

REGIONAL MUNICIPALITY OF OTTAWA-CARLETON
MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON

REPORT
RAPPORT

Our File/N/Réf. **31 05-97-0290-M**
Your File/V/Réf.

DATE 13 August 1997

TO/DEST. Co-ordinator
 Corporate Services and Economic Development Committee

FROM/EXP. Environment and Transportation Commissioner

SUBJECT/OBJET **SUPERVISORY CONTROL AND DATA ACQUISITION
SYSTEM STANDARDS DEVELOPMENT - CONSULTANT
APPOINTMENT CONTRACT NO. CC 7629**

DEPARTMENTAL RECOMMENDATION

That the Corporate Services and Economic Development Committee approve the appointment of Totten Sims Hubicki Associates, Ottawa, to undertake the development of standards for the Supervisory Control and Data Acquisition system, for a total contract provision of \$100,045.

BACKGROUND

The need to develop Supervisory Control and Data Acquisition (SCADA) system standards has become a priority for the Water Division. The SCADA system is the computer system that the Water Division staff use to control and monitor the drinking water purification process, control pumps to maintain water pressure and reservoir levels and provide information for system design and troubleshooting purposes.

A Water Supply SCADA Master Plan study was initiated over a year ago to define and prioritize the SCADA system needs over the short and long term. This study identified the need to upgrade the SCADA system for the remote water facilities. However, the creation of SCADA standards was identified as a first step to this large scale project. The standards will ensure that SCADA projects meet RMOC requirements.

Other goals will also be achieved with the creation of these standards. In essence, they will facilitate troubleshooting and ensure uniformity within the SCADA system. Since current projects that include a SCADA component are not standardized, maintaining and troubleshooting the system becomes difficult and time consuming. These standards will reduce on-going operating and maintenance costs for the system, and where possible, also minimize SCADA system design and implementation costs.

RATIONALE

Three engineering consulting firms were invited to submit a proposal to develop SCADA system standards. Staff evaluated these proposals based on project teams, understanding of objectives, methodology and approach, experience and corporate resources, and cost. Interviews were also conducted to ensure all consulting firms understood the scope of work involved in this project, and also to provide an opportunity to address any concerns.

Totten Sims Hubicki proposed a strong team that have extensive experience in developing standards for SCADA systems. Their team demonstrated 17 similar projects, where 7 large projects were completed. In addition, they demonstrated they could complete the project within the given time frame.

CONSULTATION

The consultation process was not applicable.

EXPENDITURE JUSTIFICATION

Past projects have shown that the lack of documented RMOC standards for SCADA systems can affect large projects negatively, allowing contractors to conduct their work according to their individual preferences and standards. Therefore, to ensure a successful SCADA system upgrade of the remote facilities, Water Division SCADA standards must first be developed.

Totten Sims Hubicki will undertake this project at a cost of \$85,000, plus GST of \$5,950, and a contingency allowance of \$9,095, bringing the total contract provision to \$100,045.

FINANCIAL STATEMENT

	\$
Approved Budget to Date	1,530,000
Total Committed	<u>(25,607)</u>
Balance Available	1,504,393
THIS REQUEST	<u>(100,045)</u>
Balance Remaining	<u>1,404,348</u>

Funds are available in the 1997 Capital Budget, Account No. 922-41755-3603, SCADA Update Programme (Reference page 258).

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

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FINANCE DEPARTMENT COMMENT

Funds are available as indicated.

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