



2011). The objectives of the Stage 2 assessment were to document archaeological resources present within the study area, to determine whether any of the resources might be artifacts or archaeological sites with cultural heritage value or interest requiring further assessment, and to provide specific Stage 3 direction for the protection, management and/or recovery of the identified archaeological resources (Government of Ontario 2011).

1.2 Historical Context

1.2.1 Glenelg Township

A survey of a road from Fergus to Owen Sound, bisecting Glenelg Township, was ordered in 1840; immediately after it was completed in 1842 free 50 acre lots were offered on either side to encourage settlement (Marsh 1931; Neville 1985). The requirements for a free grant were the settler must occupy the lot, clear one-third of his 20.23 hectares and plant at least one crop within four years; if these conditions were met the settler would receive his land patent (Neville 1985). Survey of the Durham Road (now Grey Road 4), from Simcoe County to Lake Huron, began in 1848 by David Gibson and A.P. Brough. The concessions north and south of the Durham Road were surveyed and settled between 1848 and 1851. A large portion of the settlers of Glenelg were from Ireland and Scotland; the large influx of these settlers has been attributed to the famine conditions in their native countries (Neville 1985). By the mid-1850s most of the lots in Glenelg Township had been spoken for, and amenities like sawmills and grist and flour mills were being established in the township.

The East Durham Project Area is situated between two substantial 19th century settlements: Durham and Priceville. Durham is situated partly in Bentinck Township, partly in Glenelg Township, on the main branch of the Saugeen River and at the crossroads of the Garafaxa and Durham roads. In 1842 Archibald Hunter opened the British Hotel at the junction of the Garafaxa and Durham roads. About 1846 John Edge began construction of a saw mill and flour mill in Durham; by the early 1860s a woollen section was added to the mill. By this time the town had become well established as the market town for the surrounding area (Neville 1985).

Priceville is situated east of the study area, where the Saugeen River crosses the Durham Road. The village grew rapidly through the latter half of the 19th century and by 1903 boasted a population of around 400, with amenities such as mills, stores, blacksmiths, wagonmakers, hotels, churches and schools.

In addition to Durham and Priceville, two small post office communities are located within the Project Area. Bunessam was located along the Durham Road between Durham and Priceville. Pomona was located along the northern edge of the study area, in between Concession 4 and Concession 5. Both communities were of substantial size in the 19th century and were home to churches, post offices, school, mills and hotels. Little evidence of these two settlements exists today. The corner of Bunessam is located in close proximity to the three substation options and the Saugeen River crossing area is located along Concession Road 4, in close proximity to where the Pomona Post Office was previously located (Figure 2).

A good resource for identifying potential historic Euro-Canadian archaeological sites is the 1880 *Grey County Supplement to the Illustrated Atlas of the Dominion of Canada* (Belden and Company 1880). Due to the fact that this atlas was subscriber based, only families who agreed to purchase an atlas had their names and homestead locations appear on the map (Figure 2). In addition to the houses of atlas subscribers, other historic structures noted in the study area include churches, mills, shops and schools. Table 2 lists those lots within the Project



Area that hold a structure in the 1880 atlas, along with the current status of these structures. Even though locations are only approximate on historic maps, they do give an idea of potential for significant archaeological historic remains that could be impacted within the study area. Typically these locations no longer exhibit any visible evidence of their former structure, but if they are to be impacted by a wind turbine placement the location would need to be archaeologically assessed to see if there are any archaeological remains. The current infrastructure layout does not impact any of these areas of former structures.

Table 2: Historic structures illustrated on the 1880 atlas map within the study area

Township	Structures	Location	Current Status
Glenelg	School House	Lot 38, Concession 2 SDR	No longer standing
	Bunessan Post Office, Church	Lot 21, Concession 1 SDR	No longer standing – historic plaque
	Wagon & Blacksmith Shop	Lot 11, Concession 1 NDR	No longer standing
	Church	Lot 31, Concession 1 NDR	No longer standing
	Cemetery	Lot 32, Concession 1 NDR	Still there
	School House	Lot 31, Concession 3	No longer standing
	Town Hall	Lot 10, Concession 4	Still standing – now community centre
	School House	Lot 17, Concession 4	No longer standing
	Homestead	Lot 24, Concession 4	Could possibly be the house standing there today

1.3 Archaeological Context

1.3.1 Previous Archaeological Surveys and Reports

A Stage 1 archaeological assessment was previously conducted for the East Durham Project Area (ASI 2010). The Stage 1 archaeological assessment resulted in the determination that potential exists within much of the study area for the identification of pre-contact Aboriginal and Euro-Canadian sites. For pre-contact Aboriginal sites this assessment was based on the presence of numerous nearby water sources. For post-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography and historic documentation. The determination of historic Euro-Canadian archaeological potential was based on the presence of historic transportation routes and the study area's proximity to early Euro-Canadian settlements. As a result, Stage 2 archaeological assessment was recommended for potential wind turbine sites and their associated infrastructure.

According to the Archaeological Sites Database (ASDB) there is one registered archaeological site located within the limits of the study area (ASI 2010). This site, the McKeon site (BbHe-1) was registered in 1992 following an archaeological survey related to aggregate resources. The McKeon site (BbHe-1) is situated on Lot 33, Concession 1 SDR, Geographic Township of Glenelg; the site is a 19th century scatter of historic domestic artifacts over a 30 metre by 30 metre area. It was recommended this site be protected during aggregate extraction or mitigated prior to extraction. Lot 33, Concession 1 SDR does not currently contain any proposed wind project infrastructure components.



STAGE 2 ARCHAEOLOGICAL ASSESSMENT - EAST DURHAM WIND ENERGY CENTRE

A Stage 2 archaeological assessment of the proposed project infrastructure was previously undertaken by Golder on behalf of NEEC. The Stage 2 assessment was conducted between June 5, 2012 and September 7, 2012 and focused upon the proposed wind turbine layout, including turbine sites, collector cable routes, access roads, construction roads, transmission lines, laydown areas and substations. A total of approximately 134.73 hectares were subject to Stage 2 archaeological assessment, the majority of which was assessed using the pedestrian survey method at an interval of five metres. Small areas of tree lines and wooded areas that could not be assessed using the pedestrian survey method were assessed using the test pit method at an interval of five metres. The Stage 2 archaeological assessment conducted by Golder resulted in the identification of three 19th century Euro-Canadian historic locations: Location 1 (BbHd-3), Location 2 (BbHd-4) and Location 3 (BbHe-2). Based on criteria established in the *Standards and Guideline for Consultant Archaeologists*, it was recommended these sites be subject to a Stage 3 archaeological investigation to further evaluate their cultural heritage value or interest (Golder 2012).



2.0 FIELD METHODS

The study area includes three optional substation locations, a change in access road and options related to the collection lines crossing the Saugeen River, within the larger East Durham Project Area. The approximate size of each area subject to Stage 2 assessment is listed in Table 3.

Table 3: Approximate Size of Study Area Components

Area	Approximate Size
Substation Option on EDU 1030	1.9 hectares
Substation Option 1 on EDU 1039	2.02 hectares
Substation Option 2 on EDU 1039	2.02 hectares
Change in Access Road	0.42 hectares
Saugeen River Crossing	1.67 hectares

Field reconnaissance conducted prior to the Stage 2 assessment identified that the optional substation areas consisted primarily of agricultural fields and the change in access road area consisted of manicured lawn, overgrown lawn and a previously used laneway. The Saugeen River crossing area is located within road right-of-ways where the river crosses Concession Road 4.

Golder personnel visited the study areas on September 13, 2012 to stake in the three optional substation locations; these areas were subsequently ploughed and allowed to be weathered by rainfall. The two substation options on EDU 1039 consisted entirely of ploughed and weathered agricultural fields; the option on EDU 1030 consisted of ploughed and weathered agricultural field bisected by a sloped tree line ranging approximately three to seven metres in width; an area of previous extraction was documented at the base of the slope along the western edge of the proposed substation boundary. As per the *Standards and Guidelines for Consultant Archaeologists* Stage 2 survey was not conducted for the sloped tree line area. The Stage 2 assessment of the well-weathered ploughed fields was conducted by the standard pedestrian survey method at transect intervals of five metres. Ground visibility and lighting conditions were excellent. In the event that an artifact was encountered during pedestrian survey, survey intervals were intensified to one metre within a twenty metre radius of the find.

The change in access road area was assessed by test pit survey at transect intervals of five metres. In the event artifacts were recovered during the test pit survey, survey intervals were reduced to 2.5 metres around the positive test pit. During the course of the test pit survey previously disturbed and poorly drained areas were encountered; these areas are illustrated in Figure 4. Although difficult to illustrate, the poorly drained area is a low-lying area in between a raised rail bed to the north and a steep slope up to Grey Road 4 to the south; this poorly drained area was previously reported on (Golder 2012). As per the *Standards and Guidelines for Consultant Archaeologists* Stage 2 survey was not conducted in the poorly drained or previously disturbed areas.

The Saugeen River crossing area was assessed by test pit survey at transect intervals of five metres. This area is located within road ROW limits where the Saugeen River crosses Concession Road 4. In the event artifacts



were recovered during the test pit survey, survey intervals were reduced to 2.5 metres around the positive test pit. During the course of the test pit survey areas of slope and previously disturbed areas were encountered; these areas are illustrated in Figure 5. As per the *Standards and Guidelines for Consultant Archaeologists* Stage 2 survey was not conducted in the sloped or previously disturbed areas.

As per the *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6, Standard 1a), Plates 1 to 25 provide a representative sample of parts of the study area to illustrate conditions that allowed the standards for pedestrian and test pit survey to be met, as well as areas of slope and previous disturbance. Figures 3-5 illustrate the field assessment methods across the study area as well as the location and directions of photographs presented in this report.

A Trimble Recon handheld GPS unit with a Holux GR-271 CF GPS Receiver with a minimal accuracy of two metres was carried on site in the event artifacts were identified on the surface; however as will be discussed in the next section, no archaeological artifacts were identified during the Stage 2 assessment.

The Stage 2 archaeological assessment of the East Durham Wind Energy Centre has involved consultation with and participation by First Nations peoples whose traditional territories are affected by the study area. The study area falls within the traditional territories of the Chippewas of Saugeen First Nation and Chippewas of Nawash First Nation as documented by Treaty 45½ in 1836. Hence, the Saugeen Ojibway Nation and Cape Croker First Nation were consulted during the planning stages of the Stage 2 archaeological assessment and monitors from these First Nations participated in the Stage 2 assessment. Further details are provided in Appendix A.

2.1 Existing Conditions

The Stage 2 field survey was conducted on September 28, October 29 and November 20, 2012 under archaeological consulting licence P319, issued to Irena Jurakic. The weather during the Stage 2 assessment was variable (Table 4). At no time were the weather or field conditions detrimental to the recovery of archaeological material; lighting conditions during the survey allowed for excellent field visibility.

Table 4: Weather Conditions During the Stage 2 Archaeological Assessment

Date	Weather Conditions
Friday September 28, 2012	Partly cloudy and warm
Monday October 29, 2012	Overcast and cold with light rain
Tuesday November 20, 2012	Cool with fog in the morning, clear and sunny by mid-morning



3.0 STAGE 2 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. No archaeological material or sites were identified during the Stage 2 archaeological assessment of the three optional substation areas, the change in access road area or the Saugeen River Crossing Area. Table 5 provides an inventory of the documentary record generated in the field.

Table 5: Inventory of Documentary Record

Document Type	Current Location of Document	Additional Comments
Field Notes	Golder office in Whitby	In original field book and photocopied in project file
Hand Drawn Maps	Golder office in Whitby	In original field book and photocopied in project file
Maps Provided by Client	Golder office in Whitby	Stored in project file
Digital Photographs	Golder office in Whitby	Stored digitally in project file