Report to: General Committee

SUBJECT:	Award of Proposal 169-R-17 Supply and Implementation, Enterprise Asset Management Solution (EAM)
PREPARED BY:	Mustafa Rahman, Client Advisor, ITS, Ext. 2884 Rosemarie Patano, Senior Construction Buyer, Ext. 2990

RECOMMENDATION:

- 1. THAT the report entitled "Award of Proposal 169-R-17 Supply and Installation, Enterprise Asset Management Solution (EAM)" be received; and
- 2. THAT the contract for 169-R-17 Supply and Installation, Enterprise Asset Management Solution (EAM) be awarded to the highest ranked/lowest priced bidder, Egov Solutions, Inc. (DBS Lucity Canada) in the amount of \$1,650,025.17 inclusive of HST, of which \$1,193,122.77 is for the software and implementation costs and \$456,902.40 is for four years of support and maintenance; and
- THAT the cost of the software, and implementation costs in the amount of \$1,193,122.77 be funded from the following capital projects; #16070 "WW Hansen 8 Upgrade", #11116 "Enterprise Asset Mangement Phase 2 Implementation", and #18077 "Enterprise Asset Management Solution – Additional Funds" with a combined available budget of \$1,175,045.14; and
- 4. THAT the capital budget shortfall in the amount of \$18,077.63 inclusive of HST (\$1,175,045.14 \$1,193,122.77) be funded from the Waterworks Reserve (\$11,750.46 or 65%) and the Life Cycle Replacement and Capital Reserve Fund (\$6,327.17 or 35%); and
- 5. THAT the cost of the software support and maintenance fees of \$456,902.40 inclusive of HST for a four years (Year 2 to 5) term be funded from #400-400-5361 with an available annual budget of \$106,000.00, subject to Council approval of the 2020-2023 operating budgets in the amounts of;
 - a. Year 2 (2020) \$111,936.00
 - b. Year 3 (2021) \$113,462.40
 - c. Year 4 (2022) \$114,988.80
 - d. <u>Year 5 (2023) \$116,515.20</u> Tatal \$456,002.40
 - Total \$456,902.40
- 6. THAT the operating budget shortfall of \$5,936.00 (\$111,936.00 \$106,000.00) in 2020 (Year 2) and future increases in 2021 to 2023 (Years 3 to 5) be funded from existing annual maintenance budget totaling \$34,700.00 (\$26,100.00 USD x 1.33 exchange rate) that will no longer be required upon full implementation of EAM; and
- 7. THAT a contract Staff for a three-year term to a maximum amount of \$113,135.00 (including benefits, subject to annual cost of living adjustment equivalent to the collective agreement increase) be pre-approved as part of the 2019 Operating Budget to support the implementation, change management, testing and training of the EAM system; and

- 8. THAT the 2019 contract Staff be funded from Waterworks Reserve (\$73,538 or 65%) and Life Cycle Replacement & Capital Reserve Fund (\$39,597); and
- 9. THAT a full-time Staff to support the implementation, change management, testing and training of the EAM system and technical support for the application during the project implementation and on going basis in the amount of \$116,673.00 (including benefits) be addressed as part of the 2019 Operating Budget; and
- 10. THAT Egov Solutions, Inc. (DBS Lucity Canada) be designated as the preferred vendor for the City of Markham's Enterprise Asset Management Solution (EAM); and
- 11. THAT the Chief Information Officer be authorized to approve the annual support and maintenance fee subject to Council approval of the annual Operating Budget; and
- 12. THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to obtain approval to award the contract 169-R-17 for the supply and installation of an Enterprise Asset Management Solution (EAM).

BACKGROUND:

Hansen, a work order system, was first implemented in 2000 in the Waterworks Department and has served the City well for the past two decades. It continues to be used primarily by staff in Environmental Services, and to a small extent, in Operations and Sustainablity and Asset Management departments. It is used for inventory control, work order management, asset life-cycle analysis and reporting. The version of Hansen (v7) being utilized at the City is outdated, and has been replaced with a new version, supplied by a new vendor. Support of this application is difficult to obtain; and, moving forward, Staff anticipate that application will cease to be supported.

The City has a requirement to implement a new scalable EAM solution that will address similar needs across the corporation with increased depth of use. The new solution will be a robust and comprehensive application that delivers the ability to meet current customer expectations and expand to meet future demands of the business as their needs continue to evolve by benefiting from the opportunity presented by newer technology capabilities.

Accordingly, the City of Markham issued a RFP for a solution to deliver, implement and support an EAM that provides functionality inclusive of (but not limited to):

- Asset/infrastructure/part inventory capabilities;
- Asset registry and valuation (Asset Registry and Public Sector Accounting Board (PSAB);
- Life cycle planning of infrastructure for capital programming;
- Work order management from initiation to closure of a service request;
- Generate reports / management dashboard; track and analyze service trends;
- Enable customer self-service on City of Markham web technologies (both web and mobile);
- Ability to integrate with other City systems using industry standard protocol;

- Ability for field staff to easily work offsite with full access the aspects of the solution; required as dictated by their user profiles;
- Provide audit capabilities; monitor staff and department service levels.

Once implemented, a robust, scalable EAM solution will help eliminate the need for manual processes as well as improve, standardize and streamline processes within the participating five primary departments: Environmental Services, Operations, Sustainability and Asset Management, Recreation, and Finance.

The scope of this initiative also includes:

- Installation, configuration, customization and implementation of the new EAM solution;
- Working with City Staff to understand existing business processes and identify process changes required to support project objectives;
- Implementation of infrastructure components that provide: inter-application communication (integration); high availability / fail-over capabilities; security, auditing and notification services; and, disaster recovery;
- Data conversion, data migration and/or data archival as agreed to with the business and in accordance with defined data retention policies;
- Completion of an IT Security audit, including production of any required documentation;
- Recommend other necessary hardware/peripherals to support a complete end-to-end system;
- Training and knowledge transfer services; warranty, maintenance and on-going support

The plan includes ensuring the City's transition from the Hansen system to the new solution. The end goal of this project is to have a solution that is flexible, allows necessary integrations with other City applications meeting all the current City users needs and broadening the adoption and use of the tool and standards by other departments. In addition, the solution will allow for enablement of quick user uptake, consolidation and standardization of asset record management across the City of Markham. The number of users of the new system is expected to increase as compared to the current base.

BID INFORMATION:

Bid closing date	June 15, 2017
Number picking up documents	17
Number responding to bid	7

PROPOSAL EVALUATION:

The Evaluation Team for this RFP was comprised of Staff from Envrionmental Services, Operations, Sustainability and Asset Management, Finance, ITS, with Purchasing Staff acting as the facilitator.

<u>Stage 1 – Technical Proposal</u>

The Stage 1 technical proposals were evaluated against the pre-established evaluation criteria as outlined in the RFP: 5 points for Experience and Qualification of the Bidder and Project Team; 5 points for Project Understanding, Methodology and Delivery Management; 30 points for Business Functionality Requirement; 15 points for Technical Requirements; 5 points for Testing; 5 points for Support, Maintenance and Warranty; and 30 point for Price, totaling 100 points. Upon completion of Stage 1 (technical evaluation), the Price Proposal (Bid Form) provided by those

bidders who qualified from Stage 1, (minimum score of 75%, or 52.5 points out of 70 required), proceeded to Stage 2 for price evaluation. The results of the Stage 1 evaluation are outlined below:

Bidders	Score (out of 70)	Rank Results
6362222 Canada Inc.(DBA The Createch Group)*	64.69	1
6362222 Canada Inc. (DBA The Createch Group)**	63.99	2
Egov Solutions, Inc. (DBS Lucity Canada)	61.14	3
ESRI Canada	59.29	4
Infor (Canada) Inc.	57.22	5
Cayenta	47.35	6
Guardian IT Management	30.44	7

*Proposal 1 – Markham hosted (On-premise)

**Proposal 2 - Service as A Service (SaaS) (off-premise)

Stage 2- Price

Based on the Stage 1 evaluation, two bidders received a minimum of 75% or 52.5 points out of 70 and therefore, proceeded to Stage 2 - Price Evaluation. The price proposal provided by the bidders is evaluated out of 30 points, based on the criteria outlined in the RFP.

Bidders	Solution Software	Solution Type	Score (out of 30)	Rank Results
Egov Solutions, Inc.	Lucity	Markham hosted	30.00	1
(DBS Lucity Canada)	M solutions	(On-Premise)	30.00	1
ESRI Canada	CityWorks	Markham hosted (On-Premise)	26.78	2
Infor (Canada) Inc.	Infor EAM	Markham hosted (On-Premise)	22.92	3
6362222 Canada Inc.	Maximo	Service as A Sservice (SaaS)	0.00	4
(DBA The Createch Group)	Μαλίπο	(off-premise)	0.00	
6362222 Canada Inc.	Maximo	Service as A Solution (SaaS);	0.00	5
(DBA The Createch Group)	Ινιαλιπο	fully off-premise	0.00	

Prices ranged from \$1,761,491 to \$5,524,387 inclusive of tax

Stage 3- Presentation and Overall Scoring

To ensure the highest ranked bidder's understood the City's requirements and to further evaluate the bidders' submissions against the requirements of this RFP, staff invited the highest ranked bidder's to a presentation as allowed for in the bid document.

Bidders	Score (out of 10)	Rank Results
Egov Solutions, Inc. (DBS Lucity Canada)	9.73	1
ESRI Canada	9.05	2
Infor (Canada) Inc.	6.07	3

Overall Scoring

Bidders	Grand Total Score (out of 110)	Rank Results
Egov Solutions, Inc. (DBS Lucity Canada)	100.87	1
ESRI Canada	95.12	2
Infor (Canada) Inc.	86.21	3

Egov Solutions, Inc. (DBS Lucity Canada) ("Egov"), the lowest priced bidder demonstrated a thorough understanding of the project and its requirements. Their proposal demonstrated to the City's satisfaction that they have the ability to undertake the project and they have a strong understanding of the project deliverables, key issues and challenges. Through the evaluation process, Egov demonstrated a depth of experience and expertise as it specifically relates to being a full service company, providing consulting, design, implementation and support (meeting City's business and technical requirements) resulting in an overall highest ranking.

OPTIONS / DISCUSSIONS

The City is receiving a complete end-to-end Enterprise Asset Mangement Delivery System solution. Egov's software and professional services offering leads the industry in a number of ways:

- dedicated EAM implementations with experience in complex EAM projects managed and deployed,
- features and functions that support optimum flexibility and ease-of-use,
- flexible licensing and deployment, integrated analytics,
- manned end user help desk support (Monday Friday from 8am to 8pm EST), built-in backups and disaster recovery as standard, and
- robust application integration capability and open architecture, and scalability

Since 1986, Egov's specialization and expertise has been in enterprise, municipal asset and work management software, GIS development and integration, business process optimization and implementation. Egov's customer base includes the following clients (but not limited to): Region of Waterloo, Metrolinx, and, Buffalo Pound WTP. Their experience includes robust integration experience, including ESRI, Avaya, Hansen, and Amanda systems.

With a development history spanning 30 years, that is dedicated to municipal space, the proposed LucityAM software suite is complemented by specialized disciplines that are needed to ensure asset management best practices are put into play and driven by repeatable, streamlined workflows. Egov has partnered with AECOM and SEG Consulting to complement the experienced Lucity resources. Combined, the team is uniquely qualified. Further, software solutions and services are also provided by Watson & Associates, and Economists to complement Lucity. Watson & Associates, based on their comprehensive range of fiscal planning and policy specialization, excels in implementation of the Assetic Predictor software solution - a modelling tool that is designed for the long-term planning of infrastructure assets. Modelling enables the evaluation of typical long-term funding scenarios and outcomes resulting in long term capital plans. Final capital plans are translated into projects and executed, with job costs, in Lucity – which, in turn update the predictive models. This integrated solution creates the asset optimization loop that will allow the City to meet desired service levels within desired budget commitments.

CONCLUSION:

Business driven changes and the needs of customers will require a solution that can constantly adapt. Egov's proposed solution will be flexible in meeting the City's asset infrastructure management needs including the ability to support growth. This award will enable the City to deliver fully integrated, extendable and scalable enterprise systems to achive this outcome.

OPERATING BUDGET AND LIFE CYCLE IMPACT:

The total award cost of \$1,650,025.17 includes capital costs of \$1,193,122.77 for software and implementation fees, and associated annual maintenance costs of \$456,902.40 (inclusive of HST) for years 2 to 5.

The capital cost in the amount of 1,193,122.77 will be funded from the consolidated capital project #18077, "Enterprise Asset Management Solution – Additional Funds", with available budget of 1,175,045.14. The shortfall in the amount of 18,077.63 inclusive of HST will be funded from the Waterworks Reserve (11,750.46 or 65%) and the Life Cycle Replacement & Capital Reserve Fund (6,327.17 or 35%).

Current Budget Available and Account #	\$1,175,045.14	Consolidated Account: 400-101-5399-18077 Enterprise Asset Management Solution – Additional Funds
Less cost of award	\$1,193,122.77	Software & Implementtion Costs (Year 1)
		Total Cost of Award (Inclusive of HST)
Budget Shortfall after this award	(\$18,077.63)	

The software support and maintenance fee in the amount of \$456,902.40 inclusive of HST over a four year (Year 2 to 5) term will be subject to Council approval of the 2020-2023 operating budgets in the amounts of;

Year 2 (2020) - \$111,936.00 Year 3 (2021) - \$113,462.40 Year 4 (2022) - \$114,988.80 <u>Year 5 (2023) - \$116,515.20</u> Total - \$456,902.40

Annual maintenance cost of \$111,936.00 will commence in 2020 (Year 2) with available budget of \$106,000.00 in account #400-400-5361 (Computer Software Service Agreements). Upon full implementation of EAM, there are existing applications that will no longer be required. As such, the corresponding annual maintenance budget totaling \$34,700.00 (\$26,100.00 USD x 1.33 exchange rate) will be reallocated to fund the shortfall of \$5,936.00 in Year 2 (\$111,936.00 - \$106,000.00) and future annual increases in Years 3 to 5 (2021 to 2023).

Council pre-approval of a three-year contract staff to a maximum cost of \$113,135.00 (including benefits) will be required to support the implementation, change management, testing & training of the EAM system for the user departments is recommended. In addition, a full-time staffing request to support the implementation, change management, testing and training of the EAM system and technical support for

the application during the project implementation and on going basis in the amount of \$116,673.00 (including benefits) will be addressed as part of the 2019 Operating Budget.

It is anticipated that the software will be in use for 15 years. Therefore, the impact to the life cycle reserve study will be \$1,193,122 over the next 25 year period. The life cycle reserve study will be updated accordingly.

HUMAN RESOURCES CONSIDERATIONS:

Not Applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:		
Goal	Examples – How the Solution can Help Achieve the Goal	
Exceptional Services by	The new system will facilitate enhanced service delivery and staff	
Exceptional People	performance efficiencies.	
Engaged, Diverse & Thriving City	The new EAM system will facilitate participation in City programs by integrating with the Customer Relationship Management system to handle and respond to service requests.	
Safe & Sustainable Community	The new EAM system will provide City staff the ability to manage infrastructure in a coordinated, sustainable manner that is consistent with the City's Corporate Asset Management Plan and industry best practices.	
Stewardship of Money & Resources	The new EAM system will facilitate a full view of City assets with an understanding of total cost of ownership to manage the asset through its life cycle	

ALIGNMENT WITH STRATEGIC PRIORITIES:

BUSINESS UNITS CONSULTED AND AFFECTED:

Community and Fire Services Commission, Corporate Services Commission

RECOMMENDED BY:

2018-12-04

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Nasir Kenea Chief Information Officer, ITS Signed by: cxa × Bundefubrus

Commissioner, Community & Fire Services

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ATTACHMENTS: Not Applicable