

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** December 17, 2008

**SUBJECT:** PROCUREMENT AUTHORIZATION  
FIRE VENTILATION CONSULTANT  
TORONTO-YORK SPADINA SUBWAY EXTENSION PROJECT  
CONTRACT A85-81

## **ACTION ITEM**

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### **RECOMMENDATION**

It is recommended that the Commission authorize the award of Contract A85-81 in the upset limit amount of \$3,000,000 to Earth Tech Canada Inc., doing business as AECOM (Earth Tech), for the conceptual design services related to fire ventilation for the Toronto-York Spadina Subway Extension, for a period of three years.

### **FUNDING**

Sufficient funds for this expenditure are included in the Toronto-York Spadina Subway Extension Project, as set out on pages 1479 to 1482 of the TTC 2009-2013 Capital Program (Category – Expansion) which was approved by the Commission on August 27, 2008.

### **BACKGROUND**

The TTC is planning the design and construction of an underground subway line extension from the existing Downsview Station on the Spadina Line located in the City of Toronto, to the proposed Vaughan Corporate Centre located in the City of Vaughan, Region of York. The new 8.6 km long line will include 2 twin tunnels and associated cut and cover sections.

The purpose of this Contract is to analyze and establish functional fire ventilation design requirements for this subway expansion, using computer modelling techniques including Subway Environment Simulation (SES) Fire Modelling, SES Environmental Modelling, Noise Modelling, Computational Fluid Dynamics (CFD) Modelling and Dispersion Modelling, which will be administered on a Work Plan Release Process basis. Subsequent detailed design work will be performed by the station designers.

**DISCUSSION**

A Request for Proposals was publicly advertised on the Commission's website as of October 2, 2008. Six companies requested copies of the proposal documents, out of which two submitted a proposal by the closing date of November 6, 2008 (as summarized in Appendix A). The proposal validity shall expire on February 4, 2009.

All proposals received were reviewed and rated by the evaluation team based on the criteria listed in Appendix A. The recommendation for award is based on the highest rated qualified proponent with reasonable pricing.

The proposal submitted by Earth Tech was considered superior in all aspects of the proposal requirement over the other proposal submitted and Earth Tech is satisfactorily performing work of this nature for the Commission currently. Earth Tech did not state any exceptions or qualifications and their submission is considered acceptable.

Following the determination of the final ranking, the pricing envelope of the highest rated proponent considered qualified to perform the work was opened and evaluated.

Upon review of the confidential pricing information, staff considered pricing from Earth Tech as fair and reasonable based on the experience and qualifications of the project team and compared to previous contracts.

**JUSTIFICATION**

The award of Contract A85-81 to Earth Tech will enable the functional design of a fire ventilation system for the Spadina Line Extension and validate the fire ventilation design in conjunction with the design of the six associated rapid transit stations for compliance with the Ontario Building Code Section 3.13 and NFPA 130.

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Attachment: Appendix A

## APPENDIX A

### FIRE VENTILATION CONSULTANT TORONTO-YORK SPADINA SUBWAY EXTENSION PROJECT CONTRACT A85-81

#### LIST OF PROPONENTS (in alphabetical order)

Arup Canada Inc.

Earth Tech Canada Inc., doing business as AECOM\*

\*Recommended Company

#### PROPOSAL EVALUATION CRITERIA

- A. CORPORATE QUALIFICATIONS/EXPERIENCE
  - a. Numbers of Years in Business
  - b. Relevant Corporate Experience
  - c. Depth of Available Relevant Resources at Proponent's Office
  
- B. PROJECT STAFF QUALIFICATIONS/EXPERIENCE
  - a. Project Manager
    - i. Numbers of Years of Direct Experience
    - ii. Work of Similar Size and Nature
    - iii. Technical Qualifications
  - b. CFD Specialist
    - i. Numbers of Years of Direct Experience
    - ii. Work of Similar Size and Nature
    - iii. Technical Qualifications
  - c. SES Specialist
    - i. Numbers of Years of Direct Experience
    - ii. Work of Similar Size and Nature
    - iii. Technical Qualifications
  - d. Acoustic Specialist
    - i. Numbers of Years of Direct Experience
    - ii. Work of Similar Size and Nature
    - iii. Technical Qualifications