



## REPORT

### COMMUNITY SERVICES COMMITTEE

MEETING DATE: DECEMBER 15, 2014

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**FROM:** Engineering and Construction Department

**DATE:** November 19, 2014

**SUBJECT:** Fourth Line Reconstruction (Speers Road to Wyecroft Road)  
Design Approval

**LOCATION:** Fourth Line between Wyecroft Road and Speers Road

**WARD:** 2

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#### RECOMMENDATION:

That the design for the Fourth Line Widening Project between Speers Road and Wyecroft Road, as detailed in the report from the Engineering and Construction Department, dated November 19, 2014, be approved.

#### KEY FACTS:

The following are key points for consideration with respect to this report:

- In 2004, the town completed an Environmental Assessment Study which recommended that Fourth Line be widened to 4 lanes between the North Service Road and Speers Road.
- In 2007, in conjunction with the Ministry of Transportation, phase 1 of the project was implemented which included the relocation of the North Service Road/Fourth Line intersection and the reconstruction and widening of Fourth Line (including the Queen Elizabeth Way overpass structure) between the North Service Road and Wyecroft Road.
- The detailed engineering design work for phase 2 of the project (Wyecroft Road to Speers Road) has been completed. The proposed design includes a centre median extending from Speers Road northerly, restricting the existing driveway to the plaza at the northwest corner of Speers Road/Fourth Line to right-in, right-out only. The design is in line with the recommendations of the approved Fourth Line Environmental Assessment Study from 2004.
- The owner of the commercial plaza on the northwest corner of Fourth Line and Speers Road has objected to the proposed driveway restriction.
- Staff are seeking approval of the proposed design in order that the construction may proceed in the late winter/early spring of 2015.

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**BACKGROUND:**

As a result of the Ministry of Transportation's (MTO) Queen Elizabeth Way (QEW) widening project through Oakville which included implementation of High Occupancy Vehicle (HOV) lanes, the existing Fourth Line overpass of the QEW needed to be reconstructed and the North Service Road/ Fourth Line intersection re-aligned.

In advance of the MTO's planned works, in 2004 the town completed an Environmental Assessment (EA) Study of Fourth Line from Speers Road to the North Service Road in order to coordinate future town capital work along Fourth Line along with the MTO's plan to widen the QEW. The approved environmental study report recommended Fourth Line be widened to four (4) lanes between the North Service Road and Speers Road including dedicated on-road bike lanes and improved pedestrian facilities. The current at-grade level crossing of the Canadian National Railway (CNR) line would be maintained. The EA was conducted in accordance with the Environmental Assessment Act and was approved.

In 2007, Phase 1 the construction of the improvements to Fourth Line (North Service Road to Wyecroft Road) were undertaken which included the re-alignment of the North Service Road/Fourth Line intersection, the widening and reconstruction of Fourth Line over the QEW and intersection improvements at Wyecroft Road. This project was cost shared between the MTO and the town.

Phase 2 of the improvements to Fourth Line (Wyecroft Road to Speers Road) is scheduled for construction in 2015. The engineering design has been completed and includes widening Fourth Line to four lanes between Wyecroft Road and Speers Road; the current at-grade railing crossing will be maintained. At the north leg of the Fourth Line/Speers Road intersection, two northbound lanes will be provided along with a single southbound lane and a right and left turn lanes. Other design features include the replacement of the existing culvert at the Taplow Creek, new railway crossing gates, LED street lights, full urban treatment including curb and gutters, sidewalks and on-road bike lanes. In addition, the existing traffic signal at the Fourth Line/Speers Road intersection will be modified. A plan view of the proposed design is presented in Appendix A of this staff report.

As part of the original EA study, existing and future traffic operations along Fourth Line, with the current CNR level crossing in place, were assessed. From both a safety and operational perspective, the EA study concluded that a continuous centre median on Fourth Line was required to be extended northerly from Speers Road beyond the existing commercial plaza driveway on the west side (1005 Speers Road/670 Fourth Line). The continuous median would restrict vehicle movements to right-in, right-out only at this particular driveway. 1005 Speers Road and 670 Fourth Line form part of a larger commercial plaza complex (including 1027 and 1029 Speers Road) providing common internal traffic circulation and parking areas; the

complex is served by five (5) driveway entrances along Speers Road. Currently, all five of these driveways can operate with full moves (left and right turns).

Detailed engineering design for this project has been ongoing since 2013 – the town retained the services of AMEC Engineering to carry out the design work. The engineering work has provided for the continuous centre median on Fourth Line as per the approved EA.

During the public engagement process for the engineering design, proposed plans were presented to abutting property owners. The owner of the commercial plaza on the northwest corner of Fourth Line and Speers Road objected with the proposed restriction of vehicle movements to this particular driveway. While they property is served by several full access driveways along Speers Road, the property owner has advised it is difficult to make safe left turns in and out of these driveways.

This report has been prepared to advise Council on the proposed design and seeks approval in order to proceed to construction in 2015.

#### **COMMENT/OPTIONS:**

In order to review the property owners concerns, the town retained the services of CIMA Engineering to undertake an independent traffic analysis of the previous EA work and current engineering work being undertaken by AMEC Engineering. CIMA is a well-known consultant specializing in transportation engineering.

The traffic analysis completed by CIMA included the intersection of Fourth Line and Speers Road and the driveways along Speers Road and Fourth Line adjacent to this intersection. The purpose of the analysis was to assess the operational and safety issues related to the commercial plaza access to Fourth Line and assess whether traffic signals are warranted for consideration of a potential future consolidated driveway entrance at Speers Road (note: the town has future plans in its capital forecast to widen and reconstruct Speers Road). Attachment B of this report provides an overview of the study area.

In order to conduct the traffic analysis, CIMA conducted turning movement traffic counts at the driveways for weekday AM, midday, and PM peak hours. Turning movement counts for Saturday midday peak hour were also conducted. Peak hour traffic volume data at the intersection of Fourth Line and Speers Road were previously collected by the town and provided to CIMA.

#### Fourth Line Driveway:

Based on their analysis, CIMA determined that today's peak hour traffic volumes currently result in southbound vehicle queues which extend from Speers Road

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northerly beyond the existing commercial plaza driveway along the west side of Fourth Line. Vehicles who ingress/egress rely on “courtesy” gaps from waiting vehicles to complete their left turn movements to and from this driveway. Because there is no opportunity to provide greater separation between the driveway and Speers Road intersection due to the proximity of the railway tracks, the queueing will continue to extend beyond the driveway resulting in operational and safety concerns. CIMA concluded that the proposed continuous median on Fourth Line, as detailed in the original EA study and the current engineering design work, is warranted.

In addition, previous transportation master plan studies undertaken by the town have recommended the current CNR level crossing be grade separated. Such an initiative will be a significant capital undertaking and this has been included in the town’s *Development Charge Bylaw* and currently planned beyond the 10-year time horizon. Ultimately, an Environmental Assessment Study will need to be carried out to confirm the recommended grade separation structure type. Due to the proximity of the CNR to Speers Road, any grade separation of the CNR would also result in the need to restrict left turns to and from existing driveways along Fourth Line between Speers Road and the CNR.

#### Speers Road Driveways:

Since the plaza has five access points on Speers Road, CIMA’s review included consideration of closing two (2) of the driveways in order to provide greater separation between driveways and providing a potential future consolidated signalized access for the plaza to/from Speers Road, approximately 140 metres west of Fourth Line.

CIMA undertook a traffic signal warrant analysis and two issues were apparent. First, in order to support the signalization of an intersection or driveway, minimum traffic volumes and/or vehicle delays must be met; the vehicles volumes generated by the plaza do not meet minimum requirements. Second, because of the close proximity to the existing traffic signal at the intersection of Speers Road/Fourth Line, an additional signal serving a driveway would create operational issues on Speers Road. Based on the results of CIMA’s review, a consolidated signalized driveway access along Speers Road to the subject commercial plaza is not warranted.

#### Conclusion:

The engineering review conducted by CIMA confirms the recommendation to restrict the commercial plaza driveway at Fourth Line to right-in right-out only, from both an operational and safety perspective. There are several other access points along Speers Road that plaza patrons may use to make left turns and ultimately gain access to Fourth Line northbound.

Staff are recommending the design of the Fourth Line improvements be approved so that the project can be tendered as soon as possible to achieve a late winter/early spring construction start date. Utility relocation work has already commenced.

## **CONSIDERATIONS:**

### **(A) PUBLIC**

The plaza property owner was advised of this report.

A public information centre will be held prior to construction to present the final design and information on construction timing and phasing.

Businesses within the construction area will be consulted prior to and during construction in order to minimize impacts to their operations during construction.

### **(B) FINANCIAL**

Sufficient funds have been allocated in the 2014 capital budget to proceed to construction in 2015.

### **(C) IMPACT ON OTHER DEPARTMENTS & USERS**

In order to replace the Taplow Creek culvert, a full closure of Fourth Line between Speers Road and Wyecroft Road is anticipated during the months of July and August 2015. The road closure will be coordinated with adjacent businesses, road users and the public.

### **(D) CORPORATE AND/OR DEPARTMENT STRATEGIC GOALS**

This report addresses the corporate strategic goal to:

- continuously improve our programs and services
- be accountable in everything we do

### **(E) COMMUNITY SUSTAINABILITY**

The safe and efficient operation of our roadways is an important facet to the social pillar of community sustainability.

## **APPENDICES:**

- A. Proposed Design: Fourth Line
- B. Plaza Access Map

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