

COMMITTEE OF THE WHOLE - MAY 11, 2010

REGENERATIVE AIR STREET SWEEPER – CAPITAL PROJECT FL-5146-10

Recommendation

The Commissioner of Engineering and Public Works, in consultation with the Director of Purchasing, the Director of Reserves and Investments, and the Manager of Fleet Services, recommends:

1. That staff be permitted to single source Project # FL-5146-10 Street Sweeper, to The Equipment Specialist Inc., in the amount of \$262,400, excluding taxes, for a new 2009 TYMCO DST-6 Regenerative Air Street Sweeper with a stainless steel hopper and dust box, mounted on an Isuzu cab and chassis (33,000 lb. G.V.W.); and,
2. That the Mayor and Clerk be authorized to sign the necessary documents.

Contribution to Sustainability

The previously adopted standards for new City-owned street sweeping equipment ensure that air quality is not compromised through street sweeping operations. The TYMCO DST-6 street sweeper an efficiency rating of 99.999 on 0.5 micron particles, which allows for sweeping with or without the use of water, thereby extending the sweeping season, reducing water consumption, and improving air quality.

Economic Impact

Funds in the amount of \$360,500 were approved in Capital Project FL-5146-10 for a new street sweeper. Due to a stronger Canadian dollar, the cost for these units has decreased, resulting in some savings to the City. The pre-tax price of the recommended unit is \$262,400. In 2009, the low bid price for a similar unit was \$274,875, before taxes.

Communications Plan

Public Works has one TYMCO Regenerative Air street sweeper in its fleet. Its cleaning capabilities and issues around improved air quality have been publicized in newsletters and previous reports.

Purpose

To seek approval for a single source ward to The Equipment Specialist Inc., in the amount of \$262,400, excluding applicable taxes, for a new 2009 TYMCO DST-6 Regenerative Air street sweeper with stainless steel hopper and dust box, mounted on an Isuzu chassis (33,000 lb. G.V.W.).

Background - Analysis and Options

In 2007, the Commissioner of Engineering and Public Works recommended that the City adopt the following standards with respect to Particulate Matter 10 (PM10), and Particulate Matter 2.5 (PM2.5) removal efficiency for its street sweeping fleet, and that all new street sweepers:

- meet PM10 and PM2.5 90% removal as outlined in the City of Toronto's Street Sweeper Test Protocol
- be able to sweep in seasonal periods when temperatures are below zero celcius without the need for water

- have a dry dustless filtration mode
- have results verified by the Government of Canada's Environmental Technology Verification Program

On December 10, 2007, Council approved that recommendation, and shortly afterwards, the Public Works Department drafted detailed specifications for a new street sweeper tender to meet the new standards.

A tender was issued by the City for the new street sweeper in the spring of 2009 and was awarded by Council on June 15, 2009, to the lowest bidder, The Equipment Specialists Inc., for a TYMCO model of regenerative air street sweepers, at a price of \$310,308.75 including all applicable taxes.

The performance of this new sweeper can not be matched by either the City's 2 older mechanical sweepers, or the newer vacuum type sweepers that staff have tested to date. This latest generation of regenerative air sweepers has reduced maintenance costs and down time as there are no conveyors to wear out and replace, and instead of a large main broom to wear out, it uses forced air to propel the dirt into the hopper.

In addition to the obvious improvement in air quality and sweeping advantages that the latest regenerative air sweepers can provide, being able to sweep without water helps the City maintain a good public image when Stage 1 and Stage 2 Water Advisories are in effect. In addition, our tests to date show that these units are more efficient at picking up wet and dry leaves than either mechanical or vacuum type sweepers tested to date.

The supervisory staff and the equipment operators themselves are extremely pleased with the TYMCO model, and its sweeping efficiency. There has been minimal downtime with this unit due to its design and method of operation. Other municipalities have reported similar benefits of the TYMCO unit as well.

As part of the 2010 Capital Budget, funds in the amount of \$360,500 were approved under Project # FL-5146-10, to purchase another street sweeper. The Equipment Specialist Inc. has provided, in writing, confirmation that they have a new 2009 TYMCO DST-6 street sweeper in stock that has a stainless steel hopper and dust box, and can be delivered within 30 days of receiving the Purchase Order. The stainless steel hopper and dust box provide additional years of service when compared to units with conventional steel hoppers. In addition to increased service life, these units will require less maintenance, thereby reducing costs and downtime. The unit is mounted on a new 2008 Isuzu cab and chassis. This cab and chassis are new and the unit bought as part of a bulk purchase by the company. The cab and chassis comes with a full 2 year warranty, and the sweeper unit comes with a full 2 warranty on the engine, and a full 1 year warranty on the sweeper unit. Taking into account the optional equipment (back up camera, automatic greasing unit, etc.), the cost of the available unit is \$262,400, excluding taxes.

Staff are recommending that the additional sweeper be single sourced to The Equipment Specialist for the following reasons:

- The TYMCO machine has significant reduced operating costs. As stated before, there are no conveyors to replace or break and down time is extremely low with these units.
- The ability to standardize on the wear parts such as gutter brooms and curb shoes will reduce the types of inventory required to be kept on hand.
- The TYMCO machine was the lowest price unit that met the specifications during the last tendering process (June 2009).

- The prices for street sweeping machines in general has dropped due to the strong Canadian dollar.
- The unit that can be obtained has a stainless steel hopper and dust box, adding years of life to the sweeper unit when compared to the standard steel units. This is normally a \$37,000 option.
- The unit quoted can be obtained within 30 days of the Purchase Order being approved.
- The unit offered has the full warranty coverage on the sweeper and the cab and chassis.
- Operator safety is increased, as the operators are already familiar with this type of unit. Standardizing on the type of equipment used will reduce the chance of operator error.

Based on the fact that the City just acquired this type of equipment last year through a public bidding process and standardization of equipment for training, safety, parts and repairs is beneficial, it is recommended that the City obtain another TYMCO unit. Given that the unit is in stock and can be delivered within 30 days of receiving a Purchase Order, obtaining this in-stock unit sooner will result in improved street cleanliness for the 2010 spring/summer/fall periods, and will come in under the 2010 budgeted project amount.

Relationship to Vaughan Vision 2020/Strategic Plan

This report is consistent with the priorities previously set by Council and ties into the following Vaughan Vision 20/20 Goals and Objectives:

Goal: Service Excellence
 Objectives: Pursue Excellence in Service Delivery
 Enhance and Ensure Community Safety, Health & Wellness
 Lead and Promote Environmental Sustainability

Goal: Management Excellence
 Objectives: Enhance Productivity, Cost Effectiveness and Innovation
 Maintain Assets & Infrastructure Integrity

Regional Implications

N/A

Conclusion

The single sourcing of Project FL-5146-10 to The Equipment Specialists Inc. for a new 2009 TYMCO Regenerative Air street sweeper mounted on an Isuzu cab and chassis will result in cost savings to the City, as well as improve overall sweeping efficiency as noted in the report. It will also help standardize the equipment being used, leading to increased operator familiarity and safety, and will allow for better parts inventory. Accordingly, it is recommended that the recommendations contained in this report be approved.

Attachments

N/A

Report prepared by:

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Respectfully submitted,

Bill Robinson, P. Eng
Commissioner of Engineering and Public Works

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Director of Public Works