

REGION OF OTTAWA CARLETON

RÉGION D'OTTAWA CARLETON

REPORT

RAPPORT

Our File/N/Réf.           **50 19-98-0006-V**  
 Your File/V/Réf.

DATE                           18 February 2000

TO/DEST.                    Coordinator  
                                   Corporate Services and Economic Development Committee

FROM/EXP.                 Commissioner  
                                   Environment and Transportation Department

SUBJECT/OBJET            **ALVIN HEIGHTS PULLBACK SEWER REPLACEMENT  
 CONTRACT NO. 98-203**

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### DEPARTMENTAL RECOMMENDATIONS

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

- 1. The award of Contract No. 98-203 to Taggart Construction Ltd., Ottawa, for the replacement of the Alvin Heights Pullback Sewer and RCAF Forcemain replacement, for a contract provision of \$3,091,990;**
- 2. The increase to the budget authority from \$2,270,000 to \$3,650,000 in Internal Order No. 900231, Alvin Heights/Rockcliffe Air Base Sewer Area Study;**
- 3. The transfer of funds in the amount of \$1,380,000 from Internal Order No.900234, Collector Sewers Rehabilitation Program to Internal Order No. 900231 Alvin Heights/Rockcliffe Air Base Sewer Area Study.**

### BACKGROUND

The Alvin Heights/Rockcliffe Air Base area contains a number of pull-back sewers and overflows, designed in the early 1960's, to re-direct dry weather flows from the Ottawa River to the central treatment facility (ROPEC). Sewers are in poor hydraulic and structural condition, and combined sewer overflows (cso) in the area are frequent. Upgrades to the sewers in this area are required as part of the Region's strategy to meet Provincial CSO policy.

In 1997, the Alvin Heights/Rockcliffe Air Base Sanitary Sewer Study was initiated with the following objectives:

- Improve the overall system performance and maintenance requirements;
- Maximize the capture and treatment of wastewater flows based on flow allocations and overflow control objectives defined by the Region's Wastewater Master Plan;
- Prevent wastewater collection system flooding, and;
- Ensure that the above objectives are met for both existing and future development conditions.

The study was completed and recommended the following:

- The replacement of the undersized Alvin Heights, Blasdell and Air Base pull-back sewers, to increase the capture rate and eliminate frequent overflows at the Blasdell control structure;
- The elimination of the RCAF Pumping Station, since all sanitary flows from the north-western area of the Rockcliffe Air Base have been eliminated, except for flow from the Aviation Museum. The Pumping Station is being transferred to the Museum since it serves only one customer.

The project was recently tendered and bids were received as follows:

<u>Contractor</u>	<u>Total Contract Price</u>
Taggart Construction Ltd., Ottawa	\$2,627,009.00
Dufferin Construction Company, Carp	\$2,932,331.00

Based on review of the tender documents, the Department recommends acceptance of the tender from the low bidder, Taggart Construction Ltd., Ottawa. The requested contract award of \$2,627,009, plus an allowance of \$262,701 for contingency for contract variations due to unforeseen conditions, and \$202,280, for the G.S.T. allowance, brings the total contract award to \$3,091,990.

The budget estimate for this work was \$1,925,000. The budget estimate for this project was prepared prior to the completion of any detailed engineering work. At that time the environmental inventory was unavailable, National Capital Commission requirements were not known, final route selection for the sewer was not established, geotechnical/rock conditions were unknown, existing utility information was unavailable, negotiations regarding the transfer of the RCAF sanitary pumping station to the Aviation Museum had not commenced, and as a result the true complexities and scope of the construction of this sewer were not evident.

## DISCUSSION

The proposed Alvin Heights Pullback Replacement Sewer intercepts combined sewage flows from the existing sewers in the Blasdell Road area and discharges them to the Region's Ottawa Outfall Sewer. The sewer flows in a southerly direction, opposite to the existing topography, resulting in the lower reaches of the sewer being in excess of ten metres deep. As a result, these deeper sections cannot be constructed by traditional open-cut methods and require the use of rock boring and jacking/boring

techniques. In addition to these areas, jacking/boring was proposed for the northern portions of the sewer so as to avoid the destruction of existing wooded areas on the National Capital Commission property. To avoid destruction of the remaining wooded areas and to provide adequate access for maintenance vehicles, a new alignment for the sewer was chosen.

In an effort to obtain the best price for this work, staff carried out additional geotechnical investigations to alleviate contractor concerns with regard to rock quality. In addition, staff tendered this work during the winter months, when construction activity is low, in order to attract the greatest number of bidders.

The fact that only two bids were received for this project is indicative of the complexities associated with this type of sewer construction. Staff recommend that this project be awarded to Taggart Construction Ltd. as re-tendering this project may result in higher or no bids being received.

The request for increase in budget authority is as a result of the following:

- An increase in construction cost for the Alvin Heights Pullback Sewer as a result of the complexities associated with installation and the new longer alignment chosen;
- The inclusion of the replacement of the RCAF forcemain and diversion chamber;
- Increased engineering costs in carrying out additional geotechnical investigations, and in completing the Federal Environmental Screening.

#### EXPENDITURE JUSTIFICATION

Issues related to servicing the Alvin Heights and Rockcliffe Air Base areas need to be addressed as they currently have an impact on operation and maintenance costs, and they present constraints to the future redevelopment and growth potential of the area. In addition, the proposed works are required as part of the Region's strategy to meet Provincial CSO policy.

#### CONSULTATION

A public Open House was held on 29 June 1999. A total of eight people attended the open house. Two comment sheets were received, with feedback being very supportive of the project. Additional public notification will take place prior to the commencement of construction.

FINANCIAL STATEMENT

	\$	\$
	<u>900231</u>	<u>900234</u>
Approved Budget To Date	2,270,000	7,890,000
Authority Increase/(Decrease)	<u>1,380,000</u>	<u>(1,380,000)</u>
Revised Budget	3,650,000	6,510,000
Total Paid and Committed	<u>(360,718)</u>	<u>(3,460,386)</u>
Balance Available	3,289,282	3,049,614
THIS REQUEST	<u>(3,091,990)</u>	<u>(0)</u>
Balance Remaining	<u><u>197,292</u></u>	<u><u>3,049,614</u></u>

Additional funds in the amount of \$1,380,00 are available for transfer from Internal Order No.900234, Collector Sewers Rehabilitation Program to Internal Order Nos. 900231, Alvin Heights/Rockcliffe Air Base Sewer Area Study.

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

ZAG/jw

SUPPLY MANAGEMENT DIVISION

I concur,

*G. Ford on behalf of*  
*the Finance Commissioner*

FINANCE DEPARTMENT COMMENT

Funds are available for transfer as indicated.

TRANSITION BOARD APPROVAL

In accordance with the Financial Guidelines as approved by the Ottawa Transition Board, the transfer of funding as recommended in this report will require Board approval.

*T. Fedec on behalf of*  
*the Finance Commissioner*