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Project name:
Vision Georgetown Transportation
Analysis

Project ref:
60565488

From:
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Memo

Subject: Impact of Potential Changes to Spatial Extent of Community Core Boundary
Vision Georgetown Transportation Analysis

AECOM was retained by the Town of Halton Hills to undertake a transportation study for the Vision Georgetown development to determine the transportation requirements within and adjacent to the Vision Georgetown development area. The findings and recommendations of the study were documented in the *Vision Georgetown Transportation Analysis* report dated April 2018 ("*April 2018 Report*"). The *April 2018 Report* utilized a land use plan ("*December 2017 Plan*") provided by the Town of Halton Hills for trip generation analysis (see **Figure 1** at the end of this memo).

On June 25, 2018, AECOM received an update to the *December 2017 Plan* from Meridian Planning Consultants via email as presented in **Figure 2** at the end of the memo. The changes to the land use plan are mainly to the spatial extent of the Community Core. It was noted that the intent of the new plan is to create a more linear north-south Community Core that will have at its centre the secondary school, the community park, the Town Score Park and the community centre/library. The revised plan provides the opportunity to distribute the High Density Residential Mixed-Use areas to both intersections of Street A with Street B and Street C compared to the *December 2017 Plan* where the High Density Mixed-Use areas was planned to be in the vicinity of the intersection of Street A and Street C. Further, the north side of Street C is designated with a linear strip of Medium Density between the High Density designation and extending westerly to Trafalgar Road.

This memorandum documents, at a high level, the impact of the potential changes to the land use plan on the transportation study findings and recommendations documented in the *April 2018 Report*. Additional detailed analysis will be required to assess and document the impacts to the same level of detail as the findings and recommendations presented in the *April 2018 Report*.

The impact of the revised land use plan on the transportation study findings and recommendations is as follows:

- The *April 2018 Report* utilized the Halton Region EMME Model to forecast travel demand in the study area. The key input to travel demand analysis is projected population and employment in the study area. AECOM

assumes that the total population and employment in the Vision Georgetown development area remains unchanged compared to the total projected population and employment provided by the Town of Halton Hills for the *April 2018 Report*¹. Therefore, no changes in the total forecasted generated trips are expected.

- Although the new land use plan does not result in a change in total population and employment for the Vision Georgetown development area, the new placement of the land use may impact traffic volumes along Street B and Street C and Street A in the vicinity of Streets B and C. Extending the Community Core between Street B and Street C and locating some of the High Density Residential Mixed-Use Areas closer to Street B are expected to result in a slight increase in Street B traffic volumes and a slight decrease in Street C traffic volumes. Based on the findings and recommendations of the *April 2018 Report*, the impact of this slight redistribution of traffic volumes can be characterized as follows:
 - Internal intersections (Street A/Street B intersection and Street A/Street C intersection): These intersections were predicted to operate at level of service A with no traffic operational issues. Therefore, a slight change in traffic volumes is not expected to negatively impact traffic operations at these internal intersections.
 - Access to Eighth Line (Eighth Line/Street B/Miller Drive intersection and Eighth Line/Street C intersection): Traffic signals were recommended to be installed at the intersection of Eighth Line/Street B/Miller Drive in the *April 2018 Report*, and the intersection was predicted to operate at level of service B. Therefore, it is predicted that a slight increase in traffic volumes on Street B can be accommodated at this intersection. A slight reduction in the traffic volumes on Street C is not predicted to significantly impact traffic operations at the Eighth Line/Street C intersection where stop control was proposed on Street C.
 - Access to Trafalgar Road (Trafalgar Road/Street B intersection and Trafalgar Road/Street C intersection): Traffic volumes from Street B and Street C to Trafalgar Road were predicted to be ~290 and ~335 vehicles in the AM peak hour respectively. Both intersections were predicted to have traffic operational issues under stop control conditions due to the high traffic volumes along Trafalgar Road. Two alternatives were considered:
 - Alternative 1 – Installation of traffic signals at Trafalgar Road/Street C intersection; provide stop control at Trafalgar Road/Street B intersection: The westbound left movement from Street B on Trafalgar Road was predicted to operate at level of service E (average delay of ~40 sec) and volume-to-capacity ratio of 0.43. A slight increase in traffic volume on Street B may negatively impact left turn operations in the AM peak hour. Under this alternative, it is expected that some motorists originating from Street B may travel along the north-south collector road to access Trafalgar Road via the signalized intersection at Street C. The Trafalgar Road/Street C intersection is predicted to operate at level of service B or better, similar to the original land use plan assessment. Locating some of the High Density Residential Mixed-Use areas in the vicinity of Street B may slightly increase traffic volumes along the north-south collector road through the Community Core.
 - Alternative 2 – Installation of traffic signals at both Trafalgar Road/Street B and Trafalgar Road/Street C intersections: Both intersections were predicted to operate at level of service B or better with the original land use plan. A slight increase in traffic volumes on Street B could be readily accommodated at the signalized intersection.

¹ Total population of 17,749 and total employment of 1,465 were used in the *April 2018 Report*.

Summary

The impact of the revised land use plan for the spatial extent of the Community Core boundary can be summarized as follows:

- No significant traffic operational impacts are predicted at the internal intersections and Eighth Line intersections.
- No significant traffic operational impacts are predicted at the Trafalgar Road intersections with the provision of traffic signals at both the Street B and Street C intersections (i.e. Alternative 2 above). If traffic signals are only implemented at the Street C intersection (i.e. Alternative 1 above), traffic delay and volume-to-capacity ratios are expected to slightly increase; however, this increase is not expected to lead to different recommendations or conclusions.

Therefore, the findings and recommendations of the *April 2018 Report* are not expected to change if the spatial extent of the Community Core boundary is updated per the revised land use plan.

Figure 1: Preferred Land Use Plan – December 2017



Figure 2: Revised Land Use Plan – June 2018

