



Report to: General Committee

Report Date: March 17, 2014

SUBJECT: Award of Proposal 101-R-13 Corporate Automated Vehicle Location (AVL) System

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RECOMMENDATION:

- 1) THAT the report entitled “Award of Proposal 101-R-13 Corporate Automated Vehicle Location (AVL) System” be received; and,
- 2) THAT the contract for Corporate Automated Vehicle Location (AVL) system from Proposal 101-R-13 be awarded to the highest ranked, lowest priced bidder, Air Automotive Tracking Inc. (AAT), in the amount of \$565,856.83 (inclusive of HST) (hardware, software and labour component totalling \$164,057.47 and warranty, support and maintenance fee component totalling \$401,799.36); and,
- 3) THAT the hardware, software and labour cost component for 101-R-13 be funded from capital project #9340 “Wireless Data & Voice Communication Strategy Implementation” in the amount of \$164,057.47, and the remaining funds of \$9,531.47 will be returned to the original funding source; and,
- 4) THAT the warranty, support and maintenance fee component for the hardware and software at \$64,719.36 per year for a four (4) year term starting in 2015, with an option to renew for an additional two years at \$71,460.96 per year for the total amount of \$401,799.36 (inclusive of HST) over a six year term be funded from operating budget account #400-404-5331 “Maintenance for Communication Equipments”, subject to Council approval of the 2015 to 2020 Operating Budgets; and,
- 5) THAT AAT be designated as the preferred vendor for City’s Automated Vehicle Location (AVL) product for the term of this contract; and further
- 6) 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 committee approval to award the contract 101-R-13 to Air Automotive Tracking Inc. (AAT).

BACKGROUND

Currently Waterworks and Operations Departments use two different third-party AVL systems (Fleetlite & Strategic Mapping), installed on 81 City owned vehicles. In addition, the City has existing contracts with Crupi, VTA and De Ferrari, providing 54 winter maintenance vehicles that use Strategic Mapping for AVL services (outside the current scope of this award). Data is hosted by the vendors for both systems, and city staff use these systems by logging into a web account setup up by these vendors. Presently the remaining City vehicles (184 or 73% of City fleets), included in this project, do not have AVL system.

The current AVL systems provided by these two vendors have limited reporting ability. The system currently used in the Winter Operations fleet is becoming very unreliable along with a number of hardware issues that seem to be increasing. This impairs the reliability of the system and increases the staff time required to verify operating times and service levels.

Another limitation of the current AVL system is that the data is stored for approximately 3 months. If the City needs to access a specific date and time of an event, it sometimes takes a long time and may not be available due to the purging of the data by the vendor. With the current workload, it is also difficult for City staff to spend the necessary time to study the information and use it to make decisions that may provide benefits to each business unit as it pertains to their respective assigned fleet units.

The recommended AVL system will be able to send the collected data automatically to a data warehouse system hosted by the successful bidder. The data will be instantly available online for 2 years and data older than 2 years can be reinstated online when required. The current AVL systems are different, not very scalable and cannot integrate with many systems that the City owns. Having a City owned, scalable Corporate AVL system sets the platform for future enhancement for numerous systems and processes that City uses.

Other City Departments have also expressed interest in having an AVL system. Accordingly, staff have reviewed the current and future needs across the organization and proposed a corporate AVL system that is flexible and scalable to the needs of the City, while optimizing the overall cost to the organization. Although many Departments can benefit from the Corporate AVL System, the main focus of the first phase will be to implement AVL Solution for four areas: replace the existing systems in Waterworks and Operations, and provide new capabilities for Waste Management and By-law Services.

In subsequent phases, the Corporate AVL system would be expanded to other Departments as required. The scope of this RFP includes:

- Software Solution delivery and installation by the successful Bidder, including system and user acceptance testing as well as onsite go live support
- Configuration and integration of the software solution with the City's specific environment, face-to-face training to end users and Information Technology Services (ITS) staff to be delivered at the City's facilities

It is with this background that the City issued a RFP for an Automatic Vehicle Location (AVL) system, as well as for obtaining support & maintenance of the system for a Term of seven (7) years.

BID INFORMATION:

| | |
|-----------------------------|-----------------|
| Advertised, place and date | ETN |
| Bid closing date | August 20, 2013 |
| Number picking up documents | 34 |
| Number responding to bid | 6 |

PROPOSAL EVALUATION

The evaluation team was comprised of ITS, Operations, Waterworks, By-Law Services, and Element Fleet Management (*Formerly known as TLS Fleet Management*). Purchasing staff acted as the facilitator. The evaluation was based on pre-established evaluation criteria as detailed in the Request for Proposal: 10 points for “Relevant Experience and Expertise of Firm & Team”; 20 points for “Project Understanding, Methodology, Delivery and Management”; 40 points for “Meeting all RFP Business and Technical Environment Requirements” (which includes Project Implementation, Delivery Training and Support), and 30 point for “Price”, totaling 100 points with resulting scores as follows:

| Supplier | Score (out of 100) | Rank Results |
|--|--------------------|--------------|
| Air Automotive Tracking Inc. (AAT Inc.) | 86.47 | 1 |
| Dican Inc. | 76.00 | 2 |
| Webtech Wireless | 73.01 | 3 |
| Telus | 69.85 | 4 |
| DM&T Services | 67.15 | 5 |
| Solutions Into Motion | 56.03 | 6 |

Prices ranged from \$565,856.83 to \$987,798 inclusive of HST for year one (1), to year seven (7) for these submissions, taking into account the total cost of ownership with the inclusion of future support and maintenance years starting in year two (2).

To ensure the highest ranked bidder understood the City’s requirements and to allow staff members to navigate through their software with technical representation, Staff invited the three highest ranked vendors to a Presentation Assessment as allowed for in the bid document.

Overall scoring

| Supplier | Score (out of 110) | Rank Results |
|--|--------------------|--------------|
| Air Automotive Tracking Inc. (AAT Inc.) | 95.27 | 1 |
| Dican Inc. | 84.80 | 2 |
| Webtech Wireless | 81.01 | 3 |

AAT Inc., the lowest priced bidder scored second highest on the technical submission demonstrating 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, AAT Inc. demonstrated a depth of experience and expertise as it specifically relates to: a full service communications company, providing consulting, design, implementation and support for best technology solution (meeting City’s business and technical requirements) resulting in an overall higher ranking.

The City is receiving a complete solution of Hardware and Software supply, including installation, training and support to ensure a successful implementation and positive transition to the new solution. The entire AAT solution is web-based and provides information in real time. The vendor will provide a full warranty and support model with a

local and dedicated customer service assigned to our account with phone and email access; all parts & labour; Software Customization, Setup & Programming; remote software updates, and an articulated service level agreement (SLA) relating to customer service timing solutions for seven (7) years; and special discounting being presented as part of this award.

OPTIONS / DISCUSSIONS

AAT Inc., incorporated in 2005 to specialize in Telematic GPS Solutions, is a division of WH Electronics Inc. (established in 1990). AAT's main customer base is made up of local municipalities that chose AAT because of its specialization in reporting custom data and creating custom solutions by integrating with other third-party hardware such as Rexroth, Dickey-John, Force-America and more. AAT monitors city of Toronto (Crupi Group) snow plows and waste management operations. Other municipalities that utilize the AAT system include the region of Niagara, Grimsby, & the Town of Lincoln. Bell Canada is also their customer with a deployment of 10,000 AXON units.

AAT Inc. has proposed a technology platform (AXON) fully developed in-house to communicate with vehicles through a vehicle on-board computer, which has been further integrated to communicate with in-vehicle devices such as salt-spreaders, proximity switches, pressure, RFID readers, PTO's, PDA's and more. Their solution also includes a back-end service with specialized report to meet customer requirements. AAT develop every aspect of their solutions themselves, making them a uniquely flexible partner.

The Corporate AVL system recommended in this report provides a number of benefits. With the recent extreme weather events of late, for example, the system would have provided quick access to information that could have helped mapping out streets where vehicles and equipment were unable to navigate due to downed trees. It could have also easily allowed City fleet units used in the clean up process to be tracked by various management levels in efforts to improve progress updates to residents.

It is important for an AVL system to be able to integrate with existing city systems to drive efficiency and allow easy access to information. For example, the Corporate AVL System can be integrated with the Fire vehicle dispatch system to map out fire vehicles. It can also be integrated with vehicle diagnostic system, various salt spreader control systems etc. The system can even help other systems achieve further efficiency. For example: as Waterworks expands & updates the Mobile Work Management System, the new AVL system can potentially integrate with this system and map out the locations of the mobile operators, providing the ability to dispatch the closest operators to the worksite. The city maintaining the ownership of the data provides opportunity for other uses in the future. Furthermore, the proposed AVL system will facilitate production of reports that will be beneficial to all business units where it is deployed, and help in decision making.

CONCLUSION

The Corporate AVL solution covering all city vehicles (265) by the end of the project will:

- Provide a consistent approach to in-field analytics gathering;
- Assist Operations staff in efficiently managing their Winter Maintenance activities - the system will provide real-time location of every vehicle, the speed at which it

travelling, how the salt is being applied to the road and whether the plow is up or down etc.

- Assist By-law Services staff ensure effective and efficient coverage of the City;
- Provide vehicle diagnostic reports and monitor/record mechanical events;
- Provide information critical for claims management and liability protection;
- Enhance staff safety in the field;
- Provide an enterprise solution with optimized cost to the organization.

FINANCIAL CONSIDERATIONS AND TEMPLATE:

The contract award to AAT Inc. for the Corporate AVL system for a four (4) year term with an option to renew for an additional two years is \$565,856.83. The contract award is broken down to two components:

- A. capital costs of \$164,057.47 including hardware, software, labour cost and warranty, support and maintenance fees for year 1 (2014);
- B. on-going warranty, support and maintenance fees of \$64,719.36 per year for a four year term, and the option to renew for an additional two years at \$71,460.96 per year. The total cost over the 6 year term is \$401,799.36.

The capital costs of \$164,057.47 will be funded from capital project #9340 "Wireless Data and Voice Communication Strategy Implementation", and the remaining funds of \$9,531.47 will be returned to the original funding source.

The future ongoing warranty, support and maintenance fees as outlined above for the years from 2015 to 2020 will be funded from the operating account #400-404-5331 "Maintenance for Communication Equipment", subject to Council approval of the operating budgets for the years 2015 to 2020. The warranty, support and maintenance cost per unit will be reduced from the existing cost of \$379.12 per unit to \$244.22 per unit, representing a 35.6% reduction. Starting in 2015, the total warranty, support and maintenance fees will increase by \$13,538.16 from \$51,181.20 to \$64,719.36 (due to volume increase from 135 units to 265 units offset by lower operating cost per unit). The future increase in operating costs will be considered as part of the annual Operating Budget process starting in 2015.

HUMAN RESOURCES CONSIDERATIONS:

Not Applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Not Applicable

BUSINESS UNITS CONSULTED AND AFFECTED:

Waterworks, Waste Management, Operations and By-law Services

RECOMMENDED

BY:

12/03/2014

12/03/2014

X 

Trinela Cane
Commissioner, Corporate Services

X 

Andy Taylor
Chief Administrative Officer