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### **SUBWAY EXTENSIONS MONTHLY REPORT**

#### **May 2009**

**The Rapid Transit Public/Private Partnership Steering Committee recommends the adoption of the recommendation contained in the following report dated April 30, 2009, from the Vice President, York Region Rapid Transit Corporation.**

#### **1. RECOMMENDATION**

It is recommended that:

1. Council receive this report for information.

#### **2. PURPOSE**

This report updates the Yonge and Spadina subway extension activities during the months of March and April 2009.

#### **3. BACKGROUND**

The Spadina Subway team is fully engaged as part of the Toronto York Spadina Subway Extension (TYSSE) project team. The preliminary design and engineering efforts are underway for each of the three stations in York Region.

#### **4. ANALYSIS AND OPTIONS**

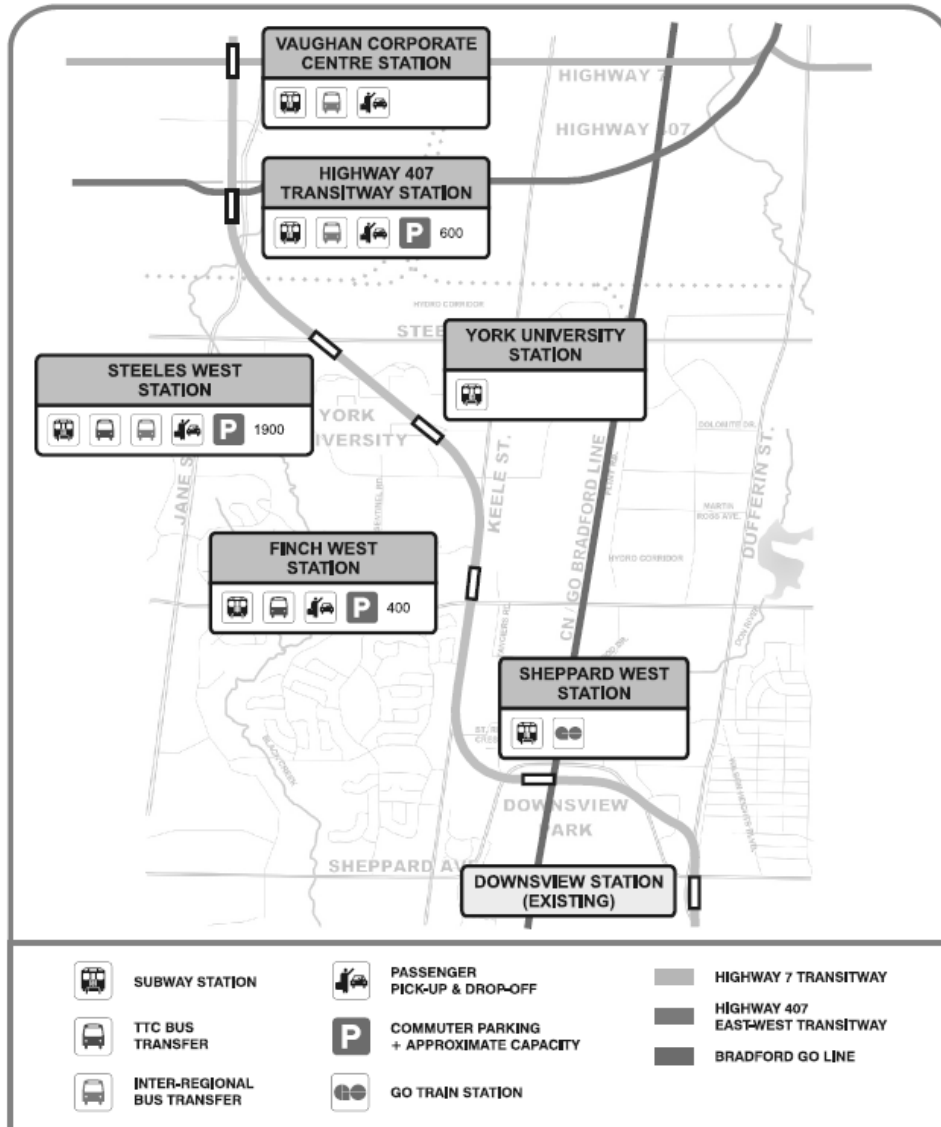
##### **4.1 SPADINA SUBWAY**

##### **Progress Update**

**The Spadina Subway Extension project continues on time and on budget**

The latest project report from the TTC for February, 2009, indicates that the Spadina subway project is proceeding on time and on budget. However, it should be noted that there are a number of scope and budget pressures that have been identified and have recently been presented to the Executive Task Force (ETF) in May.

The Yonge Subway team has completed the technical study for the extension of the Yonge Subway from Finch Avenue to Highway 7 and filed the Environmental Project Report. The public review period has been completed with all comments addressed.



## Tunnels

**The tunnel design and the procurement of Tunnel Boring Machines are progressing**

- The Executive Task Force (ETF) has approved the purchase of an additional Tunnel Boring Machine (TBM). This results in a purchase of 4 TBM's, rather than 3, as was originally planned. The additional capital cost is approximately \$8.5 million and is expected to be offset by savings of approximately \$13.4 million associated with a shortened construction schedule.

- The ETF has approved an increase in tunnel size from 5200mm to 5400mm. The increase reflects current National Fire Protection standards, which have changed since the construction of the Sheppard Subway.
- Two TBM suppliers are preparing bids to provide the four TBM's. Bid submissions are expected by the end of May.
- Tunnel design is progressing with a preliminary design (30%) submission expected by the end of May.

## **Stations**

### **The station design teams are continuing to work on the conceptual designs of the subway stations and bus terminals**

York Region Rapid Transit Corporation staff is working with the station design teams on the surface facilities and transit-oriented development integration in accordance with the project schedules and will continue to report back on the findings of this work at future Committee meetings.

The station designers for each of the York Region stations are as follows:

- Vaughan Corporate Centre Terminal Station – ARUP Canada.
- Highway 407 Station – AECOM (formerly Earth Tech Canada).
- Steeles West Station - The Spadina Group Associates (TSGA) a Joint Venture including Stevens Group Architects, Lea Consulting and Halsall Associates. ALSOP Architects are the design architects.

**Updates with respect to each of the subway stations within York Region are summarized as follows:**

### **Two primary options are being finalized**

The Vaughan Corporate Centre (VCC) design team that has been engaged to develop the station concept has identified a need to have additional up-front consultation with stakeholders and the City of Vaughan prior to developing a preliminary station concept. The VCC Station is a terminal station and, as such, will need to address the design and delivery of the surface facilities in the context of an evolving city centre Official Plan review by the City. Before putting pen to paper, the design team has been engaged in reviewing bus terminal and passenger pick-up and drop-off configurations, including on and off street as well as underground alternatives, in order to identify a preferred arrangement that will integrate with the City's vision for its new downtown.

**Highway 407 Station conceptual design report has been developed and submitted for comment**

The 407 Station design team developed two station alternatives for review by the subway team and subsequent consultation with the 407 Transitway EA consultants. The major difference between the two concepts is the degree to which the subway and bus terminals are integrated with the future 407 Transitway. Through preliminary stakeholder discussions, a preferred direction to maximize integration was identified. However, it is recognized that providing increased integration requires additional pre-build costs for the 407 Transitway which need to be funded by others. The preferred concept including any necessary additional funding strategies will be brought forward to the next Committee meeting for review and comment. The preliminary design for 407 Station is planned to be 30% complete by the summer.

**Steeles West Station conceptual design is being modified**

The Steeles West Station has been a very complicated design and engineering exercise as the station cuts through lands owned by York University and York Region at an acute angle and due to the accommodation of an additional platform to permit short-turning and train storage. This resulted in a 40 metre wide station box, which is wider than the traditional line station. The additional station width represented a particular challenge to the integration of aboveground facilities, especially transit-oriented development, where the increased spans and diagonal alignment impact building layout and efficiency.

Prior to engaging the station consultant team, a preliminary study of various alternatives for bus terminal and passenger pick-up and drop-off (PPUDO) configurations and transit-oriented development integration was undertaken. The findings of the study recommended splitting the bus terminals to the north and south of Steeles Avenue and keeping the PPUDO facility on the Hydro lands. This recommendation was endorsed by the project team and was provided to the design team to guide the station design effort.

Preliminary station design concepts based on the additional platform, have been discussed at a high level between the station designers and Toronto-York Spadina Subway Extension and York Region Rapid Transit Corporation staff. The station designers revisited their preliminary concepts based on input received and staff will update committee on the outcome of this analysis.

In April, TTC reviewed the optimal spacing and location of the triple track structure and confirmed that it would no longer be required at Steeles West Station. This change eliminates many of the complexities of over build over the station box to accommodate the bus terminal and transit-oriented development facilities.

Staff has retained Page and Steele to assist in the review of transit-oriented development on the Steeles West site including commenting on the ability of the Regional site to accommodate typical mixed use office and residential floor plates to fully realize the

site's development potential. The results of the preliminary design efforts will be brought forward for review by Committee at a future meeting.

### **Third Party Issues**

#### **The delivery of the Steeles West Station impacts a number of adjacent land owners**

The subway alignment and Steeles West Station development impacts a number of land owners in the vicinity. To address the impacts and develop mitigation strategies, the subway team embarked on a number of focussed workshops with affected land owners and agencies, including Hydro One/ORC, Toronto Region Conservation Authority, CN and United Parcel Service to resolve alignment and other issues. The workshops have been extremely helpful and productive in identifying issues and concerns, as well as potential mitigation alternatives. The mitigation strategies are nearing completion and are being put forward for endorsement to the various owners and agencies.

#### **Hydro One has approved, in principle, a number of project elements which have considerably narrowed project risks**

Hydro One have approved, in principle, a proposed alternative alignment to address concerns regarding Hydro Tower 158. The shift moves the tunnels from beneath the Hydro tower and moves Highway 407 Station further into Black Creek (this impact is discussed in the Toronto Region Conservation Authority section).

Hydro One are prepared to approve, in principle, a portion of the east-west road to be located within their property on an interim basis; however, they have requested that an analysis be undertaken to assess whether there is merit in burying the southerly most hydro line. This would allow the ultimate east-west road alignment to be built without requiring a future shift to the UPS property. This analysis is currently being completed and will be reported to the Committee at a future meeting.

Hydro One has approved, in principle, for the commuter parking, storm water management facilities, passenger pick-up and drop-off, and ancillary buildings to be located within their lands. A range of mitigation strategies will need to be prepared for Hydro's consideration once station design concepts are further advanced.

#### **A strategy to address Toronto Region Conservation Authority comments is underway**

TRCA have indicated that they are reserving any stage one approval until their larger watershed issues are addressed. The subway project team is working together with the 407 Transitway project team to develop a strategy to address this concern. The objective is to provide an assessment for all of the lands under control of the two projects (Spadina Subway and 407 Transitway).

### **Canadian National (CN) Railway**

Additional geotechnical information has been provided to CN to address their concerns from the January workshops. Stage one approval has not yet been received.

### **Work continues to implement the United Parcel Service memorandum of understanding**

A preliminary staging plan was developed which indicated the various steps to be taken by the project to relocate UPS parking facilities from the lands east of the addition onto the Damiani lands. This included the sequencing of construction on the existing UPS site to achieve the transfer of the UPS parcel to the Region in exchange for the Damiani and storm water pond lands owned by the City of Vaughan. The proposed relocation of the triple track structure away from the Steeles West Station provides some schedule relief for some of the early aspects of the staging plan; however, the complexity of the staging plan and the cost sharing arrangements that need to be in place in order to realize the various elements needs to be addressed shortly. The status of these plans will be reported at a future Committee meeting.

## **4.2 YONGE SUBWAY**

### **Progress Update**

#### **The Environmental Project Report received unconditional approval of the Ministry of Environment on April 6<sup>th</sup>**

Following the public review period, the Ministry of the Environment in consultation with staff gave due consideration to the objections/comments to the Environmental Project Report and staff responses and on April 6<sup>th</sup>, 2009, gave notice allowing the Regional Municipality of York, the York Region Rapid Transit Corporation, the City of Toronto and the TTC “to proceed with the Yonge Subway Extension from Finch Avenue to the Richmond Hill Centre in accordance with the Environmental Project Report.” Funding for the capital construction of the project remains outstanding.

#### **Work continues with Metrolinx to develop the Project Definition Report and Benefits Case Analysis for the May Metrolinx Board meeting**

The Benefits Case Analysis (BCA), originally scheduled for April, is tentatively scheduled for the new Metrolinx board meeting in May. The delay in the meeting is due largely to the changes arising from the recently introduced legislation regarding Metrolinx and new Board membership for Metrolinx announced by the Province in April.

## **4.3 COMMUNICATIONS AND PUBLIC ENGAGEMENT**

### **Spadina Subway Extension**

**The first of three newsletters to be published in 2009 was printed and issued in early May**

The first public newsletter about the Spadina Subway extension project was issued in early May. This newsletter was circulated on a broad basis by e-mail and printed versions are available to municipal offices, elected officials and communications personnel.

### **Yonge Subway Extension**

**Staff issued the Statement of Completion on May 1, concluding the Transit Project Assessment Process**

In accordance with the requirements under the Transit Project Assessment Process, staff issued a Statement of Completion on May 1 to the Ministry of the Environment and to the public via a website posting. In addition, staff issued a news release, social media posting and e-mail to the main distribution list of over 4,000 people.

**An abridged version of the Environmental Project Report has been prepared for easy, quick reference**

The nearly 2,000-page Environmental Project Report has been condensed to approximately 40 pages for media, students, residents, online readers and any others who wish to access a high-level, plain language summary of the project. Printed versions will be available to municipal offices, elected officials and communications personnel.

**The joint newsletter for the Uplands community was substituted with a community meeting to be held after capital funding is achieved**

Due to the content-heavy newsletter and its timeliness, staff committed to hold a public meeting in the Uplands area as soon as a decision to fund the project is achieved. There was a concern that many people would not read through the newsletter and much of the detail would be missed. A public meeting would review the main points, provide a timely update on the project status and enable residents to ask questions if something wasn't clearly understood.

**The TTC and York Region Rapid Transit Corporation have submitted a comprehensive preliminary engineering work programme to Metrolinx for funding approval**

Consistent with Council's April authority, the TTC and YRRTC have jointly completed and filed with Metrolinx a funding request to undertake preliminary engineering on the

Yonge Subway. Staff will report back on the timing for the approval of this submission verbally at the May meeting,

## 5. FINANCIAL IMPLICATIONS

As indicated in Table 1, a total of \$15.3 million has been expended on procurement contracts for the Yonge and Spadina subway projects. These expenditures are not limited to 2009 activity and relate to work programs that are currently ongoing.

**Table 1**  
Status of Open Procurement Contracts

| Awarded to                    | Purpose                                             | Contract Award       | Spent to Date       | Remaining Amount     |
|-------------------------------|-----------------------------------------------------|----------------------|---------------------|----------------------|
| York Consortium 2002          | Yonge Subway Environmental Project Report           | \$1,293,000          | \$954,021           | \$338,979            |
| McCormick, Rankin Corporation | Yonge Subway Environmental Project Report           | \$1,500,000          | \$1,324,557         | \$175,443            |
| City of Toronto               | York Share of Spadina Subway                        | \$351,400,000        | \$2,706,042         | \$348,693,958        |
| City of Toronto               | Spadina Subway Capacity buy-in                      | \$29,980,000         | \$10,000,000        | \$19,980,000         |
| UPS                           | Reimbursement of costs to reinforce slab for subway | \$230,730            | \$0                 | \$230,730            |
| York Consortium 2002          | Spadina Interim Work Program                        | \$300,000            | \$291,083           | \$8,917              |
| York Consortium 2002          | Transit Oriented Development                        | \$200,000            | \$0                 | \$200,000            |
|                               |                                                     | <b>\$384,903,730</b> | <b>\$15,275,703</b> | <b>\$369,628,027</b> |

Table 2 provides an accounting of expenditures year-to-date, in comparison to the 2009 Capital Budget. The capital budget for 2009 includes any carry-forward monies approved, but not spent, prior to 2009. Only projects for which work is currently ongoing are listed in Table 2.



**Table 2**  
Expenditures Year-to-Date in Relation to 2009 Capital Budget

| Description                          | ETD - Current Period | 2009 Budget          |
|--------------------------------------|----------------------|----------------------|
| Yonge Subway                         | \$145,665            | \$37,109,000         |
| Spadina Subway - YR Expenses         | \$5,790              | \$1,000,000          |
| Spadina Subway - Payments to TTC     | \$2,706,042          | \$69,344,000         |
| Spadina Subway - Payments to Toronto | \$10,000,000         | \$10,000,000         |
|                                      | <b>\$12,857,497</b>  | <b>\$117,453,000</b> |

Year to date, York Region Rapid Transit Corporation has expended \$12.9 million of a total \$117.5 million budget for subway-related activities.

## **6. LOCAL MUNICIPAL IMPACT**

The subway extensions are being closely coordinated with local planning, economic development and public works activities along their respective corridors.

## **7. CONCLUSION**

This report provides a comprehensive description of the activities of the York Region Rapid Transit Corporation during March and April 2009 relating to the Yonge and Spadina subway extensions.

For additional information, please contact Mary-Frances Turner, Vice-President, York Region Rapid Transit Corporation at (905) 886-6767 ext. 2226.

The Senior Management Group has reviewed this report.