



TO: MUNICIPAL MANAGER 1991 OCTOBER 15

FROM: DIRECTOR ENGINEERING FILE: 50-06-08

SUBJECT: ROYAL OAK AVENUE BETWEEN THE MOSCROP/GILPIN CONNECTOR  
AND SANDERS STREET

PURPOSE: To obtain Council's authority to retain a consultant for the design and construction supervision of Royal Oak Avenue and to bring down a bylaw to provide funding for the engineering services.

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RECOMMENDATIONS:

1. THAT a bylaw to appropriate \$700,000 from the Capital Works Machinery & Equipment Reserve Fund be brought down for the engineering fees required for the design and construction supervision of the Royal Oak Avenue improvements between the Moscrop/Gilpin Connector and Sanders Street.
2. THAT upon the adoption of the appropriation bylaw, N.D. Lea & Associates be retained to provide engineering consulting services for the Royal Oak Avenue major road project as more completely detailed in this report.

REPORT

At its meeting of 1990 October 22 Council received a report requesting authority to retain a consultant for the design and construction supervision of the Royal Oak Avenue project and to initiate a bylaw to provide the necessary funding. Council tabled the two recommendations pending the outcome of discussions regarding the redevelopment of the Oakalla Lands.

Council has now completed its review of the development proposals for the Oakalla Lands and have recently given third reading to the bylaw to rezone the Oakalla Lands for higher density housing and park and public use. Council has also recently (Council meeting of 1991 September 23, Item 3 of the Manager's Report No. 54) approved a recommendation to bring forward a Capital Expenditure Bylaw for the construction of Phase I of the Moscrop/Gilpin Connector.

Council will recall that the Moscrop/Gilpin Connector and the Royal Oak Avenue major road project have been considered to be interrelated and virtually dependent on each other to provide a complete and functional road network in the Deer Lake area. It is for these reasons that we believe it to be appropriate to now re-initiate the design of the Royal Oak Avenue project.

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The report of 1990 October 22 stated in part that:

"At its regular meeting of 1989 May 23, Council approved in principle a design concept for the realignment of Royal Oak Avenue. This design concept was presented to the public at an Open House held on 1989 January 18 and reflects changes resulting from that public input. Preliminary review has brought about the development of design guidelines for the final design of the project. These guidelines have been developed by the departments of Planning & Building Inspection, Engineering, and Parks & Recreation, and are intended to provide a basis for consultant Terms of Reference and final design of the project. The attached Figure 1 shows the approved preliminary design concept for the project.

The concept for the Royal Oak Realignment is that of a four lane secondary arterial road which is not part of the truck route system. The realignment traverses an ecologically sensitive park area. It includes a landscaped median and full channelization with a continuous separated sidewalk and landscaped boulevards on both sides. A wider curb lane is provided to accommodate bicycle travel on both sides. Separation from residential areas is provided to attenuate the impact of noise on existing residences located to the west of the road. The vertical alignment of the road reflects the concerns of the residents regarding view preservation. Treed areas are to be retained where possible and enhanced where deficiencies exist. It will be important to consider the environmental impact of this proposed roadway on the adjacent park ecosystem.

#### ENGINEERING PROPOSALS

Engineering proposals for design and construction supervision services have been received from four consulting engineering firms. All four firms are well established with qualified engineers and technicians on staff. As well, each firm has assembled a team of sub-consultants to address the various specialty aspects of this project. These companies are:

1. Associated Engineering (B.C.) Ltd.
2. Reid Crowther & Partners Ltd.
3. Phillips Barrett Kaiser Engineering Ltd.
4. N.D. Lea Consultants Ltd.

Each consultant was required to provide details of their experience and expertise related to this type of work together with details of their intended method of undertaking the work. They were also asked to submit detailed resumes, a schedule of "per diem" rates, and an extensive description of how they would undertake the work including a description of how their particular personnel will be utilized.

The proposals were reviewed by a committee which included Planning, Parks, and Engineering personnel. This review was in depth and was based on several weighted factors, including: experience and expertise of the consultant's company and assigned staff, proven ability based on the consultant's previous work history, references, project understanding, completeness of proposal, scheduling, and total cost implications.

Assessment of each of these factors on a scored-points basis provided a quantitative method for consultant evaluation. The quantitative rating represented an appraisal of the Corporation's particular needs in this specific engineering project.

The evaluation rating method established that N.D. Lea Consultants Ltd. represented the proposal which most closely meets the needs of the Corporation. N.D. Lea have sound experience in major road and bridge design, road and bridge construction, and project management in Burnaby as well as in the surrounding municipalities. Their team demonstrated a complete understanding of the project and a high concern for the sensitive nature of this particular project. Their proposal emphasized a strong pro-active approach to dealing with the environmental, landscaping and neighbourhood impact issues.

It is therefore recommended that the consulting firm of N.D. Lea Consultants Ltd. be retained to provide engineering consultant services for the design and construction supervision of the Royal Oak Avenue major road project. The Purchasing Agent concurs with this recommendation.

Upon the adoption of a Capital Expenditure Bylaw, the consultant and the Corporation will enter into an engineering agreement which will include the Corporation's Terms of Reference and the consultant's engineering proposal as integral parts."

N.D. Lea & Associates submitted the most competitive fee schedule of the four proposals which ranged from \$580,400 to \$740,600; however, given the elapsed time since the original proposal, staff requested that the recommended consultant update their proposal to reflect any changes in circumstance. N.D. Lea have amended their proposal to reflect inflationary increases plus the introduction of GST.

The 1991-1995 Capital Budget includes an amount of \$7.65 million for the completion of this project over a three year period commencing in 1991. This budget estimate is preliminary and will be reviewed in considerable detail as part of the early phases of the work to be undertaken by the consultant. Based upon our history of consulting engineering costs, consulting fees for general major road projects generally range between 10% and 14%. At this stage we would recommend that a budget for engineering fees be established at \$700,000.

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For this reason we are recommending that a Capital Works Machinery & Equipment Reserve Fund Bylaw in the amount of \$700,000, being the budget for professional fees, be brought forward at this time with a subsequent Expenditure Bylaw to be brought forward prior to any construction. This project is eligible for Provincial Revenue Sharing and would be included in the Municipality's application for this funding in 1992.

Staff would advise Council that although it is necessary to put the \$700,000 into place at this time in order to award the full engineering agreement, it is intended that only design work be commenced in 1991. The estimated cost of the design work is \$250,000 however it is anticipated that 1991 expenditures would be less than \$200,000 and this expenditure is in conformance with the objectives established in the current Capital Program review. Any further expenditure would be subject to subsequent specific Council approval.

VNW/WCS:jb  
Attach.

cc: Director Finance  
Purchasing Agent  
Director Planning & Building Inspection  
Director Recreation & Cultural Services

  
DIRECTOR ENGINEERING

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ROYAL OAK AVENUE REALIGNMENT



