

NO: R136

COUNCIL DATE: July 8, 2019

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **July 4, 2019**

FROM: **Acting General Manager, Engineering** FILE: **2320-20 (Tandem Axle Truck)**

SUBJECT: **Award of Contract No. 1220-040-2019-024
Supply of One CNG Fuelled Tandem Axle Dump Truck with Winter Maintenance Equipment**

RECOMMENDATION

The Engineering Department recommends that Council:

1. Award Contract No. 1220-040-2019-024 to First Truck Centre Vancouver Inc. in the amount of \$519,812.16 (including all applicable taxes and levies) for the supply of one Compressed Natural Gas (“CNG”) fuelled tandem axle dump truck and associated winter maintenance equipment (front-mount plough and salt spreader);
2. Set the expenditure authorization limit for this Contract at \$540,000.00 (including contingencies and taxes); and
3. Authorize the General Manager, Engineering to execute Contract No. 1220-040-2019-024.

INTENT

The purpose of this report is to seek Council approval for staff to purchase one CNG fuelled tandem axle dump truck and associated winter maintenance equipment, as identified within this report.

DISCUSSION

As part of the 2018 Capital Replacement and Additions budget, the Engineering Department identified four tandem axle trucks which require replacement. On September 17, 2018, Council approved the purchase of three tandem axle dump trucks, including the associated winter maintenance equipment (Corporate Report No. R195; 2018 attached as Appendix “I”). The fourth truck was not replaced at that time, as the Engineering Operations Division was identifying the specifications required to purchase and pilot a dedicated CNG fuelled tandem axle truck. The City will pilot this vehicle to ensure that it does in fact meet all of its operating requirements prior to going to tender for the purchase of more of these units.

In April 2019, the City issued a Request for Quotations (“RFQ”) for a dedicated CNG fuelled tandem axle truck, including a front-mount plough and salt spreader. The RFQ included the following specifications that the truck must:

- Meet the City’s day-to-day operational requirements;
- Improve upon the City’s already positive winter maintenance performance by maintaining the City’s routes for the safety of the motoring public. This will be accomplished by upgrading the City’s spreader technology to include pre-wetting capabilities. Pre-wetting is the process of spraying road salt with a brine solution before spreading the salt on the roadway. When temperatures drop below freezing, there is no moisture on the road and salt alone is therefore less effective. Pre-wetting the salt ensures that there will be enough moisture to facilitate the melting process. Pre-wetted salt works faster and at lower temperatures than dry salt alone and with less waste, thereby shortening the time required to activate its snow melting properties; and
- Be fuelled by CNG to meet the California Air Resources Board and Environmental Protection Agency Optional Low NOx emission standards of 0.02g/bhr-hr.

Fortis BC offers an incentive program providing funds towards the purchase of CNG fueled vehicles in an effort to offset possible additional costs. The City has applied for this funding from Fortis BC through their Natural Gas Incentive Program. Should the City be successful with its application, an incentive payment of approximately \$47,398.28 will be paid to the City.

QUOTATION RESULT

In accordance with the Purchasing and Expenditure Authorization Bylaw, the RFQ was posted on the BC Bid and City of Surrey websites. First Truck Centre Vancouver Inc. (Freightliner) was the only proponent to provide a bid. During the RFP process, there were no inquiries from other vendors.

Historically, for diesel fuelled trucks of a similar specification, the City received bids from Inland Group (Kenworth), Pacific Coast Heavy Truck Group (Mack) and Peterbilt Pacific (Peterbilt). While the use of CNG fuelled trucks is relatively common in the refuse truck market, it still relatively new in the vocational truck (tandem axle dump truck) market. This reduces the number of possible suppliers, which staff believe is the reason there was only one proponent.

Supplier	Tendered Amount (including taxes & levies)	Corrected Amount
First Truck Centre Vancouver Inc.	\$519,812.16	No Change

First Truck Centre Vancouver Inc. have provided low complying bids for trucks previously purchased in 2015, 2017 and 2018. In 2018, First Truck Centre Vancouver Inc. provided a successful bid for the supply of three tandem axle dump trucks, including associated winter maintenance equipment (front-mount plough, underbody plough and salt spreader), in the amount of \$445,480.50 each, including taxes and levies.

In 2019, First Truck Centre Vancouver Inc. has provided a bid for the supply of one CNG fuelled tandem axle dump truck and associated winter maintenance equipment (front-mount plough and salt spreader) in the amount of \$519,812.16, including taxes and levies.

A review of the difference in costs between the diesel vehicles and the CNG vehicle was completed which found that there is an additional cost of \$67,711.84 for CNG tanks and engine. Upon completion of the cost analysis between the diesel and CNG fuelled vehicles, it has been determined that the CNG vehicle has an increased cost of \$26,933.38 over a similar diesel vehicle, inclusive of the Fortis BC rebate.

This bid is consistent with past procurement processes for tandem axle dump trucks with associated winter maintenance equipment.

EVALUATION

An evaluation team involving staff from the Engineering Department and the Finance Department reviewed the quotation for accuracy and completeness.

Based on the purchase cost of the three (3) dump trucks purchased in 2018, the expected premium cost for a CNG vehicle and the Fortis rebate, staff consider the CNG vehicle price to be good value. First Truck Centre Vancouver Inc. provided the only bid for the full scope of the RFQ. First Truck Centre Vancouver Inc. has previously supplied similar diesel vehicles to the City, and staff have found their products and service to be satisfactory.

It is therefore recommended that First Truck Centre Vancouver Inc. be awarded Contract No. 1220-040-2019-024 for the supply and delivery of one CNG fuelled tandem axle dump truck with winter maintenance equipment.

SUSTAINABILITY CONSIDERATIONS

The purchase of the tandem axle dump truck and winter maintenance equipment, and associated economic and environmental benefits, supports the objectives of the City's Sustainability Charter 2.0. In particular, the purchase relates to the Sustainability Charter 2.0 themes of Ecosystems and Infrastructure. Specifically, the purchase supports the following Desired Outcomes ("DO"):

- Water, Air and Soil DO6: Water supports healthy ecosystem;
- Water, Air and Soil DO9: Air quality meets or exceeds established standards; and
- Energy and Climate DO7: Per capita emissions are low, and align with global, national and provincial GHG reduction targets.

FUNDING

Funding for the supply of the tandem axle dump truck and associated winter maintenance equipment is available from the 2019 Fleet Capital Replacement Program.

Jaime Boan, P.Eng.
Acting General Manager, Engineering

RK/cc

Appendix "I" - Corporate Report No. R195; 2018

CORPORATE REPORT

NO: R195

COUNCIL DATE: September 17, 2018

REGULAR COUNCIL

TO: Mayor & Council DATE: September 13, 2018

FROM: General Manager, Engineering FILE: 2320-20 (tandem axle trucks)

SUBJECT: Award of Contract RFQ 1220-040-2018-077 for the Supply of Three (3) Tandem Axle Dump Trucks with Winter Maintenance Equipment

RECOMMENDATION

The Engineering Department recommends that Council:

1. Award Contract 1220-040-2018-077 to First Truck Centre Vancouver Inc. in the amount of \$1,336,441.51 (including all applicable taxes and levies), for the supply of three (3) tandem axle dump trucks and associated equipment (front mount ploughs, belly ploughs, and salt spreaders);
2. Set the expenditure authorization limit for this contract at \$1,386,500.00 (including contingencies and taxes); and
3. Authorize the General Manager, Engineering to execute contract 1220-040-2018-077.

INTENT

The purpose of this report is to seek Council approval for staff to purchase three (3) tandem axle dump trucks and associated winter maintenance equipment, as identified within this report.

DISCUSSION

The Engineering Department has identified three (3) tandem axle trucks which require replacement. The trucks are at the end of their economic life and require replacement to ensure the City has sufficient tandem axle trucks available to:

- Meet the City's day-to-day operational requirements, and
- Improve upon the City's already positive winter maintenance performance by maintaining the city's routes for the safety of the motoring public. This will be accomplished by upgrading our salt spreader technology to include pre-wetting capabilities. Pre-wetting is the process of spraying road salt with a brine solution before spreading the salt on the roadway. When temperatures drop below freezing there is no moisture on the road, and salt alone is therefore less effective. Pre-wetting the salt ensures that there will be enough moisture to facilitate the melting process.

Pre-wetted salt works faster and at a lower temperature than dry salt alone and with less waste, thereby shortening the time required for salt to activate its snow melting properties.

As part of the 2018 Capital Replacement and Additions budget, the Engineering Department identified three (3) tandem axle trucks that require replacement. The proposed replacement trucks include specifications that meet the city's day-to-day requirements, as well as provide the Engineering Department with winter maintenance capabilities, including front-mount ploughs, belly ploughs, and salt spreaders. In addition, the proposed trucks will meet the latest engine emission standards, EPA/CARB Final GHG17.

QUOTATION RESULTS

In accordance with the Purchasing and Expenditure Authorization By-law, the RFQ was posted on the BC Bid and City of Surrey websites. The following suppliers submitted quotes:

Supplier	Tendered Amount Including Taxes & Levies	Corrected Amount
First Truck Centre Vancouver Inc.	\$1,336,441.51	No Change
The Inland Group	\$1,383,911.59	No Change

EVALUATION

An evaluation team involving staff from the Engineering Department and the Finance Department reviewed the quotations for accuracy and completeness.

First Truck Centre Vancouver Inc. provided the lowest bid for the full scope of the RFQ. First Truck Centre Vancouver Inc. has previously supplied similar vehicles to the City and we have found their products and service to satisfactory.

It is therefore recommended that First Truck Centre Vancouver Inc. be awarded Contract 1220-040-2018-077, for the supply of three (3) tandem axle dump trucks with winter maintenance equipment.

SUSTAINABILITY CONSIDERATIONS

The purchase of the tandem axle dump trucks and winter maintenance equipment, and associated economic and environmental benefits, supports the objectives of the City's Sustainability Charter 2.0. In particular, the purchase relates to the Sustainability Charter 2.0 themes of Ecosystems and Infrastructure. Specifically, the purchase supports the following Desired Outcomes ("DO"):

- Water, Air and Soil DO6: Water supports healthy ecosystem;
- Water, Air and Soil DO9: Air quality meets or exceeds established standards; and
- Energy and Climate DO7: Per capita emissions are low, and align with global, national and provincial GHG reduction targets;

FUNDING

Funding for the supply of the three (3) tandem axle dump trucks and associated equipment is available from the 2018 Fleet Capital Replacement Program.

CONCLUSION

The Engineering Department recommends that Council:

1. Award Contract 1220-040-2018-077 to First Truck Centre Vancouver Inc. in the amount of \$1,336,441.51 (including all applicable taxes and levies), for the supply of three (3) tandem axle dump trucks and associated equipment (front mount ploughs, belly ploughs, and salt spreaders);
2. Set the expenditure authorization limit for this contract at \$1,386,500.00 (including contingencies and taxes); and
3. Authorize the General Manager, Engineering to execute contract 1220-040-2018-077.


For Fraser Smith, P.Eng., MBA
General Manager, Engineering

RK/jma