

## **COMMITTEE OF THE WHOLE (WORKING SESSION) – APRIL 19, 2011**

### **YORK REGION RAPID TRANSIT HIGHWAY 7 BUS RAPID TRANSIT- VMC STATION WARD 4**

#### **Recommendation**

The Commissioner of Engineering and Public Works and the Director of Development/Transportation Engineering, in consultation with the Director of Policy Planning and Director of Development Planning, recommend that:

1. The presentation from the York Region Rapid Transit Corporation with respect to the proposed Highway 7 Viva Bus Rapid Transitway Station at Millway Avenue in the Vaughan Metropolitan Centre be received; and
2. York Region Rapid Transit Corporation be requested to consider the City's design objective outlined in this report with respect to the Vaughan Metropolitan Centre Viva Station.

#### **Contribution to Sustainability**

The Highway 7 Bus Rapid Transitway project will provide higher order transit infrastructure to support compact urban form and offer an alternative mode of transportation to the single occupant vehicle. In addition, the subway extension into the City will stimulate the establishment of transit oriented development in the Vaughan Metropolitan Centre.

#### **Economic Impact**

There is no economic impact associated with this report.

#### **Communications Plan**

York Region Rapid Transit Corporation is carrying out a comprehensive communication plan in connection with the Highway 7 Bus Rapid Transitway project to facilitate the planning, design and construction of the project.

#### **Purpose**

The purpose of this report is to supplement the presentation from York Region Rapid Transit Corporation on the Highway 7 Bus Rapid Transit station at Millway Avenue in the Vaughan Metropolitan Centre, and to provide staff comments on the proposed station canopy.

#### **Background - Analysis and Options**

The segment of the Highway 7 Viva Bus Rapidway (BRT) within Vaughan extends from Helen Street to Yonge Street. This segment of the Highway 7 BRT is approximately 13 kilometres long. The Highway 7 BRT is part of Metrolinx's \$1.4 billion commitment to improving transit in York Region, just one component of a larger \$9.5 billion investment in the first five priority projects of Metrolinx's Regional Transportation Plan, The Big Move.

The Highway 7 BRT project is currently in the preliminary engineering phase. Construction will be carried out in two phases. Construction from Edgely Boulevard to Creditstone Road (H2-VMC) is scheduled for 2012/13 – 2015 to coincide with the opening of the Toronto-York Spadina Subway extension. The remainder of Highway 7 from Helen Street to Yonge Street (H2) is scheduled for construction between 2015/16 – 2020.

The key project milestones for the H2-VMC segment are as follows:

- Conceptual Design –completed
- Preliminary Engineering – late 2010 to late summer 2011
- Land Acquisition – late 2010 to summer 2011
- Detail design – late 2011 to 2012/2013

The conceptual design for the rest of the H2 segment has been completed and the preliminary engineering is underway, which should be completed by the end of 2011.

### VMC Subway/Viva Station

The H2-VMC phase of the project includes the construction of a Viva Station at the intersection of Highway 7 and Millway Avenue. This Viva Station will be directly linked vertically from the platform to the VMC Subway Station by stairs, escalators and elevators. Since the structure and below ground components of the VMC Viva Station are an integral component of the subway station, they will be designed and constructed in conjunction with the subway project.

YRRT is now preparing design concepts for the above ground canopy over the VMC Viva Station. A number of architectural alternatives for the station canopy were developed based on the following principles/considerations:

- Scalability
- Constructability
- Material options
- Maintainability
- Cost
- Presence
- Transit Identity
- Sustainability
- Climate considerations
- Personal Security and security oversight

Based on an evaluation of the canopy design alternatives, YRRT is proposing a design that has a relationship to the VMC Subway Station entrance building, as shown on Attachment No.1. This dome shaped shell is approximately 9.5 metres high and will span the entire width of the Viva Station platform as shown on Attachment No.2.

### Staff Comments

The area of Millway Avenue/ Highway 7 intersection will be the most important Mobility Hub in the City of Vaughan, including subway, bus rapid transit, conventional bus service, vehicles, bicycles and pedestrians. Mobility Hubs are considered as part of a larger city building strategy with the potential to generate a vibrant urbanism by integrating transit infrastructure with land use and urban design. The VMC Viva Station design is one component within the VMC Mobility Hub and therefore design strategies and tactics need to be further explored through a multi-disciplinary approach to successfully integrate this infrastructure piece with its future urban context.

Relationships between the VMC Viva Station Shelter and the surrounding future built form and public realm must be considered. The scaled Context Map shown on Attachment No.3 demonstrates the relationship between the proposed VMC Viva Station to the VMC Subway Station. The VMC subway station main entrance building, at 9.6 metres high, is the architectural icon for the Mobility Hub. The proposed VMC Viva Station canopy height is 9.5m high. It is important to ensure clear visual and physical connections between the Highway 7 streetscape and the subway station main entrance building. Accordingly, the VMC Viva Station Shelter

should be reduced to be more pedestrian-oriented in scale, which will be supportive of the future "Avenue 7" streetscape public realm experience and view corridors.

It is important to note that the City's VMC Streetscape and Open Space Master Plan Study is scheduled to commence in June 2011. The Master Plan will provide an integrated streetscape and open space strategy and design for the Mobility Hub located at Highway 7 and Millway Avenue. The first task in the Millway Avenue streetscape design process will be to review the VMC Subway Station and VMC Viva Station designs and to provide comments and recommendation in the context of the overall Master Plan.

### **Relationship to Vaughan Vision 2020/Strategic Plan**

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in:

- The pursuit of excellence in service delivery;
- Planning and managing growth, and economic vitality; and
- The demonstration of leadership and promotion of effective governance.

Specific Strategic Plan Initiatives applicable to the recommendations made in this report include Vaughan's corporate priorities to support and plan high capacity transit at strategic locations throughout the City. Accordingly, this report is consistent with the priorities previously set by Council.

### **Regional Implications**

The York Region Rapid Transit Corporation is the proponent of the Highway 7 Bus Rapidway, which includes the VMC Viva Station at Millway and Highway 7.

### **Conclusion**

The conceptual design and architecture of the VMC Viva Station is proposed to have a relationship to the VMC Subway Station entrance building. The dome shaped shell of the platform canopy will be approximately 9.0 metres high and will span the entire width of the Viva Station. Staff is generally satisfied with the conceptual design of the VMC Viva Station subject to the comments noted in this report.

### **Attachments**

Attachment No. 1: VMC Viva Station – Perspective View

Attachment No. 2: VMC Viva Station – Building Cross Section – North South

Attachment No. 3: Context Map

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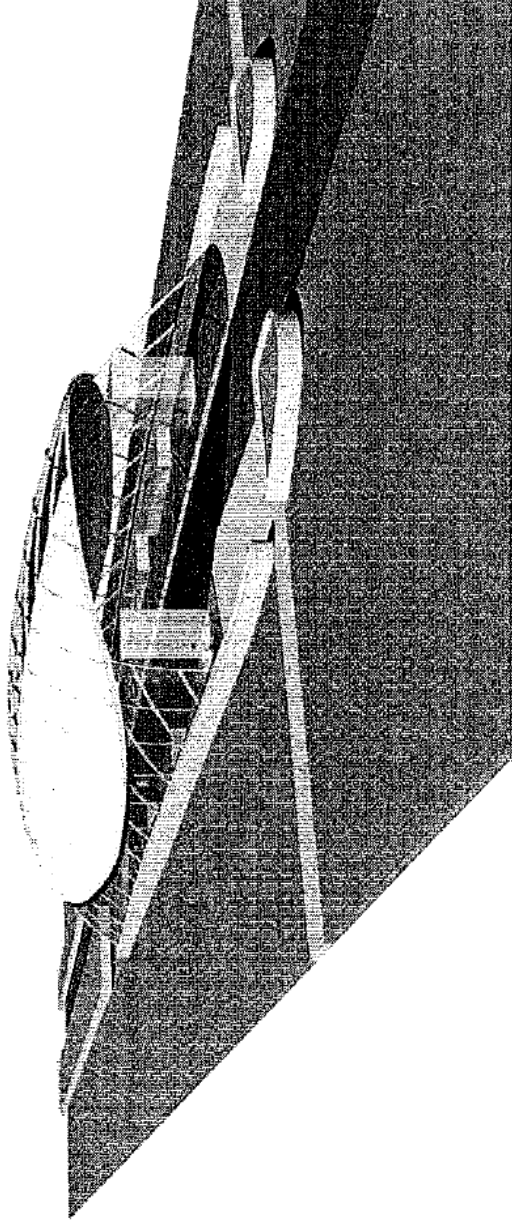
Respectfully submitted,

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Commissioner of Engineering  
And Public Works

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Perspective View

vivaNext



Design reference to both vivaNext canopies and new Subway station entrance

# Building Cross Section – North South

VIVANEXT

