

TORONTO TRANSIT COMMISSION REPORT NO.

MEETING DATE: March 1, 2011

SUBJECT: PROCUREMENT AUTHORIZATION AMENDMENT
TORONTO-YORK SPADINA SUBWAY EXTENSION PROJECT
CONTRACT NO. A85-75B – FINCH WEST STATION
CONTRACT AMENDMENT NO. 8

ACTION ITEM

RECOMMENDATION

It is recommended that the Commission authorize Contract Amendment No. 8 to The Spadina Group Associates (TSGA), in the amount of \$4,529,245, increasing the total upset limit amount to \$23,629,260.31. This will provide for complete design services from preliminary to design support during construction for Finch West Station and associated works, which it is estimated will cost approximately \$135 million.

FUNDING

Sufficient funds for this expenditure are included in the Toronto-York Spadina Subway Extension Project, as set out on pages 1447 to 1449R of the TTC 2011-2015 Capital Program (Category - Expansion) which was approved by the Commission on January 12, 2011.

BACKGROUND

The TTC is implementing the design and construction of an underground subway line from the existing Downsview Station on the Spadina line to the proposed Vaughan Corporate Centre Station located in the City of Vaughan, Region of York. The 8.6 km extension includes six new subway stations, one of which is the Finch West Station.

The Toronto-York Spadina Subway Extension (TYSSE) project is being funded by the Federal Government, the Province of Ontario, the Regional Municipality of York and the City of Toronto. The TTC is managing the design and construction of the YYSSE project and will own and operate the subway extension.

At the Commission Meeting of October 23, 2008, the Commission approved YYSSE's recommendation to award Contract A85-75B for the design of Finch West Station to the design team lead by Stevens Group Architects, in the upset limit amount of \$12,000,000. The fees were increased between January and May 2009 by \$410,955.74 for design of

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the new fire hall. The fee was subsequently increased by the Commission at its meeting on June 2, 2010 for a further increase of \$6,600,000, bringing the total authorized to \$19,000,000. The fee was again increased February 2011 to \$19,100,015.31 by \$100,015.31, to design a future Finch West LRT Pedestrian Tunnel Link which is being funded by Metrolinx and will be cost recovered from the Project.

Public presentation of the station concept took place on March 30, 2010, April 28, 2010 and November 25, 2010 generally with positive feedback.

Contract A85-75B details are as follows:

Original Contract Upset Limit Amount	\$12,000,000.00
Previous POA (Detailed design and construction documentation of the new fire hall)	\$410,955.74
Previous Amendment (Detailed design and construction documentation of various additional design activities detailed in the June 2, 2010 Commission Report)	\$6,589,044.26
Finch West LRT Pedestrian Tunnel Link (funded by Metrolinx)	<u>\$100,015.31</u>
Current Total Contract Amount	\$19,100,015.31
This Contract Amendment	<u>\$ 4,529,245.00</u>
Total Revised Upset Limit Amount (including HST):	\$23,629,260.31

To date there has been no expenditure beyond the previously authorized \$19,100,015.31.

DISCUSSION

Subsequent to the amendment in the June 2, 2010 Commission Report, a number of further scope changes have materialized. This has necessitated additional design and redesign work, including provision for future work, the extent of which is summarized below. Similarly the scope of design services during construction has also increased to address changes in the advance contract work currently under construction, and changes to the Finch West Station design which is currently out for tender. Also, the incremental cost of HST on all previously approved fees which have been expended since July 1, 2010 and need to be added to the previous amendment.

1. HST Adjustment

The incremental cost of HST applied to the portion of the \$19,100,000 design fee used after July 1, 2010, is estimated to be \$540,000. However, it should be noted that

\$421,200 (approximately 78%) will be rebatable by the Province. It should be further noted that the remaining costs also include HST in amount of \$447,435, of which \$349,000 will be reimbursed. In addition, design fees in amount of \$100,000 are reimbursable by Metrolinx.

2. Design revisions to bus terminal to account for delay in the Finch LRT (\$1,450,000 including HST)

The Finch West Station design was developed on the basis that the Finch LRT would be operational by the time the TYSSE subway opens in late 2015. The subsequent announcement in spring 2010 to delay implementation of the Finch LRT required that buses continue to operate on Finch Avenue and stop at the Finch West Station. Considerable evaluation of options were undertaken to utilize currently available space for bus/station concept without increasing property requirements and schedule impacts.

This was finalized in late 2010. The previously designed four-bay bus platform had to be expanded to accommodate the Finch buses. As the detailed design of the original bus terminal was already well advanced, this required extensive design change, including expansion of the bus terminal to accommodate two additional bus bays; reconfiguration of the bus platform area; an additional fare line; a queue jump lane and bus stops along the east side of Keele Street; and, extension of Four Winds Drive to connect with Keele Street, including signalization of the Keele/Four Winds intersection.

3. Facilitation of By-law 72 Exemption (\$329,762 including HST)

The Public Works and Infrastructure Committee, at its meeting on June 15, 2010, recommended the adoption of a report recommending an amendment to By-Law No. 72 to permit the transportation of flammable liquids on Finch Avenue, over the proposed Finch LRT Station. In this report, there was a recommendation that City Council consider the appropriateness of a similar exemption for Keele Street to permit fuel tankers to travel over a portion of the Spadina Subway Extension. This was approved by the Commission at its July 14, 2010 meeting and subsequently by City Council at its August 25-26, 2010.

This avoided significant cost for injurious affection, the need to provide internal road circulation and associated improvements to the Shell and Suncor tank farms if fuel tankers were to take an alternate to their normal routing along Keele Street. This, however, required redesign of the Murray Ross Parkway and Tangiers Road alignment and intersections to accommodate the revised tanker truck traffic routing on Keele Street.

4. Additional design support services during construction (\$950,000 including HST)

The contractor responsible for the advance utilities/road works requires a larger than normal amount of design support dealing with discrepancies in existing underground

utilities, and changes to the road and road detour designs. This requires extensive review of contract changes, resequencing of construction activities, review of shop drawings, and approval of day to day traffic management arrangements.

Additional design support will also be required to account for the expanded bus terminal and streets, particularly as some of this work will be added to the contract by means of change orders. Additional design support services were provided during construction of the new fire hall to design a new sewer along Murray Ross Parkway to service the fire hall. Also included is an allowance to coordinate construction sequencing and design details with the tunnelling contracts at the north and south limits of the Finch West Station construction contract.

5. Design updates for traffic management plan (\$687,351 including HST)

The traffic management area encompasses a distance of 1.3km along Keele Street and includes four road intersections. This design consultant is responsible for coordinating and revising the area traffic management plan encompassing construction of Finch West Station and three adjacent construction contracts. The complexity and frequency of adjustment is well in excess of what was originally envisioned. As each of these contracts progresses through its own construction stages, the traffic management plan will require adjustment for every stage of each contract. This will require lane shifts, adjustments to intersections and traffic lights, and detour routes throughout the four year construction period.

An additional traffic management plan was required in February 2011 to provide a detour route to circumvent a three week closure of Murray Ross Parkway west of Keele Street. This was originally routed along Tangiers Road, but completion of the Tangiers Road extension to Murray Ross has been delayed until the spring due to delays to the advance contract for the Tangiers Road construction.

6. Additional design requirements for ventilation, fire fighters and elevators (\$312,921 including HST)

Additional design work included the following items:

- Optimization of the fire ventilation system to reduce capital costs;
- Implementation of fire department requests for ventilating fire fighters' access; and
- Provision of air conditioner redundancy to increase service availability of elevators.

7. Scope changes required to address City requirements (\$259,211 including HST)

Extensive design effort is required to address changes in the Site Plan Application and design approvals process with the City of Toronto, and other stakeholders, to account for changes in the bus terminal design. Also, it includes design changes following The City's review of bike lanes in the hydro corridor and along Tangiers Road. This item

also addresses design of secure bike storage in the station, for which the City is to reimburse the Commission.

The total authorization being requested as an upset limit, including design support during construction, is \$23,629,260.31. Work will only proceed on the basis of work plans approved by staff.

The Contract Amendment is being requested at this time to ensure that sufficient authorization is in place for the design work and design support during construction and avoid delaying completion of the work and late delivery of the Project.

JUSTIFICATION

The Contract Amendment is required to pay for the additional engineering costs associated with the increased project work to avoid delaying completion of the work and late delivery of the Project.

February 17, 2011
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