

COUNCIL REPORT

M&C No.	2018-331
Report Date	November 21, 2018
Meeting Date	December 03, 2018
Service Area	Corporate Services

His Worship Mayor Don Darling and Members of Common Council

SUBJECT: GEOGRAPHIC INFORMATION SYSTEMS ENTERPRISE UPGRADE

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Common Council.

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
<i>Yves Léger</i>	<i>Stephanie Rackley-Roach</i>	<i>Neil Jacobsen</i>

RECOMMENDATION

It is recommended that the City enter into a Service Request Agreement with Esri Canada Limited, for a maximum of \$13,145 (plus applicable taxes) and further that the Mayor and Common Clerk be authorized to execute the Service Request Agreement in the form already approved by the Legal Department as well as the Consulting Service Request Order.

EXECUTIVE SUMMARY

In order to take advantage of new features, stability enhancements and improved functionality, the GIS service area is looking to upgrade its current GIS Server and SDE Geodatabase to the latest ArcGIS Enterprise. This upgrade introduces new components to Saint John's current GIS environment; these components include Portal for ArcGIS and the ArcGIS Data Store. ArcGIS Enterprise also presents a security model change which will need to be implemented with the upgrade. Because of the complexity of the work and specialized knowledge required, the GIS service area requested and has received a quote, from Esri Canada, for onsite and remote technical consulting support in order to perform the upgrade.

PREVIOUS RESOLUTION

None.

REPORT

The City is currently running version ArcGIS Server and SDE Geodatabase version 10.3.1. The current release of ArcGIS Enterprise is 10.6.1. Upgrading to this latest version is warranted for a number of reasons. Firstly, in an effort to remedy serious performance issues which are significantly slowing staff's progress in mapping the City assets, the SDE Geodatabase is being migrated to SQL Server version 2017, from the current version 2008 R2. However, SQL Server version 2017 is not a supported relational database management system (RDBMS) platform for version 10.3.1 of ArcGIS Server and SDE Geodatabase. SQL Server version 2017 is a supported RDBMS platform for version 10.6.1 of ArcGIS Server and SDE Geodatabase. Secondly, ArcGIS Enterprise version 10.6.1 will allow staff to take advantage of new data analytics tools which are included in our current licensing agreement. These tools will permit the analysis of, and assist in finding insights in, various databases.

ArcGIS Enterprise also introduces new components to the GIS architecture, including Portal for ArcGIS and the ArcGIS Data Store. These components will make it easier for employees to find and access spatial data. In addition to the changes in the system architecture, ArcGIS Enterprise also has an enhanced security model.

Because of the complexity of the work and the specialized knowledge required, the GIS service area requested and has received a quote, from Esri Canada, for onsite and remote technical consulting support in order to perform the upgrade. The quoted amount, based on time and materials, is up to a maximum of \$13,145 (plus applicable taxes).

STRATEGIC ALIGNMENT

Ensuring the Geographic Information System is up-to-date and performing properly is critical for the Asset Management program to be able to make data-driven decision-making. This aligns directly with Council's Valued Service Delivery and Fiscally Responsible priorities.

The Geographic Information Systems software is integral to City operations. Most municipal business processes are location-dependent, making the GIS a critical part of the City's overall information systems. This is true whether the information relates to infrastructure, assets, facilities, transportation, by-laws or customers.

The Geographic Information Systems software facilitates the collection, management, analysis and dissemination of location-based information. GIS is an essential tool required to perform complex spatial analysis; the results of which

are used to make evidence-based decisions to enable efficiencies and ensure services are strategically aligned with Council's priorities.

SERVICE AND FINANCIAL OUTCOMES

The total cost to the City of Saint John for the enterprise GIS upgrade, as proposed by Esri Canada, will be \$13,145 plus tax.

Funds have been allocated in the Geographic Information Systems service area and Information Technology service area operating budgets.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

The Legal Department reviewed the Service Request Agreement, provided input to staff, and approved the version attached to this report as to form and legality.

ATTACHMENTS

Esri Canada Consulting Service Request Order