Appendix F

Stage I Archaeological Assessment

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FINAL REPORT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, PROPOSED WIND GENERATING FACILITY, OSTRANDER POINT, PRINCE EDWARD COUNTY, ONTARIO

Gilead Power Corporation

Project No. 1007732.02
CIF # P002-092-2006

PROJECT NO. 1007732.02

REPORT TO **Gilead Power Corporation**
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ON **Stage 1 Archaeological Assessment, Proposed Wind Generating Facility, Ostrander Point, Prince Edward County, Ontario**

February 15, 2008

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1.0 INTRODUCTION

Gilead Power has proposed to develop a wind power generation facility (wind farm) near Ostrander Point, in Prince Edward County, Ontario (Figure 1). The wind farm is proposed to include turbines and substation, as well as a series of access roads and underground and aboveground cable connections. As part of an Environmental Assessment for the project, Jacques Whitford Limited (Jacques Whitford) conducted a Stage 1 Archaeological Assessment of the proposed project area. The study was completed by Colin Varley, M.A., R.P.A., Archaeologist and Heritage Planning Consultant with Jacques Whitford.

2.0 PROJECT AREA

The Stage 1assessment was completed early in the planning stage of the project and thus a large study area was examined for this component of the project. The project area consists of: all of Lots 1-10 (inclusive) and parts of Lots 11 and 12, and Lots A, B, P and Q of the Concession West of Long Point; and parts of Lots 5 and 6 of the Concession Around Prince Edward Bay, in the Township of South Marysburgh, Prince Edward County. The study area encompasses approximately 875 ha (2160 acres) along the south shoreline of the east peninsula (Long Point) of Prince Edward County.

The project area is located within the Prince Edward Peninsula physiographic region, a region of generally shallow soils over a limestone plain bedrock (Chapman and Putnam, 1984). The majority of the project area is composed of Farmington Loam series soils, which are stony, well drained and level to undulating. There are small pockets of marsh land along the Lake Ontario shoreline, at the top of the two embayments and along Helmer Road at the west end of the project area (Richards and Morwick, 1948) (Figure 1).

3.0 EXISTING CONDITIONS

The assessment of archaeological potential for the site considered both prehistoric and historic period resources. Archaeological potential modeling for prehistoric era sites is based largely on the identification of landscape features which are either known to have attracted past habitation or land use, or which appear to have potential for attracting human use. These features include: navigable rivers and lakes; confluences of watercourses; smaller sources of potable water; ridges or knolls that overlook areas of resource potential; outcrops of high-quality stone for tool making; and, most importantly, combinations of these features. In general it has been demonstrated that areas within 200-300 m of watercourses, or other significant bodies of water (ASI, 1990; Cox, 1989), and in particular those areas with multiple water sources (Young et al., 1995), are considered to be of elevated archaeological potential.

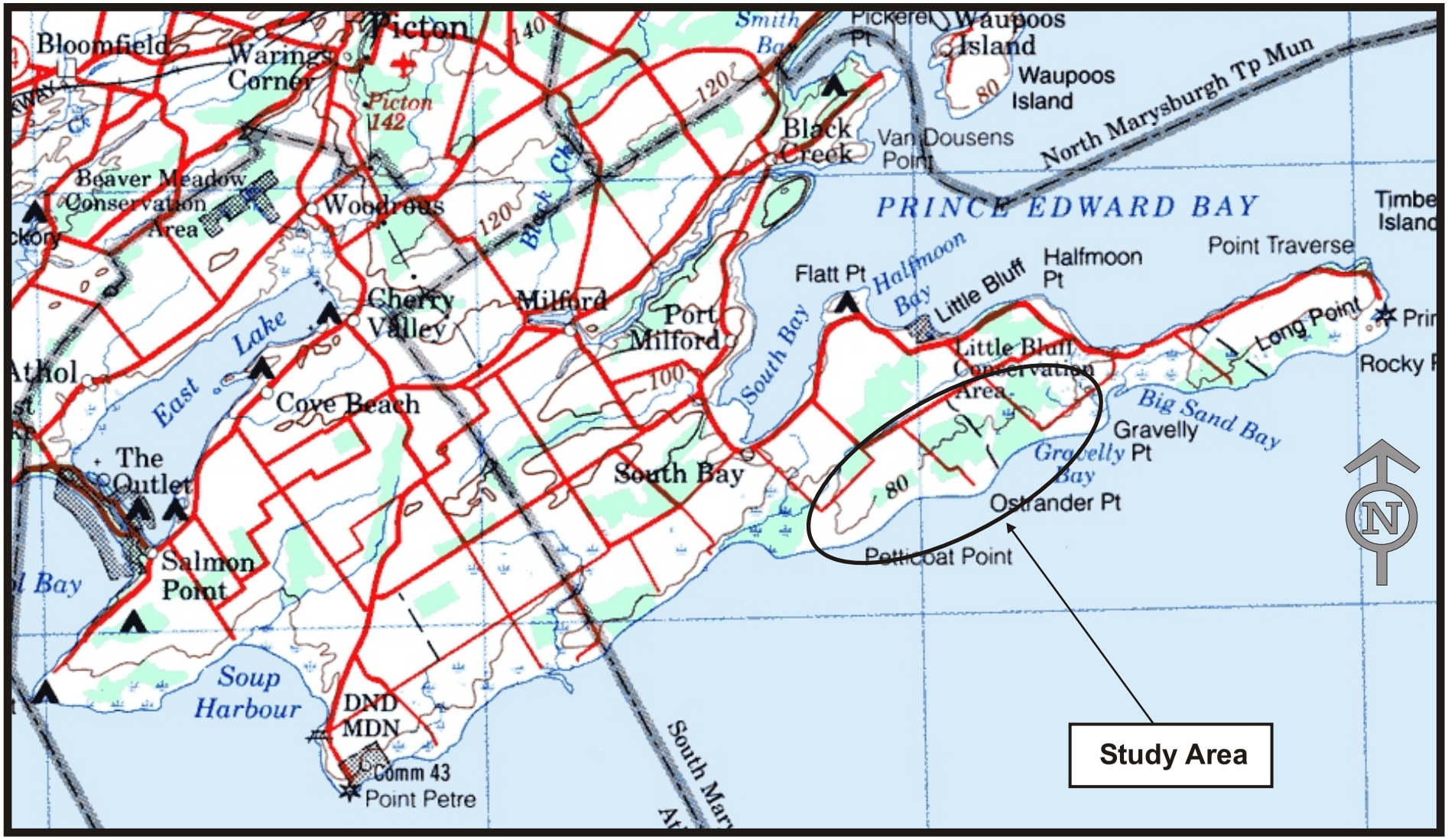

Figure 1 - Primary Study Area

Patterns of land use by historic Euro-Canadians to some extent mirror those of the prehistoric period. This is not surprising, since the same general needs must be met, i.e., proximity to potable water, access to natural resources, and a level, well drained habitation site. On the other hand, the Euro-Canadian conversion of both fertile and more marginal land for agricultural purposes, the development of non-water travel routes, the exploitation of different resources such as subsurface mineral deposits, and other differences in land use patterns make potential modeling of Euro-Canadian and other non-Aboriginal historic sites somewhat less reliable. Fortunately, these sites are more visible than their prehistoric counterparts, which helps offset this lower level of predictive reliability.

3.1 PREHISTORIC RESOURCES

There are currently three registered prehistoric archaeological sites located near the study area (Table 1) (MOC, 2006). All of these sites are unidentified with regard to archaeological culture or time period, but have been identified by recovery of modified lithic material. Lithic (stone) flakes and tool fragments generally represent activities associated with the manufacture of stone tools such as projectile points, knives, drills and scrapers, among others. Each of the three sites is located in a different econich. The Ostrander site is located 800 m from the shoreline, along a small stream just to the north of the project area. The Little Bluff site is located 150 m inland from the shoreline in an area with no secondary water source. The Mouck site is located immediately on the shoreline of South Bay. Thus, while the current information on the prehistoric occupation of the general project area is limited, it is evident that a variety of localities were being exploited.

Table 1 - Registered Archaeological Sites Near Study Area		
AlGf 1	Ostrander	Undetermined prehistoric findspot
AlGf 3	Little Bluff	Undetermined prehistoric campsite
AlGf 14	Mouck	Undetermined prehistoric findspot

The general location characteristics and presumed prehistoric econiches of these known archaeological sites are found throughout the project area and it is reasonable to expect that sites may be found in most, if not all, of the areas which may be utilised for the project. Since none of the project area is more than 300 m from some water source, and there would be ready access to most of the available resource locations, most of the project area would be considered to have elevated potential for the presence of prehistoric archaeological resources.

4.0 HISTORIC RESOURCES

There are presently no historic period archaeological sites in or near the study area (Table 1) (MoC, 2006).

The area of Prince Edward County, and Marysburgh Township in particular, was part of the extensive land granting program for the settling of United Empire Loyalists after the American War of Independence. The Township of Marysburgh was specifically set aside for those who had served as German Regulars or Royal Highlanders (Fryer, 1984). By 1784 a total of 48 Loyalists had been settled in Marysburgh Township (Gentilcore et al., 1998).

Detailed map resources of the project area are limited, but there are two resources which show useful information for assessing historical archaeological potential. The first of these maps is Tremaine's map of Prince Edward County (Tremaine, 1863) (Figure 2). Tremaine's map shows both the name of the landowner and the general location of the main house for each property (Figure 2). There is also a school house indicated just inside the project area at Lot 6, Concession Around Prince Edward Bay. As indicated on the map, almost every lot within the project area is both owned and occupied. Many of the homesteads are located along the Lake Ontario shoreline. However, there are others distributed along the road fronts and a smaller number in the centre of the individual farms. It must also be considered that the Tremaine map does not show the location of other farm buildings, such as barns and sheds.

The other important map resource is the Historical Atlas of Hastings and Prince Edward counties, produced in 1878 (Belden, 1878) (Figure 3). The Belden atlas mirrors the Tremaine map in much of its detail, although there are some significant differences. Most notably, the school house, and the road it fronted on, shown as being inside the project limits on the Tremaine map are shown as being in Lot 5 and outside of the project area on the later map (Figure 3). There are also a greater number of smaller land holdings, and an increase in the number of homesteads shown, particularly at the east end of the project area, in Lots 1, A, B, P and Q in the Concession West of Long Point. As with the Tremaine map, only the main house of each property is generally indicated on the Belden atlas, so many more potential historic period resources should be anticipated within the limits of the project area.

5.0 RECOMMENDATIONS

Archaeological potential modeling suggests that the combination of the well drained soils, potable water sources, and wide range of resource types available from the natural areas in and around the project area would have made this an attractive location for longer term habitation throughout the entire pre-contact period. The presence of known archaeological sites just outside of the proposed project area, in

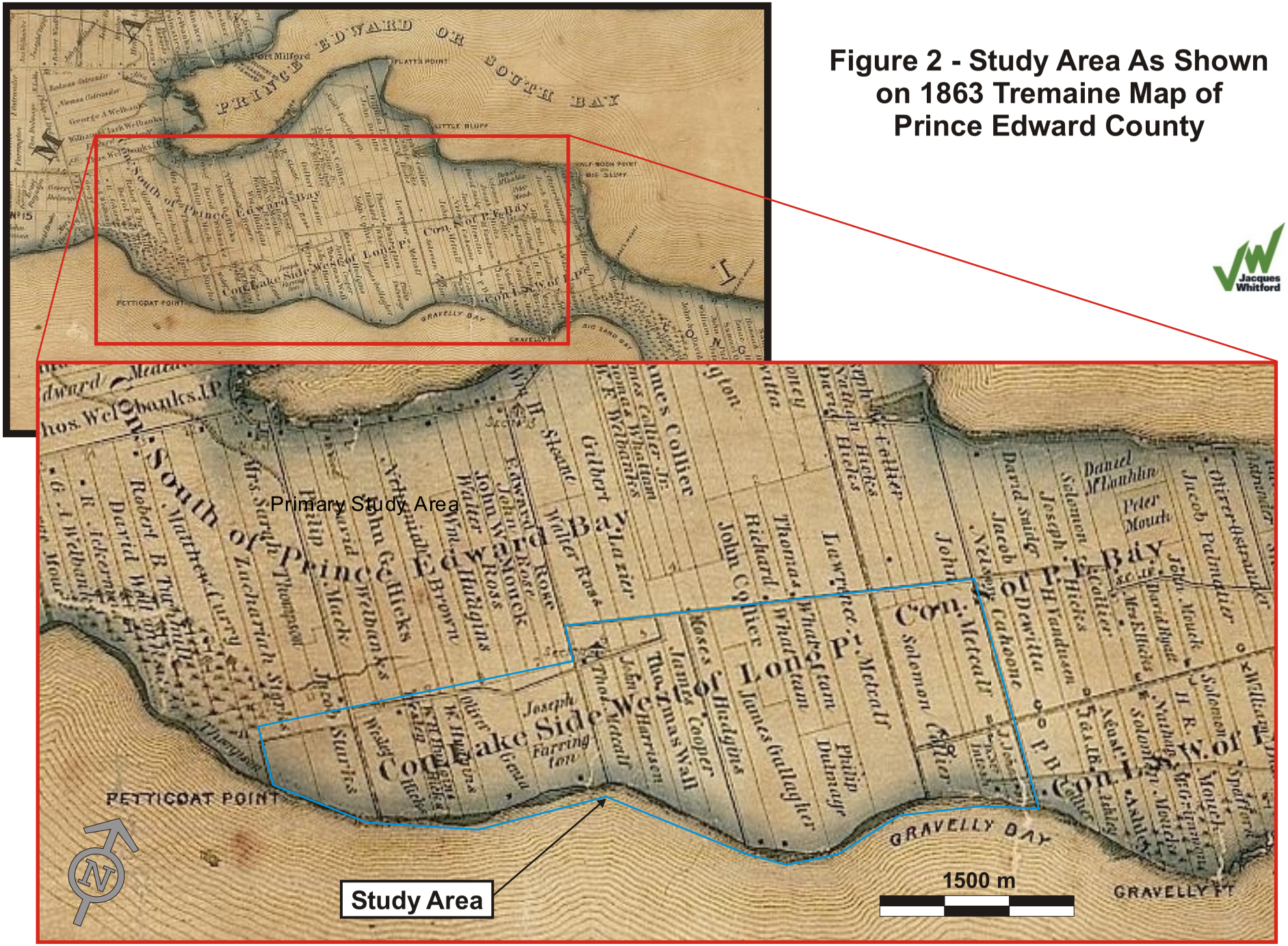

Figure 2 - Study Area As Shown on 1863 Tremaine Map of Prince Edward County

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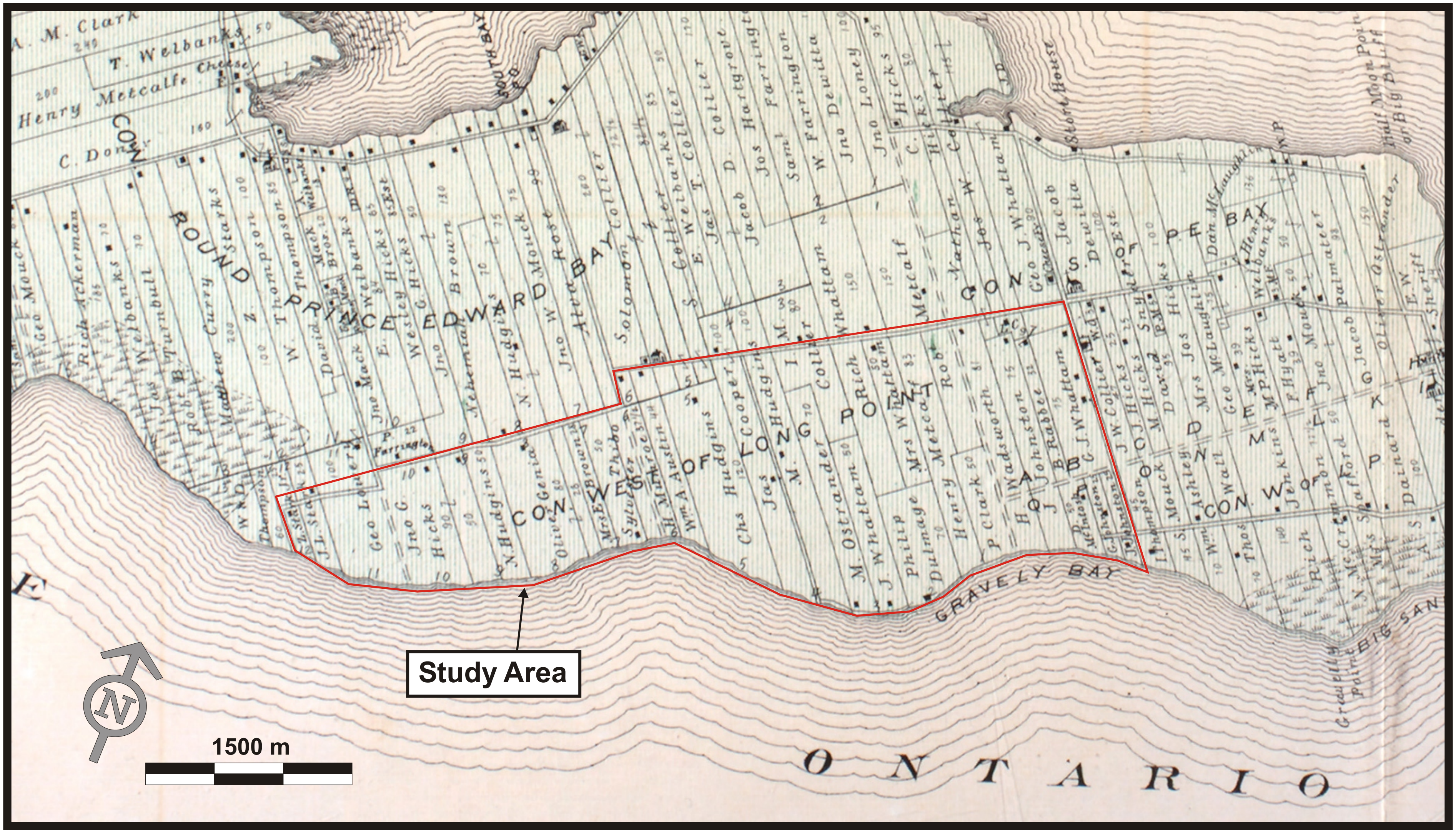

Figure 3 - Study Area As Shown in 1878 Belden Atlas

locations with physiographic characteristics similar to the project area, and the large number of historic period buildings demonstrates the high potential for archaeological resources of both prehistoric and historic disposition for the project area.

Given the large area encompassed by the project limits as currently defined it is unfeasible to recommend further archaeological assessment of all of the land within the project limits. Once specific project infrastructure and temporary work areas have been identified it is recommended that areas which would be disturbed by project construction be subject to further Stage 2 Archaeological Assessment. The turbines associated with the wind farm will require only a limited amount of land for construction. However, access roads for construction and maintenance vehicles, as well as temporary work areas, have the potential to cause wide soil disturbance.

6.0 CLOSURE

This report has been prepared for the sole benefit of Gilead Power and may not be used by any third party without the express written consent of Jacques Whitford Limited and Gilead Power. Any use which a third party makes of this report is the responsibility of such third party.

The recommendations made in this report are in accordance with our understanding of the project as it was presented at the time of our report. In the event that changes or alterations are made to the project, we reserve the right to review our recommendations with respect to any such changes.

We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this project.

Yours truly,

JACQUES WHITFORD LIMITED

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Senior Archaeologist and Heritage
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