Section IV - Ontario Regulation 166/06, as amended

TO: Chair and Members of the Executive Committee

Friday, April 14, 2023 Meeting

FROM: Sameer Dhalla, Director, Development and Engineering Services

RE: MAJOR PERMIT APPLICATIONS – REGULAR- FOR APPROVAL

CITY OF MISSISSAUGA - DERRY ROAD FROM WEST OF

HIGHWAY 410 TO WEST OF FIR TREE DRIVE

KEY ISSUE

Applications that involved a more complex suite of technical studies to demonstrate consistency with policies; applications that cover a significant geographic area, extensive modifications to the landscape, major infrastructure projects, applications requiring site specific conditions and permissions that extend beyond two years.

RECOMMENDATION:

THAT permits be granted in accordance with Ontario Regulation 166/06, as amended, for City of Mississauga - Derry Road from west of Highway 410 to west of Fir Tree Drive.

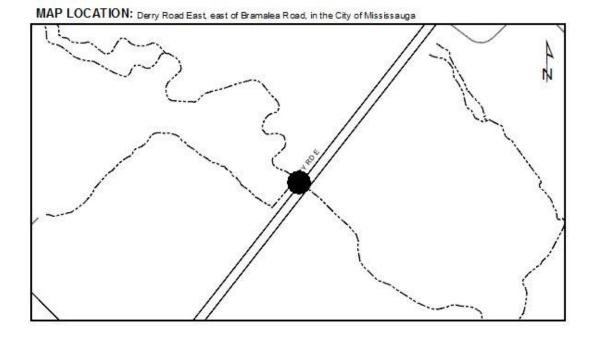
CITY OF MISSISSAUGA

REGIONAL MUNICIPALITY OF PEEL

To construct, reconstruct, erect or place a building or structure, site grade, temporarily or permanently place, dump or remove any material, originating on the site or elsewhere and alter a watercourse on Derry Road from west of Highway 410 to west of Fir Tree Drive, in the City of Mississauga, Etobicoke Creek Watershed as located on the property owned by the Regional Municipality of Peel and Greater Toronto Airports Authority.

The purpose is to construct a 2,400 mm diameter trunk sanitary sewer on Derry Road East from west of Fir Tree Drive west to Credit Valley Conservation's (CVC) jurisdiction, in the City of Mississauga. The Regional Municipality of Peel (the Region) has phased the construction of the new east west diversion trunk sewer in two separate permit applications. Phase 1 includes works on Derry Road East from Highway 410 to Dixie Road and was permitted under CFN 60046. This application is for Phase 2 works and includes the construction of the trunk sewer on Derry Road from Dixie Road to west of Fir Tree Drive. The proposed project will have a net increase of fill in the flood plain of 4,731 m3. The Region has committed to address the net increase in fill in the flood plain through creation of a wetland with matching storage within the Etobicoke Creek watershed located in Emancipation Park (Dixie Road and Highway 407 area). The

wetland will be constructed in 2023-24 and will be in place in advance of the completion of the sewer works.



The permit will be issued for the period of April 14, 2023 to April 13, 2028 in accordance with the following documents and plans which form part of this permit:

- Plan No. TRCA-C2-001; East to West Diversion Sanitary Trunk Sewer Contract 2 -Drawing Index and General Notes; prepared by Jacobs on behalf of Region of Peel; dated July 30, 2021; received by TRCA on October 13, 2021;
- Plan No. G-1-004; East to West Diversion Sanitary Trunk Sewer Contract 2 General Notes; prepared by Jacobs on behalf of Region of Peel; dated July 30, 2021; received by TRCA on October 13, 2021;
- Plan No. G-1-003; East to West Diversion Sanitary Trunk Sewer Contract 2 -Abbreviations and Legend; prepared by Jacobs on behalf of Region of Peel; dated January 8, 2021; received by TRCA on October 13, 2021;
- Plan No. 1-STG-001; East to West Diversion Sanitary Trunk Sewer Contract 2 -Staging and Work Sequencing Plan; prepared by Jacobs on behalf of Region of Peel; dated July 22, 2021; received by TRCA on October 13, 2021;
- Plan No. C-042; Derry Road from Old Creditview Road to east of Bramalea Road -Prop. 2400 mm Sanitary Sewer; prepared by Jacobs on behalf of Region of Peel; dated July 22, 2021; received by TRCA on October 13, 2021;
- Plan No. 1-SP-001; East to West Diversion Sanitary Trunk Sewer Contract 2 Site No. 1 Existing Site Plan and Tree Removals; prepared by Jacobs on behalf of Region of Peel; dated July 22, 2021; received by TRCA on October 13, 2021;
- Plan No. 1-SP-002; East to West Diversion Sanitary Trunk Sewer Contract 2 Site No.
 1 Site Preparation Plan; prepared by Jacobs on behalf of Region of Peel; dated July 30, 2021; received by TRCA on October 13, 2021;

- Plan No. 1-R-001; East to West Diversion Sanitary Trunk Sewer Contract 2 Site No.
 1 Site Restoration Plan; prepared by Jacobs on behalf of Region of Peel; dated July 30, 2021; received by TRCA on October 13, 2021;
- Plan No. D-2-001; East to West Diversion Sanitary Trunk Sewer Contract 2 Site No.
 1 Grading Section Details; prepared by Jacobs on behalf of Region of Peel; dated January 8, 2021; received by TRCA on October 13, 2021;
- Plan No. TRCA-C2-002; East to West Diversion Sanitary Trunk Sewer Contract 2 -Site No. 1 Spring Creek Crossing Plan; prepared by Jacobs on behalf of Region of Peel; dated July 30, 2021; received by TRCA on October 13, 2021;
- Plan No. TRCA-C2-004; East to West Diversion Sanitary Trunk Sewer Contract 2 -Site No. 1 Spring Creek Crossing Planting Plan; prepared by Jacobs on behalf of Region of Peel; dated July 30, 2021; received by TRCA on October 13, 2021;
- Plan No. TRCA-C2-005; East to West Diversion Sanitary Trunk Sewer Contract 2 -Site No. 1 Spring Creek Crossing Planting Schedules; prepared by Jacobs on behalf of Region of Peel; dated July 22, 2021; received by TRCA on October 13, 2021;
- Plan No. T-2-003; East to West Diversion Sanitary Trunk Sewer Contract 2 Site No.
 1 Excavation Tunnel Support Details; prepared by Jacobs on behalf of Region of Peel; dated January 8, 2021; received by TRCA on October 13, 2021;
- Plan No. T-2-004; East to West Diversion Sanitary Trunk Sewer Contract 2 Site No.
 1 Excavation Tunnel Support Details; prepared by Jacobs on behalf of Region of Peel; dated January 8, 2021; received by TRCA on October 13, 2021.

RATIONALE

The application was reviewed by staff on the basis of the following information:

Proposal:

The Regional Municipality of Peel (the Region) will construct a new 2,400 mm diameter gravity trunk sanitary sewer for approximately 11 km along Derry Road from Spring Creek (Derry Road and Bramalea Road), ending at the Credit River in Credit Valley Conservation's (CVC) jurisdiction. The Region's wastewater system comprises of two principal trunk systems: the west trunk system which conveys flow along and near the Credit Valley to the Clarkson Wastewater Treatment Plant (WWTP) and the east trunk which conveys flow along and near the Etobicoke Creek Valley to the G.E. Booth WWTP. Based on capacity needs to service flows to the year 2041 and beyond, and in order to optimize the infrastructure upgrades and timing of upgrades for the east and west trunk sewers, including the wastewater treatment facilities, this east to west diversion is required. This diversion will also leverage the upgraded capacity of the west system. The majority of the sewer will be constructed using a tunnel boring machine at depths ranging from approximately 5 m at the tie-in point (Spring Creek) to approximately 50 m within CVC's jurisdiction. These depths are based on the need for a gravity fed system and required upstream and downstream connection points for the wastewater system. Work within TRCA's jurisdiction has been divided in two separate permit applications. The permit for Phase 1 includes the construction of the trunk sewer from the northeast corner of Dixie Road and Derry Road, westerly along Derry Road to just west of Highway 410 and was issued under CFN 60046. Both phases of work were reviewed through the Municipal Class Environmental Assessment process (Schedule C).

This permit covers Phase 2 sewer works located on Derry Road East, east of Bramalea Road to west of Fir Tree Drive. The works include raising and levelling the site within the flood plain, constructing a shaft to facilitate tunnelling, building a diversion chamber to divert the flows from the existing East Trunk System and installing associated sewers, access road, access gate, fencing, and vent pipes. Upon completion of the tunnel and structures, the majority of the fill for the working areas will be removed. A portion of the fill will remain around the permanent chamber and access road that will have finished ground elevation just above the 100-year flood elevation with a net increase of fill of 3,908 m³ and 823 m³, respectively. The Region has committed to address the net increase in fill in the flood plain through creation of a wetland with matching storage within the Etobicoke Creek watershed in Emancipation Park (Dixie Road and Highway 407 area). The Region has requested the permit be issued for 5 years as the construction of the sewer works is estimated to take 4 years or more.

Control of Flooding:

The proposed project will have a net increase of fill in the flood plain of 4,731 m³. The Region has committed to address the net increase in fill in the flood plain through creation of a wetland with matching storage within the Etobicoke Creek watershed in Emancipation Park (Dixie Road and Highway 407 area). The wetland will be constructed in 2023-24 in advance of the completion of the sewer works.

Pollution:

Standard erosion and sediment control measures, including catch basin geotextile, silt fence, rock check dam and geotextile membrane will be implemented prior to construction and maintained for the duration of construction, and until the site is stabilized and restored, in order to prevent construction generated sediments from entering any watercourse or wetland. Erosion and sediment control measures have been provided in accordance with Erosion and Sediment Control Guide for Urban Construction prepared by the Toronto and Region Conservation Authority (2019).

Dynamic Beaches:

Not applicable.

Erosion:

No geotechnical/slope stability issues have been identified.

Conservation of Land:

To protect local fish populations during their spawning, nursery and migratory periods, the Region should ensure that in-water/near-water activities occur within the applicable timing window. The Region should confirm timing window application and dates directly with the appropriate Provincial and Federal agencies.

Plantings

This proposal requires the removal of four (4) trees, vegetation pruning and clearing. The project area will be restored with native, non-invasive seed mix, 855 shrubs and live stakes will be planted.

Policy Guidelines:

This proposal complies with Section 7.4.4 Infrastructure, Section 8.8 Interference with a Watercourse, and Section 8.9 Infrastructure Policies of The Living City Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority.

CFN: 63869 - Application #: 1035/20/MISS

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