

**Stage 1 and 2 Archaeological Assessment for  
Northland Power – Empire Solar Site  
(27.6 kV Transmission Line)  
Part of Lots 15, Concession 8, and Lots 17 and 18, Concession 7  
Township of Glackmeyer,  
District of Cochrane**

**FIT-FQJ0FUC**



Prepared by

Licensee: T. Keith Powers  
Archaeological Consulting Licence P052  
Project Information Number: P052-466-2013

**THE ARCHAEOLOGISTS INC.**

REVISED Report  
January 14, 2014

## **EXECUTIVE SUMMARY**

The Archaeologists Inc. was contracted by Northland Power to conduct a Stage 1 and 2 archaeological assessment for additional lands for the development of a connecting transmission line associated with the Empire Solar Site project. The subject property is located in Part of Lot 15, Concession 8, in the former geographic Township of Glackmeyer, now in the Town of Cochrane, District of Cochrane, Ontario. The proponent is seeking a Renewable energy Approval according to Ontario Regulation 359/09 issued under the Environmental Protection act, Sections 20, 21 and 22. The assessment was done in advance of a solar farm project.

A Stage 1 background study of the subject property was conducted to provide information about the property's geography, history, previous archaeological fieldwork and current land condition in order to evaluate and document in detail the property's archaeological potential and to recommend appropriate strategies for Stage 2 survey. A Stage 2 property assessment was conducted to document all archaeological resources on the property, to determine whether the property contains archaeological resources requiring further assessment, and to recommend next steps. The characteristics of the property dictated that the Stage 2 survey be conducted by a test pit survey strategy for northern Ontario and on Canadian Shield terrain.

The Stage 1 background study found that the subject property exhibits potential for the recovery of archaeological resources of cultural heritage value and concluded that the property requires a Stage 2 assessment. The Stage 2 property assessment, which consisted of a test pit survey strategy for northern Ontario and Canadian Shield terrain, did not result in the identification of archaeological resources.

The Stage 1 background study concluded that the property exhibits archaeological potential. The Stage 2 property assessment did not identify any archaeological resources within the subject property. The report recommends that no further archaeological assessment of the subject property is required.

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## **PROJECT PERSONNEL**

Project and Field Director:	Mr. T. Keith Powers (P052)
Field Archaeologists	Mr. T. Keith Powers Mr. Barclay Powers Mr. John Ellis Mr. Sam Filipe
Report Preparation:	Mr. Norbert Stanchly (R149)
Graphics	Mrs. Karen Powers Mr. T. Keith Powers

## **INTRODUCTION**

The *Ontario Heritage Act*, R.S.O. 1990 c. O.18, requires anyone wishing to carry out archaeological fieldwork in Ontario to have a license from the Ministry of Tourism and Culture (MTC). All licensees are to file a report with the MTC containing details of the fieldwork that has been done for each project. Following standards and guidelines set out by the MTC is a condition of a licence to conduct archaeological fieldwork in Ontario. *The Archaeologists Inc.* confirms that this report meets ministry report requirements as set out in the *2011 Standards and Guidelines for Consultant Archaeologists*, and is filed in fulfillment of the terms and conditions an archaeological license.

### **1.0 PROJECT CONTEXT (Section 7.5.5)**

This section of the report will provide the context for the archaeological fieldwork, including the development, historical and archaeological context.

#### **1.1 Development Context (Section 7.5.6, Standards 1-3)**

##### ***Section 7.5.6, Standard 1***

The Archaeologists Inc. was contracted by Northland Power to conduct a Stage 1 and 2 archaeological assessment for additional lands for the development of a connecting transmission line to join three solar projects: Empire, Martin’s Meadows and Abitibi. The subject property is located in Part of Lots 15, Concession 8 and Part of Lots 17 and 18, Concession 7, in the former geographic Township of Glackmeyer, now in the Town of Cochrane, District of Cochrane, Ontario. The proponent is seeking a Renewable energy Approval according to Ontario Regulation 359/09 issued under the Environmental Protection act, Sections 20, 21 and 22. The assessment was done in advance of a solar farm project.

Northland Power Solar is proposing to develop a Class 3 10-megawatt (MW) ground mounted solar photovoltaic (Solar PV) facility in the District of Cochrane for the Empire, Abitibi and Martin’s Meadows Solar Projects (Hatch 2011, 2012a&b). Northland is commencing with the Renewable Energy Approval (REA) process as required and described in Ontario Regulation 359/09 under the Environmental Protection Act. The proposed Projects are renewable energy generation facilities, which will use solar photovoltaic technology. Electricity generated by solar photovoltaic panels will be converted from dc to ac by an inverter, and subsequently stepped-up (via transformer) to 115 kV prior to being connected to the transmission system.

The project is seeking a Renewable Energy Approval according to Ontario Regulation 359/09 issued under the Environmental Protection Act, Sections 20, 21 and 22. The projects have been awarded Feed-in-Tariff (FIT) contract number FIT-FQJ0FUC.

##### ***Section 7.5.6, Standard 2***

There is no additional development-related information relevant to understanding the choice of fieldwork strategy or recommendations made in the report.

**Section 7.5.6, Standard 3**

Permission to access the study area to conduct all required archaeological fieldwork activities, including the recovery of artifacts was given by the landowner and their representative.

**1.2 Historical Context (Section 7.5.7, Standards 1-2)**

**Section 7.5.7, Standard 1**

In advance of the Stage 2 assessment, a Stage 1 background study of the subject property was conducted in order to document the property archaeological and land use history and present condition. Several sources were referenced to determine if features or characteristics indicating archaeological potential for pre-contact and post-contact resources exist.

Characteristics indicating archaeological potential include the near-by presence of previously identified archaeological sites, primary and secondary water sources, features indicating past water sources, accessible or inaccessible shoreline, pockets of well-drained sandy soil, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases, resource areas, (including food or medicinal plants, scarce raw materials, early Euro-Canadian industry), areas of early Euro-Canadian settlement, early historical transportation routes, property listed on a municipal register or designated under the *Ontario Heritage Act* or that is a federal, provincial or municipal historic landmark or site, and property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations.

Archaeological potential can be determined not to be present for either the entire property or a part of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as ‘disturbed’ or ‘disturbance’, and may include: quarrying, major landscaping involving grading below topsoil, building footprints, and sewage and infrastructure development. Archaeological potential is not removed where there is documented potential for deeply buried intact archaeological resources beneath land alterations, or where it cannot be clearly demonstrated through background research and property inspection that there has been complete and intensive disturbance of an area. Where complete disturbance cannot be demonstrated in Stage 1, it will be necessary to undertake Stage 2 assessment.

The background study determined that the following features or characteristics indicate archaeological potential for the subject property.

- The presence of primary waterways and marsh within the subject property would have been attractive areas for hunting or settlement for both precontact populations and European settlers.

- The subject property is located close to historic transportation routes, i.e. Glackmeyer Concession Road 6-7 and Rural Road #4.

A detailed land use history of Lots 17 & 18, Concession 7 is provided in the archaeological assessment report entitled “*Stage 1 and 2 Archaeological Assessment Empire Solar Project (FIT-FQJ0FUC), Part Lots 17 & 18, Concession 7, Township of Glackmeyer, District of Cochrane, Ontario*”, prepared by Archaeological Research Associates Ltd. (ARA 2010a)

Briefly, their detailed research indicates that:

*“Lot 17, Concession 7 (Parcel 1356) was first patented to Emile Matte on August 8, 1925, who obtained a \$1,800 mortgage from the Agricultural Development Board, with an interest rate of 5.5% per annum. On June 24, 1952, the lot was transferred to Alcide Matte for a consideration of \$1. Alcide and his wife Jeannette obtained a mortgage on the same day from Emile for \$6,500, without interest. Just over a year later, on July 17, 1953, Alcide transferred the title to Ernest Lamarche for a consideration of \$1. Ernest obtained a \$7,500 mortgage from Emile Matte, without interest, as well as \$8,900 from J. L. de Blois, with an interest rate of 6% per annum. On October 18, 1961, Ernest mortgaged the parcel once again, this time to the Farm Credit Corporation for \$16,000, with interest at 5% per annum.*

*The lot changed hands on June 11, 1970, when Donald and Arnel Genier purchased the property. They obtained four mortgages from the Farm Credit Corporation in the 1970s, including \$28,200 on January 28, 1972, \$46,500 on July 19, 1977, \$46,500 on May 28, 1979 and \$200,000 on November 22, 1979. On March 1, 1988 the parcel was transferred to Donald Genier, who obtained a \$100,000 mortgage from Caisse Populaire de Cochrane Limitee on July 23, 1993. The land transactions for Lot 17, Concession 7 are summarized in Table 1.*

*Lot 18, Concession 7 (Parcel 1258) was first patented to Henry La Point on September 14, 1923, who retained the title for nearly three decades until the land was repossessed by the Township of Glackmeyer. On August 30, 1951, Albert and Prudentia Cloutier took possession of Lot 18 for a consideration of \$75, and on August 22, 1952 it passed to Henri DeGagne for a consideration of \$1. On August 19, 1958, Henri (now a widower) transferred the parcel back to Albert Cloutier, for a consideration of \$500. The Title of Parcel 1258 then passed to Rodolphe Chaff on June 27, 1959, for a consideration of \$1. On November 7, 1966, the parcel passed into the hands of the Corporation of the Town of Cochrane, and on May 26, 1977, it was parted for future sale. The land transactions for Lot 18, Concession 7 are summarized in Table 2.”*

A detailed land use history of the Lot 15, Concession 8, is provided in the archaeological assessment report entitled “*Stage 1 and 2 Archaeological Assessment, Abitibi Solar Project (FIT-FAQLBAO) Part Lots 14 & 15, Concession 8, Township of Glackmeyer,*

*District of Cochrane, Ontario”, prepared by Archaeological Research Associates Ltd. (ARA 2010b)*

Briefly, their detailed research indicates that:

*“Lot...15, Concession 8 of Glackmeyer Township (Parcels 2488 & 2487, respectively) were first transferred to Alphonse Tousignant on May 25, 1955 for a consideration of \$1. Alphonse arranged a mortgage for Parcels 2488 & 2487 from Elphir Chartrand in the amount of \$3,000 (payable \$200 yearly), and on November 23, 1959, Fess Investments Ltd. notified the land registry office that Alphonse had an outstanding debt of \$1,443. After Elphir passed away he was succeeded by his widow, Fernande Genier, as the owner of the charge. On December 14, 1962, Alphonse Tousignant and his wife Helene transferred Parcels 2488 & 2487 to Helmut Ucke, who obtained a mortgage from the Farm Credit Corporation for \$45,000 (with a repayment schedule of 7% per annum). On February 14, 1977 the parcels were transferred to Robert Ethier, and on May 3, 1977 they were transferred again to Robert Ethier and Richard Bezeau, who were running a business under the name R & R Ranch. Unfortunately, the business did not pan out, and on October 18th, 1979 Robert Ethier went bankrupt, and Keith Dorland was entered as the Trustee in bankruptcy for the parcels.*

*On October 3, 1980, the parcels were transferred back to Robert Ethier and Suzanne Ethier, who obtained a mortgage for \$30,000 from the Caisse Populaire de Cochrane Limitee. Another mortgage was obtained on August 7, 1981 for \$71,000 from the Farm Credit Corporation. The parcels were later transferred to Adrian and Margaret Struyk on August 7, 1987, who obtained a mortgage of \$90,000 from the Farm Credit Corporation. On June 30, 1995, Randall Martin and Lisa Martin obtained Parcels 2488 & 2487 for a consideration of \$91,000”*

The District of Cochrane was formed in 1921. Previously it had been part of the Districts of Algoma and Nipissing. The earliest settlers began to arrive in the 1880s, and the majority settled at the head of Lake Temiskaming (Marwick 1950). These early settlers were largely isolated and their transportation routes were limited to the waterways, primarily Lake Temiskaming itself and the Ottawa River (ARA 2010a). In 1902 the construction of the Temiskaming and Northern Ontario railroad began in North Bay and by 1908 had reached the Town of Cochrane, which had been named after Frank Cochrane, former Mayor of Sudbury.

With the arrival of the railway in 1908 Euro-Canadian settlement of the area began in earnest:

*“The area was divided up into 160 acre farm lots which sold for \$80 each. Only a quarter of the full price was required initially, with the balance to be paid in three yearly payments plus 6% interest. After four years, the settler could then obtain the patent to the lot...The first settlers began to arrive in 1909, taking the 22 to 24 hour ride from Toronto that could amount to \$500 if livestock and furniture was*

*also shipped... Upon arrival, each man obtained the number to his lot and was given directions to find the stakes. These settlers then set out, forcing their way through the bush with their provisions, axes and saws. Some went east towards the Abitibi River, following old tote roads, while others struck out into the unsettled north... Cochrane received its charter in January, 1910, and soon after it experienced its first disaster when its business sector burned to the ground in August of that same year.*

*Employment for these early settlers, aside from selling timber and agricultural goods, was focused on the continued construction of the Grand Trunk Pacific railway and the Temiskaming and Northern Ontario railway... Land needed to be cleared and steel needed to be laid, so many settlers would work on the railway in the winter and tend to their farms during the winter. On the settler's own lands, the majority of the early years were spent clearing the land in order to obtain their patent. They also sold firewood on the side of the road and pulpwood to the railroads. Early houses were generally tents or lean-tos, until the standard 16 x 20 foot shack could be built. The early years were the most difficult, as "everything had to start from scratch, and most of the settlers kept on scratching for years...*

*In anticipation of the great influx of settlers, the government began surveying the townships of the area in 1904. Typically, as fast as they were opened, the townships filled up ... In the vicinity of what would become the Town of Cochrane, four townships were opened for settlement by 1910. To the north were Glackmeyer Township and Chute Township, while Lamarche Township and Fournier Township were situated to the south... Further to the west, Calder Township, Colquhoun Township and Leitch Township would later be opened for settlement. In less than 30 years, roughly 200 organized townships were created in northern Ontario... Aside from the community at Cochrane itself, the French Canadian settlement of Genier developed around Dora Lake to the north, while Hunta grew up in the vicinity of Hydro Lake to the west." (ARA 2010a)*

The Town of Cochrane, the seat of Cochrane District, was created in 2000 by the amalgamation of the Townships of Glackmeyer and Lamarche.

In summary, the Stage 1 background study indicated the potential for the recovery of pre-contact and post-contact Euro-Canadian archaeological resources within the subject property. As it cannot be clearly demonstrated through the background study that there has been complete and intensive disturbance of the area, archaeological potential is not removed. There are areas within the subject property that have the potential for the recovery of archaeological resources.

### **Section 7.5.7, Standard 2**

The subject lands are woodlot and located in northern Ontario and the Stage 2 property assessment of the subject property will employ the strategy of test pit survey, following

the standards listed in Section 2.1.2 and 2.1.5 of the *2011 Standards and Guidelines for Consultant Archaeologists*.

### **1.3 Archaeological Context** (Section 7.5.8, Standards 1-7)

#### ***Section 7.5.8, Standard 1***

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: the site forms for registered sites housed at the Ministry of Tourism, Culture and Sport; published and unpublished documentary sources; and the files of *The Archaeologists Inc.*

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (O.A.S.D.), an inventory of the documented archaeological record in Ontario.

Information on the known archaeological sites in the vicinity of the study area was obtained from the Ministry of Tourism and Culture site database. There are no known archaeological sites located within the study area limits and no sites were registered within a one-kilometre radius of the subject property.

#### ***Section 7.5.8, Standard 2***

The subject property consists of low, wet scrub over fairly level terrain. The subject lands lie 240 m west of Lauzon Lake, 4.5 km southwest of the Abitibi River and 2.0 km east of Chartrand Lake. Munroe Creek bisects the subject properties.

Physiographically, the study area lies within the Superior Province of the Precambrian Canadian Shield (Davidson 1989). The soils in the study area belong to the Gleysolic soil order. These are heavy, wet non-saturating and non-organic soils that typically have dark surface horizons and gray subsoils. Orthic Gleysols are dominant in the vicinity of the Town of Cochrane. These are characterized by dark-coloured A-horizons less than 10 cm thick (Hoffman 1989).

#### ***Section 7.5.8, Standard 3***

The Stage 2 archaeological fieldwork of the subject property was undertaken October 10-15, 2013.

#### ***Section 7.5.8, Standard 4***

Previous archaeological fieldwork was conducted in the vicinity of the subject property. Stage 1 and 2 archaeological assessments were conducted for adjacent lands associated with the Empire, Martin's Meadows and Abitibi Solar Projects. These were conducted by Archaeological Research Associates Ltd. (ARA 2010a,b&c) and The Archaeologists Inc (2012, 2013). Previous fieldwork was conducted by means of a systematic pedestrian and systematic and judgemental test pit survey. The Stage 2 archaeological assessments did not result in the identification of any archaeological resources or sites.

Our fieldwork is being conducted in order to complete the assessment of additional parcels of land to be incorporated into the overall solar projects.

***Section 7.5.8, Standard 5***

The ARA and TAI reports make no recommendations relevant to the current stage of work, other than the fact that the background study indicates the subject property has potential for the recovery of archaeological resources.

***Section 7.5.8, Standard 6***

There are no unusual physical features that may have affected fieldwork strategy decisions or the identification of artifacts or cultural features, except for the existing soils, which are heavy and saturated.

***Section 7.5.8, Standard 7***

There is no additional archaeological information that may be relevant to understanding the choice of fieldwork techniques or the recommendations of this report.

## **2.0 FIELD METHODS (Section 7.8.1, Standards 1-3)**

This section of the report addresses Section 7.8.1 of the 2011 Standards and Guidelines for Consultant Archaeologists. It does not address Section 7.7.2 because no property inspection was done as a separate Stage 1.

### ***Section 7.8.1, Standard 1***

All of the subject property was assessed and surveyed. There were no exemptions.

### ***Section 7.8.1, Standard 2***

As relevant, we provide detailed and explicit descriptions addressing Standards 2a and 2d.

*Section 7.8.1, Standard 2a* - The general standards for property survey under Section 2.1 of the *2011 Standards and Guidelines for Consultant Archaeologists* were addressed as follows:

- Section 2.1, S1 – All of those portions of the property exhibiting archaeological potential were surveyed.
- Section 2.1, S2a – The entire subject property consisted of low and wet (i.e. heavily saturated soils) lands of no or low potential due to physical features such as permanently wet areas. This was determined through judgmental test pitting.
- Section 2.1, S2b – There are no areas of no or low potential due to extensive and deep land alterations within our subject property.
- Section 2.1, S2c (lands recommended not to require Stage 2 assessment by a previous Stage 1 report where the ministry has accepted that Stage 1 into the register) - n/a
- Section 2.1, S2d (lands designated for forest management activity w/o potential for impacts to archaeological sites, as determined through Stage 1 forest management plans process) - n/a
- Section 2.1, S2e (lands formally prohibited from alterations) - n/a
- Section 2.1, S2f ( lands confirmed to be transferred to a public land holding body, etc) - n/a
- Section 2.1, S3 - The Stage 2 survey was conducted when weather and lighting conditions permitted excellent visibility of features.
- Section 2.1, S4 - No GPS recordings were taken as no artifacts were found during the Stage 2 assessment. There were also no fixed landmarks.
- Section 2.1, S5 - All field activities were mapped in reference to survey stakes and development markers as appropriate.
- Section 2.1, S6 - See report section *8.0 Images* for photo documentation of examples of field conditions encountered.
- Section 2.1, S7 - n/a

*Section 7.8.1, Standard 2d* -The subject property was subject to a test pit survey acceptable as alternative strategies for special survey conditions (i.e. northern Ontario

and Canadian Shield terrain), as per Section 2.1.5 of the *2011 Standards and Guidelines for Consultant Archaeologists*.

- Section 2.1.5, S1 – The subject property is located within 50 metres of a modern source. Accordingly, test pits were initially to be spaced at maximum 5 metre intervals. However, all areas test pitted were found to be low and wet.
- Section 2.1.5, S2 – n/a
- Section 2.1.5, S3 – Initial test pitting at 5 metre intervals indicated that the entire subject property consisted of low, wet saturated soils. Thus the subject property was then subject to a judgmental test pit survey at maximum intervals of 10 metres to confirm its low and wet condition.

Section 7.8.1, Standard 3

The entire (100%) property was surveyed at maximum 10 metre intervals.

### 3.0 RECORD OF FINDS (Section 7.8.2, Standards 1-3)

This section documents all finds discovered as a result of the Stage 1 and 2 archaeological assessment of the subject property.

#### *Section 7.8.2, Standard 1*

No archaeological resources or sites were identified in the Stage 2.

#### *Section 7.8.2, Standard 2*

An inventory of the documentary record generated in the field is provided in Table 1.

<b>Table 1: Inventory of Documentary Record</b>	
<b>Document Type</b>	<b>Description</b>
Field Notes	<ul style="list-style-type: none"><li>• This report constitutes the field notes for this project</li></ul>
Photographs	<ul style="list-style-type: none"><li>• 11 digital photographs</li></ul>
Maps	<ul style="list-style-type: none"><li>• Mapping within this report constitutes all of the maps generated in the field.</li></ul>

#### *Section 7.8.2, Standard 3*

Information detailing exact site locations on the property is not submitted because no sites or archaeological resources were identified in the Stage 2 assessment.

### 4.0 ANALYSIS AND CONCLUSIONS (Section 7.8.3, Standards 1-2)

#### *Section 7.8.3, Standard 1*

No archaeological sites were identified. Standard 2 is not addressed because no sites were identified.

### 5.0 RECOMMENDATIONS (Section 7.8.4, Standards 1-3)

#### *Section 7.8.4, Standard 1*

This standard is not applicable as no sites were identified.

#### *Section 7.8.4, Standard 2*

The report makes recommendations only regarding archaeological matters.

#### *Section 7.8.4, Standard 3*

The Stage 2 survey did not identify any archaeological sites requiring further assessment or mitigation of impacts and it is recommended that no further archaeological assessment of the property be required.

## **6.0 ADVICE ON COMPLIANCE WITH LEGISLATION (Section 7.5.9, Standards 1-2)**

### ***Section 7.5.9, Standard 1a***

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism and Culture, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

### ***Section 7.5.9, Standard 1b***

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

### ***Section 7.5.9, Standard 1c***

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

### ***Section 7.5.9, Standard 1d***

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

### ***Section 7.5.9, Standard 2***

Not applicable

## **7.0 BIBLIOGRAPHY AND SOURCES (Section 7.5.10, Standards 1)**

### Archaeological Research Associates Ltd.

- 2010a Stage 1 and 2 Archaeological Assessment Empire Solar Project (FIT-FQJ0FUC), Part Lots 17 & 18, Concession 7, Township of Glackmeyer, District of Cochrane, Ontario”, prepared by Archaeological Research Associates Ltd. (PIF# P007-282-2010)
- 2010b Stage 1 and 2 Archaeological Assessment Abitibi Solar Project (FIT-FAQLBA0), Part Lots 14 & 15, Concession 8, Township of Glackmeyer, District of Cochrane, Ontario (PIF #P007-279-2010)
- 2010c Stage 1 and 2 Archaeological Assessment Martin’s Meadows Solar Project (FIT-FM5F42U), Lot 16, Concession 8, Township of Glackmeyer, District of Cochrane, Ontario

### Davidson, R.J.

- 1989 Foundations of the Land Bedrock Geology. In *The Natural History of Ontario*, edited by J.B. Theberge, pp. 36-47. Toronto: McClelland and Stewart Inc.

### Hatch Ltd.

- 2011 DRAFT Project Description Report, Empire Solar Project. Report prepared for Northland Power Inc.
- 2012a Water Body Environmental Impact Study Report Martin's Meadows Solar Project. Report prepared for Northland Power Inc.
- 2012b Natural Heritage Environmental Impact Study Report Abitibi Solar Project. Report prepared for Northland Power Inc.

### Hoffman, D.

- 1989 Earthen Blanket: The Soils of Ontario. In *The Natural History of Ontario*, edited by J.B. Theberge, pp. 67-75. Toronto: McClelland and Stewart Inc.

### Marwick, A.

- 1950 Northland Post: The Story of the Town of Cochrane. Cochrane: N.p.

### Ministry of Tourism and Culture

- 2011 Standards and Guidelines for Consultant Archaeologists.

### The Archaeologists Inc.

- 2012 Stage 1 and 2 Archaeological Assessment for Northland Power – Empire Solar Project, Part of Lots 17 and 18, Concession 7, Township of Glackmeyer, District of Cochrane (PIF# P052-393-2012)

2013 Stage 1 and 2 Archaeological Assessment for Northland Power – Additional Lands (Martin’s Meadows & Abitibi Solar Projects) Part of Lot 15, Concession 8, Township of Glackmeyer, District of Cochrane (PIF# P052-409-2012).

**8.0 IMAGES** (Sections 7.5.11, 7.7.5, 7.8.6)



**Plate 1:** From Map 5 – shows low, wet conditions for judgmental test pit survey.



**Plate 2:** From Map 5 – shows conditions for test pit survey.



**Plate 1:** From Map 6 – shows conditions for judgmental test pit survey.

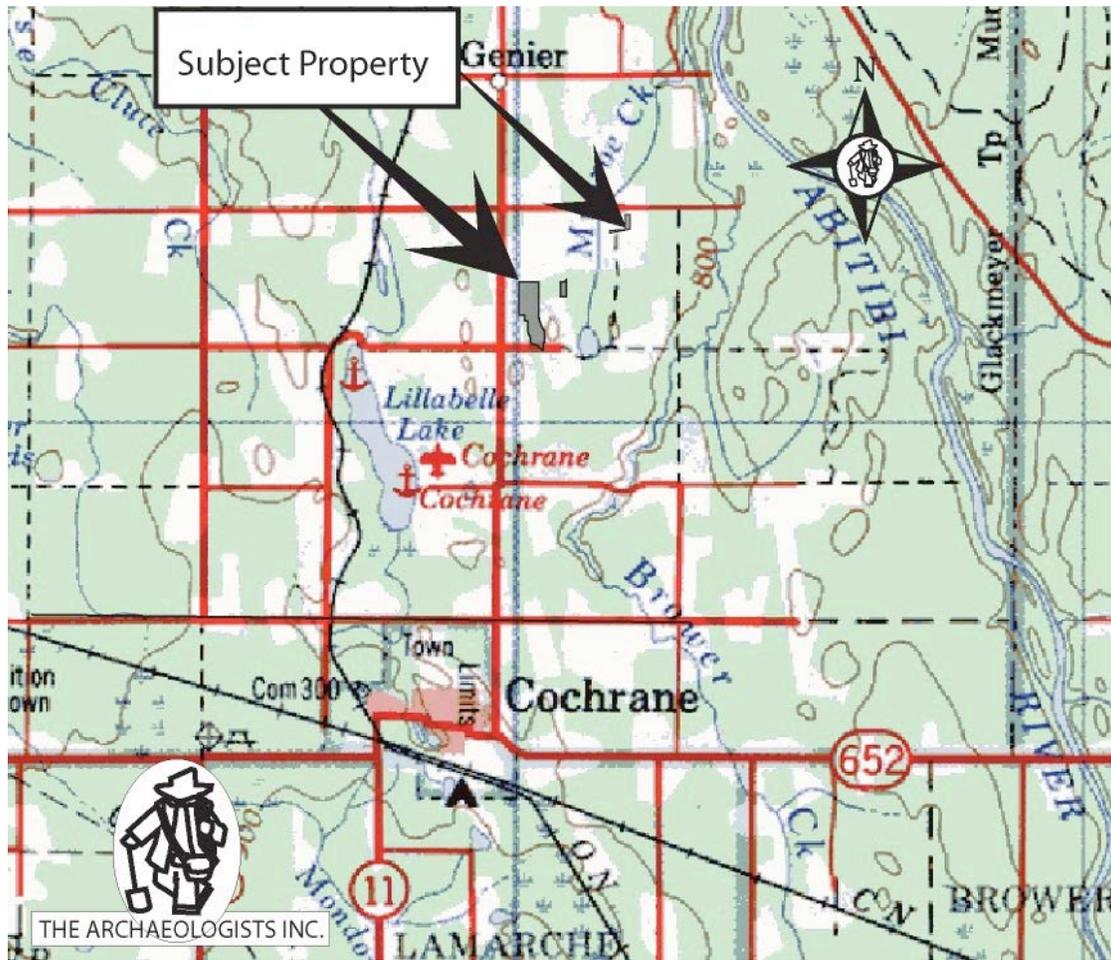


**Plate 2:** From Map 6 – shows conditions for test pit survey.

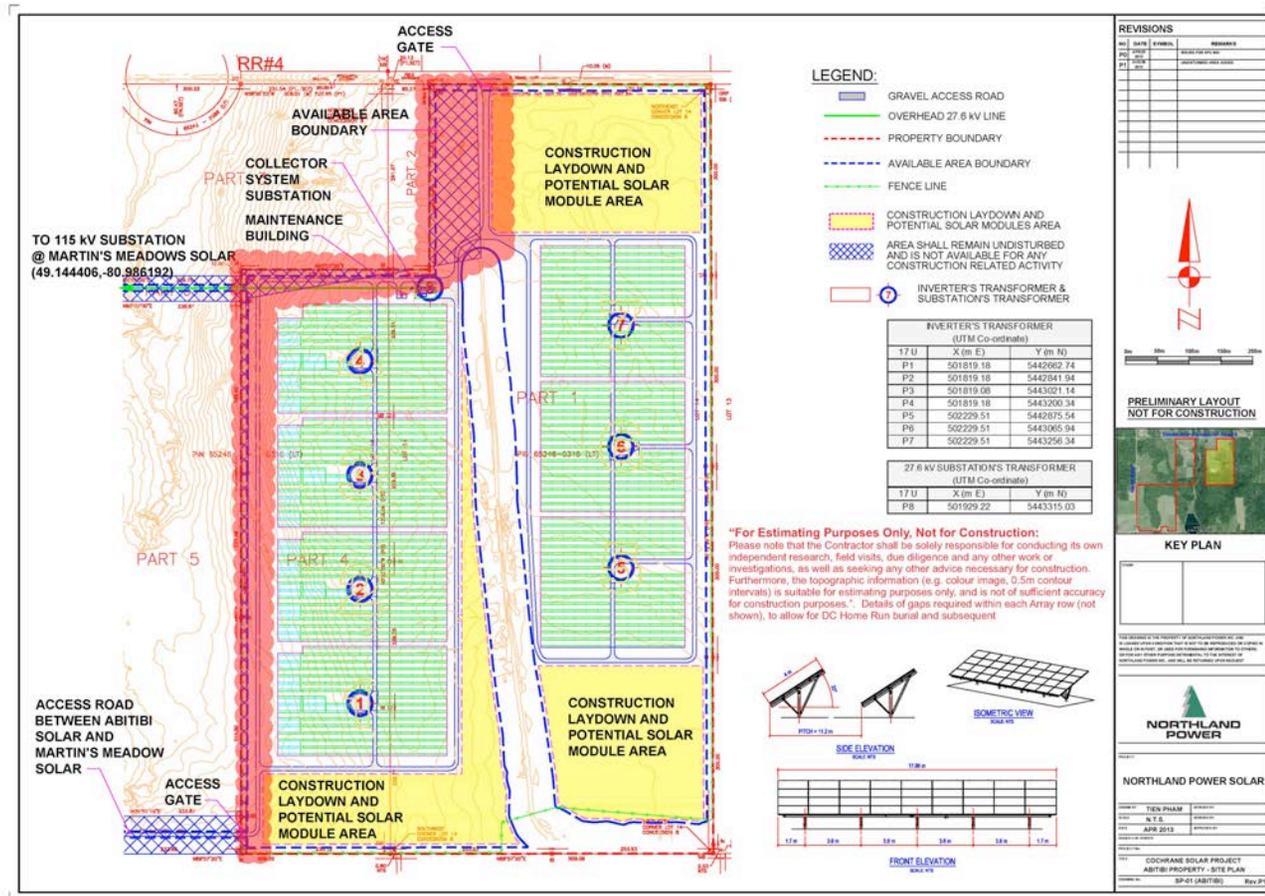


**Plate 3:** From Map 6 – shows conditions for test pit survey.

9.0 MAPS (Section 7.5.12, 7.7.6, 7.8.7)

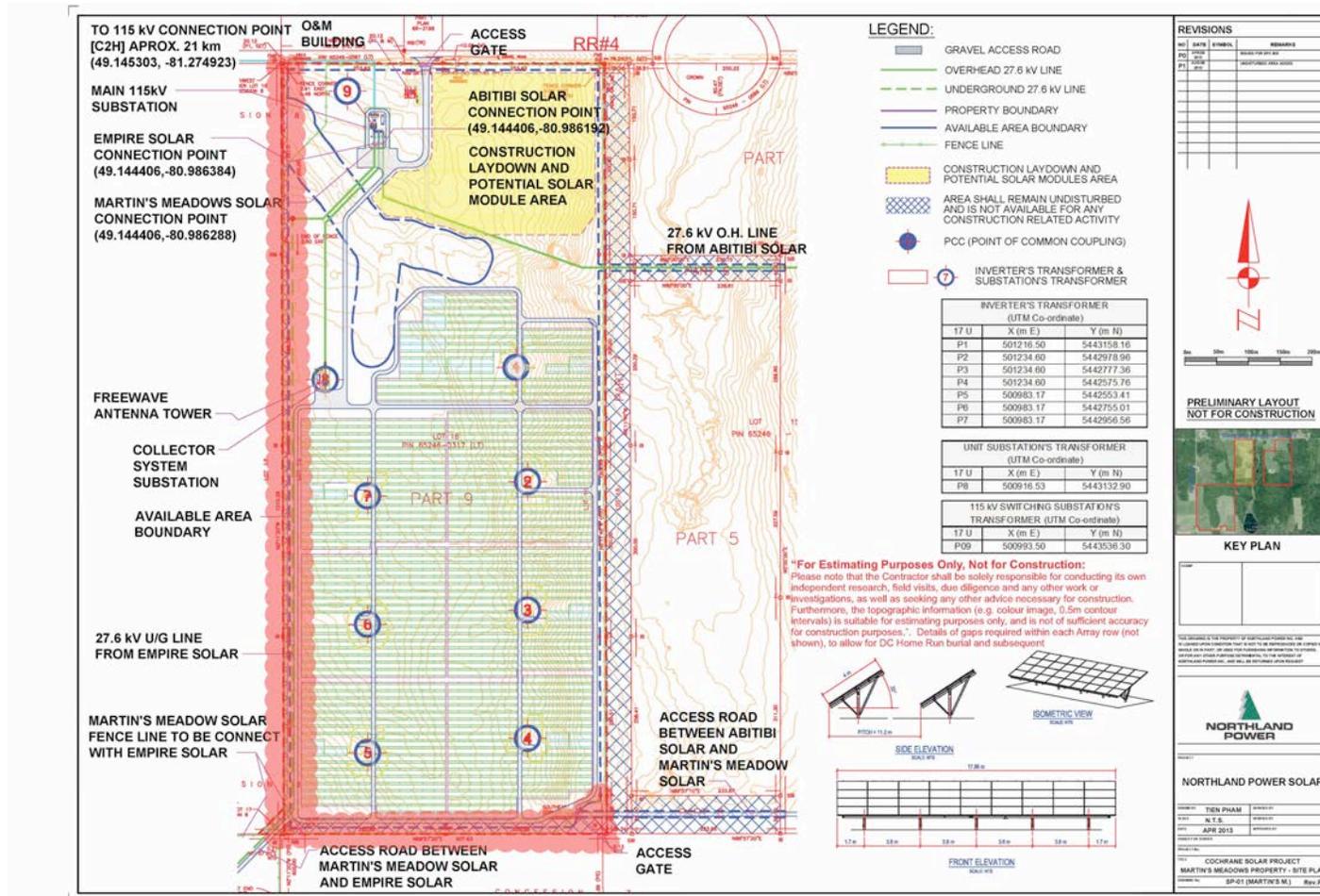


Map 1: General location of subject property.



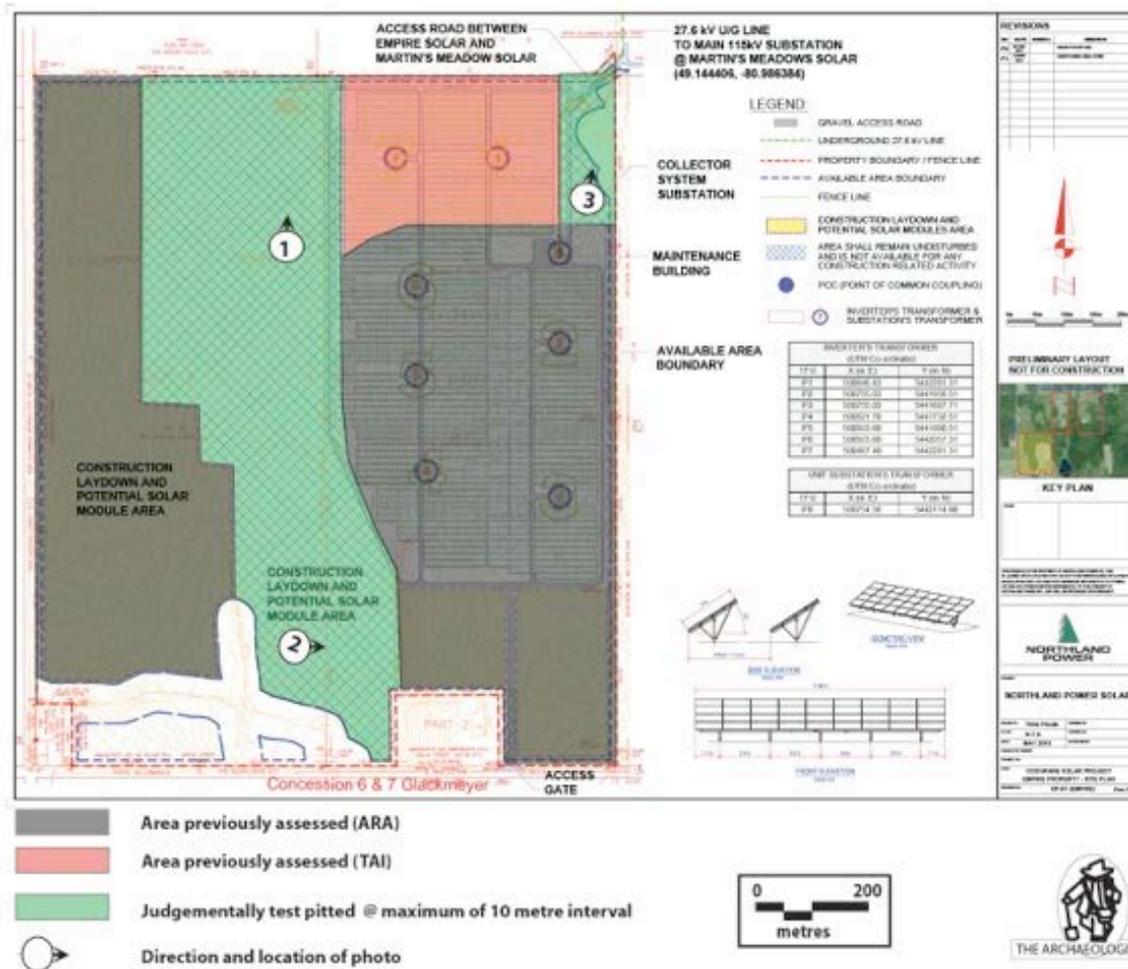
Map 2: Development mapping provided by proponent (area in red required assessment – some previously assessed).





Map 4: Development mapping provided by proponent. Area in red required assessment but all previously assessed by ARA.





Map 6: Results of Stage 2 assessment within area on Map 3.