



CONTRACT TENDER AWARD MEMORANDUM

To: Mike Humphries, C.E.T., Town of the Blue Mountains

From: James Witherspoon, P.Eng.

Cc: -

Date: March 16, 2021

Re: 2021-01-T-OPS - WATER PRESSURE ZONE 4C DISTRIBUTION IMPROVEMENTS
Tender Results Assessment and Recommendations

This technical memorandum presents WT Infrastructure Solutions Incorporated's (WT) analysis of the Tender Submissions received for Town of the Blue Mountain's Tender 2021-01-T-OPS – Water Pressure Zone 4C Distribution Improvements, near Craigleith.

The intent of this memorandum is to assist the Town of the Blue Mountains in deciding relating to the appointment of the preferred contractor.

PROJECT BACKGROUND

This project involves four separate related parts.

- Craigmere Crescent Existing Pressure Reducing Valve Removal and Watermain Extension

The scope for this phase includes the replacement of the 150mm watermain from Grey Road 19 to the intersection of Craigmere Crescent and Tyrolean Lane with 200mm watermain, the removal of the existing pressure reducing valve and chamber and replacement and replacement of all water services to property line as encountered. The existing PRV chamber will become redundant once the new valve chambers are installed.

- Tyrolean Lane Pressure Reducing Valve and Watermain Extension

The scope of this phase of the project includes the replacement of 200mm watermain from the intersection of Craigmere Crescent and Tyrolean Lane to just past the intersection of Tyrolean Lane and Arlberg Crescent and a new pressure reducing valve including all instrumentation and low flow by-pass to develop the new pressure zone 4C which will reduce high pressures on Birchview Trail and reduce the risk of breakage associated with the Series type watermain that was installed in this area. The phase includes instrumentation including pressure and flow monitoring to allow for ongoing remote monitoring of the system operation via the Town SCADA system.

- Craigmere Crescent Watermain Extension,

The scope of this phase of the project includes the extension of the existing dead-end 150mm diameter watermain on Craigmere Crescent approximately 83 m to a connection with the existing watermain on Settler's Way. The intent of this watermain is to provide additional supply to the pressure zone for fire flow and to loop the watermain for redundancy.

- Birchview Trail Pressure Reducing Valve and Watermain

The scope of this phase of the project includes the installation of a new pressure reducing valve to develop the new pressure zone 4C which will reduce high pressures on Birchview Trail and reduce the risk of breakage associated with the Series type watermain that was installed in this area. The project also includes a 91 m - 200mm watermain extension to link the watermain on Brooker Boulevard to Arlberg Crescent to supplement the fireflow capacity into the new pressure zone. The phase includes instrumentation including pressure and valve status condition monitoring to allow for ongoing remote monitoring of the system operation via the Town SCADA system.

TENDER SUBMISSION

A summary of the bid takers and tenders submitted is presented in **Table 1-1**, below.

Table 1-1 – Bid Takes and Submitted Tenders

Bid Taker	Tender Submission
1579137 Ontario Ltd O/A SMRS Construction	-
Arenes Construction Ltd	\$1,855,750.60
Arnill Construction Limited o/a Seeley and Arnill Construction	-
Arnott Construction Limited	\$1,849,950.00
Barrie Construction Association	-
Capital Paving Inc	-
Coldstream Concrete Ltd.	-
ContractConnect	-
Conval Process Solutions Inc	-
D&A Road Services Inc.	-
Decast Ltd.	-
E. C. King Contracting	-
Franklin Empire	-
Huskita Electrical Inc	-
Mar-King Construction Company Ltd.	-
Nabolsy Contracting Inc.	-

North Rock Group Ltd	-
Ontario 2009GN Ltd	\$6,004,981.85
OZA Inspections Ltd	-
Selectra Inc.	-
Summa Engineering Limited	-
Yorkwest Plumbing Inc	-

One Addendum was issued February 26, 2021 to respond to Contractor questions and to clarify the scope of work on the drawings.

REVIEW OF BIDS

WT has reviewed the received proposal documents with the Town for compliance. One submission was declared non-compliant and disqualified.

The pre-tender engineer's estimate prepared by WT was \$1,381,760.00 (excluding HST) including contingency. The Town's estimate for budget was based on benchmark costs maintained by the Town was \$1,041,100 (excluding HST).

Of the compliant bids, both bids were greater than the pre-tender engineer's estimate. However, they were within 0.3% of each other, which is indicative that the bidding was competitive and balanced.

Arenes Construction Ltd. (Arenes) submitted a bid of \$1,855,750.60 (excluding HST), which is 34.3% higher than WT's estimate.

Arnott Construction Limited (Arnott) submitted a bid of \$1,849,950.00 (excluding HST), which is 33.9% higher than WT's estimate.

The received tenders were checked for mathematical errors / omissions. The vendors priced all the items, and no items were combined. There were no mathematical errors identified in either submission.

Through review of the Schedule of items and Prices, the following was noted:

- The pricing for both contractors was consistently higher than the WT Estimate across the board with the most significant variations associated with the watermain components of the project where the pricing was more than double the pre-tender estimate.
- General contract items and provisional items are within 10% of the pre-tender estimate and therefore the risk of significant extra claims due to site conditions is mitigated to the extent possible.
- A detailed line by line evaluation of pricing is not warranted in this review as there appear to be no unbalanced low pricing between the two bidders compared with the estimate to pose a risk of issues during construction.

This project was tendered last July and was also over the pre-tender estimate by close to 50% and, as such the tender was cancelled due to the high price. At the time, it was our opinion that the complexity of the project and size combined with the late release of the tender due to the COVID-19 pandemic were significant factors.

Following the closure of this project, we completed an informal survey of some of the potential bidders and industry suppliers to better understand the explanation for the higher pricing. The following with the key takeaways from those discussions, which are anecdotal, are:

- Supply and demand issues, raw material pricing and reduced production due to COVID-19 has directly or indirectly resulted in a 30% increase in plastics and metals pricing (watermain, valves and fittings) and 10-15% increase aggregate pricing since the start of 2021.
- Contractors working in the Town are now competing for labour directly with the GTA which has resulted in a 27% increase in construction labour costs for unionized contractors.
- Local Contractors are currently very busy due to development and previously secured municipal projects and have the capacity to select and bid on projects that are least risk and most profitable.

Another factor is the Town published budget and the impact that a significantly lower budget has on the willingness of contractors to invest in a bid submission. The current benchmark pricing used by the Town, although a valid approach during periods of stable bidding conditions, is looking at past bids rather than forward at the current market conditions. In this case, the pandemic combined with the expansion of the construction labour area of influence of the GTA has resulted in a large increase in labour and material costs.

For a project like this, both material and labour costs have increased, that equates into close to a 30% increase in project pricing, which is consistent with what we illustrated in this tender.

It is our opinion that local bidder's workload combined with the significant increase in labour and materials pricing in the market is the primary driver in the increased cost. Furthermore, due to the pent-up demand in the market, large infrastructure projects in urban areas and changes in the demographics resulting from the pandemic (i.e., remote work) will keep these prices high for the foreseeable future and it is not anticipated that the labour costs will abate.

RISKS AND MITIGATION MEASURES

The major risks with this type of project are unexpected conditions that result in significant increases in unit quantities or the addition of new scope of work that was not considered in the original design.

There are no indicators in terms of site conditions that would point to any unreasonable risks associated with this project. The most significant area of risk on the project is likely associated with the Tyrolean Lane Valve Chamber due to a perched water table in the area and potential poor soil conditions. It is our opinion that the allowances for provisional items are reasonable value and the anticipated risks can be managed within the available contingency amount. Mitigation of these risks will be to monitor the progress closely and act proactively in the event

of any significant issues. Furthermore, monitoring provisional item quantities throughout construction will be completed to minimize unreasonable extras.

RECOMMENDATION

Based on the general analysis presented above, Arnott Construction Limited was identified as the lowest tender submission at 33.9% higher than WT's estimate. In our opinion, although the project is greater than the Town and Engineer's estimate, this price represents current market conditions in the area and as this project was previously tendered unsuccessfully, retendering the project would not only result in similar pricing, but it is anticipated that pricing competition would be further reduced as the bidders that bid this time and the previous time would not likely bid again.

Based on the tender analysis and the above commentary, WT confirms that Arnott Construction Limited's bid appears to be generally balanced and compliant and therefore recommends to the Town of the Blue Mountains accept their Tender as submitted.

We trust this meets with your approval. If you have any questions or comments, please contact the undersigned.

WT INFRASTRUCTURE SOLUTIONS INC.

Jamie Witherspoon, P.Eng., LEED AP
Project Manager