

ITEM	05
MANAGER'S REPORT #	18
COUNCIL MEETING	96/06/24

**TO:** CITY MANAGER **DATE:** 1996 06 19  
**FROM:** DIRECTOR ENGINEERING **FILE:** 50-06-08  
**SUBJECT:** ROYAL OAK AVENUE REALIGNMENT PROJECT  
**PURPOSE:** To provide Council with an updated phased construction program and to seek necessary funding authority to proceed with the next phase of construction

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**RECOMMENDATIONS:**

1. THAT a Capital Works Machine & Reserve Fund Expenditure Bylaw in the amount of \$5.2 million be brought down for the construction of Phase III of the Royal Oak Avenue Realignment project.
2. THAT Council approve the retention of N.D. Lea Consultants Ltd. for engineering services to complete Phase III of the Royal Oak Avenue Realignment project at an estimated fee of \$430,000.

**REPORT**

**1.0 BACKGROUND**

At its regular meeting of 1994 March 21, Council approved a multi-phased construction program for the Royal Oak Avenue Realignment project. This project extends from Oakland Street to Deer Lake Parkway and includes three distinctive components: pre-loading, bridge construction, and road construction. The construction program began with pre-loading in 1994 (Phase I) with further pre-loading and utility relocation and construction in 1995 (Phase II). The main construction activity planned for 1996/97 (Phase III) is the construction of a 3 span, 110 metre long cast-in-place bridge structure and earth approach embankments. The bridge design program has now been completed and tenders closed on 1996 June 17. A report recommending award of a construction contract appears elsewhere on this agenda. It is anticipated that the bridge contract will take approximately 14 months to complete.

The final component (Phase IV), road construction, will follow bridge construction and is scheduled for completion in 1998.

## **2.0 COSTS AND FINANCING**

To date, Council has approved funding for Phases I and II in the amount of \$1.765 million. In order to proceed with Phase III construction this year, funding is required in the amount of \$5.2 million to finance the bridge contract and to retain the contract consultant. Accordingly, it is recommended that a Capital Works Machinery & Equipment Reserve Fund Expenditure Bylaw in the amount of \$5.2 million be brought down to finance Phase III of the Royal Oak Avenue Realignment project. Sufficient Capital Reserves are available and this project is included in the 1996-2000 Capital Program. Appearing elsewhere on the agenda is the bylaw for this project.

## **3.0 ENGINEERING SERVICES**

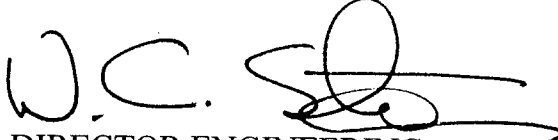
This project has a significant component of engineering services primarily due to its:

- environmental sensitivity
- geotechnical requirements
- extensive survey monitoring of settlement
- extended construction program including a 110 metre cast-in-place post-tension bridge structure

The prime consultant, N.D. Lea Consultants Ltd., has assembled a team of sub-consultants for environmental, geotechnical, noise attenuation, and landscaping components. The team has been involved in this project on an ongoing basis since inception in 1992.

The consultant team's commission has been approved through to the completion of Phase II as well as the detailed design for Phases III and IV. It would be cost effective for the City of Burnaby to retain the same consultant team to complete the remaining engineering services required. Retention of N.D. Lea would provide continuity of service and would take advantage of the knowledge gained over the past number of years. N.D. Lea's performance to date has been completely satisfactory and continuation of their assignment would obviate any learning curve for a new consultant. It is recommended that N.D. Lea Consultant's consulting team be retained for engineering services through to completion of Phase III. The estimated cost of engineering services to complete Phase III construction is \$430,000. The rates

submitted by N.D. Lea are consistent with the guidelines established by the Association of Professional Engineers & Geoscientists of B.C., and are competitive with other engineering fees for similar type projects within the City. Funding for the engineering services are included in the project cost totals. The Purchasing Agent concurs with this recommendation.

  
DIRECTOR ENGINEERING

VNW/WCS:jb

cc: Director Finance  
Director Planning & Building  
Director Recreation & Cultural Services  
City Solicitor  
Deputy Manager, Corporate Services  
Purchasing Agent

