

## **CITY OF VAUGHAN**

### **EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 24, 2017**

Item 7, Report No. 35, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on October 24, 2017.

#### **7 TEMPORARY ROAD CLOSURE FOR CULVERT REPLACEMENT ON CLARENCE STREET- WYCLIFFE AVENUE TO 250 METRES SOUTH OF WYCLIFFE AVENUE WARD 2**

The Committee of the Whole recommends approval of the recommendation contained in the following report of the Deputy City Manager of Public Works and the Director of Infrastructure Delivery, dated October 3, 2017:

##### **Recommendation**

The Deputy City Manager of Public Works and the Director of Infrastructure Delivery, in consultation with the Director of Transportation Services and Parks & Forestry operations recommend:

1. That the necessary by-law be passed authorizing the temporary closure on Clarence Street from Wycliffe Avenue to approximately 250 metres south of Wycliffe Avenue, tentatively scheduled to occur between January 8, 2018 and February 28, 2018, to facilitate the safe and timely construction activities to replace the existing culvert on Clarence Street.

##### **Contribution to Sustainability**

An integral part of a sustainable city is effective asset management. Through infrastructure investments, system reliability is improved, providing optimal service to residents.

##### **Economic Impact**

Project EN-1950-13, Clarence Street Slope Stabilization, has been approved to receive grant funding under the Clean Water and Wastewater Fund (CWWF). The grant, which is provided by the Government of Canada and the Province of Ontario, equates to 75% of the project cost. The proposed temporary road closure on Clarence Street will facilitate the construction activities for the replacement of the existing culvert on Clarence Street to meet the project milestones required to receive the grant funding, as well as the regulatory restrictions stipulated for in-water works.

##### **Communications Plan**

A comprehensive communication plan will be implemented to inform all stakeholders of the proposed temporary closure of Clarence Street and related detour routes. This communication plan will include written notification of the road closure to the area property owners and stakeholders, including emergency public service agencies (police, fire and ambulance) and the Regional Municipality of York. There are no transit routes currently operating on Clarence Street.

Access Vaughan will be provided with information regarding the closure and associated contact information to effectively respond to any enquiries received from the public. A traffic control plan will be developed with the General Contractor that will make provision for the installation and maintenance of all barricades and construction signage for local access around the construction area. Road side signage will also be installed in advance of the road closure as a means of notifying and informing the public of the upcoming road closure.

##### **Purpose**

The purpose of this report is to seek Council's approval for a temporary road closure of Clarence Street from Wycliffe Avenue to approximately 250 metres south of Wycliffe Avenue, as shown on

**EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 24, 2017**

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Attachment No.1, to facilitate the safe, timely and efficient construction of the municipal infrastructure.

**Background – Analysis and Options**

**During preliminary engineering investigations for the slope stabilization on Clarence Street, an existing culvert in need of replacement was identified**

Early in the design phase, in order to address the sidewalk settlements and slope stabilization on Clarence Street south of Wycliffe Avenue, it was found that the subject culvert on Clarence Street was in an advanced state of deterioration and must be replaced. The culvert replacement will form part of the comprehensive solution to address the slope stabilization issues currently occurring in the area.

The existing culvert crossing is approximately 5.5 metres deep. As a result, larger construction equipment will be required to excavate and replace the culvert crossing at this location in a safe and efficient manner. The construction equipment needed for this work will occupy most of the roadway and will also require additional space to load trucks with excavated material, as well as materials to be brought in to the site. Alternate rehabilitation measures, such as trenchless methodologies, were also explored to mitigate traffic impacts and have been determined to not be feasible.

The critical project timelines have been developed to meet the timelines stipulated to receive the external funding (CWVF) for the project as well as the in-water work restrictions imposed by the Toronto and Region Conservation Authority (TRCA) per the Ministry of Natural Resources and Forestry (MNR), both of which has a deadline of March 31<sup>st</sup>, 2018.

**The proposed temporary road closure will result in a safer project site, cost savings, reduce the duration of construction and minimize disruption to the community**

There are no residential properties directly fronting onto the section of roadway where the culvert will be replaced. Given the constructability issues noted above and after exploring the available construction methods, processes and staging alternatives for this work, a temporary road closure has been determined to be the optimal option to undertake the work.

The closure of the road will establish a safer work environment for the construction workers as well as the travelling public. It will reduce the construction time required for the project from approximately 14 weeks to 8 weeks. A shorter construction period will also minimize the disruption to the road users. There could also be significant cost savings, estimated at approximately \$300,000, resulting from the road closure because of increased construction efficiency and reduced overall project risk.

**A comprehensive traffic management plan will be developed to address all users that travel on Clarence Street**

Clarence Street is a north-south collector road, which currently extends between Rutherford Road and Woodbridge Avenue. Traffic volumes on the section of Clarence Street are currently approximately 4300 vehicles per day. The majority of the daily traffic occurs during the morning and afternoon rush hour periods. Residents living south of the closure limits that wish to travel northbound on Clarence Street may be slightly inconvenienced by having to take a longer detour route during the construction period.

The total volume of local traffic being diverted as a result of the proposed closure of Clarence Street south of Wycliffe Avenue can be accommodated by other road links in the transportation

## **CITY OF VAUGHAN**

### **EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 24, 2017**

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network. The impact on the overall network resulting from the short-term closure of Clarence Street can be appropriately managed.

Local traffic movement will be achievable both northbound and southbound on Clarence Street by detour routes through Islington Avenue, Rutherford Road and Wycliffe Avenue (see Attachment No. 2). A detailed traffic management plan for the temporary road closures will be developed. Road closure signage and barricades will be installed and maintained by the contractor along Clarence Street and in the surrounding area, as a means of notifying the public of the closure period together with the appropriate detour route information signage on Rutherford Road, Islington Avenue, Wycliffe Avenue and Woodbridge Avenue.

#### **Relationship to Term of Council Service Excellence Strategy Map (2014-2018)**

In consideration of the priorities set within the Term of Council Service Excellence Strategy Map, the recommendations in this report support the priority to invest, renew and manage infrastructure assets.

#### **Regional Implications**

The proposed road closure and traffic management plan will be coordinated with York Region as the detour routes will include Rutherford Road and Islington Avenue.

#### **Conclusion**

To facilitate the replacement of the municipal infrastructure on Clarence Street in an efficient and safe manner and to meet the timelines stipulated by the TRCA and the CWWF funding requirements, it is recommended that a by-law be passed to provide for the temporary closure of Clarence Street from Wycliffe Avenue to approximately 250 metres south of Wycliffe Avenue, that is tentatively scheduled to occur between January 8, 2018 and February 28, 2018.

#### **Attachment**

1. Location Plan for Temporary Road Closure on Clarence Street
2. Interim Traffic Management Plan

#### **Report prepared by:**

Pat Marcantonio, Project Manager, Ext. 8468  
Mohan Toor, Manager, Design & Construction (West) Ext. 8144

(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.)

**TEMPORARY ROAD CLOSURE FOR CULVERT REPLACEMENT ON CLARENCE STREET–  
WYCLIFFE AVENUE TO 250 METRES SOUTH OF WYCLIFFE AVENUE  
WARD 2**

**Recommendation**

The Deputy City Manager of Public Works and the Director of Infrastructure Delivery, in consultation with the Director of Transportation Services and Parks & Forestry operations recommend:

1. That the necessary by-law be passed authorizing the temporary closure on Clarence Street from Wycliffe Avenue to approximately 250 metres south of Wycliffe Avenue, tentatively scheduled to occur between January 8, 2018 and February 28, 2018, to facilitate the safe and timely construction activities to replace the existing culvert on Clarence Street.

**Contribution to Sustainability**

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**Economic Impact**

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**Communications Plan**

A comprehensive communication plan will be implemented to inform all stakeholders of the proposed temporary closure of Clarence Street and related detour routes. This communication plan will include written notification of the road closure to the area property owners and stakeholders, including emergency public service agencies (police, fire and ambulance) and the Regional Municipality of York. There are no transit routes currently operating on Clarence Street.

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**Purpose**

The purpose of this report is to seek Council's approval for a temporary road closure of Clarence Street from Wycliffe Avenue to approximately 250 metres south of Wycliffe Avenue, as shown on Attachment No.1, to facilitate the safe, timely and efficient construction of the municipal infrastructure.

## **Background – Analysis and Options**

### **During preliminary engineering investigations for the slope stabilization on Clarence Street, an existing culvert in need of replacement was identified**

Early in the design phase, in order to address the sidewalk settlements and slope stabilization on Clarence Street south of Wycliffe Avenue, it was found that the subject culvert on Clarence Street was in an advanced state of deterioration and must be replaced. The culvert replacement will form part of the comprehensive solution to address the slope stabilization issues currently occurring in the area.

The existing culvert crossing is approximately 5.5 metres deep. As a result, larger construction equipment will be required to excavate and replace the culvert crossing at this location in a safe and efficient manner. The construction equipment needed for this work will occupy most of the roadway and will also require additional space to load trucks with excavated material, as well as materials to be brought in to the site. Alternate rehabilitation measures, such as trenchless methodologies, were also explored to mitigate traffic impacts and have been determined to not be feasible.

The critical project timelines have been developed to meet the timelines stipulated to receive the external funding (CWWF) for the project as well as the in-water work restrictions imposed by the Toronto and Region Conservation Authority (TRCA) per the Ministry of Natural Resources and Forestry (MNR), both of which has a deadline of March 31<sup>st</sup>, 2018.

### **The proposed temporary road closure will result in a safer project site, cost savings, reduce the duration of construction and minimize disruption to the community**

There are no residential properties directly fronting onto the section of roadway where the culvert will be replaced. Given the constructability issues noted above and after exploring the available construction methods, processes and staging alternatives for this work, a temporary road closure has been determined to be the optimal option to undertake the work.

The closure of the road will establish a safer work environment for the construction workers as well as the travelling public. It will reduce the construction time required for the project from approximately 14 weeks to 8 weeks. A shorter construction period will also minimize the disruption to the road users. There could also be significant cost savings, estimated at approximately \$300,000, resulting from the road closure because of increased construction efficiency and reduced overall project risk.

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The total volume of local traffic being diverted as a result of the proposed closure of Clarence Street south of Wycliffe Avenue can be accommodated by other road links in the transportation network. The impact on the overall network resulting from the short-term closure of Clarence Street can be appropriately managed.

Local traffic movement will be achievable both northbound and southbound on Clarence Street by detour routes through Islington Avenue, Rutherford Road and Wycliffe Avenue (see Attachment

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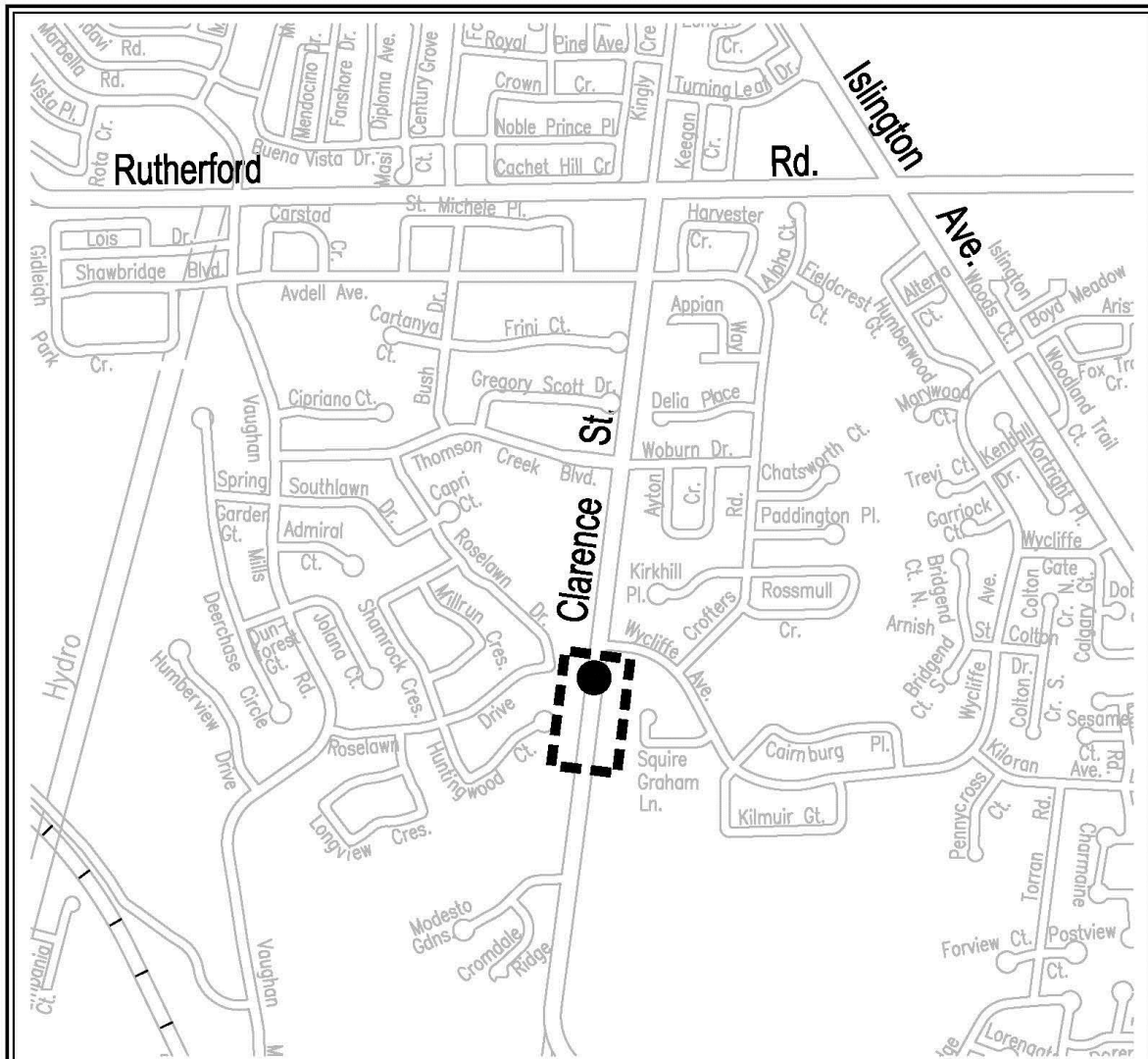
Respectfully submitted,

Stephen Collins, P. Eng  
Deputy City Manager, Public Works

Jack Graziosi  
Director, Infrastructure Delivery

MT:mm

# ATTACHMENT No. 1



## TEMPORARY ROAD CLOSURE - CLARENCE STREET FROM WYCLIFFE AVENUE TO APPROX. 250m SOUTH OF WYCLIFFE AVENUE PROJECT # 18-15SW

### LEGEND



PROPOSED ROAD CLOSURE

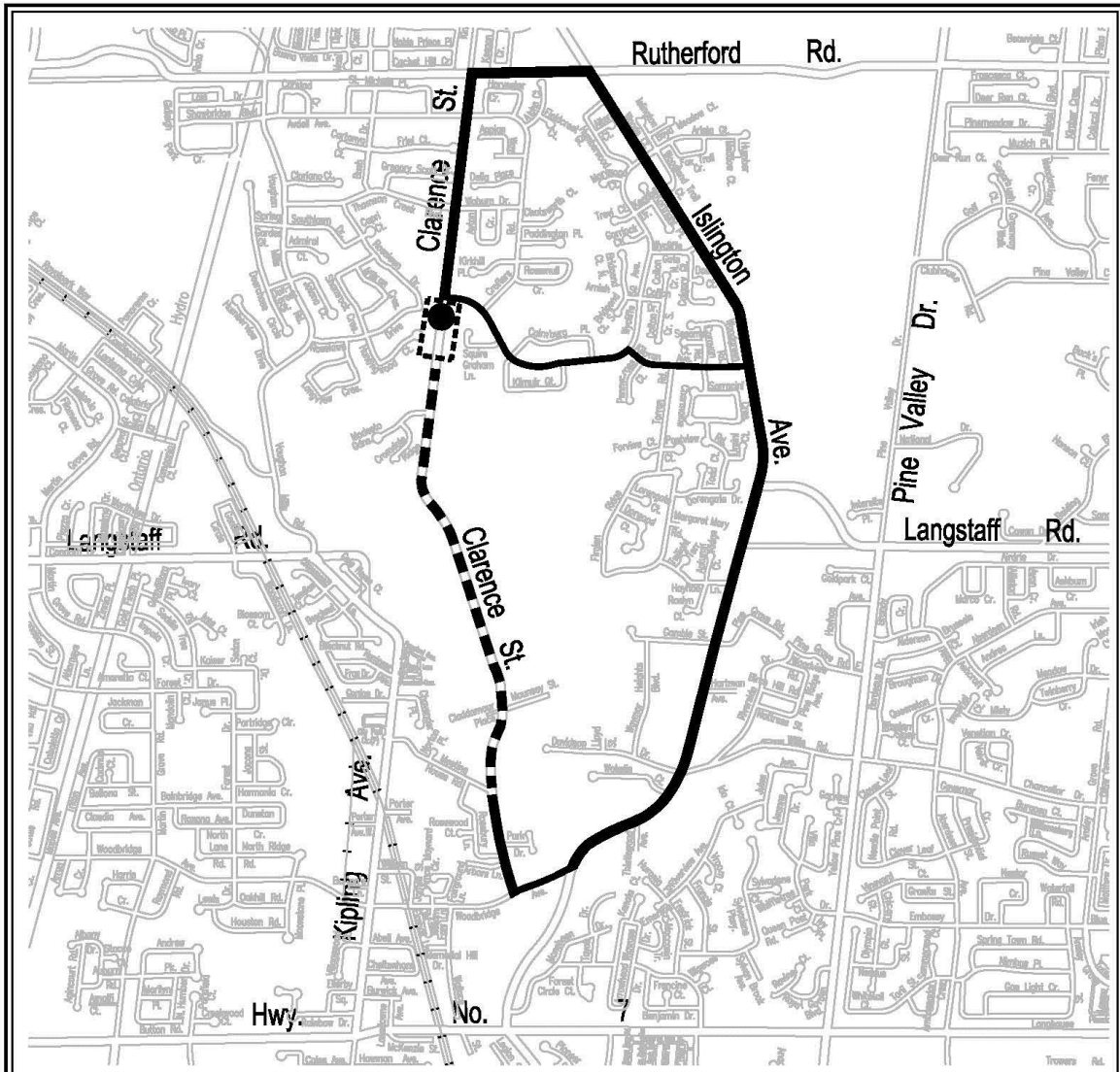


PROPOSED CULVERT REPLACEMENT



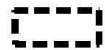



NOT TO SCALE

# ATTACHMENT No. 2



## INTERIM TRAFFIC MANAGEMENT PLAN PROJECT # 18-15SW

### LEGEND

-  PROPOSED ROAD CLOSURE
-  PROPOSED CULVERT REPLACEMENT
-  PROPOSED DETOUR ROUTES
-  OPEN TO LOCAL TRAFFIC ONLY



NOT TO SCALE

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CITY OF VAUGHAN - INFRASTRUCTURE DELIVERY

Engineering Design Technician: G.S.

File path: F:\Common\ENG\ATTACHMENTS\INFRASTRUCTURE DELIVERY\Clarence Road Closure\Clarence Road Closure detour map.dwg