

Memorandum

Date: February 28, 2023

To: Members of Council

From: Imran Salam, Transportation Engineer, Engineering Services

Subject: Update on the Region of Peel's and the City of Brampton's Environmental Assessment in Brampton – Highway 427 Industrial Secondary Plan Area

MEMORANDUM HIGHLIGHTS

- The Highway 427 Industrial Secondary Park Area (Area 47) Environmental Assessment (EA) identifies the transportation improvements to satisfy future capacity needs within Area 47 in the northeast of the City of Brampton, just south of Mayfield Road.
- The EA includes two parts. The Part A of the EA pertains to the roads that will be owned and operated by the Region of Peel. Part B pertains to the roads that will be owned and operated by the City of Brampton.
- The EA has recommended a new six-lane north-south arterial road (A2) that connects Major Mackenzie Drive/Hwy 427 to Mayfield Road.
- Coleraine Drive, south of Mayfield Road, is recommended to be widened to four lanes with an urban cross-section. Coleraine Drive is proposed to be realigned to connect the new arterial road (A2) west of Highway 50.
- Clarkway Drive (Humber Station Road in Caledon) is recommended to remain as the existing two-lane rural cross-section south of Mayfield Road. The existing misaligned Humber Station Road/Clarkway Drive intersection at Mayfield Road is recommended to be realigned, eliminating the jog.
- Transportation staff reviewed the EA and shared the following comments with the Region of Peel and the City of Brampton:
 - The traffic study completed in support of the EA does not capture the significant employment and population growth planned to 2051 for South of Bolton, immediately north of the study area, as recently demonstrated through the Town's Bolton Residential Expansion Study (BRES) and the Region's Settlement Area Boundary Expansion (SABE) Study (2022) for the 2051 Official Plan review. Also, the traffic study does not consider the impact of 413 interchange at Humber Station Road.
 - The north-south arterials directly connect Area 47 and the planned development within Bolton; therefore, the design of the intersections of Mayfield Road with Humber Station Road, Coleraine Drive, and Arterial Road A2 should consider the impacts of growth in South Bolton.

- Humber Station Rd (Clarkway Drive in Brampton) from Mayfield Road to Healey Road is identified by SABE and the Town's ongoing TMP for widening from 2 to 4 lanes for 2041 to 2051 horizon. The proposed Highway 413 interchange at Humber Station Road will likely attract significant highway traffic on Clarkway Drive, and so the EA recommendation to maintain the existing two-lane cross-section of Clarkway Drive south of Mayfield Rd could potentially result in backing up of traffic in Caledon at the intersection of Mayfield Road and Humber Station/Clarkway Drive.
- To address the issues above and per discussions between the Town, the Region of Peel and the City of Brampton, below are the next action items:
 - The Region has noted in Part A of the ESR a commitment to assess, in consultation with the Town, through subsequent stages of the project and its upcoming Transportation Master Plan (TMP) the traffic operations at the intersections of Mayfield Road with Humber Station Road, Coleraine Drive, and Arterial Road A2.
 - For Part B, Town Staff has requested to the City to provide a commitment within the ESR to revisit and reassess the capacity needs of two-lane cross-section of Clarkway Drive south of Mayfield Rd up to the East-West Arterial, through the ongoing City's Transportation Master Plan before detailed design stage. If the capacity analysis determined the need for widening to four lanes, an amendment to the ESR to be initiated accordingly.

BACKGROUND

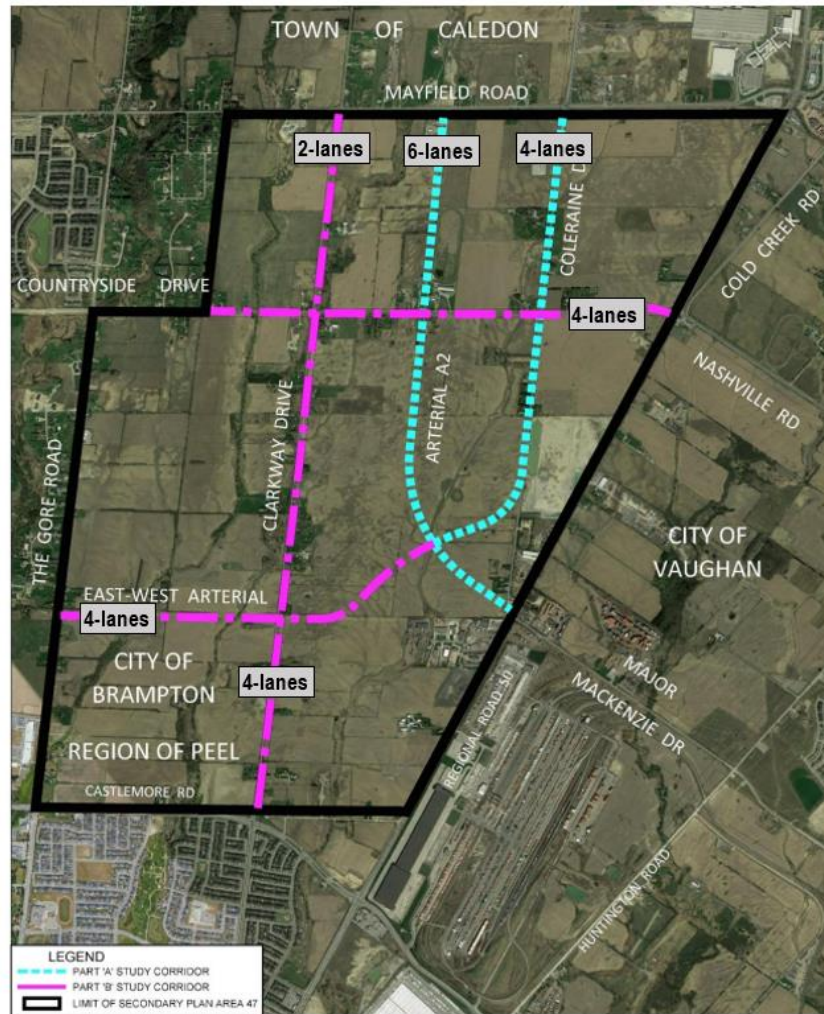
The purpose of this memo is to provide Council with an update on a Schedule 'C' EA study completed by the Region of Peel and the City of Brampton for arterial road improvements within Area 47, just south of Mayfield Road.

Area 47 is located in the northeast of the City and is illustrated in **Figure 1**.

The EA is divided into two parts, as illustrated in **Figure 1**. The Part A roads (Coleraine Drive and Arterial A2) will be owned and operated by the Region, and the Part B (Clarkway Drive, Countryside Drive and East-west Arterial) roads will be owned and operated by the City. The Region and the City circulated the Environmental Study Reports (ESR) for Part A and Part B respectively for review and comments and are the subject of this memorandum.

The EA builds upon the recommendations from the Region's Highway 427 Extension Transportation Master Plan 2009 (Hwy 427 TMP) as well as the City's Highway 427 Industrial Secondary Plan Area 47 Transportation Master Plan 2014 (SP47 TMP). Area 47 is projected to house 22,300 residents and support 20,700 jobs. The area is strategically located at the York/Peel Boundary and close to the future confluence point of the most important transportation/goods movement corridors – Highway 427, Highway 413 and CN Rail Line.

Figure 1: Study Area/Key Plan



THE EA PREFERRED DESIGN

The preferred design focuses on providing increased connectivity as well as increased mobility options. The salient features include the following:

- Realigned Coleraine Drive connected to Arterial A2 west of Highway 50. Coleraine Drive currently has a poorly aligned intersection at Highway 50 and Major Mackenzie Drive
- A new six-lane Arterial A2, connecting areas west of The Gore Road (via Mayfield Road) with those east of Highway 50, including access to Highway 427
- Clarkway Drive to remain as the existing two-lane rural cross-section north of East-West Arterial
- Transit service on all major arterial roads and community-based service on all collector roads
- Connectivity with future GO stations at Kleinburg and Nashville Road via Arterial A2/ Major Mackenzie Drive and shuttle service, respectively.
- Active transportation facilities on arterial and collector roads.

TRAFFIC IMPACTS IN CALEDON

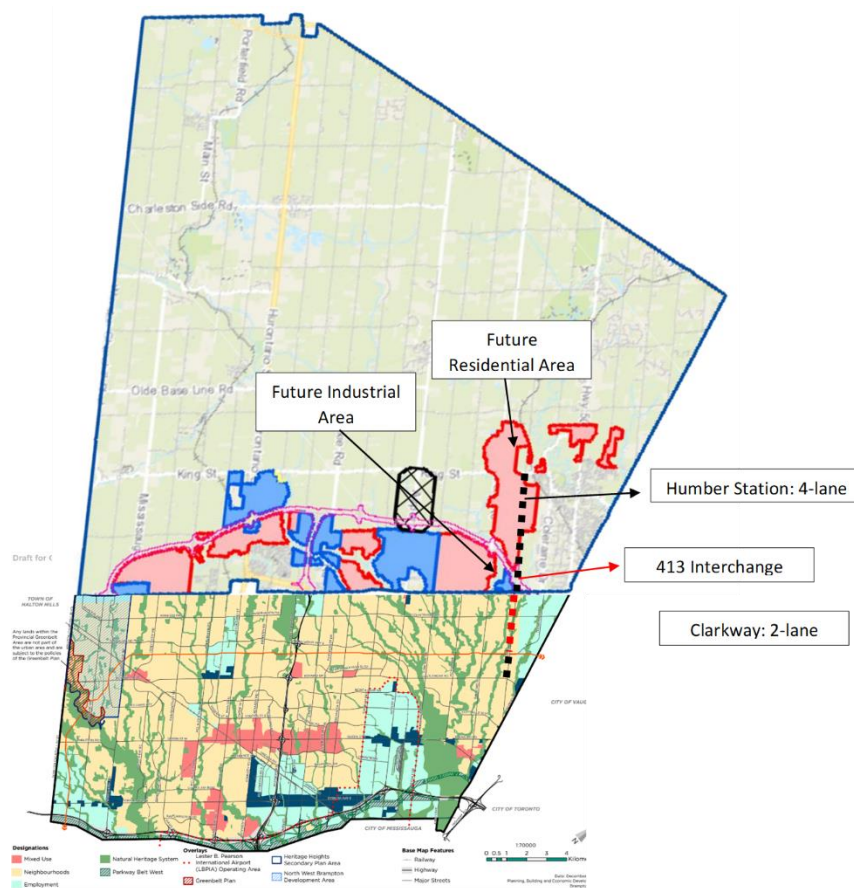
Significant employment and population growth are planned by 2051 for South Bolton, immediately north of the study area, through the Town's Bolton Residential Expansion Study (BRES) and the Region's Settlement Area Boundary Expansion (SABE) Study (2022) for the approved 2051 Region's Official Plan. Also, there is a proposed 413 interchange at Humber Station Road just north of Mayfield Road. Given the growth and the interchange, Staff has the following observations about the EA recommendations.

- The Traffic Study completed in support of the EA was completed before the SABE study and therefore didn't consider the growth in South Bolton and the impact of 413 interchange at Humber Station Road.
- The north-south arterials directly connect Area 47 and the planned development within Bolton; therefore, Town Staff believe the design of the intersections of Mayfield Road with Humber Station Road, Coleraine Drive, and Arterial Road A2 should consider the impacts of growth in South Bolton.
- Humber Station Rd (Clarkway Drive in Brampton) from Mayfield Road to Healey Road is identified by SABE and the Town's ongoing TMP for widening from 2 to 4 lanes for 2041 to 2051 horizon. The proposed Highway 413 interchange at Humber Station Road will likely attract significant highway traffic on Clarkway Drive due to industrial and residential land uses in Caledon and Brampton, as shown in **Figure 2**. Therefore, the EA recommendation to maintain the existing two-lane cross-section of Clarkway Drive south of Mayfield Rd could potentially result in the backing up of traffic in Caledon at the intersection of Mayfield Road and Humber Station/Clarkway Drive.

Currently, the truck traffic on Highway 50 is required to bypass Bolton using Albion-Vaughan Road and Coleraine Drive/Emil Kolb Parkway via Mayfield Road. Accordingly, the operations of Highway 50 at Mayfield Road are impacted due to heavy truck traffic. The Coleraine Drive widening south of Mayfield Road will provide an improved link between Emil Kolb Parkway and Hwy 427 via Major Mackenzie Drive; therefore, it will help lessen truck traffic load on Mayfield Road, Highway 50 and Albion Vaughan Road.

The Arterial Road A2 will also function as a north-south link to support the growth in south Bolton. The potential northerly extension of A2 will provide to the Southern Employment Lands within BRES areas a direct connection to Hwy 427 via Arterial A2 and Major Mackenzie Drive. The direct connection will boost the attractiveness of the site as an employment node. The extension will also improve network connectivity within the BRES areas.

Figure 2: Land-uses Impacting Clarkway Drive



STAFF COMMENTS and NEXT STEPS

Town Staff shared with Region and City, the comments about the traffic impacts in Caledon, and they agreed to address the comments through future commitments and the subsequent planning studies of the respective municipalities.

- The Region has noted in Part A of the ESR a commitment to assess, in consultation with the Town, through subsequent stages of the project and its upcoming Transportation Master Plan (TMP) the traffic operations at the intersections of Mayfield Road with Humber Station Road, Coleraine Drive, and Arterial Road A2.
- For Part B, Town Staff has requested the City to provide a commitment within the ESR to revisit and reassess the capacity needs of the two-lane cross-section of Clarkway Dr. south of Mayfield Rd up to the East-West Arterial through the ongoing City's Transportation Master Plan before detailed design stage. If the capacity analysis determined the need for widening to four lanes, an amendment to the ESR will be initiated accordingly.

The Town Staff will work with the counterparts at Region and City during the implementation of these commitments and will report to the Council about the outcomes.