

City of Richmond

Report to Committee

To:

General Purposes Committee

Date:

December 12, 2007

From:

Robert Gonzalez, P.Eng.

Director, Engineering

File:

10-6340-20-P.06402/Vol

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Re:

Additional Funding Required to complete Aztec Area Drainage Upgrades

Staff Recommendation

1. That funding of \$300,000 from the Drainage Improvement Reserve Fund be approved as the funding source for the "Aztec Area Drainage Upgrades" capital project.

2. That the 2008 Capital Budget via the Five Year Financial Plan (2008 – 2012) be amended for the new capital submission "Aztec Area Drainage Upgrades" with a total project budget of \$300,000.

Robert Gonzalez, P.Eng. Director, Engineering

(4150)

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ROUTED TO:	Concurrence	CONCURRENCE OF GENERAL MANAGER
Budgets Sewerage & Drainage	Y D N D	
REVIEWED BY TAG	YES NO	REVIEWED BY CAO YES NO

Staff Report

Origin

Contract T.3042 was awarded to B. Cusano Contracting Inc. on September 25, 2007 and is currently in the construction phase. Total funding approved by Council in the 2007 Capital program is \$1,400,000. Through the course of construction, a significant and unforeseen conflict between a Telus duct bank and the proposed storm sewer was identified.

The purpose of this report is to request Council authority to add a new capital project to the 2008 Capital Program in the amount of \$300,000 to fund this unanticipated additional scope.

Analysis

The City completed a drainage system capacity assessment of the Aztec area and identified that the storm sewers required upgrading. The scope of work for contract T.3042 includes the installation of 500 metres of 900mm diameter storm sewer and 500 metres of 200mm/300mm diameter water main on Dallyn Road and Cambie Road.

While the storm sewer was designed around the Telus duct bank in accordance with the Telus record information, the actual location varied materially. City staff have been investigating several options to address the impact of the conflict, including reducing the scope of storm sewer replacement and modelling the overall project drainage benefit with the reduced scope, as well as re-designing the storm sewer to avoid the conflict. Upon completing these investigations, the storm sewer model indicated that the overall drainage benefit would be severely impacted by altering the design as would be required and, in addition, the storm sewer could not be substantially re-directed due to the system's flat pipe grades.

To date, the contractor has completed the watermain installation and is currently installing the storm sewer on Dallyn Road and it is anticipated that they will be complete by the second week of January, 2008. After completing the work on Dallyn Road, the contractor is scheduled to commence the storm sewer installation on Cambie Road. This work cannot proceed until the conflict with the existing Telus utility duct bank has been resolved. Should this issue not be resolved, the contractor will likely hold the City liable for construction delays, and claim for lost profit due to reduced Contract scope of work. Completion of this work will provide direct benefit to the Aztec area that experienced flooding on December 2, 2007.

The cost associated to deal with the Telus duct bank conflict is estimated at \$300,000. Richmond, like other Cities in the Lower Mainland, currently does not have a Municipal Access Agreement with Telus to address conflicts and errors in telecom record drawings, and thus relocation costs are the City's responsibility. Richmond is, however, close to reaching agreement with Telus on a Municipal Access Agreement, which will be the first of its kind with a major utility company in the Lower Mainland. Staff will be reporting to Council over the next few months on this initiative.

Options for Consideration

- 1. Amend 2008 Capital Budget (Recommended) Under this option, a new project entitled "Aztec Area Drainage Upgrades" would be added to the 2008 capital program, and would be funded through the Drainage Improvement Reserve Fund.
- 2. Replace Project in 2008 Capital Program There is the opportunity to replace a project in the approved 2008 capital program with an "Aztec Area Drainage Upgrades" project. The project recommended by staff for replacement, should Council select this option, would be the Dike Seismic Upgrade and Raise No 4 Road to No 5 Road project, which has a value of \$337,000. This is not recommended given the need to upgrade and raise the dyke elevation between No 4 Road and No 5 Road.

Should Council approve the "Aztec Area Drainage Upgrades" project, staff will immediately coordinate with Telus and the contractor to address the conflict between the Telus duct bank and the proposed storm sewer.

Financial Impact

The Aztec Area Drainage Upgrades project was originally funded through the 2007 capital program. The financial impact to the City is the addition of a \$300,000 capital project to the 2008 capital program to be funded from the Drainage Improvement Reserve Fund.

Conclusion

The City completed a drainage system capacity assessment of the Aztec area and identified that completing the drainage upgrades on Dallyn Road and a section on Cambie Road will reduce flooding in the area. Through the course of construction, a significant and unforeseen conflict between a Telus duct bank and the proposed storm sewer was identified.

Staff recommend that the 2008 Capital Budget via the Five Year Financial Plan (2008 – 2012) be amended for the new capital submission "Aztec Area Drainage Upgrades" with a total project budget of \$300,000.

Roeland Zwaag, P. Eng.

Project Engineer, Engineering Design and Construction

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