TO: CHAIR AND MEMBERS
ENVIRONMENT AND TRANSPORTATION COMMITTEE

FROM: PAT MCNALLY, P. Eng.
DIRECTOR – WATER, ENVIRONMENT & CUSTOMER RELATIONS

SUBJECT MEETING ON MARCH 8, 2004
ARVA WATER PUMPING STATION - TRANSFORMER REPAIRS

RECOMMENDATION

That on the recommendation of the Director – Water, Environment & Customer Relations in order to implement unforeseen repairs to electrical equipment at the Arva Water Pumping Station:

a) Information with respect to the emergency repair BE RECEIVED; and

b) A budget BE ESTABLISHED in the amount of $40,000 and that financing BE APPROVED as set out in the Sources of Financing Report attached hereto as Schedule ‘A’.

BACKGROUND

During the annual maintenance and inspection programme of the high voltage electrical system at the Arva Water Pumping Station, a 225kVA transformer (one of two) was found to be faulted. The seriousness of this situation was heightened by the results of a comprehensive evaluation which concluded that the entire system (an associated transfer scheme and the second transformer) was approaching the end of its life cycle. This problem was not identified in previous inspections. Consequently, an urgent situation has developed – one where there is potential for a failure of the remaining transformer at Arva and the resultant loss of ability to pump water into the City’s distribution system from the Lake Huron supply system.

The course of action underway is to replace both transformers to ensure compatibility of electrical equipment and performance. Options for the replacement equipment are further constrained by existing space limitations and clearances required to comply with the electrical code. Quotes were received on three equipment options, and the lowest price transformer equipment has been selected, approximately $18,000 (2 @ $8,890). The total estimated installed cost is $40,000 including all materials, labour and tax.

This significant replacement of equipment was not anticipated in the preparation of the 2004 Budget, accordingly it is recommended that the source of funding be established as outlined in the Schedule ‘A’.

This report was prepared and reviewed by Niall Robertson and Charlie Murray of the Water and Sewer Operations Division.

PREPARED BY: RECOMMENDED BY:

NIALL ROBERTSON, P. Eng., MBA PAT MCNALLY, P. Eng.
ENVIRONMENTAL SERVICES ENGINEER DIRECTOR – WATER, ENVIRONMENT &
WATER AND SEWER OPERATIONS CUSTOMER RELATIONS

Attached: Schedule ‘A’ – Source of Financing

cc: P. Steblin, P. Eng., General Manager & City Engineer
RE: Arva Water Pumping Station - Transformer Repairs
New Capital Budget Project No. EW3618 Arva Water Pumping Station

FINANCE AND CORPORATE SERVICES DEPARTMENT REPORT ON THE SOURCES OF FINANCING:
The Director of Financial Planning and Policy confirms that the cost of this project was not specifically included in the 2004 Capital Works Budget and that, subject to the recommendations of the Director of Water, Environment and Customer Relations, the detailed source of financing for this project is:

<table>
<thead>
<tr>
<th>ESTIMATED EXPENDITURES</th>
<th>2004 Approved Budget</th>
<th>This Submission</th>
<th>2004 Revised Budget</th>
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</thead>
<tbody>
<tr>
<td>Construction</td>
<td>$0</td>
<td>$40,000</td>
<td>$40,000</td>
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NET ESTIMATED EXPENDITURES

<table>
<thead>
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<th>SOURCE OF FINANCING</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Drawdown from Repairs &amp; Mtce. Water Reserve Fund - tsf. from EW3102-Year 2000 Systems Controls (1)</td>
<td>$0</td>
<td>$40,000</td>
<td>$40,000</td>
</tr>
</tbody>
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TOTAL FINANCING

Note:
1) The additional requirement of $40,000 is available as a drawdown from the Repairs & Mtce. Water Reserve Fund, transferred from EW3102-Year 2000 Systems Controls. This project is complete and has surplus funds available to fund the requirement for the Arva Water Pumping Station project EW3618.

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Martin Hayward
Director of Financial Planning & Policy