

ITEM 7  
MANAGER'S REPORT NO. 77  
COUNCIL MEETING Nov. 7/77

Re: ENGINEERING SERVICES FOR THE STUDY, DESIGN AND  
CONSTRUCTION SUPERVISION OF THE GILLEY AVENUE  
ALTERNATE BETWEEN MARINE WAY (PROPOSED) AND KINGSWAY

Following is a report from the Municipal Engineer regarding proposals for the subject work.

RECOMMENDATIONS:

1. THAT the Corporation of Burnaby enter into an Engineering Agreement with McElhanney Surveying and Engineering Ltd. for the provision of engineering services for the study, design, and construction supervision of the Gilley Avenue Alternate Road Project based on the terms of reference established in the Municipal Engineer's letters dated September 16, 1976 and October 7, 1977 and the submitted proposals by McElhanney Surveying and Engineering Ltd. dated October 8, 1977 and October 20, 1977.
2. THAT a review of Bill 58 be the subject of a future separate report to Council.

\* \* \* \* \*

2 November, 1977

TO: MUNICIPAL MANAGER  
FROM: MUNICIPAL ENGINEER  
SUBJECT: ENGINEERING SERVICES FOR THE STUDY, DESIGN AND  
CONSTRUCTION SUPERVISION OF THE GILLEY AVENUE  
ALTERNATE BETWEEN MARINE WAY (PROPOSED) AND KINGSWAY

In keeping with the priorities established in our six-year Capital Improvement Program (1977-1982) we invited proposals for engineering services from four reputable consulting firms by way of our letters dated 16 September, 1976 and 7 October, 1977 (copies attached). Each of the consultants, namely N.D. Lea & Associates Ltd., Associated Engineering Services Ltd., McElhanney Surveying & Engineering Ltd., and Ker, Priestman and Associates Ltd., responded with extensive proposals outlining their expertise and interest to undertake this project. A complete copy of each proposal is available, for viewing, in the Engineering Department.

The Engineering Department has carefully assessed each of the proposals concentrating on such items as their previous work history in Burnaby, the personnel that they will actually assign to their design and supervision team, their current work load in Burnaby, and their familiarity with our standards, specifications, and procedures.

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Based on such an evaluation, it is this Department's conclusion that the proposal submitted by McElhanney Surveying & Engineering Ltd. for the study, design, and construction supervision of the Gilley Avenue Alternate is the most complete and outlines the best balance of expertise and experience for this type of project.

Fees for Professional Engineering Services will be in accordance with the Schedule of Fees considered appropriate for this type of work as published by the Association of Professional Engineers of the Province of British Columbia. The 1977 C.I.P. Budget contains a provision of \$134,500 for the study and design phases of this project.

With respect to Council's request for a review of the provisions of Bill 58 "Revenue Sharing Act", the information available to date is incomplete in that the Ministry of Highways and Public Works has not yet formulated the regulations for administering this Bill and, therefore, we are recommending that a discussion regarding the applicability of Bill 58 to the Gilley Avenue Alternate Project be the subject of a separate report when more definite information is available.

#### RECOMMENDATIONS

1. THAT the Corporation of Burnaby enter into an Engineering Agreement with McElhanney Surveying & Engineering Ltd. for the provision of engineering services for the study, design, and construction supervision of the Gilley Avenue Alternate Road Project based on the terms of reference established in the Municipal Engineer's letters dated 16 September, 1976 and 7 October, 1977 and the submitted proposals by McElhanney Surveying & Engineering Ltd. dated 8 October, 1976 and 20 October, 1977.
2. THAT a review of Bill 58 be the subject of a future separate report to Council.

*EE Olson*  
MUNICIPAL ENGINEER

VNW:cc

c.c. ( ) Municipal Treasurer

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The Office of the Engineer

16 September, 1976

Associated Engineering Services Ltd.  
1661 West 8th Avenue  
Vancouver, B.C.  
V6J 1V1

Dear Sirs:

Re: Engineering Services for the Study, Design  
and Construction Supervision of the Gilley  
Avenue Alternate between Marine Way  
(Proposed) and Kingsway

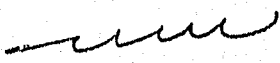
As part of our 1976 Major Street Design Program, we hereby invite you to give serious consideration to submitting a proposal for the engineering services outlined on the attached schedules. Please note that the project consists of three basic elements, namely, study, design and construction supervision and inspection each of which can and very probably will be considered in isolation. Therefore your proposal should be qualified to recognize the possibility that through certain yet unknown constraints the third phase, construction, may not occur within the next three to five years. Your proposal should also outline the manner of payment for the various functions, however, because of the complexity of the project and the uncertainties regarding construction deadlines we would request that no estimate of fees be included.

The proposal should also include a brief resume of the personnel who would be assigned to the various functions.

We would appreciate receiving your proposal on or before October 8, 1976.

Yours truly,

E. E. Olson, P. Eng.  
MUNICIPAL ENGINEER

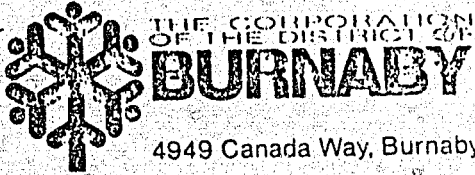


by: V. N. Wiebe, P. Eng.  
DESIGN ENGINEER

VNW:wlh  
Atch.  
cc: ( ) Design Engineer

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4949 Canada Way, Burnaby, B.C. V5G 1M2

Department of the Engineer

Telephone (604) 294-7460

7 October, 1977.

Ker, Priestman & Associates Ltd.  
#275 - 4299 Canada Way  
Burnaby, B. C.  
V5G 1H3

Dear Sirs:

Re: Engineering Services for the Study, Design  
and Construction Supervision of the Gilley  
Avenue Alternate between Marine Way (Proposed)  
and Kingsway.

As you are well aware, you were invited to submit a proposal on this subject last September. Your proposals have been received, however, pending resolution of our Capital Works priorities, we have not been in a position to finalize the selection of a Consultant until this time.

I would therefore respectfully request that you re-affirm your interest in this project. Because of the time which has elapsed since the preparation of your original proposal, it would be in order for you to reassess and update your proposal.

The general terms of reference given last September are still valid with one additional condition, being the recent passing of Bill No. 58, copy of which is attached. When re-submitting, would you please include an assessment as to how this bill may relate to the Gilley alternate project.

In order to permit you sufficient time to properly reassess and resubmit your proposal, I would suggest a reasonable deadline as being October 21, 1977.

Yours truly,

E. E. Olson, P. Eng.  
MUNICIPAL ENGINEER

by: V. N. Wiebe, P. Eng.  
DESIGN ENGINEER

VNW:cj  
Attach.

cc: ( ) Design Engineer

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SCHEDULE "A"

Engineering Services for the Study of the  
Gilley Avenue Alternate Between Marine Way and Kingsway

All work shall be carried out in consultation with and in accordance with the requirements of the Corporation.

This assignment shall include preliminary investigation of the site survey, collection and interpretation of design data, study of alternative alignments, preparation of preliminary plans, cost estimates and report on preliminary engineering studies satisfactory for submission to Municipal Council for approval of proposals, the report to contain a firm recommendation as to the best scheme, in the opinion of the consultant, for adoption by Council.

The preliminary study shall include the following:

- (1) Review of current traffic flows, turning movements, etc, and study the effect of various alignments on traffic flows, turning movements, etc, at the Marine Drive intersection (at grade).
- (2) Location of road, structures and ramp connections as required.
- (3) Preliminary investigation of soil conditions in the area with recommendations on its effect on structures, embankment fills, pavements including treatment of peat areas where required.
- (4) Study of storm drainage.
- (5) Considerations for preserving a maximum amount of natural vegetation and having a minimum effect on the ravine.
- (6) Negotiations with Government authorities and Utilities companies as required to secure approval of proposed works.
- (7) Relocation proposals as may be required for utilities and services.
- (8) Comparative preliminary cost estimate for alternatives.
- (9) Considerations for minimizing noise level to future abutting residential developments.

The preliminary report shall be completed for submission to Council by January 15, 1977.

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SCHEDULE "B"

Engineering Services for the Design of the  
Gilley Avenue Alternate Between Marine Way and Kingsway

This project shall include all field survey, drafting and design work necessary to prepare a complete set of construction drawings, specifications and tender-contract documents. This work shall be carried out in consultation with and in accordance with the requirements of the Corporation, and shall be generally based on the following:

- (a) Design and prepare plans and specifications for a 4-lane roadway with curb and gutter both sides and an abutting sidewalk on one side.
- (b) Design and prepare plans and specifications for storm sewers and culverts where necessary to complete the project.
- (c) Design and prepare plans and specifications for ornamental street lighting throughout the project.
- (d) Design and prepare plans and specifications for the structure overpassing the B.C. Hydro Railway and the Byrne Creek Ravine, including related drainage facilities and ramps as required.
- (e) Desirable maximum grade to be 8 percent.
- (f) Make arrangements with all affected Government agencies and Utility Companies with regard to securing approval for the proposed works, and provide estimates related thereto.
- (g) Pavement design to be based on geotechnical information gathered during earlier study phase.
- (h) Provide a schedule of quantities for the structure and all roadways, ramps, drainage and ancillary works and an estimate of cost of all works.
- (i) Provide detail sketches of all right-of-way requirements in sufficient detail to have the Corporation B.C.L.S. prepare necessary legal plans.
- (j) Alignment of the roadway and location of ramps and ancillary improvements to be based on alternative approved by Council.

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SCHEDULE "C"

Engineering Services for Construction Supervision and Inspection of  
Gilley Avenue Alternate between Marine Way and Kingsway

1. Provide office administration of construction including checking of construction proposals, interpretation of drawings and specifications to the contractor, evaluation of material to be installed for approval by the Corporation, routine visits by senior Engineering personnel to inspect the execution of the work, certification of interim and final payment to the contractor and preparation of as-built record drawings.
2. Provision of resident inspection and survey staff for detailed layout of all work and supervision of construction of the work as authorized by the Corporation.
3. Maintain a daily work diary of each days work for submission to the Corporation at completion of construction, submit to the Corporation a weekly progress report on the progress of the work, maintain continuous close liaison with the Corporation throughout the course of construction, in order to ensure that all work is performed to the satisfaction of the Corporation.