

## **COMMITTEE OF THE WHOLE - JANUARY 17, 2012**

### **AWARD OF TENDER T11-301 WATERMAIN CURED-IN-PLACE-PIPE (C.I.P.P.) LINING LANGSTAFF ROAD TO CONNIE CRESCENT WARD 4**

#### **Recommendation**

The Commissioner of Engineering and Public Works in consultation with the Director of Purchasing Services and the Director of Budgeting and Financial Planning recommends:

1. That Tender T11-301, Watermain Cured-In-Place-Pipe (C.I.P.P.) Lining from Langstaff Road to Connie Crescent be awarded to Fer-Pal Construction Ltd. in the amount of \$152,625.00, plus applicable taxes;
2. That a contingency allowance in the amount of \$16,000.00, plus applicable taxes be approved within which the Commissioner of Engineering and Public Works or his designate is authorized to approve amendments to the Contract; and
3. That the Mayor and City Clerk be authorized to sign the appropriate documents.

#### **Contribution to Sustainability**

The cured-in-place-pipe watermain lining between Langstaff Road and Connie Crescent will ensure that an acceptable level of service by the City's infrastructure is maintained for the health and well being of its citizens.

This tender includes an environmentally sustainable method of construction as the existing pipe will be rehabilitated with the use of trenchless construction rather than a conventional trenching operation to install a new watermain pipe. This alternative construction method is in keeping with the sustainability objectives identified in Green Directions Vaughan, in particular Objective 1.1 to reduce emissions and move towards carbon neutrality for the City of Vaughan's facilities and infrastructure. The proposed rehabilitation of the watermain by trenchless technology reduces the need for exporting and importing granular material, and is therefore consistent with the same goal and objective.

#### **Economic Impact**

The total project cost of \$177,000.00, which includes a contingency allowance and treasury administration, falls within the approved 2006 Capital Budget amount for Project No. 1624-0-06.

#### **Communications Plan**

Once the project is awarded, Engineering Services staff will advise the Mayor and Members of Council and will distribute a notice of construction to the affected residents and businesses.

#### **Purpose**

Council approval to award Tender T11-301, Watermain Cured-In-Place-Pipe (C.I.P.P.) Lining from Langstaff Road to Connie Crescent.

## **Background - Analysis and Options**

The work covered by this tender includes the structural lining of approximately 225 metres of 300mm diameter ductile iron watermain with cured-in-place-pipe, or C.I.P.P. The limit of watermain lining is from the end of the cul-de-sac on Connie Crescent through a City-controlled easement on private property, terminating on the north side of Langstaff Road. (See Attachment No. 1 for project location). The original scope of this project scheduled in 2006 included only the pipe crossing Langstaff Road where some watermain breaks had occurred. During the preliminary engineering design stage, it was determined that it would be more efficient to expand the limits of the project to include all the watermain up to Connie Crescent since the pipe in question is the same age and material. The revised scope was approved as part of the 2011 Capital Budget.

The original 2006 capital budget submission was developed based on a conventional watermain replacement by open-cut trenching. During the detailed design phase, rehabilitation of the pipe with C.I.P.P. lining was determined to be more appropriate. The benefits of utilizing this trenchless technology are as follows:

- **Reduced impact to local businesses;** due to shortened construction timelines and minimal impact to the private parking lot.
- **Reduced impact to traffic;** due to elimination of excavation across Langstaff Road.
- **Reduced costs.**

This tender was advertised in the Daily Commercial News, on the Ontario Public Buyers Association (OPBA), on Biddingo and on the City Webpage and closed on November 14, 2011. A total of 3 sets of bid documents were picked up from the Purchasing Services Department and the following 2 bids were received:

<u>Contractor</u>	<u>Total Bid Amount (excl. H.S.T.)</u>
Fer-Pal Construction Ltd.	\$ 152,625.00
Aquarehab Drinking Water Inc.	\$ 192,950.00

The estimated cost for this project, including contract administration, a contingency allowance, treasury administration and all applicable taxes is \$177,000.00 and is calculated as follows:

Fer-Pal Construction Ltd. Bid Price (excluding H.S.T.)	\$ 152,625.00
Contingency Amount (approx. 10%)	\$ 16,000.00
Sub-Total	\$ 168,625.00
H.S.T. (1.76%)	\$ 2,967.80
Total	\$ 171,592.80
Treasury Administration (3%)	\$ 5,147.78
Total Project Cost	\$ 176,740.58

**ROUNDED \$ 177,000.00**

<b>PROJECT FUNDING POSITION SUMMARY</b>	
<b>CAPITAL PROJECT</b>	<b>1624-0-06</b>
Original Budget	\$314,500.00
Less: Expenses & Commitments to Date	(\$654.92)
Current Funds Remaining	\$313,845.08
Less: Total Project Cost	\$176,740.58
<b>Balance Remaining</b>	<b>\$137,104.50</b>

Staff have reviewed the submitted bids as well as the project references provided by Fer-Pal Construction Ltd. The reference checks were predominantly positive. As this will be the first project the City has undertaken utilizing this construction methodology, the City has no prior experience with contractors performing this type of work. Staff conducted a field visit to a similar project undertaken by this contractor in Aurora, earlier this year, and were satisfied with the quality of the operation.

The revised engineering estimate for this redefined C.I.P.P. project was \$190,000.00 excluding H.S.T.

It is appropriate to award this contract to the low bidder, Fer-Pal Construction Ltd., to allow for construction in the Spring of 2012.

#### **Relationship to Vaughan Vision 2020/Strategic Plan**

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in enhancing and ensuring community safety, health and wellness; priorities previously set by Council. The lining of the existing watermain will ensure that drinking water quality standards and infrastructure are maintained for the residents of Vaughan.

#### **Regional Implications**

The Regional Municipality of York approval has been received and includes provision of working hours from 9:30 am to 7:00 pm for the duration of the contract. The Regional Municipality of York staff will be notified of the project's commencement.

#### **Conclusion**

Staff recommends that this contract be awarded to Fer-Pal Construction Ltd. in the amount of \$152,625.00, plus applicable taxes.

#### **Attachments**

1. Location Map

**Report prepared by:**

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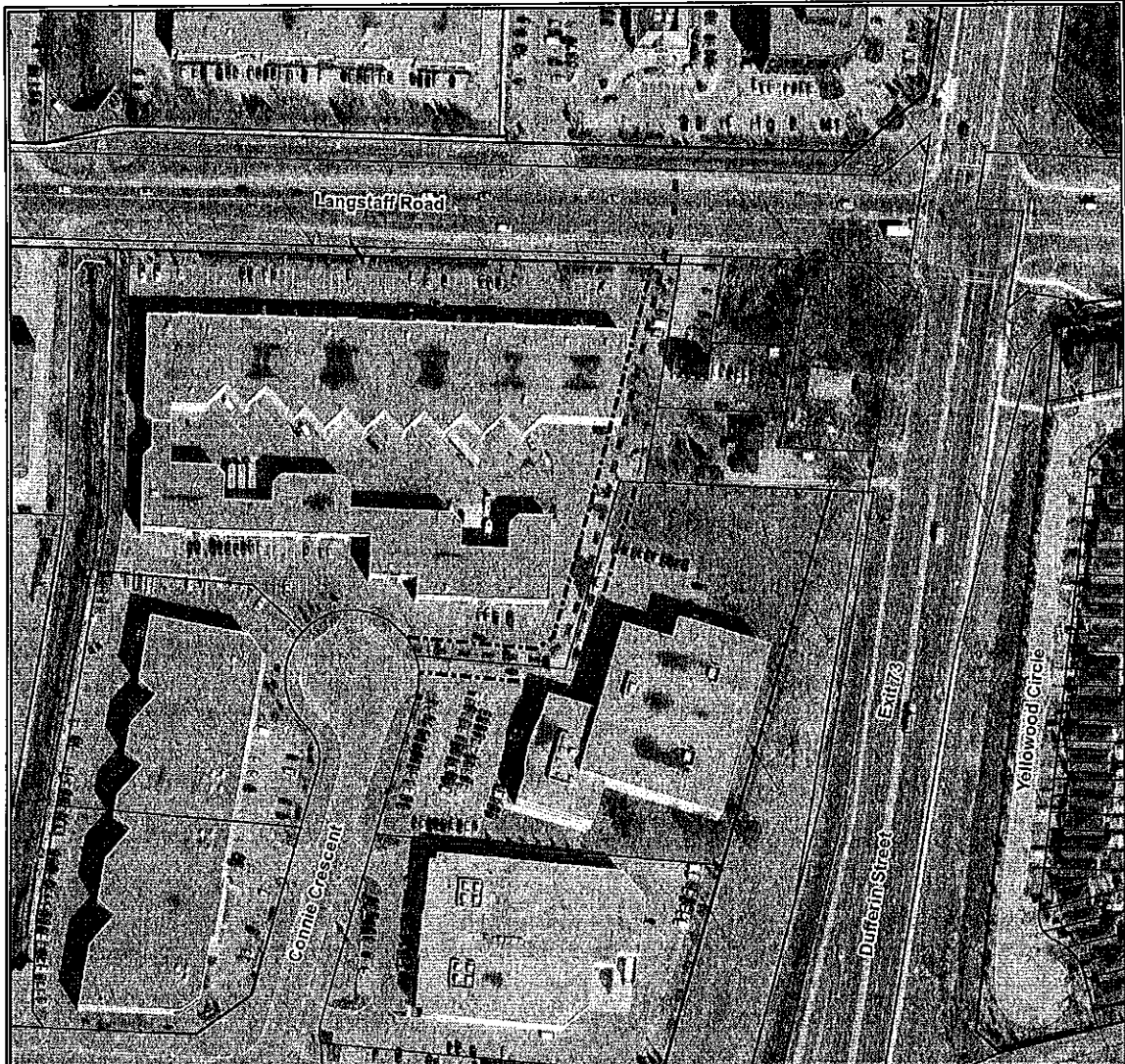
Respectfully submitted,

Paul Jankowski, P. Eng.  
Commissioner of Engineering and Public Works

Jack Graziosi, P. Eng.  
Director of Engineering Services

CC:mm

# ATTACHMENT No. 1



## WATERMAIN CURED-IN-PLACE-PIPE (C.I.P.P.) LINING LANGSTAFF ROAD TO CONNIE CRESENT T11-301

### LEGEND

- WATERMAIN EASEMENT  
--- WATERMAIN TO BE LINED



NOT TO SCALE