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> Halifax Regional Council March 27, 2007

TO:

Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:** 

Cathie O'Toole, CGA - A/Director of Finance

DATE:

March 21, 2007

**SUBJECT:** 

Spider Lake Water Services Extension

#### INFORMATION REPORT

# **ORIGIN**

May 2006 Public Consultation with Spider Lake Residents regarding water service issues, and feasibility of providing a water system expansion funded by Local Improvement Charge (LIC).

#### BACKGROUND

The residents of the Spider Lake area, east of Highway 107 (as shown on the attached map), are currently serviced with on site systems for water supply. Historical inquiries from area residents have noted a desire for the extension of public water service to their homes referencing quality and quantity problems. General feedback over the past few years stated that primary water servicing constraints were two fold; the area was outside of the water service district boundary and the capital cost was significant. With continued public interest a project plan and cost estimate was prepared and significant public consultation undertaken to discuss the issues of water serving with the residents in more detail.

The Halifax Regional Water Commission and HRM have developed the following strategy and time line to move forward in development of a water servicing project for Spider Lake residents, with the objective of being positioned to complete the project during the 2007 construction season.

HRWC issuing design for RFP
HRWC Board/NSURB approvals sought
Detailed Design
Construction Tender
Review and Report Preparation
Report to HRM Council
Public Hearing for Local Improvement Charge
Construction commencing

March 20<sup>th</sup>, closing March 28<sup>th</sup>, 2007 March 29<sup>th</sup> - April 13<sup>th</sup>, 2007 April 16<sup>th</sup> - May 11<sup>th</sup>, 2007 May 14<sup>th</sup> - June 1<sup>st</sup>, 2007 June 4<sup>th</sup> - June 15<sup>th</sup>, 2007 prior to Council breaking for Summer 2007 July 2007 August 2007

#### DISCUSSION

### Water Quality & Quantity Issues

In correspondence over the past several years residents have noted concerns with both the quality and quantity of their well water supplies. A local survey, conducted by the area residents in 2003, noted that 25% had water quality problems and 40% reported quantity problems (a large majority of the residents also indicated a desire to extend water services to the area). These residents also reported concerns that new subdivision development activity in the area and the expansion of an adjacent gravel pit would disrupt the water table further degrading the water problems. In addition, residents noted the increased frequency of water being trucked into the area to supplement wells.

The N.S. Department of the Environment & Labour (NSDEL) has no specific information about water problems in the Spider Lake Subdivision area. However, they commented:

"... it appears that the area in question is underlain by bedrock of the Meguma Group, Goldenville Formation. Greywacke, slate and other rocks of this geological formation may contain mineralization that can result in dissolved groundwater Arsenic levels above the Guideline for Canadian Drinking Water Quality (GCDWQ) criteria. Many wells in the Waverley are so affected. The Spider Lake Road

would also be suspect due to its location near previously known gold mining areas where such mineralization has resulted in water quality problems in the past"

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Since the timing of the NSDEL information the GCDWQ criteria for arsenic has been reduced from a maximum acceptable concentration (MAC) of 0.025 mg/l to 0.010 mg/l, increasing the likelihood of arsenic above acceptable limits within the Spider Lake area.

#### Planning Boundary

The recently approved HRM Regional Plan contains provisions for the inclusion of the Spider Lake Road area within the water service district boundary. Thus, the planning amendments required for a water service extension are now in place.

# Project Plan

To ensure a clearer definition of the project scope for continued consideration of the water servicing, HRWC retained an engineering consultant (SDMM Ltd.) to complete a preliminary design and cost estimate. The design of the water service extension includes an under crossing of the Highway 107, a 200/300 mm water main on each street, control valves and hydrants at standard spacing, and a service lateral to each property line.

The project is designed to include either Phase 1 (original community) or Phase 1 and Phase 2 (original community plus the first section of new subdivision). The total cost for the project is estimated at \$1,100,000 based on an equal sharing of the under crossing cost between Phase 1, Phase 2 and future development.

At this time no external funding has been identified for this project and the full cost would be allocated to the benefitting residents. Based on the total cost and with an adjustment for the lower density of lots within Phase 2, the estimated per lot charge is:

Phase 1: \$14,500/lot Phase 2: \$21,600/lot

This projected cost per lot for water servicing is within the price range of several recent residential serving projects that had limited or no external funding support.

If approved by Council and constructed, the per lot charge would form a Local Improvement Charge (LIC) payable by each lot owner at the completion of construction.

In addition to the project costs noted above, lot owners connecting to the system would be required to pay the full cost of extending the service lateral from the property line to the house and the plumbing connections. The consultant has estimated that service lateral extension costs can be estimated at +/- \$85/m excluding rock excavation and unique landscaping requirements.

# Community Participation

A public meeting was held on March 30, 2006 where staff from the Halifax Regional Water Commission and the Councilor from District 6 discussed the general planning, infrastructure and financial issues surrounding the extension of water service to the Spider Lake Road area. Based on feedback from the meeting, staff was encouraged to continue with the process of developing a water servicing plan and seek more specific feedback from the community via a formal survey.

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Subsequent to the Community Meeting of March 30, 2006, an information letter and petition dated May 29, 2006 was sent to all residents affected by the servicing strategy. The petition was designed to ensure we got as broad an input from the community as possible, and requested that each lot owner within the project limit indicate their support for or against this current proposal.

Based on the petition results, there was a slight majority of residents in Phase 1 in favour of the project Plan, and no interest in the project Plan from the residents of Phase 2. The detailed results of the May 29, 2006 petitioning process follows:

# Phase 1

40 of 42 petitions returned 21 – YES 19 – NO 2 – No Response

Phase 2

20 of 23 petitions returned 0 – YES 20 – NO 3 – No Response

# Next Steps

Given that the current cost estimates were developed in the Spring of 2006, the most prudent course of action would be to ensure cost estimates are as accurate as possible before initiating an LIC process. The construction index is currently running around 5%, however this inflationary increase may possibly be offset partially by more accurate cost estimates as a result of developing the detailed design and tendering the project. Should the project costs obtained through the tendering process exceed the design estimates by more than 5%, the residents of Phase 1 will be given another opportunity to vote on whether they still want to continue with the project. A report to Council would be prepared to initiate the Local Improvement Charge based on the tendered cost.

Based on a majority of replying residents in favour, the historically noted water problems and the trend for costs and quality/quantity problems to increase with time, staff will be proceeding with the detailed design and public tender for the water service extension to Phase 1 within the Spider Lake Area Subdivision. As detailed earlier in this report, and discussed at the Public meeting, the lot owners of Phase 2 and the future subdivision area would be charged their share of the highway under crossing as a future benefit in their area of the subdivision. This is currently estimated to be \$1,650

per lot but will be revised based on the results of the public tendering process. This amount would be part of the LIC payable after project completion.

In response to a Motion of Council, the Mayor has requested funding from Service Nova Scotia and Municipal Relations toward the cost of the Highway 107 under-crossing, in a letter dated February 26, 2007. No response has been received to date. If HRM receives Provincial funding toward the under-crossing, it would eliminate costs at this time for Phase 2 and 3 residents, and reduce costs for Phase 1 residents. It is appropriate that those residents who could benefit in the future from the availability of water services should they decide to connect, should contribute to the costs incurred to receive the benefit. HRM staff have investigated whether it is possible to defer the charges for Phase 2 and 3 residents for their portion of the bridge crossing until they connect to water services, however the Municipal Government Act does not provide HRM with authority or a financial tool to do this. The by-law approval process includes a formal public hearing where residents and others can speak for or against the project. The hearing would be advertised in the newspaper for two weeks to encourage residents to participate in the Public Hearing to ensure we maximize community input prior to a Regional Council decision.

#### **BUDGET IMPLICATIONS**

There are no budget implications for HRM. A lot based Local Improvement Charge (LIC) will be levied to reflect the actual cost of the project, less any external funding that may become available. Thus there will be no direct cost to HRM for the implementation of this project. Should external funding become available during the implementation of this project, the funding should be applied to reduce both the LIC for Phase 1 and the LIC for the Phase2/Future Lots.

# FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

#### **ATTACHMENTS**

Map of project area: Spider Lake and Spider Lake Estates Subdivisions Water Servicing Plan (Phase 1 Area) dated May 2006.

A copy of this report can be obtained online at <a href="http://www.halifax.ca/council/agendasc/cagenda.html">http://www.halifax.ca/council/agendasc/cagenda.html</a> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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