

**EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 10, 2013**

**41 TRAFFIC OPERATIONS REVIEW**  
**MCNAUGHTON ROAD – FROM MAJOR MACKENZIE DRIVE TO ST. JOAN OF ARC AVENUE**  
**WARD 1**

### Recommendation

1. That Council approve an increase to the speed limit on McNaughton Road, from Major Mackenzie Drive to St. Joan of Arc Avenue from 40 km/h to 50 km/h.

Not applicable.

There is no economic impact at this time.

Not Applicable.

The purpose of this report is to address Council's direction from its meeting held on September 17, 2013:

**“That Engineering Services staff carry out a review of this section of road and provide a report to a future Committee of the Whole reviewing the speed limit between Major Mackenzie Drive and St. Joan of Arc Avenue.”**

**McNaughton Road is a two-lane minor arterial road between Major Mackenzie Drive west of Keele Street with a posted speed limit of 40 km/h**

McNaughton Road is a two-lane minor arterial road between Major Mackenzie Drive and Keele Street with a 48.0 metre right-of way, and 7.0 metre pavement width (refer to Attachment No. 1). This wide right-of-way reflects the original plan to build McNaughton Road as a four-lane arterial by-pass for Maple. There are sidewalks along the north side of the roadway, and between St. Joan of Arc Avenue and approximately 150 metres east of St. Joan of Arc Avenue along the south side of the roadway. The current speed limit is 40 km/h and is posted.

McNaughton Road is identified as a primary emergency response route. There are no residential homes fronting onto McNaughton Road. There are four traffic signals along McNaughton Road at

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Keele Street, Cranston Park Avenue, St. Joan of Arc Avenue, and Major Mackenzie Drive. A pedestrian signal located approximately 100 metres east of St. Joan of Arc Avenue was installed in 2008 to assist pedestrians crossing between St. Joan of Arc Catholic High School, McNaughton Park, Maple Community District Park, Maple Community Centre, and Maple View Plaza.

**McNaughton Road was established as a haulage route for the Keele Valley Landfill site**

McNaughton Road was established as a haulage route to the Keele Valley Landfill site and as a by-pass of the Maple core for trucks destined for the industrial area on Keele Street. The use of McNaughton Road for truck traffic accessing the landfill site was incorporated in the Keele Valley Certificate of Approval, provided from the Ministry of the Environment (MOE)

The Keele Valley Landfill Site operated from November 28, 1983 to December 31, 2002. The Closure Plan for the Keele Valley Landfill Site was approved on December 20, 2006 by the MOE.

**Posted speed limits on McNaughton Road have ranged from 70 km/h to 40 km/h; the existing 40 km/h zone was implemented in 1997**

The speed limit on McNaughton Road prior to November 10, 1993 was 50 km/h from Keele Street to Shetland Avenue and 70 km/h from Shetland Avenue to Major Mackenzie Drive. The speed limit was reduced from 70 km/h to 50 km/h in July 1993 to coincide with the opening of St. Joan of Arc Catholic High School (refer to Attachment No. 3).

Council approved a further reduction of the maximum speed limit from 50 km/h to the existing 40 km/h following a deputation made before Council at its meeting held on August 25, 1997 (refer to Attachment No. 4).

**Traffic activity has been monitored along McNaughton Road after the pedestrian signal was installed in 2008**

In 2006, concerns were raised by the community regarding the safety of pedestrians crossing on McNaughton Road. Staff conducted a pedestrian study at the walkway to the Maple Community District Park. The study results indicated that there were 250 daily crossings at this location. A pedestrian signal was recommended to provide drivers with greater identification and warning of pedestrians crossing McNaughton Road. The pedestrian signal was installed in 2008.

Following the installation of the pedestrian signal, a number of studies have been undertaken to assess traffic operations along this section of McNaughton Road.

The following traffic studies were undertaken on McNaughton Road, between Keele Street and Major Mackenzie Drive:

- Automatic Traffic Recorders (ATRs) – to obtain traffic volume and vehicular speed data in 2009 and 2012, and
- Collision History Analysis – from 2008 to 2012\*

\*To date, this is the latest collision data available from York Regional Police.

A comprehensive review and analysis of all the available traffic data was undertaken. A detailed summary of the above mentioned traffic study data and the technical analysis can be found in Attachment No. 2. It was found that the 2012 average speeds on McNaughton Road decreased in comparison to the 2009 data. The 2012 average speeds were found to be above the posted limit (40 km/h), ranging from 42 – 55 km/h. It was determined that both the average and 85<sup>th</sup> percentile

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speeds (the speed at which 85% of drivers are driving at or less) were appropriate for a minor arterial roadway, and consistent with industry standards.

The traffic volumes recorded were also typical of minor arterial roads. Traffic volume decreased approximately 23% (or 1,200 vehicles/day) from 2009 to 2012. The total truck traffic volume, as a percentage of overall traffic volumes, also decreased during this time period.

There were twenty-two (22) reported collisions along McNaughton Road from 2008 to 2012, none of which were attributed to speeding.

As determined through the analysis of the previous traffic studies, McNaughton Road is performing within its design operational guidelines.

#### **An increase of the speed limit from 40 km/h to 50 km/h on McNaughton Road will comply with design standards and provide greater consistency to drivers**

According to the Geometric Design Guide for Canadian Roads, 1999, the minimum design speed of a minor arterial roadway and a collector roadway is 50 km/h. Increasing the speed limit to 50 km/h on McNaughton Road would be consistent with other high school locations in Vaughan and consistent with the speed limit on McNaughton Road East, a 4-lane major collector roadway east of Keele Street.

Staff recommend increasing the speed limit from 40 km/h to 50 km/h along McNaughton Road from Major Mackenzie Drive to St. Joan of Arc Avenue.

#### **Maintaining the existing speed limit of 40 km/h on McNaughton Road, from Keele Street to St. Joan of Arc Avenue, will provide a safer environment for the surrounding land uses**

Under Section 128 of the Highway Traffic Act, a municipality is permitted to designate a section of road, 150 metres of either side of the entrance and exit of a school as a school area. This area can then be posted as a 40 km/h zone. The entrance to St. Joan of Arc Avenue fronts St. Joan of Arc Drive and not McNaughton Road. As a result, the school area speed zone is not permitted on McNaughton Road. The Institute of Transportation Engineers (ITE) does not recommend using school area speed zones for secondary schools.

However, it is appropriate that the existing speed limit of 40 km/h on McNaughton Road from St. Joan of Arc Avenue to Keele Street remain. The surrounding land uses within this section of roadway include McNaughton Park, Maple Community District Park, Maple Community Centre, and Maple View Plaza. A reduced speed limit, 40 km/h, provides a safer environment for pedestrians and the surrounding land uses. Similar roads in Vaughan have reduced speed limits in recognition of these types of facilities.

#### **Relationship to Vaughan Vision 2020/Strategic Plan**

Not Applicable.

#### **Regional Implications**

Not Applicable.

#### **Conclusion**

Based on the results of the collected traffic data, road geometrics, and collision review, it is recommended that the speed limit to be increased from 40 km/h to 50 km/h on McNaughton Road between Major Mackenzie Drive and St. Joan of Arc Avenue.

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**Attachments**

1. Location Map
2. Technical Analysis Review
3. Extract from Council Meeting Minutes of July 5, 1993, Item 36, Report No. 11 of the Committee of the Whole.
4. Extract from Council Meeting Minutes of September 15, 1997 (Council, August 25, 1997, Staff Report No. 8)

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(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)