# **Information Report - Sheppard And York Mills Crossover, Contracted Services**

Meeting Date: December 13, 2000

Subject: Information Report - Sheppard And York Mills Crossover, Contracted Services

#### Recommendation

It is recommended that the Commission receive this report regarding the procurement of a contractor for the removal of track ballast at Sheppard and York Mills crossover due to the storm/flood on May 12 and 13, 2000, for information.

## **Funding**

No funds were budgeted for this expenditure in 2000. Recovery of these costs from the Commission's insurers will be pursued.

## **Background**

On May 12 and 13, 2000, the City of Toronto was exposed to intense rain and lightning storms causing considerable problems and damage to a number of Commission assets. At approximately 10:00 p.m. on May 12, 2000, intense flooding from the cut and cover portion of the Sheppard Subway construction at Yonge-Sheppard Station resulted in a partial shutdown of the Yonge subway. The resultant damage included failed switch and train stop machines, blocked drainage systems and fouled track ballast.

The track bed between Sheppard and York Mills Station in both directions was filled with approximately 2 to 3 inches of mud, silt and fine material. The drainage ditch in the middle of the invert was completely filled with the material. The mud that flowed in from the Sheppard Construction site affected the electrical isolation between the running rails, thereby causing the signals to fail. The ballast contained in the crossovers at Sheppard and York Mills was fouled by the silt material that was a by-product of flooding at these locations. Ballast in these areas cannot function properly as it has hardened into a solid mass preventing the proper distribution of train loads, it cannot drain properly and the electrical resistance is extremely low, thereby jeopardizing the operation of the signal system.

To facilitate the removal of the fouled track ballast at these locations it was necessary to retain the services of an outside contractor by utilizing a high pressure vacuum unit capable of lifting track ballast approximately seventy (70) feet vertically and approximately three hundred (300) feet along track level.

#### Discussion

The scope of work associated with the replacement of fouled ballast at Sheppard and York Mills crossovers includes the removal of approximately 20,000 cubic feet of track ballast, clay and peat based soils.

Due to the operational constraints associated with this work, staff approached a number of firms to determine if they were capable of undertaking this project. Tests were requested to verify that the vacuum systems used by the various firms were capable of lifting the ballast to a collection tank parked at street level.

Qualifying testing revealed that Aquablast Corporation was the only firm capable of performing this task. Aquablast Corporation reviewed the site and as per the Commission's specification have offered a quotation. Staff reviewed their hourly rates and methodology and find them acceptable.

Approval was required before the start of the winter season and freezing conditions, which could prevent the work from being performed. Subsequently, staff issued a Purchase Order in the upset limit amount of \$200,000 to Aquablast Corporation with the approval of the Chair, Commissioner, and Chief General Manager as required for unbudgeted expenditures as specified in the TTC Corporate Policy under Authorization for Expenditures.

### **Justification**

It was necessary to proceed with the foregoing procurement in order to ensure the timely completion of the removal of ballast at Sheppard and York Mills crossover and minimize costs.

November 13, 2000

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