

Additional Expenditures for Extra Work on Capital Projects Currently in Progress

(City Council on December 14, 15 and 16, 1999, adopted this Clause, without amendment.)

The Works Committee recommends the adoption of the following report (November 18, 1999) from the Commissioner of Works and Emergency Services:

Purpose:

To obtain Council authorization to negotiate and authorize additional expenditures for the performance of necessary additional work on contracts within the Water and Wastewater Services Division as outlined in this report.

Financial Implications and Impact Statement:

Funds are available in the approved 1999-2003 Water and Wastewater Services Division Capital Accounts for each contract outlined in this report.

Recommendations:

It is recommended that:

- (1) additional expenditures in the amount of \$847,082.15, including Goods and Services Tax, be authorized for the performance of necessary additional work on Water and Wastewater contracts, as described herein and in accordance with the amounts listed in Appendix B attached; and
- (2) the appropriate City officials be authorized and directed to take the necessary action to give effect thereto.

Background:

At its meeting of January 6, 1998, City of Toronto Council enacted By-law No. 7-1998, Interim Financial Control By-law, which repealed former Metro By-law No. 146-90. As the new By-law contains no provision to exceed the awarded contract value, as confirmed by the City's Legal Division, the Department has effectively lost its ability to authorize the unforeseen and necessary additional work that may arise during construction of capital projects. This is particularly problematic in instances where the capital construction is tendered on a firm, lump sum basis. For contracts recently tendered, since confirmation of the repeal of former Metro By-law No. 146-90, we have been providing, on an interim basis, a general contingency allowance for possible extra work into the Schedule of Prices for Alterations, Extras, and Deductions for incorporation into the total lump sum tender price. However, in the case of contracts identified herein, Contract No. WPC-5-97, Construction of Digester Gas Control Building, and Contract No. WPC-6-97, Construction of the Anaerobic Digestion Tanks Nos. 19-22 at the Ashbridges

Bay Treatment Plant, no such general contingency was added, as we believed it was still available through former Metro By-law No. 146-90.

At the time of award, in accordance with former Metro By-law No. 146-90, as amended, a Department Head had authority to approve additional expenditures on a commitment in accordance with the By-law up to an amount equal to ten percent of the commitment. As such, under the former Metro By-law a further ten percent of the awarded contract amount for each of the contracts identified herein would have been available for required extra work on each contract.

Comments:

Shown in Appendix A are the above-noted contracts, which require the performance and/or payment of approved extra work.

Appendix B identifies the extra work necessary to be performed for both of the contracts described in Appendix A along with their corresponding costs.

At its meetings of October 28, 1998 and December 16, 1998, City of Toronto Council adopted Clause No. 4 of Report No. 7, and Clause No. 3 of Report No. 11 of The Works and Utilities Committee authorizing additional expenditures in the amounts of \$1,078,836.93 and \$1,393,444.44 including Goods and Services Tax for the performance of necessary additional work on Contracts Nos. WPC-5-97 and WPC-6-97 respectively.

Since the above-mentioned request to City Council for authorization of additional expenditures for Contracts Nos. PC-5-97 and WPC-6-97, more recent issues have been identified as requiring the performance of extra work. In some cases, additional information and unexpected circumstances have arisen during construction, which have necessitated changes to the original tendered scope of work. To ensure continuity with respect to liability and warranty issues under the contract, these changes must be implemented by the issuance of extra work orders.

Some of the extra work is required to be performed to conform to recently changed regulatory code requirements or operating procedures, and should be implemented to ensure construction of the best possible finished product. In other cases, the advancement of technology in the period between the completion of design (1995) and current construction phase dictated replacement/upgrade of the specified equipment or an addition to the equipment at extra cost. Examples of this are as follows: (a) level sensing pipes in existing Digester Tanks Nos. 1 and 3 to provide accurate monitoring of sludge levels; (b) provision of Programmable Logic Controllers control panels instead of microprocessors to provide better control and monitoring of the operation of the dryers; and (c) thickened waste activated sludge flowmetering to existing Digester Tanks Nos. 13 to 16 and new Digester Tanks Nos. 19 to 22 to provide total control of the sludge distribution to Digester Tanks.

Furthermore, the installation of latest technology gas monitoring devices is required to be performed during the current contract work due to the unreliability of aged and inaccurate existing gas sensors. Also, due to safety concerns, expressed by plant personnel, control panels

were removed from explosion to non-explosion proof area to eliminate reliance on the performance, by plant personnel, of mandatory safety protocols (which over time may inadvertently be forgotten to be performed) for each and every time routine maintenance or repair work is carried out.

Under this request for extra work expenditures we are also seeking funds required to cover the cost of the heating, ventilation and air conditioning needed to complete the new control room building for the existing Anaerobic Digester Tanks Nos. 5 to 12. The previous request covered the cost only of the construction of the previously designed control room building. The heating and cooling components of the work were left to be completed at a later date.

The total value of the estimated extra work required to date, as a percentage of the overall cost of Contracts Nos. WPC-5-97 and WPC-6-97, is equivalent to 5.8 and 6.3 percent respectively.

Conclusions:

The additional expenditures for extra work in the amount of \$847,082.15, including GST, are summarized in Appendix B attached. This additional work is necessary to either meet regulatory code requirements and/or ensure construction of the best possible product.

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Insert Appendix A

Insert Appendix B

Insert Appendix B (cont'd)