

Request for Decision

Tom Davies Square Elevator Project Update

Presented To:	City Council
Presented:	Tuesday, Mar 07, 2017
Report Date	Wednesday, Feb 22, 2017
Type:	Tenders and Requests for Proposals

Resolution

THAT the City of Greater Sudbury accept the report dated February 22, 2017 from the General Manager of Corporate Services entitled Tom Davies Square Elevator Project Update and select Option One (1), being to complete the interim repair work as outlined in the KJA Consultants feasibility study and re-tender the elevator project once additional funding is available.

Finance Implications

If Option 1 is approved, \$300,000 from the Elevator Capital project will be used to fund the repairs, leaving approximately \$1.3 million for the future capital upgrade to the elevators.

If Option 2 is approved, a contribution from the Tax Rate Stabilization Reserve of approximately \$965,000 would be required to complete the project. This will leave an uncommitted balance in this reserve of approximately \$3 million.

Signed By

Report Prepared By

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Capital Projects Co-ordinator
Digitally Signed Feb 22, 17

Division Review

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Recommended by the Department

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Background

In April 2010, the Technical Safety & Standards Association (TSSA) alerted owners and operators about upcoming changes affecting existing hydraulic elevators that have buried single bottom cylinders such as the two existing elevators in operation within 200 Brady Street. As a result of the new governing specifications implemented by TSSA, CGS is mandated to replace the two aforementioned existing hydraulic cylinder elevators.

KJA Consultants Inc. (KJA) conducted a feasibility study outlining the mechanical requirements to execute the elevator conversion from two double-bottom cylinder type to machine-room-less type elevators. The feasibility study documented elevator deficiencies such as the existing state of the elevator cylinders are not provided with a PVC liner (now required by Code on new hydraulic elevators).

The hydraulic piping and cylinders for both elevators are buried. The repair includes the installation of a

PVC casing which sleeves the double bottom cylinder. The PVC surrounding the entire cylinder acts as a barrier to protect against corrosion of the double-bottom cylinder along with added protection against environmental contamination.

In January 2014 Yallowega Belanger Architecture (YB) was commissioned to perform a feasibility study to build upon the previous submission provided by KJA. The YB report was used to incorporate the Ontario Building Code (OBC) and construction costs into the elevator replacement strategy. Five installation location options were addressed within the YB report. The final recommendation was to proceed with installation of new elevators in the existing elevator location.

In August 2014, J.L. Richards & Associates Limited (JLR) was retained as the Prime Consultant for the project. At the request of our consultant JLR, CGS pre-qualified elevator suppliers for the replacement of hydraulic elevators. Upon review and evaluation of the pre-qualification submissions, KONE Elevators and Thyssen-Krupp Elevators were successfully pre-qualified.

The installation of a machine-room-less elevator came into question in September 2015 due to the inadequacy of the existing structure to allow the new equipment to fit in the existing space. The requirement to structurally reinforce the roof to accept more than twice the existing loading requirements signified a substantial increase in construction costs.

In January 2016, JLR formally submitted a letter to CGS providing two design proposals:

1. Replace the existing hydraulic elevator with a machine-room-less traction elevator
2. Replace the existing hydraulic elevator with a new hydraulic elevator.

In June 2016 JLR provided a revised Cost Estimate to confirm a project estimate of \$1,583,900 for a hydraulic elevator system (option 2).

As a result of only receiving two prequalification proposals, CGS reposted pre-qualification in an attempt obtain more interest from the industry by clarifying the project requirements. Magnum Constructors was the only General Contractor who achieved pre-qualification.

The Tender closed on December 15, 2016 for a sum of \$2,344,550 (including 1.76% non-refundable HST). The Bid irrevocability period expires on March 9, 2017. The variance to the estimate is \$760,650.

The Elevator Project has a number of impacts on Corporate Security. Currently the Tom Davies Square/ 199 Larch complex is well covered with more than 100 cameras in the two buildings and in the underground parking garage. The next important phase in the camera monitoring program will be the construction of a new Security Office with the space and privacy necessary for banks of monitors to allow for real time monitoring of an array of cameras. The new security office is planned to be constructed in the space behind the current elevator locations, which construction is aligned with the elevator replacement project.

The second impact of the elevator project on security lies with access control to upper levels of the building. Technology to allow for control of elevator destinations across various time periods and with access control restrictions that align to the security plan (as for example, no public access to upper level floors after business hours) will be incorporated into the new elevators when installed. In the interim, staff will explore options to upgrade the current elevator operating systems to read access cards or be programmed differently. Building Services staff will be working towards more formal plans for space redesign on each floor so as to allow for the installation of controlled access points on a floor-by-floor basis and will present the same to staff and Council at a future date.

Discussion

In consideration of the feasibility studies performed, CGS elevator and security requirements, available construction budgets and the existing state of this project; the following options are suggested for consideration:

Option 1

Perform the interim repair work outlined in the KJA feasibility study, and retender in the future once additional funding is provided. This interim repair work will cost in the range of \$300,000, funded from the current budget. This work entails the installation of plunger grippers and vinyl sleeves. These repairs would yield a short life expectancy extension for the elevators of about 3-4 years as most of the support equipment is still of original vintage, and has been discontinued long ago. Parts are extremely hard to source as the equipment is no longer manufactured.

Staff recommends this option as it provides the opportunity to allocate additional funding over a predetermined number of years to replace the 200 Brady Elevators with additional budget allotment to the project, while keeping the elevators in service until funding is provided.

Option 2

Provide additional funding from the Tax Rate Stabilization Reserve of \$965,000 (the variance, plus additional funding for contingency, plus additional consulting fees) to award the elevator replacement for a sum of \$2,304,000+HST prior to March 9, 2017.

Request for Council Direction

Additional funding is required for Option 2 to proceed. CGS must determine the extent of the concessions considered to be acceptable with respect to redesign requirements and consulting fees. Without extensive modifications to the design, the current budget is not sufficient to proceed.

Staff recommends canceling the current Bid and suspending Consultant services until additional funding is provided. Staff also recommends using a portion of the current budget (approximately \$300,000) to repair the elevators in accordance with the KJA inspection report recommendations.

The additional funding is to be requested in future budget deliberations, with the acknowledgement that this is still considered a high risk project that needs to be completed in due course.

Reference:

[Finance & Administration Committee February 10, 2015 - TDS Elevator Replacement Report](#)