

Ministry of Tourism, Culture and Sport

Culture Programs Unit
Programs and Services Branch
Culture Division
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel.: 416-314-2120
Email: Andrea.Williams@ontario.ca

Ministère du Tourisme, de la Culture et du Sport

Unité des programmes culturels
Direction des programmes et des services
Division de culture
401, rue Bay, bureau 1700
Toronto ON M7A 0A7
Tél. : 416-314-2120
Email: Andrea.Williams@ontario.ca



December 6, 2016

Paul Racher (P007)
Archaeological Research Associates Ltd.
900 Guelph St.
Kitchener ON
N2H 5Z6

RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Stage 1 and 2 Archaeological Assessments, Loyalist Solar Project, L-006345-SPV-001-054, Township of Stone Mills, Multiple Lots and Concessions, Geographic Townships of Camden and Sheffield, Lennox & Addington County, Ontario", Dated Nov 24, 2016, Filed with MTCS Toronto Office on Nov 25, 2016, MTCS Project Information Form Number P007-0744-2016

Dear Mr. Racher:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.¹ This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.²

¹ This letter constitutes the Ministry of Tourism, Culture and Sport's written comments where required pursuant to section 22 of O. Reg. 359/09, as amended (Renewable Energy Approvals under the Environmental Protection Act), regarding the archaeological assessment undertaken for the above-captioned project. Depending on the study area and scope of work of the archaeological assessment as detailed in the report, further archaeological assessment reports may be required to complete the archaeological assessment for the project under O. Reg. 359/09. In that event Ministry comments pursuant to section 22 of O. Reg. 359/09 will be required for any such additional reports.

² In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

The report documents the assessment/mitigation of the study area as depicted in Maps 12-28 and SD Maps 4-9 of the above titled report and recommends the following:

“The Stage 1 assessment determined that the study area comprised a mixture of areas of archaeological potential and areas of no archaeological potential. The Stage 2 assessment of the identified areas of archaeological potential resulted in the identification of 16 locations of archaeological materials: Pre-Contact Findspot 2, Findspot 4, Findspot 9 (BcGf-8), Findspot 10 (BcGf-15), Findspot 11 (BcGf-9) and Findspot 12; Euro-Canadian Findspot 1 (BcGf-7), Findspot 5, Findspot 6 (BcGf-14), Findspot 7, Findspot 8 (BcGf-13), Findspot 11 (BcGf-9), Findspot 13, Findspot 14 (BcGf-10) and Findspot 15 (BcGf-12); and multi-component Findspot 3. Findspots 1, 8, 9, 11, 14, 15 and 16 were found to be of further CHVI, whereas Findspots 2, 3, 4, 5, 6, 7, 10, 12 and 13 were found to be of no further CHVI. All of the sites fall within the project location, save for Findspot 9 (BcGf-8). This site was avoided through a project redesign associated with the identification of a Loggerhead Shrike nest and is currently 80 m south of the project location.

Regarding the project location/Construction Disturbance Area, ARA recommends that 1) Findspots 1, 8, 9, 11, 14, 15 and 16 be subject to Stage 3 site-specific assessment in advance of construction, 2) Findspots 2, 3, 4, 5, 6, 7, 10, 12 and 13 do not require further archaeological assessment and 3) the remainder of the project location does not require further archaeological assessment. The associated recommendations are summarized in Table 24.

Table 24: Project Location – Summary of Recommendations

Location	Description	Further CHVI?	Recommendation/Strategy
Findspot 1 (BcGf-7)	Euro-Canadian scatter (19 x 14 m)	Yes	Small Post-Contact site of unclear CHVI
Findspot 2	Pre-Contact scatter (15 x 1 m)	No	No further assessment required
Findspot 3	Pre-Contact and Euro-Canadian scatter (2 x 1 m)	No	No further assessment required
Findspot 4	Isolated Pre-Contact find	No	No further assessment required
Findspot 5	Isolated Euro-Canadian find	No	No further assessment required
Findspot 6 (BcGf-14)	Euro-Canadian scatter (1 x 1 m)	No	No further assessment required
Findspot 7	Isolated Euro-Canadian find	No	No further assessment required
Findspot 8 (BcGf-13)	Euro-Canadian scatter (30 x 12 m)	Yes	Small Post-Contact site of unclear CHVI
Findspot 10 (BcGf-15)	Pre-Contact scatter (4 x 1 m)	No	No further assessment required
Findspot 11 (BcGf-9)	Middle Archaic and Woodland scatter (4 x 1 m)	Yes	Small Pre-Contact site of unclear CHVI
Findspot 12	Isolated Pre-Contact find	No	No further assessment required
Findspot 13	Isolated Euro-Canadian find	No	No further assessment required
Findspot 14 (BcGf-10)	Euro-Canadian scatter (111 x 52 m)	Yes	Small Post-Contact site of clear CHVI
Findspot 15 (BcGf-11)	Euro-Canadian scatter (38 x 26 m)	Yes	Small Post-Contact site of unclear CHVI
Findspot 16 (BcGf-12)	Archaic, Middle Archaic and Early Woodland scatter (400 x 192 m)	Yes	Large plough-disturbed lithic scatter strategy

As small or moderately sized deposits, an appropriate assessment method for Findspots 1, 8, 11 and 15 would comprise test unit excavation using the strategy for Pre-Contact or Post-Contact sites where it is not yet evident that the level of CHVI will result in a recommendation to proceed to Stage 4. This would involve the excavation of grid test units at a 5 m interval across each site and additional test units amounting to at least 20% of the grid unit total in areas of interest. Given that Findspots 1 and 15 are located within agricultural fields, test unit excavation must be preceded by a complete CSP (with re-cultivation and weathering if ground surface visibility has decreased since the Stage 2 assessment).

In accordance with best practices for larger Euro-Canadian sites (MTCS 2014:13), an appropriate assessment method for Findspot 14 would comprise test unit excavation using the strategy for Pre-Contact or Post-Contact sites where it is clearly evident that the level of CHVI will result in a recommendation to proceed to Stage 4. This would involve the excavation of grid test units at a 10 m interval across the site and additional test units amounting to at least 40% of the grid unit total in areas of interest. If this strategy does not provide enough information on which to base a determination that the site should or should not proceed to Stage 4, then the strategy for Pre-Contact or Post-Contact sites where it is not yet evident that the level of CHVI will result in a recommendation to proceed to Stage 4 should be utilized. This would involve the excavation of grid test units at a 5 m interval across the site extent and additional test units amounting to at least 20% of the grid unit total in areas of interest. Given that Findspot 14 is located within an agricultural field, test unit excavation must be preceded by a complete CSP (with re-cultivation and weathering if ground surface visibility has decreased since the Stage 2 assessment).

As a large and diffuse lithic scatter, an appropriate assessment method for Findspot 16 would comprise test unit excavation using the strategy for plough-disturbed, large, multi- or single-component sites. This would involve the excavation of grid test units at a 5 m interval across the identified artifact concentrations, additional test units amounting to at least 20% of the grid unit total within the remainder of the site extent and further additional test units amounting to at least 10% of the grid unit total on the periphery of the scatter. Given that a complete CSP has already been conducted at Findspot 16, an additional CSP is not required.

Regardless of the specific strategy employed, all test units must be excavated stratigraphically into at least the first 5 cm of subsoil, and all soils must be screened through mesh with an aperture of no greater than 6 mm. If a potential cultural feature is uncovered, the exposed plan of the feature must be recorded and geotextile fabric must be placed over the unit floor prior to backfilling (MTC 2011:49). Section 3.2.2 Guideline 3 states that exposed cultural features may be excavated during a Stage 3 assessment only if the information is required to inform a recommendation for or against a Stage 4 mitigation of development impacts (MTC 2011:49).

Regarding the additional lands previously under consideration for development (i.e., areas removed from the project design and included in the subject report in fulfillment of archaeological licensing requirements), it is recommended that 1) Findspot 9 be subject to Stage 3 site-specific assessment if any future developments are contemplated, 2) the portion of the Hinch Road ROW adjacent to the Camden Fifth Cemetery (within the additional lands) be subject to a Stage 3 burial site investigation if any future developments are contemplated, 3) that the identified areas of archaeological potential

along Lockridge Road (within the additional lands) be subject to a Stage 2 assessment if any future developments are contemplated and 4) that the remainder of the additional lands do not require further archaeological assessment. The associated recommendations are summarized in Table 25.

Table 25: Additional Lands – Summary of Recommendations

Location	Description	Further CHVI?	Recommendation/Strategy
Findspot 9 (BcGf-8)	Late Woodland scatter (7 x 7 m)	Yes	Small Pre-Contact site of unclear CHVI
Hinch Road ROW	Lands adjacent to Camden Fifth Cemetery	Unknown	Burial Site Investigation
Lockridge Road ROW	Areas of archaeological potential	Unknown	Test pit survey

An appropriate assessment method for Findspot 9 would comprise test unit excavation using the strategy for Pre-Contact or Post-Contact sites where it is not yet evident that the level of CHVI will result in a recommendation to proceed to Stage 4. This would involve the excavation of grid test units at a 5 m interval across the site and additional test units amounting to at least 20% of the grid unit total in areas of interest. All test units must be excavated stratigraphically into at least the first 5 cm of subsoil, and all soils must be screened through mesh with an aperture of no greater than 6 mm. If a potential cultural feature is uncovered, the exposed plan of the feature must be recorded and geotextile fabric must be placed over the unit floor prior to backfilling (MTC 2011:49). Section 3.2.2 Guideline 3 states that exposed cultural features may be excavated during a Stage 3 assessment only if the information is required to inform a recommendation for or against a Stage 4 mitigation of development impacts (MTC 2011:49). Stage 4 avoidance and protection during construction for the Loyalist Solar Project will not be required as the 20 m protective buffer and 50 m monitoring buffer fall outside of the project location (see SD Map 9).

Regarding the portion of the Hinch Road ROW adjacent to the Camden Fifth Cemetery, the Stage 3 burial site investigation must be conducted in accordance with Section 3.3.3 (Assessment of Sites in Deeply Buried Conditions) of the S&Gs (MTC 2011:55–56). Although specific to Stage 4 excavations, the concepts set out in Section 4.2.3 (Excavation by Mechanical Topsoil Removal) of the S&Gs (MTC 2011:78–79) should also be considered. In order to confirm the extent of the cemetery, the deeply buried survey should comprise the mechanical excavation of the portion of the ROW to be impacted. An excavator or backhoe with an articulated wrist and a straight-bladed bucket must be utilized so that potential resources are not damaged. The mechanical excavation should continue until the subsoil interface is reached, and the interface must then be immediately subjected to a close examination for potential colour and texture changes that could be indicative of the tops of grave shafts or other cultural features. Shovel shining must be utilized to further clarify the interface. If any cultural features are encountered, they must be fully documented and mapped in order to satisfy the requirements and objectives set out in *Funeral, Burial and Cremation Services Act*, 2002, O. Reg. 30/11 Section 174 and the S&Gs (MTC 2011). Mechanical excavation must extend a minimum of 10 m beyond the outermost burial features, as required by Section 4.3 of the S&Gs (MTC 2011:Table 4.1). It is understood that the extension of mechanical excavation into the ROW would be limited by roadway stability and drainage

requirements. It is recommended that the Bereavement Authority of Ontario be engaged throughout this process (if the investigation is ever required).

Regarding the identified areas of archaeological potential within the Lockridge Road ROW, the Stage 2 assessment must be conducted in accordance with Section 2.1 of the S&Gs (MTC 2011:28–39). Given that the areas of archaeological potential consist of non-agricultural lands, it is recommended that the test pit survey method be utilized to complete the assessment. A test pit survey interval of ≤ 5 m will be required due to the proximity of the lands to the identified features of archaeological potential. Each test pit must be excavated into at least the first 5 cm of subsoil, and the resultant pits must be examined for stratigraphy, potential features and/or evidence of fill. The soil from each test pit must be screened through mesh with an aperture of no greater than 6 mm and examined for archaeological materials. If archaeological materials are encountered, all PTPs must be documented and intensification may be required.

Due to the number of parcels involved in the assessments and the variety of recommendations, the results of the investigation are relatively complex. For clarity and quick reference, a summary of archaeological concerns by parcel is provided in Table 26.

Table 26: Archaeological Concerns by Parcel

Parcel	Archaeological Concerns
NAP038	Further Concerns
NAP120/NAP030	Further Concerns
NAP118	No Further Concerns
NAP023	No Further Concerns
NAP768 (Hinch Road)	Further Concerns
NAP021	Further Concerns
NAP022	Further Concerns
NAP010/011/022/124 (Rattie Road)	No Further Concerns
NAP013	Further Concerns
NAP554 (Lockridge Road)	Further Concerns
NAP011	No Further Concerns
NAP012/NAP553	No Further Concerns
NAP454/497/552/542 (Centreville Road)	No Further Concerns
NAP454 (North of Centreville Road)	No Further Concerns
NAP382/389/420 (County Road 27)	No Further Concerns
NAP284/361/370/377 (Teskey Road)	No Further Concerns
NAP251/252/320/323 (Marlin, Edges and Murphy Road)	No Further Concerns
NAP235/237/282/ 283/284/294 (North of Teskey Road)	No Further Concerns
NAP163/165/175/199 (Miller Road)	No Further Concerns
NAP185 (Haggerty Road East and West)	No Further Concerns
NAP162/175/725 + No Identifier (Murphy and Sheffield Bridge Road)	Further Concerns
NAP160	No Further Concerns

It is requested that this report be entered into the *Ontario Public Register of Archaeological Reports*, as provided for in Section 65.1 of the *Ontario Heritage Act*.”

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Andrea K. Williams
Archaeology Review Officer

cc. Archaeology Licensing Officer
Tom Bird, BluEarth Renewables Inc.