

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

A Stage 1 archaeological assessment was previously conducted for the East Durham study 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 19<sup>th</sup> 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.





#### 2.0 FIELD METHODS

The study area encompasses the entire East Durham Wind Energy Project. Only those areas to be affected by the construction, operation, and decommissioning of the wind farm have undergone archaeological assessment. Those areas include: 16 turbine locations; underground or overhead collector cables running between turbines and substations; access roads between turbines, junction boxes; staging areas related to the construction of the wind farm; substations, a permanent MET tower location and the existing road grid. Turbine pads were assessed with a 140 metre by 140 metre pad. Collector access lines were surveyed as 60 metre corridors while cable lines along roadways varied between 15 metres and 20 metres in width and are illustrated in Figure 3. Staging areas, substations and additional infrastructure locations varied in size and are illustrated in Figure 3.

A total of approximately 134.73 hectares were subject to Stage 2 archaeological assessment. reconnaissance conducted prior to the Stage 2 assessment identified that the study area consisted primarily of ploughed agricultural fields. The Stage 2 assessment of well-weathered ploughed fields was conducted by the standard pedestrian survey method at transect intervals of five metres. Ground visibility was 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. All diagnostic artifacts were retained from pedestrian survey. A sample of non-diagnostic artifacts were collected and the remainder left in the field to help relocate a site prior to Stage 3 archaeological assessment. For areas subject to test pit survey the survey was conducted in five metre transects as well. Each test pit was approximately 30 centimetres in diameter and excavated five centimetres into sterile subsoil. All soil matrix was screened through six millimetre mesh hardware cloth to facilitate the recovery of small artifacts but no artifacts were recovered. Approximately 91.7% of the study area was subject to pedestrian survey at five metre intervals (123.51 hectares), approximately 6.3% was subject to test pit survey at five metre intervals (8.55 hectares) and approximately 2.0% of the study was not surveyed due to being poorly drained, previously disturbed or areas of slope (2.7 hectares). The disturbed areas consist of municipal right-ofways and under existing road beds (which will be directionally drilled) where collector cables will be buried. As per the Standards and Guidelines for Consultant Archaeologists (Section 7.8.6, Standard 1a), Plates 1 to 24 provide a representative sample of parts of the study area to illustrate conditions that allowed the standards for pedestrian survey to be met as well as photographs representing the test pit survey undertaken within the study area, areas of previous disturbance and poorly drained areas. One relatively large poorly drained area was documented in the southeastern part of the study area on property EDU 1309; this area was inspected on June 6, 2012 while on site to conduct the Stage 2 survey and again on October 29, 2012. On both occasions the area was documented as poorly drained; it is likely the area is poorly drained due to its low lying position in between the raised roadway to the south (Plate 4) and the raised rail bed to the north (Plate 5). Plate locations and photograph directions are provided in Figure 3.

All formal and diagnostic artifact types were collected and a UTM reading was taken using either a Trimble Recon handheld GPS unit with a Holux GR-271 CF GPS Receiver, using the North American Datum (NAD) 83, with a minimal accuracy of two metres, or a Garmin eTrex Legend handheld GPS unit using the North American Datum (NAD) 83, with a minimal accuracy of five metres. UTM coordinates were recorded for a total of three archaeological sites. These are presented in Supplementary Document B. Supplementary Document A illustrates the Stage 2 field assessment methods and results for the study area in detail while Figure 3 illustrates the field assessment methods across the study area.





The Stage 2 archaeological assessment of the East Durham Wind Energy Project 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 Supplementary Document C.

### 2.1 Existing Conditions

The Stage 2 field survey was conducted between June 5, 2012 and September 7, 2012 under archaeological consulting licence P218, issued to Scott Martin, Ph.D. The weather during the Stage 2 assessment ranged from sunny and hot to overcast and cool. At no time were the weather or field conditions detrimental to the recovery of archaeological material. Field visibility during the pedestrian surveys and test pitting surveys was excellent and lighting conditions also allowed for excellent field visibility.

Table 3: Weather Conditions During Stage 2 Archaeological Assessment

Thursday June 07, 2012	Warm and Sunny	
Friday June 08, 2012	No Data	
Monday June 18, 2012	Muggy and Hot	
Thursday July 05, 2012	Clear, Sunny and Warm	
Friday July 06, 2012	Clear, Sunny and Warm with Breeze	
Monday July 30, 2012	Clear and Sunny	
Tuesday July 31, 2012	Couldy, Warm and Chance of Thunderstorm	
Wednesday August 01, 2012	Clear, Sunny and Warm	
Tuesday August 14, 2012	Overcast, Cool and Raining	
Monday August 20, 2012	Clear, Cool and Breezy/Clear, Sunny and Warm	
Tuesday August 21, 2012	Clear, Sunny and Cool	
Tuesday September 04, 2012	Overcast and Warm	
Wednesday September 05, 2012	Clear and Warm	
Thursday September 06, 2012	Clear, Warm and Slight Breeze	
Friday September 07, 2012	Overcast and Warm	

### 2.2 Road Right-of-Way Assessment

The Stage 2 field survey included an assessment of road right-of-ways that are being considered for collector cable routes. These areas are illustrated in Figure 3. Areas within five metres of roadways were documented; these roadways included portions of Concession Road 4, Grey Road 4, Southline Road, Baptist Church Road, Grey Road 23 and Boat Jack Ranch Road. Both sides of the roadways were inspected. By nature of these areas being roadway ditches, documented conditions for the most part included gravel disturbance and artificial





sloping. In addition to these disturbed areas, poorly drained areas along these ditches were also documented. No portions of ditches along any of these roadways were determined to be relatively undisturbed or well-drained; as such Stage 2 survey was these areas was deemed to be not necessary. These areas are not included in the previously discussed section on total area (hectares) subject to Stage 2 survey. Plates 8 to 16 illustrate representative photographs of the road right-of-way assessment. All areas subject to the right-of-way assessment are illustrated as previously disturbed in Figure 3; although poorly drained areas were documented along portions of these roadways, it is highly likely that the raised road beds contributed to this documented condition.





### 3.0 STAGE 2 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. A total of three archaeological sites were identified during the Stage 2 assessment and will be discussed further below. A summary of the artifacts collected from each of these sites, their spatial extent, and a description of the artifacts left in the field are provided below. Supplementary Document A, which illustrates the Stage 2 survey methods and results, and Supplementary Document B, which lists the UTM coordinates for each of these locations, are included as supplementary documents to this report.

Material culture recovered from the East Durham Wind Energy Project is contained in one banker's box and will be temporarily housed at Golder's Whitby office until formal arrangements can be made for their transfer to an MTCS collections facility. Table 3 provides an inventory of the documentary record generated in the field.

**Table 4: 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

### 3.1 **Location 1 (BbHd-3)**

The Stage 2 pedestrian survey of the proposed wind energy components on property EDU1311, south of Grey Road 4 and east of Boat Jack Ranch Road, resulted in the identification of Location 1 (BbHd-3). A total of 100 historic Euro-Canadian artifacts were recovered from an approximate 100 metre (along the north-south axis) by 75 metre (along the west-east axis) area including 86 domestic, nine structural, three metal, one personal and one piece of recent material. The entire surface scatter was identified within the surveyed area and did not extend beyond the surveyed area. All refined ceramic sherds were retained for laboratory analysis; very few examples of structural and personal artifacts were identified on the surface of the field, as such all examples of these types of artifacts were retained. A sample of coarse earthenware ceramics, bottle glass and metal was left on the surface to assist with relocating the site if necessary; this sample included approximately 50 artifacts. Each artifact class will be discussed separately below. Table 3 provides a summary of the artifacts recovered during the Stage 2 archaeological assessment. The artifact catalogue for Location 1 (BbHd-3) is presented following the discussion on recovered artifacts. For historic Euro-Canadian artifacts, Appendix A provides a more comprehensive discussion of temporally diagnostic Euro-Canadian material culture to supplement the results below.

