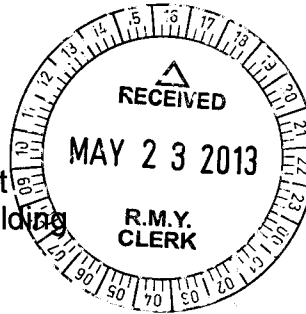




May 16, 2013

Denis Kelly, Regional Clerk
Corporate Services Department
York Region Administration Building
17250 Yonge Street, 4th Floor
Newmarket, ON L3Y 6Z1



REGION OF YORK
CLERK'S OFFICE

FILE No. - P42

The Regional
Municipality
of Durham

Corporate Services
Department -
Legislative Services

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Matthew L. Gaskell
Commissioner of
Corporate Services

**RE: SOLE SOURCE ENGINEERING ASSIGNMENT FOR THE
YORK-DURHAM DUFFIN CREEK WATER POLLUTION
CONTROL PLANT IN THE CITY OF PICKERING –
SUPERVISORY CONTROL AND DATA ACQUISITION
SYSTEM INTEGRATION SERVICES AND EXISTING
INCINERATION PLATFORM MIGRATION (2013-W-47)
(Our File: O11-15)**

Please be advised the Works Committee of Regional Council considered the above matter and at a meeting held on May 15, 2013 Council adopted the following recommendations of the Committee:

- a) THAT Eramosa Engineering Inc. be retained to provide Supervisory Control and Data Acquisition System process software programming engineering services, for the York-Durham Duffin Creek Water Pollution Control Plant Stage 1 and 2 incineration complex at an upset limit not to exceed \$135,000*;
- b) THAT the gross cost of this assignment in the amount of \$135,000 be funded from the approved 2013 Duffin Creek Water Pollution Control Plant, Tangible Capital Assets – Replacement Budget, Item Nos. 184 and 367 which are cost shared with the Regional Municipality of York as follows:

Durham Region's (18.76%) Share	\$25,326
York Region's (81.24%) Share	109,674
Total Upset Limit	<u>\$135,000;</u>

- c) THAT the Commissioner of Finance be authorized to execute the necessary agreement; and
- d) THAT a copy of Report No. 2013-W-47 of the Commissioner of Works be forwarded to the Regional Municipality of York."
*(including disbursements and before applicable taxes)

.../2



Page 2
Report 2013-W-47

As directed, please find attached a copy of Report No. 2013-W-47 of the Commissioner of Works.

A handwritten signature in cursive script that reads "Deb Bowen".

D. Bowen, AMCT
Regional Clerk/Director of Legislative Services

DB/cb

c: C. Curtis, Commissioner of Works, Region of Durham



The Regional Municipality of Durham
To: The Works Committee
From: Commissioner of Works
Report: 2013-W-47
Date: May 1, 2013

SUBJECT:

Sole Source Engineering Assignment for the York-Durham Duffin Creek Water Pollution Control Plant in the City of Pickering – Supervisory Control and Data Acquisition System Integration Services and Existing Incineration Platform Migration

RECOMMENDATIONS:

THAT the Works Committee recommends to Regional Council that:

- a) Eramosa Engineering Inc. be retained to provide Supervisory Control and Data Acquisition System process software programming engineering services, for the York-Durham Duffin Creek Water Pollution Control Plant Stage 1 and 2 incineration complex at an upset limit not to exceed \$135,000*;
- b) The gross cost of this assignment in the amount of \$135,000 be funded from the approved 2013 Duffin Creek Water Pollution Control Plant, Tangible Capital Assets - Replacement Budget, Item Nos.184 and 367 which are cost shared with the Regional Municipality of York as follows:

Durham Region's (18.76%) Share	\$25,326
York Region's (81.24%) Share	<u>109,674</u>

Total Upset Limit	<u>\$135,000</u>
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- c) The Commissioner of Finance be authorized to execute the necessary agreement; and
- d) A copy of this report be provided to the Regional Municipality of York.

* (including disbursements and before applicable taxes)

REPORT:**1. PURPOSE**

The purpose of this report is to provide details and seek authorization to retain Eramosa Engineering Inc. (Eramosa) to perform Supervisory Control and Data Acquisition (SCADA) software programming services related to the migration of the legacy SCADA system operating at the Duffin Creek Water Pollution Control Plant (WPCP) Stage 1 and 2 incineration complex, to the current standard SCADA platform provided for the Stage 3 expansion project.

2. BACKGROUND

The Duffin Creek WPCP was initially completed in 1980. In the early 1990s, a SCADA system that was based on a unique platform was installed. This unique platform was replaced under the SCADA Retrofit Project completed in 2010 for the liquid side operation of the plant.

In 2006, a Request for Proposal (RFP) was issued and awarded to Eramosa to complete the pre-design, detailed design, construction administration and SCADA software standard module creation and programming of the new GE IFIX software (General Electric's Corporate Process Logic Control Software Platform) which is the current standard platform at the Duffin Creek WPCP facility (including the recently completed Stage 3 incineration works).

The existing Stage 1 and 2 incineration complex SCADA software platform is still based on the legacy WONDERWARE platform. This process area was not converted during the recently completed works as the process could not be placed out of service for an extended duration for process programming requirements and testing as there was no process redundancy in place at that time. Now that the Stage 3 incineration complex is being commissioned, there is sufficient redundancy for sludge processing in place to allow for the conversion of the legacy WONDERWARE system to the new IFIX platform.

Such integration is necessary to ensure the smooth transition from the old platform. The integration will require co-ordination of programming with Incineration Operations and the Plant Information System group for uploading of the new platforms to the virtual servers which Eramosa installed and created at the facility.

Based on their extensive involvement to date with the SCADA network, and software standard module programming, it is recommended that Eramosa be retained to provide process programming engineering services for the Duffin Creek WPCP, Stage 1 and 2 incineration complex SCADA platform migration.

The use of Eramosa will ensure the work is expedited in an efficient manner and the risk of non-compliance with Ministry of the Environment (MOE) regulations is reduced in this complex process facility.

3. FINANCIAL IMPLICATIONS

3.1 Purchasing By-law 68-2000

Section 9.1.1 of the Purchasing By-law requires that staff submit a report to Regional Council to obtain approval to acquire the services of a particular company or individual where the value of the assignment is expected to be more than \$60,000.

3.2 Financing

The cost of engineering services for the York-Durham Duffin Creek WPCP SCADA Retrofit Project - Part 1 is to be shared between the Regional Municipalities of York and Durham. Funds for the recommended engineering assignment can be provided within the approved 2013 Duffin Creek WPCP Tangible Capital Assets - Replacement Budget, Items 184 and 367 which includes the WONDERWARE conversion to IFIX for Reactors 1 and 2.

The total estimated cost of engineering services for the scope of work is \$135,000*.. Durham's share is identified below:

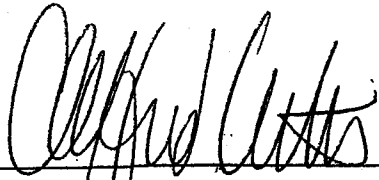
Durham Region's (18.76%) Share	\$25,326
York Region's (81.24%) Share	<u>109,674</u>

Total Upset Limit	<u>\$135,000</u>
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4. CONCLUSION

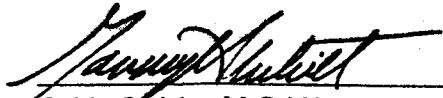
It is recommended that Eramosa Engineering Inc. be retained to provide Supervisory Control and Data Acquisition System process software programming engineering services for the York-Durham Duffin Creek Water Pollution Control Plant Stage 1 and 2 Incineration Complex at an upset limit not to exceed \$135,000* and that the Commissioner of Finance be authorized to execute the necessary agreement.

This report has been reviewed by the Finance Department.



Clifford Curtis, P.Eng., MBA
Commissioner of Works

Recommended for Presentation to Committee



G.H. Cubitt, M.S.W.
Chief Administrative Officer

PO2/em/ms