



Report to: Development Services Committee

Report Date: May 20, 2014

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**SUBJECT:** Markham Centre VIVA Rapidway Next Phase H3.4 Project

**PREPARED BY:** Brian Lee, Senior Manager, Special Projects, Ext. 4838  
Sepideh Majdi, Senior Engineer, Special Projects, Ext. 2414

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**RECOMMENDATION:**

- 1) **That** the May 20, 2014 report titled “Markham Centre VIVA Rapidway Next Phase H3.4 Project”, be received;
- 2) **And that** the general configuration of a local municipal street and the Rapidway on the Civic Mall/Simcoe Promenade from Birchmount Road to Sciberras Road, as outlined in this report and shown on the sketches attached as Attachment ‘B’, be endorsed;
- 3) **And that** the Mayor and Clerk be authorized to execute an agreement with Ruland Properties Inc. for the conveyance by Ruland Properties Inc. to the City of lands required for a local municipal street and the Rapidway on the Civic Mall/Simcoe Promenade (total width approximately 33.8 metres, subject to detailed design) from Birchmount to Sciberres Road, in a form satisfactory to the Chief Administrative Officer and the City Solicitor;
- 4) **And that** staff be authorized to convey property interests to the Regional Municipality of York for the Transit Rapidway, including station locations, between Warden Avenue and Sciberras Road to the satisfaction of the City Solicitor and the Chief Administrative Officer;
- 5) **And that** the Mayor and Clerk be authorized to amend the existing “Permission to Enter and Construct the Transit Rapidway” agreement or enter into a new agreement with the Regional Municipality of York and other parties having jurisdiction to establish the parties’ obligations, pertaining to construction of the expanded Rapidway on municipal rights-of-way or City owned lands associated with the H3.4 Project, in a form satisfactory to the Chief Administrative Officer and the City Solicitor;
- 6) **And that** the Mayor and Clerk be authorized to amend the existing “License To Operate And Maintain Transit Rapidways” agreement or enter into a new agreement with the Regional Municipality of York and other parties having jurisdiction for the operation and maintenance of the VIVA Rapidway on the expanded Rapidway associated with the H3.4 Project, in a form satisfactory to the Chief Administrative Officer and the City Solicitor;

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- 7) **And that** the Mayor and Clerk be authorized to execute a construction agreement with Ruland Properties Inc. for construction of the municipal street (including road, bridge crossings, cycling facilities, sidewalks, boulevards, landscaping, underground services and public utilities,) on the Civic Mall/Simcoe Promenade, in a form satisfactory to the Chief Administrative Officer and the City Solicitor;
- 8) **And that** staff be authorized and directed to do all things necessary to give effect to this resolution.

**PURPOSE:**

The purpose of this report is to:

- obtain Council's endorsement of the general configuration of the Rapidway and proposed local street in the Civic Mall/Simcoe Promenade from Birchmount Road to Sciberras Road;
- obtain Council's authority to acquire the required lands for the construction of a local municipal street on the Civic Mall/Simcoe Promenade or additional right-of-way from Ruland Properties Inc. ("Remington Group");
- obtain Council's authority to enter into various agreements required for construction and maintenance of the expanded Rapidway, and the future municipal street; and
- obtain Council's authority to convey the required property interests to the Regional Municipality of York over lands on which the Rapidway and station locations are situated, for the benefit of Metrolinx.

**BACKGROUND:**VIVA Rapidway Next Phase H3.4 Project:

The H3.4 Project is the next phase of a larger VIVA Next plan funded by Metrolinx for building new rapid transit corridors across York Region. The first phase of the Rapidway plan (Bayview Avenue to Warden Avenue) was reported to Council in June 2009, and will be completed later this year.

York Region Rapid Transit Corporation ("YRRTC") has started the preliminary engineering study for the next phase ("H3.4 Project") which will be a design-build-finance contract where the successful bidder will prepare the final design to YRRTC specifications, build the Rapidway and finance its implementation. The H3.4 Project includes the design-build-finance of two sections of Rapidway: on Civic Mall/Simcoe Promenade - from Birchmount Road to Sciberras Road; and on YMCA Boulevard - from Riva Road to Kennedy Road. Since the YMCA Boulevard section will be affected by the future Mobility Hub planning and design, YRRTC has decided to focus on the Civic Mall/Simcoe Promenade section at this time and defer the YMCA Boulevard section. The location of this Project is shown in Attachment 'A'.

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The H3.4 Project timelines are:

- Request for Design-Build Proposals to be released - June 2014
- Design-Build Proposals closes - November 2014
- Financial Proposal closes - April 2015
- Construction Commencement - Fall 2015 (after 2015 Pan Am Games)
- Contract completion - 2019

The Request for Proposals to be released by YRRTC this June requires confirmation of the general configuration of the Civic Mall/Simcoe Promenade by the various parties. Therefore, Council's approval in principle of the plans and cross-sections in this report is required before YRRTC release the Request for Proposals. Staff consulted with the Cycling and Pedestrian Advisory Committee ("CPAC") at its April 17 meeting and the configuration of the cycling facility may have to be modified but will not impact the total right-of-way width between Birchmount Road and the Tributary 4 bridge.

## **OPTIONS/ DISCUSSION:**

### Civic Mall/Simcoe Promenade Concept

The original concept for Civic Mall/Simcoe Promenade was based on a "Shared Space Rapidway and linear park" concept which was presented to Development Services Committee in June 2008. The main design objective was to "develop a high quality and safe public realm designed to accommodate safe movement of pedestrians, transit and alternative modes of transportation such as bicycles in a linear park". In a later report to Development Services Committee dated June 2, 2009 entitled "Transit Rapidway on Municipal Rights-of-Way and Town Owned Lands", the concept of the Rapidway was further described as allowing transit vehicles authorized by the Regional Municipality of York, other vehicles operated by authorized transit agencies, emergency vehicles, City vehicles requiring access for maintenance and repair, and vehicles with access permits only.

### Increasing Transportation Demands Generated the Need for a New Municipal Street

With increasing development density in Markham Centre as endorsed by Council through the Growth Management Strategy and new Official Plan, the City retained the IBI Group to undertake a transportation analysis to determine the transportation/transit requirements. The transportation review of 2012 identified that internal and external trips generated by Markham Centre will require additional road capacity across Tributary 4 which bisects Markham Centre. A two lane municipal road crossing of Tributary 4 was identified.

In addition, the Remington Group also retained WSP Canada Inc. (formerly Genivar Inc.) to carry out a similar transportation analysis and WSP also confirmed the need for additional road capacity across Tributary 4. Based on these analyses, City staff recommended adding a two-lane municipal street on the north side of the Rapidway on the Civic Mall/Simcoe Promenade, as per Attachment 'B'.

Revised Civic Mall/Simcoe Promenade Configurations

Staff have been working with YRRTC and the Remington Group to revise the Civic Mall/Simcoe Promenade configuration to accommodate an additional municipal street with boulevard and cycling facilities. The following preliminary concept plans and cross-sections (see Attachment 'B') will be used for the Request for Proposals for the H3.4 Project:

- A) Between Birchmount Road and Tributary 4 bridge structure, the general arrangement of the Civic Mall/Simcoe Promenade includes 7.0m of Rapidway, 4.0m of VIVA station, 6.5m of municipal street, 2.0m of cycle track on each side, and varying width of sidewalks/boulevards/barriers/buffers, consistent with Markham Centre street design for a total of 33.8 metres. The final dimension of the total right-of-way will be determined through a detailed design exercise.
- B) The current conceptual design of the bridge structure crossing Tributary 4 is 27.50m wide to accommodate a 3.0m sidewalk on each side, 7.0m of Rapidway, 6.5m of travelled lanes for the municipal street, a 2.0m cycle track on each side, and a total of 4.0m of buffers and barriers. CPAC has requested that the bridge deck be widened to provide more space for the cyclists.
- C) Between the bridge structure and Sciberras Road/Enterprise Boulevard, the Rapidway and the municipal street will be able to fit within a 30.0m ROW because there are no VIVA stations.

Council is requested to endorse the general configuration described above and in Attachment 'B' so that YRRTC can proceed with the Request for Proposals. As mentioned earlier, these dimensions are to be confirmed after the completion of the detailed design by the successful bidder.

Land Conveyances from the Remington Group to the City of Markham

Concurrently in the H3.4 Project, certain lands will need to be conveyed from the Remington Group to the City for the Rapidway and a proposed local road north of the Rapidway.

The detailed design at a later time will determine the exact property requirement, and further discussions between City staff and the Remington Group are required to indentify the most appropriate timing of these land conveyances. The land conveyances for the Rapidway and for the municipal street will likely be at different times. City staff are working with the Remington Group to finalize the terms of the conveyances to the City. Council is requested to authorize the said land acquisitions and the execution by the Mayor and Clerk of any agreements with Remington Group pertaining to the conveyance of the required lands to the City.

Conveyance of Property Interest on the Transitway to the Regional Municipality of York

Metrolinx has requested, as part of the Big Move funding condition, to have property interest conveyed to them, through the Region, over the Rapidway and associated infrastructure. As this is a Metrolinx condition for the funding of H3.4 Project, the City will work with the Region and Metrolinx to satisfy this condition.

Permission to Enter and Construct the Rapidway & Long Term Encroachment and Maintenance

The Regional Municipality of York will need to enter into a construction agreement with the City of Markham to build the next phase of the Rapidway on City lands. For the implementation of the H3.4 Project, similar legal and financial arrangements for the constructed Phase 1 section of Rapidway from Warden Avenue to Birchmount Road will be required between the City of Markham, the Regional Municipality of York, and other parties having jurisdiction. At the June 3, 2009 Council meeting, Council authorized staff to:

- A) Execute construction agreements with the Regional Municipality of York for the construction of the Rapidway on municipal rights-of-way or City owned lands; and
- B) Execute encroachment and maintenance agreements with the Regional Municipality of York for the use and long term maintenance of the Rapidway on municipal rights-of-way or City owned lands.

The encroachment and maintenance agreements will allow the Regional Municipality of York to enter onto City lands to operate the VIVA buses and for the City to provide certain long term maintenance obligations on the Rapidway, as outlined in the agreements. Council is requested to authorize the Mayor and Clerk to amend the existing agreements to include the expanded Rapidway section entailed in the H3.4 Project or to enter into new agreements.

Construction of the Municipal Street

The construction of the municipal street will be the responsibility of the Remington Group as part of the development of the adjacent lands. Since it is uncertain if this street will be constructed as part of a plan of subdivision or a site plan application, staff are requesting Council to authorize the Mayor and Clerk to enter into a construction agreement with the Remington Group to design, construct and maintain this municipal street as a stand-alone project.

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

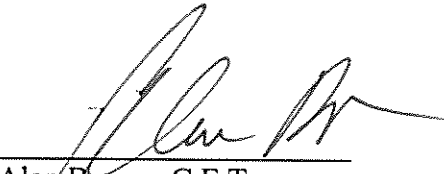
The project is in line with the BMFT strategic focus area of Transportation/Transit as it will help to encourage the transit culture in Markham and bring a rapid transit system into Markham Centre. The H3.4 Project is identified in Metrolinx's The Big Move and the Region's Master Transportation Plan Update, and the City's newly adopted Official Plan. The alignment of the Transitway on Civic Mall/Simcoe Promenade will help to support growth and density along this corridor, and provide a competitive alternative to private cars in the urban growth centre.

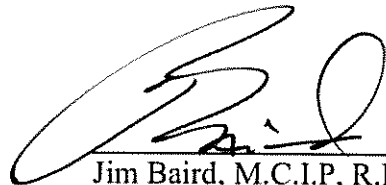
**BUSINESS UNITS CONSULTED AND AFFECTED:**

The Planning & Urban Design Department and Operations Department have reviewed this report and their comments have been incorporated.

**RECOMMENDED BY:**

**BY:**

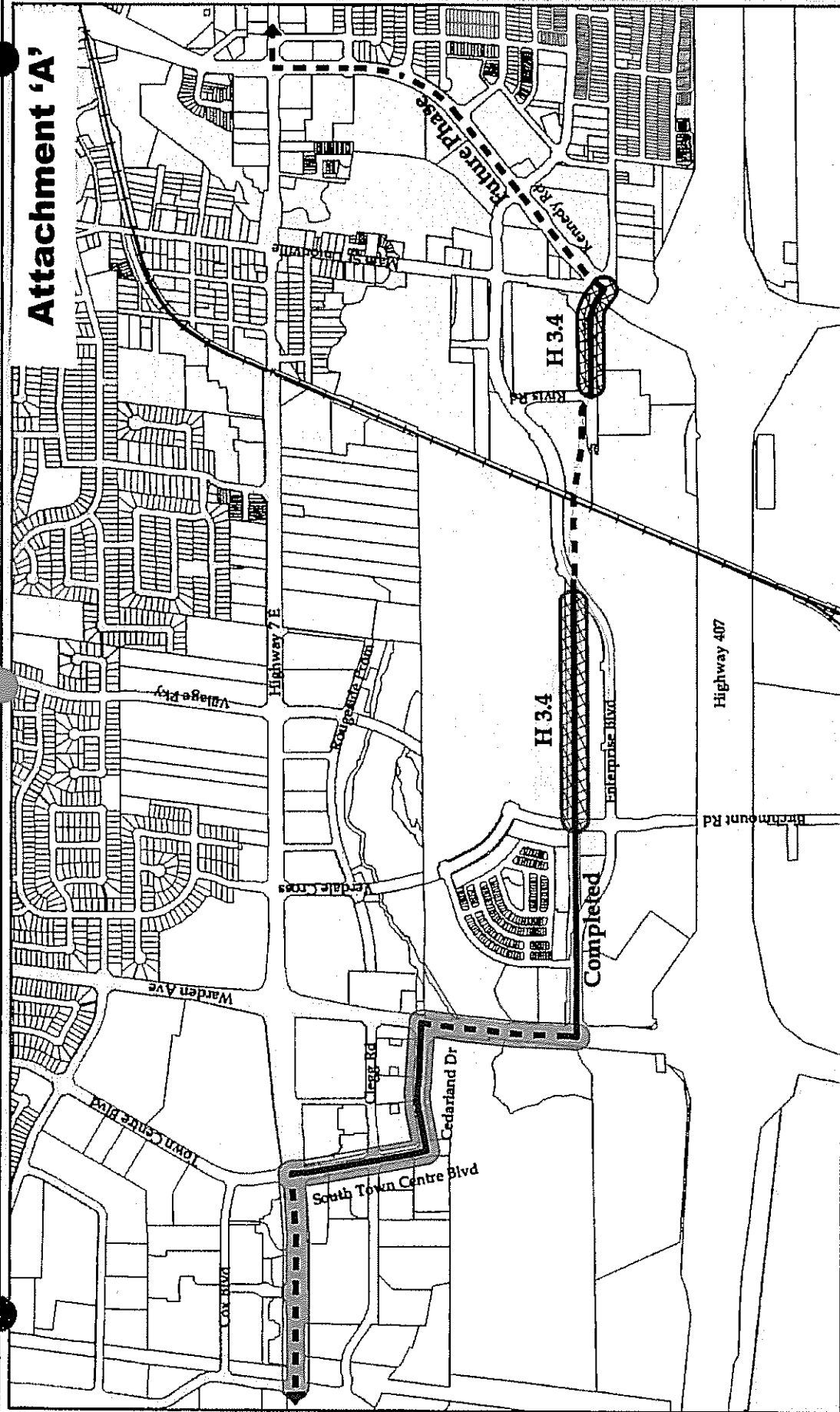
  
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Alan Brown, C.E.T.  
Director, Engineering

  
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Jim Baird, M.C.I.P., R.P.P.  
Commissioner, Development






**ATTACHMENTS:**

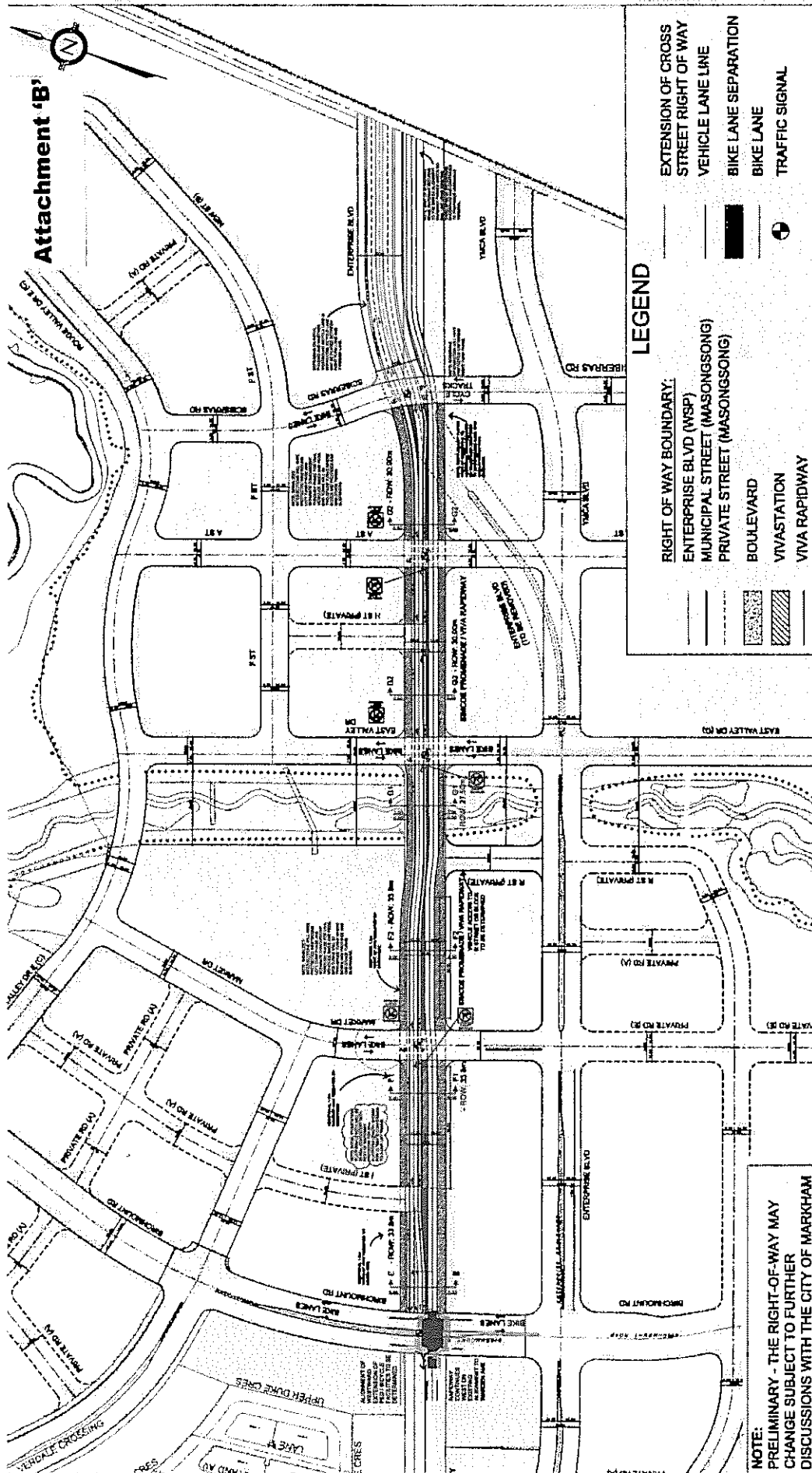
Attachment A: - VIVA Rapidway Next Phase H3.4 Project location

Attachment B: - Civic Mall/Simcoe Promenade Plans and Cross Sections



# Transit Rapidway on Municipal R.O.W. or City Owned Land

-  H 3.4
-  Under Construction
-  Scheduled Completion Q4 2014
-  Other Parts of Transit Route
-  Transit Route on Municipal R.O.W. or City Owned Land



Source: 0002MESP-Concept\_22Mar12.dwg received on March 27, 2012 from Masonsong Engineering, Ltd.

Revised - Version 4 - April 1, 2014

Scale: 1:1200

Figure 1

Preferred Option: Viva and Vehicular Lane in Same Right-of-Way (Long-Term)  
Downtown Markham Road Network Viva Rapidway Preferred Option Design

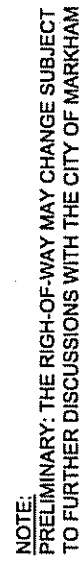
**DRAFT**



Drawn: V.M.  
Checked: J.L.  
Review Date: 04/01/2014



## CROSS SECTION E



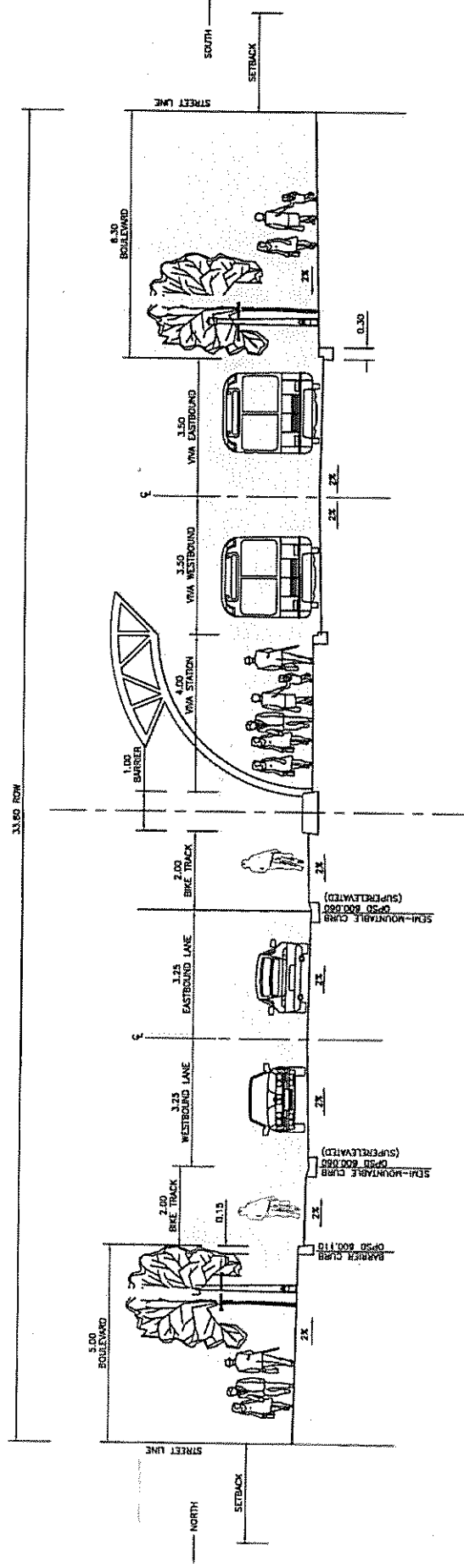
**Source: WSP & City of Markham**

**Figure 2**  
**Cross Section E**  
**Based on New Request from City of Markham**  
**Downtown Markham Road Network Viva Rapid**

**DRAFT**

t3f-25551fig14-03-28Cross-sections.dwg\_CrossSec E

# Attachment 'B'



CROSS SECTION F1

NOTE:  
PRELIMINARY: THE RIGHT-OF-WAY MAY CHANGE SUBJECT  
TO FURTHER DISCUSSIONS WITH THE CITY OF MARKHAM

Sources: WSP & City of Markham

Scale: 1:100

Figure 3

Cross Section F1  
Based on New Request from City of Markham  
Downtown Markham Road Network Viva Rapidway Preferred Option Design

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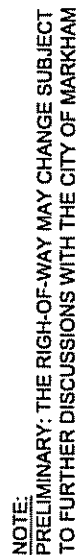


131-25551fig14-03-28Cross-sections.dwg\_CrossSec F1

Revision Date: 2014-03-25

Revised: 2014-03-25  
Project: 131-25551  
Project Date: 2014-03-25

## CROSS SECTION F2



Scale: 1:100

**Sources:** WSP & City of Markham

**Figure 4**

Cross Section F2

Based on New Request from City of Markham

## Downtown Markham Road Network Viva Rapidway Preferred Option Design

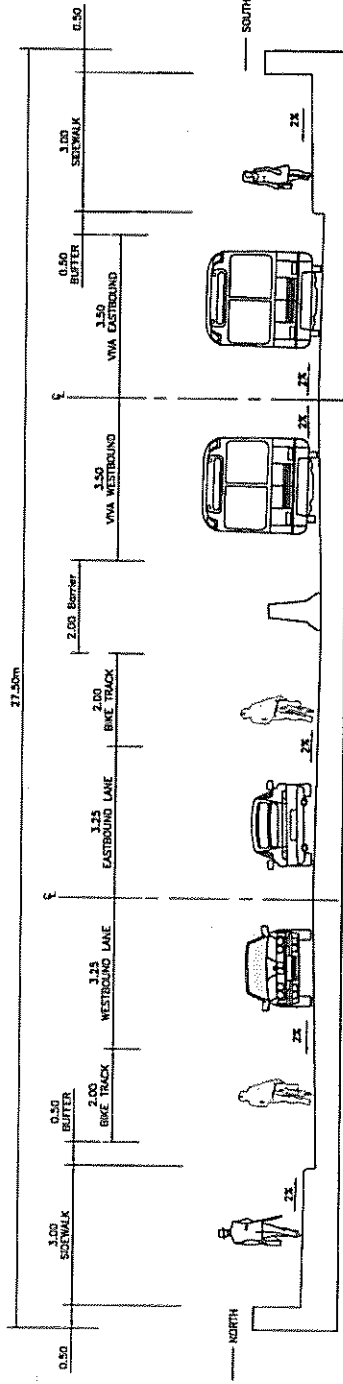
21-2555fig14-03-28Cross-sections.dwg\_CrossSec F2

Revision Date: 2014-03-25      Approved: [Signature] and By: [Signature]      Pwd Date: [Signature]

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# Attachment 'B'



TRIBUTARY #4 BRIDGE CROSS-SECTION WITH BICYCLE LANES

NOTE:  
PRELIMINARY: THE RIGHT-OF-WAY MAY CHANGE SUBJECT  
TO FURTHER DISCUSSIONS WITH THE CITY OF MARKHAM

Scale: 1:100

Source: WSP & City of Markham

Figure 5

Cross Section G1

Tributary 4 Crossing Cross-section

Downtown Markham Road Network Viva Rapidway Preferred Option Design

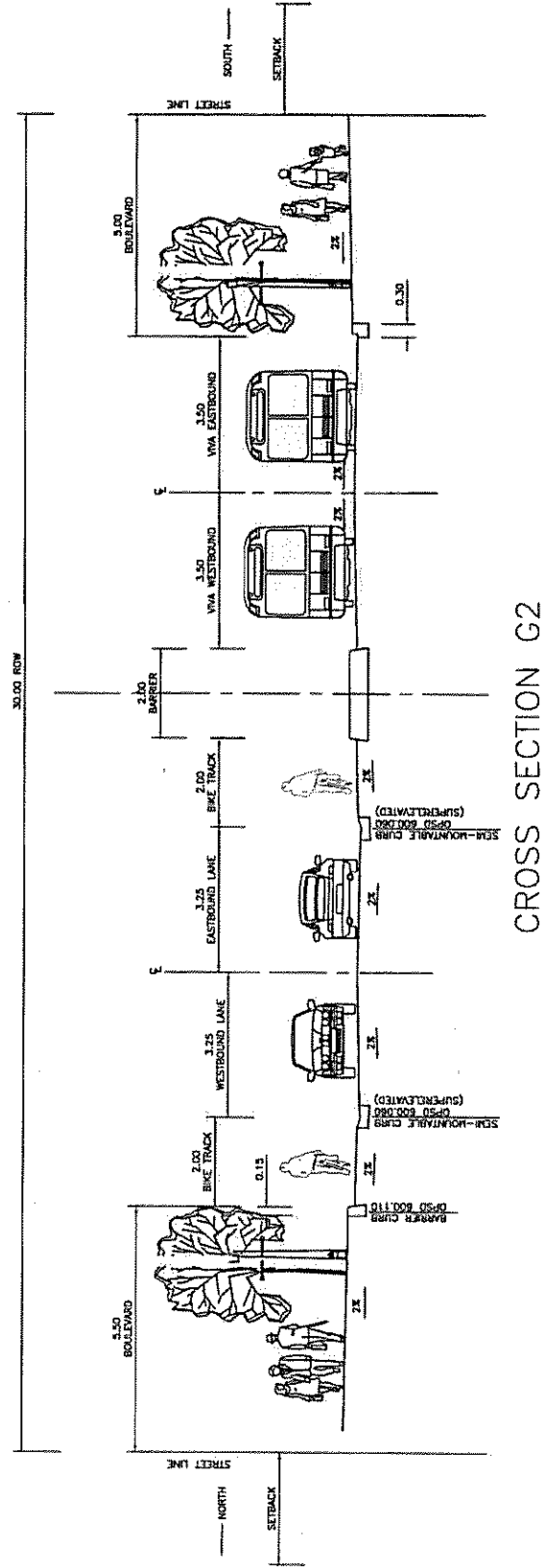
131-25551fig14-03-26Cross-sections.dwg\_Cross Sec G1



**DRAFT**

Revision Date: 2014-03-25 Modified: 2014-03-25 By: [signature] Plot Date: [signature]

# Attachment 'B'



NOTE:  
PRELIMINARY: THE RIGHT-OF-WAY MAY CHANGE SUBJECT  
TO FURTHER DISCUSSIONS WITH THE CITY OF MARKHAM

Source: WSP & City of Markham

Scale: 1:100

Figure 6

Cross Section G2  
Based on New Request from City of Markham  
Downtown Markham Road Network Viva Rapidway Preferred Option Design

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131-25551fig 14-03-26Cross-sections.dwg\_CrossSec G2

Revision Date: 2014-03-25

Markham Road Network Viva Rapidway Preferred Option Design