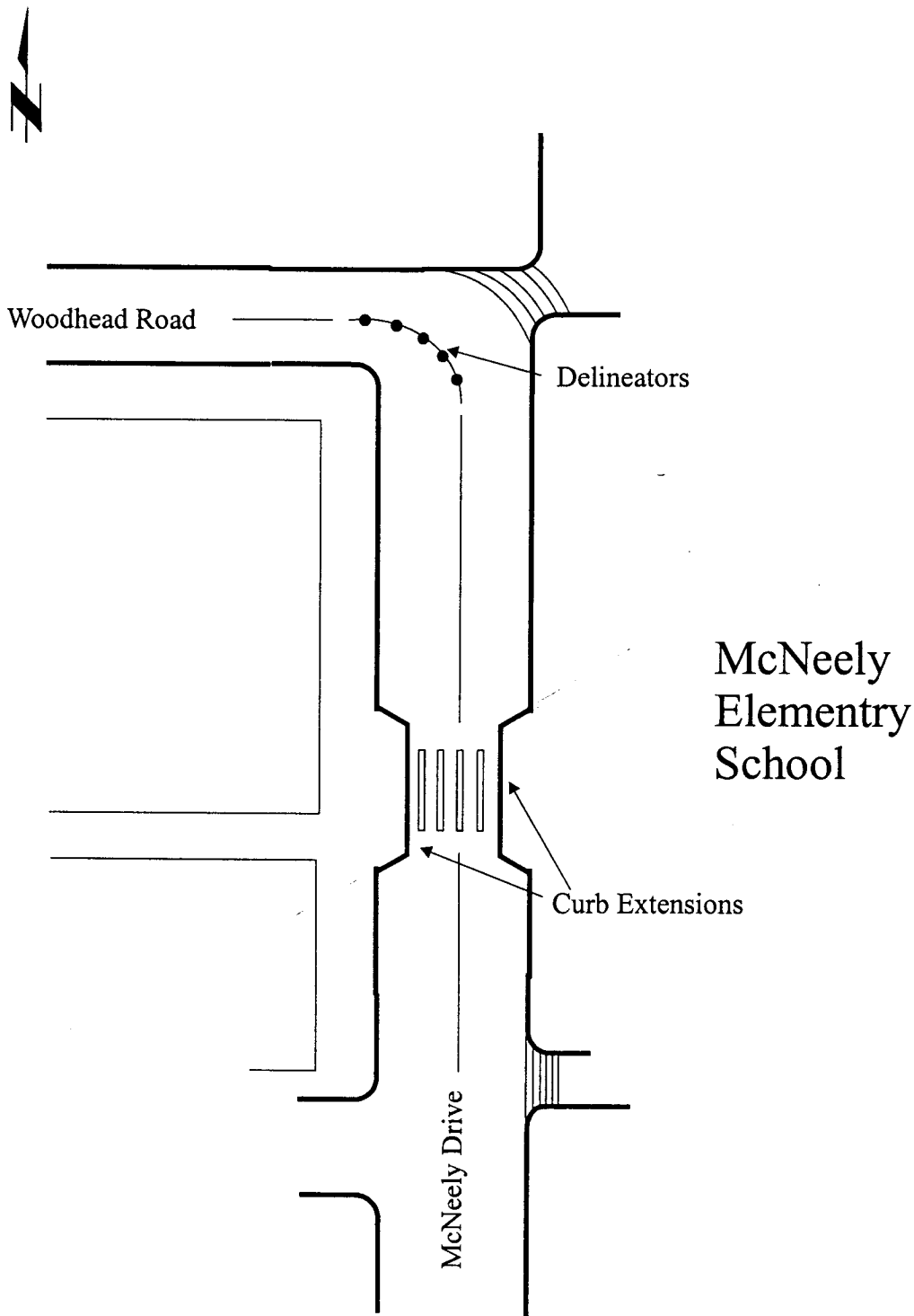


Carlos Rocha  
Traffic Technician II

CJR:cjr



Location of 4500 Block McNeely Drive  
Proposed Traffic Calming 45



PROPOSED TRAFFIC CALMING MEASURES  
4500 BLK. McNEELY DRIVE  
AT MCNEELY ELEMENTARY SCHOOL FRONTAGE