CITY OF RICHMOND

REPORT TO COMMITTEE

TO:

Public Works and Transportation Committee

DATE:

February 22, 2001

FROM:

Jeff Day, P. Eng.

FILE:

6340-20-P.00306

Director, Engineering

RE:

11000 Block Granville Avenue North Side Ditch Infill

STAFF RECOMMENDATION

It is recommended that the ditch infill project for the north side of the 11000 block of Granville Avenue remain for consideration as a candidate for funding in the year 2004 within the proposed 5 year Capital Plan.

Jeff Day, P. Eng.

Director, Engineering

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CONCURRENCE OF GENERAL MANAGER

STAFF REPORT

ORIGIN

At the February 7, 2001, Public Works and Transportation Committee Meeting, it was moved:

That the report (dated December 11, 2000, from the Director, Engineering), regarding the 11000 block Granville Avenue North Side Ditch Infill, be referred to staff to:

- (a) examine the project in light of the 2001 capital budget;
- (b) meet with representatives of the Greater Vancouver Water District and to report to Committee on (i) the proposed timeframe and location for construction of the GVWD watermain, and (ii) whether there would be a cash saving.

ANALYSIS

Complaints from residents regarding poor drainage and flooding along the 11000 block of Granville Avenue prompted installation of a storm sewer along the south side of Granville Avenue. Installation of cross-drains from the north side ditch to the south side storm sewer, re-grading of the north side ditch, and cleaning of the ditch along the east side of the Shell Road/CN Rail right of way was also done. All this work was proposed in 1998 and the majority was completed in July of 2000.

The Granville Avenue 11000 block south side storm sewer installation successfully addressed the original resident complaints of poor drainage and flooding in this area.

In the interim, residents of the north side of 11000 block Granville Avenue have raised additional concerns regarding pedestrian safety, rats, and erosion associated with the remaining north side ditch.

Project in Light of the 2001 Capital Budget

While originally scheduled for 2004 in the 5 year Capital Plan, in the event that flooding and drainage problems persisted following completion of the south side storm sewer construction, installation of a new storm sewer along the north side of the 11000 block of Granville Avenue was included in the provisional 2001 capital budget. Accordingly, sufficient drainage DCC funds are included for this project in the 2001 capital budget, subject to Council approval and no other 2001 drainage projects would need to be deferred in order to do this work. This was made possible by savings realized from advanced design and resultant accurate estimates for drainage projects. However, if this project proceeds in 2001 it eliminates any opportunity to advance other high priority ditch infill projects currently scheduled in 2002 and 2003. It also reduces funding flexibility in the event cost sharing opportunities arise, such as the Canada-BC Infrastructure Program.

Greater Vancouver Water District Watermain

Staff at the Greater Vancouver Regional District confirmed that detailed design for the GVWD Granville Avenue watermain is not planned to commence until 2003 and construction will not commence until 2005 at the earliest with completion in 2008. Accordingly detailed route selection and schedule for the GVWD watermain is not available at this time. However, staff anticipate that the GVRD will select the south boulevard of Granville Avenue for their watermain

alignment because road restoration would be minimised. Therefore, co-ordination of the north side ditch infill with the GVWD watermain construction is not expected to achieve significant cost savings.

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Considering that construction of the GVWD watermain is at least four years in future, anticipated cost savings are minimal, and the design and schedule are still uncertain, co-ordination with the GVWD watermain project is not a significant consideration.

Consideration of Master Drainage Plan

Engineering Planning is currently preparing a Master Drainage Plan which will use computer modelling to analyse the effects of changes such as ditch infills on the drainage system. The Master Drainage Plan will eventually provide a comprehensive plan for prioritised improvements to the drainage system, but completion is not expected until 2003.

As reported in a memorandum to Committee dated April 17, 2000, staff is concerned that without a Master Drainage Plan, there is no way to determine if infill of the north side ditch would eliminate needed storm water storage from the drainage system.

Since monitoring indicates the drainage and flooding problems along the 11000 block of Granville Avenue have now been addressed, it is desirable to defer infill of the north side ditch until the Master Drainage Plan is complete, sizing requirements for a new storm drain pipe can be confirmed, and relative priority of storm drainage projects can be evaluated more completely.

FINANCIAL IMPACT

This recommendation will have no financial impact.

CONCLUSION

The infill of the south side ditch has successfully improved drainage along the 11000 block of Granville Avenue, and addressed the original resident complaints regarding poor drainage and flooding problems. The 11000 block Granville Avenue north side ditch infill could proceed in 2001 because sufficient drainage DCC funds have been included in the provisional 2001 capital budget, and co-ordination with the GVWD water main project is not a significant consideration. However construction of the Granville Avenue north side ditch infill in 2004, as originally proposed in the 5 year Capital Plan, will allow flexibility for use of funds to advance other drainage projects of higher priority or to take advantage of cost sharing opportunities. Staff therefore recommend this project remain scheduled for 2004 to maximise flexibility for use of available drainage DCC funds to address drainage concerns especially in anticipation of the completion of the Master Drainage Plan in 2003.

Steve Ono, P.Eng.

Manager, Engineering Design & Construction

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