



December 15th, 2010

Tom Bird
Project Manager, Environmental Services
NextEra Energy Canada
5500 North Service Road, Suite 205
Burlington, Ontario
L7L 6W6

Dear Mr. Bird;

This letter identifies changes in the project layout for the Conestogo Wind Energy Centre, Wellington County (Fit-FU99SSXJ) and addresses implications of these changes on the *Detailed Heritage Assessment Report* prepared by Archaeological Services Inc. (November 2010) and which was reviewed by the Ministry of Tourism and Culture (MTC).

1.0 Description of Changes in Project Layout

Review and comparison of revised project layout drawings for the Conestogo Wind Energy Centre (See Figures 1 – 2) confirm that the siting and/or alignment of the following infrastructure components have been revised:

- Realignment of a permanent access road extending easterly from Sideroad 17 to Turbine Nos. 5 and 6.
- Relocation of Turbine No. 4 southerly to the rear of previously participating lot.
- Relocation of Turbine No. 5 northerly within previously participating lot.
- Relocation of Turbine No. 6 westerly to a new lot and which was a previously participating lot.
- Introduction of a new permanent access road extending easterly from Sideroad 17 to Turbine No. 4.
- Siting of transformer substation (34.5 kV/44 kV) approximately 1 km south of initially proposed location.
- Identification of locations for permanent meteorological towers.

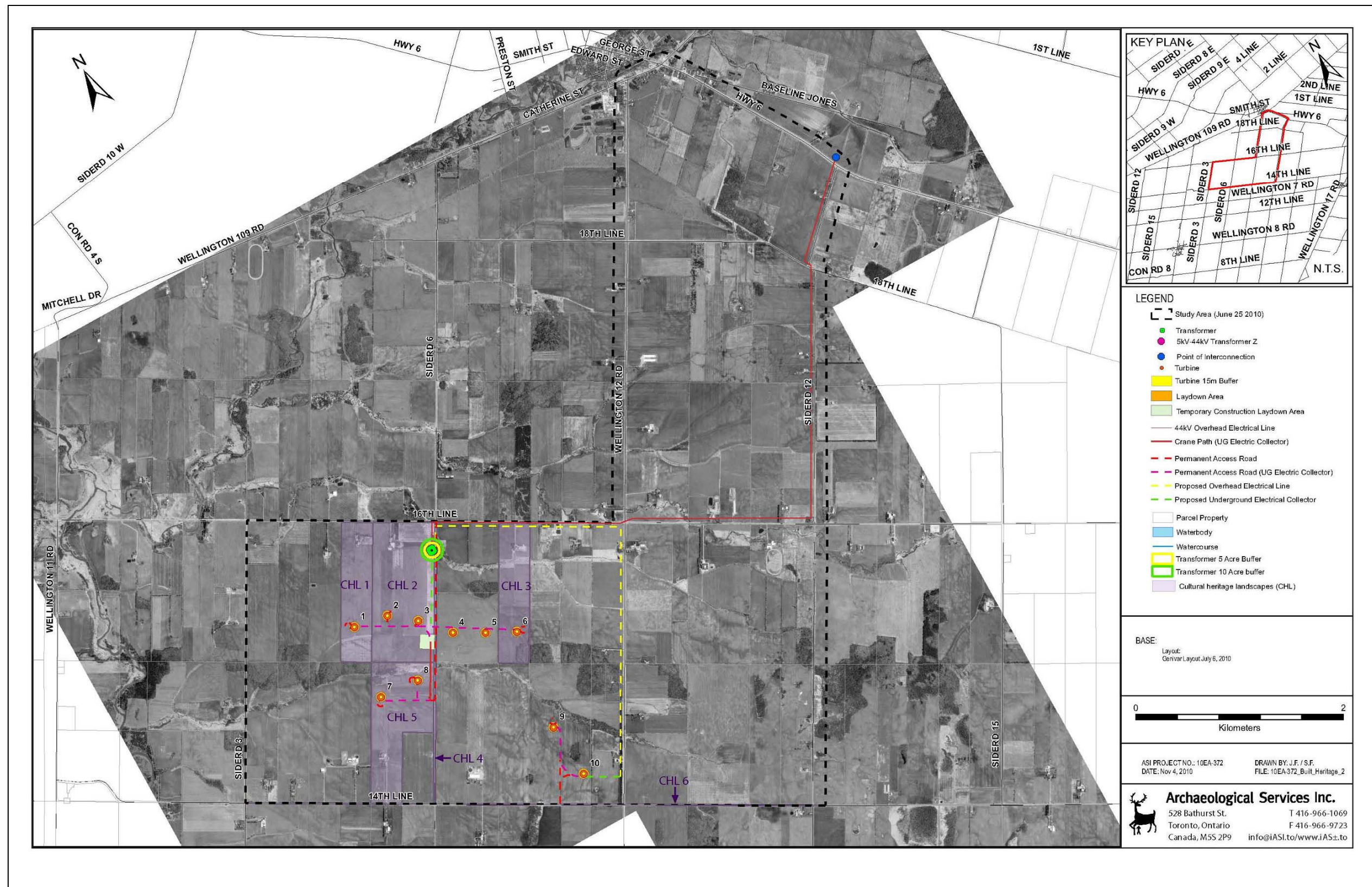


Figure 1: Key plan of the Conestogo Wind Energy Centre showing extent of study area, proposed infrastructure (July 2010), site context, and impacted cultural heritage landscapes (CHLs).

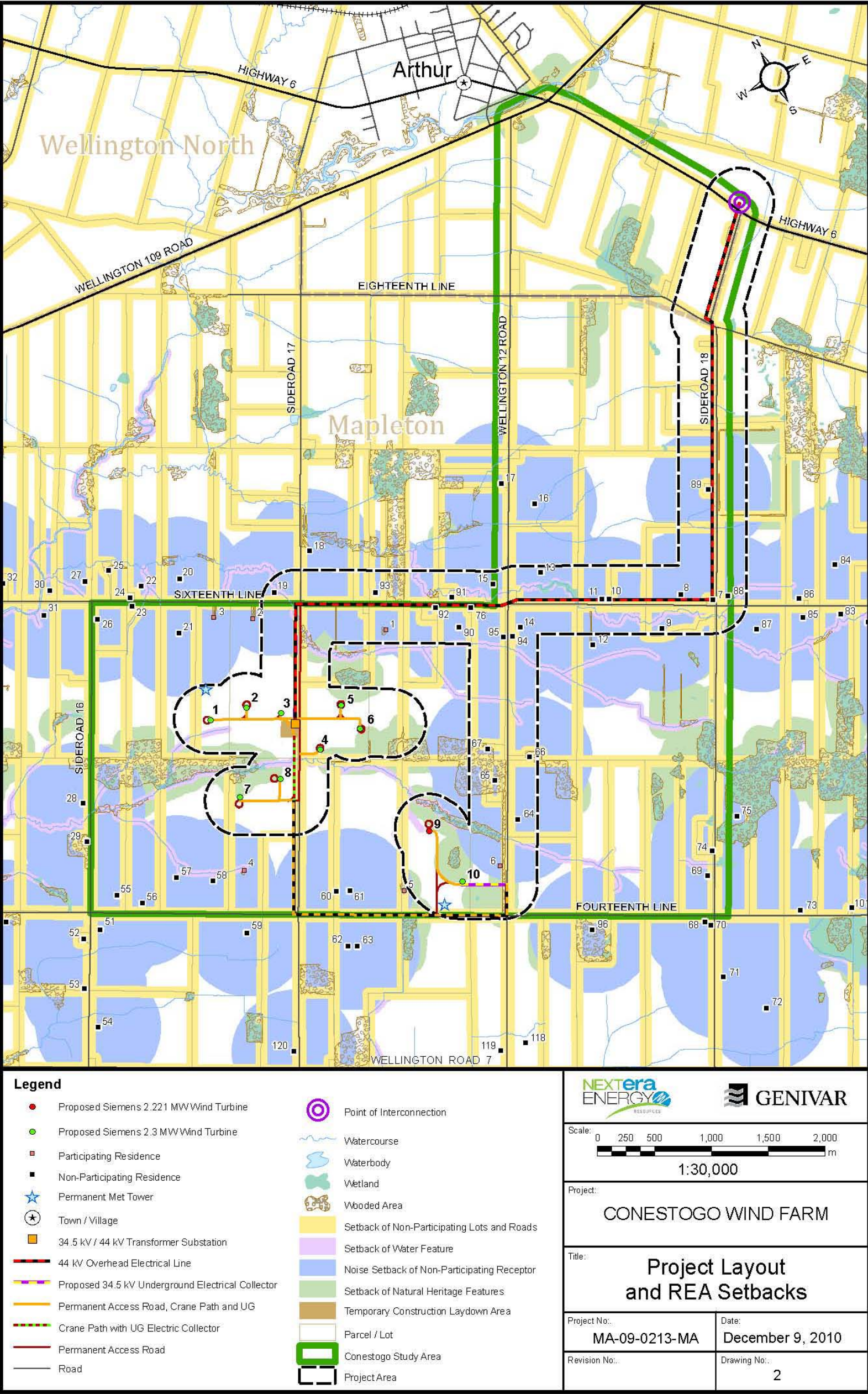


Figure 2: Conestogo Wind Energy Centre Project Layout (December 2010).



2.0 Assessment of Impacts of Proposed Changes on Cultural Heritage Resources

Proposed Change in Project Layout	Impacts on Cultural Heritage Resources
Realignment of a permanent access road extending easterly from Sideroad 17 to Turbine Nos. 5 and 6.	None.
Relocation of Turbine No. 4 southerly to the rear of previously participating lot.	None.
Relocation of Turbine No. 5 northerly within previously participating lot.	None.
Relocation of Turbine No. 6 westerly to a new lot but which was a previously participating lot.	None. This change in project layout will result in removing a proposed turbine from within a lot that was identified as a cultural heritage landscape (CHL 3). Initial project layouts that recommended introduction of Turbine No. 6 within CHL 3 were assessed to result in impacts to the subject cultural heritage resource and subsequently, mitigation measures were proposed to minimize these impacts. Removal of Turbine No. 6 from CHL 3 eliminates any impacts to this cultural heritage landscape.
Introduction of a new permanent access road extending easterly from Sideroad 17 to Turbine No. 4.	None.
Siting of transformer substation (34.5 kV/44 kV) approximately 1 km south of initially proposed location.	None. The initial project layout for the Conestogo Wind Energy Centre proposed introduction of a transformer substation approximately 0.3 km south of the northern property line of a lot identified as a cultural heritage landscape (CHL 2). Introduction of this component was assessed to result in impacts to the subject cultural heritage resources and subsequently, mitigation measures were proposed to minimize these impacts. While mitigation measures originally recommended in the November 2010 report are still appropriate, re-siting of the transformer southerly helps minimize alterations to the setting of the cultural heritage landscape.
Identification of locations for permanent Meteorological towers.	Specific locations for permanent meteorological towers were previously undetermined. Siting of a permanent meteorological tower south of Turbine No. 10 will not result in impacts to cultural heritage resources. Siting of a permanent meteorological tower north of Turbine No. 1 and within a lot identified as a cultural heritage landscape (CHL 1) will result in impacts to the resource. However, these impacts have been previously described and identified in the November 2010 report through analysis of impacts of introducing Turbine No. 1 within the lot identified as CHL 1. Mitigation measures that were recommended to minimize impacts of Turbine No. 1 on CHL 1 are appropriate for application in relation to introduction of the permanent meteorological tower.



3.0 Conclusions

The *Detailed Heritage Assessment Report* prepared by Archaeological Services Inc. (November 2010) assessed impacts of the undertaking and recommended mitigation measures. Review and comparison of the original and revised project layouts (July 2010 and December 9 2010 respectively) confirms that the *Detailed Heritage Assessment Report* sufficiently addressed potential impacts of the revised project layout on cultural heritage resources. However, it should be noted that mitigation measures originally recommended in relation to CHL 3 are no longer applicable given that Turbine No. 6 has been relocated to an adjacent lot, and therefore no impacts are now expected in relation to CHL 3.

Following, a review and comparison of original and revised project layouts for the Conestogo Wind Energy Centre, the following recommendations have been developed:

1. The results of impact assessment confirmed that the three farm complexes (CHL 1, 2 and 5) have the potential to have their setting temporarily altered and that new visual features will be introduced on each of the lots. These impacts were not found to represent permanent, adverse, and significantly incompatible alterations that would irreversibly compromise these resources' heritage attributes. On this basis, and given that the current turbine layout and related infrastructure have been developed to address required setbacks from roads, property lines, woodlots, watercourses, and known archaeological resources and to comply with noise constraints, mitigation measures that are appropriate and feasible for minimizing the extent of visual alteration to these resources may include maximizing setbacks from structures and utilizing landscape designs such as massing and screening. Additionally, to ensure that alterations to these resources are temporary and that lots will be returned to their existing condition following decommissioning, it is recommended that the three farm complexes be subject to heritage recording in advance of construction activities. Permission to enter the three farm complexes should be secured for the purposes of conducting photographic documentation of built heritage resources and cultural heritage landscape elements located within the entire limits of the property. Detailed land use histories should be included in the heritage recordings of the four farm complexes.
2. In the case of CHL 1, it is further recommended that where possible and should other environmental and noise constraints permit reconfiguration of the proposed project layout, Turbine No. 1 should be sited further east of the residential structure for the purposes of concentrating visible components of the infrastructure at lateral edges of the representative viewshed. It is further recommended that the permanent meteorological tower proposed within the limits of CHL 1 be subject to landscape designs such as screening.
3. Of the two roads that were evaluated to retain cultural heritage value, one is expected to be altered through widening (CHL 4) and the other has the potential to be impacted through project related construction (CHL 6). Impacts to CHL 4 were determined to represent permanent impacts to the resource however these impacts can be mitigated through minimizing the extent of widening, maintaining a gravel road bed, preserving extant vegetation and hedgerows where possible, and employing native species and/or historic plant materials for new berms and/or vegetative screening. It is further recommended that this resource be subject to heritage recording in advance of construction activities to serve as a final record of the resource prior to permanent alteration. Impacts to CHL 6 are not expected at this time, however, it is recommended that should the resource be altered during construction, it should then be returned to its existing condition. It is further recommended that this feature be subject to heritage recording in advance of construction



Archaeological Services Inc.

activities to ensure that the resource is appropriately returned to its existing condition should it be altered during project construction activities. Heritage recordings of the two roadsides should include photographic documentation, a township history, and information regarding development of the local road network, where available

4. This report should be submitted to the Ministry of Tourism and Culture for review and comment and future heritage recordings should be produced on archival paper and submitted to the Clerk in the Township of Mapleton and at an appropriate local repository.

Sincerely,

Rebecca Sciarra, MA CAHP
Manager and Cultural Heritage Specialist
Built Heritage and Cultural Heritage Landscape Planning Division

Enc.

**Detailed Heritage Assessment Report:
Built Heritage Resources and Cultural Heritage Landscapes**

**Conestogo Wind Energy Centre
Wellington County, Ontario**

FIT-FU99SSXJ

Prepared for:

GENIVAR
600 Cochrane Drive, 5th Floor
Markham, ON L3R 5K3
Tel: (905) 475-8727
Fax: (905) 475-5994
Web: www.genivar.com
Email: Terence.Rasmussen@genivar.com

ASI File 10EA-372

November 2010



Archaeological Services Inc.

528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9

T 416-966-1069
F 416-966-9723
info@iASI.to/www.iASI.to

**Detailed Heritage Assessment Report:
Built Heritage Resources and Cultural Heritage Landscapes**

**Conestogo Wind Energy Centre
Wellington County, Ontario**

EXECUTIVE SUMMARY

Archaeological Services Inc. (ASI) was contracted by Genivar, Markham, on behalf of NextEra Energy Canada to conduct a Detailed Heritage Assessment for the proposed Conestogo Wind Energy Centre in Wellington County, Ontario. The overall study area is “L-shaped” and is generally bounded by Sideroad 3 to the west, 16th Line to the north, Wellington Road 12 to the west again, Wellington Road 109 at Arthur, Highway 6 and Sideroad 12 to the east, and 14th Line to the South. NextEra Energy is applying for a Renewable Energy Approval under O. Reg. 359/09 of the *Environmental Protection Act*. Appendix A provides contact information for relevant personnel at NextEra Energy.

An Initial Heritage Assessment for the subject project was undertaken and completed in July 2010 (ASI 2010). This assessment identified heritage sensitivities in the study area and potential impacts of the undertaking on cultural heritage resources. It confirmed that six resources would be indirectly impacted by the undertaking and had the potential to have their setting and character altered through the introduction of various renewable energy infrastructure components, such as turbines, laydown areas, transformers, and access roads etc. Accordingly, a Detailed Heritage Assessment was initiated to apply Regulation 9/06 of the *Ontario Heritage Act* to determine if these resources are of cultural heritage value or interest and if further impact assessment analysis and development of mitigation measures would be required.

Based on the results of background research and data collected from publicly accessible road right-of-ways, application of Regulation 9/06 suggests that the identified six resources are of cultural heritage value to varying degrees. Based on this result, impacts of the undertaking on the six resources were assessed for the purposes of determining the significance of the impacts of the undertaking and to accordingly propose measures to avoid, eliminate, or mitigate impacts where appropriate and feasible.

The results of impact assessment confirmed that the four farm complexes have the potential to have their setting temporarily altered and that new visual features will be introduced on each of the lots. These impacts were not found to represent permanent, adverse, and significantly incompatible alterations that would irreversibly compromise these resources’ heritage attributes. On this basis, and given that the current turbine layout and related infrastructure have been developed to address required setbacks from roads, property lines, woodlots, watercourses, and known archaeological resources and to comply with noise constraints, mitigation measures that are appropriate and feasible for minimizing the extent of visual alteration to these resources may include maximizing setbacks from structures and utilizing landscape designs such as massing and screening. In the case of CHL 1, it is further recommended that where possible and should other environmental and noise constraints permit reconfiguration of the proposed turbine layout, Turbine No. 1 should be sited further east of the residential structure for the purposes of concentrating visible components of the infrastructure at lateral edges of the representative viewshed. Additionally, to ensure that alterations to these resources are temporary and that lots will be returned to their existing condition following decommissioning, it is recommended that the four farm complexes be subject to heritage recording in advance of construction

activities. Permission to enter the four farm complexes should be secured for the purposes of conducting photographic documentation of built heritage resources and cultural heritage landscape elements located within the entire limits of the property. Detailed land use histories should be included in the heritage recordings of the four complexes.

Of the two roadscares that were evaluated to retain cultural heritage value, one is expected to be altered through widening (CHL 4) and the other has the potential to be impacted through project related construction (CHL 6). Impacts to CHL 4 were determined to represent permanent impacts to the resource however these impacts can be mitigated through minimizing the extent of widening, maintaining a gravel road bed, preserving extant vegetation and hedgerows where possible, and employing native species and/or historic plant materials for new berms and/or vegetative screening. It is further recommended that this resource be subject to heritage recording in advance of construction activities to serve as a final record of the resource prior to permanent alteration. Impacts to CHL 6 are not expected at this time, however, it is recommended that should the resource be altered during construction, it should then be returned to its existing condition. It is further recommended that this feature be subject to heritage recording in advance of construction activities to ensure that the resource is appropriately returned to its existing condition should it be altered during project construction activities. Heritage recordings of the two roadscares should include photographic documentation, a township history, and information regarding development of the local road network, where available

This report should be submitted to the Ministry of Tourism and Culture for review and comment and future heritage recordings should be produced on archival paper and submitted to the Clerk in the Township of Mapleton and at an appropriate local repository.

**ARCHAEOLOGICAL SERVICES INC.
ENVIRONMENTAL ASSESSMENT DIVISION**

PROJECT PERSONNEL

Corporate Oversight

Robert Pihl, MA, CAHP
*Partner and Senior Archaeologist
Manager, Environmental Assessment Division*

Senior Project Manager:

Rebecca Sciarra, MA, CAHP
Manager and Cultural Heritage Specialist

Project Administrator:

Sarah Jagelewski, Hon. BA
Research Archaeologist

Report Preparation:

Rebecca Sciarra

Annie Veilleux, Hon. BA
Researcher

Graphics Preparation:

Mary-Cate Garden, PhD
Cultural Heritage Specialist
Annie Veilleux

Mary-Cate Garden

Report Reviewer:

Lindsay Popert, MA, CAHP
Project Manager and Cultural Heritage Specialist



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1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by Genivar, Markham, on behalf of NextEra Energy Canada to conduct a Detailed Heritage Assessment for the proposed Conestogo Wind Energy Centre in Wellington County, Ontario. The overall study area is “L-shaped” and is generally bounded by Sideroad 3 to the west, 16th Line to the north, Wellington Road 12 to the west again, Wellington Road 109 at Arthur, Highway 6 and Sideroad 12 to the east, and 14th Line to the South (Figure 1). NextEra Energy is applying for a Renewable Energy Approval under O. Reg. 359/09 of the *Environmental Protection Act*. Appendix A provides contact information for relevant personnel at NextEra Energy.

An Initial Heritage Assessment for the subject project was undertaken and completed in July 2010 (ASI 2010). This assessment identified heritage sensitivities in the study area and potential impacts of the undertaking on cultural heritage resources. It confirmed that six resources would be potentially impacted by the undertaking and had the potential to have their setting and character altered through the introduction of various renewable energy infrastructure components. Accordingly, a Detailed Heritage Assessment was initiated to apply Regulation 9/06 of the *Ontario Heritage Act* to determine if these resources are of cultural heritage value or interest and if further impact assessment analysis and development of mitigation measures would be required.

The purpose of the current report is to present the results of the Initial Heritage Assessment, apply Regulation 9/06 of the *Ontario Heritage Act* to resources identified as being potentially impacted by the undertaking, and to recommend, based on the results of application of Regulation 9/06, specific measures to avoid, eliminate or mitigate the impact, which may include a heritage conservation plan. This report has been completed to partially fulfill the requirements of O. Reg. 359/09, specifically s.20(1) and s.23. This research was conducted under the project direction of Rebecca A. Sciarra, Cultural Heritage Specialist.



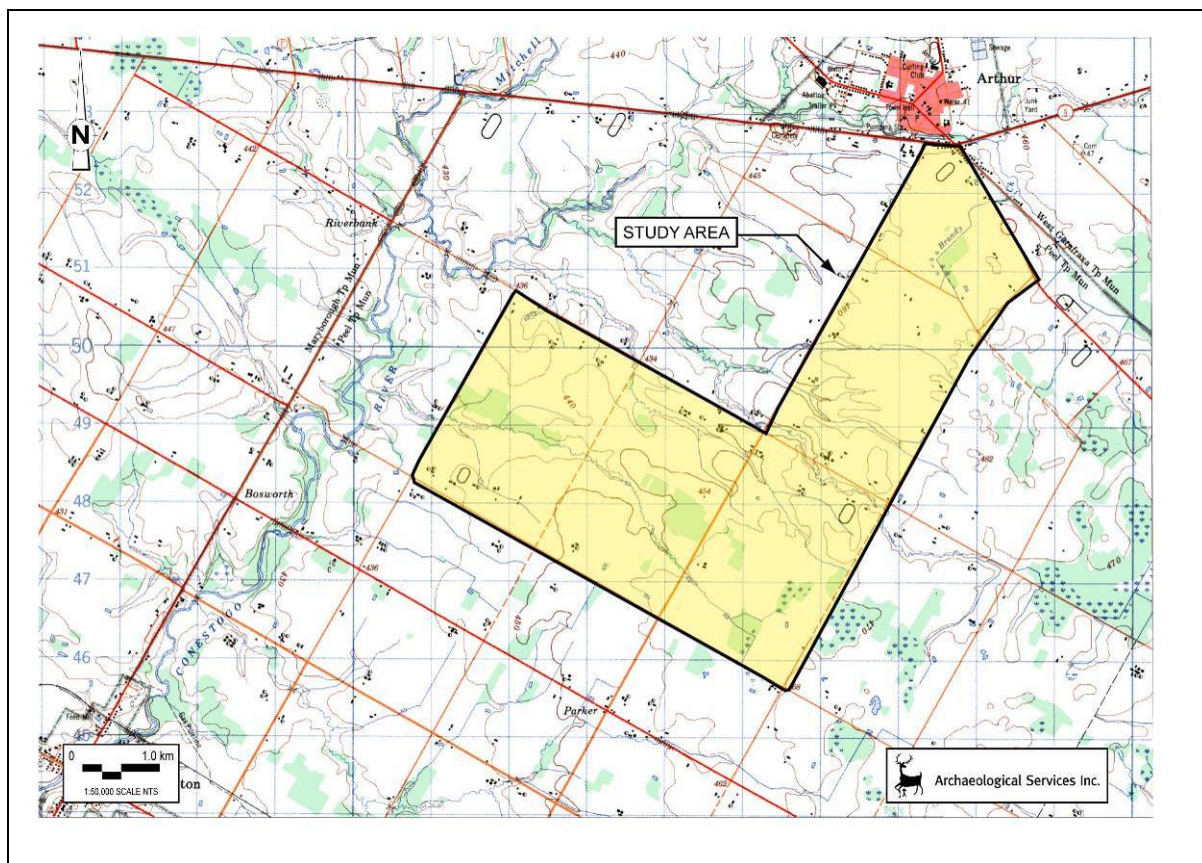


Figure 1: Location of the study area in Mapleton Township, County of Wellington.

Base Map: NTS Sheet 40 P/10, Conestogo

2.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT CONTEXT

2.1 Approach and Methodology

As part of heritage assessments conducted under the Renewable Energy Approvals process, it is required that the following study components be undertaken: desk-top data collection and consultation with local heritage stakeholders; field review; identification of cultural heritage resources; evaluation of cultural heritage resources to be potentially impacted; description of proposed developments or site alterations; measurement of impacts; and consideration of alternatives, mitigation, and conservation methods. It should be noted that requirements to conduct a heritage evaluation can only be determined following a initial heritage assessment. It should also be noted that heritage evaluations must be completed in order to measure impacts of the undertaking and to develop appropriate alternatives, mitigation measures, or conservation methods. Normally, a multi-phased study approach is undertaken to provide the most suitable amount of information appropriate at various project stages. A preliminary heritage assessment is first conducted to identify heritage sensitivities. Based on the results of this preliminary assessment, requirements for a detailed heritage assessment are then recommended.

O. Reg. 359/09, s. 20(1) and s. 23 requires that applicable projects must determine if there will be an impact to any heritage resources or protected properties as described in s. 19, and then carry out a heritage

assessment under s. 23. Heritage resources are defined under O. Reg 359/09 as “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, Section 1). This assessment addresses above ground cultural heritage resources over 40 years old. Use of a 40 year old threshold is a guiding principle when conducting a preliminary identification of cultural heritage resources (Ministry of Transportation 2006; Ministry of Transportation 2007; Ontario Realty Corporation 2007). While identification of a resource that is 40 years old or older does not confer outright heritage significance, this threshold provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from retaining heritage value.

The proposed wind farm project has the potential to affect cultural heritage resources in a variety of ways. These include the loss or displacement of resources through removal or demolition and the disruption of resources by introducing physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.

For the purposes of this assessment, the term cultural heritage resources was used to describe both cultural landscapes and built heritage features. A cultural landscape is perceived as a collection of individual built heritage features and other related features that together form farm complexes, roadscares and nucleated settlements. Built heritage features are typically individual buildings or structures that may be associated with a variety of human activities, such as historical settlement and patterns of architectural development.

The *Planning Act* (1990) and related *Provincial Policy Statement (PPS)* provide a number of definitions relating to heritage conservation:

Built heritage resources mean one or more buildings, structures, monuments, installations or remains associated with architectural, cultural, social, political, economic, or military history, and identified as being important to a community.

Cultural heritage landscapes mean a defined geographical area of heritage significance that has been modified by human activities. Such an area is valued by a community, and is of significance to the understanding of the history of a people or place. Examples include farmscapes, historic settlements, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways, and industrial complexes of cultural heritage value (*PPS* 2005).

In addition, significance is also more generally defined. It is assigned a specific meaning according to the subject matter or policy context, such as wetlands or ecologically important areas. With regard to cultural heritage and archaeology resources, resources of significance are those that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people (*PPS* 2005).

Criteria for determining significance for cultural heritage resources potentially impacted by renewable energy projects are recommended by the Province and are contained in Regulation 9/06 *Criteria for Determining Cultural Heritage Value or Interest of the Ontario Heritage Act*. The following provides a description of criteria contained in Regulation 9/06:



1. The property has design value or physical value because it :

	i. is a rare, unique, representative or early example of a style, type, expression, material or construction method;
	ii. displays a high degree of craftsmanship or artistic merit, or;
	iii. demonstrates a high degree of technical or scientific achievement.

2. The property has historical value or associative value because it:

	i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community;
	ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or;
	iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.

3. The property has contextual value because it:

	i. is important in defining, maintaining or supporting the character of an area;
	ii. is physically, functionally, visually or historically linked to its surroundings, or;
	iii. is a landmark.

Accordingly, the foregoing guidelines and relevant policy statement were used to guide the scope and methodology of the cultural heritage assessment.

2.2 Data Collection

In the course of the cultural heritage assessment, all potentially affected cultural heritage resources within the study area are subject to inventory and photographic documentation. Short form names are usually applied to each resource type, (e.g. barn, residence). Generally, when conducting a preliminary identification of cultural heritage resources, three stages of research and data collection are undertaken to appropriately establish the potential for and existence of cultural heritage resources in a particular geographic area.

Background historic research, which includes consultation of primary and secondary source research and historic mapping, is undertaken to identify early settlement patterns and broad agents or themes of change in a study area. This stage in the data collection process enables the researcher to determine the presence of sensitive heritage areas that correspond to nineteenth and twentieth century settlement and development patterns. To augment data collected during this stage of the research process, federal, provincial, and municipal databases and/or agencies are consulted to obtain information about specific properties that have been previously identified and/or designated as retaining cultural heritage value. Typically, resources identified during these stages of the research process are reflective of particular architectural styles, associated with an important person, place, or event, and contribute to the contextual facets of a particular place, neighbourhood, or intersection.



A field review, in the form of a windshield survey, is then undertaken to confirm the location and condition of previously identified cultural heritage resources. The field review is also utilized to identify cultural heritage resources that have not been previously identified on federal, provincial, or municipal databases and which have the potential to be impacted by the undertaking.

Several investigative criteria are utilized during the field review to appropriately identify new cultural heritage resources. These investigative criteria are derived from provincial guidelines, definitions, and past experience. A built structure or landscape is identified as a cultural heritage resource that should be considered during the course of the assessment. A resource will be considered if it is 40 years or older¹, and if the resource satisfies at least one criterion in one of the following three categories:

Design/Physical Value:

- It is a rare, unique, representative or early example of a style, type, expression, material or construction method
- It displays a high degree of craftsmanship or artistic merit
- It demonstrates a high degree of technical or scientific achievement
- The site and/or structure retains original stylistic features and has not been irreversibly altered so as to destroy its integrity

Historical/Associative Value:

- It has a direct association with a theme, event, belief, person, activity, organization, or institution that is significant to: Wellington County; the Province of Ontario; Canada; or the world heritage list
- It yields, or has the potential to yield, information that contributes to an understanding of: Wellington County; the Province of Ontario, Canada; or the world heritage list
- It demonstrates or reflects the work or ideas of an architect, artist builder, designer, or theorist who is significant to: Wellington County; the Province of Ontario; Canada; or the world heritage list

Contextual Value:

- It is important in defining, maintaining, or supporting the character of an area
- It is physically, functionally, visually, or historically linked to its surroundings
- It is a landmark
- It illustrates a significant phase in the development of the community or a major change or turning point in the community's history
- The landscape contains a structure other than a building (fencing, culvert, public art, statue, etc.) that is associated with the history or daily life of that area or region
- There is evidence of previous historic and/or existing agricultural practices (e.g. terracing, deforestation, complex water canalization, apple orchards, vineyards, etc.)

If a resource meets one criterion in one of these categories, it will be identified as a cultural heritage resource and is subject to further research where appropriate and when feasible. Typically, further

¹ Use of a 40 year old threshold is a guiding principle when conducting a preliminary identification of cultural heritage resources (Ministry of Transportation 2006; Ministry of Transportation 2007; Ontario Realty Corporation 2007). While identification of a resource that is 40 years old or older does not confer outright heritage significance, this threshold provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from retaining heritage value.



historical research and consultation is required to determine the specific significance of the identified cultural heritage resource.

When identifying cultural heritage landscapes, the following categories are typically utilized for the purposes of the classification during the field review:

Farm complexes:	comprise two or more buildings, one of which must be a farmhouse or barn, and may include a tree-lined drive, tree windbreaks, fences, domestic gardens and small orchards.
Roadscapes:	generally two-lanes in width with absence of shoulders or narrow shoulders only, ditches, tree lines, bridges, culverts and other associated features.
Waterscapes:	waterway features that contribute to the overall character of the cultural heritage landscape, usually in relation to their influence on historic development and settlement patterns.
Railscapes:	active or inactive railway lines or railway rights of way and associated features.
Historical settlements:	groupings of two or more structures with a commonly applied name.
Streetscapes:	generally consists of a paved road found in a more urban setting, and may include a series of houses that would have been built in the same time period.
Historical agricultural Landscapes:	generally comprises a historically rooted settlement and farming pattern that reflects a recognizable arrangement of fields within a lot and may have associated agricultural outbuildings and structures
Cemeteries:	land used for the burial of human remains.

In accordance with Section 23 of Ontario Regulation 359/09, identified cultural heritage resources that are described as having the potential to be impacted by the undertaking are then subject to application of heritage evaluation criteria contained in Regulation 9/06 of the *Ontario Heritage Act*. Typically, these criteria are applied based on detailed archival research tracing the property's land uses from first deed to present, consultation of available primary and secondary source material, and detailed on-site analysis of the property's landscape composition and buildings. For the purposes of this report, and based on consultations with the Ministry of Tourism and Culture, application of evaluation criteria were based on consideration of readily accessible archival data available at local holdings, including review of local history sources and maps, and data collected from public right of ways regarding each feature's landscape composition, buildings, and potential heritage attributes. Permission to enter properties identified as cultural heritage resources and which may be subject to impacts was not granted.

Results of background research, data collection, and application of Regulation 9/06 are contained in Section 3.0; while Section 4.0 provides the results of impact assessment and Section 5.0 contain conclusions and recommendations with respect to the undertaking.

3.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT

3.1 Introduction

This section provides a brief summary of historic research and a description of above ground cultural heritage resources that may be affected by the proposed Conestogo Wind Energy Centre. Historically, the study area is located in the former Township of Peel, Wellington County, with the northern-most section of the study area abutting the junction of the Townships of Arthur, Luther, and Garafraxa. It is now located within the Township of Mapleton, which was created with the amalgamation of the Townships of Peel and Mayborough, and the Village of Drayton.

3.2 Township Survey and Settlement

The township of Peel is the largest of the townships making up Wellington County and is believed to have been named after Sir Robert Peel (Mackenzie 1907:2) twice Prime Minister of Britain and known for his reforms in criminal law and policing. Both the term ‘bobbies’ and ‘peelers’ are derived from his name. Originally set aside in 1835 as Clergy Reserves, Peel Township was not surveyed until 1843, remaining unimproved for a number of years. So dire was this situation that by 1840 nearby townships were “demanding” that “this wild block be cleared up” (Mountjoy 1999:17). During this time the area in the south of Peel Township became known as the ‘Queen’s Bush’ and was home to a large African American settlement. By and large these first non-aboriginal settlers in the former Township of Peel area were fugitive African-American slaves who escaped to Canada following the Underground Railroad (Ontario Heritage Trust n.d.; Mackenzie 1907:3). It is said that Emancipation Day, which commemorated the abolition of slavery in the British Colonies in 1834, was widely celebrated in the area, white residents joining their black neighbours in celebration (Mapleton n.d.). Settlement in Queen’s Bush was in the first instance informal and continued in this manner through to the 1840s when fifty acres in Queen’s Bush was offered to “every man of colour [sic] assisting in putting down the Rebellion of the years 1837 and 1838” (Commissioner of Crown Lands: 1840). Although the surveying of the land in the 1840s and this formalisation of landholding meant that some settlers who were unable to purchase lands which they had cleared had to leave the area, many African-American settlers remained in Peel Township until after the mid nineteenth century. The Queen’s Bush settlement is now commemorated in the town of Glen Allan by an Ontario Heritage Trust plaque.

In the North half of the Township of Peel the early settlers included a large number of Irish immigrants who were escaping the potato famine in Ireland and who also arrived in the 1840s (Mountjoy 1999:18). A review of available historical maps and census data reveals the high number of Irish settlers who settled in Peel Township with many of the earliest landholders recently arrived from Ireland. Unfortunately, there also were tensions throughout the mid-nineteenth century and local papers (e.g. *Elora Backwoodsman* 1857) include a number of sectarian incidents in which the (largely) Roman Catholic Irish settlers came into conflict with local Orangemen.



The Garafraxa Road along the northeast edge of Peel Township was laid out in 1837, connecting Fergus to the southeast with Mount Forest to the northwest. In 1840-1841 free 50 acre lots adjoining the road were surveyed, thus precipitating a rush to settle along the road (Sawden 1952: 17-18). European settlers came to the area in the mid-1800s intent on working the land. While the population increased at a substantial rate, many of the settlers left in the late 1850s following unexpected harsh weather and poor crops (Mapleton n.d.).

In the early 1900s, Old Order Mennonites from Pennsylvania began arriving in the area, establishing farms and roots for their families. At the end of World War II, several Dutch families immigrated to the rural areas of the Township (Mapleton n.d.).

Completion of two rail lines through the area facilitated commercial activity in the last quarter of the nineteenth century. The 1871 Grand Trunk Railway intersects the southern corner of the Township of Peel study area, and the 1874 Toronto, Grey and Bruce Railway line extends eastward and northward from Arthur (Andreae 1997:128-129).

The Village of Arthur, named after Arthur Wellesley, Duke of Wellington, was first surveyed in 1841 and officially surveyed in 1846. Community growth was initiated by the construction of saw and grist mills. 1851 saw the opening of the village post office, as well as the organization of the first church and school (Township of Wellington North n.d.).

The Hamlet of Riverbank, which was located approximately at the junction of present day Concession Road 16 and Wellington Road 11, represents the closest nineteenth century settlement to the subject study area. It was founded circa 1889 and at one time boasted a number of community, religious, and commercial enterprises including a Methodist Church, school, cheese and butter factory, a general store, blacksmith, a feed mill, and a population of approximately 300 people (Mountjoy 1999). The hamlet of Riverbank eventually faded from view as the growth of transportation and other towns in the area made it redundant (Mountjoy 1999).

3.3 Review of Historic Mapping

This section provides a brief summary of historic research. The following Historic atlas maps for Wellington County, and particularly Peel Township, were reviewed: 1861 *Map of the County of Wellington, Canada West* (W Chewett); the *Illustrated Atlas of the County of Wellington* for the years 1877 and 1906; and the 1885 *Map of Wellington County*. These sources were reviewed to determine the potential for the presence of cultural heritage resources located within the study area and to trace chains of ownership on the lots identified as cultural heritage resources in the Initial Heritage Assessment Report. Historically, the study area is located within the former Township of Peel (Figure 2). The study area is partially or completely located within the following Lots and Concessions:

Township of Peel

- Lots 3 to 13, Concession XIV
- Lots 3 to 13, Concession XV
- Lots 3 to 13, Concession XVI
- Lots 3 to 13, Concession XVII
- Lots 9 to 13, Concession XVIII
- Lots 9 to 12, Concession XIX
- Lots 18 to 23, Concession B



- Lots 18 to 23, Concession A

A number of property owners/residents and historic features are illustrated within or adjacent to the study area. The majority of the illustrated features are individual farm houses. Other significant historical features that are illustrated include the historic settlement of Arthur, the hamlet of Riverbank (Concession XVI), the post office and store at Parker (Concession XIV), one school, and one saw or grist mill. It should be noted, however, that not all features of interest appear on the historic maps. For example, features of interest were not mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the maps. Table 1 provides a summary of the study area's historic location and associated features depicted on the 1906 historic map of the former Township of Peel.

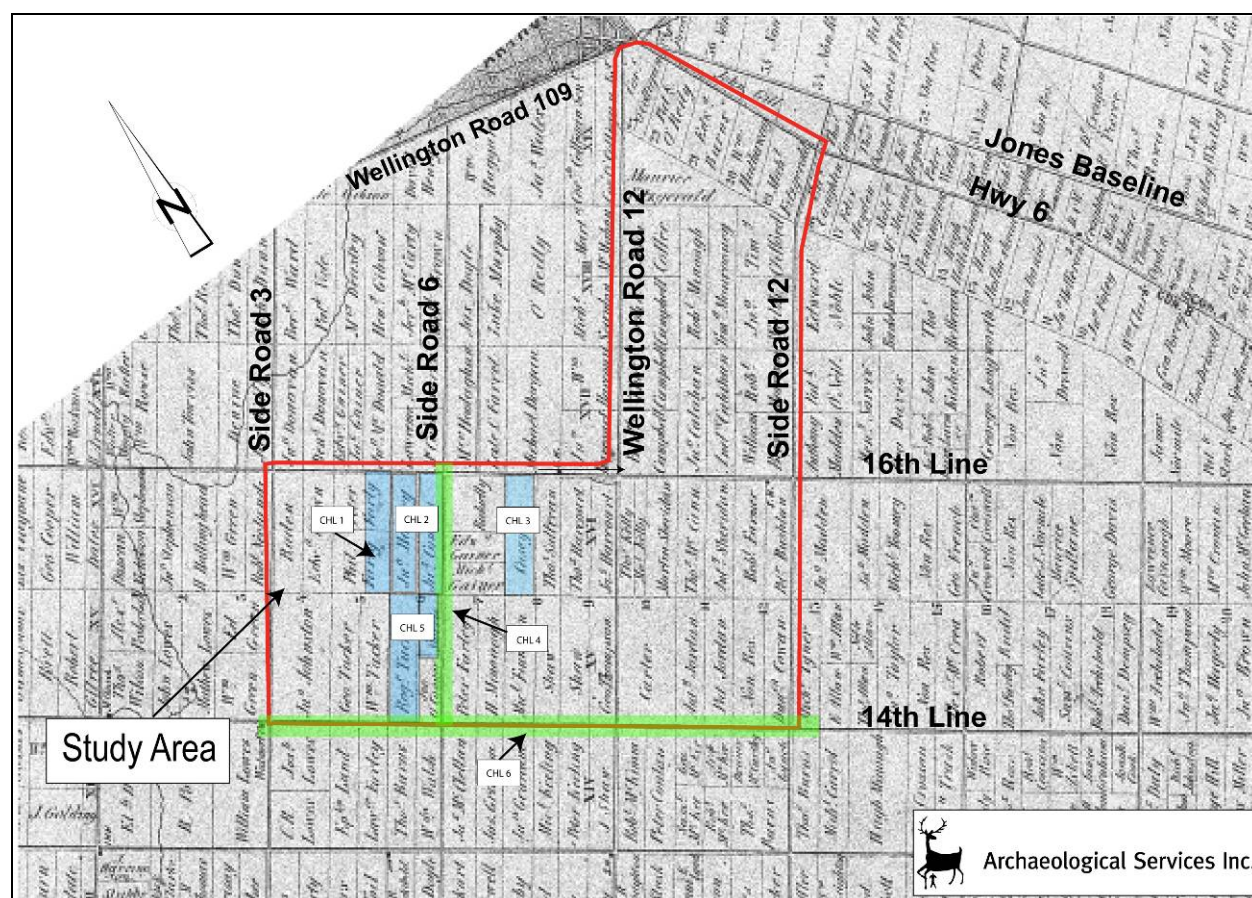


Figure 2: Approximate location of the study area and cultural heritage resources (CHRs) subject to application of Regulation 9/06 of the *Ontario Heritage Act*, superimposed on the former Township of Peel on the 1861 (W.C. Chewett) *Map of the County of Wellington, Canada West*.

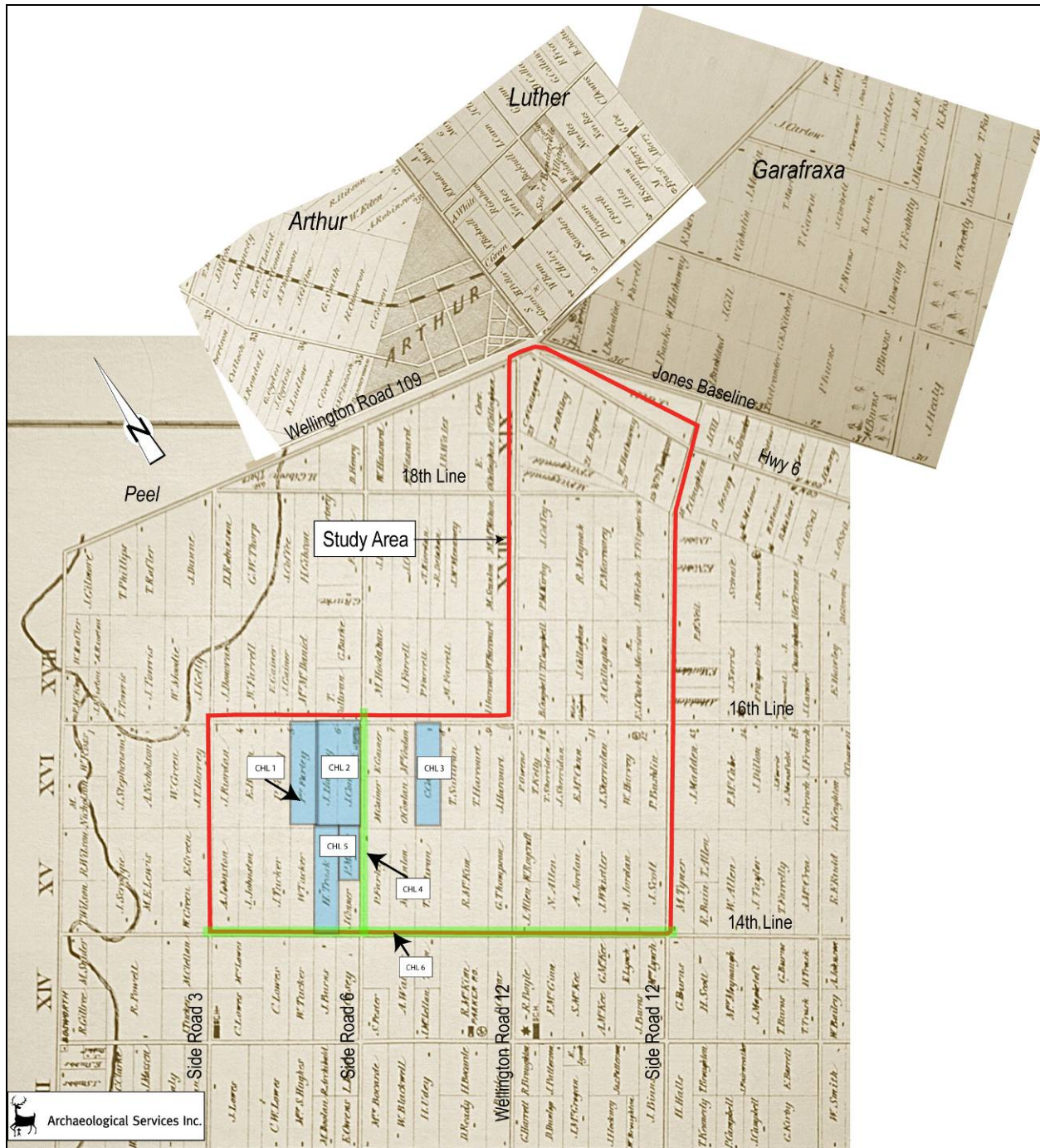


Figure 3: Approximate location of the study area and cultural heritage resources (CHRs) subject to application of Regulation 9/06 of the *Ontario Heritage Act*, superimposed on portions of the former Townships of Peel, Arthur, Luther, and Garafraxa in the 1877 *Illustrated Atlas of the County of Wellington*.



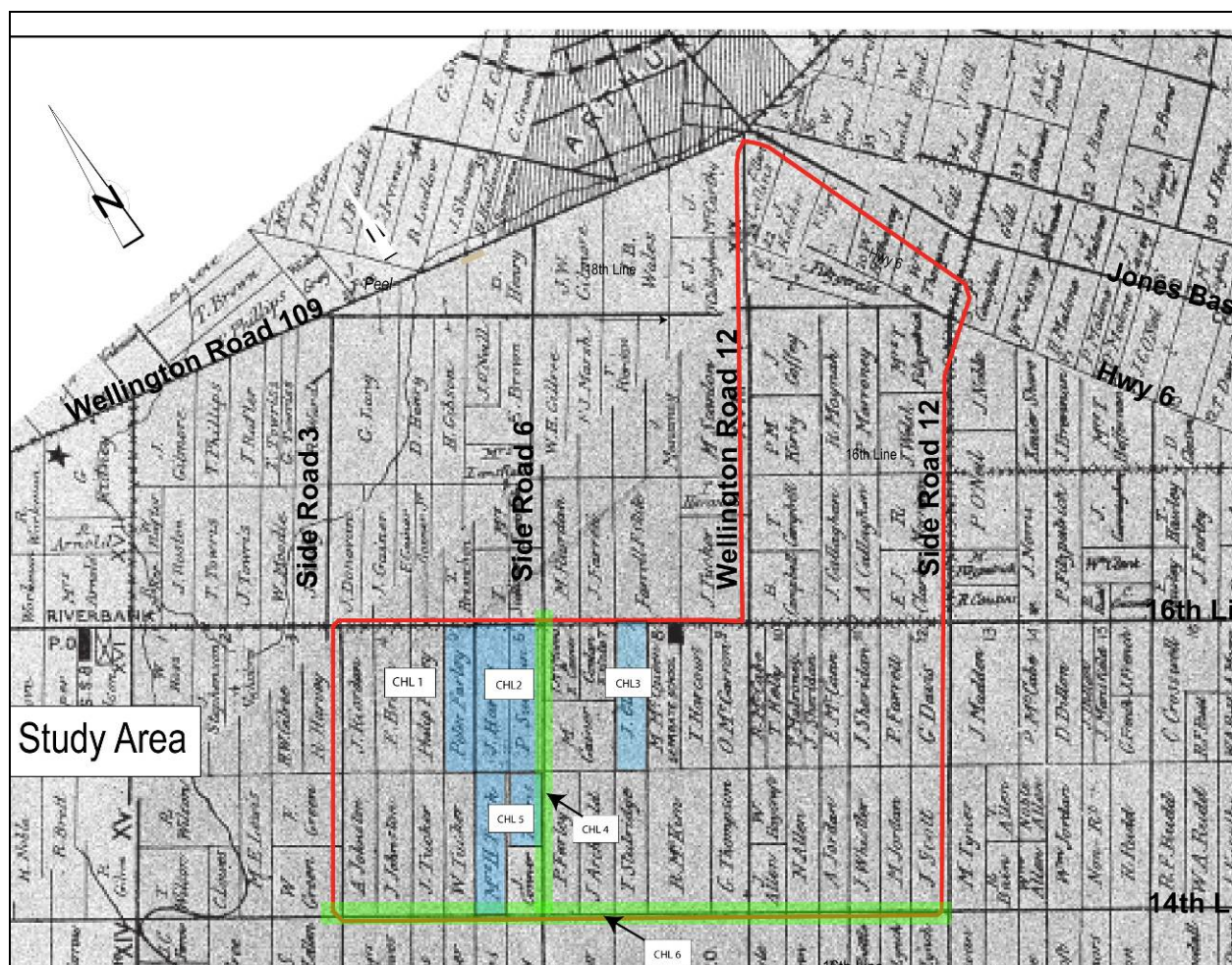


Figure 4. Approximate location of the study area and cultural heritage resources (CHRs) subject to application of Regulation 9/06 of the *Ontario Heritage Act*, superimposed on the former Township of Peel on the 1885 *Map of Wellington County (W.W Evans, Guelph)*

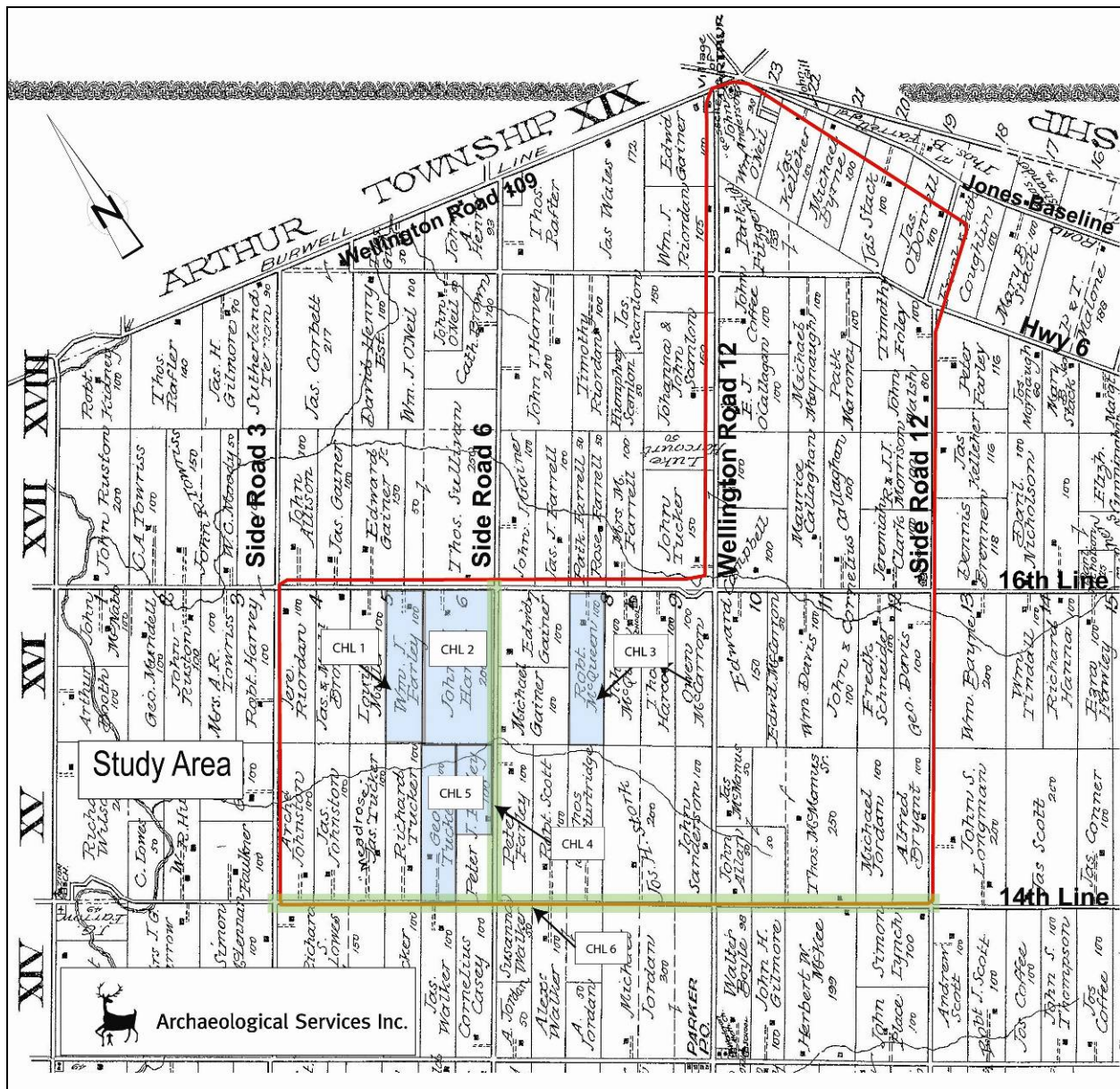


Figure 5. Approximate location of the study area and cultural heritage resources (CHRs) subject to application of Regulation 9/06 of the *Ontario Heritage Act*, superimposed on the former Township of Peel on the 1906 Map of Wellington County in the *Historical Atlas of the County of Wellington*



Table 1: Summary of 1906 Property Owners and Historic Features within the Study Area			
Con.#	Lot#	Property Owner(s)/Resident(s)	Historic Feature(s)
<i>Peel Township</i>			
XIV	4	Mrs. Lowes (north half)	Residence
	5	C. Lowes (west half) W. Tucker (east half)	Residence ---
	6	J. Burns (west half) C. Casey (east half)	Residence Residence
	7	A. Walker (north half)	---
	8	T. Sun (northwest quarter) R. McKim (east half)	Residence ---
	9	R. McKim (west half) J. Canrar (east half)	--- ---
	10	R. Boyle (west half) F. McGuire (east half)	--- ---
	11	S. McKee (west half) G. McKee (northeast quarter)	--- Residence
	12	E. Lynch (west quarter) Mrs. Lynch (east quarter)	Residence Residence
XV	4	A. Johnston (west half) J. Johnston (east half)	Residence Residence
	5	J. Tucker (west half) W. Tucker (east half)	Residence Residence
	6	H. Trask (west half) J. Conner (southeast quarter) P. Morris (northeast quarter)	Residence Residence Residence
	7	P. Farley (west half) Mrs. Hanlon (east half)	Residence ---
	8	T. Sullivan (west half) R. McKim (east half)	Residence ---
	9	R. McKim (west half) G. Thompson (east half)	--- Residence
	10	J. Allen (southwest quarter) W. Raycroft (northwest quarter) N. Allen (east half)	Residence --- ---
	11	A. Jordan (west half) W. Whistler (east half)	Residence ---
	12	M. Jordan (west half) J. Scott (east half)	Residence Residence
XVI	4	J. Riordan (west half) E. Brown (east half)	Residence Residence
	5	P. Farley (west half) Pte. Farley (east half)	Residence Residence
	6	J. Harvey (west half) J. Conlan (east half)	--- School
	7	M. Gainer (southwest quarter) E. Gainer (northwest quarter) O. Conlan (southeast quarter) Mrs Conlan (northeast quarter)	--- Residence --- ---
	8	C. Casey (west half) T. Sullivan (east half)	Residence Residence
	9	T. Harcourt (west half) J. Harcourt (east half)	Residence Residence; Roadscape



Table 1: Summary of 1906 Property Owners and Historic Features within the Study Area			
Con.#	Lot#	Property Owner(s)/Resident(s)	Historic Feature(s)
	10	P. Owens (west quarter) T. Kelly (centre-west quarter) T. Sherridan (centre-east quarter) J. Sherridan (east quarter)	Residence Residence Residence Residence
	11	E. McCann (west half) J. Sherridan (east half)	Residence Residence
	12	W. Harvey (west half) P. Bushlin (east half)	Residence; Saw or Grist Mill Residence
XVII	10	B. Campbell (south half) T. Campbell (north half)	Residence Residence
	11	[---] Callaghan (southwest corner) J. Callaghan (remainder of west half) A. Callaghan (east half)	Residence Residence Residence
	12	E.J. Clarke (south half) R. Morrison (north half)	Residence Residence
XVIII	10	P.M. Kirby (south half) J. Col. Tey (north half)	Residence Residence
	11	R. Moynak (west half) P. Marroney (east half)	Residence Residence
	12	J. Welsh (south half) T. Fitzpatrick (north half)	Residence Residence
XIX	9	E. O'Callaghan (south half) Cars. O'Callaghan (north half)	--- ---
	10-12	M. Fitzgerald F. Fitzgerald	Residence Residence
B	18	P. Coughlan	Residence
	19	W. Thompson	Residence
	20	W. Hathaway	Residence
	21	E. Byrne	Residence
	22	P.O'Riley	Residence
	23	C. O'Callaghan	Residence

3.4 Existing Conditions

In order to make a preliminary identification of existing built heritage resources and cultural heritage landscapes within the study area, the Ministry of Culture's Ontario Heritage Properties Database was consulted. The Clerk's Department at the Townships of Mapleton and Wellington North were also contacted and the community websites were consulted to collect relevant data. A review of the provincial database revealed that there were no heritage properties designated under the *Ontario Heritage Act* within or adjacent to the study area. Communications with the Townships also confirmed that no properties located in or abutting the study area have been designated under Part IV or V of the *Ontario Heritage Act* or listed on a municipal heritage register.²

² Patty Sinnamon, CAO/Clerk at Mapleton Township, telephone communication, July 6 2010; Lorraine Heinbuch, Clerk at Township of Wellington North, telephone communication July 7 2010. The Townships of Mapleton and Wellington North do not have inventories of cultural heritage resources.

A field review was undertaken by Rebecca Sciarra, ASI in July 2010 to document the existing conditions of the study area and to identify if any previously unidentified cultural heritage resources were located in the study area and which would be subject to potential impacts. The July 2010 field review was conducted to collect information necessary to describe the existing conditions of the entire study area. Data and photographic documentation was collected to identify cultural heritage resources that may be directly or indirectly impacted by the undertaking. In this regard, the field review focused on entire lots where turbines, access roads, underground collector wires, transformers, and overhead wires are proposed (based on spatial data received July 7th, 2010). The field review was also used to consider the cultural heritage landscape potential of the study area as a whole.

A secondary field review was conducted by Mary-Cate Garden, Cultural Heritage Specialist, ASI, in October 2010 to collect additional data pertaining to resources expected to be impacted and which would be subject to application of Regulation 9/06, assessment of impacts, and development of mitigation measures where appropriate and feasible. Data collection was conducted from publicly accessible right-of-ways.

The overall study area can be described as generally rural-agricultural in character and setting. It is comprised of level, gently undulating fields that have been carved out into large parcels known as “long hundreds”. These parcels run back from the road, with approximately 300 metre frontages and depths of approximately 1.3 kilometres (Plate 1). In some cases, these large parcels have been severed to accommodate modern residential subdivision or have been combined for large scale agricultural operations (Plate 2). The study area is also characterized by a series of meandering watercourses and associated valleylands (Plate 3). These watercourses are tributaries of the Conestogo River.

The study area is situated below the historic settlement of Arthur but is physically and visually disconnected from it by Highway 109 (Plate 4) and is located east of the former hamlet of Riverbank. A number of nineteenth and early twentieth century farmsteads and associated agricultural complexes are located along the various concession roads, all of which are considered historic thoroughfares. In many cases, these older farm complexes continue to be actively farmed and continue to be situated on large parcels of land and retain landscape features such as long, tree-lined entrance drives, generous setbacks from the road right-of-way, and vegetative screening and windbreaks at property boundary lines. The study area also illustrates a wide range of development of modern and large scale agricultural operations as well as mid-to-late twentieth century residential construction. Overall, the study area can be considered a rural agricultural landscape that is in transition.

Table 2 identifies cultural heritage resources located in the study area which were identified as having the potential to be impacted by the undertaking. Section 6.0 provides location mapping of these resources.





Plate 1: Northwest across flat terrain from Sideroad 6, approximately 740 m north of 14th Line.



Plate 2: Example of mid-twentieth century residential subdivision and construction on the west side of Wellington Road 12, just south of 16th Line.



Plate 3: Looking west at meandering tributary and vegetation from Sideroad 5, approximately 1.3 km north of 14th Line.



Plate 4: North at Wellington Road 109 and Wellington Road 12 intersection, showing physical and visual barrier between study area and Arthur, which is located to the north.





Table 2: Conestogo Wind Energy Centre – Identified Cultural Heritage Landscapes (CHLs)					
Feature	Location	Feature Type	Recognition/Reference(s)	Photo	Potential Impact
CHL 1	7810 16 th Line	Farm Complex	Identified during the field review.		The proposed undertaking has the potential to alter the nineteenth century, agricultural setting of this property through the introduction of Turbine No. 1 and associated access road at the rear of the parcel.
CHL 2	7788 16 th Line	Farm Complex	Identified during the field review.		The proposed undertaking has the potential to alter the nineteenth century, agricultural setting of this property though the introduction of: a transformer along its eastern edge approximately 300 – 400 metres east of the agricultural complex; Turbines No. 2 and 3 and access roads at the rear of the parcel; an underground electrical collector along the property’s eastern boundary; a temporary construction laydown area at the rear of the parcel; and a crane path at the rear of the parcel.





Table 2: Conestogo Wind Energy Centre – Identified Cultural Heritage Landscapes (CHLs)					
Feature	Location	Feature Type	Recognition/Reference(s)	Photo	Potential Impact
CHL 3	7708 16 th Line	Farm Complex	Identified during the field review.		The proposed undertaking has the potential to alter the early twentieth century, agricultural setting of the property through the introduction of Turbine No. 6 and associated access roads.
CHL 4	Sideroad 6	Roadscape	Identified during the field review.		The proposed undertaking has the potential to alter this historic thoroughfare, which continues to function as a roadscape evocative of its nineteenth century origins, through likely upgrading from Sixteenth Line southerly to the access roads for Turbine Nos. 7 and 8. The upgrades will include widening to a width of 6 m and upgrading of culverts if required. The culverts were not identified as individual cultural heritage resources.

Table 2: Conestogo Wind Energy Centre – Identified Cultural Heritage Landscapes (CHLs)					
Feature	Location	Feature Type	Recognition/Reference(s)	Photo	Potential Impact
CHL 5	7793 14 th Line	Farm Complex	Identified during the field review.		The proposed undertaking has the potential to alter the nineteenth century, agricultural setting of the property through the introduction of: Turbines No. 7 and 8, associated access roads, and crane paths.
CHL 6	14 th Line	Roadscape	Identified during the field review.		The proposed undertaking has the potential to alter this historic thoroughfare, which continues to function as a roadscape evocative of nineteenth century origins, through potential project construction related alterations.

3.5 Application of Regulation 9/06 of the Ontario Heritage Act

In accordance with Section 23 of Ontario Regulation 359/09 of the *Environmental Protection Act*, cultural heritage resources that are identified as having the potential to be impacted by the undertaking are subject to application of heritage evaluation criteria contained in Regulation 9/06 of the *Ontario Heritage Act*. For the purposes of this report, and based on consultation with Ministry of Tourism and Culture staff, application of evaluation criteria was based on consideration of readily accessible archival data available at the Wellington County Museum and Archives, including review of local history sources and maps, and data collected from public right of ways regarding each feature's landscape composition, buildings, and potential heritage attributes. Permission to enter properties identified as cultural heritage resources and which may be subject to impacts was not received.

The following sections provide the results of background research and application of Regulation 9/06 on resources that were identified in the Initial Heritage Assessment as being potentially subject to impacts.

3.5.1 Results of Background Research

East Half of Lot 5, Concession 16 (CHL 1)

Granted to Peter Farley as a crown patent (Mountjoy 1999:512), the 1861 Chewett map lists him as owner of all of Lot 5, Concession 15. The Farley family continued to hold this property throughout the late nineteenth and early twentieth century. By 1877 Peter Farley's holding were confined to the west half of the lot but by this time had extended fully southward to the 14th Concession. At this time, another Farley (J) was in possession of all of the east half of Lot 5. One structure is depicted on Peter Farley's lot at this time, located along Concession 16. A review of the 1885 map suggests that Peter Farley had moved to the east side of the lot by this time while Philip Farley held the west half. By 1906, William J Farley was in possession of 100 acres of the east half of Lot 5, Concession 16 and a single structure is illustrated. It is quite likely that the subject farmhouse identified as CHL 1 was constructed between 1877 and 1906 and was the second structure to be built on Lot 5, Concession 16. A brief description of this lot is provided in Mountjoy and a photo of the Farley family is provided therein.

Lot 6, Concession 16 (CHL 2)

Currently operating as a dairy farm, the barn bears the legend 'Hollens'. By 1861 Lot 6 was divided between two landholders: Jas Conlan (east half) and Jno Harvey. A review of the 1877 atlas indicates that both these lots were still in the possession of the same owners and that a school house had been constructed along the east property line. The 1885 atlas map lists public buildings including schools but the previously depicted school seems to have disappeared by this time. Also at this time, while the west half has remained in J Harvey's hands, the east had been transferred to P Sullivan. Finally, the 1906 map shows that J Harvey had by this time acquired all of Lot 6. A house and driveway are depicted on this lot on the 1906 map and their cartographic location suggest that this may be the extant farmhouse identified as CHL 2. Based on this data, it is possible that the subject farmhouse dates to the mid-nineteenth century when Jno Harvey is shown to have first been in possession of the subject lot. However, based on its current massing and style it appears that it was likely constructed towards the end of the nineteenth century to replace an earlier structure. Alternatively, the extant farmhouse may have been built around an earlier structure.



West Half of Lot 8 North, Concession 16 (CHL 3)

This property is currently owned by the Beers family and is home to a large agribusiness specialising in seeds. Like many of the properties in the subject area, these lots have changed hands relatively few times. The west half of Lot 8 has been in the Beer family since 1952. Mountjoy (1999:513) notes the crown transfer to William Moodie in 1878; however, on the 1861 Chewett map the lot is shown listed against “Casey”. The 1877 atlas also lists C Casey as owner of the land and depicts a structure located near the north property line (along the road). By 1885, the subject lot had transferred to a J Clark. During his last quarter of the nineteenth century both halves of Lot 8 were sold to the McQueen family and by 1906 John McQueen is listed as owner of the west half of Lot 8, also known as the ‘school lot’ as a school was once extant there, and Robert McQueen as owner of the east half. Notably the structure depicted on Robert McQueen’s holdings on the 1906 map shows a structure at the end of a driveway in the configuration of the extant farmhouse. A brief description of this lot is provided in Mountjoy (1999) and a photo of a member of the Beer family and the subject residence in 1965 is provided therein. Based on the location, size, and massing of the extant farmhouse, identified as CHL 3, it was likely constructed in the late nineteenth century/early twentieth century to replace an earlier residential structure which was depicted immediately adjacent to present day 16th Line on the 1877 historic atlas map.

Lot 6, Concession 15 (CHL 5)

A review of the historic mapping shows that by 1861, Lot 6, Concession 14 was held by Roger Tucker, Jno. O’Connor and Morris, with Tucker in possession of the west half and O’Conner and Morris in possession of the southeast and northeast halves respectively. Between 1877 and 1885, the east half of the lot did not change ownership however, an H. Trask is depicted on the west half of the lot between these years. By 1906, historic mapping confirms that west half had returned to the Tucker family and an entrance drive and farmhouse is depicted on this portion of the lot in the approximate location as the subject farmhouse identified as CHL 5. By 1906 the east half of lot is shown to be in the possession of Peter Farley.

Sideroad 6 and 14th Line (CHL 4 and CHL 6)

A review of historic mapping confirms that both of these roads date to at least 1861, as depicted on the Chewett Map of the County of Wellington. No additional information could be retrieved on these features at local archival holdings. However, it is highly likely that these roads would have been plotted at the time of township survey as primary north-south and east-west transportation corridors and would have been carved out of the landscape in the mid nineteenth century contemporaneously with the transfer of crown deeds to early settlers.



3.5.2 Results of Application of Regulation 9/06 of the *Ontario Heritage Act*.


Table 3: Application of Regulation 9/06 of the <i>Ontario Heritage Act</i> : on Cultural Heritage Landscapes Potentially Impacted by the Undertaking					
Feature	Location	Feature Type	Exterior and Landscape Description	Results of Application of Regulation 9/06 of the <i>Ontario Heritage Act</i>	Photos
CHL 1	7810 16 th Line	Farm Complex	<p>This property contains a mid-to-late nineteenth century 1 ½ storey Ontario Gothic farmhouse of brick construction with a stucco exterior and metal roof. There are two interior brick chimneys, each located at the gable ends. The house sits on fieldstone foundations which have been parged across the front elevation. The house has retained original window trim and front elevation window arrangements. All windows, however, are modern. Similarly, although the door is modern, the fanlight opening and door openings appear to be original. Its front façade features a boldly pitched central dormer with pointed arch window. The dormer features decorative vergeboard with a ‘wagon wheel’ design which may be a replacement for earlier gingerbread trim. The ground floor windows and door are arched and feature brick sills. A single storey ‘wood shed’ attached to the rear elevation was under construction at the time of the field review. Multiple outbuildings are extant on the property and these include a number of small outbuildings—among them a frame building with a gable roof and a ‘Quonset hut’ style semi circular corrugated metal structure. The largest of these is a frame drive shed which features a gable roof, vertical planking and two 12 pane windows on the north elevation. Located to the rear of the shed is a very large, banked barn which dates to the nineteenth century. This structure features a gable roof clad in metal roofing materials with a vertical plank exterior and sits on fieldstone foundations. Overall, the property is fairly level, extending back from the 16th Line; however, there is a slight drop to the rear of the house giving the house a slightly elevated position over the outbuildings. The house, shed and workspace behind the house is accessed by a long, tree-lined entrance drive. Fields surround this house in all directions and are actively cultivated.</p>	<p>Consideration of criteria contained in Regulation 9/06 confirmed that this property may be considered to retain cultural heritage value. The primary residence serves as a fairly good example of late nineteenth century residential design and construction methods and serves as a good example of the Ontario Gothic architectural style. The structure has been sympathetically modified over time. A nineteenth century banked barn is located to the rear of the house, and together with the property’s tree lined entrance drive and generous set back serves as a relatively intact example of a nineteenth century agricultural landscape that helps maintain the former nineteenth century rural character of the area. The property likely retains moderate associative values given that it is referenced in a local history source and therefore can also be considered to be of potential value to the local community.</p>	





Table 3: Application of Regulation 9/06 of the <i>Ontario Heritage Act</i> on Cultural Heritage Landscapes Potentially Impacted by the Undertaking					
Feature	Location	Feature Type	Exterior and Landscape Description	Results of Application of Regulation 9/06 of the <i>Ontario Heritage Act</i>	Photos
CHL 2	7788 16 th Line	Farm Complex	<p>This property contains a late nineteenth century 1 ½ storey Ontario Gothic farmhouse of frame or brick construction. It features a plaster or stucco exterior on an L-shaped footing with projecting bay on the north elevation. The house features an external brick chimney located on the east gable end. All visible windows are new but feature original openings. The windows are slightly arched with stone stills. There appear to be two entrances on the north elevation with the west one, on the gable end of the ‘L’, likely dating to the construction of the house. The door itself is new but features a transom that likely dates to the construction of the house. The east entrance appears to be a later modification. Remains of decorative gingerbread and vergeboard are extant under the eaves of the projecting bay. Its foundations are unknown; however, the footings across the front appear to have been parged with an inscribed block design. A front porch with a shed roof, clad in metal roofing material runs across the front of the house and wraps around to the west. A modern addition with a brick exterior has been constructed on the rear of the residence. The adjacent barn complex appears to be of modern construction, featuring two concrete silos and a gable roofed barn. A long, tree-lined entrance drive provides access to the structure. Lands to the south are actively cultivated.</p>	<p>Consideration of criteria contained in Regulation 9/06 confirmed that this property may be considered to retain cultural heritage value. The primary residential structure dates to the mid-to-late nineteenth century but has been externally altered and as such does not serve as a very good example of late nineteenth/early twentieth century materials, construction methods, or design. Examination of available local history sources did not reveal significant historical associations with this property. However, it should be noted that a school was once located at the northeast corner of this lot; however, it is no longer extant. Additionally, based on historic mapping (1877 and 1885) it appears that the subject school house was only in operation for a brief period of time. Information beyond data contained on the 1877 historic atlas map could not be found at local archives regarding this resource. Although many of the outbuildings on the property are of modern construction and the property’s setting has been altered to some extent, the early twentieth century residence, tree-lined entrance drive, and agricultural setting help maintain vestiges of the former rural nineteenth century character of the area.</p>	   













Table 3: Application of Regulation 9/06 of the <i>Ontario Heritage Act</i> on Cultural Heritage Landscapes Potentially Impacted by the Undertaking					
Feature	Location	Feature Type	Exterior and Landscape Description	Results of Application of Regulation 9/06 of the <i>Ontario Heritage Act</i>	Photos
CHL 3	7708 16 th Line	Farm Complex	The site of “Beers Seeds”, a large commercial agricultural operation, this property contains a late nineteenth or early twentieth century 2 storey farmstead of frame construction. The floor plan is, overall, square with a corner cut out on the north elevation. A modern deck has been added to the second storey. The residence features vinyl siding and a central single brick chimney stack. The roof is clad in asphalt shingles and is hipped. Its foundations are unknown. A large complex of agricultural buildings is located to the east of the residence, and contains early-to-late twentieth century structures. A large driveshed or garage sits between the house and the barn complex. Two of these barns were built in the 1980s and one was an earlier replacement for an historic barn. The property is accessed by a long, tree-lined gravel entrance drive; the house sits to the west of the driveway with the agricultural buildings located to the east. The subject property is largely flat with the house sitting on a very small rise above the fields and the ground rising slightly to the south. The house is screened from the road by large, mature conifers and sits in the middle of cultivated fields. Lands to the south and north are actively cultivated.	Consideration of criteria contained in Regulation 9/06 confirmed that this property may be considered to retain cultural heritage value. The primary residence serves as a moderately good example of early twentieth century farmhouse design. The property also retains moderate associative values given that it was continuously owned by three families since the mid-nineteenth century and has been profiled in a local history source. Although the property features a substantial complex of modern agricultural buildings and its setting has been altered to some extent, the early twentieth century residence, tree-lined entrance drive and agricultural setting help maintain vestiges of the former rural nineteenth century character of the area.	   
CHL 4	Sideroad 6	Roadscape	This road is a historic thoroughfare and retains features and elements associated with the adjacent rural, nineteenth century setting. The road features: a very narrow right-of-way; gravel surface; lacks curbs, ditches or shoulders; and is framed by various hedgerows, vegetative screening, and mature deciduous trees.	Consideration of criteria contained in Regulation 9/06 confirmed that this feature may be considered to retain cultural heritage value. This road is associated with early settlement activities and is contextually important in defining the agricultural character of the area.	 

Table 3: Application of Regulation 9/06 of the <i>Ontario Heritage Act</i> on Cultural Heritage Landscapes Potentially Impacted by the Undertaking					
Feature	Location	Feature Type	Exterior and Landscape Description	Results of Application of Regulation 9/06 of the <i>Ontario Heritage Act</i>	Photos
CHL 5	7793 14 th Line	Farm Complex	This property contains a mid-to-late nineteenth century vernacular farmhouse that has undergone a series of additions to the rear elevation. The structure appears to be of frame construction and features a single central chimney stack. The house features a porch with a shed roof across the front elevation. A number of outbuildings are located to the north of the residence, which feature gable roofs and may be of nineteenth century construction. Of the additions, the one adjacent to the main structure is narrower and forms an ‘L’ shape with the main house. This may suggest that this addition was a ‘summer kitchen’ addition and would be early or contemporaneous with the house. The most northerly of the extensions is a two storey structure with guttering and downspouts. The upper storey appears to over hang the ground floor on the east elevation. Both the house and the complex of agricultural buildings are located at a considerable distance from the road and are almost completely concealed by corn fields and a dense screen of mature deciduous trees. A very long entrance drive provides access to the residence. The property is heavily cultivated.	Consideration of criteria contained in Regulation 9/06 confirmed that this property may be considered to retain cultural heritage value. The residential structure, although difficult to view from public road right of ways, appears to have been substantially modified over time and as such it does not serve as a very good example of a particular design or period of construction. Review of local history sources did not reveal that this property retains documented historical associations. Although the property’s setting has been partially altered through the introduction of modern agricultural buildings, the early twentieth century residence and its substantial set back, and long entrance drive help maintain vestiges of the former rural nineteenth century agricultural character of the area.	   
CHL 6		Roadscape	This road is a historic thoroughfare and retains features and elements associated with the adjacent rural, nineteenth century setting. The road features: a very narrow right-of-way; gravel surface; lacks curbs, ditches or shoulders; and is framed by various hedgerows, vegetative screening, and mature deciduous trees.	Consideration of criteria contained in Regulation 9/06 confirmed that this feature may be considered to retain cultural heritage value. This road is associated with early settlement activities and is contextually important in defining the nineteenth century agricultural character of the area.	 

4.0 IMPACT ASSESSMENT

The results of background historic research and a review of secondary source material illustrate that lands located within the study area were first surveyed and settled in the mid-nineteenth century. The results of data collection examining municipal and provincial heritage inventories confirmed that no properties located within or adjacent to the study area have been designated under Part IV or Part V of the *Ontario Heritage Act* or listed on a municipal heritage register or inventory.

The results of a field survey confirmed that lands within the study area continue to be heavily farmed and generally retain a rural agricultural setting. The study area features a gently undulating topography and several historic thoroughfares including roads that feature: narrow right-of-ways; gravel beds; lack of shoulders, ditches or curbs; and which are framed by hedgerows and mature tree lines. The study area also retains a number of mid-to-late nineteenth century and early twentieth century farm complexes which continue to be used for agricultural production. These properties generally consist of: residential vernacular structures or Ontario Gothic farmhouses; agricultural complexes; windbreaks and vegetative screening; original lot dimensions; rolling topography; long entrance drives, and generous set backs from roads. However, in many parts of the study area, modern, large scale agricultural operations have emerged alongside modern residential subdivision and construction. The study area can be described as a typical, evolving rural landscape, many of which span across southwestern Ontario. Therefore, the overall study area is not considered to be a cultural landscape that retains cultural heritage value. However, within the study area, six individual cultural heritage resources were identified as being subject to potential impacts and were subsequently subject to application of Regulation 9/06 of the *Ontario Heritage Act*. Consideration of evaluation criteria contained in Regulation 9/06 confirmed that these resources retain cultural heritage value to varying degrees. On this basis, these six resources were carried forward to assess impacts of the undertaking and to propose measures to avoid, eliminate, or mitigate the impact where appropriate and feasible in accordance with Section 23 of Regulation 359/09 of the *Environmental Protection Act*.

To assess the potential impacts of the undertaking, features that were considered to retain cultural heritage value to varying degrees, through application of Regulation 9/06 of the *Ontario Heritage Act*, were considered against a range of possible impacts to cultural heritage resources, as outlined in the Ministry of Tourism and Culture document entitled *Screening for Impacts to Built Heritage and Cultural Heritage Landscapes* (March 2010), which include:

- Destruction of any, or part of any, significant heritage attribute or features (I1).
- Alteration that is not sympathetic, or is incompatible, with the historic fabric or appearance (I2).
- Shadows created that alter the appearance of a heritage attribute or change the visibility of a natural feature of plantings, such as a garden (I3).
- Isolation of a heritage attribute from its surrounding environment, context, or a significant relationship (I4).
- Direct or indirect obstruction of significant views or vistas from, within, or to a built and natural feature (I5).
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces (I6).

As part of the process of assessing impacts on the four farm complexes in particular, photomontages and cross-section drawings were prepared for the purposes of analyzing the extent of resulting landscape alteration. These drawings can be found in Appendix B. Table 4 provides a summary of the results of impact assessment.



Table 4: Assessment of Impacts of the Undertaking on Cultural Heritage Landscapes Identified in the Initial Heritage Assessment

Potential Impacts and Recommended Mitigation Measures	CHL 1	CHL 2	CHL 3	CHL 4	CHL 5	CHL 6
I1	Not applicable. No heritage attribute or feature is to be demolished. The resource’s potential heritage attributes are linked with its agricultural setting and nineteenth century structures. None of these features are to be demolished or permanently removed.	Not applicable. No heritage attribute or feature is to be demolished. The resource’s potential heritage attributes are linked with the primary residential structure and its modified nineteenth century agricultural setting. Neither of these features will be demolished or permanently removed.	Not applicable. No heritage attribute or feature is to be demolished. The resource’s potential heritage attributes are linked with the primary residential structure and its modified nineteenth century agricultural setting. Neither of these features will be demolished or permanently removed	The existing road is expected to be widened although the roadbed will remain gravel. There is potential for adjacent vegetation to be permanently removed.	Not applicable. No heritage attribute or feature is to be demolished. The resource’s potential heritage attributes are linked with the primary residential structure and its modified nineteenth century agricultural setting. Neither of these features will be demolished or permanently removed	Not applicable. The existing road is not expected to be impacted by the undertaking.
Recommended Mitigation Measure	None recommended	None recommended	None recommended	Retain existing vegetation and hedgerows where possible and feasible. Maintain a gravel road bed. Develop landscaping designs to utilize native and/or historic materials for berms and/or vegetative screening.	None recommended	Should the existing road be impacted by project related construction, the road should be restored to its existing condition. Document the cultural heritage resource prior to construction activities to serve as a final archival record should the feature be altered during construction activities and to serve as documentary evidence for the purposes of returning the feature to its existing condition.
I2	Introduction of Turbine No. 1 and an associated access road at the rear of the parcel will temporarily alter the setting of the property on the basis that the proposed infrastructure will have a 25 year operating life and will then be decommissioned and lots returned to their existing condition. This temporary alteration is not considered to be significantly unsympathetic or incompatible with the historic fabric or appearance of the lot, warranting significant modifications to the proposed turbine layout and related infrastructure. Stationary ³ components of the wind turbines (base and shaft) occupy a small, non visible footprint and have a massing that is perceptively comparable to existing utility	Introduction of a transformer, Turbines No. 2 and 3, an access road at the rear of the parcel, a temporary construction laydown areas at the rear of the parcel, and a crane path at the rear of the parcel will temporarily alter the setting of the property on the basis that the proposed infrastructure will have a 25 year operating life and will then be decommissioned and lots returned to their existing condition. This temporary alteration is not considered to be significantly unsympathetic or incompatible with the historic fabric or appearance of the lot, warranting significant modifications to the proposed turbine layout and related infrastructure. Stationary components of the wind turbines (base and shaft) occupy a small, non visible footprint and have a massing that is perceptively comparable to existing	Introduction of Turbine No. 6 and an associated access road at the rear of the parcel will temporarily alter the setting of the property on the basis that the proposed infrastructure will have a 25 year operating life and will then be decommissioned and lots returned to their existing condition. This temporary alteration is not considered to be significantly unsympathetic or incompatible with the historic fabric or appearance of the lot, warranting significant modifications to the proposed turbine layout and related infrastructure. Stationary components of the wind turbines (base and shaft) occupy a small, non visible footprint and have a massing that is perceptively comparable to existing utility infrastructure. Additionally, cross section drawings	Road widening will alter the general appearance of the feature although maintenance of a gravel road bed and widening to only 6 m will generally maintain the historic appearance of the road.	Introduction of Turbines Nos. 7 and 8, an associated access road and crane paths will temporarily alter the setting of the property on the basis that the proposed infrastructure will have a 25 year operating life and will then be decommissioned and lots returned to their existing condition. This temporary alteration is not considered to be significantly unsympathetic or incompatible with the historic fabric or appearance of the lot, warranting significant modifications to the proposed turbine layout and related infrastructure. Stationary components of the wind turbines (base and shaft) occupy a small, non visible footprint and have a massing that is perceptively comparable to existing utility	Not applicable. The existing road is not expected to be impacted by the undertaking.

3 Stationary components of the wind turbine were examined with regard to massing and height because they represent permanent and fixed structures that will be introduced into the landscape and which have the potential to alter the visual composition of the landscape.

Table 4: Assessment of Impacts of the Undertaking on Cultural Heritage Landscapes Identified in the Initial Heritage Assessment

Potential Impacts and Recommended Mitigation Measures	CHL 1	CHL 2	CHL 3	CHL 4	CHL 5	CHL 6
	infrastructure. Additionally, cross section drawings illustrate that the height of the wind turbine shaft is not significantly incompatible with heights of existing buildings on the subject and adjacent lots. Although the proposed infrastructure represents a modern intervention in the landscape, these changes are temporary and are not considered to represent significantly adverse and incompatible alterations.	utility infrastructure. Additionally, cross section drawings illustrate that the height of the wind turbine shaft is not significantly incompatible with heights of existing buildings on the subject lot. Although the proposed infrastructure represents a modern intervention in the landscape, these changes are temporary and are not considered to represent significantly adverse and incompatible alterations.	illustrate that the height of the wind turbine shaft is not significantly incompatible with heights of existing buildings on the subject and adjacent lots. Although the proposed infrastructure represents a modern intervention in the landscape, these changes are temporary and are not considered to represent significantly adverse and incompatible alterations.		infrastructure. Additionally, cross section drawings illustrate that the height of the wind turbine shaft is not significantly incompatible with heights of existing buildings on the subject and adjacent lots. Although the proposed infrastructure represents a modern intervention in the landscape, these changes are temporary and are not considered to represent significantly adverse and incompatible alterations.	
Recommended Mitigation Measure	Return lot to its existing condition at the end of the 25 year old operating cycle. Document cultural heritage resource prior to construction activities to serve as a final archival record of the resource prior to alteration.	Return lot to its existing condition at the end of the 25 year old operating cycle. Document cultural heritage resource prior to construction activities to serve as a final archival record of the resource prior to alteration.	Return lot to its existing condition at the end of the 25 year old operating cycle. Document cultural heritage resource prior to construction activities to serve as a final archival record of the resource prior to alteration.	Minimize widening where possible, maintain a gravel road bed, and retain adjacent vegetation and hedgerows where possible. Develop landscaping designs to utilize native and/or historic materials for berms and/or vegetative screening. Document the cultural heritage resource prior to permanent alteration to serve as a final archival record.	Return lot to its existing condition at the end of the 25 year old operating cycle. Document cultural heritage resource prior to construction activities to serve as a final archival record of the resource prior to alteration.	None recommended
I3	Not applicable. Turbine No. 1 is sited approximately 1000 m south of the primary residence, outbuildings, and entrance drive and therefore is not expected to result in the introduction of shadows.	Not applicable. Turbines No. 2 and 3 are sited approximately 1000 – 1600 m south of the primary residence, outbuildings, and entrance drive and the proposed transformer is sited approximately 375 m east and therefore are not expected to result in the introduction of shadows	Not applicable. Turbine No. 6 is sited approximately 1000 m south of the primary residence and therefore is not expected to result in the introduction of shadows.	Not applicable. Road widening is not expected to result in the introduction of shadows.	Not applicable. Turbine Nos. 7 & 8 is sited approximately 700 m north of the primary residence and therefore is not expected to result in the introduction of shadows.	Not applicable. The existing road is not expected to be impacted by the undertaking.
Recommended Mitigation Measure	None recommended	None recommended	None recommended	None recommended	None recommended	None recommended
I4	Not applicable. Introduction of Turbine No. 1 and an access road at the rear of the lot will not isolate heritage attributes.	Not applicable. Turbines No. 2 and 3, an access road, temporary construction laydown area, transformer, and crane path will not isolate heritage attributes.	Not applicable. Introduction of Turbine No. 6 and an access road at the rear of the lot will not isolate heritage attributes.	Not applicable. Road widening will not isolate heritage attributes.	Not applicable. Introduction of Turbine Nos. 7 & 8 and an access road at the rear of the lot will not isolate heritage attributes.	Not applicable. The existing road is not expected to be impacted by the undertaking.
Recommended Mitigation Measure	None recommended	None recommended	None recommended	None recommended	None recommended	None recommended
I5	Introduction of Turbine No. 1 will	Introduction of a transformer, Turbines	Introduction of Turbine No. 6 will	Not applicable. Road widening is	Introduction of Turbine Nos. 7 and	Not applicable. The existing road

Table 4: Assessment of Impacts of the Undertaking on Cultural Heritage Landscapes Identified in the Initial Heritage Assessment

Potential Impacts and Recommended Mitigation Measures	CHL 1	CHL 2	CHL 3	CHL 4	CHL 5	CHL 6
	introduce new visual features into the landscape. However, analysis of photomontages confirms that representative views or vistas of the property, which were identified from the north elevation of the property southerly, will not be obstructed. The turbine will be visible but located in the background and its massing and location is not expected to significantly distort the visual experience of flat, open agricultural land set in a 'long hundred' configuration. Therefore, introduction of this infrastructure does not significantly compromise, or make unintelligible, representative visual experiences of the nineteenth century agricultural landscape.	No. 2 and 3, an access road at the rear of the parcel, a temporary construction laydown area at the rear of the parcel, and a crane path at the rear of the parcel will introduce new visual features into the landscape. However, analysis of photomontages confirms that representative views or vistas of the property, which were identified from the north elevation of the property southerly will not be obstructed. Turbines will be visible but located in the background and at lateral edges of the viewshed and the turbines' massing and location is not expected to distort the visual experience of flat, open agricultural land set in a 'long hundred' configuration. Therefore, introduction of this infrastructure does not significantly compromise, or make unintelligible, representative visual experiences of the nineteenth century agricultural landscape.	introduce new visual features into the landscape. However, analysis of photomontages confirms that representative views or vistas of the property, which were identified from the north elevation of the property southerly, will not be obstructed. The turbine will be visible but located in the background and at lateral edges of the viewshed and the turbine's massing and location is not expected to distort the visual experience of flat, open agricultural land set in a 'long hundred' configuration. Therefore, introduction of this infrastructure does not significantly compromise, or make unintelligible, representative visual experiences of the nineteenth century agricultural landscape.	not expected to obstruct significant views or vistas.	8 and an access road at the rear of the parcel will introduce new visual features into the landscape. However, analysis of photomontages confirms that representative views or vistas of the property will not be obstructed. Turbines will be visible but located in the background and/or at lateral edges of the viewshed and the turbines' massing and location is not expected to distort the visual experience of flat, open agricultural land set in a 'long hundred'. Therefore, introduction of this infrastructure does not significantly compromise, or make unintelligible, representative visual experiences of this nineteenth century agricultural landscape.	is not expected to be impacted by the undertaking.
Recommended Mitigation Measure	<p>The visual impact of the infrastructure should be minimized where possible by maximizing setbacks from structures and through landscape design such as massing and screening.</p> <p>Where possible and should other environmental and noise constraints permit reconfiguration of the proposed turbine layout, Turbine No. 1 should be sited further east of the residential structure for the purposes of concentrating visible components of the infrastructure at lateral edges of the representative viewshed.</p>	The visual impact of the infrastructure should be minimized where possible by maximizing setbacks from structures and through landscape design such as massing and screening.	The visual impact of the infrastructure should be minimized where possible by maximizing setbacks from structures and through landscape design such as massing and screening.	None recommended	The visual impact of the infrastructure should be minimized where possible by maximizing setbacks from structures and through landscape design such as massing and screening.	None recommended
I6	Not applicable. The existing land use is agricultural and is expected to be maintained.	Not applicable. The existing land use is agricultural and is expected to be maintained.	Not applicable. The existing land use is agricultural and is expected to be maintained.	Not applicable. The existing land use is expected to be maintained.	Not applicable. The existing land use is agricultural and is expected to be maintained.	Not applicable. The existing land use is expected to be maintained.
Recommended Mitigation Measure	None recommended	None recommended	None recommended	None recommended	None recommended	None recommended

Table 4: Assessment of Impacts of the Undertaking on Cultural Heritage Landscapes Identified in the Initial Heritage Assessment

Potential Impacts and Recommended Mitigation Measures	CHL 1	CHL 2	CHL 3	CHL 4	CHL 5	CHL 6

5.0 CONCLUSIONS AND RECOMMENDATIONS

The proposed renewable energy infrastructure has the potential to impact cultural heritage resources in a variety of ways. Impacts can include: direct impacts that result in the loss of resources through demolition or alteration, or the displacement of resources through relocation; and indirect impacts that result in the disruption of resources by introducing physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting. Four nineteenth century farm complexes and two roadscapes were identified as having the potential to be impacted by the undertaking. These resources were carried forward for application of Regulation 9/06 of the *Ontario Heritage Act* in accordance with Section 23 of Regulation 359/09 of the *Environmental Protection Act*. Based on the results of background research and information about the resources collected from publicly accessible road right-of-ways, application of Regulation 9/06 suggests that these resources are of cultural heritage value to varying degrees. Based on this result, impacts of the undertaking on the six resources were assessed for the purposes of determining their significance and to accordingly propose measures to avoid, eliminate, or mitigate impacts where appropriate and feasible.

The results of impact assessment confirmed that the four farm complexes have the potential to have their setting temporarily altered and that new visual features will be introduced on each of the lots. These impacts were not found to represent permanent, adverse, and significantly incompatible alterations that would irreversibly compromise these resources' heritage attributes. On this basis, and given that the current turbine layout and related infrastructure have been developed to address required setbacks from roads, property lines, woodlots, watercourses, and known archaeological resources and to comply with noise constraints, mitigation measures that are appropriate and feasible for minimizing the extent of visual alteration to these resources may include maximizing setbacks from structures and utilizing landscape designs such as massing and screening. In the case of CHL 1, it is further recommended that where possible and should other environmental and noise constraints permit reconfiguration of the proposed turbine layout, Turbine No. 1 should be sited further east of the residential structure for the purposes of concentrating visible components of the infrastructure at lateral edges of the representative viewshed. Additionally, to ensure that alterations to these resources are temporary and that lots will be returned to their existing condition following decommissioning, it is recommended that the four farm complexes be subject to heritage recording in advance of construction activities. Permission to enter the four farm complexes should be secured for the purposes of conducting photographic documentation of built heritage resources and cultural heritage landscape elements located within the entire limits of the property. Detailed land use histories should be included in the heritage recordings of the four farm complexes.

Of the two roadscapes that were evaluated to retain cultural heritage value, one is expected to be altered through widening (CHL 4) and the other has the potential to be impacted through project related construction (CHL 6). Impacts to CHL 4 were determined to represent permanent impacts to the resource however these impacts can be mitigated through minimizing the extent of widening, maintaining a gravel road bed, preserving extant vegetation and hedgerows where possible, and employing native species and/or historic plant materials for new berms and/or vegetative screening. It is further recommended that this resource be subject to heritage recording in advance of construction activities to serve as a final record of the resource prior to permanent alteration. Impacts to CHL 6 are not expected at this time, however, it is recommended that should the resource be altered during construction, it should then be returned to its existing condition. It is further recommended that this feature be subject to heritage recording in advance of construction activities to ensure that the resource is appropriately returned to its existing condition should it be altered during project construction activities. Heritage recordings of the two roadscapes should include photographic documentation, a township history, and information regarding development of the local road network, where available



This report should be submitted to the Ministry of Tourism and Culture for review and comment and future heritage recordings should be produced on archival paper and submitted to the Clerk in the Township of Mapleton and at an appropriate local repository.



6.0 LOCATION MAPPING OF IMPACTED CULTURAL HERITAGE RESOURCES

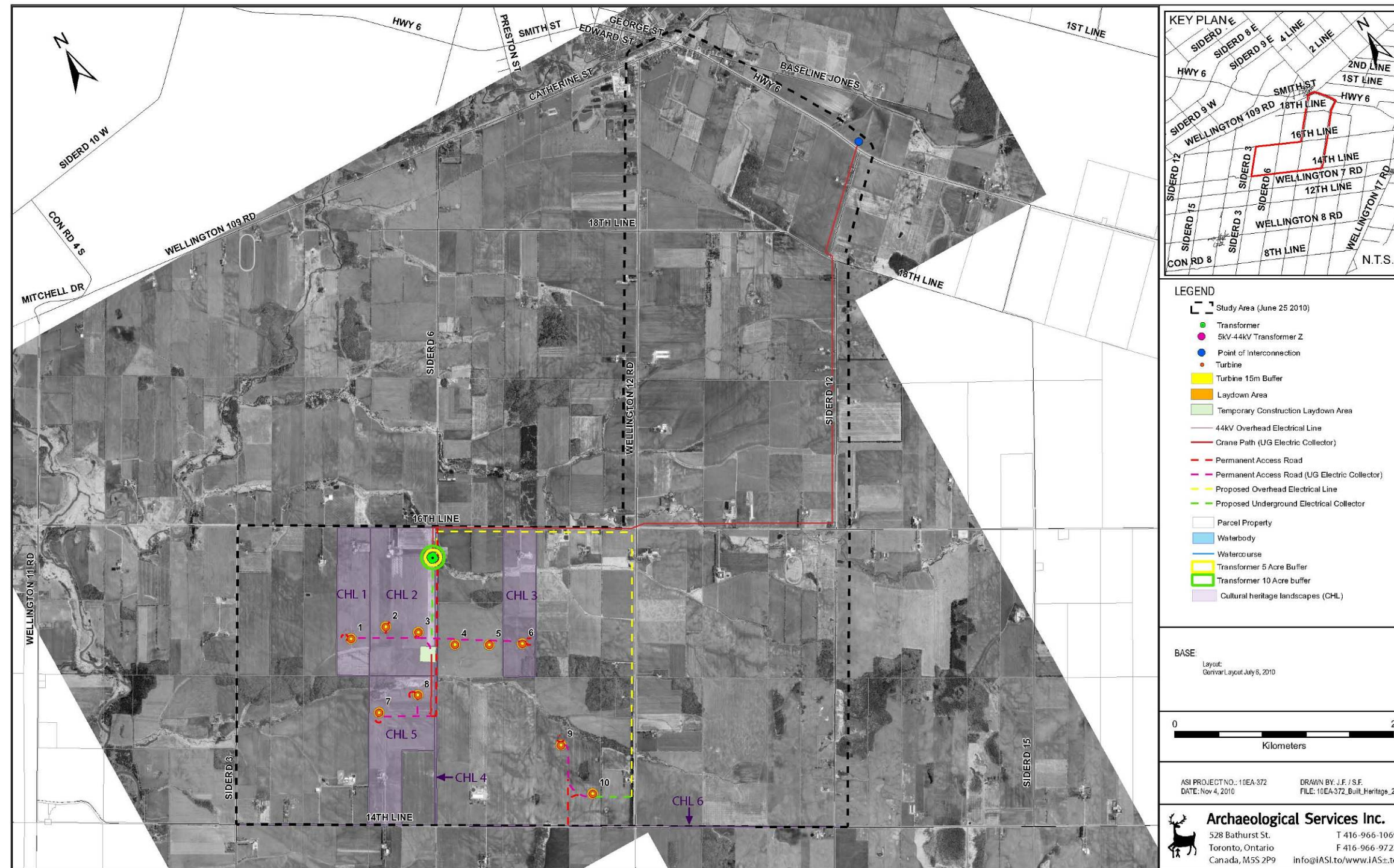


Figure 6: Key plan of the Conestogo Wind Energy Centre showing extent of study area, proposed infrastructure, site context, and impacted cultural heritage landscapes (CHLs).

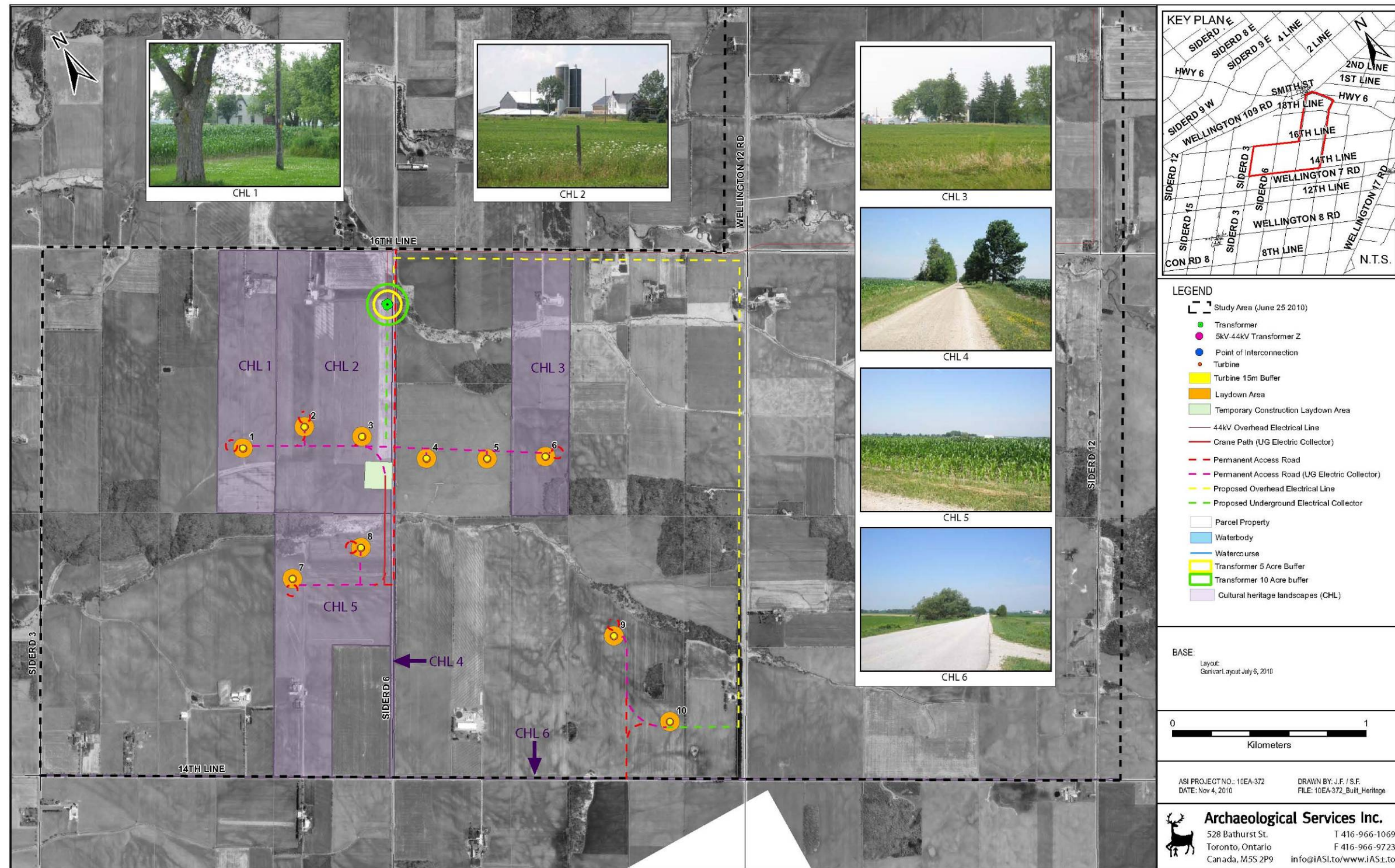


Figure 7: Detail of cultural heritage resources impacted by the Conestogo Wind Energy Centre.

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APPENDIX A: PROJECT PROPONENT CONTACT INFORMATION



Tom Bird
Project Manager, Environmental Services
NextEra Energy Canada
5500 North Service Road, Suite 205
Burlington, Ontario
L7L 6W6

Thomas.bird@nexteraenergy.com

Business Phone: 905-335-4904

Business Fax: 905-335-5731



APPENDIX B: PHOTOMONTAGES AND PROFILE DRAWINGS





Figure 8: Photomontage looking south, showing proposed turbine #1 (behind house) and turbine #2 to left (east) on CHL 1.



Figure 9: Photomontage looking south showing right to left (west to east) proposed turbines #1, #2 and part of proposed turbine #3 on CHL 2.



Figure 10: Photomontage looking south showing proposed turbines from right to left (west to east) proposed turbine #5; proposed turbine #6 at left of driveway (obscured); and in distance behind barns, proposed turbines #9 and #10 on CHL 3.



Figure 11: Photomontage looking north showing right to left (east to west) proposed turbines #5, #4, #8, #3, proposed turbine #2 down lane (behind trees) and proposed turbine #7 (behind trees) on CHL 5.

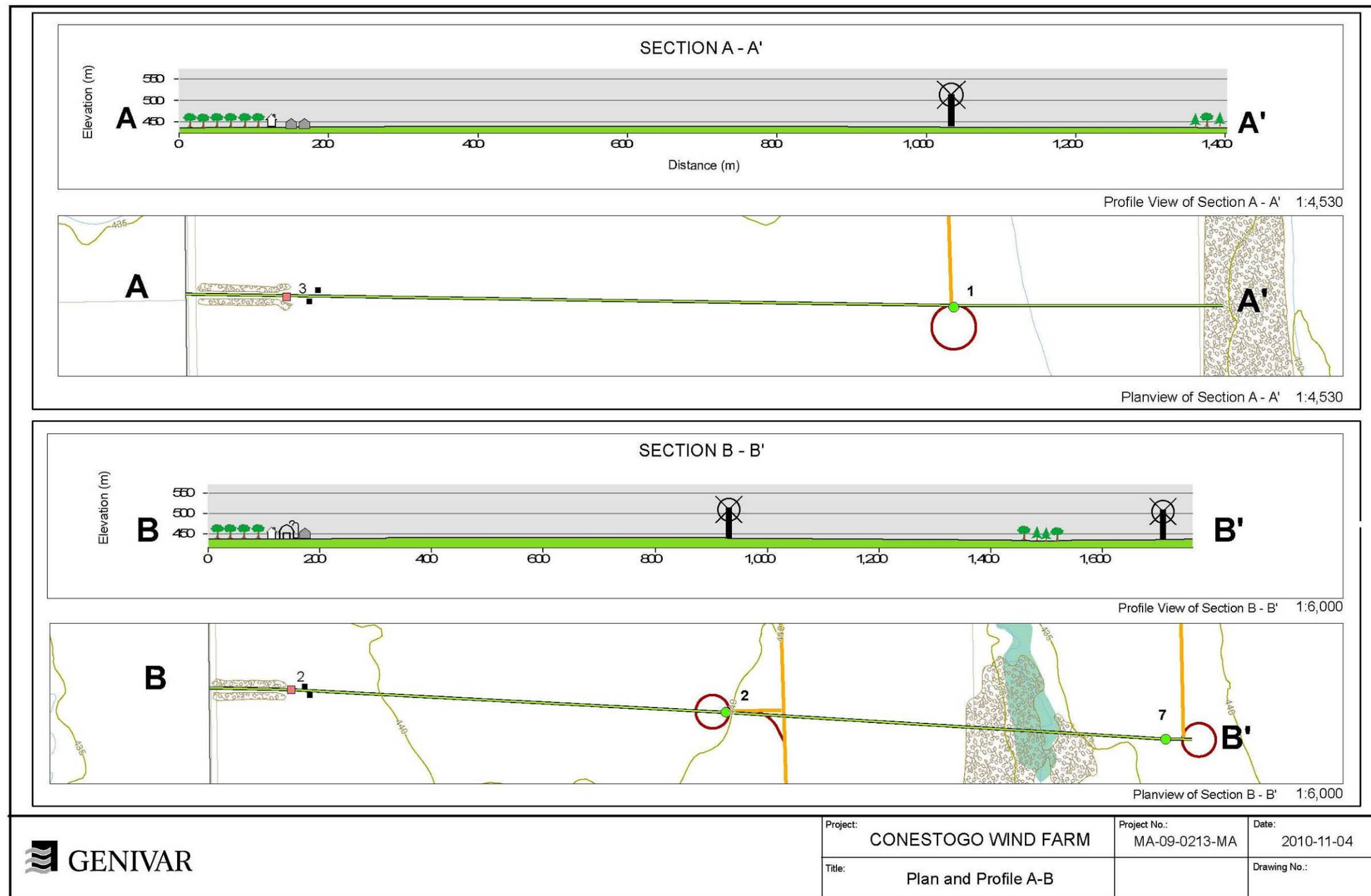


Figure 12: Plan and profile drawings of CHL 1 and CHL 2 illustrating general landscape composition of lots with respect to height of existing structures.

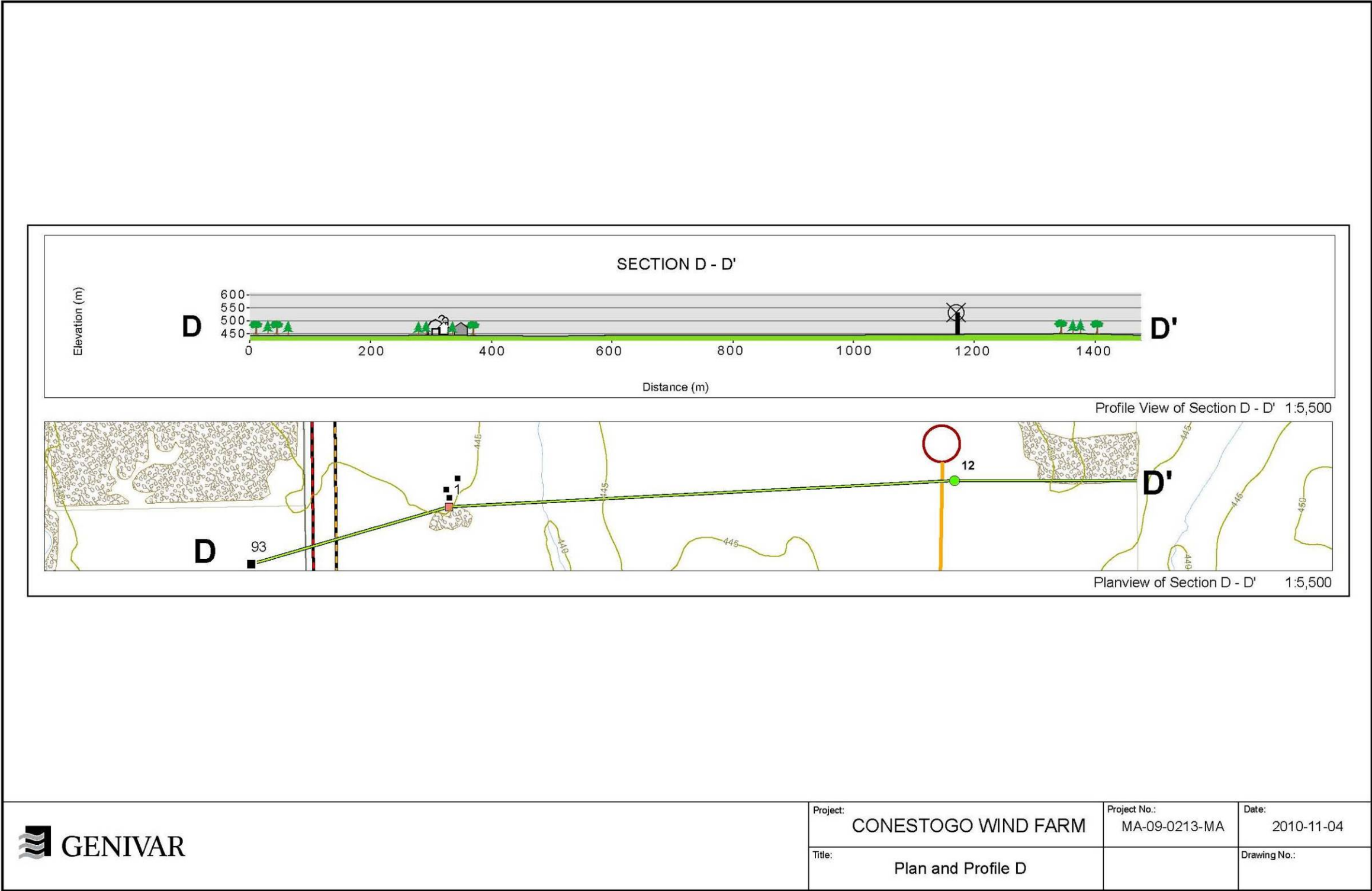


Figure 13: Plan and profile drawings of CHL 3 illustrating general landscape composition of lot with respect to height of existing structures.

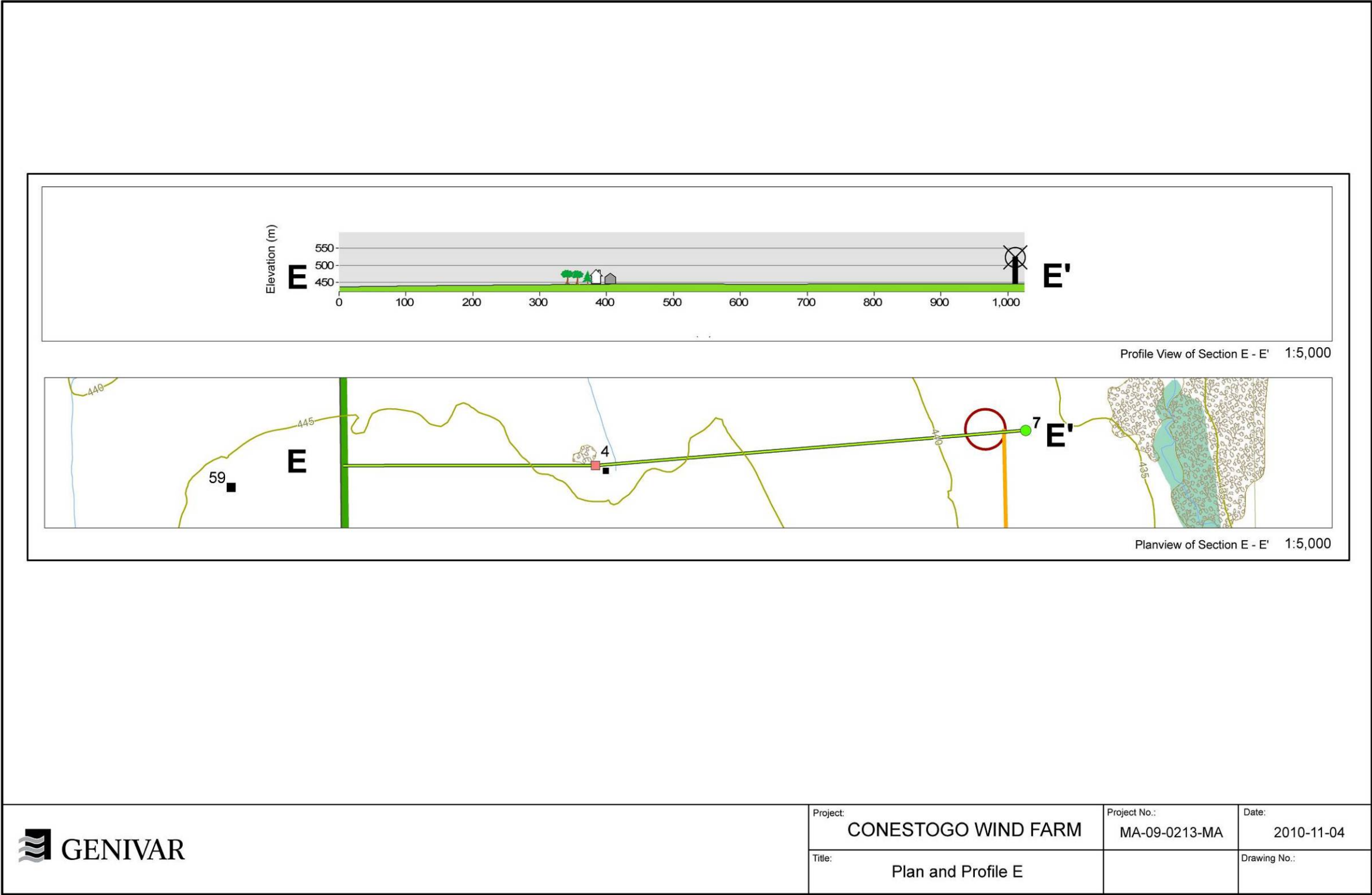


Figure 14: Plan and profile drawings of CHL 5 illustrating general landscape composition of lot with respect to height of existing structures.