

**THE STAGE 1 ARCHAEOLOGICAL ASSESSMENT
OF THE TERRA DEVELOPMENT SERVICES
LIMITED PROPERTY, PART OF LOT 9,
CONCESSION 1, AND PART OF LOTS 9 & 10,
CONCESSION 2,
MUNICIPALITY OF MEAFORD,
COUNTY OF GREY**



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OF THE TERRA DEVELOPMENT SERVICES LIMITED
PROPERTY, PART OF LOT 9, CONCESSION 1 AND PART OF
LOTS 9 & 10, CONCESSION 2,
MUNICIPALITY OF MEAFORD,
COUNTY OF GREY**

Submitted to

Friedman & Associates

and

The Ministry of Tourism and Culture

Prepared by

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Archaeological Consulting Licence Number P123
C.I.F. Number P123-050-2010
November 2010

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SUMMARY

This report details the rationale, methods and results of the Stage 1 Archaeological Assessment of the Terra Development Services Limited Property, Part of Lot 9, Concession 1 and Part of Lots 9 & 10, Concession 2, Municipality of Meaford, County of Grey. The purpose of the assessment was to determine the archaeological potential of the subject property as part of a due diligence process. The assessment was undertaken on behalf of Friedman & Associates.

The 371 acre subject property consists of a combination of active agricultural lands, scrublands and forested areas that are associated with the northern upland edge and base of the Niagara Escarpment. A small section of the property has been disturbed by several large dirt roads.

The results of the Stage 1 archaeological assessment indicate that large sections of the subject property have a moderate to high potential for archaeological resources. Most of the subject property consists of well drained undisturbed tableland areas that are located within 300 metres of one or more sources of water. In addition, the northern section of the property is associated with the northern slope of the Niagara Escarpment which may contain relic beach ridges associated with glacial Lake Algonquin. Finally, there is some potential for mid to late 19th century Euro-Canadian homesteads within the subject lands. Some small sections of the subject lands have a low potential for archaeological resources due to poor drainage, severe slope or previous disturbance.

Given the moderate to high archaeological potential of large sections of the subject property, it is recommended that a Stage 2 archaeological assessment should be conducted prior to the development of any of these lands. It is recommended that the conditions of approval for the development of this property should include a requirement for a Stage 2 archaeological assessment prior to any soil disturbance.

1.0 INTRODUCTION

This report details the rationale, methods and results of the Stage 1 Archaeological Assessment of the Terra Development Services Limited Property, Part of Lot 9, Concession 1 and Part of Lots 9 & 10, Concession 2, Municipality of Meaford, County of Grey. The purpose of the assessment was to determine the archaeological potential of the subject property as part of a due diligence process. The assessment was undertaken on behalf of Friedman & Associates.

The assessment was conducted under archaeological consulting licence No. P123 issued to Glenn Kearsley. The assessment was conducted in accordance with the provisions of the Ontario Heritage Act (Government of Ontario 1980), the technical guidelines for archaeological assessments formulated by the Ministry of Tourism and Culture (MCL 1993, 2009), and the Ministry's educational primer and comprehensive guide for non-specialists (1997). Archaeological Assessments Ltd. accepts responsibility for the long term curation of any artifacts recovered and documents produced as a result of the assessment.

2.0 LOCATION AND DESCRIPTION

The 371 acre subject property is located 3.5km southeast of the urban core of Meaford, south of Highway 26 on the east side of the 3rd Line (Figure 1 and 2).

The subject property was visited and subjected to a careful visual inspection on November 3, 2010. The weather was overcast and cool. The southern and eastern sections of the property consist of level to gently rolling active agricultural lands located in an upland area. At the time of the site visit, some of these lands were in pasture, some were in hay and some had recently been ploughed. The central section of the property contains a large area of former agricultural lands now covered by scrublands and some trees. This area contains level terrain and several wide dirt roads that have been graded down to the subsoil. These roads had been cleared back in the 1980's as part of a previous subdivision development plan (Steven Warsh personnel communication). The northern section of the property has a sharp break in slope along the northern edge of the Niagara Escarpment and that drops down to a lowland area on the south side of Highway 26. This area of severe slope contains a combination of forested lands and areas of exposed subsoil where the soil had been eroded from exposure. The bottom of the escarpment may also contain some small forested terraces.

The subject property is situated on the northern edge and base of the Niagara Escarpment. The majority of the property consists of upland areas on the crest of the escarpment. Just west of the subject property there is a large indentation in the Niagara Escarpment occupied by the Bighead River Valley and the urban core of Meaford. Several active and relic watercourses pass through the eastern, central and western sections of the property and drain to the north down the escarpment into Georgian Bay. Georgian Bay is located 600 metres north of the northern edge of the property.

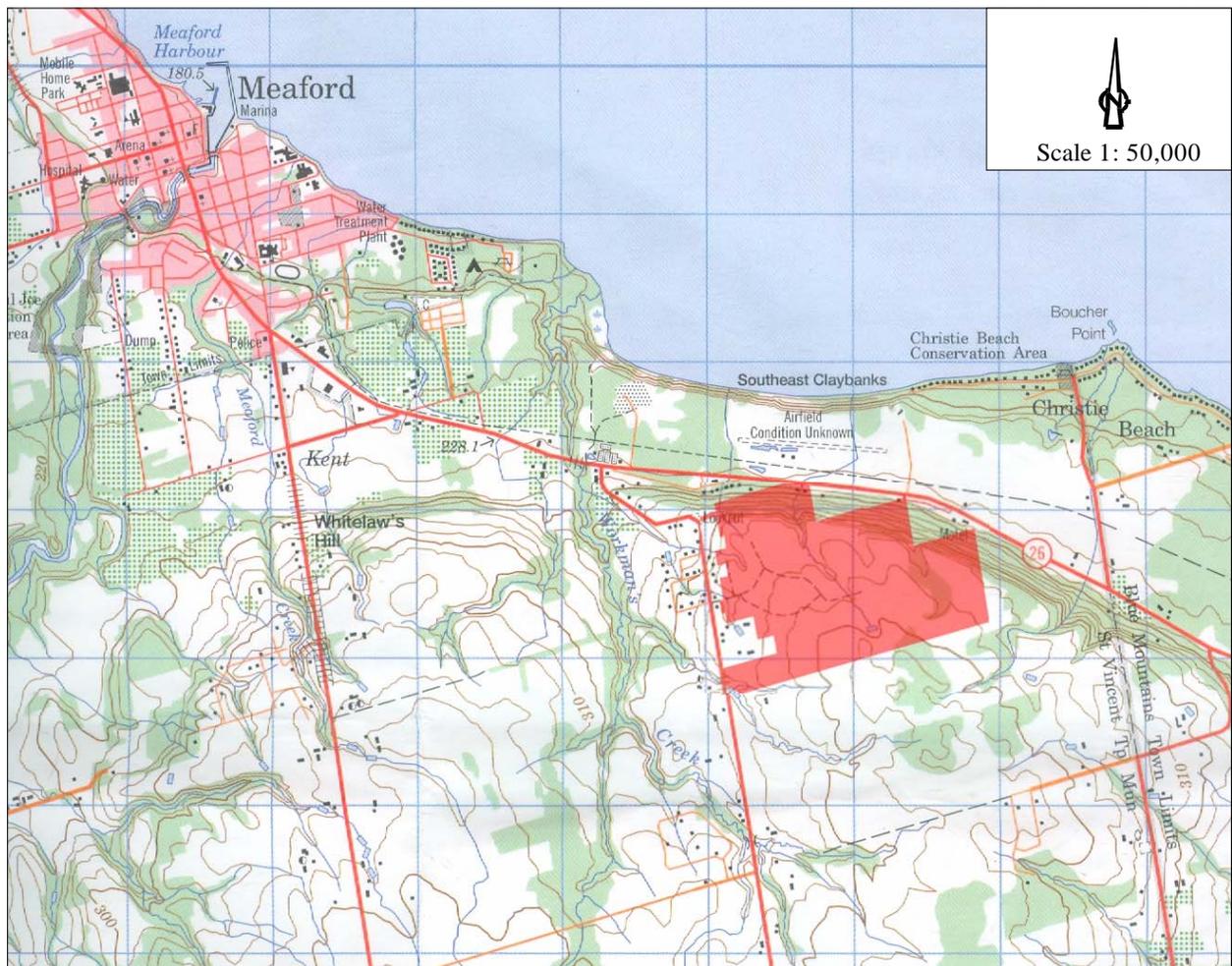


Figure 1. General Location of the Subject Property

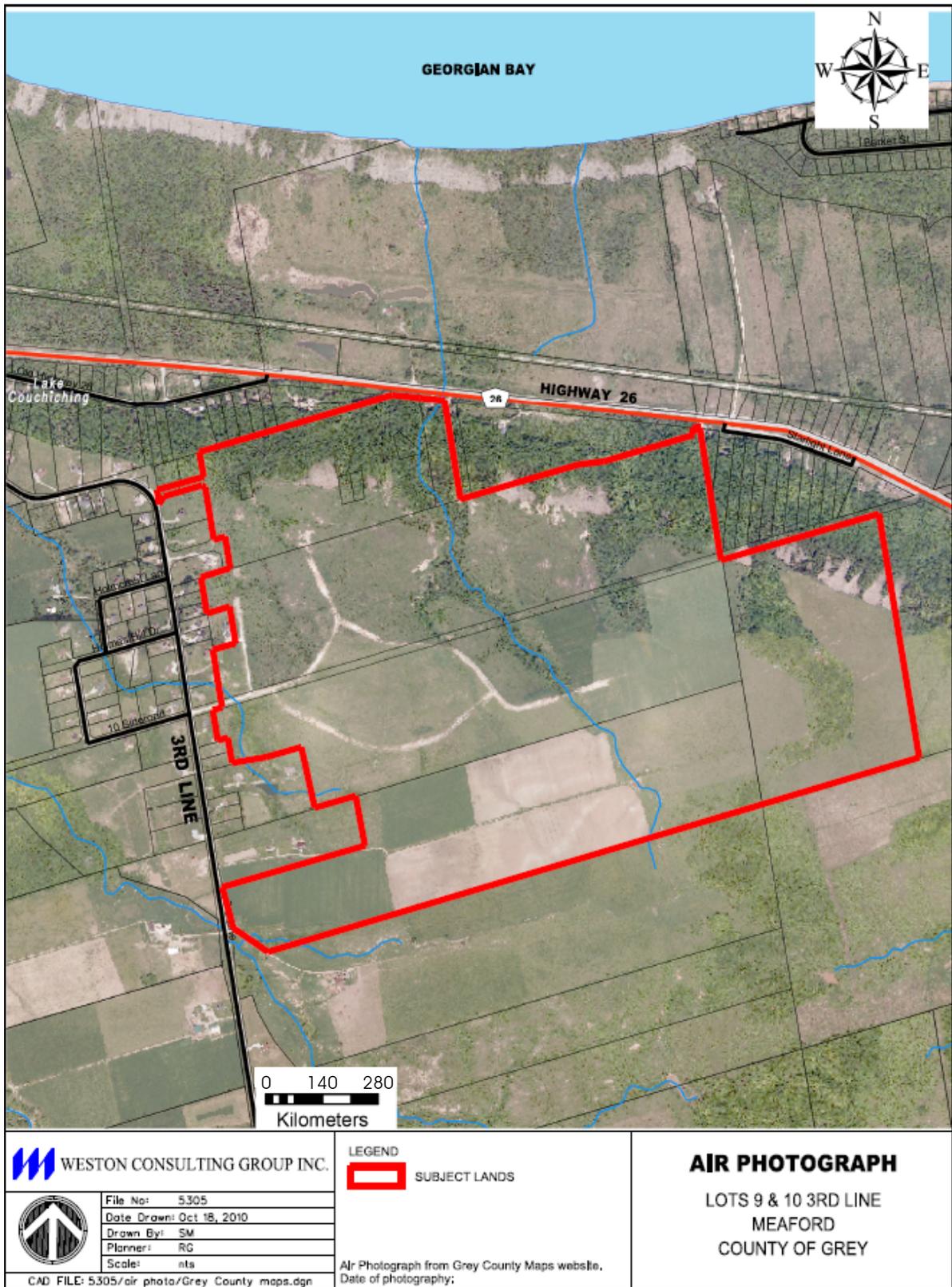


Figure 2. Aerial Photograph of the Subject Property

3.0 ARCHAEOLOGICAL SITE POTENTIAL

The Ontario Ministry of Tourism and Culture has defined general guidelines for determining the archaeological potential of development properties (1997, 2009). Evaluating the potential for a specific development property is based on determining its association with a wide range of geographic and cultural-historic features which would have directly influenced the settlement patterns of the past inhabitants of a region. The presence or absence of these features within or close to a particular parcel of land can serve as an indicator of past human use, and can serve as the screening criteria for determining the archaeological potential of the property (MTC 1997, 2009).

3.1 Known Archaeological Resources

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (O.A.S.D.), a database maintained by the Ontario Ministry of Tourism and Culture. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The study area is located in Borden Block BdHd.

Information on archaeological sites located beyond the limits of the subject property provide context for the property, and serve to indicate the variety and nature of archaeological resources that may be present on the property itself. There are currently no registered archaeological sites located either on or immediately adjacent to the subject property. A survey of the Ministry of Tourism and Culture archaeological files located in Toronto indicates that there is only one registered archaeological site located within a 2 kilometre radius of the study area. The previously registered site is the Moore site (BdHd-6), a indeterminate aboriginal findspot which is located 1.7km northwest of the subject property.

The absence of registered sites within the vicinity of the study area does not indicate a low potential for aboriginal or historical Euro-Canadian archaeological remains. It likely only reflects the fact that there has been a lack of intensive archaeological survey work carried out in this region. The cultural/temporal categories of Southern Ontario are outlined in Table 1.

TABLE 1. Cultural Chronology For Southern Ontario

PERIOD	GROUP	TIME RANGE	COMMENT
PALEO-INDIAN			
Early	Fluted	9000 - 8500 B.C.	Big Game Hunters and Small Nomadic Groups
Late	Non-fluted	8500 - 7500 B.C.	
ARCHAIC			
Early	Nettling	8000 - 7000 B.C.	Nomadic Hunters and Gatherers
	Bifurcate Based	7000 - 6000 B.C.	
Middle	Stemmed, Otter Creek and Brewerton	6000 - 2500 B.C.	Transition to Territorial Settlement
Late	Narrow Point	2500 - 1800 B.C.	More Diverse Resource Base
	Broad Point	1800 - 1500 B.C.	
	Small Point	1500 - 800 B.C.	
WOODLAND			
Early	Meadowood and Middlesex	1000 - 300 B.C.	Introduction of Pottery
Middle	Point Peninsula	300 B.C.-700 A.D.	Long Distance Trade
Transitional	Princess Point	500 - 900 A.D.	Early Agriculture
Late	Early Iroquoian	900 - 1275 A.D.	Transition to Village Life
	Middle Iroquoian	1275 - 1400 A.D.	Large Villages and Dependence on Agriculture
	Late Iroquoian	1400 - 1650 A.D.	Tribal Development, Warfare, European Contact
HISTORIC			
Early	Odawa, Ojibwa, Mississauga	1700 - 1875 A.D.	Social Displacement
Late	Euro-Canadian	1800 A.D.-present	European Settlement

3.2 Physiographic Features

General physiographic features which must be considered when identifying areas of archaeological potential include distance to water, local topography, soil conditions, and other resource specific features. In general, any lands located within 300 metres of any of these physiographic features should be considered to have archaeological potential (MTC 2009: 7).

The MTC's Draft Standards and Guidelines for Consultant Archaeologists (2009:5) stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or

marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential. Other geographic characteristics that can indicate archaeological potential include: elevated topography (eskers, drumlins, large knolls, plateau), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. Resource areas are also considered to be characteristics that indicate archaeological potential (MTC 2009:5-6).

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south central Ontario after the Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

Several active and relic watercourses pass through the eastern, central and western sections of the property and drain to the north down the escarpment into Georgian Bay. Most of the subject property is located within 300 metres of these water sources (Figure 4), indicating that the majority of the property has some potential for aboriginal archaeological sites.

The northern edge of the property is situated at the base of the Niagara Escarpment and may contain some elevated terraces created by relict shorelines associated with glacial Lake Algonquin. These terraces have a high potential for Archaic and Paleo-Indian archaeological sites. The majority of the property is also located in an upland area that contains well drained clay loam soils which would have been suitable for 19th century Euro-Canadian farming.

3.3 Historic Cultural Features

The MTC's Draft Standards and Guidelines for Consultant Archaeologists (2009:6) stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries, are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the Ontario Heritage Act or a federal, provincial, or municipal historic landmark or site, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations are also considered to have archaeological potential. In general, any lands located within 300 metres of any of these cultural features should be considered to have archaeological potential (MTC 2009: 7).

Information on potential Euro-Canadian archaeological planning concerns was derived from an examination of the 1880 Illustrated Historical Atlas of Grey and Bruce Counties (Belden 1880: Figure 3). At that time the subjected property was situated in the northeastern section of the Township of St. Vincent. The historical atlas map indicates that there may have been a late 19th century homestead located on or very close to the northwestern section of the subject property on Part of Lot 10, Concession 2. This homestead was occupied by William Postill.

The historical atlas map for this township only shows the location of a few of the many residences which were likely located in this area at this time. It should be noted that the historical atlas maps were produced by subscription and only the homes of wealthier land owners tended to be illustrated along with the principal roads and villages. Any early or mid 19th century homesteads that were abandoned before the 1880 atlas was produced, would also not have been illustrated.



Figure 3. 1880 Historical Atlas Map of St. Vincent Township Showing Location of the Subject Property

The Township of St. Vincent where the subject property is situated was first surveyed for settlement in 1833 (Stanley Knight Limited 1991). The earliest Euro-Canadian settlers in this region arrived in the mid 1830's and settled in the northern section of the township close to the various bays along the

lakeshore. The first settlers arrived in the area where the urban section of the Town of Meaford is now situated in 1840 and expanded out into the other sections of the township by the 1850's. The town grew rapidly in the 1850's and was incorporated as a Town in 1874. Consequently, the subject property has some potential for containing Euro-Canadian homesteads dating back to the mid 19th century. Parts of the northern edge of the subject property also fronts onto what is now Highway 26, which was originally one of the early transportation routes into the region.

3.4 Extent of Previous Disturbance and Development

For an assessment of the archaeological potential of any property, examining the extent of previous disturbance is an important factor in determining the potential for archaeological resources. The subject property is situated in a rural area and only contains some small isolated areas which are disturbed. The disturbed areas are all associated with the graded dirt roads which are located in the central and northwestern section of the property (Figure 4). These linear areas no longer have any archaeological potential. However, the vast majority of the property has not been disturbed by previous development and still retains an intact original topsoil horizon.

4.0 RECOMMENDATIONS

The results of the Stage 1 archaeological assessment indicate that large sections of the subject property do have a moderate to high potential for archaeological resources. Most of the subject property consists of well drained undisturbed tableland areas that are located within 300 metres of one or more sources of water (Figure 4). In addition, the northern section of the property is associated with the northern slope of the Niagara Escarpment and may contain relic beach ridges associated with glacial Lake Algonquin. Finally, there is some potential for mid to late 19th century Euro-Canadian homesteads within the subject lands. Some small sections of the subject lands have a low potential for archaeological resources due to poor drainage, severe slope or previous disturbance.

Given the moderate to high archaeological potential of large sections of the subject property, it is recommended that a Stage 2 archaeological assessment should be conducted prior to the development of any of these lands. It is recommended that the conditions of approval for the development of this property should include a requirement for a Stage 2 archaeological assessment prior to any soil disturbance.

Notwithstanding the above, no archaeological survey can be considered to totally negate the potential for deeply buried cultural remains, including human burials. In consequence, it is recommended that Archaeological Assessments Ltd. (905-469-8690), and the archaeological staff of the Ontario Ministry of Tourism and Culture (416-314-7143) should be contacted immediately if any deeply buried archaeological remains are discovered during construction. Archaeological Assessments Ltd., MTC, as well as the Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Consumer and Commercial Relations, should also be notified immediately if any human remains are discovered.

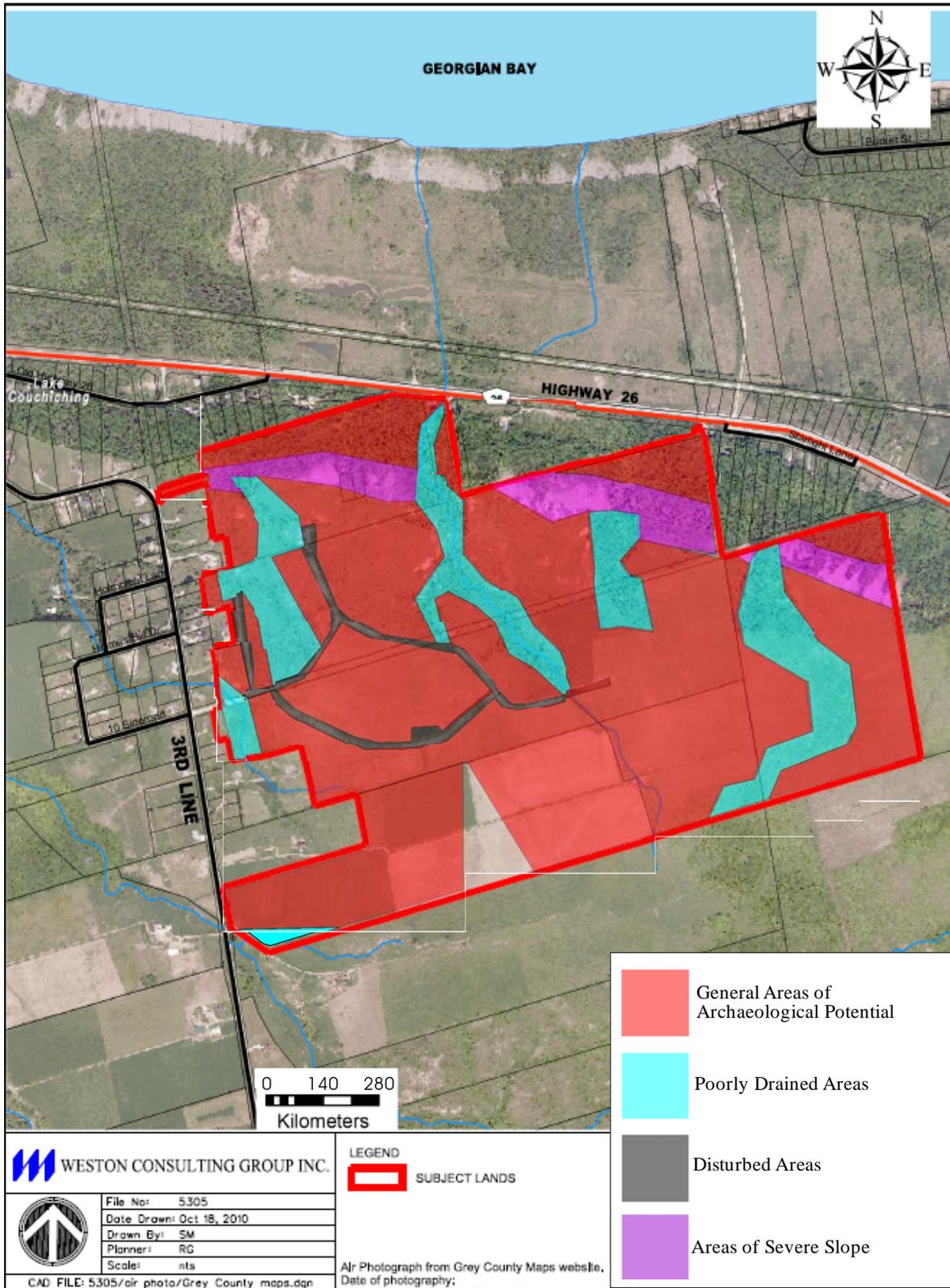


Figure 4. Archaeological Potential of the Subject Property

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Plate 1. Scrublands, Central Section of Property (view northwest)



Plate 2. Active Agricultural Lands, Southern Section of Property (view southwest)



Plate 3. Active Agricultural Lands, Southeastern Section of Property (view east)



Plate 4. Watercourse, Central Section of Property (view northwest)



Plate 5. Road Disturbance, Central Section of Property (view southeast)



Plate 6. Severe Slope, Northern Section of Property (view west)