

RE: ENGINEERING SERVICES FOR THE DESIGN OF THE MARINE WAY/10TH AVENUE CONNECTOR AND THE GILLEY ALTERNATE

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Director Engineering be adopted

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TO: MUNICIPAL MANAGER 1987 FEBRUARY 18

FROM: DIRECTOR ENGINEERING

SUBJECT: ENGINEERING SERVICES FOR THE DESIGN OF THE MARINE WAY/10TH AVENUE CONNECTOR AND THE GILLEY ALTERNATE

RECOMMENDATION:

- 1) THAT Reid Crowther and Partners Ltd. be retained to provide engineering consulting services for the design of a portion of the Marine Way/10th Avenue Connector and the Gilley Alternate, as more fully described in this report.
- 2) THAT a Capital Works Machinery and Equipment Reserve Fund Expenditure Bylaw in the amount of \$1.1 million be brought forward for design, property acquisition, and partial road construction of a portion of the Marine Way/10th Avenue Connector and the Gilley Alternate, as more fully described in this report.

R E P O R T

BACKGROUND:

Council, at its regular meeting of 1986 July 07, approved amendments to the Conceptual Transportation Plan which would designate the proposed Gilley Alternate alignment between the Marine Way/10th Avenue Connector and 19th Street as a secondary arterial. At the same time, Council authorized staff to retain an engineering consultant to design the first phase which includes a portion of the Marine Way/10th Avenue Connector and the Gilley Alternate to 19th Street. (See Sketch #1, attached). The consultant was to have also included an examination of all available options for crossing Byrne Creek, B. C. Hydro Rail and the A.L.R.T. corridor and a study of how the three intersections (18th Avenue/19th Street; 19th Street/Edmonds; and Rumble/Griffiths) would interact. Implementation of the project is scheduled for 1987 and 1988; in order to be ready to meet this proposed construction schedule, it is necessary for the Corporation to retain a Professional Engineering Consultant to provide the aforementioned design services. Engineering proposals were invited and have been received from nine professional engineering consultants.

Your Director Engineering has submitted applications to the Ministry of Transportation and Highways under Part V of the Revenue Sharing Act for 50% funding on the following major roads, ranked in order of priority:

- #1 - Boundary Road, Price Street to Thurston Street
- #2 - Marine Way/10th Avenue Connector and Gilley Alternate (Marine Way to Marine Drive portion)
- #2A - Marine Way/10th Avenue Connector and Gilley Alternate (Bridge over Byrne Creek just north of Marine Drive)

Further, your Director Engineering has made personal representation to Ministry officials in Victoria in support of our applications and, although it is too early to expect final decisions on approvals, it has been established that the Ministry agrees with our priority ratings. Further representations to other levels in the Ministries of Transportation and Highways and Municipal Affairs will be made as and when appropriate.

ENGINEERING PROPOSALS:

The nine companies invited to propose on this project are all well-established firms having qualified engineers and technicians on staff. All of these firms have a strong background in highway engineering, which is a prime consideration in being able to undertake this multi-disciplined project. The companies are:

- Acres International Ltd.
- Associated Engineering (B. C.) Ltd.
- Crippen Consultants Ltd.
- Fenco Lavalin Corporation
- N. D. Lea & Associates Ltd.
- McElhanney Engineering Services Ltd.
- Phillips Barratt Kaiser Engineering Ltd.
- Reid Crowther & Partners Ltd.
- UMA Engineering Ltd.

The consultants were asked to provide details of their experience and expertise related to this type of project together with details of their intended method of approach to the project. They were also asked to submit a work schedule and an estimate of their fees.

PROPOSAL REVIEW:

The submitted proposals were reviewed by Messrs. Olson, Sinclair, Wiebe, and Hext, the four most senior members of the Engineering Department. The review process included a thorough review of the proposals which resulted in a short list of six consultants. These six were interviewed by the selection committee and were individually and independently assessed on a number of predetermined factors including an evaluation of the company's experience and expertise, their understanding of the terms of reference, their proposed methodology, their scheduling plan and their budget for engineering fees.

Assessments of each of the factors on a scored points basis provided a quantitative method for proposal evaluation. The points scored represent an appraisal of our particular needs on this specific project.

CONSULTANT SELECTION:

The evaluation rating method established that Reid Crowther & Partners Ltd. and N. D. Lea & Associates Ltd. are the two leading candidates, ranking first and second respectively. Neither of these companies submitted a fixed maximum fee, primarily because it is unrealistic to do so given the number of undetermined elements contained within this particular assignment.

After having interviewed the two highest ranking consultants, it was the conclusion that Reid Crowther & Partners Ltd. had sufficient flexibility in their engineering fee budget to effect some cost savings without sacrificing the quality or thoroughness of their proposal. They are able to offer this innovation by providing the option of omitting a "Preliminary Design" phase and thereby proceeding directly to the final design from the conceptual design. This would also expedite the completion date by over a month, moving it up to the latter part of July.

In addition, the Reid Crowther team proposes to incorporate some of the latest concepts and highway design tools to address the areas of sensitive peat soils as well as to examine some alternatives for crossing the Byrne Creek ravine while maximizing the retention of a park-like setting. Other affected Departments will also be involved in discussions with Reid Crowther concerning land use and parks considerations prior to commencement of final design.

It is therefore recommended that the firm of Reid Crowther & Partners Ltd. be retained to perform the engineering design services as called for in the Corporation's Terms of Reference included in the request for proposals sent out to all nine consultants for the portions of the Marine Way/10th Avenue and Gilley Alternate road links as further described in this report and shown on Sketch #1, attached. The Purchasing Agent concurs with this recommendation.

PROFESSIONAL ENGINEERING FEES:

Reid Crowther submitted an estimate of their total fees for this design assignment of \$179,000 to \$196,000; it is suggested, then, that a work order estimate figure of \$190,000 would be an appropriate one.

For sake of total clarity, this assignment is one for design services only and does not contain any elements of construction supervision or inspection services. At the time that the project is being advanced to the construction stage, a totally new proposal call will be put out to appropriate consultants for the required supervision and inspection services.

The Consultant and the Corporation will enter into an Engineering Agreement which includes the Corporation's Terms of Reference and the Consultant's Engineering Proposal as integral parts.

FINANCING:

The 1987 Provisional Capital Budget includes an amount of \$1.1 million for the initial phase of the Marine Way/10th Avenue Connector and Gilley Alternate for the portion lying between Marine Way and Marine Drive. In addition, \$100,000 has been brought forward from the 1986 Recast Capital Budget for design work. The aggregate sum of \$1.2 million, then, will finance the total engineering design which is the subject of this report, and the portion of the road construction (preloading and associated works such as utility relocation and special drains) and attendant property acquisitions between Marine Way and Marine Drive for 1987 construction. It is therefore recommended that a Capital Works Machinery and Equipment Reserve Fund Expenditure Bylaw in the amount of \$1.1 million be brought forward.

-4-

ITEM	SUPL.	12
MANAGER'S REPORT NO.		13
COUNCIL MEETING		87/02/23

The 1987 Annual Capital Budget will contain provision for the cost of the bridge over Byrne Creek. If and when Revenue Sharing approval is obtained for the bridge construction, a further Capital Works Machinery and Equipment Reserve Fund Expenditure Bylaw will be recommended to be brought forward.

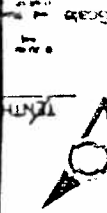
139


DIRECTOR ENGINEERING

EEO/VNW:m1
Attach.

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

ITEM SUPPL. 12
 MANAGER'S REPORT NO. 13
 COUNCIL MEETING 87/02/23



COMPONENTS OF GILLEY ALTERNATE AND MARINE WAY / TENTH AVE. CONNECTOR

① ② ④ = SUBJECT OF THIS REPORT
 ③ ⑤ ⑥ = FUTURE LINKS

