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February 2, 2006

File:175-05-01

MEMORANDUM:

TO: Mark Hornell
Director, Regional Planning

FROM: J. A. (Jack) Hull, MBA, P. Eng.
General Manager, Water Services

EXTENSION OF WATER SERVICE TO THE DISTRICT OF HIGHLANDS

In response to the request from the Planning and Protective Services Committee for information on the cost implication of extending water service to the District of Highlands, we have prepared the following information and estimates.

Municipalities and electoral areas with water distribution systems supplied from the regional water supply system are members of the Regional Water Supply Commission (RWSC), and in the case of the municipalities and electoral area serviced by CRD Water Services, they are also members of the Juan de Fuca Water Distribution Commission. As there is no municipal water service in Highlands, the District of Highlands is not a member of either commission.

The 1998 MacKay Report recommended that each member municipality of the Regional Water Supply Commission was entitled to a transmission main terminating at its boundary. This principle was adopted and implemented by the Regional Water Supply Commission. Applying that principle in this case, the water main on Millstream Avenue would have to be transferred from the Juan de Fuca Water Distribution Commission to the Regional Water Supply Commission and become a transmission main. (Refer to the attached plan).

The net book value of the existing water main (Sections A and B on the attached plan), is \$1,288,750. The cost of replacing the section of existing 200 mm water main is estimated at \$756,000 (Section C on the attached Plan) and the cost of extending a 400 mm water main to the District of Highlands boundary is estimated at \$623,000 (Section D on the attached plan), for a total asset value of \$2,667,750. Under the full cost pricing methodology employed by both Commissions, the cost of these assets is recovered over their useful life, in this case 50 years, by charging straight line depreciation and a return on the net book value of the assets (original cost less accumulated depreciation) based on the 30 year Canada bond rate.

ALTERNATIVES CONSIDERED

1. Transfer the Millstream Road water main from the Juan de Fuca retail distribution system to the regional water supply system with the cost of upgrading and the extension included in the wholesale water rate.

2. Transfer the Millstream Road water main from the Juan de Fuca retail distribution system to the regional water supply system with the cost of upgrading and the extension borne by others e.g. District of Highlands or developers requesting water service.

FINANCIAL IMPLICATIONS

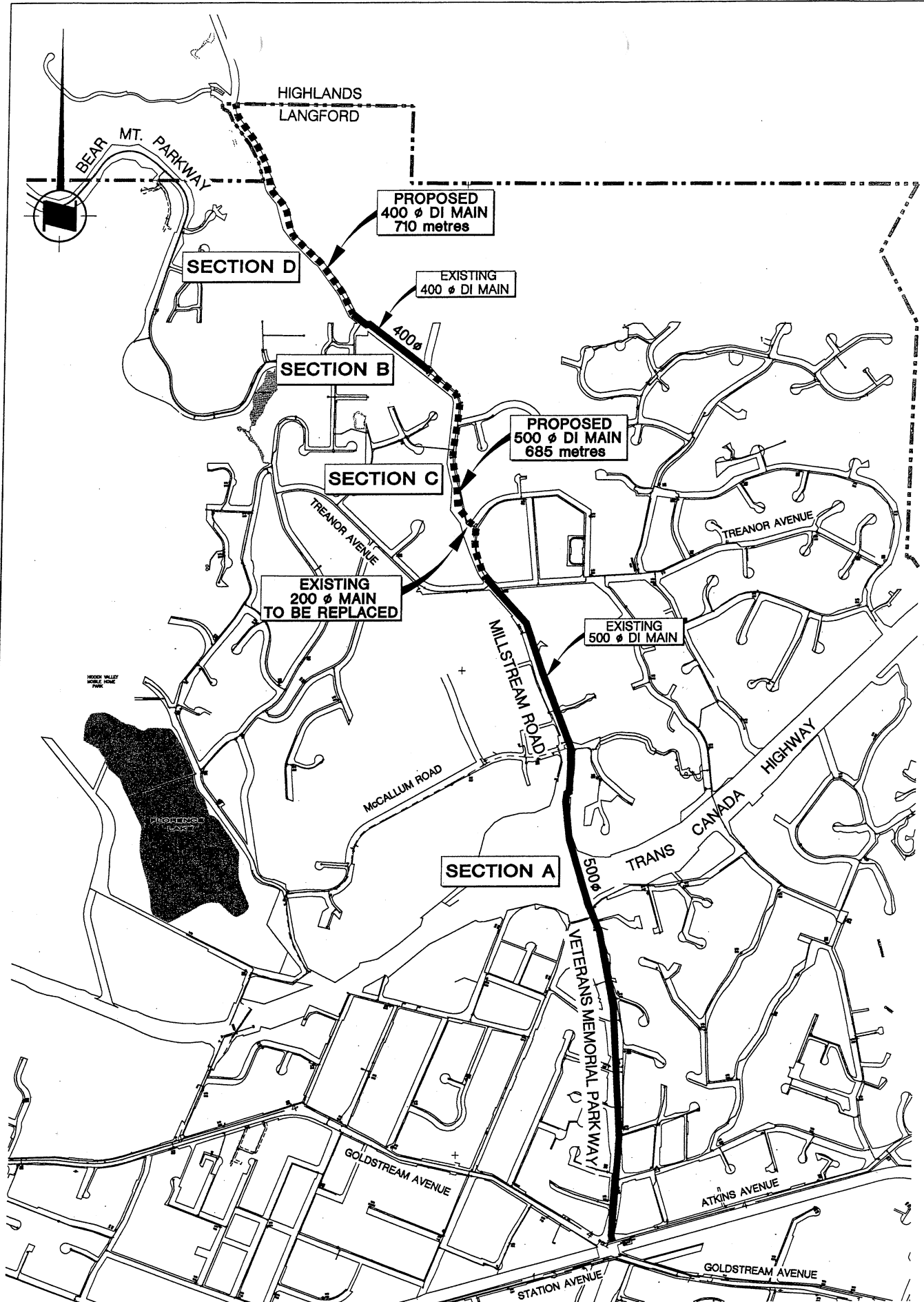
Under both alternatives the rate base (i.e. net book value of assets) for the wholesale system would initially increase by \$2,667,750, while the rate base for the Juan de Fuca retail system would initially decrease by \$1,288,750. Under Alternative 1, both the return on the rate base and depreciation on water main extension and replacement would be included in the wholesale revenue requirement, while under Alternative 2, the water main replacement and extension would be considered a 'contributed asset' with only depreciation being added to the wholesale revenue requirement.

Under Alternative 1, the wholesale revenue requirement would increase by an average of \$179,750 per year over the next 5 years. This would be partially offset by new revenues (approximately \$32,000) from the additional customers in Highlands. The revenue requirement in the Juan de Fuca retail system would decline by an average of \$76,800.

Under Alternative 2, the wholesale revenue requirement would increase by an average of \$112,000 per year over the next 5 years. Again, this would be partially offset by the new revenues from the additional customers in Highlands. The revenue requirement in the Juan de Fuca retail system would decline by an average of \$76,900.

In both alternatives the increase in the wholesale revenue requirement would cost the average regional household less than \$1.00 per year.

JH:mm



VERIFY SCALES

BAR IS 20mm LONG ON ORIGINAL DRAWING.
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 IF NOT SHOWN ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

REUSE OF DOCUMENTS

THIS DRAWING IS OF A CONFIDENTIAL NATURE AND SHALL NOT BE REPRODUCED IN ANY MANNER, NOR USED FOR ANY PURPOSE, WHATSOEVER EXCEPT BY WRITTEN PERMISSION OF THE CAPITAL REGIONAL DISTRICT, WATER DEPARTMENT.
 ALL UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHOULD BE CONFIRMED BY MANUAL RECORDING CAPITAL REGIONAL DISTRICT WATER DEPARTMENT DOES NOT ACCEPT RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE INFORMATION SHOWN ON THIS DRAWING.



CAPITAL REGIONAL DISTRICT WATER DEPARTMENT
 478 ISLAND HIGHWAY VICTORIA, B.C.

PROPOSED SUPPLY MAIN No. 9 FROM GOLDSTREAM AVE TO DISTRICT OF HIGHLANDS

date: JULY 2004	scale: AS SHOWN
acct no:	drawn: S. ACOSTA
designed: P. MALONE	checked:
approved:	map: 43/243/241/243
dwn: 4500	acad file: 4536.dwg
drawing no:	issue: 1

