CULTURAL HERITAGE ASSESSMENT REPORT FOR SOL-LUCE KINGSTON SOLAR PV ENERGY PROJECT (FORMER ERNESTOWN AND KINGSTON

AND ADDINGTON COUNTIES), ONTARIO

TOWNSHIPS, FRONTENAC, LENNOX

June 8, 2012

Submitted to: AMEC Environment & Infrastructure, a Division of AMEC Americas Limited. 160 Traders Blvd. E., Suite 110 Mississauga, ON L4Z 3K7

Submitted by: MHBC Planning, Urban Design and Landscape Architecture 540 Bingemans Centre Drive. Suite 200 Kitchener, ON N2B 3X9

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1.0 INTRODUCTION

1.1 Background

MHBC was retained by AMEC, a Division of AMEC Americas Limited, on behalf of Kingston Solar LP to conduct a cultural heritage assessment of properties identified as part of the Sol-luce Kingston Solar PV Energy Project. Kingston Solar LP intends to design and construct a 100 MWAC solar power project. The subject properties are located in the City of Kingston and Loyalist Township (See Figure 1).

This Cultural Heritage Assessment Report presents the results of the cultural heritage assessment conducted for the Sol-luce Kingston Solar PV Energy Project and includes a preliminary historical overview of the area, field survey of the prospective properties to identify heritage resources as defined in Ontario Regulation 359/09 (notably any built heritage resources or cultural heritage landscapes), and recommendations respecting potential mitigation measures.

1.2 Scope of work

The scope of work for this study consisted of several tasks as follows:

- Review of the properties to ascertain whether the Ontario Ministry of Tourism Culture and Sport (MTCS) had exercised its authority in designating or had issued a Notice of Intent to Designate any of the subject lands and properties;
- Contact with local municipalities to determine whether any of the subject properties had been designated under Parts IV or V of the Ontario Heritage Act;
- Conducting a desktop survey of relevant historical information to ascertain key themes of Euro-Canadian settlement as well as review of historical atlases to determine the potential for identifying heritage structures or other settlement areas such as crossroads settlements;
- Conducting a field survey of the subject properties to identify landscapes and structures of potential cultural heritage value or interest; and,
- Mapping and subsequent report preparation.

This report was prepared in accordance with Sections 19 and 20 of Ontario Regulation 359/09 with respect to the consideration of heritage resources on the properties identified by Sol-luce Kingston Solar PV Energy Project.

2.0 ONTARIO REGULATION 359/09, ENVIRONMENTAL PROTECTION ACT, RENEWABLE ENERGY APPROVALS UNDER PART V.0.1 OF THE ACT

2.1 Ontario Regulation 359/09 provisions

Ontario Regulation 359/09 provides for the identification of heritage resources that may be affected by projects subject to the Regulation. Heritage resources are defined as meaning "real property that is of cultural heritage value or interest and may include a building, structure, landscape or other feature of real property. (Part 1, Interpretation).

The Regulation also recognizes that any heritage property protected by the provisions of the Ontario Heritage Act with respect to designation by or conservation easements held by Provincial or Municipal authority require specific approvals and authorization from the relevant authority.

Revisions to the Renewable Energy Approval (REA) regulation (O.Reg. 359/09) and the Technical Guide for Renewable Energy Approvals (Technical Guide, Draft 2012) are currently under review and this report has been prepared with consideration of the proposed draft regulations and revised Technical Guide.

2.2 Consideration of Protected Properties

Proponents of a renewable energy project must determine whether the project location is on a property under the provisions of the *Ontario Heritage Act* and more specifically described in Column 1 in Section 19 of Ontario Regulation 359/09:

- 1. A property that is the subject of an agreement, covenant or easement entered into under clause 10(1) (b) of the *Ontario Heritage Act*.
- A property in respect of which a notice of intention to designate the property to be of cultural heritage value or interest has been given in accordance with section 29 of the Ontario Heritage Act.
- 3. A property designated by a municipal by-law made under section 29 of the Ontario Heritage Act as a property of cultural value or interest.
- 4. A property designated by order of the Minister of Culture (now the Ministry of Tourism, Culture and Sport) made under section 34.5 of the Ontario Heritage Act as a property of cultural value or interest of provincial significance.
- 5. A property in respect of which a notice of intention to designate the property as a property of cultural heritage value or interest of provincial significance has been given in accordance with section 29 of the *Ontario Heritage Act*.

- 6. A property in respect of which a notice of intention to designate the property to be of cultural heritage value or interest has been given in accordance with section 29 of the *Ontario Heritage Act*.
- 7. A property designated by a municipal by-law made under section 29 of the *Ontario Heritage Act* a property of cultural value or interest.
- 8. A property designated by order of the Minister of Culture (now Tourism, Culture and Sport) made under section 34.5 of the Ontario Heritage Act as a property of cultural heritage value or interest of provincial significance.

Amendments to the regulation, specifically section 19, also provide that:

"(3) If a person mentioned in subsection (1) determines that the project location is not on a property described in Column 1 of the Table to this section, the person shall submit, as part of an application for the issue of a renewable energy approval, a written summary of the matters addressed in determining whether the project location is on such a property."

The following provides a written account indicating those matters addressed in determining whether the project location is on or abutting a protected property.

Following review of Protected Properties, Archaeological and Heritage Resources: An Information Bulletin for Applicants Addressing the Cultural Heritage Component of Projects Subject to Ontario Regulation 359/09 Renewable Energy Approvals, Ministry of Tourism and Culture, 2011, it was determined that there were no protected properties for which the Minister of Tourism and Culture has authority that are the subject of this heritage assessment.

The Ontario Heritage Trust's website was also accessed and there appeared to be no evidence of heritage conservation easements registered against any of the subject properties. Staff of the Ontario Heritage Trust was contacted to confirm that there were no heritage easements registered against the subject properties. Trust staff confirmed that there were no easement properties. There were also no easement registered properties adjacent to the subject properties.

A review was also undertaken of the websites of the municipalities of the Loyalist Township and the City of Kingston to determine whether any of the subject properties were designated under either Parts IV or V of the Ontario Heritage Act and contained in the Register established under the Act. There were no designated properties identified. Staff of both municipalities were contacted and it was confirmed none of the subject properties were designated, subject to a municipal heritage conservation easement agreement or adjacent to such properties (See Section 2.3 following and Appendix A for staff responses and a list of designated and registered heritage properties). It was concluded that none of the subject properties constituted protected properties under the Regulation. There are also no protected properties adjacent to the subject properties.

2.3 Consideration of Heritage Resources

Proponents of a renewable energy project must also consider whether a re-newable energy project may have an impact on heritage resources as follows:

20. (1) A person who proposes to engage in a renewable energy project shall consider whether engaging in the project may have an impact on any of the following:

- 1. An archaeological resource at the project location.
- 2. A heritage resource at the project location, other than at a part of the project location that is on a property described in Column 1 of the Table to section 19.
- 3. A property described in Column 1 of the Table to section 19 that abuts the parcel of land on which the project location is situated. O. Reg. 359/09, s. 20 (1).

(2) If, as a result of the consideration under subsection (1), the person mentioned in subsection (1) concludes that there is no possibility of impact on a resource or a property described in paragraph 1, 2 or 3 of subsection (1), the person shall submit, as part of an application for the issue of a renewable energy approval, a written summary of the matters addressed in the consideration of the resource or property. O. Reg. 359/09, s. 20 (2).

Section 23, Heritage Assessment, of the Regulation also provides as follows:

23. (1) If, as a result of the consideration mentioned in subsection 20 (1), a person concludes *that engaging in the renewable energy project may have an impact on a heritage resource described in paragraph 2 of subsection 20 (1), the person shall,*

- (a) conduct a heritage assessment consisting of,
 - (i) an evaluation of whether there are any heritage resources at the project location, applying the criteria set out in Ontario Regulation 9/06 (Criteria for Determining Cultural Heritage Value or Interest) made under the Ontario Heritage Act, and
 - (ii) if any heritage resources are identified as a result of the evaluation under subclause (i), an evaluation of any impact of the renewable energy project on the heritage resources and proposed measures to avoid, eliminate or mitigate the impact, which may include a heritage conservation plan;
- (b) prepare a heritage assessment report summarizing the assessment conducted under clause (a); and
- (c) submit the report prepared under clause (b) to the Ministry of Culture.

(2) If, as a result of the consideration mentioned in subsection 20 (1), a person concludes that engaging in the renewable energy project may have an impact on a property mentioned in paragraph 3 of subsection 20 (1), the person shall,

(a) conduct a heritage assessment consisting of an evaluation of any impact of the renewable energy project on the property and proposed measures to avoid, eliminate or mitigate the impact, which may include a heritage conservation plan;

Accordingly, the following section addresses those matters relating to heritage resources.

2.4 Heritage Resources

In order to ascertain the potential for heritage resources at the subject properties the following was undertaken:

- a desktop survey of relevant physiographic and historical information to ascertain key themes of Euro-Canadian settlement as well as review of historical atlases to determine the potential for identifying heritage structures or other settlement areas such as crossroads settlements; and,
- a field survey of the subject properties to identify landscapes and structures of potential cultural heritage value or interest.

For the purposes of the survey, heritage resources were divided into two types: built heritage resources and cultural heritage landscapes. Identification of these types of resources implied no evaluation of significance and these materials types of heritage resources were distinguished solely for the purposes of organizing field work and subsequent recording.

It should also be noted that in the assessment of cultural heritage landscapes these were identified on the basis of Euro-Canadian settlement patterns, in keeping with usually accepted practice. The recovery of isolated lithic artifacts during the Stage 2 archaeological assessment indicates that these areas were used periodically by transitory First Nations hunters prior to historic Euro-Canadian contact. The existence of any traditional use and traditional knowledge areas (forming part of the pre-contact cultural heritage landscape) were not identified or brought to the attention of the proponent or the consultants by First Nations groups as part of the public engagement process. Accordingly, the identification of cultural heritage landscapes relied on the examination of post Euro-Canadian settlement activities.

2.4.1 Physiographic context

The subject properties are all located within the physiographic region identified as the Napanee Plain (Chapman and Putnam), consisting of an underlying bed of limestone overlain by a very thin layer of soil. Although one of the earliest areas in Upper Canada to be settled by Euro-Canadians the paucity of soils resulted in marginal farming with many of the early farms remaining unimproved for many years and eventually abandoned. Field work confirmed that in some areas bedrock was clearly visible on the subject properties. The use of a specific rail fencing type (or a variant thereof) known as "stake and rider" which relies on a tripod system resting on the ground to support rails attested to the inability of farmers to penetrate and install fence posts into the bedrock.

2.4.2 Historical context

Although the area was first settled as early as the 1780s and by 1830 much of the land in Kingston and Ernestown Townships had been patented this did not necessarily mean settled in any meaningful or permanent manner resulting in changes to the landscape. Both the 1860 Map of United Counties of Frontenac, Lennox and Addington Canada West and the 1878 Illustrated Historical Atlas of the Counties of Frontenac, Lennox and Addington show a well established system of early, irregular travelled routes and linear concession roads populated with farmhouses on many of the lots together with the nucleated settlements of Sharpton and Glenvale. Farmhouses at this time were typically, log, frame or stone. (Detailed review of historical maps, residents and features may be found in the Stage 1 Archaeological Background Study, conducted by AMEC).

It is conjectured that depending on soil quality not all the farm lots were necessarily in agricultural production during this period. Indeed during the latter half of the nineteenth century rural de-population of the area became characteristic. It was later concluded that the Napanee Plain was a "zone of difficulty and that a fair number of those who live on it do so for the sake of cheap space adjacent to a highway" (Chapman and Putnam). Throughout the twentieth century it appeared that dairy farming and animal grazing became prevalent throughout the Napanee Plain area generally although farming was considered to be a marginal commercial activity with many farmers holding other jobs. Non-farm development such as residential rural infill also became evident during this time.

Review of historical mapping also revealed that historical features such as mills, churches and schoolhouses were clustered either around smaller nucleated settlements or nearby centres such as Odessa. Accordingly, it was concluded that the majority of the subject properties would comprise remnant pockets of rural landscapes associated with the historical nineteenth century activity of land clearance, settlement, farming and potentially abandonment.

2.4.3 Cultural Heritage Landscape and Built Heritage Resource Inventory Documentation and Assessment

The following inventory comprises the results of field survey conducted on September 26 and 27, 2011. The survey consisted of field inspection of nineteen (19) properties identified as potential sites for solar panels. As all the potential sites were identified as containing lands that were once farmed over forty years ago these were concluded to be cultural heritage landscapes for the purposes of survey. For each property its integrity, historical association, views, circulation, topography, and landscape structures were recorded with supporting photographs. These rural remnant landscapes were either relict or continuing landscapes as described by Park's Canada in its publication The Standards and Guidelines For The Conservation of Historic Places in Canada:

Organically evolved cultural landscapes developed in response to social, economic, administrative or religious forces interacting with the natural environment. They fall into two sub-categories: Relict landscapes in which an evolutionary process came to an end. Its significant distinguishing features are, however, still visible in material form. Continuing landscapes in which the evolutionary process is still in progress. They exhibit significant material evidence of their evolution over time.

The property's built heritage resources were also recorded and documented. These records include the structure type and construction period as well as construction details such as foundation material, main construction material, roof material, number of storey's, notable features and historical associations.

For each property there is a statement describing the criterion or criteria of Ontario Regulation 9/06 that may be met.

The following property map identifies the properties that were documented and assessed.