



Report to: General Committee

Meeting Date: May 9, 2022

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**SUBJECT:** 113-S-22 Supply and Delivery of Two (2) Auxiliary Vehicles for Fire & Emergency Services

**PREPARED BY:** Melita Lee, Senior Buyer, Ext. 2239  
Chris Nearing, Deputy Fire Chief,  
Fire & Emergency Services, Ext. 5960  
Tanya Lewinberg, Acting Sr. Manager – Business,  
Fleet & Public Realm, Ext 4852

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**RECOMMENDATION:**

- 1) That the report entitled “113-S-22 Supply and Delivery of Two (2) Auxiliary Vehicles for Fire & Emergency Services” be received; and,
- 2) That the contract for the supply and delivery of two (2) auxiliary vehicles (Drago apparatus with UHP units) for Fire & Emergency Services be awarded to Camions Carl Thibault Inc. in the amount of \$1,711,000.78, inclusive of HST; and,
- 3) That a new 2022 capital project be established in the amount of \$1,711,000.78 to be funded from Fire Development Charges; and,
- 4) That the tendering process be waived in accordance with Purchasing By-Law 2017-18, Part II, Section 11 (1) (b) which states, where there is only one source of supply for the goods to be purchased and (e) “where the City is acquiring specialized vehicles in which case the sources of supply may be identified based on technical specifications prepared by the User Department; and further,
- 5) 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 Council approval to purchase two (2) auxiliary vehicles for Fire & Emergency Services.

**BACKGROUND:**

As part of the 2022 Budget, the modernizing fire services strategy, was approved. The endorsement included the purchase of four (4) auxiliary vehicles by 2025. Two (2) auxiliary vehicles were identified as being required; one in 2022, and the second in 2023. Due to current estimated build times, both units are being ordered at the same time in order to meet the timelines identified in the strategy.

The auxiliary vehicle is a Drago, which is a 23’ long fire apparatus that can carry 1-2 firefighters. Drago is equipped with a rear-mounted water cannon and two (2) Ultra High Pressure (UHP) handlines that can be rapidly deployed for an immediate intervention at many emergency scenes. The Drago’s water cannon can deliver a water and / or foam stream 30-50 feet wide with a distance of over 200 feet. The cannon has the capability of delivering the same fire control streams at a height of up to 180 feet.

The Drago cannon uses approximately 70% less water and has superior thermal absorption and penetration, when compared against a typical hose stream, due to the 35,000 CFM output of the fan. The fan also serves a vital ventilation function not currently present, such as below-ground (subway) air change and to control the contaminants from a fire or other hazardous situation. Drago can be utilized to cool and extinguish fires from the exterior, including house fires, making the space more survivable for trapped occupants and safer to enter for firefighters.

The Ultra High Pressure (UHP) handlines use technology developed by the US Navy to battle fires in submarines. With the ability to pierce metal and concrete walls, UHP handlines can be used to extinguish compartment fires from the exterior when the seat of the fire is either not accessible or the compartment is too hot to make entry. The UHP system allows quick and precise fire extinguishment from the exterior with minimal water damage, making interior operations safer for firefighters.

Drago is also outfitted with a 45kW generator that powers the cannon and could provide substantial emergency power to critical infrastructure, if required.

The Drago is a highly-effective, multi-use piece of equipment that can be utilized in many different situations and can be operated remotely if needed. The Drago supplements the existing fire fleet with its diverse capability and also delivers additional staff to the emergency.

The Drago is built in Quebec, Canada by Carl Thibault Emergency Vehicles (Camions Carl Thibault Inc.). Carl Thibault Emergency Vehicles has the sole distribution rights in Canada for building fire apparatus equipped with the Drago cannon technology. Carl Thibault Emergency Vehicles has been building fire apparatus for three (3) decades and is an established company known and respected in the industry and marketplace for its exceptional know how and experience.

Based on the aforementioned technical specifications, Fleet and Fire Services recommend purchasing the two (2) auxiliary vehicles by waiving the tendering process in accordance with Purchasing By-Law 2017-18, Part II, Section 11 (1)(b) and (e).

#### **FINANCIAL CONSIDERATIONS**

Recommended bidder	Camions Carl Thibault Inc. (non-competitive procurement)	
Current budget available	\$1,711,000.78	057-5350-22XXX-005 New Fleet – Fire New Capital Project
Less cost of award	\$1,711,000.78	Total Award (inclusive of HST) \$855,500.39/unit x 2 units
Budget remaining after award	\$ 0.00	

A new 2022 capital budget be established in the amount of \$1,711,000.78 to be funded from Fire Development Charges;

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**OPERATING & LIFE CYCLE IMPACT**

There is an operating budget impact in the amount of \$10,000 (\$5,000/vehicle) associated with annual fuel, parts and maintenance requirements, which will be added to the 2023 operating budget, subject to Council approval.

The two vehicles will be included in the next Life Cycle Reserve Study Update.

**ENVIRONMENTAL CONSIDERATIONS**

Since the Drago cannon uses approximately 70% less water not only is water conserved, but the amount of runoff is substantially reduced. The use of the fan at hazardous material fires and incidents will allow firefighters to control the direction of the hazardous materials to some extent, keeping them away from vulnerable people and places. Finally, the smaller size of the vehicle and the rapid nature of some of its interventions may reduce the time resources are committed at certain incidents, thereby reducing associated fuel use.

**HUMAN RESOURCES CONSIDERATIONS**

Not applicable.

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

This purchase aligns with the City's goal of "Safe, Sustainable, & Complete Community."

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Financial Services Department has been consulted in preparation of this report.

**RECOMMENDED BY:**

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Adam Grant  
Fire Chief, Fire & Emergency Services

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Morgan Jones  
Community Services