



Report to: General Committee

Meeting Date: December 5, 2023

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**SUBJECT:** **Contract 297-S-23 - Supply and Delivery of One (1) Pumper Rescue Apparatus and One (1) 32m Aerial Ladder Apparatus for Fire & Emergency Services**

**PREPARED BY:** Ryan Best, Deputy Fire Chief, ext. 2012  
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**RECOMMENDATION:**

- 1) THAT the report entitled “Contract 297-S-23 - Supply and Delivery of One (1) Pumper Rescue Apparatus and One (1) 32m Aerial Ladder Apparatus for Fire & Emergency Services” be received; and,
- 2) THAT the contract for Contract 297-S-23 - Supply and Delivery of One (1) Pumper Rescue Apparatus and One (1) 32m Aerial Ladder Apparatus for Fire & Emergency Services be awarded to Safetek Emergency Vehicles (“Safetek”) in the amount of \$3,701,391.76 inclusive of HST;
- 3) THAT the tendering process be waived in accordance with Purchasing By-Law 2017-8, Part II, Section 11.1 (e), Non-Competitive Procurement, whereby “the City is acquiring specialized... equipment, such as firefighting equipment..., in which case the sources of supply may be identified based on technical specifications prepared by the User Department,”; and
- 4) THAT the award be funded from project #23230 Corporate Fleet Replacement-Fire (account 057-6150-23230-005) with available budget of \$2,968,700.00; and
- 5) THAT the budget shortfall of \$732,691.76 (\$3,701,391.76 - \$2,968,700.00) be funded from the Life Cycle Replacement and Capital Reserve Fund; and
- 6) THAT any potential future price increase to the award amount under recommendation # 2 due to long delivery times be approved as per the Expenditure Control and Capital Budget Control policies; and further;
- 7) 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 for the Contract 297-S-23 - Supply and Delivery of One (1) Pumper Rescue Apparatus and One (1) 32m Aerial Ladder Apparatus for Fire & Emergency Services purchase as identified for replacement in the 2023 Life Cycle Reserve Study. The anticipated delivery is 14 – 18 months for both apparatus.

**BACKGROUND:**

As identified in the City's Life Cycle Reserve Study, the approved 2023 Capital Budget includes the scheduled end-of-life replacement of:

- One (1) Pumper Apparatus – Unit 9981
- One (1) 32m Aerial Ladder Apparatus – Unit 9916

Markham Fire and Emergency Services (MFES) standardized the fire apparatus in 2001 with Smeal/Spartan fire apparatus, distributed by Safetek Emergency Vehicles ("Safetek"), the sole distributor in Ontario for all Smeal/Spartan fire apparatus. The above two apparatus, if approved, will be supplied by Safetek.

**OPTIONS/ DISCUSSION:**

Standardizing Fire's fleet and apparatus since 2001 has provided the following benefits:

**Interchangeability/Interoperability with existing equipment:** Standardization of fire fleet and apparatus provides for interchangeability and interoperability with the City's existing equipment as well as reducing substantial duplication of costs for the City. Fleet standardization of vehicle platforms offers reduced costs and operational benefits, including, but not limited to, improved maintenance servicing, ease of technician training, technical knowledge, streamlined parts and fluids inventory, enhanced operational efficiency, and driver safety. Reduction in apparatus variation increases the operational efficiency of fire-rescue inventory costs, and higher product quality.

**Training efficiency costs:** Apparatus specific training is not required for City Staff, reducing training for 24 firefighters from a 24-hour course to a 4-hour in-service review. Existing training manuals and lecture notes can be updated, eliminating the requirement for new manuals and significantly reducing administrative time of training staff. Efficiency in this area means the Training Division can redeploy their efforts toward other training programs.

**Reduced downtime:** Fire mechanical staff can undertake repairs, and subsequently recover costs from the manufacturer for warranty work performed in-house.

**Reduced inventory levels:** Savings is realized by carrying common parts such as emergency lighting, filters, windshields and brakes, as the City purchases less parts, and stores less physical inventory.

**Reliability:** Smeal fire apparatus have generally averaged less than half the annual downtime (40 hours) for major services/inspections compared to other previous manufactured units. Minimized downtime results in greater availability of "front run" apparatus for emergency responses and less downtime of suppression crews for vehicle changeovers and station cover-ups.

**Planning and Operational Management:** The preferred supplier approach has realized business operation benefits and represented good business practice for delivering on the outcome of a safe community.

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**Supplier and Partner Focus:** The preferred supplier approach maximizes the supplier relationship by selecting a highly qualified supplier to deliver products and services that meet Markham's quality

**Improved staff utilization:** Reduced staff movements (mileage) and overtime paid to maintain specialized qualifications on unique apparatus. These costs associated with the standardized fleet have been eliminated.

**Preferred Vendor**

Safetek has been a dependable vendor and continues to provide:

- safe and high quality vehicles at a fair market value,
- excellent customer service,
- prompt warranty repairs, and
- on-going Original Equipment Manufacturer (OEM) training for both our mechanical and training staff.

Despite the pressures of the pandemic MFES is set to receive three (3) custom-built pumper apparatus from Safetek in January 2024, within the original quoted build time of 14 months.

Safetek are the suppliers for fire apparatus to the following local municipalities: Toronto, Vaughan, Richmond Hill, Barrie, Ajax, Pickering, St. Catharines, Burlington and Kingston.

**Market Conditions/Price Fluctuations**

There remains a high level of uncertainty on costing in this market and vendors who previously provided pricing valid for 6-months, are now offering pricing with validity of only 15 to 30 days.

Due to the extended timeliness of the build of the apparatus (e.g. 14-18 months), the quoted price and delivery maybe subject to further changes after contract award. Delivery times have been extended due to continued labour, equipment and raw material shortages, along with a large backlog of outstanding orders/deliveries since the COVID-19 pandemic. In addition, major chassis builders are unwilling to provide firm price on a chassis that won't be produced for a year or longer. The forecast for the balance of 2023 is that the equipment and component supply chain issues will continue, which has resulted in little improvement on these production cycle times. As the apparatus will be purchased in U.S. dollars, exchange rate fluctuations may also impact the cost the City will ultimately pay. Additional costs will be managed as per the City's Expenditure Control and Capital Budget Control policies, which delegate authorization to the Treasurer or the CAO to consider and approve any required additional funding to complete the purchase.

In spite of the above risks, deferring the purchase of these two fire apparatus were considered and not recommended as it is expected to result in higher prices paid for replacement at a later date and increased maintenance costs with potential extended "out-of- service" times. The cost of repairs increases as the vehicles get older and often fire apparatus are out of service for longer than expected times awaiting delivery of parts (currently at 4-6 weeks), especially for apparatus that have already been extended in the lifecycle.

MFES will continue to explore the most efficient and cost-effective path forward for the life cycle replacement of the 5 fire apparatus due in 2025-2027, based on latest market conditions and any changes in codes / standards.

**FINANCIAL CONSIDERATIONS**

Recommended bidder	Safetek Emergency Vehicles (non-competitive procurement)	
Current budget available	\$2,968,700.00	057-6150-23230-005 Corporate Fleet Replacement-Fire
Less cost of award	\$1,416,417.79	Cost of Award – Pumper-Rescue apparatus
	<u>\$2,284,973.97</u>	Cost of Award – Aerial ladder apparatus
	\$3,701,391.76	Total Cost of Award*
Budget Remaining	(\$ 732,691.76)	**

\*The purchase will be made in U.S. dollars (USD), but the above estimates of cost in Canadian dollars (CAD) are provided based on an exchange rate of 1.27 as of December 2022, which was the actual rate at the time of USD purchase. The cost of the vehicles in USD, inclusive of HST impact, are as follows:

- Pumper-Rescue apparatus: \$1,115,289.60 USD or \$1,416,417.79 CAD. A scope change was approved to purchase a Rescue-Pumper apparatus to replace the Pumper apparatus in life cycle, which reduced the purchase price by \$69,438.07.
- Aerial ladder apparatus: \$1,799,192.10 USD or \$2,284,973.97 CAD

\*\*The budget shortfall in the amount of \$732,691.76 or 25% compared to budget can be attributed to an 18-month old cost estimate, the increase of inflation over this period, and raw materials used to manufactured fire apparatus increasing 15 to 30% in the last two (2) years. Some indirect costs (input costs), like shipping, are up as much as 50% over pre-pandemic times.

The budget shortfall will be funded from the Life Cycle Replacement and Capital Reserve Fund. The amount maybe subject to further changes after contract award, due to continued volatility of the supply chain.

The 2024 Life Cycle Study will be updated with the current unit prices as per this award. As this is a capital project, there is no incremental Operating Budget impact.

Old Units

Units 9981 and 9916 to be replaced will be put into the spare inventory fleet. Upon delivery of the new units, Fleet will conduct a condition assessment on the spare units to determine which ones shall be disposed of and sold in accordance with the Purchasing By-Law 2017-8, Part V, Disposal of Personal Property. Proceeds will be posted to account 890-890-9305 (Proceeds from the Sale of Other Fixed Assets).

**HUMAN RESOURCES CONSIDERATIONS**

Not applicable

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

Safe and Sustainable Community - The purchase of these apparatus replacements will allow not only seamless continuity of fire service delivery, but enhanced rescue capability to the residents of Markham.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Operations and Financial Services Departments have been consulted in preparation of this report.

**RECOMMENDED BY:**

Chris Nearing  
Fire Chief

Morgan Jones  
Commissioner, Community Services

Andy Taylor  
Chief Administrative Officer