



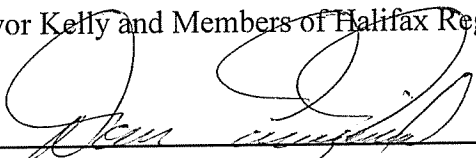
PO Box 1749
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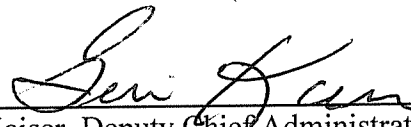
Halifax Regional Council
July 3, 2007

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



Dan English, Chief Administrative Officer



Geri Kaiser, Deputy Chief Administrative Officer - Corporate Services
and Strategy

DATE: June 25, 2007

SUBJECT: Spider Lake Water Services Extension

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).

RECOMMENDATION

It is recommended that Regional Council:

1. Approve the Capital Budget for Spider Lake Water Service Extension in the amount of \$674,030 gross, including net HST, with the net residual amount (after HRWC funding) funded from a Local Improvement Charge (LIC).
2. Approve in principle, and begin the formal process for, the adoption of By-Law L-126 respecting charges for the Spider Lake Water Services Extension, attached hereto as Attachment 1.
3. Subject to the approval of By-Law L-126, authorize the Halifax Regional Water Commission (HRWC) to be the contracting agency for the installation of the necessary water infrastructure within the Spider Lake project area including required engineering construction management services and material testing.

BACKGROUND

The residents of the Phase 1 section of the Spider Lake area, east of Highway 107 (as shown on the map included as Attachment 2), 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 were prepared and significant public consultation undertaken to discuss the issues of water servicing with the residents in more detail.

DISCUSSION

Water Quality and 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 could 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 and 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 area 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 clear 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 a 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 preliminary total cost estimate to provide water service to Phases 1 and 2 was \$1,100,000. With no identified external funding for this project the full cost was 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 was:

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

This projected cost per lot for water servicing was 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 could be about +/- \$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 Councillor 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. A copy of the letter and petition are included as Attachment 3 to this report. 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 the 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	Phase 2
Number of respondents in favour:	21 (51%)	0 (0%)
Number of respondents not in favour:	18 (44%)	20 (87%)
Number who did not respond:	2 (5%)	3 (13%)

Detailed Design and Construction Tender

Based on a majority of replying residents in Phase 1 in favour, the historically noted water problems and the trend for costs and quality/quantity problems to increase with time, staff proceeded with the detailed design and public tender for the water service extension to Phase 1 within the Spider Lake Area Subdivision. Given that the cost estimates were developed in the Spring of 2006, the most prudent course of action was to ensure cost estimates were as accurate as possible before initiating an LIC process.

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 crossing, in a letter dated February 26, 2007. If HRM receives Provincial funding toward the under-crossing, it would reduce costs for Phase 1 residents.

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.

HRWC completed the detailed design and publicly tendered the project which included the highway crossing and infrastructure for Phase 1 only. The tender closed in May 2007, and based on the acceptable low bid tender, the Gross Total Project Cost estimate is \$674,030 . This cost includes design fees, construction inspection, contingency, net HST and interest and overheads. In addition, the HRWC was successful in obtaining additional project funding, as part of its Stewardship program, valued at \$60,000.

The following table summarizes the project costs and funding sources.

	<i>Water System</i>	<i>Highway Crossing</i>	<i>Total</i>
Gross Project Cost - Estimated	\$562,205	\$111,825	\$674,030
Less: HRWC Stewardship Contribution	(\$ 60,000)	\$ 0	(\$ 60,000)
Net Cost (to be fully recovered by LIC)	<u>\$502,205</u>	<u>\$111,825</u>	<u>\$614,030</u>

Since Phase 1 has 41 lots, the estimated lot based LIC for Phase 1 of this project is \$14,976, which is \$476 or 3.3% higher than the preliminary estimate that was utilized for the community survey process. There would be no cost to Phases 2 and 3 as those phases would not be hooking-up and therefore would not be deriving a benefit.

BUDGET IMPLICATIONS

There are no net 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.

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.

ALTERNATIVES

1. Council could decide not to proceed with this project. This is not recommended as there are potential quality and quantity problems with water from the on-site systems as discussed earlier in this report.
2. Council could decide to spread the cost of the highway crossing between all three phases based on the possibility that Phases 2 and 3 might decide to hook-up at a future date and therefore should pay their fair share of the highway crossing. The portion of the cost of the highway crossing attributable to Phases 2 and 3 would be paid for upon completion by HRM, and later recovered from the property owners of those phases when they hook-up to water. The per lot charge for Phase 1 property owners would drop by \$1,729 to \$13,247, and property owners in Phases 2 and 3 would not pay anything until they decided to hook-up.

However, the interest charged by HRM to Phase 2 and 3 property owners for carrying the cost of the highway crossing for them could be substantial depending on how many years into the future HRM is required to do so. There is also the risk that those property owners may never hook-up to the municipal water supply, in which case HRM would be required to absorb the cost and would also forego the interest on funds held in abeyance that could have been used for other purposes.

Staff are also concerned with regard to the precedent this approach would set. HRM's involvement with local water service projects has always been restricted to providing a mechanism by which property owners can pay for the cost through local improvement

charges. The Water Commission is not able to offer such a financing mechanism to property owners. Should Council decide to accept the risk of carrying the cost of the highway crossing for Phases 2 and 3, this could create an expectation for similar accommodation for other water projects in the future thereby further increasing risk to HRM. For these reasons, staff do not recommend this alternative.

It is important to note that this situation is not appropriate for a Capital Cost Contribution (CCC). CCC is charged on future development, not on properties which already exist as is the case with Spider Lake.

3. Council could decide to spread the cost of the highway crossing between all three phases and charge an LIC to all properties in those phases upon completion of the highway crossing. This approach has the advantages of reducing carrying costs to the property owners of Phases 2 and 3, and is consistent with HRM’s limited role in providing LICs as a mechanism by which property owners can finance the infrastructure required for them to access the public water supply.

If that approach was taken, the per lot LIC for Phase 2 and 3 property owners would be \$998, while the per lot charge for Phase 1 property owners would drop by \$1,729 to \$13,247. The following table summarizes the project costs and funding sources under this alternative.

	<i>Water System</i>	<i>Highway Crossing</i>	<i>Total</i>
Gross Project Cost - Estimated	\$562,205	\$111,825	\$674,030
Less: HRWC Stewardship Contribution	(\$ 60,000)	\$ 0	(\$ 60,000)
Net Cost	<u>\$502,205</u>	<u>\$111,825</u>	<u>\$614,030</u>
Allocation to Phase 1	\$502,205	\$ 40,936	\$543,141
Allocation to Phase 2 and 3	\$ 0	\$ 70,889	\$ 70,889
Phase 1 estimated per lot LIC (41 lots):	\$ 12,249	\$ 998	\$ 13,247
Phase 2 and 3 estimated per lot LIC (71 lots):	\$ 0	\$ 998	\$ 998

Section 79 of the MGA specifies that “council may, by by-law, prescribe charges for the provision of services for persons who use or **benefit** from the service, on a basis to be set out in the by-law.” A written legal opinion received from Legal Services states that “Council cannot impose the LIC on Phases 2 and 3 now because the property owners are not currently realizing, nor guaranteed to realize

a benefit from the water infrastructure. There may be a problem if Phase 2 and 3 are charged the LIC, yet never actually realize the benefit by connecting to the water in the future.” Therefore, staff recommend against this approach because of the potential risk for litigation.

Even if this option did pass legal scrutiny, there is concern that an LIC paid now for the highway crossing by Phases 2 and 3 property owners would commit HRM and the HRWC to providing the remaining infrastructure for access to the public water supply at some point in time. Such an open-ended commitment could go on for many years.

Legal Services have also advised that Phases 2 and 3 cannot be prevented from hooking-up to the highway crossing should the majority of property owners in those phases decide at some future time that they are willing to pay an LIC for the necessary infrastructure to extend water service to their properties.

ATTACHMENTS

Attachment 1: Proposed By-Law L-126

Attachment 2: Map of project area: Spider Lake and Spider Lake Estates Subdivisions Water Servicing Plan (Phase 1 Area) dated May 2006.

Attachment 3: Letter to Residents and Petition dated May 29, 2006

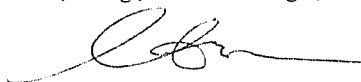
A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Jamie Hannam, P.Eng., Chief Engineer, Halifax Regional Water Commission 490-4804

Gordon Roussel, Financial Consultant, Budget & Financial Analysis 490-6468

Report Approved by:

Carl Yates, P.Eng., General Manager, Halifax Regional Water Commission 490-4840



Report Approved by:

Catherine Sanderson, Sr. Manager, Financial Services, 490-1562

Attachment 1

HALIFAX REGIONAL MUNICIPALITY

**BY-LAW NUMBER L-126
RESPECTING CHARGES FOR LOCAL IMPROVEMENT PROJECTS**

Be It Enacted by the Council for the Halifax Regional Municipality that By-Law L-100, the Local Improvement By-Law, be amended as follows:

1. Schedule "A" of By-Law L-100 is amended by adding the following:
 - a) The Spider Lake Subdivision Water Extension (Phase 1) project is a plan to install water lines to service properties located within the boundaries identified on a plan entitled "Spider Lake and Spider Lake Estates Subdivisions Water Servicing Plan (Phase 1 Area) May 2006" as attached.
 - b) The Project will be funded by Local Improvement Charges based on the entire cost of the project less any other external recoveries.
 - c) A Local Improvement Charge will be imposed at an interim rate of \$14,976 per lot for those properties located in Phase 1.
 - d) The interim Local Improvement Charges will be adjusted at the completion of the project and will be calculated on the basis of the total actual cost of the project at the adjustment date,
 - e) A further charge, yet to be determined, will be levied in respect of all future connections to the water system for any properties either existing or created, which are not assessed a local improvement charge.

Done and passed by Council on this day of , 2007.

MAYOR

MUNICIPAL CLERK

I, Jan Gibson, Municipal Clerk for the Halifax Regional Municipality, hereby certify that the above noted by-law was passed at a meeting of the Halifax Regional Council held on , 2007.

Jan Gibson, Municipal Clerk

Notice of Motion:

First Reading:

Notice of Public Hearing - Publication:

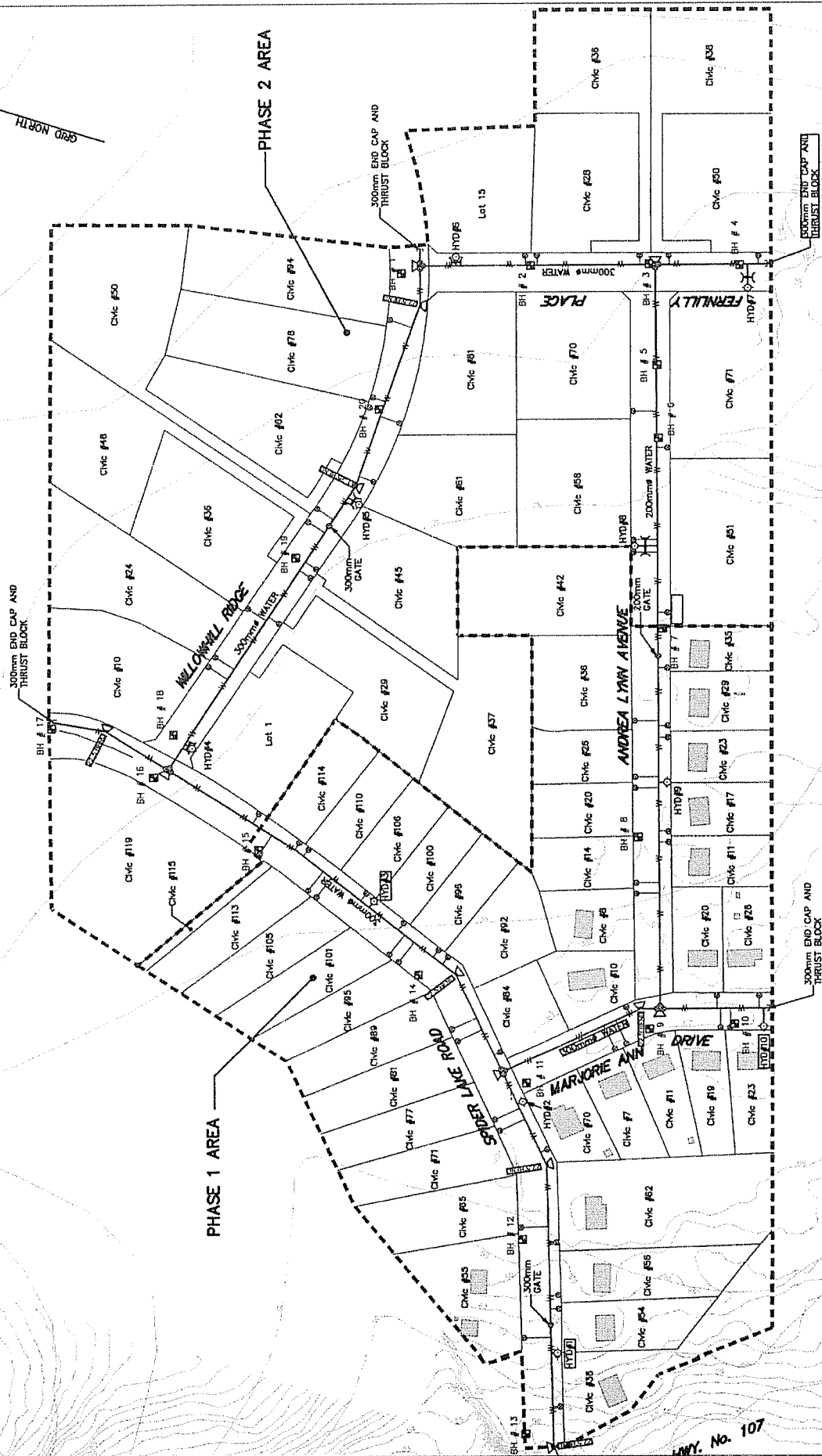
Second Hearing:

Approval of Service Nova Scotia and Municipal Affairs:

Effective Date:

SPIDER LAKE AND SPIDER LAKE ESTATES SUBDIVISIONS WATER SERVICING PLAN

MAY 2006



PHASE 1 AREA

PHASE 2 AREA

HWY. No. 107



*Councillor Andrew Younger – District 6
 P. O. Box 1749
 Halifax, NS B3J 3A5
 Phone: 476-1727 Fax: 490-5983*

*Jamie Hannam, P. Eng. - Chief Engineer
 P. O. Box 8388 Station A
 Halifax, NS B3K 5M1
 Phone: 490-4804 Fax: 490-4808*

May 29, 2006

To: Residents of Spider Lake and Spider Lake Estates Subdivisions

The following information is being provided to the property owners within the Spider Lake and Spider Lake Estates Subdivision area east of the Highway 118 to provide an update on the potential opportunity for water service extension within your neighbourhood and seek your input on the issue.

A public meeting was held on March 30, 2006 where staff from the Halifax Regional Water Commission and the Councillor 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 were encouraged to continue with the process of developing a water servicing plan and seek more specific feedback from the community via a formal survey.

As discussed at the public meeting, HRM's proposed Regional Plan will contain provisions for the inclusion of the Spider Lake Road area within the water service district boundary. Thus, if Council approves the Regional Plan, the planning amendments required for a water service extension will be in place. Under this assumption, we have developed a servicing Plan for the area including the associated funding mechanism.

As shown on the attached sketch, the water service extension would include an under crossing of the Highway 118, a 300 mm or 200 mm water main on each street, control valves and hydrants at standard spacings, and a service lateral to each property line. The project could include either Phase 1 (original community) or Phase 1 and Phase 2 (original community plus the first section of new subdivision). The estimated 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. 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

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. The LIC could be paid in full or financed through HRM over a twenty year period with interest calculated at

**Residents of Spider Lake Road
Marjorie Ann Drive and Andrea Lynn Avenue
May 29, 2006**

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HRM's Bankers prime rate + 2%. Please note that HRM provides a deferral assistance program to property owners whose income is below a certain level and there are also various payment options available. To obtain more information on this, please contact Rose Preston, HRM Customer Account Analyst at 490-4197. 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. Our consultant has estimated that service lateral extension costs can be estimated at +/- \$85/m excluding rock excavation and unique landscaping requirements.

Based on input from the community (from the formal survey and the community meetings), and our knowledge of the project, staff will prepare a report for Regional Council for their consideration of the servicing project. The Regional Council process includes a formal public hearing where residents and others can speak for or against the project. Subsequent to the public hearing Council will debate the issue and render a decision. A positive decision would include the approval of an amendment to By-Law L-100 establishing the formal interim LIC charge for the project. With Council endorsement, the project would proceed to detailed design and construction.

After construction the approved LIC rate would be adjusted either upwards or downwards as a result of final costs of water service installation.

To ensure we get as broad an input from the community as possible, we are requesting that each lot owner within the project limit fill out the attached form to indicate their support for or against this current proposal. To help expedite this project, your response is required prior to Wednesday, June 14, 2006. Please return by fax at 490-4808, or via the return envelope supplied.

The Halifax Regional Council must formally approve this servicing strategy.

Should you have any questions, please contact Jamie Hannam, P. Eng., Chief Engineer, HRWC, 490-4804.

Yours very truly,



Andrew Younger
Councillor, District 6



Jamie Hannam, P. Eng.
Chief Engineer, HRWC

encls.



**Spider Lake Area Water Servicing Project - Water Service Petition
May, 2006**

Name: _____

Civic Address: _____

Mailing Address: _____

Signature : _____

Yes - We wish to participate in this water extension project under the afore mentioned requirements - estimated LIC:

Phase 1 \$14,500/lot

Phase 2 \$21,600/lot

No - We do not wish to participate in this water main project under the current requirements.

Please return completed petitions to the attention of Jamie Hannam at HRWC, via return envelope or by faxing to 490-4808, prior to Wednesday, June 14, 2006.

This copy is for your records.



**Spider Lake Area Water Servicing Project - Water Service Petition
May, 2006**

Name: _____

Civic Address: _____

Mailing Address: _____

Signature : _____

Yes - We wish to participate in this water extension project under the afore mentioned requirements - estimated LIC:

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

No - We do not wish to participate in this water main project under the current requirements.

Please return completed petitions to the attention of Jamie Hannam at HRWC, via return envelope or by faxing to 490-4808, prior to Wednesday, June 14, 2006.

This copy to be returned.