



**ENGINEERING AND OPERATIONS DEPARTMENT
ENGINEERING DIVISION**

Report Number: 2011-31

Date: June 13, 2011

**SUBJECT: CONTRACT 2011-23 – SANITARY LATERAL REPLACEMENTS ON
FIRST AVENUE**

1) PURPOSE:

This report is prepared by Jim Hupponen, Manager of Engineering Services under the permission of Ron Hanson, Director of Engineering and Operations. The purpose of the report is to inform Council of the outcome of the tender proceedings for the Sanitary Lateral Replacements on First Avenue Contract, and to hopefully obtain approval from Council, to award the contract to the lowest bidder.

2) HISTORY, BACKGROUND, COUNCIL POLICY, PRACTICES

The City has been actively engaged in the identification and remediation of extraneous flows since the 1970's, when the first sections of the 1929 vitrified clay sanitary sewer system were replaced. Today, that system now consists of PVC pipe materials, which is substantially superior to previous materials such as asbestos cement. Emphasis on rehabilitation and remediation in the past has focused primarily on the infrastructure located within the road allowances, with few attempts to rectify sources of extraneous flow from the private sector.

In conjunction with the Region of Niagara, the Port Colborne Pollution Control and Infrastructure Study was completed in 2006. The study identified existing CSO locations and sources of extraneous flow contributing to the problem. As a result of the study, recommendations for source control in key areas have been identified. As detailed in the 2007 Strategic Planning sessions and during annual Budget deliberations, Staff presented a proposed Pilot Program for the Arena Sewershed, with an initial allocation of \$200,000 for 2007. A successful application to the Region under the CSO Plan matched those funds with an additional \$200,000 for the project. During 2008 Budget deliberations another \$200,000 was allocated to the Pilot Program with matching funds from the Region.

The results of source control measures will be lower treatment costs to the Municipality, reduced capital costs to the Region for pumping station, treatment plant upgrades and forcemain, gravity sewer replacements/upgrades and additional capacity for future development connecting to the system.

Redirection of any sources of storm water from the sanitary sewer system should be encouraged, since the payback in treatment costs is immediate. A source of sewer surcharging is removed, which could result in reduced instances of basement flooding.

By-law No. 5228/134/08 was adopted by Council in December 2008. The bylaw prohibits any form of storm water connection to the sanitary sewer system and provides the means to disconnect such connections. While the owner of the building is

responsible for the cost of disconnection of the sources of storm water, section 4.8.2 provides for a reimbursement program, subject to budget and Council concurrence, which would provide financial incentives to assist in the work. To date, it has not been necessary to levy fines under this by-law.

As reported to Council over the past four years, we have been actively pursuing a Combined Sewer Overflow (CSO) remediation program in the Arena PS catchment area. Post-flow monitoring was completed in the Arena PS area in the fall of 2010 and a summary report was prepared by Veritec Consulting Inc. in February 2011 and submitted to Associated Engineering for review. Findings in this report indicated that there was a major source of infiltration within the sanitary sewer along First Avenue. During the City's Closed Circuit Television (CCTV) inspection in the spring of 2011, these sources were identified.

3) STAFF COMMENTS AND DISCUSSIONS

The Arena area CSO program is nearing completion with a final report to be submitted to the City by Associated Engineering in the summer of 2011. Currently there is one section of pipe along First Avenue that is still experiencing a significant source of inflow. Additional flow monitoring has taken place and additional CCTV work has been completed to further investigate the structural integrity of the riser pipes connecting the laterals. It has been determined that there are four sanitary laterals that are severely damaged. Based on the calculations provided by Associated Engineering; the treatment costs that the City is paying for the infiltration at these 4 laterals ranges from \$95,000 to \$130,000 per year depending on the rainfall during that year.

Staff previously prepared documents and publicly called for the submittal of formal tender documents.

The tender allowed for the replacement of eight (8) sanitary laterals up to the property line. The four (4) damaged laterals are broken close to the sanitary main. The additional four (4) sanitary laterals for replacement were chosen because they are located in very close proximity to the damaged laterals. They must be replaced based on the condition of the damaged laterals. During excavation for the damaged laterals, these adjacent laterals will be exposed making it sensible to replace them.

The documents called for a contract being entered into, pending approval by Council:

- Replacement of 8 sanitary laterals up to property line including a cleanout at property line and all excavation and reinstatements

At the time of tender closing on Tuesday May 31st, 2011 formal, completed tenders were received from the following listed, three (3) Contractors. All submitted tender documents have been checked for errors or omissions and corrected pricing has been listed below:

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| 1. Peter's Excavating Inc. | \$95,218.00 |
| 2. Alfidome Construction Ltd. | \$97,662.00 |
| 3. DeRose Bros. General Contracting Ltd. | \$108,357.90 |

As is indicated above, the lowest tender pricing was submitted by Peter's Excavating of Stevensville, Ontario. The tender document as submitted by Peter's Excavating Inc. was found to be complete in all aspects with regard to specifications, details and format. Peter's Excavating has previously carried out other infrastructure contracts in 2007 & 2008 within the City of Port Colborne, and is currently the contractor for several other municipalities within the Region.

It is the recommendation of staff at this time that Council accept the lowest priced tender as submitted by Peter's Excavating and award Tender 2011-23 FIRST AVENUE-Sanitary Lateral Replacements to them. This will allow the City to enter into an agreement with Peter's Excavating and to initiate construction as soon as scheduling permits.

By removing extraneous flows from the sanitary system, the capacity of the entire system is theoretically increased allowing the City and the Region to delay future capital upgrades to the system such as construction of CSO tanks, sewer replacement, upgrade of pumping stations or the upgrade of the treatment plant.

4) OPTIONS AND FINANCIAL CONSIDERATIONS:

a) Do nothing.

If no action is taken at this time, the Sanitary Lateral Replacements on First Avenue will not be completed and a major source of infiltration will not be removed from the sanitary system costing the City between \$95,000 and \$130,000 in unwarranted treatment costs per year.

b) Other Options

None.

5) COMPLIANCE WITH STRATEGIC PLAN INITIATIVES

Extraneous Flow Reduction Program – 2007 Strategic Planning Session

6) ATTACHMENTS

None.

7) RECOMMENDATION

A. That the Council of the City of Port Colborne award Tender # 2011-23 Sanitary Lateral Replacements on First Avenue to Peter's Excavating, of Stevensville, Ontario, for the total tendered price of \$95,218.00, plus applicable taxes; and further, that a contract by-law, whereby the City enters into a Contract Agreement with the contractor to be prepared.

B. That funding for Tender # 2011-23 be financed under Account: 3-590-33370-3328.

8) SIGNATURES

Prepared on May 31, 2011 by:

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