The Regional Municipality of York

Committee of the Whole Transportation Services June 13, 2019

Report of the Commissioner of Transportation Services

Lane Designations to Operate Rapidways in the Cities of Markham, Richmond Hill and Vaughan

1. Recommendations

- 1. The existing Lane Designation Bylaw No. 2009-23 be amended to designate newly-constructed bus rapidway lanes outlined in Table 2.
- The Regional Clerk circulate this report to Clerks of the Cities of Markham, Richmond Hill and Vaughan, York Region Rapid Transit Corporation and Chief of York Regional Police.
- 3. The Regional Solicitor prepare the necessary bylaws.

2. Summary

This report seeks Council approval to designate lanes on Regional roads to operate bus rapid transit service.

Key Points:

- Viva service operates in exclusive dedicated lanes to provide efficient rapid transit service to citizens
- Rapidway lanes need to be designated to allow exclusive use for Viva bus rapid transit service in dedicated lanes

3. Background

Viva service operates in exclusive dedicated lanes to provide efficient rapid transit service to citizens

Rapidway lanes are dedicated lanes for bus rapid transit service, which operate in the centre of the road, allowing Viva buses to move out of mixed traffic lanes, maximizing peoplemoving capacity and enabling people to get around York Region's busiest corridors more

efficiently. Rapidways are controlled with dedicated transit signals that typically operate concurrent with through traffic. These transit signals are enhanced with transit signal priority measures that assist buses in maintaining their schedules. Figure 1 is an image of a completed section of rapidway on Highway 7. Previously designated dedicated rapidway lanes are identified in Attachment 1.

Figure 1
Viva Service on Highway 7 Rapidway



Highway 7, east rapidway looking west to Valleymede Station

Since rapidways are located in the centre lanes of the corridor, left turn movements must operate with their own separate signal phase or be restricted to ensure the safety of vehicles crossing the rapidway lanes. Given the width of the roadway, pedestrians may be required to cross in two phases, stopping on the landscaped median between them.

Due to physical and operational constraints, some sections of the rapidway are a partial rapidway with a single dedicated rapidway lane in only one direction, while some sections of the Viva bus rapid transit service continue to operate in mixed traffic.

Completed rapidway sections have created seamless connections to Regional centres and additional sections are anticipated to be completed by the end of 2020

The completed Viva rapidway along Highway 7 East has created seamless connections between the Richmond Hill Regional Centre and Markham Regional Centre. The completed Viva rapidway along Highway 7 West in the City of Vaughan connects to the Vaughan

Metropolitan Centre and the TTC subway. In the Town of Newmarket, the completed Viva rapidway along Davis Drive provides fast, reliable transit with connections to the Newmarket Regional Centre, Southlake Regional Health Centre and Highway 404.

YRRTC construction schedules (see Attachment 2) indicate remaining rapidway sections will be completed as follows:

- Highway 7 West rapidway in the City of Vaughan is anticipated to be completed in December 2019
- Yonge Street section of rapidway in the Town of Newmarket is anticipated to be completed in December 2019
- Yonge Street section of rapidway in the City of Richmond Hill is anticipated to be completed in December 2020

4. Analysis

Rapidway lanes need to be designated to allow exclusive use for Viva bus rapid transit service in dedicated lanes

Rapidway lanes are designed for Viva bus rapid transit use. The intent of these dedicated lanes is to improve the person-moving capacity on Regional corridors. Amending the Lane Designation Bylaw will restrict the use of the rapidways to certain vehicle class types prescribed within the bylaw and are therefore enforceable in accordance with the Highway Traffic Act. Lane designation is required to ensure the rapidway is exclusively designated for bus rapid transit vehicles and will have provisions for use by emergency service vehicles responding to calls, as well as road maintenance vehicles.

Table 2 outlines the Regional road sections scheduled for implementation of rapidway lane designation. Attachment 3 is a map of the location.

Table 2
Regional Roads to be Designated for Rapidways

Bus Rapid Transit Project	Portion of Highway	Limit	Class of Vehicle	Times or Days
H2 East	Highway 7 (Y.R. 7)	Yonge Street Connector (Y.R. 7) to Bathurst Street Connector (Y.R. 7)	Bus Rapid Transit	24 hours, 7 days a week, effective July 2019
	Partial eastbound rapidway located in the centre lane		Vehicles	
			Emergency Service Vehicles	
			Maintenance Vehicles	
H2 East	Bathurst Street Connector Road (Y.R. 7)	Highway 7 (Y.R. 7) to Bathurst Street (Y.R. 38)	Bus Rapid Transit Vehicles	24 hours, 7 days a week, effective July 2019
	Full rapidway located in the centre lane		Emergency Service Vehicles	
			Maintenance Vehicles	

5. Financial

Costs to install the required signs for implementation of the dedicated lanes referenced in this report are included in the approved York Region Rapid Transit Corporation project budget funded by Metrolinx.

Bus rapid transit corridors require specialized maintenance which includes snow removal, transit priority signals, landscaping and transit terminal maintenance. This section of rapidway along Highway 7 from Yonge Street Connector Road to Bathurst Street Connector Road is estimated to cost \$238,000.00 and is included in approved 2019 budget submission which includes the 2020 outlook year.

6. Local Impact

Local municipal staff has been informed of the recommendations contained within this report. Residents will be provided with improved rapid transit service offering more sustainable transportation options, including a more connected and efficient transportation network.

7. Conclusion

As construction of this portion of the H2E bus rapid transit project nears completion, it is necessary to implement lane designations to support safe and efficient transit and traffic operations along this rapidway corridor. Revisions to the Lane Designation Bylaw are required to support bus rapid transit service.

Staff recommends the sections of Regional roads outlined in this report be designated for the exclusive use of bus rapid transit vehicles and the turn restrictions outlined be implemented to support safe operations. Designation of these lanes will increase capacity on a busy corridor, benefit transit operations and support planned growth to better serve residents in York Region.

The Regional Solicitor is required to amend the schedules to the bylaws governing lane designations and the Regional Clerk notify the Cities of Markham, Richmond Hill and Vaughan, York Region Rapid Transit Corporation and York Regional Police of the amendments.

For more information on this report, please contact Joseph Petrungaro at 1-877-464-9675 ext. 75220. 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

May 29, 2019 Attachments (2) 9070847