

# **The Regional Municipality of York**

Committee of the Whole  
Transportation Services  
April 4, 2019

Report of the Commissioner of Transportation Services

## **Agreements with Canadian Pacific Railway for Rail Grade Separation Highway 27 South of Rutherford Road City of Vaughan**

### **1. Recommendation**

Council authorize entering into agreements with Canadian Pacific Railway for the structure replacement and long-term maintenance of the road-rail grade separation on Highway 27 (Y.R.27), south of Rutherford Road (Y.R.73) in the City of Vaughan, in accordance with the principles outlined in Attachment 1.

### **2. Summary**

This report seeks Council authorization to enter into agreements with Canadian Pacific Railway (CPR) for the construction and long-term maintenance of the structure replacement at the existing road-rail grade separation on Highway 27, south of Rutherford Road, as shown in Attachment 2.

Key Points:

- Agreements for the construction and long-term maintenance of the road-rail grade separation are required to identify CPR and York Region responsibilities and jurisdiction
- The replacement of this bridge will accommodate the future widening of Highway 27 to six lanes, as recommended in the Western Vaughan Individual Environmental Assessment
- Staff has negotiated a mutually beneficial agreement with CPR as per the Principles of Agreement (Attachment 1) on the cost apportionment for the grade separation

### 3. Background

#### **The existing bridge on Highway 27 at the CPR tracks is nearing the end of its service life and needs to be replaced**

The existing bridge carrying a single rail track was constructed in 1938 and includes two spans over two traffic lanes in each direction. Both the substructure and superstructure have deteriorated and the overall condition of the bridge is poor. Recent structural inspections undertaken by the Region recommend replacement of the bridge in the short term. The Region is responsible for the substructure of the bridge and CPR is responsible for the superstructure.

#### **The new structure will accommodate the future widening of Highway 27 to six lanes for transit/high occupancy vehicles**

The Western Vaughan Individual Environmental Assessment was approved in July 2012. The study included a key recommendation to widen Highway 27, from Steeles Avenue to Major Mackenzie Drive, to six lanes including transit/high occupancy vehicle lanes and the replacement of the existing CPR bridge, south of Rutherford Road.

The Region is in the process of completing the detailed design, moving utilities and obtaining required regulatory permits.

The improvements to replace the existing CPR bridge are included in the 2019 10-Year Roads and Transit Capital Construction Program with construction planned to commence in 2019. The new structure will be constructed to accommodate the future widening of Highway 27 to six lanes for transit/high occupancy vehicle lanes. It will also have adequate space for cyclists and pedestrian facilities.

### 4. Analysis

#### **The proposed grade separation project will result in two separate structures over Highway 27**

Road and rail traffic need to be maintained during the removal of the existing structure and construction of the replacement structure. In order to detour rail traffic temporarily, a second CPR bridge (south bridge) over Highway 27 is to be constructed to the south of the existing bridge. In consultation with CPR, it was determined that construction on the north side of the existing bridge is not feasible.

Both bridges will be constructed to accommodate the future widening of Highway 27 to six lanes with space for pedestrians, cyclists and a centre median.

## **Agreements for the construction and long-term maintenance of the grade separations are required to ensure both CPR and the Region's responsibilities are identified**

The principles presented in Attachment 1 shall form the basis for agreements for cost-sharing and overall governance for the construction and long-term maintenance of the grade separations. The principles are based on industry best-practices and are in line with Canadian Transportation Agency (CTA) guidelines and the "Board Order" for the existing bridge.

## **Bridge replacement on the existing alignment with a new second permanent bridge to the south is the most economical and efficient option**

Rather than constructing a new temporary structure for the purpose of detouring rail traffic and removing it when the detour is no longer required, it is recommended the new south bridge be retained and used by CPR in the future when an additional track is needed along the corridor. Building and retaining a second structure permanently will not only result in savings in demolition and disposal costs, but minimize traffic impacts/disruptions for road and rail traffic, both now and in the future when the additional track is required. The long-term maintenance of the north and south structures is to be shared by both parties, as outlined in Attachment 1.

All four lanes of traffic on Highway 27 will be maintained during construction with minimal disruptions anticipated by temporary lane restrictions during off-peak hours. Some strategic short-term road closures will be required to accommodate demolition of the north bridge and installation of girders for the new bridges.

Construction is planned to commence in fall 2019 and is expected to be completed by winter 2021. In the first stage, the new south bridge will be constructed and rail traffic will be shifted onto it. Following this, the existing north bridge will be demolished and the new north bridge constructed. Rail traffic will then be shifted back onto the north bridge.

## **5. Financial**

Staff has negotiated a mutually beneficial agreement with CPR as per the Principles of Agreement (Attachment 1) on the cost apportionment for the grade separation.

The Highway 27 bridge replacement, excluding road construction costs, is currently estimated to cost \$12.2 million. This includes demolition and reconstruction of the existing bridge and construction of a new permanent bridge to the south. CPR has agreed to contribute \$2.2 million, or approximately 18 per cent, towards the capital cost of the bridges, with the Region contributing the balance, an estimated \$10.0 million, as summarized in Table 1. As CPR's contribution is fixed, any cost savings or overruns will be absorbed by the Region.

**Table 1**  
**Road-Rail Grade Separation Funding Sources**

Funding Source	Amount (millions)
York Region	\$10.0
CPR	2.2
Total	\$12.2

The cost for the project is included in the 10-Year capital budget and is funded from 90 per cent development charges and 10 per cent tax levy.

## 6. Local Impact

The reconstruction of the existing grade separation of the CPR tracks at Highway 27 will benefit residents of Vaughan and the rest of York Region.

The replacement of this bridge will accommodate the future widening of Highway 27 to six lanes, as recommended in the Western Vaughan Individual Environmental Assessment, and will benefit residents of Vaughan and the Region and improve travel to Pearson airport and business parks in the area.

The City of Vaughan has been and will continue to be actively involved in the project. The new structures will accommodate the installation of pedestrian and cyclist infrastructure.

## 7. Conclusion

Agreements for the construction and long-term maintenance of the road-rail grade separation are required to identify CPR and York Region responsibilities and jurisdiction.

Council authorization will allow the Region to enter into agreements with CPR for the construction and long-term maintenance of the Highway 27 road-rail grade separation and finalize arrangements for tender and construction.

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For more information on this report, please contact Salim Alibhai, Director, Capital Planning and Delivery at 1-877-464-9675 ext. 75229. Accessible formats or communication supports are available upon request.

Recommended by:

**Paul Jankowski**  
Commissioner of Transportation Services

Approved for Submission:

**Bruce Macgregor**  
Chief Administrative Officer

March 20, 2019  
Attachments (2)  
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