

17
TEMPORARY ROAD CLOSURES
TOWNSHIP OF KING
TOWN OF WHITCHURCH-STOUFFVILLE
CITY OF VAUGHAN

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, May 31, 2007, from the General Manager, Roads:

1. RECOMMENDATIONS

It is recommended that:

1. The General Manager, Roads be authorized to exercise any of the powers of Regional Council for the temporary closure of the following roads:
 - a) Jane Street (Y.R. 55) north of 16th Sideroad in the Township of King.
 - b) Jane Street (Y.R. 55) north of 17th Sideroad in the Township of King.
 - c) Jane Street (Y.R. 55) north of Teston Road (Y.R. 49) in the City of Vaughan.
 - d) Jane Street (Y.R. 55) north of King Road (Y.R. 11) in the Township of King.
 - e) Jane Street (Y.R. 55) north of 15th Sideroad in the Township of King.
 - f) Kennedy Road (Y.R. 3) north of Bethesda Sideroad in the Town of Whitchurch-Stouffville.
 - g) Warden Avenue, (Y.R. 65) between Davis Drive (Y.R. 31) and Vivian Road (Y.R. 74) in the Town of Whitchurch-Stouffville.
2. The Regional Solicitor prepare the necessary by-law.
3. The Regional Clerk forward this report to the Clerks of Township of King, Town of Whitchurch-Stouffville, City of Vaughan and to the Chief of York Regional Police.

2. PURPOSE

The purpose of this report is to provide authorization for the General Manager, Roads to temporarily close the specified Regional roads to through traffic to accommodate the replacement of culverts at several locations on the Regional road network. The location of each road closure is attached to this report.

3. BACKGROUND

In order to complete some roadwork activities, it is often necessary to temporarily close sections of a road to through traffic. The Municipal Act allows a municipal council to delegate authority to temporarily close roads for the purposes of construction or maintenance.

It is difficult to pinpoint the required dates for the temporary closures, as the construction schedule often changes because of delays, weather, and supply of materials. It is therefore appropriate to delegate the authority to temporarily close roads to the General Manager, Roads. The following roads require temporary closures for construction activities:

- Jane Street north of 16th Sideroad in the Township of King (*see Attachment 1*).
- Jane Street north of 17th Sideroad in the Township of King (*see Attachment 2*).
- Jane Street north of Teston Road in the City of Vaughan (*see Attachment 3*).
- Jane Street north of King Road in the Township of King (*see Attachment 4*).
- Jane Street north of 15th Sideroad in the Township of King (*see Attachment 5*).
- Kennedy Road north of Bethesda Sideroad in the Town of Whitchurch-Stouffville (*see Attachment 6*).
- Warden Avenue between Davis Drive and Vivian Road in the Town of Whitchurch-Stouffville (*see Attachment 7*).

Each location noted above requires the replacement of one culvert. There are two locations on Jane Street, north of King Road, where two separate closures are required. These culverts are within approximately 110 metres, but their replacement must be carried out separately in order to meet the necessary timelines.

The culverts to be replaced range in a diameter of 450 mm up to a maximum of 1600 mm. The roads at each of these locations are rural, two-lane roadways with substandard narrow lanes and shoulders. There is not enough room to excavate the roadway for the culvert replacement and maintain traffic through a one-lane closure while using flag persons and provide space for construction equipment. The road closures will allow the Region to accomplish the culvert replacement work expediently and in a safe and cost effective manner.

It is intended to close the road north and south of each of the culvert location. As there are suitable alternate roads, (Weston Road and Keele Street for Jane Street and Warden Avenue and McCowan Road for Kennedy Road and Woodbine Avenue for Warden Avenue) traffic can be detoured.

At each of these locations, the culvert has either rusted through or failed at a joint. This has allowed the fill material to fall into the culvert, thereby undermining the side slope of the road. If left unresolved, this will damage the watercourse, plug the culvert and cause the road to fail.

The closure of Warden Avenue south of Davis Drive to install a new culvert is a portion of the future improvements at this intersection. This project is scheduled to start in the Spring of 2008 with completion anticipated by the Fall of 2008. The intersection work includes full-depth reconstruction of the road, the addition of turning lanes, the extension of culverts on Davis Drive west of Warden Avenue, and the replacement of culverts on Warden Avenue south of Davis Drive and installation of partial illumination and traffic signals. This temporary closure is required to facilitate the installation of the culvert on Warden Avenue south of Davis Drive.

4. ANALYSIS AND OPTIONS

4.1 Rationale for Temporary Road Closures

Where possible, Regional staff co-ordinate construction activities to keep the roads open to through traffic. However, it is not always feasible to maintain through traffic because of the very nature of the work and it is often safer and more cost effective to complete the work under a temporary full road closure.

Temporary road closures for the culvert installations will be a maximum of one day other than the installation on Warden Avenue south of Davis Drive. At this location, the specific closure date and duration will be determined once the contract has been awarded and the contractors work schedule is developed. The aquatic habitat in this area is deemed cold water and the permit for in-water work is only valid between June 1, 2008 and September 15, 2008. The temporary road closure to replace the culvert must be within that time period. This work includes removal of an existing twin culvert, in-stream environmental measures, and the construction of foundations and a new structure. The in-stream environmental works have to be completed before the new culvert can be placed due to the minimal clearance between the stream and the obvert of the culvert. Given the scope of this work, it is expected that a 16 week road closure will be required to complete this portion of the project.

Temporary road closures, where implemented, reduce safety risks to both the travelling public and work crews and provide a work environment that enhances construction quality. Furthermore, temporary closures significantly reduce the costs and time schedule for any work, thus minimizing public impact and disruption when applied.

4.2 Public Notification

Road signs notifying the public of the proposed road closures will be placed on the arterial roads a minimum of two weeks in advance of the closure. Emergency services (police, fire and ambulance), school bus operators, school transit authorities and the public will be notified of the closures as well. Temporary road closure schedules will also be posted on the York Region website.

Once a road closure is in effect, efficient use of the time period will be an obligation of the contractor to ensure that public impact and inconvenience is limited through effective work planning and operations.

A detailed signage plan will be put in place for these closures to clearly identify detour routes. Measures will also be provided to maintain local access to residents, businesses, schools and other institutions. If needed, any property owner that will be affected by the local access only will be advised directly.

Under a full road closure, the work will be completed more quickly, with a greater level of safety for both road users and workers, and be more cost effective.

Advance warning detour signage will be installed to alert drivers of the closure and to indicate alternative routes via the Regional road system.

5. FINANCIAL IMPLICATIONS

The work will be undertaken at the Region's expense. Funds for the work are included in the 2007 Roads Program Budget

6. LOCAL MUNICIPAL IMPACT

Signage forewarning the public of the proposed temporary road closures will be placed a minimum of two weeks in advance of the road closure dates. Detour signs will be installed to properly guide motorists around the closure. Emergency services and school boards will be notified in advance of the closure to ensure no interruption in their service provision.

7. CONCLUSION

Under the *Municipal Act*, Regional Council may delegate authority to temporarily close roads. It is therefore recommended that authorization be delegated to the General Manager, Roads for the temporary closure of:

- Jane Street (Y.R. 55) north of 16th Sideroad in the Township of King;
- Jane Street (Y.R. 55) north of 17th Sideroad in the Township of King;
- Jane Street (Y.R. 55) north of Teston Road (Y.R. 49) in the City of Vaughan;
- Jane Street (Y.R. 55) north of King Road (Y.R. 11) in the Township of King;
- Jane Street (Y.R. 55) north of 15th Sideroad in the Township of King;
- Kennedy Road (Y.R. 3) north of Bethesda Sideroad in the Town of Whitchurch-Stouffville.
- Warden Avenue (Y.R. 65) between Davis Drive and Vivian Road in the Town of Whitchurch-Stouffville.

Regional staff will take all necessary precautions to ensure that road closures are kept to a minimum and that appropriate notification is made to all affected parties.

Replacing these culverts in one stage, with a temporary road closure, for a one day period is the quickest, safest and most cost effective method. It is therefore, recommended that the General Manager, Roads be authorized to exercise any of the powers of Regional Council for the temporary closure to through traffic, on these Regional roads, to permit the replacement of these culverts.

For more information on this report, contact Brian Harrison, Director, Operations, Roads Branch at extension 5205 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

(The attachments referred to in this clause were included in the agenda for the June 13, 2007 Committee meeting.)