

**Stage 1 Archaeological Assessment
Part of Lots 12 & 13, Concession 5
Kingston Township,
Frontenac County
City of Kingston**

Conducted for: **The Cruickshank Group
751 Dalton Avenue, Kingston, On
K7M 8N6**

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PIF# **P246-040-2010**
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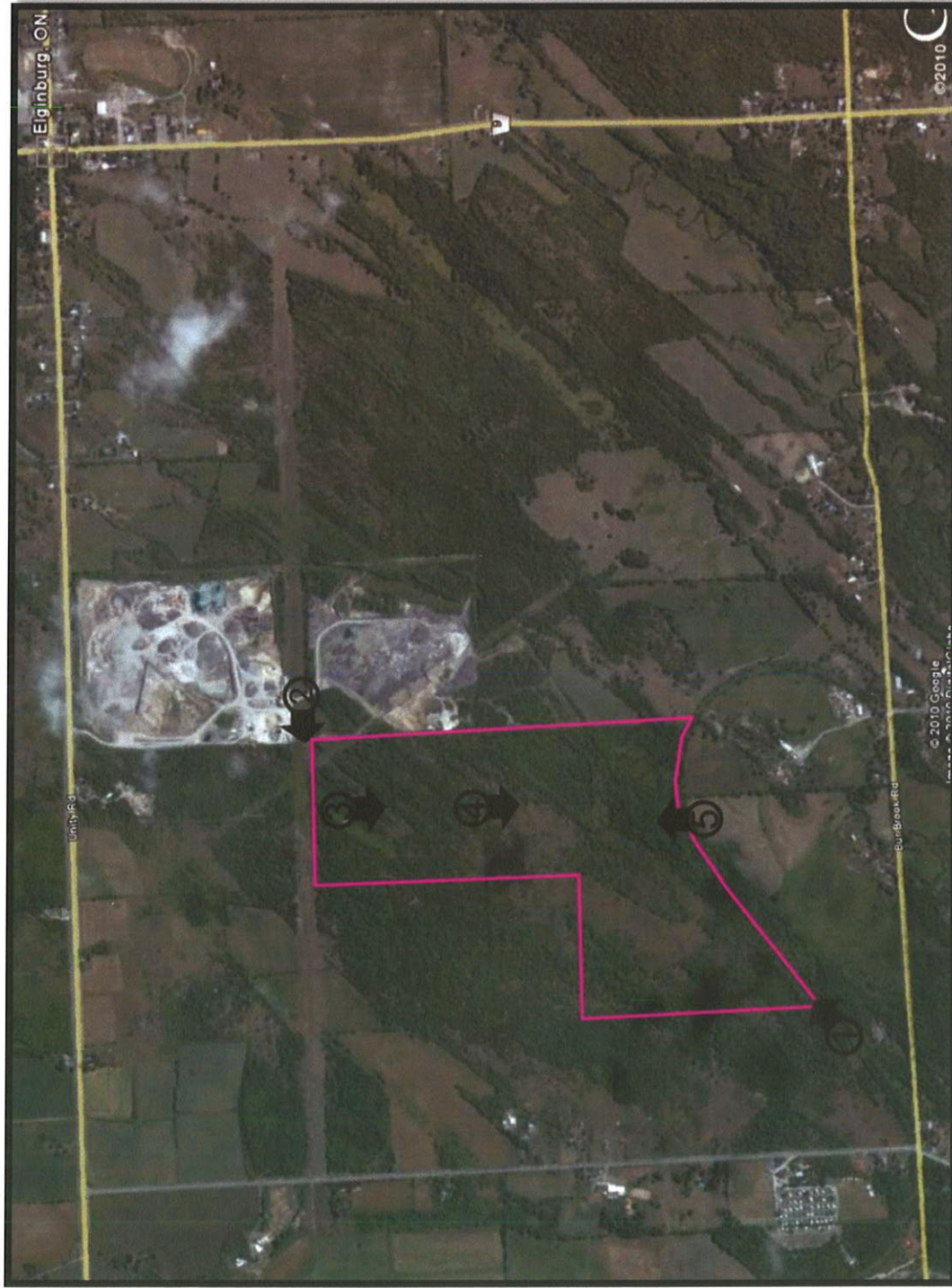


Figure 1. The study zone (in purple), and surrounding area with location of Plates indicated (Base map Google Earth, 2010).

Summary and Recommendations

In September of 2010 Ground Truth Archaeology was retained by Cruickshank Construction Limited, Kingston, Ontario to undertake a Stage 1 archaeological assessment of an approximately 95 acre parcel of land fronting onto Unity Road just west of the village of Elginburg. The property is located within parts of Lots 12 and 13, Concession 5 in Kingston Township, now within the City of Kingston (Figure 1). The subject property is owned by Cruickshank Construction Limited. The study area is east of an Aggregate Extraction Facility owned by Cruickshank Construction Limited, is bounded to the south by a section of the former K&P rail line, now a public trail, and to the north by the Trans-Canada Pipeline easement. It is the intention of Cruickshank Construction Limited to prepare for the future expansion of the existing Aggregate Extraction property on Unity Rd, Kingston, resulting in the present assessment. The Stage 1 study area was visited by the licensee, Michael Berry, on September 24, 2010.

No registered archaeological sites are found within 4.5 kilometres of the area. Research suggests that the study area was developed relatively late and not the focus of a great deal of development during the first half of the 19th century. However, the southern portion of the study area is located on a significant ridge and slope, indicating a Paleo-shoreline of the Collins Creek waterway, and is within 50 metres of a small secondary stream/creek. Ministry of Tourism and Culture Standards and Guidelines recognise these types of land formations as significant indicators of archaeological potential. All properties with archaeological potential require testing prior to land altering development.

Based on the findings of the Stage 1 archaeological assessment the licensee and Ground Truth Archaeology make the following recommendations in regards the subject property:

- The study area has areas of high potential for significant archaeological resources. Stage 2 testing should be undertaken within areas of the property designated in Figure 10. Due to the topography this should take the form of test pit excavation on five and 10 meter intervals.
- If following Stage 2 investigation any undetected or deeply buried archaeological remains are discovered during the course of future development the landowner, or their agents, should contact the Ontario Ministry of Culture, Archaeology Section at 416-314-7132.
- If following Stage 2 investigation any human remains should be discovered during the course of future development the landowner, or their agents, should contact the Police, the Cemeteries Registrar of the Ministry of Consumer and Commercial Relations (416) 326-8394 and the Ontario Ministry of Culture.

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Introduction

In September of 2010 Ground Truth Archaeology was retained by the Cruickshank Group, Kingston, Ontario to undertake a Stage 1 archaeological assessment of an approximately 95 acre parcel of land fronting onto Unity Road just west of the village of Elginburg. The property is located within parts of Lots 12 and 13, Concession 5 in Kingston Township, now within the City of Kingston (Figure 1). An existing Aggregate Extraction Facility is owned and operated by the Cruickshank Construction Limited on Lot 14 directly east of the subject property. It is the intention of Cruickshank Construction Limited to prepare for the future expansion of the existing Aggregate Extraction property on Unity Rd, Kingston Ontario. The City of Kingston required an archaeological assessment as part of the Official Plan amendment and rezoning process. In January of 2009 Ground Truth Archaeology completed a Stage 1 assessment of an approximately three hectare lot also owned by Cruickshank Construction Limited located north of the present study area (Figure 3).

Stage 1 background research utilized Land Registry Records, local histories and relevant maps. The Stage 1 study area was visited by the licensee, Michael Berry, on September 24, 2010. The weather was overcast with lighting conditions adequate for the assessment of archaeological potential. This report was written and assembled by Michael Berry, PhD of Abacus Archaeological Services, working on behalf of Ground Truth Archaeology. Portions of the historical background research on the subject property, those pertaining to Lot 13, were written by Christine Adams M.A.C. Additional editing was provided by Nick Gromoff of Ground Truth Archaeology.

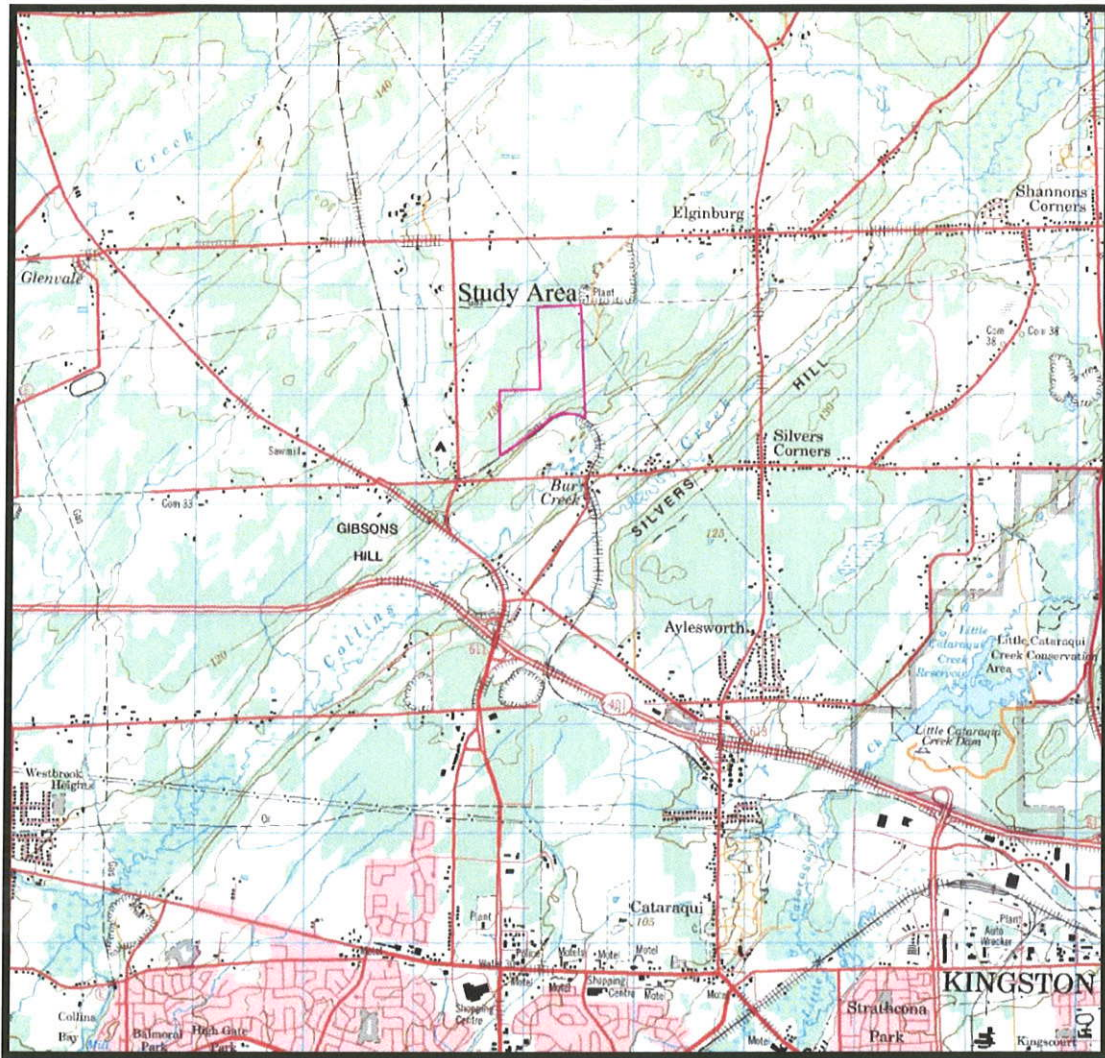


Figure 2. The study area and surrounding topography on 1:50 000 Map; study area outlined in purple (NTS 31\2h).

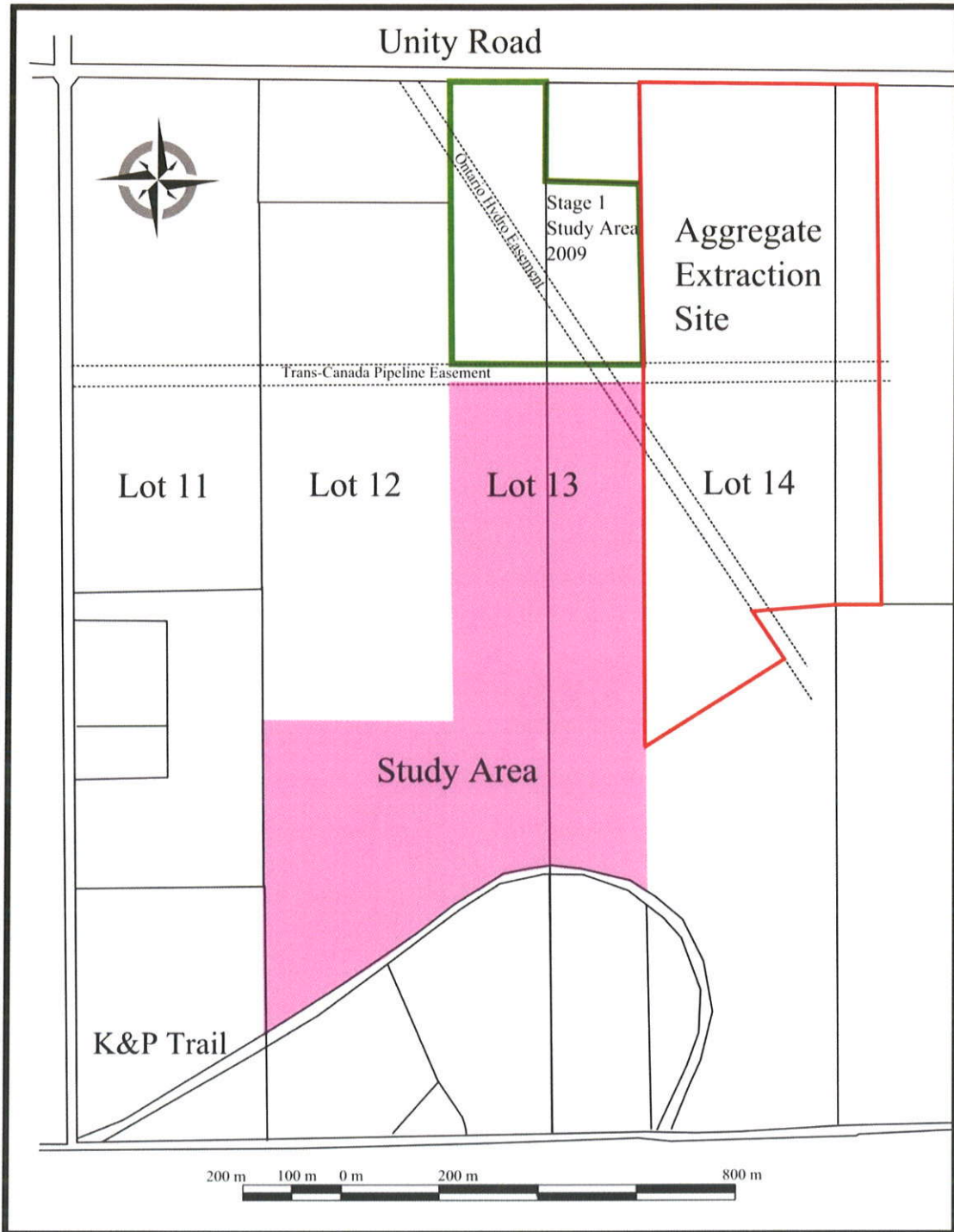


Figure 3. A plan of the study area; based on material provided by Cruickshank Construction Ltd.

Physiography of the Study Area

The subject study property lies within the physiographic region of the Napanee Limestone Plain (Chapman and Putnam, 1984) and is underlain by Middle Ordovician Black River limestone bedrock stripped by the most recent glaciation (Sanford and Baer, 1971:186). The existing soil is the upper limits of the sediments laid down in the former glacial lake period (Gillespie et al., 1962:33). The study area is essentially flat along the northern half of the property with a slope along the south end. The very southern limits of the property feature a significant slope to the south, which is formed both by the Collins Creek valley and the placement of the former K&P rail line (Plate 1). The northern limit of the subject property is defined by an easement for the Trans-Canada Pipeline (Plate 2). The cedar and other vegetation in the northern limits of the property are growing directly on bedrock, as there is virtually no soil in this area only lichen and needle/leaf litter.

The soil of the property is a shallow deposit of Farmington Loam (FL) (Plate 3) with exposed bedrock visible or thinly covered over much of the area (Gillespie et al 1962). The Farmington soils occur within areas that have very thin covering of soil materials of limestone origins and are often flat, reflecting the underlying limestone rock surface (Figure 4). The commonly thin, calcareous, soil series often do not have sufficient moisture reserve to ensure crop production, as a result these soil areas are most often used for grazing (Gillespie et al., 1962:28). Organic content is commonly high in Farmington loams, and are present into subsoil. These soils have limited agricultural and grazing use and are regarded as problem soils in the county. Common trees include eastern cedar, dwarf juniper and creeping juniper (Gillespie et al., 1962:29). The general area of Kingston lies within the Huron-Ontario sub-region of the Great Lakes-St. Lawrence Forest Region. Examples of trees that exist in this region include sugar maple, beech, basswood, white and red ash, yellow birch, red maple, and red, white and bur oaks. Eastern hemlock, eastern white pine, and balsam fir are also found in the sub-region (Rowe, 1977:93).

The subject property is located on a plateau of limestone in the uplands of the Collins Creek watershed near the divide with Glenvale Creek. No entrenched watercourses are present on the property however, offshoot streams and creeks related to the Collins Creek are present south-east of the study area in topographical maps of the area (Figure 5). One of these secondary water sources is located directly adjacent to the study area and is visible in the agricultural field south of the subject property. The topography of the area suggests that the former Paleo-shoreline of the Collins Creek waterway extended into the present subject property. A number of the water sources located directly south of the study area were created as a result of modern agricultural **use of a farm within that property**, and serve as irrigation channels and ponds servicing the farm.



Plate 1. A view east along the K&P trail line.



Plate 2. A view west along the Trans-Canada Pipeline easement.



Plate 3. A view south showing the typically shallow soils, exposed bedrock and scrub vegetation.

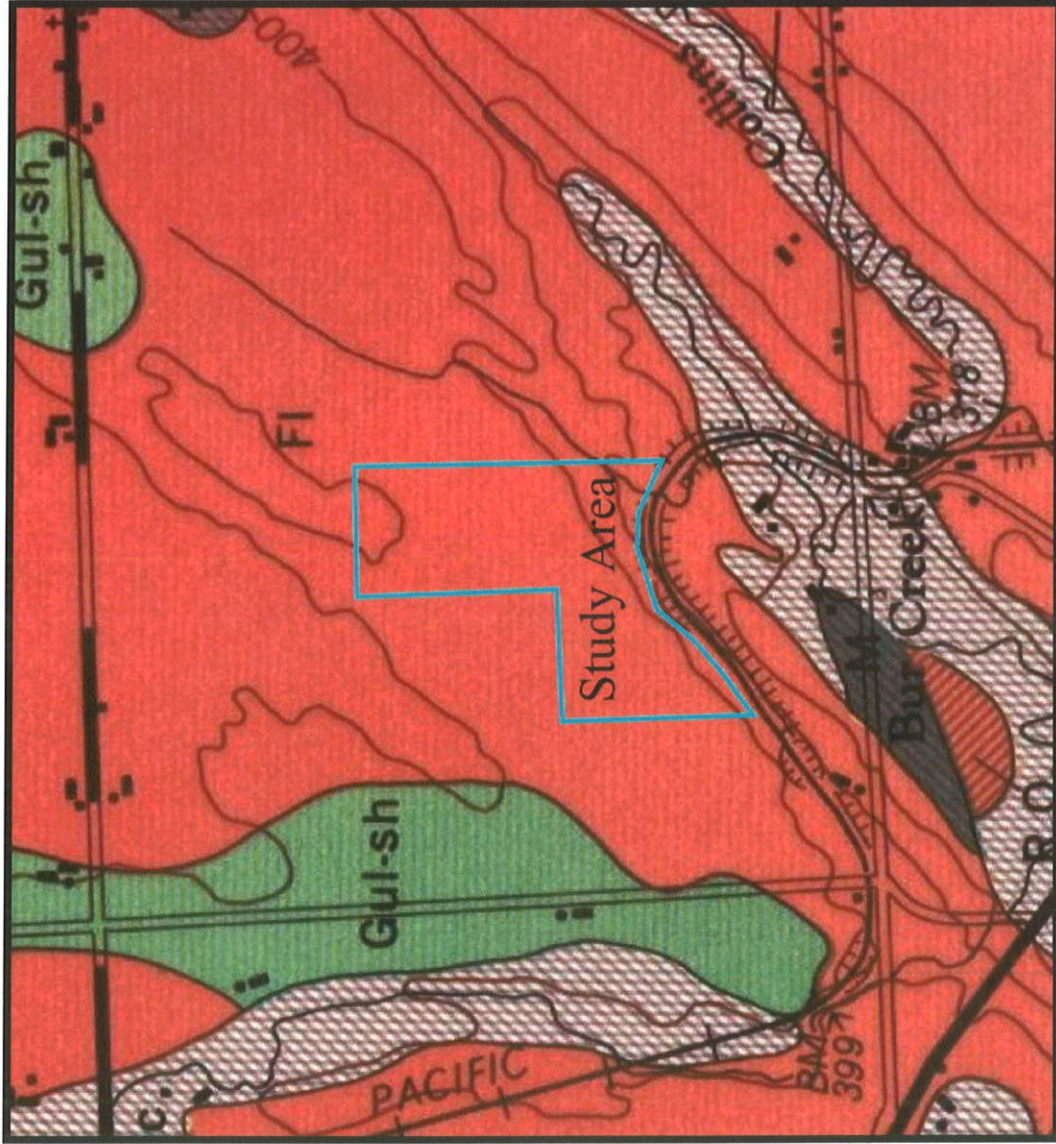


Figure 4. Soil Survey map of the study area (Gillespie and Wicklund, 1962).

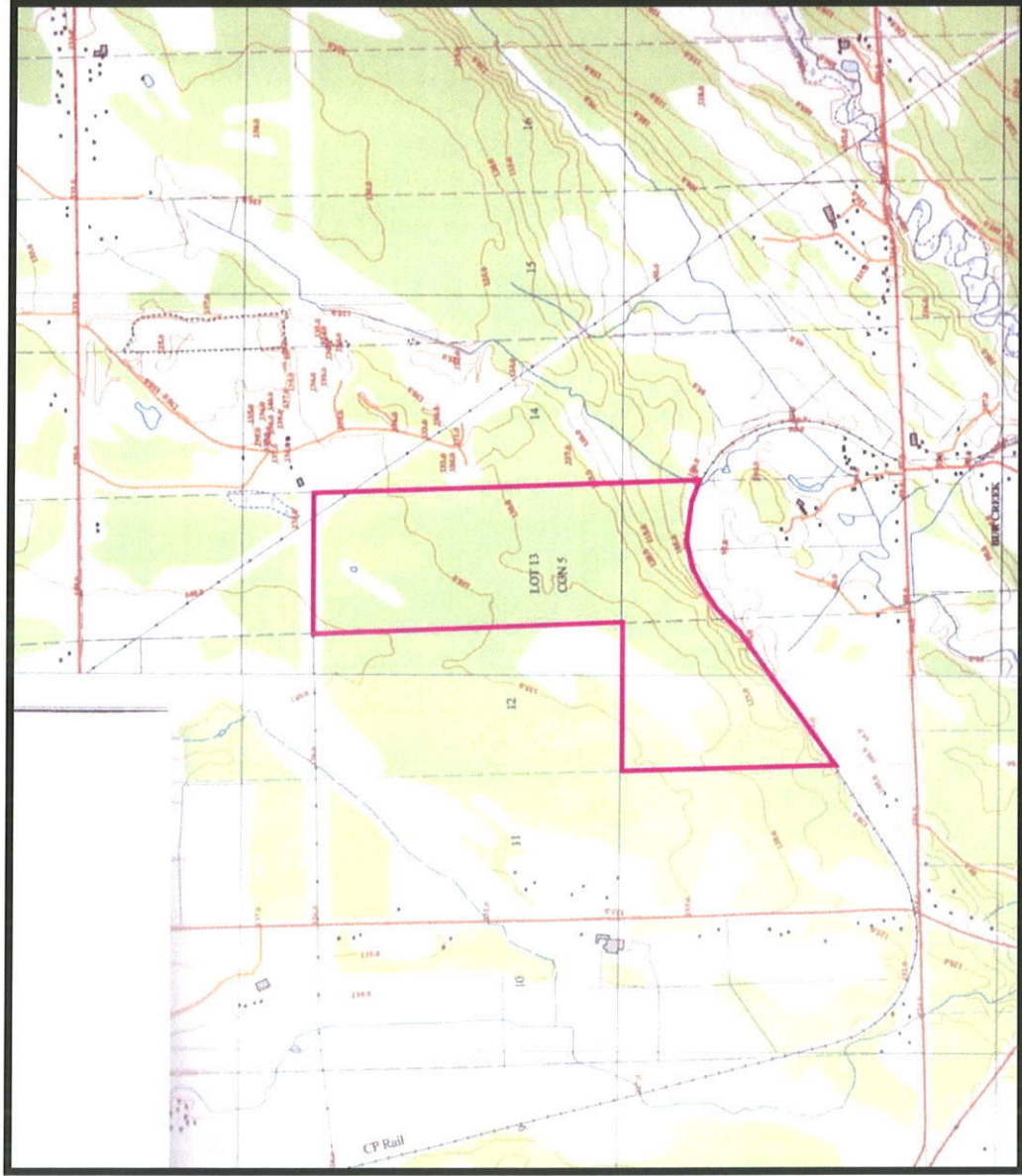


Figure 5. The study area, outlined in purple, and surrounding topography on 1:10 000 Ontario Base Map (OBM# 1018 3750 49050/1018 37000 49050)

Archaeology of the Region

The known archaeology of south-eastern Ontario begins with the Paleo-Indian Period which begins 12,000 BP when the land between the ice covered Algonquin Highlands and Lake Iroquois was exposed as far east as the Champlain Sea. In time small bands of hunters likely moved into the area in pursuit of hunting resources after a steppe environment had been established. Paleo-Indian sites are rare but not unknown in Eastern Ontario and are usually random find spots such as the spear points typical of the Late-Paleo Period. Previous work by avocational archaeologist Guy Blomely located a number of sites in the region. This research was followed on by Hugh Daechsel (Daechsel, 1988, 1989) who had the findings entered into the provincial sites database. A survey of parts of Lennox and Addington Counties by Arthur Roberts suggests that some late Palaeo-Indian occupation might be postulated for the region (Roberts, 1985). Plano finds from the Cornwall and Rideau Lakes areas suggest the presence of Palaeo-Indian people in the area, although likely on a sparse or sporadic basis.

The following period, the Archaic Period, begins around 7000 BP in Eastern Ontario. This period is noted for the extinction of the megafauna and the switch to a way of life focused on fishing and the harvesting of wild foods. This lifestyle included seasonal movements around vital resources such as fish spawning areas and the movement of animal herds. Sites such as Salisbury, near Camden East (BcGe-5), and the York Site near Bellrock (BcGe-8) have provided evidence of Archaic occupations from at least the Middle Archaic period on (Adams, 2008). It is likely that these locations attracted people from the Middle Archaic c. 3000 B.C. until well into the Woodland Period.

The beginning of the Woodland period is marked by the appearance of pottery on First Nation's sites. In Eastern Ontario this occurs around 3000 BP, a time when the Meadowood Culture of Western New York State begins to occupy the province. Although a useful temporal marker, the appearance of ceramics in eastern Ontario does not seem to have profoundly changed the hunter-gatherer lifestyle. Shortly after 2700 BP the Middle Woodland Period begins with a steady increase in the population of Ontario. By 800 AD, during the Late Woodland Period, a definitively Iroquoian people are occupying the north shore of Lake Ontario demonstrating a reliance on horticulture. Most Iroquoian people seem to have inhabited large, sometimes fortified villages throughout southern Ontario, including the north shore of Lake Ontario.

Most of the Lake Ontario north shore communities had moved northward from Lake Ontario by about 1600. Those who had lived in the St. Lawrence valley had likely amalgamated in the sixteenth century with contemporary Huron or Iroquois communities. While this movement of communities likely took place over many generations, the major impetus was the conflict between the Five Nations Iroquois of New York State and the Huron Confederacy. This conflict likely kept the population of the area artificially low. In the Kingston region most archaeological sites are known from the north shore of Lake Ontario and the islands to the south, the mouth of the Cataraqui River, the Napanee River and Wilton Creek environs and the shore of the St. Lawrence east of Kingston along with the Thousand Islands.

Within the close proximity to the study area is a site of great interest; the Arbor Ridge site (BbG-10) (Adams, 1998) has provided evidence of the prehistoric occupation and seasonal use of the Little Cataraqui Creek valley and marshy areas to the south. In 1998, Adams Heritage Consultants undertook Stage 4 at the Arbor Ridge Site (BbGd-10), a small Iroquoian settlement dating to the Middle/ Early Late Ontario Iroquoian phase (ca. A.D 1400-1450) of the Late Woodland period. The site occupies the edge of the ridge overlooking Little Cataraqui Creek just south of the CN rail tracks that bound the southern limits of the present study area. No palisade or other defensive outworks were identified during the excavation, however, a longhouse on the terrace above the valley edge was identified. The single complete longhouse excavated was 35.0 metres long, and 6.6 metres wide and was oriented approximately NE-SW (with reference to magnetic north) or almost E-W with reference to grid north. The site is interpreted as a small, summer village or hamlet where brief periods of intensive utilization of the surrounding environment were carried out.

The period of European settlement in Kingston began in July of 1673 when the French Military established Fort Cataraqui, later renamed Fort Frontenac. The fort was located on the west bank of the mouth of the Cataraqui River. Fort Frontenac was established more as a trading post than a military stronghold but nonetheless was the first permanent European settlement in the region. The fort attracted a small native and trader settlement including several Iroquois longhouses around the exterior of the fort. The French retained control of Fort Frontenac until 1758 when the fort was captured by the British under the direction of Col. Bradstreet. Following the end of the American Revolution the British began settlement in earnest of the Kingston region via land grants to United Empire Loyalists who chose to build new lives in British North America. The settlement that would become the City of Kingston was established in 1783. Rapid expansion continued and by the outbreak of the War of 1812, Kingston had become a major military town, naval harbour and shipyard. Brief stints as the capital of the Province of Ontario in 1841 demonstrated the importance of the city. Institutions such as Queen's University, the Royal Military College, hospitals and penitentiaries were established in Kingston over the last century of occupation.

There is little evidence to suggest that a significant French presence existed in Kingston Township, as the French occupation was focused on fortifications at the mouth of the Cataraqui River. However, French settlement of temporary use is always possible in the vicinity of Kingston. The township was surveyed in 1783 by Alex Aitkin and settlement began shortly thereafter. The first land grants were primarily to United Empire Loyalist resettling from the U.S and former soldiers who had served in the American Revolutionary War. The population of the township did not grow rapidly.

Improvements eventually came to the township, as did a range of transport routes throughout the township. At first roads were neglected due to the more relative ease of transport via water or sleigh. The first transportation routes usually followed existing aboriginal trails. In 1856 the Grand Trunk Railway was completed. Despite the many advances the township remained a series of rural settlements for most of the 19th century,

as such, farming was the dominant occupation. By mid-century the principal crops and farm products in the township were wheat, oats, peas, potatoes, maple sugar, wool and butter (Smith, 1851:287).

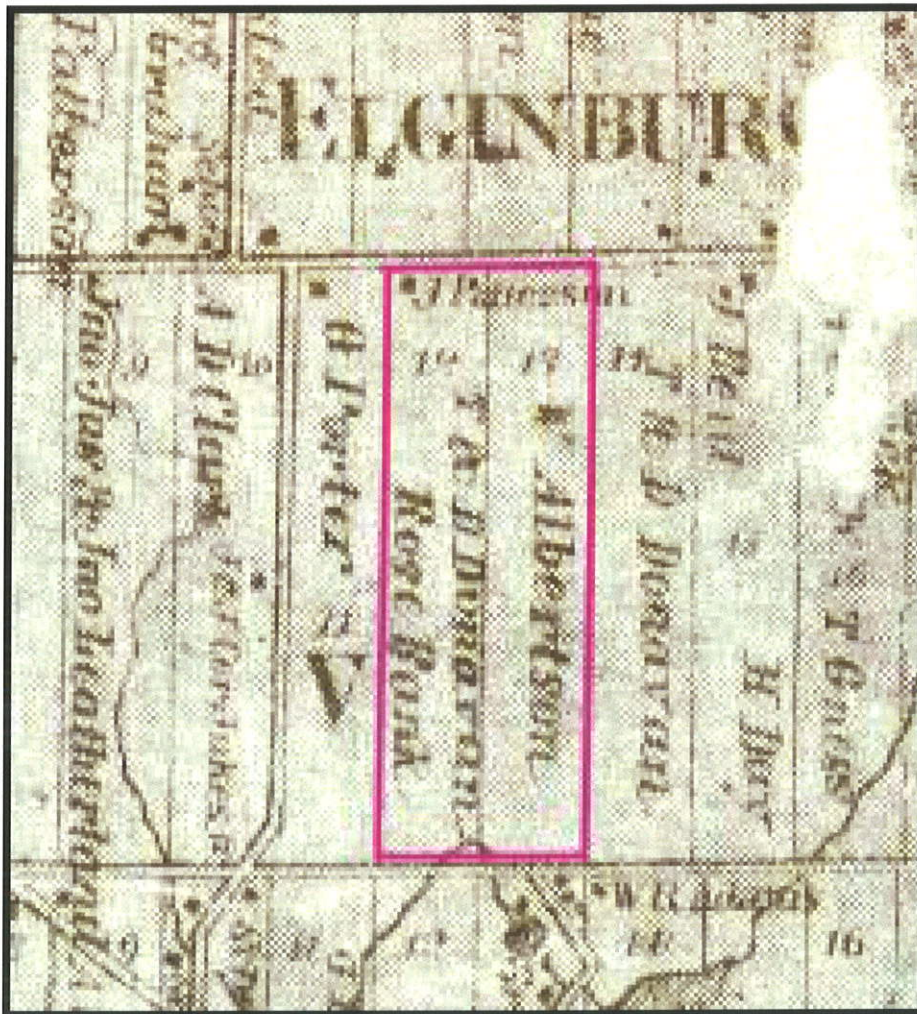


Figure 6. A section of the 1860 Walling Plan of Kingston with the lots containing the study area are outlined in purple.

Previous Archaeological Research near the Subject Property

Within the City of Kingston there are more than 70 terrestrial recorded sites. Most of which are located within the urban core of Kingston. These sites, mainly historic in nature, lie within the City of Kingston's downtown core. Registered historic period sites include McBurney Park BbGc-89, the Kingston Harbour Front BbGc-7, Fort Frontenac BbGc-8, Frontenac Village BbGc-11, the Bajus Brewery BbGb-12, the Union Cemetery BbGc-87, the Market Square BbGc-88, Queen and Bagot BbGc-91, and the North Block BbGc-92 / BbGc-78. The intensity of the archaeological remains in the city demonstrates the rich heritage of the region.

No archaeological excavations have been undertaken directly within the study area. In January of 2009 Ground Truth Archaeology completed a Stage 1 assessment of an approximately three hectare lot also owned by Cruickshank Construction Limited located north of the present study area (Figure 3). That study found a low potential for archaeological remains within the property (Gromoff, 2009). Consultation with the Ministry of Culture's Archaeological Sites Database found that no registered archaeological sites are found within 4.5 km of the study area¹, which lies within the Borden Block BbGd.

¹ Information courtesy of Robert Von Bitter, Archaeological Data Coordinator, Ontario Ministry of Culture.

Property and Structural History
Lots 12, 13, Concession 5
Geographical Township of Kingston
Frontenac County

Upon patent by the Crown Lot 12 was split into eastern and western halves each consisting of 100 acres. The eastern half of Lot 12 was granted to Micajah Purdy in 1798, and the western half was granted in 1802 to John Warner. The eastern half was retained by Micajah Purdy until 1823 when he sold the property to Lewis Day, in the same year Day sold the property to John Lampton Hodgson. In 1825 Warner sold the north-eastern quarter to Hodgson, consolidating his ownership of the majority of the lot.

In 1828 Hodgson sold the southern 100 acres of Lot 12 to John and Lydia Pugh. Upon the death of John Warner in 1832 his land holdings passed via will to John Vincent and his wife; one of the Vincent's were likely relatives of John Warner. By 1834 the northern 100 acres of Lot 12 were sold to John Patterson. John Patterson was born in Scotland, a Presbyterian, married to Isabella Patterson. The couple had at least seven children according to the 1851 census of Canada West, four of which were adults at the time of enumeration and working in the Kingston Township area (Ancestry.com, 2010a).

In 1849 John and Lydia Pugh sold the southern 100 acres to Timothy Donovan, an Irish Catholic immigrant born in 1811. Donovan only farmed his 100 acre holding, as he owned nearby Lot 14 and maintained his home on that property along with his wife Catharine and their seven children (Ancestry.com, 2010b) (Figure 6). The ownership of Lot 12 remained with the Patterson's and Donovan's for the remainder for the 19th century. In 1879, upon the death of John Patterson, the ownership of the northern part passed to his second oldest son, Francis Patterson. The eldest Patterson son, George, was described as a Seaman in the 1851 census and was likely no longer living on the family farm. In December 1874 the Kingston and Pembroke Railway Company purchased a portion Lot 12 from Timothy Donovan in order to run a rail line across the property (see Figure 8).

Lot 13 within Concession 5 was also split along its eastern and western halves. The east half of Lot 13 was first granted by the Crown to John Cummings et al, in 1802 (OLR). The west half was granted at the same date to Colonel Neil McLean. These men were Loyalists, and would have viewed these properties, by the Crown following the American Revolution, as capital, rather than as working farms.

In 1812, John Cumming and Peter Smith transferred title to the east half of Lot 13 to Peter Smith. The west half was mortgaged by John McLean in 1834 (OLR). In 1838, the Smiths sold the east half to William Dames, who sold it to William Albertson in 1840 (OLR). William Albertson was of Loyalist stock, on all sides. He was born in Kingston Township in 1806, and died there in 1881. His wife Ann Maria Loney was also from Kingston Township. They had many children, mostly girls, and in 1851 were living on Lot 13, in a one storey log house. A labourer, Charles Murray, his wife and daughter were living in a shanty nearby. It seems most likely that the Albertson house of 1851 was

in the same location as the one shown on Walling's map of 1860, since the family was enumerated near the Switzers and Gibsons and Jacksons of Jackson's Mill. All of these families' properties lay on or near the fourth concession line. In 1860, Walling's map showed Lot 13 in the possession of W. Albertson (Walling, 1860) (Figure 6).

The Historical Atlas, nearly two decades later, shows W. Albertson owning the east half of Lot 13 (Figure 8). There was a house located at the south end of the property, between the creek to the south, and the railway line to the north. The west half of Lot 13 was owned by Timothy Donovan, who lived on Lot 14 (Meacham, 1878). Donovan purchased the land in 1840 from John McLean (OLR). After the death of William Albertson, his wife, Maria, gave the property to her son, John in 1882. Both halves of the lot remained in the possession of the original settlers until after 1900 (OLR).

In summary, the study area was settled fairly late by local standards, and does not appear to have had any other use than agricultural during the historic period.

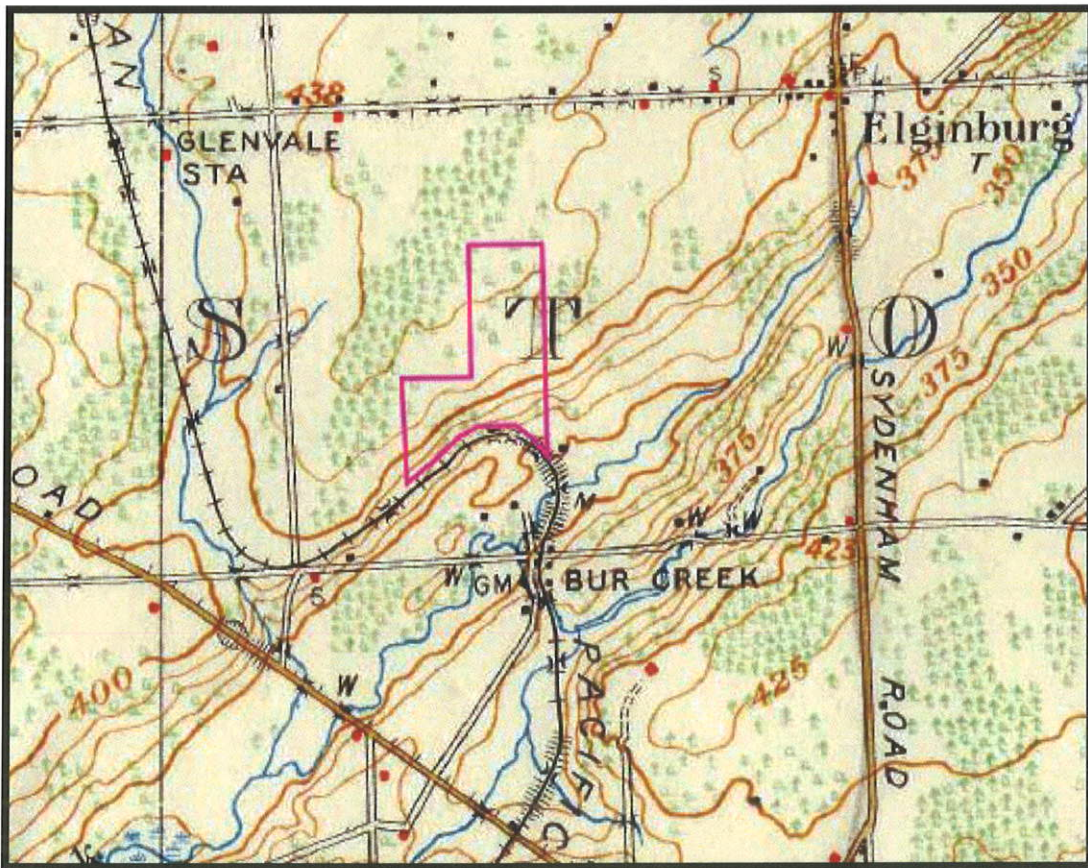


Figure 7. The study area and surrounding topography on 1 inch to 1 mile National Topographical Series Map (Sheet No. 63).

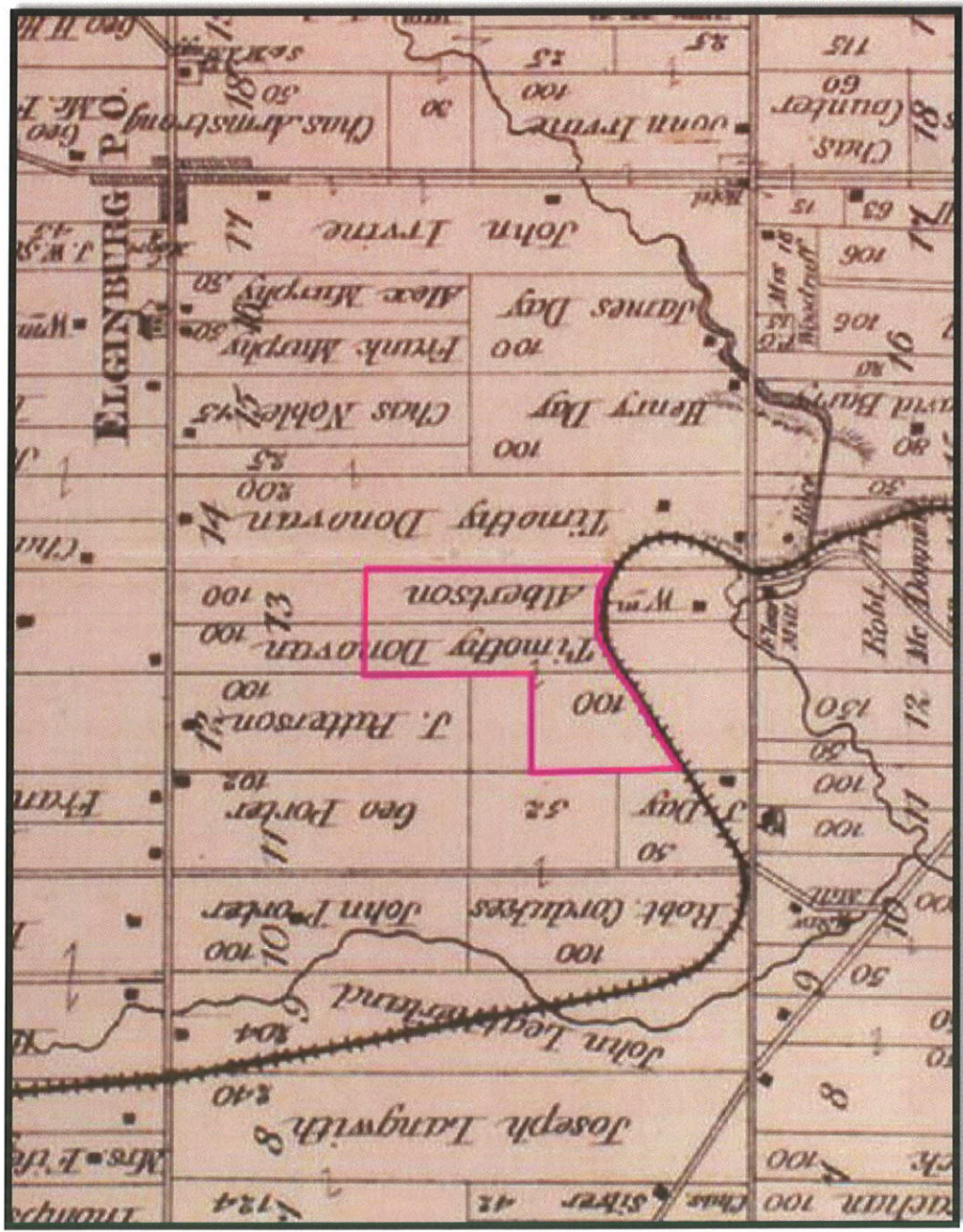


Figure 8. A section of a 1878 County Atlas plan with the study area outlined in purple.



Figure 9. An air photograph from 1953 with the study area outlined in purple

Archaeological Potential of the Study Area

Background research on the history of Lots 12 and 13 indicates that settlement likely did not occur on the property until after the mid 19th century. The available map evidence shows that all buildings and settlement on the property were concentrated along the concession road (modern Burbrook Road) at the south end of the lots, outside of the subject property. The study area is not located on a significant historic transportation route such as a waterway, historic highway or Colonization Road. There are at present several secondary water sources south and east of the study area, however all of these appear to have been created in the 20th century by human modification to the landscape (see Physiography). The available evidence suggests that none of the present water sources located directly adjacent to the study area (Figure 5) were created until the recent construction and terraforming associated with the Aggregate Extraction Facility and agricultural drainage of local farms.

As indicated in the Physiography section, the most significant land feature within the study area is located within the southern end of the property. A small creek is extant running on a north-east to south-west axis along the southeast corner of the study area. This secondary water source raises the potential for significant archaeological resources to be found within the study area. The very southern limits of the property also contain a significant slope running south of a east-west running ridge, which is indicative of a Paleo-shoreline associated with the Collins Creek waterway (Figure 5, 7). The on site assessment of the property revealed that much of the northern areas of the property has little to no soil cover over the exposed limestone bedrock (Plate 3), however the southern area of the property nearest to the Paleo-shoreline appears to have the greatest amount of soil cover as suggested by the dense forest vegetation (Plate 4, 5). Taken together the subject property can be said to have significant potential for prehistoric archaeological resources within its southern extents (Figure 10). Consequently this area, along with a 300 meter buffer, should be subject to test pit excavation at a 5 meter interval. The remainder of the property has a significantly lower potential and should only be subject to testing at a 10 meter interval (Figure 10).



Plate 4. A view south towards the gradual down slope; note the increasing vegetation.



Plate 5. A view north up the slope formed by a Paleo-shoreline.

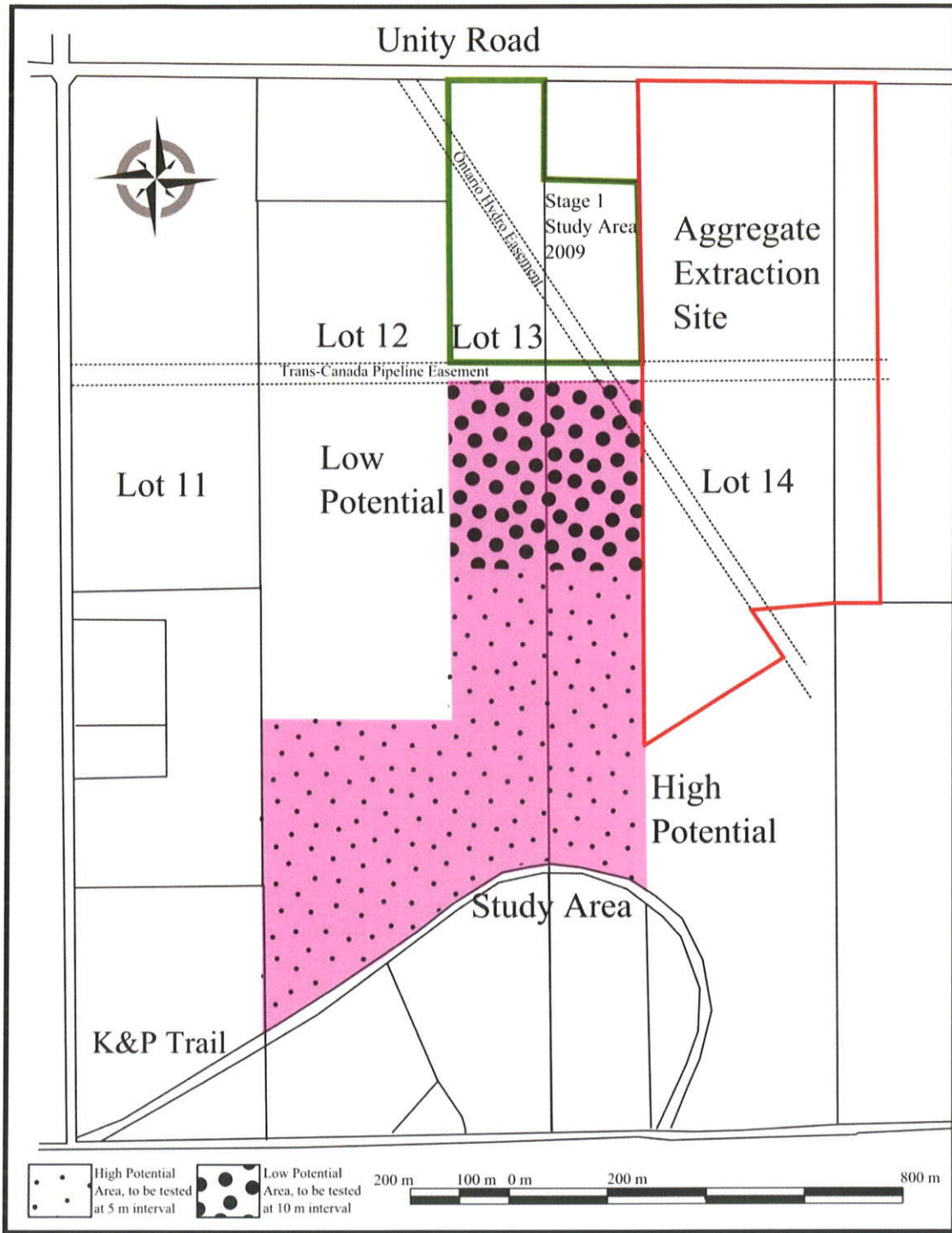


Figure 10. A plan of the study area archaeological potential; based on material provided by Cruickshank Construction Ltd.

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References

Image and Topographic Map References

- 1:50, 000 Topographical Map - NTS 31/C7 1975
- 1:10, 000 Ontario Base Map - OBM # 1018 3750 49050/1018 37000 49050
- 1 inch to 1 mile National Topographical Series Map - Sheet No. 63 1912

Air Photography

- 1953 Provincial Series 4414-29-38. Queen's University Air Photograph Collection

Archival Map Source References

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- 1878 Illustrated Historical Atlas of the Counties of Frontenac, Lennox and Addington, Ontario, Belleville. J.H. Meacham. Reprinted by Mika Silk Screening Limited. Queen's University Library Map Collection.

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Photographic Catalogue

Photo #	Description	Date
P246-40-D01	View West of pipeline area	24/09/2010
P246-40-D02	View West of pipeline area	24/09/2010
P246-40-D03	View West of pipeline area	24/09/2010
P246-40-D04	View West of pipeline area	24/09/2010
P246-40-D05	View south of study area	24/09/2010
P246-40-D06	View south of study area	24/09/2010
P246-40-D07	View south of study area	24/09/2010
P246-40-D08	View south of study area	24/09/2010
P246-40-D09	View south of study area	24/09/2010
P246-40-D10	View North of study area along K&P trail	24/09/2010
P246-40-D11	View North of study area along K&P trail	24/09/2010
P246-40-D12	View East of study area along K&P trail	24/09/2010
P246-40-D13	View East of study area along K&P trail	24/09/2010
P246-40-D14	View East of study area along K&P trail	24/09/2010
P246-40-D15	View North of study area	24/09/2010
P246-40-D16	View North of study area	24/09/2010
P246-40-D17	View North of study area	24/09/2010
P246-40-D18	View North of study area	24/09/2010
P246-40-D19	View North of study area	24/09/2010

*All photos were taken with a 15.1 Megapixel Canon Eos Rebel T1i Digital SLR camera.