



P.O. Box 1749  
Halifax, Nova Scotia  
B3J 3A5 Canada

**Item No. 14.2.3**  
**Halifax Regional Council**  
**September 6, 2016**

**TO:** Mayor Savage and Members of Halifax Regional Council

Original Signed

**SUBMITTED BY:** \_\_\_\_\_  
Councillor Waye Mason, Chair, Community Planning and Economic  
Development Standing Committee

**DATE:** July 29, 2016

**SUBJECT:** Bayers Lake Mystery Wall

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**ORIGIN**

Motion passed by the Community Planning and Economic Development Standing Committee at a meeting held on July 28, 2016.

**LEGISLATIVE AUTHORITY**

Section 5 of the Committee's Terms of Reference RE: Oversight – Community Building Initiatives– The Community Planning and Economic Development Standing Committee shall oversee the Municipality's Community building initiatives in the areas of arts, culture and recreation and related facilities strategies

**RECOMMENDATION**

The Community Planning and Economic Development Standing Committee recommend Halifax Regional Council:

1. Approve entering into a one-time contribution agreement with the Nova Scotia Archeology Society for funding of \$5,475; and
2. Direct staff to negotiate and execute a contribution agreement on behalf of the Municipality with the Nova Scotia Archeology Society that, in the opinion of the Acting Chief Administrative Officer or his delegate, achieves the outcomes of the Municipality identified in the July 12, 2016 staff report.

**BACKGROUND**

A staff report was submitted and considered at the July 28, 2016 meeting of the Community Planning and Economic Development Standing Committee.

**DISCUSSION**

The Committee endorsed the staff recommendation as noted.

**FINANCIAL IMPLICATIONS**

The attached staff report addresses financial implications.

**RISK CONSIDERATION**

The attached staff report addresses risk considerations.

**COMMUNITY ENGAGEMENT**

The Community Planning and Economic Development Standing Committee is a Committee of Regional Council comprised of six Councillors. The meetings are open to the public and the Committee's agendas, minutes, and reports can be viewed at Halifax.ca.

**ENVIRONMENTAL IMPLICATIONS**

None.

**ALTERNATIVES**

The Committee did not provide alternatives.

**ATTACHMENTS**

Attachment 1: Staff report dated July 12, 2016.

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A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by: Sheilagh Edmonds, Legislative Assistant, Municipal Clerk's Office 902.490.6520

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P.O. Box 1749  
Halifax, Nova Scotia  
B3J 3A5 Canada

Item No.  
**Community Planning and Economic Development  
Standing Committee  
July 28, 2016**

**TO:** Chair and Members, Community Planning and Economic Development  
Standing Committee

**SUBMITTED BY:** Original Signed by: \_\_\_\_\_  
Brad Anguish, Director, Parks and Recreation

**DATE:** July 12, 2016

**SUBJECT:** Bayers Lake Mystery Wall

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### **ORIGIN**

- October 21, 2014 motion of Halifax Regional Council:

MOVED by Councillor Rankin, seconded by Councillor Whitman, that Regional Council request a staff report on the possibility of HRM staff working with the Nova Scotia Archaeology Society in developing a short term plan and long term plan to protect and stabilize the Bayers Lake Historical (Mystery Wall) site so that the history is saved and can be shared for future generations. **Motion Put and Passed**

- March 10, 2015 Information Report to Halifax Regional Council
- Proposal from the Nova Scotia Archeology Society dated April 2, 2016 requesting partnership funding

### **LEGISLATIVE AUTHORITY**

- *Halifax Regional Municipality Charter*, Section 61(3), Powers of Municipality Regarding Property, The property vested in the Municipality, absolutely or in trust, is under the exclusive management and control of the Council, unless an Act of the Legislature provides otherwise.
- *Nova Scotia Special Places Protection Act*
- Halifax Regional Municipal Planning Strategy policies:
  - Cultural Landscapes and Scenic Views CH-13
  - Cultural Heritage Conservation Standards and Guidelines CH-14
  - Consideration of Mechanisms for Management of Heritage Resources CH-15

....Recommendation on Page 2

## **RECOMMENDATION**

It is recommended that the Community Planning and Economic Development Standing Committee recommend that Regional Council:

- 1) Approve entering into a one-time contribution agreement with the Nova Scotia Archeology Society for funding of \$5,475; and
- 2) Direct staff to negotiate and execute a contribution agreement on behalf of the Municipality with the Nova Scotia Archeology Society that, in the opinion of the Acting Chief Administrative Officer or his delegate, achieves the outcomes of the Municipality identified in this report.

## **BACKGROUND**

The Mystery Wall is an archeological resource located on Municipal land in the Bayers Lake Business Park. It is informally called the "Mystery Wall" as its purpose, age and history are not known. While known to local residents, its presence was identified during the land surveys to establish the Bayers Lake Business Park in the 1990s. The Municipality conducted a Level I Archeological Assessment in 2010 in order that the extent of the resource was known so that it would not be mistakenly developed for Business Park purposes. The Municipality has cooperated with the Province of Nova Scotia under the *Special Places Protection Act* to protect the area until additional work can be conducted to determine its significance.

Halifax Trails.ca refer to the area as, "The mystery walls of Bayers Lake, are just that; a mystery. Educated guesses say they were likely built during the early settlement of Halifax, in the late 1700's or early 1800s. The most likely theories are that they were either used as a defensive structure for the back end of Halifax, a military supply depot, or as a training ground for the siege of Fortress Louisbourg." The walls were only discovered in the 1980's when development in the area took place.

The Nova Scotia Archaeology Society (NSAS) approached the area Councillor to discuss possibilities for further exploration, interpretation and protection of the asset. Subsequently, Regional Council requested a staff report on the possibility of HRM staff working with the Nova Scotia Archaeology Society in developing a short term plan and long term plan to protect and stabilize the Bayers Lake Historical (Mystery Wall) site. An information report was presented to Regional Council on March 10, 2015 which subsequently resulted in a proposal being submitted to HRM on April 2, 2016 from the Nova Scotia Archeology Society.

## **DISCUSSION**

### **Proposal**

The proposal asks for support from Regional Council to assist in the funding of a X-Ray Fluorescence (pXRF) system in order to analyze soil chemistry in and around the site. The total cost of the rental is estimated at \$7,475 (\$6500 + HST), of which the Society has received a donation of \$2,000 from Saint Mary's University. The Society is requesting \$5,475 from HRM to complete the project. The project will be carried out by Society volunteers and Archeology students from Saint Mary's University, led by Archeologist, Dr. Jonathon Fowler.

### **Information Sharing**

The key deliverable of this work and the benefit for the Municipality is information. The Society's proposal states that, "Data products will be the property of HRM, the Principle Investigator (Dr. Jonathan Fowler, representing Saint Mary's University), the Nova Scotia Archaeology Society, and the regulatory authority (the Nova Scotia Department of Communities, Culture and Heritage). The research will be conducted under a Heritage Research Permit in accordance with the provisions of the *Special Places Protection Act*. A summary of the research method, results, and interpretation, with precise geospatial referencing, will be

included in this report, digital and print copies of which will be supplied to HRM staff within six months of completing of research. Media engagement and public outreach will be undertaken in co-ordination with HRM staff.”

#### Timeline

The Nova Scotia Archeology Society indicates that the work would be completed in either the spring or the fall of 2016 when vegetation on the site is at its lowest growth. Saint Mary's University and the Nova Scotia Archaeology Society would have a professional team on site with the pXRF. The Society estimates two days of fieldwork to collect sufficient samples to characterize the five-sided structure and its immediate surroundings. In co-ordination with stakeholders, the Society anticipates a significant opportunity for public education and outreach (e.g. site tour, workshop/symposium, media outreach).

#### **Community Grants Program**

The Community Grants Program could accommodate the level and type of funding requested by Nova Scotia Archeology Society. HRM's current Community Grants Program provides for program grants in the amount of \$5,000 and capital grants up to a maximum of \$25,000. The Nova Scotia Archeology Society request could be considered under the current guideline; however, the application window for the 2016 program closed just prior to the proposal being received. Due to the need to complete the work during the spring or fall months, forwarding the proposal for consideration during the 2017 Community Grants Program would result in the work having to be delayed until the fall of 2017.

The site draws a high degree of public interest, and the proposal provides an opportunity for HRM to obtain information and expertise from the Nova Scotia Archeology Society that does not exist corporately. That data can be used by HRM to supplement the information collected through the Halifax Green Network, as the site would be considered a cultural landscape. Through the provision of the funding, HRM could ensure that access to the data collected is available to HRM. Therefore, it is recommended that Regional Council approve provision of funding to the Nova Scotia Archeology Society and direct staff to enter into a contribution agreement with the Society for the provision of the funding.

#### **FINANCIAL IMPLICATIONS**

Funding for the contribution in the amount of \$5,475 would be able to be accommodated within the Parks & Recreation Operating Budget, Account C705 8004.

#### **RISK CONSIDERATION**

No significant risk is associated with the recommendation of this report in consideration of hazard, finance or operations. The requirement for a contribution agreement for the provision of the funding would ensure HRM is able to ensure the funding is used for the purpose as requested and receives the data collected through the project.

#### **COMMUNITY ENGAGEMENT**

The Nova Scotia Archeology Society is a registered non-profit organisation representing citizens interested in the study and promotion of archeology, particularly as it relates to the cultures of all Nova Scotia.

#### **ENVIRONMENTAL IMPLICATIONS**

Based on information presented by the Nova Scotia Archeology Society it is not anticipated that the proposed methodology of the site investigation using X-Ray Fluorescence (pXRF) system to determine soil chemistry in and around the site will create any negative environmental impact on this parcel. The site investigation will not require removal of existing vegetation, excavation or other form of the site disturbance.

**ALTERNATIVES**

Alternative 1: Regional Council may choose to not approve provision of funding to the Nova Scotia Archeology Society.

Alternative 2: Regional Council may choose to direct that a decision on the Nova Scotia Archeology Society proposal be deferred and the proposal be considered as an application to the 2017 Community Grants Program.

**ATTACHMENTS**

Attachment 1 Bayers Lake Historical Site 2016 Research Proposal dated April 2, 2016

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A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/index.php> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by: Betty Lou Killen A/Manager Policy and Planning, Parks and Recreation  
902.490.4833

Original Signed by:

Report Approved by:

Denise Schofield, Manager, Program Support, Parks and Recreation  
902.490.6252

Original Signed by:

Financial Approval by:

Amanda Whitewood, Director of Finance and Information Technology/CFO,  
902.490.6308

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## Bayers Lake Historical Site 2016 Research Proposal

02 April 2016

### **Request**

Recommend the Nova Scotia Archaeology Society explore the Bayers Lake Historical Site with a portable X-Ray Fluorescence (pXRF) system in order to analyze soil chemistry in and around the site.

### **Methodology**

The pXRF provides a fast, non-destructive analytical method for the analysis of elemental composition in a wide range of samples, with microscopic spatial resolution. In the context of soil science and archaeology, pXRF technology has been used successfully to detect archaeological sites (e.g. Hayes 2013; Oonk 2009; Shackley 2011) and delineate site features and activity areas based on remnant chemical signatures (e.g. Coronel et al 2014; Derham et al. 2013; Gauss et al. 2013; Nowaczinski et al. 2012). To our knowledge, this would be the first time the equipment has been employed in archaeological research in Nova Scotia. The work will be supervised by Dr. Jonathan Fowler, Associate Professor of Archaeology at Saint Mary's University and President of The Nova Scotia Archaeology Society. The proposed research will be conducted under a Heritage Research Permit from the Nova Scotia Department of Communities, Culture and Heritage and in accordance with the provisions of the Special Places Protection Act.

Unlike archaeological excavation, pXRF survey is practically non-intrusive. Sampling requires the operator to temporarily remove the sod layer and/or leaf litter to expose the surface of the soil. The soil surface is scanned with the device and the process is repeated. We propose to collect several dozen samples from soils within and surrounding the five-sided structure. Precise geospatial data for each sample location will be recorded with a total station. The resulting soil chemistry data, when compared with the archaeological literature, holds the potential to offer new insights into the nature of former human activities at the site, and will provide a baseline for future archaeological research.

### **Work Schedule**

During May-June 2016, Saint Mary's University and the Nova Scotia Archaeology Society will have a professional team on site with the pXRF. We anticipate two days of fieldwork to collect

sufficient samples to characterize the five-sided structure and its immediate surroundings. In co-ordination with stakeholders, we anticipate a significant opportunity for public education and outreach (e.g. site tour, workshop/symposium, media outreach).

## **Contributions**

The cost of the 2016 research project on the Bayers Lake History site will consist of volunteer members of the Nova Scotia Archaeology Society and Archaeology students. The pXRF will be rented from Elemental Controls of Mississauga, ON by Saint Mary's University. The total cost of the rental is \$7,475 (\$6500 + HST), of which Saint Mary's has already donated \$2,000. We are asking for \$5,475 to complete the project.

## **Information Sharing**

Data products will be the property of HRM, the Principle Investigator (Dr. Jonathan Fowler, representing Saint Mary's University), The Nova Scotia Archaeology Society, and the regulatory authority (the Nova Scotia Department of Communities, Culture and Heritage). The research will be conducted under a Heritage Research Permit in accordance with the provisions of the Special Places Protection Act. A summary of the research method, results, and interpretation, with precise geospatial referencing, will be included in this report, digital and print copies of which will be supplied to HRM staff within six months of the completion of research. Media engagement and public outreach will be undertaken in co-ordination with HRM staff.

## **Principal Investigator Contact**

Dr. Jonathan Fowler  
Associate Professor of Anthropology (Archaeology)  
Saint Mary's University  
President, Nova Scotia Archaeology Society 2015-16  
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## **References**

Coronel, Eric G., Daniel A. Bair, Clifford T. Brown, and Richard E. Terry. "Utility and limitations of portable X-ray fluorescence and field laboratory conditions on the geochemical analysis of soils and floors at areas of known human activities." *Soil Science* 179, no. 5 (2014): 258-271.

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Hayes, Katherine. "Parameters in the use of pXRF for archaeological site prospection: a case study at the Reaume Fort Site, Central Minnesota." *Journal of Archaeological Science* 40, no. 8 (2013): 3193-3211.

Nowaczinski, E., G. Schukraft, S. Hecht, K. Rassmann, O. Bubbenzer, and B. Eitel. "A multimethodological approach for the investigation of archaeological ditches—exemplified by the Early Bronze Age settlement of Fidvár Near Vráble (Slovakia)." *Archaeological Prospection* 19, no. 4 (2012): 281-295.

Oonk, S., C. P. Slomp, and D. J. Huisman. "Geochemistry as an aid in archaeological prospection and site interpretation: current issues and research directions." *Archaeological Prospection* 16, no. 1 (2009): 35-51.

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