# COMMITTEE OF THE WHOLE- MAY 5, 2008

## **OVERVIEW OF TRAFFIC MANAGEMENT PLAN AT NEW SCHOOL SITES**

## **Recommendation**

The Commissioner of Engineering and Public Works recommends that this report BE RECEIVED for information purposes.

#### Economic Impact

There are no economic impacts associated with this report.

## **Communications Plan**

That a copy of this report be forwarded to the Council/School Board Liaison Committee.

## **Purpose**

This report has been prepared in response to Council's request for a report regarding traffic calming measures, particularly as they relate to new schools in subdivisions.

## **Background - Analysis and Options**

At its meeting of November 26, 2007, Council directed:

## "that staff provide a report on traffic calming measures, particularly as they relate to new schools in subdivisions."

In the past, traffic management at schools, particularly during the pick-up and drop-off times have created a significant problem for municipalities and the school boards, and ultimately prompted the Region of York with the nine local municipalities and two school boards to jointly commission *Region of York Safety and Traffic Circulation at School Sites Guidelines Study 1999.* 

The findings of this study provided direction for revised school site layout and design, adequate size of the site, location within community and design of streets adjacent to the school. These guidelines are being utilized by the school boards in their design of school sites and by local municipalities in the approval process of site plan.

Currently, the number and location of school site are identified as part of the Block Plan approval process in consultation with the School Boards, City of Vaughan Planning, Parks and Engineering Departments, Region of York (if school is on a Regional road) and the developer. The Location, catchment area, enrolment and physical characteristics of the site influence how the site can be designed and managed. It is important to recognized that no two schools are the same and traffic solutions that are appropriate for one school site, may not be suitable for another site.

#### Criteria for New School Site Location

Of primary importance in selecting a school site is its anticipated catchment area. Public elementary schools typically serve a neighbourhood and Separate elementary schools may have a broader catchment area. According to the York Region District and York Catholic School Boards, schools should be located centrally to the ultimate catchment area.

A proposed attendance area should enable most students to walk to school (1.6 km maximum walking distance for primary aged school children).

In addition, the school site should be abutting a minor collector and having access to the collector road while minimizing impacts on local streets. The location of site is also considered within the context of the proposed adjacent street network and pedestrian facilities including sidewalks which should be provided on both sides of the street.

# Site Plan Design Elements

The safe and effective movement of vehicular and pedestrian traffic on school property and the control of traffic around school areas should be a key consideration when selecting and designing a school site plan.

Concerns about children's safety with regards to speeding, congestion and general neighbourhood impacts have influenced an increased number of parents to drive their children to school which in turn intensified congestion in the vicinity of schools. This has made the management of traffic in and around schools all that more important.

The majority of older schools were built on smaller properties and the site circulation designs were limited to shared bus drop-off and parent drop-off zones. Due to a need to accommodate adequate on-site traffic circulation, new schools are now being built on larger 2.43 ha (6 acres) sites. Larger school sites also provide more flexibility when dealing with irregular shaped sites and lining up driveways with opposite streets.

The typical traffic management measures that are incorporated into the development of a typical school site are illustrated on Attachment No. 1 to this report and described below:

- The site is located on a minor collector road with one frontage and provides separate bus loading and unloading driveway from all other transportation activities and is designed as a one-way loop with the passenger door on the building side (counterclockwise direction). The location of bus driveways are lined-up with the location of streets opposite the school frontage.
- Residential units opposite the school frontage are designed as flankage lots.
- The parent pick-up/drop-off zone operates in a one-way direction (counterclockwise) with two lanes, one for travel and other for stopping and is incorporated with the school parking lot. In the provided example available school frontage and site area do not allow for separate loop. By providing adequate parent pick-up/drop-off zones illegal standing or parking near school are minimized as well as blocking of school buses and driveways.
- The subject school will be developed as part of a larger campus which will include another school and a park (school/park/school cluster application) to better utilize community resources such as playing fields and parking.
- Locating neighbourhood uses such as woodlots, storm water management ponds and commercial uses are to be avoided next to elementary schools.

# Traffic Calming Measures As They Related To New Schools

A Transportation Management Plan (TMP) outlining traffic calming measures, proposed transit routes and traffic control measures is prepared as part of the development review at the Block/Draft Plan stage. At this stage, locations of school sites are also identified and approved. All measures identified on the TMP are proposed as a way of enhancing the street environment. As most school sites are located on collector roads as described above, a number of traffic

calming measures cannot be implemented on such roads due to the negative impacts on emergency and transit vehicles. However, measures such as curb extensions and road narrowings, traffic circles, raised medians, and textured crosswalks are still being implemented on collector roads.

In addition to the traffic calming measures identified, other measures such as school and park zone treatments that include lay-by lanes and increased landscape treatments are also proposed as part of the TMP.

Development/Transportation Engineering Department with support of Parks and Urban Design Departments has been requesting on-street lay-by lanes to be implemented near schools and parks at the Block Plan/Draft Plan stage. These lanes reduce the roadway width available for vehicle movement and are effective in slowing down traffic. The provision of lay-by lanes also minimizes illegal standing or parking near schools. Refer to Attachment No. 1 for typical location of lay-by lanes.

In addition to measures being implemented during the Block Plan stage, once schools are constructed and opening date is known, signage and other traffic control devices will be implemented. The location of school zone maximum signs (40 km/h) and school crossing guards in the vicinity of a school will be identified and implemented before school is opened. These and other non-physical measures/treatments, even though not traffic calming measures improve conditions for non-motorized street users and may be effective measures in reducing speeding and congestion in vicinity of schools.

# Relationship to Vaughan Vision 2020

This report is consistent with the Vaughan Vision 2020 strategic initiatives to enhance and ensure community safety, health and wellness. Accordingly, this report is consistent with the priorities previously set by Council.

# Regional Implications

York Region approval of Site Plans is required for sites next to regional roads. York Region Transit approval is required for the proposed Transportation Management Plans for new development blocks if transit routes are proposed and where proposed measures impact regional roads.

# Conclusion

Development/Transportation Engineering staff will continue to implement the *Safety and Traffic Circulation Guidelines* in their review of new school sites together with requiring separate on-site bus loops, parent drop-off/pick-up zones, on-street lay-by lanes and other non-physical measures/treatments as a means of managing traffic at and in the vicinity of new school sites.

# **Attachment**

1. A Typical Elementary School Site Plan in New Development Areas

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Respectfully submitted,

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