

3. **FLEET STREET PUMPING STATION DISCHARGE PIPING
COMMISSIONER STREET AND BRONSON AVENUE WATERMAINS
CONTRACT NO. 98-310 AND CONSULTANT NO. CZ 0305**

COMMITTEE RECOMMENDATIONS

That Council approve:

1. **The award of Contract 98-310 for the installation of the Fleet Street Pumping Station Discharge Piping, and the Commissioner Street and Bronson Avenue Watermains to Ottawa Greenbelt, Gloucester, for a total contract provision of \$3,448,845;**
2. **The increase to Contract CZ 0305 with Delcan Corporation, Ottawa, for construction services for the Fleet Street Pumping Station Discharge Piping Replacement, in the amount of \$89,880, bringing the revised total contract provision to \$370,680;**
3. **The transfer of funds in the amount of \$2,350,000 from the project, Urban Watermain Upgrades/Extensions (922-41927) to Fleet Street Pumping Station Discharge Pipes (922-41925).**

DOCUMENTATION:

1. **Environment and Transportation Commissioner's report dated 26 May 99 is immediately attached.**

REGION OF OTTAWA-CARLETON
 RÉGION D'OTTAWA-CARLETON

REPORT
 RAPPORT

Our File/N/Réf. Your File/V/Réf.	50 18-99-0004-V
DATE	26 May 1999
TO/DEST.	Co-ordinator Corporate Services and Economic Development Committee
FROM/EXP.	Environment and Transportation Commissioner
SUBJECT/OBJET	FLEET STREET PUMPING STATION DISCHARGE PIPING COMMISSIONER STREET AND BRONSON AVENUE WATERMAINS, CONTRACT NO. 98-310 CONSULTANT NO. CZ 0305

DEPARTMENTAL RECOMMENDATIONS

That the Corporate Services and Economic Development Committee and Council approve:

1. The award of Contract 98-310 for the installation of the Fleet Street Pumping Station Discharge Piping, and the Commissioner Street and Bronson Avenue Watermains to Ottawa Greenbelt, Gloucester, for a total contract provision of \$3,448,845;
2. The increase to Contract CZ 0305 with Delcan Corporation, Ottawa, for construction services for the Fleet Street Pumping Station Discharge Piping Replacement, in the amount of \$89,880, bringing the revised total contract provision to \$370,680;
3. The transfer of funds in the amount of \$2,350,000 from the project, Urban Watermain Upgrades/Extensions (922-41927) to Fleet Street Pumping Station Discharge Pipes (922-41925).

BACKGROUND

The Fleet Street Pumping Station Discharge Piping, and the Commissioner Street and Bronson Avenue Watermains project includes watermain and pumping station upgrades in the vicinity of the Fleet Street Pumping Station. The works are required to replace ageing infrastructure, reduce operation and maintenance costs, improve the hydraulic output from the pumping station, reduce pressure losses and unaccounted for water losses.

This project is scheduled for the later half of 1999 to allow for other projects in the downtown core to be completed and to ensure uninterrupted water delivery to the downtown core area. Completion in 1999 will allow for the benefits of the increased hydraulic capacity to be realized immediately and will not conflict with the year 2000 moratorium of construction projects in the downtown core.

Tenders for Contract 98-310 (excluding G.S.T.) were received as follows:

<u>Contractor</u>	<u>Tender Bid</u>
Ottawa Greenbelt, Gloucester	\$2,823,220
Taggart Construction, Ottawa	\$3,228,850
Dufferin Construction, Ottawa	\$3,266,030
Departmental estimate (excluding G.S.T.)	\$2,481,666

Based on the review of the tender documents, the Department recommends acceptance of the tender from the low bidder, Ottawa Greenbelt, Ottawa. The requested contract award of \$2,823,220, plus an allowance of \$400,000 for contract variations due to unforeseen conditions, and \$225,625 for the G.S.T. brings the total contract award to \$3,448,845.

The difference between the Departmental estimate and the lowest bid was primarily the cost of the specialized valve chambers required. The tendered cost of these seven chambers was approximately \$320,000 (excluding G.S.T.) higher than the estimate. The Region has never replaced watermains and valve chambers of this size and in high traffic locations, and has no data on which to accurately base such an estimate.

This large and complex phase of the work includes replacing the header pipe in the pumping station and replacing several different diameter watermains with a 1500 mm watermain in Commissioner Street from the pumping station to Bronson Avenue, and a 1500 mm watermain in Bronson Avenue from Commissioner Street to Laurier Avenue, and a 1050 mm watermain in Bronson Avenue from Laurier Avenue to Gloucester Street. Approximately 460 m of large-diameter new watermain will be installed in this project. During the detail design of this complex project, a number of significant issues were encountered requiring higher than anticipated effort than originally estimated:

- Storm and sanitary sewer separation on Commissioner Street and Albert Street as a result of major utility conflicts;
- Design and construction of the header pipe inside the Pumping Station to minimize construction on top of the tailrace;
- Preparation of Environmental Assessment Screening Reports for the National Capital Commission (N.C.C.) to acquire property and construction easements;
- Removal of the existing valve building at the pumping station and consideration of asbestos handling;
- Demolition and removal of all decommissioned piping adjacent to the pumping station;

- Additional design work to accommodate traffic and transit considerations;
- Provision of a traffic camera at the north-east corner of Bronson and Laurier to facilitate traffic flow during construction.

The construction sequencing has been designed to maintain 70% of the pumping station output capacity throughout construction.

The requested contract extension for the construction services is \$72,000, plus an allowance of \$12,000 for contract variations due to unforeseen conditions, plus \$5,880 for the G.S.T. allowance brings the total contract provision to \$89,880. This increase is a result of additional scope of work and the complexity of the project as noted above.

CONSULTATION

Although the public consultation process is not applicable, the public has been notified of the project in the Restore the Core flyers that are circulated to numerous public and private agencies (approximately 10,000 copies have been distributed to date), and a public meeting will be held in June 1999 on this specific project. Signage advising motorists of the upcoming public meeting and the construction will be erected a week prior to the public meeting.

This project has been closely co-ordinated with the City of Ottawa, O.C. Transpo and the N.C.C.

EXPENDITURE JUSTIFICATION

The existing infrastructure ranges in age from 83 years to 109 years. It has reached the end of its forecast life expectancy and an increase in pipe size is required to meet water demand in the core area. This expenditure will allow for timely replacement. Replacement of the header pipe in the pumping station and removal of the existing old watermains (ranging in size from 381 mm to 914 mm) from the pumping station and replacement with a single large watermain will increase the hydraulic capacity of the Fleet Street Pumping Station and will reduce the operation and maintenance costs. The hydro savings alone that will be realized by the project are in the order of \$170,000 annually. Additional cost savings will be realized by the reduced maintenance costs on the mains and valves.

FINANCIAL STATEMENT

	922-41925	922-41927
	\$	\$
Approved Budget to Date	2,800,000	18,210,000
Increase (Decrease) in Authority	<u>2,350,000</u>	<u>(2,350,000)</u>
Revised Budget	5,150,000	15,860,000
Total Paid and Committed	<u>(1,081,599)</u>	<u>(10,277,453)</u>
Balance Available	4,068,401	5,582,547
THIS REQUEST	<u>(3,538,725)</u>	<u>(0)</u>
Balance Remaining	<u>529,676</u>	<u>5,582,547</u>

Funds are available in the 1999 Capital Budget, Account Number 922-41925 (Order No. 900198), Fleet Street Pumping Station Discharge Pipes (Reference page 356), Purchase Requisition No. 10006052 and Purchase Order 45000138, and Account Number 922-41927 (Order No. 900200), Urban Watermain Upgrades/Extensions, (Reference page 358) by deferring the Catherine Street Rehabilitation project until next year.

Approved by
M.J.E. Sheflin, P.Eng.

BAM/

FINANCE DEPARTMENT COMMENT

Funds are available as indicated.

Approved by T. Fedec
on behalf of the Finance Commissioner