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Halifax Regional Council
March 27, 2007

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY: Cathie O'Toole
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	March 20 th , closing March 28 th , 2007
HRWC Board/NSURB approvals sought	March 29 th - April 13 th , 2007
Detailed Design	April 16 th - May 11 th , 2007
Construction Tender	May 14 th - June 1 st , 2007
Review and Report Preparation	June 4 th - June 15 th , 2007
Report to HRM Council	prior to Council breaking for Summer 2007
Public Hearing for Local Improvement Charge	July 2007
Construction commencing	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”

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.

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

