

**Amendment to Purchase Order 6023919
R.C. Harris Water Treatment Plant
Building Envelope Rehabilitation**

Date:	February 5, 2010
To:	Public Works and Infrastructure Committee
From:	General Manager, Toronto Water Director, Purchasing and Materials Management
Wards:	Ward 36 – Scarborough Southwest
Reference Number:	P:/2010/Internal Services/pmmd/PW10010pmmd (AFS #11216)

SUMMARY

The purpose of this report is to request the authority to amend Purchase Order 6023919 for the provision of professional engineering services during construction related to the R.C. Harris Building Envelope Rehabilitation (BER) project. The total amendment being requested is \$1,205,811.20 net of all taxes (\$1,230,952.37 net of GST and HST Recoveries). The completion date on the purchase order will be amended from December 31, 2009 to June 30, 2013.

RECOMMENDATIONS

The General Manager of Toronto Water and the Director of Purchasing and Materials Management recommend that Public Work and Infrastructure Committee grant authority to:

1. Amend Purchase Order 6023919 for contracted professional engineering services with CH2M Hill Canada Limited, pursuant to RFP 9117-07-7177, for the provision of services during construction for the R.C. Harris Building Envelope Rehabilitation by an additional amount of \$1,205,811.20, net of all taxes (\$1,230,952.37, net of GST and HST Recoveries but inclusive of a 10% contingency allowance), revising the contract value for services during construction from an upset limit of \$680,842.80 to \$1,886,654.00, all net of all taxes (\$1,911,795.17 net of GST and HST Recoveries), and correspondingly revising the total cost for engineering services for the R. C. Harris Water Treatment Plant Building Envelope Rehabilitation from an upset limit of \$1,615,336.80 to \$2,821,148.00 net of all taxes (\$2,846,289.17 net of GST and HST Recoveries) including all disbursements and contingencies.

Financial Impact

The amendment for an additional \$1,205,911.20 net of all taxes (\$1,230,952.37, net of GST and HST Recoveries) increases the current contract value with CH2M Hill Canada Limited from \$680,842.80 to \$1,886,654.00 all net of all taxes (\$1,911,795.17 net of GST and HST Recoveries). Funding for the increase is available in the 2010 Toronto Water Capital Budget and the 2011-2019 Capital Plan in account CPW061 - Harris Water Treatment Plant as follows:

2010 HST on post July 1 st work	2011 net of GST and HST recoveries	2012 net of GST and HST recoveries	2013 net of GST and HST recoveries	TOTAL net of GST and HST recoveries
\$3,918.89 HST (Non- recoverable)	\$457,920.00	\$457,920.00	\$311,193.48	\$1,230,952.37

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

BACKGROUND

At its meeting of August 22, 2007, the Bid Committee adopted the staff recommendation that authority be granted to enter into agreements with CH2M Hill Canada Limited to provide engineering services for pre-design, detailed design, services during construction, and post construction services for the R. C. Harris Water Treatment Plant Building Envelope Rehabilitation, at a total cost of \$1,615,336.80, including \$680,842.80 for Services During Construction (all figures net of GST).

CH2M Hill Canada Limited was engaged through Request for Proposals (RFP) 9117-07-7177 for the pre-design, detailed design, services during construction and post-construction services. The RFP identified an assumed construction window of 52 weeks to be assumed by prospective firms in the preparation of fee proposals.

At its meeting of May 27, 2009, the Bid Committee granted authority to award a contract to Clifford Restoration Limited for construction of the R.C. Harris Building Envelope Rehabilitation at a total award value of \$17,079,159.05 net of GST.

As part of their tender submission for Tender Call 105-2009 for the construction of the BER, Clifford Restoration Limited, has identified a 180 week construction duration. This longer construction window will required professional engineering services during construction for an additional period beyond that originally assumed (52 weeks), hence the need for a purchase order amendment.

COMMENTS

The R.C. Harris Water Treatment Plant is Toronto's largest water treatment facility, with a rated capacity of 950 million liters per day. Constructed in the 1930s in the Classical Art Deco style and expanded in the 1950s, the facility is registered under the Ontario Heritage Act, and is designated as a National Historic Civil Engineering Site. As such, it is essential that it be maintained in a state-of-good repair to ensure the security and integrity of Toronto's water supply.

The plant consists of three above ground structures, the Filter/Administration Complex, the Service Building and the Pumping Building. Due to the facility's age and highly exposed location, the envelope of these buildings, including masonry, steel members, windows, and roofing, has deteriorated. Steps have been taken to arrest this decline, including replacement of the Pumping Building Roofing in 2000, rehabilitation of the Filter Building skylights in 2005, and rehabilitation of the filter building north wall and roofing in 2009. These projects successfully addressed specific areas of the facility; however the majority of the building envelope remained to be dealt with.

As part of the pre-design process for the R.C. Harris BER project, a comprehensive building condition assessment was carried out. This assessment noted considerable deterioration of the building envelope of the Filter/Administration Building, Service Building, the east section of the Pumping Building, as well as the outdoor terrace structure. This deterioration includes severely damaged brick that requires complete replacement in many areas, stonework that is heavily weathered and failing due to corrosion of steel anchors and in need of extensive repair or replacement, as well as corroded steel structural support members that require replacement with stainless steel. The resulting required scope of masonry rehabilitation and replacement of structural steel members is far beyond that originally assumed prior to the assessment.

The condition assessment also identified remediation requirements for the seawall at the water's edge that were not originally contemplated, but are necessary to maintain a state-of-good-repair and prevent further deterioration. In addition, the vehicle access control gates at the plant entrance were identified as deteriorated and in need of rehabilitation in order to meet plant heritage conservation and security guidelines. This also represented an addition to the original scope.

The general contractor, Clifford Restoration Limited, has implemented an efficient and aggressive schedule for carrying out the required work, however the 180 week construction duration is in excess of the 52 weeks assumed during the RFP process for procuring engineering services. For this reason it is necessary to amend the Purchase Order with CH2M Hill for services during construction.

CH2M Hill's fee proposal has identified an amount of \$8,564.00 per week excluding all taxes for additional services during construction beyond the 52 week period, including general office administration and site supervision services. Based on this weekly rate, the

additional 128 weeks of construction results in an additional \$1,096,192.00 net of all taxes (\$1,115,484.98 net of GST and HST recoveries) to accommodate the additional time required for services during construction.

As a result of the additional time required for services during construction, it is recommended that Purchase Order 6023919 be amended by \$1,096,192.00 plus an additional 10% provisional contingency allowance of \$109,619.20 for a total amendment of \$1,205,811.20 all net of all taxes (\$1,230,957.32 net of GST and HST recoveries). This amendment revises the current contract value with CH2M Hill Canada Limited from \$680,842.80 to \$1,886,654.00 net of all taxes (\$1,911,795.17 net of GST and HST recoveries). Considering the scope, complexity and duration of the R.C. Harris BER, this represents excellent value to the City.

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