

**Stage 1 & 2 Archaeological Assessment  
Municipal Class EA  
Proposed Kinburn Line Bridge Replacement Project  
Part of Lots 25 and 26, Concession 3 South of Huron Rd and  
Part of Lots 25 and 26, Concession 2 South of Huron Rd  
Geographic Township of Tuckersmith  
Municipality of Huron East  
Huron County, Ontario**

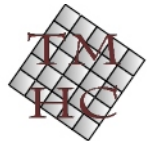
Submitted to

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and

**The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries**

Prepared by



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## Executive Summary

A Stage 1 and 2 archaeological assessment was conducted as part of a Municipal Class EA for the proposed Kinburn Line Bridge Replacement project in the Municipality of Huron East, Ontario. The project area is roughly 0.43 hectares (1.06 ac) in size and currently contains a pony truss bridge and associated right-of-way (ROW). The Kinburn Line Bridge is located on Kinburn Line, and comprises part of Lots 25 and 26, Concession 2 and 3 South of Huron Road in the Geographic Township of Tuckersmith, Huron County (now the Municipality of Huron East), Ontario. The bridge will be replaced and will be widened from 6.1 m to 10 m. Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted by B.M. Ross and Associates Limited, working on behalf of the Municipality, to carry out an archaeological assessment. The assessment was conducted in accordance with the provisions of the *Environmental Assessment Act* (R.S.O. 1990). The purpose of the assessment was to determine whether there were archaeological resources present within the project area.

The Stage 1 background study included a review of current land use, historic and modern maps, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. It also involved a review of previously registered archaeological resources within 1 km of the project area and previous archaeological assessments within 50 m. The background study indicated that the project area had potential for containing archaeological resources due to its proximity (i.e., within 300 m) to features that signal archaeological potential, namely: 1) a watercourse (Bayfield River); 2) 19<sup>th</sup> century travel routes (Kinburn Line and Front Road); and 3) historic structures (19<sup>th</sup> century residences and a school).

The project area consisted of non-ploughable lands and was recommended for assessment via standard test pitting at a 5 m transect interval in keeping with provincial standards. The Stage 2 field inspection established that the entirety of the project area had been previously disturbed (72.1%), was steeply sloped (20%) or was low and wet (7%). As the project area was entirely of low archaeological potential, only photo-documentation was carried out.

The entire project area was deemed to be of low archaeological potential during a Stage 2 assessment. As such, it should be considered free of archaeological concern and no further assessment work is recommended.

**Our recommendations are subject to the conditions laid out in Section 5.0 of this report and to Ministry of Heritage, Sport, Tourism and Culture Industries' review and acceptance of this report into the Ontario Public Register of Archaeological Reports.**



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### **Project Personnel**

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### **Acknowledgements**

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<b><i>Kelly Vader</i></b>	<i>Planner</i> B.M. Ross and Associates Limited
<b><i>Barry Mills</i></b>	<i>Public Works Manager</i> Municipality of Huron East



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Huron County, Ontario**

## **1.0 PROJECT CONTEXT**

### **1.1 Development Context**

#### ***1.1.1 Introduction***

A Stage 1 and 2 archaeological assessment was conducted as part of a Municipal Class EA for the proposed Kinburn Line Bridge Replacement project in the Municipality of Huron East, Ontario. The project area is roughly 0.43 hectares (1.06 ac) in size and currently contains a pony truss bridge and associated right-of-way (ROW). The Kinburn Line Bridge is located on Kinburn Line, and comprises part of Lots 25 and 26, Concession 2 and 3 South of Huron Road in the Geographic Township of Tuckersmith, Huron County (now the Municipality of Huron East), Ontario. The bridge will be replaced and will be widened from 6.1 m to 10 m. Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted by B.M. Ross and Associates Limited, working on behalf of the Municipality, to carry out an archaeological assessment. The assessment was conducted in accordance with the provisions of the *Environmental Assessment Act* (R.S.O. 1990). The purpose of the assessment was to determine whether there were archaeological resources present within the project area.

All archaeological assessment activities were performed under the professional archaeological license of Jim Sherratt, M.A. (P074) and in accordance with the *Standards and Guidelines for Consultant Archaeologists (Standards and Guidelines)* (MTC 2011, “*Standards and Guidelines*”). Permission to enter the property and carry out all required archaeological activities, including collecting artifacts when found, was given by Kelly Vader of B.M. Ross and Associates Limited.

#### ***1.1.2 Purpose and Legislative Context***

The *Ontario Heritage Act* (R.S.O. 1990) makes provisions for the protection and conservation of heritage resources in the Province of Ontario. Heritage concerns are recognized as a matter of provincial interest in Section 2.6.2 of the *Provincial Policy Statement* (PPS 2020) which states:

*development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.*

In the PPS the term *conserved* means:

the identification, protection, management and use of *built heritage resources, cultural heritage landscapes and archaeological resources* in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments.

The purpose of a Stage 1 background study is to determine if there is potential for archaeological resources to be found on a property for which a change in land use is pending. It is used to determine the need for a Stage 2 field assessment involving the search for archaeological sites. In accordance with *Provincial Policy Statement 2.6.2*, if sites of further cultural heritage value or interest are found, a strategy (usually avoidance, preservation or excavation) must be put forth for their mitigation.

*The Environmental Assessment Act* (R.S.O. 1990) provides for the protection and conservation of the environment. In this case, the environment is widely defined to cover “cultural heritage” resources. Section 5(3)(c) of the Act stipulates that heritage resources to be affected by a proposed undertaking be identified during the environmental screening process. Within the EA process, the purpose of a Stage 1 background study is to determine if there are known cultural resources within the proposed study area, or potential for such resources to exist. Subsequently, it can act as a planning tool by identifying areas of concern that, where possible, could be avoided to minimize environmental impact. It is also used to determine the need for a Stage 2 field assessment involving the search for archaeological sites.

## **2.0 STAGE 1 ARCHAEOLOGICAL ASSESSMENT**

### **2.1 Research Methods and Sources**

A Stage 1 overview and background study was conducted to gather information about known and potential cultural heritage resources within the project area. According to the *Standards and Guidelines*, a Stage 1 background study must include a review of:

- an up-to-date listing of sites from the Ontario’s Past Portal for 1 km around the property;



- 
- reports of previous archaeological fieldwork within a radius of 50 m around the property;
  - topographic maps at 1:10,000 (recent and historical) or the most detailed scale available;
  - historic settlement maps (e.g., historical atlas, surveys)
  - archaeological management plans or other archaeological potential mapping (when available); and
  - commemorative plaques or monuments on or near the property.

For this project, the following activities were carried out to satisfy or exceed the above requirements:

- a database search was completed through the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) PastPortal (PastPort) system that compiled a list of registered archaeological sites within 1 km of the project area (completed August 17, 2020);
- a review of known prior archaeological reports for the property and adjacent lands (note: the MHSTCI currently does not keep a publicly accessible record of archaeological assessments carried out in the Province of Ontario, so a complete inventory of prior assessment work nearby is not available);
- Ontario Base Mapping (1:10,000) was reviewed through ArcGIS and mapping layers provided by geographynetwork.ca; detailed mapping provided by the client was also reviewed;
- a series of historic maps and photographs was reviewed related to post-1800 land settlement;

There are no applicable archaeological management plans for the area, no historic plaques within the vicinity of the project area.

Additional sources of information were also consulted, including modern aerial photographs, local history accounts, soils and physiographic data provided by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), and both 1:50,000 (Natural Resources Canada) and finer scale topographic mapping.

When compiled, background information was used to create a summary of the characteristics of the study area, in an effort to evaluate its archaeological potential. The Province of Ontario (MTC 2011 – Section 1.3.1) has defined the criteria that identify archaeological potential as:

- previously identified archaeological sites;
- water sources;
  - primary water sources (lakes, rivers, streams, creeks);
  - secondary water courses (intermittent streams and creeks, springs, marshes, swamps);





- features indicating past water sources (e.g., 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 topography, shorelines of drained lakes or marshes, cobble beaches);
- accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh);
- elevated topography (e.g., eskers, drumlins, large knolls, plateaux);
- 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; there may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings;
- resource areas, including:
  - food or medicinal plants (e.g., migratory routes, spawning areas, prairie);
  - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert);
  - early settler industry (e.g., fur trade, logging, prospecting, mining);
- areas of early 19<sup>th</sup>-century settlement. These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks.
- early historical transportation routes (e.g., trails, passes, roads, railways, portage routes);
- property listed on a municipal register or designated under the *Ontario Heritage Act* or that is a federal, provincial, or municipal historic landmark or site; and
- property that local histories or informants have identified with possible archaeological sites, historical events, activities or occupations.

In southern Ontario (south of the Canadian Shield), any lands within 300 metres of any of the features listed above are considered to have potential for the discovery of archaeological resources.

Typically, a Stage 1 assessment will determine potential for Indigenous and historic era sites independently. This is due to the fact that lifeways varied considerably during these eras so that criteria used to evaluate potential for each type of site also varies.

It should be noted that some factors can also negate the potential for discovery of intact archaeological deposits. Subsection 1.3.2 of the *Standards and Guidelines* indicates that archaeological potential can be removed in instances where land has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Major disturbances indicating removal of archaeological potential include, but are not limited to:



- quarrying;
- major landscaping involving grading below topsoil;
- building footprints; and
- sewage and infrastructure development.

Some activities (agricultural cultivation, surface landscaping, installation of gravel trails, etc.) may result in minor alterations to the surface topsoil but do not necessarily affect or remove archaeological potential. It is not uncommon for archaeological sites, including structural foundations, subsurface features and burials, to be found intact beneath major surface features like roadways and parking lots. Archaeological potential is, therefore, not removed in cases where there is a chance of deeply buried deposits, as in a developed or urban context or floodplain where modern features or alluvial soils can effectively cap and preserve archaeological resources.

## **2.2 Project Context: Archaeological Context**

### **2.2.1 Project Area: Overview and Physical Setting**

The project area consists of the Kinburn Line Bridge spanning the Bayfield River and a portion of the ROW located on Kinburn Line and Front Road. It falls within Lots 25 and 26, Concessions 2 and 3 South of Huron Road in the Municipality of Huron East, Huron County, Ontario (Maps 1 and 2). The existing Kinburn Line Bridge is a riveted, six-panel, half-through or pony truss structure with a cast-in-place concrete and steel deck, measuring 32.3 m by 7.25 m, and cast-in-place concrete wingwalls and abutments. It is our understanding that the assessment is limited to the ROW and no staging areas outside the ROW are required. The project area measures 240 m in length and 30 m in width and covers the footprint of the current bridge and a portion of the ROW.

The project area is within the Horseshoe Moraines physiographic region, as defined by Chapman and Putnam (1984; Map 4). The Horseshoe Moraines region covers an area of roughly 2,158 square miles from the Niagara Escarpment to the southern end of Lake Huron (Chapman and Putnam 1984:127) and is known for its well-drained Huron loam clay and deposits of sand and gravel. Specifically, the project area falls within a till plain. The mapped soil type within the project area is predominantly Bottom Land (Map 4). Bottom Land is low lying soil along streams and river which are subject to flooding. It is an immature soil and shows little horizon differential (Hoffman et al. 1952:70). The project area is drained by Bayfield River, which transects the project area (Map 5).

### **2.2.2 Summary of Registered or Known Archaeological Sites**

According to Ontario's Past Portal maintained by the Ministry of Heritage Sport, Tourism and Culture Industries, there are no registered archaeological sites within 1 km of the project area.



### **2.2.3 Summary of Past Archaeological Investigations within 50 Metres**

During the course of this study no record was found of any archaeological investigations within 50 m of the project area. One cultural heritage evaluation report/heritage impact assessment was conducted for the bridge. However, it should be noted that the Ministry of Heritage, Sport, Tourism and Culture Industries currently does not provide an inventory of archaeological assessments to assist in this determination.

In 2019, TMHC conducted a Cultural Heritage Evaluation/Heritage Impact Assessment for the Front Road Bridge (renamed the Kinburn Line Bridge) on behalf of B.M. Ross and Associates. The assessment concluded that the proposed development will cause impacts to the heritage value of the bridge. Mitigation measures including documentation of the bridge prior to demolition, and discussion with the municipality to gauge the feasibility of publicly displaying a salvaged section of the existing truss structure. The results of this work are presented in a report entitled *Cultural Heritage Evaluation Report/Heritage Impact Assessment, Front Road Bridge, Huron East, Huron County, ON* (TMHC 2020).

### **2.2.4 Dates of Archaeological Fieldwork**

The Stage 2 fieldwork was conducted on August 6, 2020 in sunny and clear weather conditions. The field director for the field work was Jim Sherratt (P074).

## **2.3 Project Context: Historical Context**

### **2.3.1 Indigenous Settlement in Huron County**

In recent years, our archaeological knowledge of the Huron County area has improved greatly, largely due to various cultural resource management surveys that have accompanied *Green Energy Act* development projects. Nonetheless, our knowledge of past Indigenous land use in the area is still incomplete. Using province-wide and region-specific data, a generalized cultural chronology for Indigenous settlement in the area can be proposed. The following paragraphs provide a basic textual summary of the known general cultural trends and a tabular summary appears in Table 1.

#### *Paleo Period*

The first human populations to inhabit southern Ontario arrived between 12,000 and 10,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different then they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleoindians by archaeologists, Ontario's first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In this area, caribou may have provided the staple of Paleo diet, supplemented by wild plants, small game, birds and fish.



Given the low density of populations on the landscape at this time and their mobile nature, Paleo sites are small and ephemeral. They are sometimes identified by the presence of fluted projectile points manufactured with high quality raw materials. Sites or find spots are frequently located adjacent to the strandlines of large glacial lakes. This settlement pattern has been attributed to the strategic placement of camps in high, dry areas and at logistical points for the interception of migrating caribou herds.

**Table 1: Cultural Chronology for Indigenous Settlement in Huron County**

Period		Time Range (circa)	Diagnostic Features	Complexes
Paleo	Early	9000 - 8400 B.C.	fluted projectile points	Gainey, Barnes, Crowfield
	Late	8400 - 8000 B.C.	non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Archaic	Early	8000 - 6000 B.C.	serrated, notched, bifurcate base points	Nettling
	Middle	6000 - 2500 B.C.	stemmed, side & corner notched points	Brewerton, Otter Creek, Stanly/Neville
	Late	2000 - 1800 B.C.	narrow points	Lamoka
		1800 - 1500 B.C.	broad points	Genesee, Adder Orchard, Perkiomen
		1500 - 1100 B.C.	small points	Crawford Knoll
	Terminal	1100 - 950 B.C.	first true cemeteries	Hind
Woodland	Early	950 - 400 B.C.	expanding stemmed points, Vinette pottery	Meadowood
	Middle	400 B.C. - A.D. 500	dentate, pseudo-scallop pottery	Saugen
	Transitional	A.D. 500 - 900	first corn, cord-wrapped stick pottery	Princess Point
	Late	A.D. 900 - 1300	first villages, corn horticulture, longhouses	Glen Meyer
		A.D. 1300 - 1400	large villages and houses	Uren, Middleport
		A.D. 1400 - 1650	tribal emergence, territoriality, first Europeans	Odawa
Contact	Indigenous	A.D. 1700 - present	treaties, mixture of Native & European items	Ojibway, Odawa
	Settler	A.D. 1796 - present	English goods, homesteads	European settlement, pioneer life

### *Archaic Period*

The archaeological record of early Indigenous life in southern Ontario indicates a change in lifeways beginning circa 8000 B.C. at the start of what archaeologists call the Archaic Period. The Ontario populations are better known than their Paleo predecessors, with numerous sites found throughout the area. The characteristic projectile points of early Archaic populations appear similar in some respects to early varieties and are likely a continuation of early trends. Archaic populations continued to rely heavily on game, particularly caribou, but diversified their diet and exploitation patterns with changing environmental conditions. A seasonal pattern of warm season river or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record. Since the large cold weather mammal species that formed the basis of the Paleo subsistence pattern became extinct or moved northward with the onset of warmer climate, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environs and resource abundance led to the expansion of band and family sizes. In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would come together in times of resource abundance.

The coniferous forests of earlier times were replaced by stands of mixed coniferous and deciduous trees by about 4000 B.C. The transition to more productive environmental circumstances led to a rise in population density. As a result, Archaic sites become more abundant over time. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone scrapers, ground stone tools (e.g., celts, adzes)



and ornaments (e.g., bannerstones, gorgets), bifaces or tool blanks, animal bone and waste flakes, a byproduct of the tool making process.

#### *Early, Middle and Transitional Woodland Periods*

Significant changes in cultural and environmental patterns are witnessed in the Early, Middle and Transitional Woodland periods (c. 950 B.C. to 1000 A.D.). Occupations became increasingly more permanent, culminating in major semi-permanent villages by roughly 1,000 years ago. Archaeologically, the most significant changes by the Woodland Period are the appearance of artifacts manufactured from modeled clay and the emergence of more sedentary villages. The earliest pottery was crudely made by the coiling method and early house structures were simple oval enclosures. The Early and Middle Woodland periods are also characterized by extensive trade in raw materials, objects and finished tools, with sites in Ontario containing trade items with origins in the Mississippi and Ohio River valleys. A rise in mortuary ceremonialism is also evident, culminating in the construction of large burial mounds.

#### *Late Woodland Period*

Beginning circa 1000 A.D. the archaeological record documents the emergence of more substantial, semi-permanent settlements and the adoption of corn horticulture. These developments are most often associated with Iroquoian-speaking populations, the ancestors of the Wendat (Huron), Tionontati (Petun - Tobacco Nation) and Attawandaron (Neutral) nations who were known to have resided in the province upon the arrival of the first European explorers and missionaries. Iroquoian villages incorporated a number of longhouses, multi-family dwellings that contained several families related through the female line. Pre-contact Iroquoian sites may be identified by a predominance of well-made pottery decorated with various simple and geometric motifs, triangular projectile points, clay pipes and ground stone artifacts. Sites post-dating European contact are recognized through the appearance of various items of European manufacture. The latter include materials acquired by trade (e.g. glass beads, copper/brass kettles, iron axes, knives and other metal implements) in addition to the personal items of European visitors and Jesuit missionaries (e.g. finger rings, stoneware, rosaries, and glassware).

#### *Algonquian Populations*

At the time of European contact in the early 17<sup>th</sup> century the Bruce peninsula was occupied by Algonkian speaking groups (Odawa, Potawatomi, Ojibwa) who maintained a close relationship with the Iroquoian speaking Tionontati peoples living along the southern end of Georgian Bay (Fox 1990:461). Like other Indigenous people in the area, these groups were dispersed in the mid-17<sup>th</sup> century as a result of the conflict between the Five Nations Iroquois and the Huron-Wendat. Many moved along the Lake Huron shoreline, with others settling in the peninsula proper. Several probable Algonquin sites on the Bruce



Peninsula and Georgian Bay have been documented, including a component on the Inverhuron-Lucas site on the Lake Huron shoreline.

### **2.3.3 19<sup>th</sup> Century and Municipal Settlement**

The project area is situated within part of Lots 25 and 26, Concessions 2 and 3 South of Huron Road, historic Geographic Township of Tuckersmith, now in the Municipality of Huron East, Huron County, Ontario. A brief discussion of 19<sup>th</sup> century and early municipal settlement for the area is provided below, together with a consideration of features that would otherwise indicate historic era archaeological potential.

What was to become the Township of Tuckersmith formed part of a parcel of land that was subject to a surrender by the Ojibwa to the Crown in 1825 called Treaty Number 27½ (Lee 2004:21). Treaty 27 ½ formalized the surrender of much of the Huron Tract, of which Tuckersmith Township was a part:

*...being an agreement made at Amherstburg in the Western District of the Province of Upper Canada on the 26th of April, 1825, between James Givens, Esquire, Superintendent of Indian Affairs, on behalf of His Majesty King George the Fourth and the Chiefs and Principal Men of the part of the Chippewa Nation of Indians, inhabiting and claiming the tract of land... (Morris 1943:26, 27).*

The Treaty was concluded on April 26, 1825 (ITS 1971:65).

#### *Huron County*

Early municipal settlement in Huron County came with the creation of the Huron Tract, established through the efforts of John Galt and the Canada Company. Incorporated in 1824, the company was organized by Galt and a number of wealthy investors who wished to wrest some control from Clergy and Crown who held reserves amounting to two sevenths of lands in Upper Canada in the early-19<sup>th</sup> century. These lands were largely vacant, which served to impede any sustained settlement efforts in the area. Galt's plans were vehemently opposed by Church of England officials, and the church's considerable influence prevented the sale of its designated lands (Beecroft 1984:20). In May of 1826, the Canada Company purchased lands from the British Government that included all of the fifteen townships comprising Huron County. Nine of these townships would form part of the Huron Tract.

Huron County at this time was covered by dense forest that had to be cleared, and access to these areas was an obvious necessity. In 1827, William Dunlop and Mahlon Burwell were contracted to undertake a preliminary survey for a colonization road into the tract. The official survey for what would become the Huron Road (now Highway 8) was carried out by John McDonald in 1828-29 (Beecroft 1984:37). McDonald was responsible for surveying all of the townships in Huron County, with the exception of Goderich



Township, which was undertaken by Deputy Provincial Surveyor David Gibson (Lee 2004:226). However, completion of the Huron Road did not initially attract settlers to the region. Five years after the road was finished there were only 385 inhabitants in all of Huron County (Scott 1966:52). In an attempt to remedy the situation and assist immigrants, Galt made plans for three “inns” to be erected along the course of the Huron Road, where settlers could stay on their journey into the deeper reaches of the tract. These would be placed where settlers could stay on their journey into the deeper reaches of the tract. In the following years hundreds of families utilized the inns as they made their way through Huron County (Scott 1966:44). The Canada Company often constructed temporary residences for the accommodation of the settlers until they were able to build their own homes (H. Belden & Co. 1879:8). Censuses for Huron County show that the population in 1837 was 385, in 1838 it was 1,168, and by 1842 it had reached 7,190 (Scott 1966:57).

Settlement in Tuckersmith and McKillop Townships was centralized around Egmondville which was settled by Anthony Van Egmond of the Canada Company. Van Egmond attempted to establish a settlement on the Huron Road with the understanding that the Canada Company would be supporting further immigration to the area. Van Egmond established the first mill and constructed and supported the first school, but was unhappy with the neglected duties and broken promises of the Canada Company and organized and lead the Huron Union Society in 1835 (Lee 2004:129; Scott 1966:77-78). Egmondville developed at a rapid rate, with its most promising years being between 1840 and 1860. The Van Egmond family controlled the majority of the local industry, but other local family enterprises soon arose around the community (Scott 1966:147). Egmondville’s decline began with the arrival of the railway, which avoided Egmondville and shifted the economic focus to what was to become Seaforth, which was emerging as a major center (Scott 1966:148).

### *Historic and Current Land Use*

The project area is located within part of Lots 25 and 26, Concession 2 and 3 South of Huron Road in the Geographic Township of Tuckersmith. The project area is located mid way between the village of Vanastra and Seaforth. The 1862 Tremaine Map shows Angus Murray on Lot 25, Jason Townsend on Lot 26, Concession 2 South of Huron Road, William Alexander on Lot 25, and Jason Broadfoot on Lot 26, Concession 3 South of Huron Road (Map 6). No structures are depicted on these lots, but a school is located northeast of the Bayfield River on Lot 26, Concession 2 South of Huron Road. Kinburn Line and Front Road are both depicted as open at this time, but Front Road has a different alignment to the current day alignment.

The 1879 historic atlas map of Huron County (Map 7) depicts J. Thorpe on Lot 25, T. Townsend on Lot 26, Concession 2 South of Huron Road, H. Alexander on Lot 25, and Jason Broadfoot on Lot 26, Concession 3 South of Huron Road. Structures are depicted on all but Lot 25, Concession 2 South of Huron Road. Kinburn Line and Front Road are still



both depicted as open at this time, and the alignment of Front Road is still different from the current day alignment.

By 1937 Front Road had been rebuilt to its present day alignment (Map 8). The structures depicted on the 1879 historic map are still present in 1937. Prior to 1947 the existing bridge and roadways featured a different alignment (Map 9). The former Broadfoot Bridge had an east-west alignment and Front Road use to run closer to the Bayfield River. A 1954 aerial photograph (Map 10) illustrates that the project area has been relatively unchanged since the 1950s and the former alignment of Front Road south of the Bayfield River is still visible.

## **2.4 Analysis and Conclusions**

As noted in Section 2.1, the Province of Ontario has identified numerous factors that signal the potential of a property to contain archaeological resources. Based on the archaeological and historical context reviewed above, the project area is in proximity (i.e., within 300 m) to several features that signal archaeological potential, namely: 1) a watercourse (Bayfield River); 2) 19<sup>th</sup> century travel routes (Kinburn Line and Front Road); and 3) historic structures (19<sup>th</sup> century structures and a school).

## **2.5 Recommendations**

Given that the project area demonstrated potential for the discovery of archaeological resources, a Stage 2 archaeological assessment was recommended. In keeping with provincial standards, the areas within the project area that consist of grassed or treed areas are recommended for assessment by a standard test pit survey at a 5 m transect interval, to achieve the provincial standard. As the project area is considered to have archaeological potential pending Stage 2 field inspection, a separate map detailing zones of archaeological potential is not provided herein (as per Section 7.7.4 Standard 1 and 7.7.6 Standards 1 and 2 of the *Standards and Guidelines*).

## **3.0 STAGE 2 ARCHAEOLOGICAL ASSESSMENT**

### **3.1 Field Methods**

All fieldwork was undertaken in good weather and lighting conditions. No conditions were encountered that would hinder the identification or recovery of artifacts. The project area boundaries were determined in the field based on proponent mapping, landscape features, and GPS co-ordinates.

As per Section 2.1, Standard 2 of the *Standards and Guidelines*, a survey was not required when encountering areas that are permanently low and wet, steeply sloped (greater than 20°), or impacted by extensive and deep land alterations. When encountered, these areas were recorded and photo-documented due to their low archaeological potential.





The southwest portion of the project area contains the Front Road and Kinburn Line ROWs, subsurface utilities and a steeply sloped river bank (Images 1 to 3). This area was deemed to be of low archaeological potential and was photo-documented.

The southeast portion of the project area consists of steeply sloped river banks and disturbed ROW along Kinburn Line (Images 4 and 5). This area was deemed to be of low archaeological potential and was photo-documented.

The northwestern portion of the project area contains a subsurface utility, is sloped and contains a disturbed ROW (Images 6 and 7). This area was deemed to be of low archaeological potential and was photo-documented.

The northeast portion of the project area is steeply sloped and contains a disturbed ROW (Image 8 to 11). This area was deemed to be of low archaeological potential and was photo-documented.

In sum, 72.1% of the project area was found to be previously disturbed, approximately 20% was steeply sloped and another 7% low and wet. These areas are considered to have low archaeological potential and were photo-documented. Map 11 illustrates the Stage 2 field conditions encountered and assessment methods used. Map 12 illustrates the field conditions and assessment methods on the proponent mapping. An unaltered Proponent Map is provided as Map 13.

### 3.2 Record of Finds

No archaeological materials or sites were identified during the Stage 2 archaeological assessment of the project area. Table 2 provides an inventory of the documentary records generated during this project.

**Table 2: Documentary Records**

<b>Field Notes and Field Maps</b>	Dated August 6, 2020
<b>Photo Catalogue</b>	Dated August 6, 2020 (14 digital photographs)
<b>Location of Records</b>	Timmins Martelle Heritage Consultants Inc., @ the Museum of Ontario Archaeology, 1600 Attawandaron Road, London, Ontario N6G 3M6

### 3.3 Analysis and Conclusions

A Stage 2 field assessment was carried out in keeping with the *Standards and Guidelines*. This demonstrated that the entirety of the project area was previously disturbed. The assessment did not result in the documentation of archaeological resources. As such, the project area should be considered free of archaeological concern.



### **3.4 Recommendations**

All work met provincial standards and no archaeological material was documented during the assessment. As such, the project area should be considered free of archaeological concern and no further archaeological assessment is recommended.

**Our recommendations are subject to the conditions laid out in Section 5.0 of this report and to Ministry of Heritage, Sport, Tourism and Culture Industries' review and acceptance of this report into the Ontario Public Register of Archaeological Reports.**

### **4.0 SUMMARY**

A Stage 1 and 2 archaeological assessment was conducted as part of a Municipal Class EA for the proposed Kinburn Line Bridge Replacement Project in the Municipality of Huron East, Ontario. The project area is roughly 0.43 hectares (1.06 ac) in size and currently contains a pony truss bridge and associated right-of-way (ROW). The Kinburn Line Bridge is located on Kinburn Line, part of Lots 25 and 26, Concession 2 and 3 South of Huron Road in the Geographic Township of Tuckersmith, Huron County (now the Municipality of Huron East), Ontario. The bridge will be replaced and will be widened from 6.1 m to 10 m. Within the Class EA process, the purpose of the archaeological assessment is to establish if the project will have negative effects on archaeological resources. The Stage 1 assessment revealed that the project area had potential for the discovery of archaeological resources. The entire project area was deemed to be of low archaeological potential during the Stage 2 assessment. As such, the project area should be considered free of archaeological concern and no further assessment work is recommended.

### **5.0 ADVICE ON COMPLIANCE WITH LEGISLATION**

This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the MHSCTI, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the minister stating that the site has no further cultural heritage



value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented (i.e., unknown or deeply buried) archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*. Further, archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.

The *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33* requires that any person discovering human remains must notify the police or coroner and Nancy Watkins, the Registrar of Burial Sites, War Graves, Abandoned Cemeteries and Cemetery Closures, Ontario Ministry of Government and Consumer Services. Her telephone number is 416-212-7499 and her e-mail address is [Nancy.Watkins@ontario.ca](mailto:Nancy.Watkins@ontario.ca).

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## 7.0 IMAGES



**Image 1: Utilities and Slope in Southwest Portion of Project Area (looking east)**



**Image 2: Disturbed ROW in Southwest Portion of Project Area (looking southeast)**



**Image 3: Sloped Area in Southwest Portion of Project Area (looking southwest)**



**Image 4: Sloped Area in the Southeast Portion of Project Area (looking northeast)**

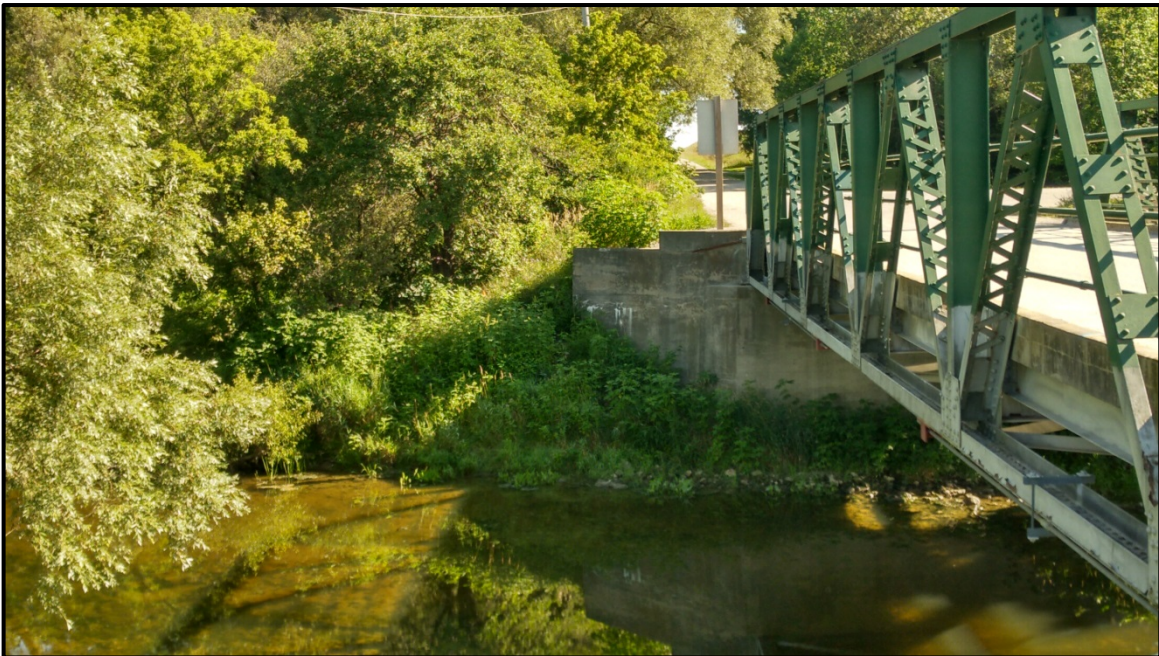




**Image 5: Disturbed ROW in the Southeast Portion of Project Area  
(looking north)**



**Image 6: Sloped Area in Northwest Portion of Project Area (looking northeast)**



**Image 7: Disturbed ROW in in Northwest Portion of Project Area  
(looking southwest)**



**Image 8: Disturbed ROW in in Northwest Portion of Project Area  
(looking northeast)**



**Image 9: Disturbed ROW in in Northeast Portion of Project Area  
(looking northwest)**



**Image 10: Disturbed ROW in in Northeast Portion of Project Area  
(looking northwest)**



**Image 11: Sloped Area in the Southeast Portion of Project Area (looking southwest)**

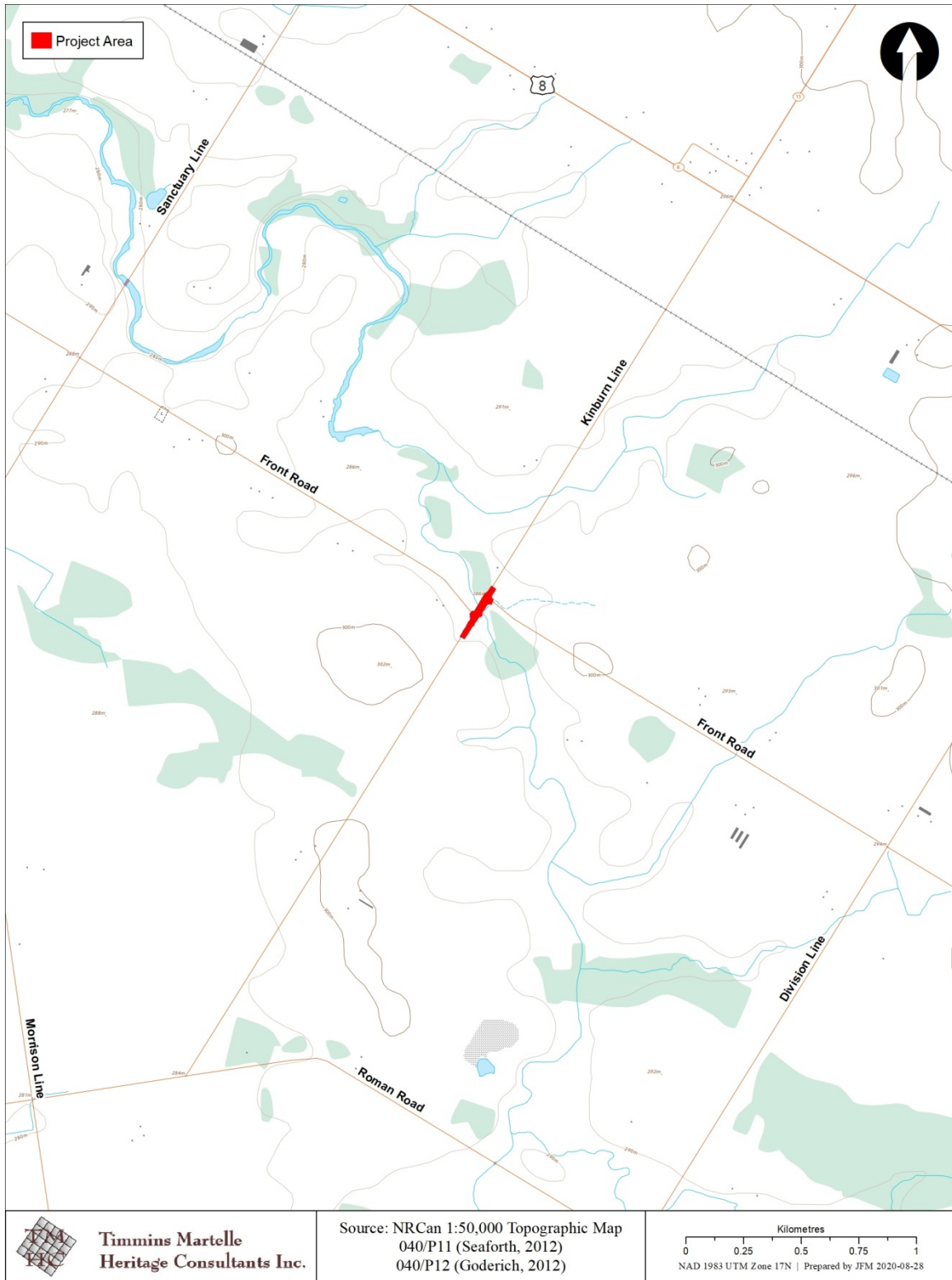


**Image 12: Kinburn Line Bridge (looking northeast)**



## 8.0 MAPS





**Map 1: Location of the Project Area in Huron County, ON**





**Map 2: Aerial Photograph Showing the Location of the Project Area in Huron  
County, ON**

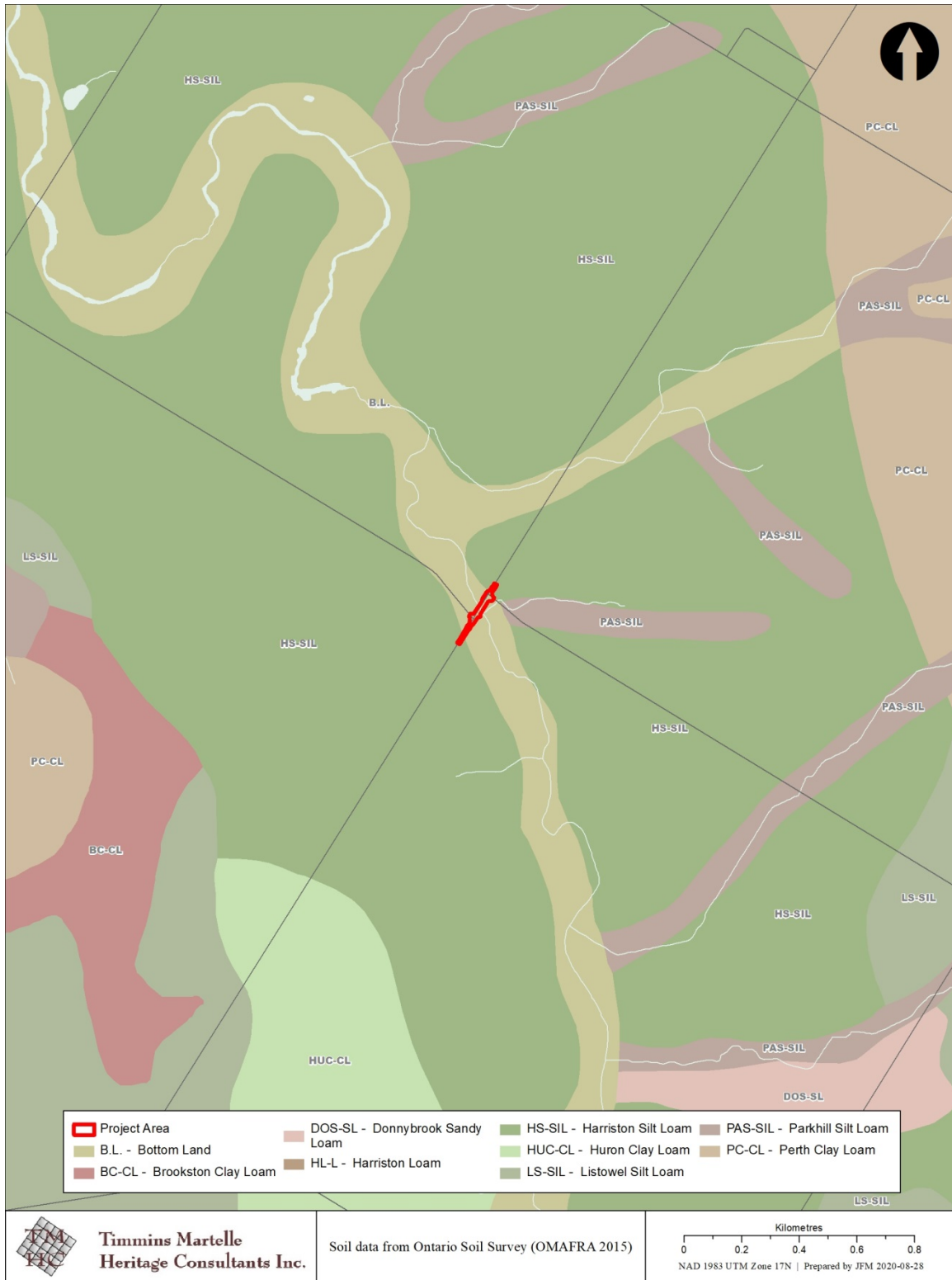




**Map 3: Physiography Within the Vicinity of the Project Area**

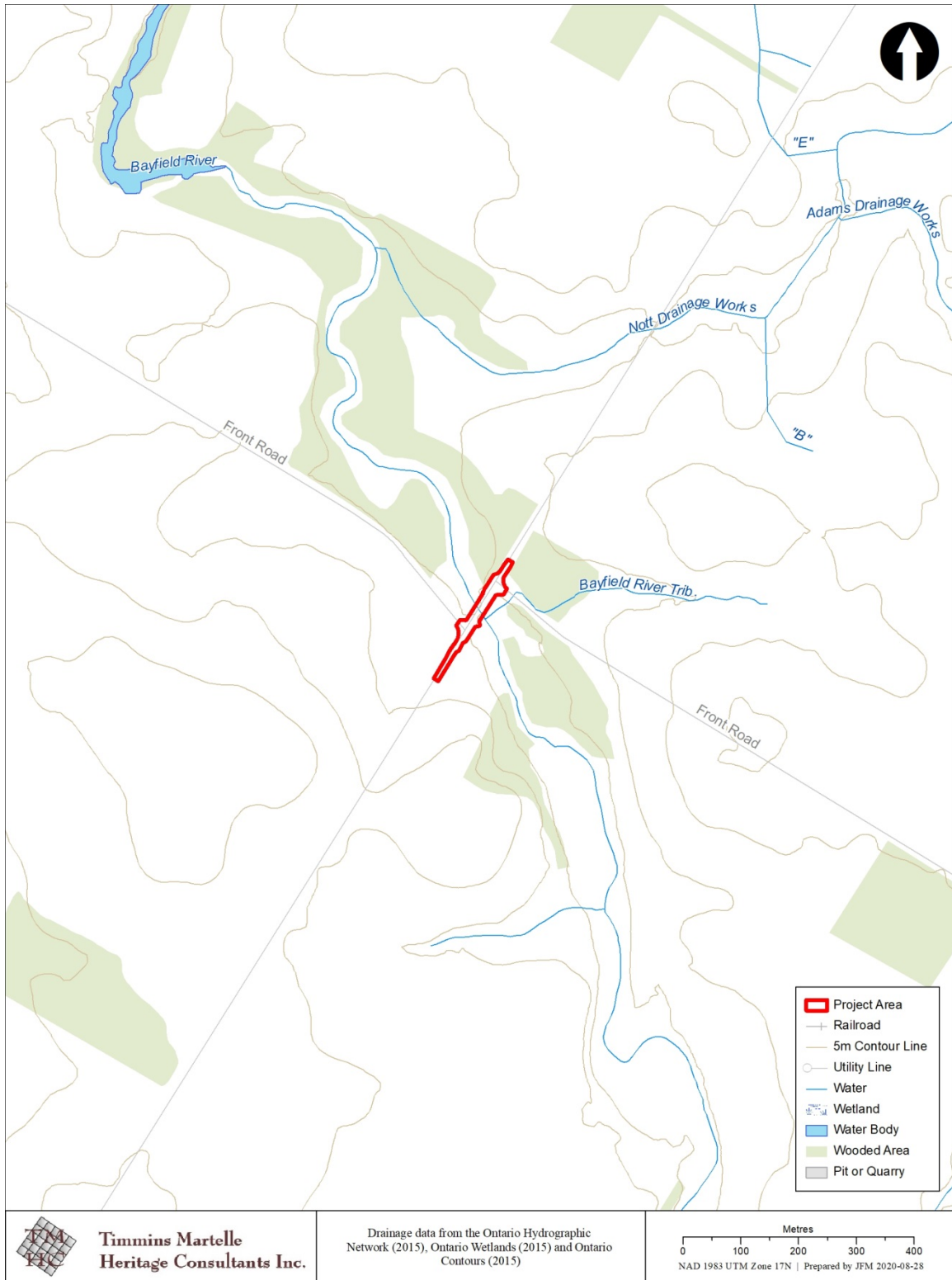






**Map 4: Soils within the Vicinity of the Project Area**





Timmins Martelle  
Heritage Consultants Inc.

Drainage data from the Ontario Hydrographic  
Network (2015), Ontario Wetlands (2015) and Ontario  
Contours (2015)

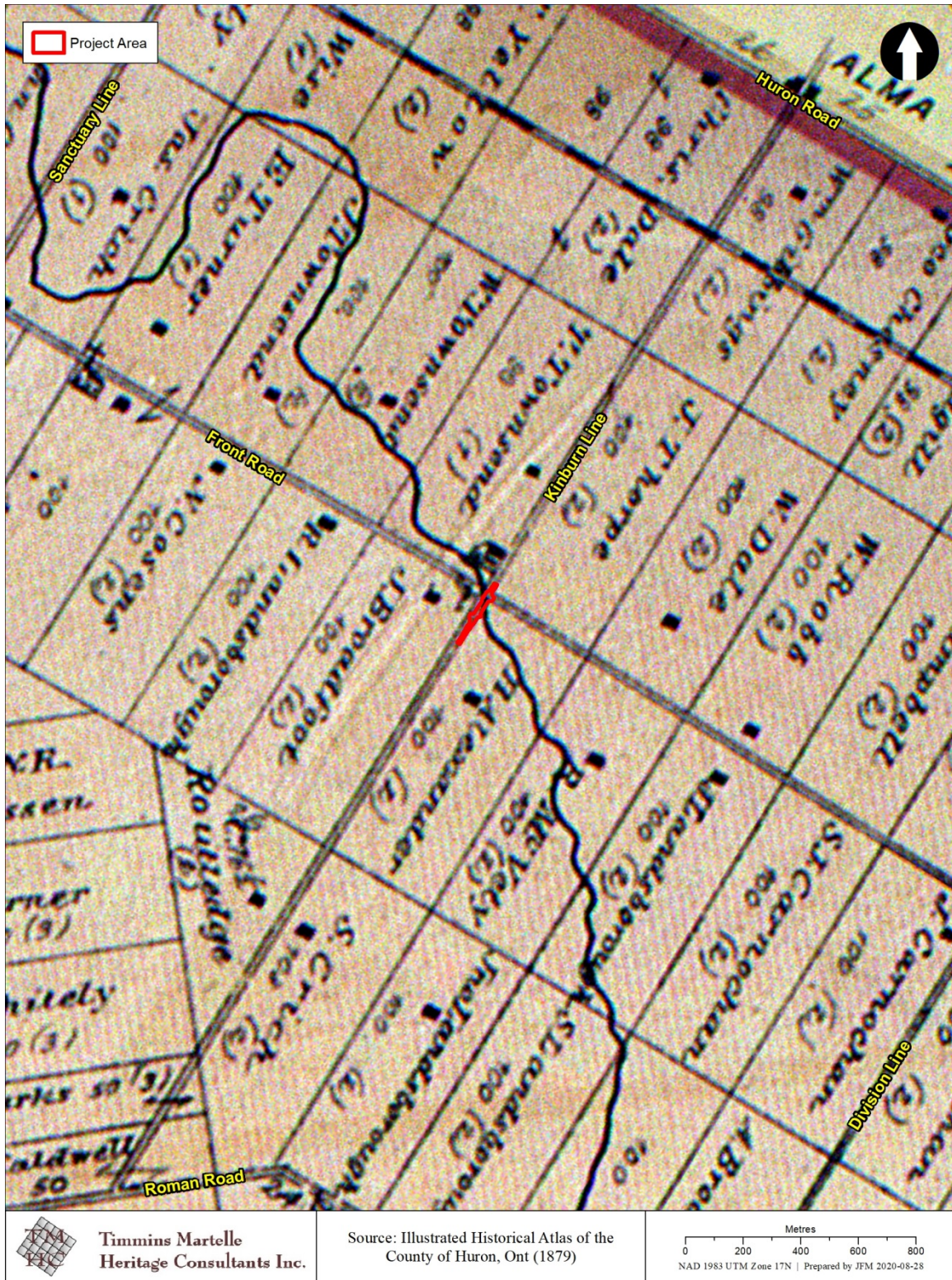
0 100 200 300 400  
Metres  
NAD 1983 UTM Zone 17N | Prepared by JFM 2020-08-28





**Map 6: Location of the Project Area Shown on the 1862 Map of Huron County**

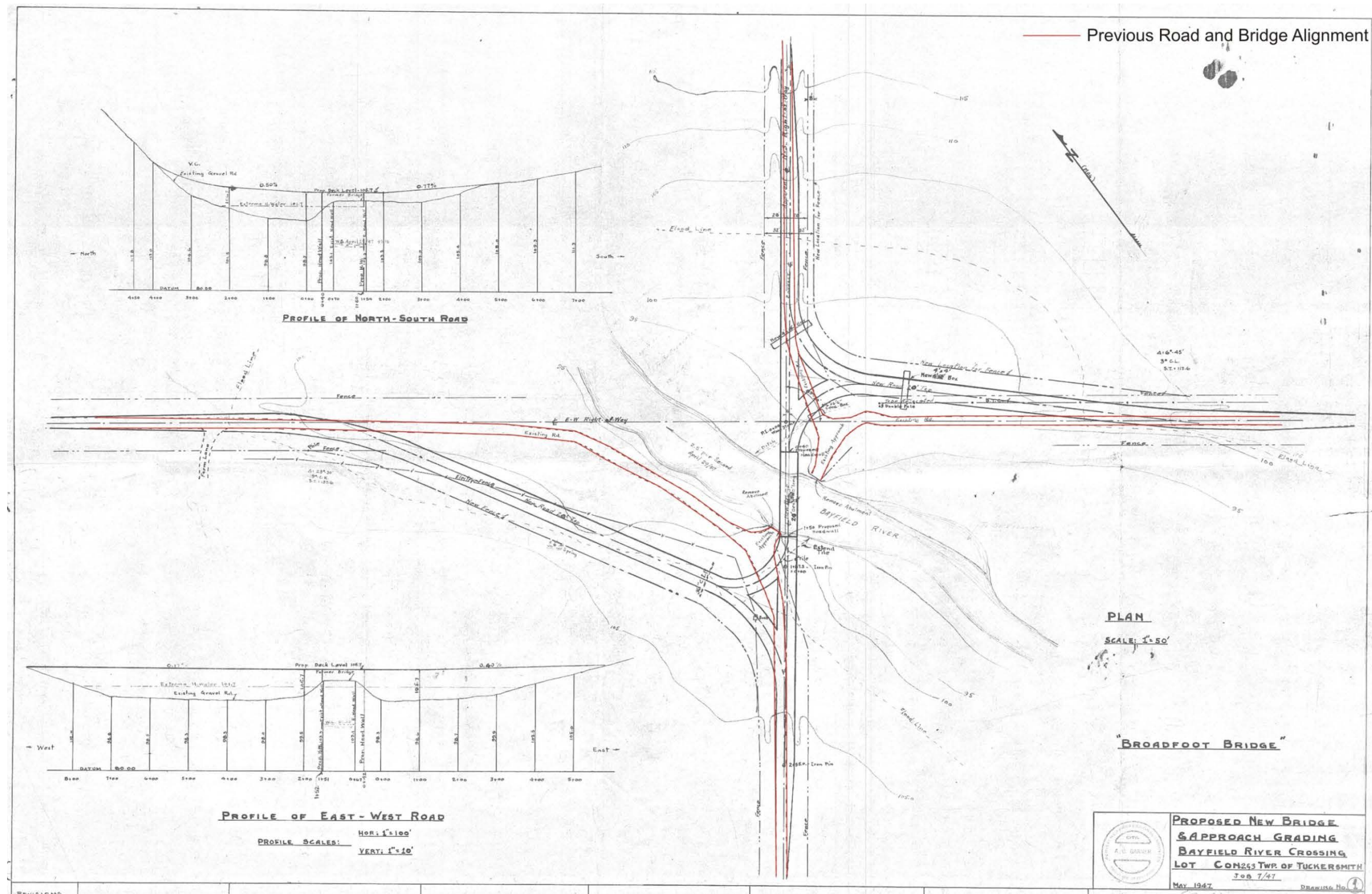




**Map 7: Location of the Project Area Shown on the 1879 Map of Huron County**

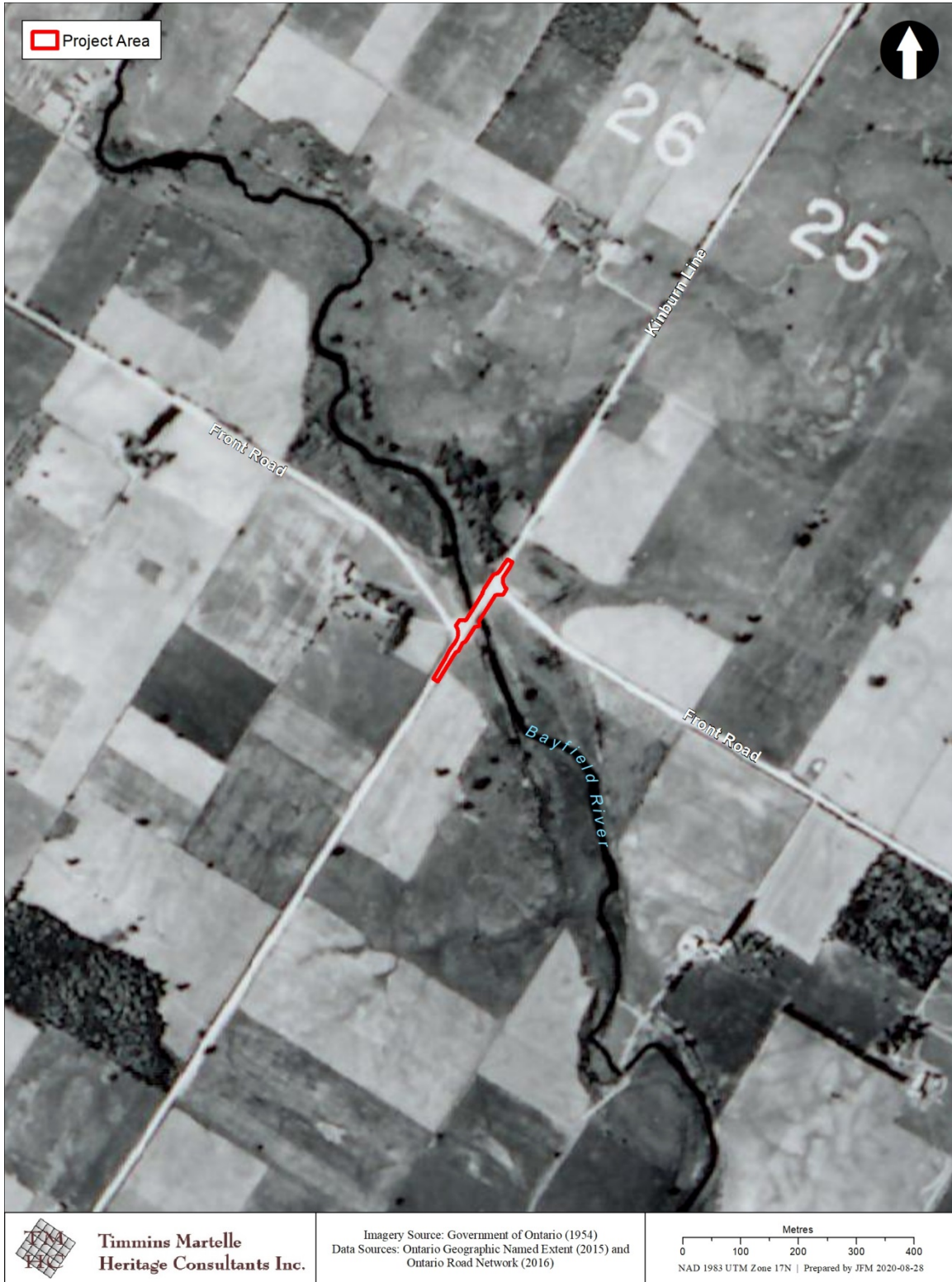






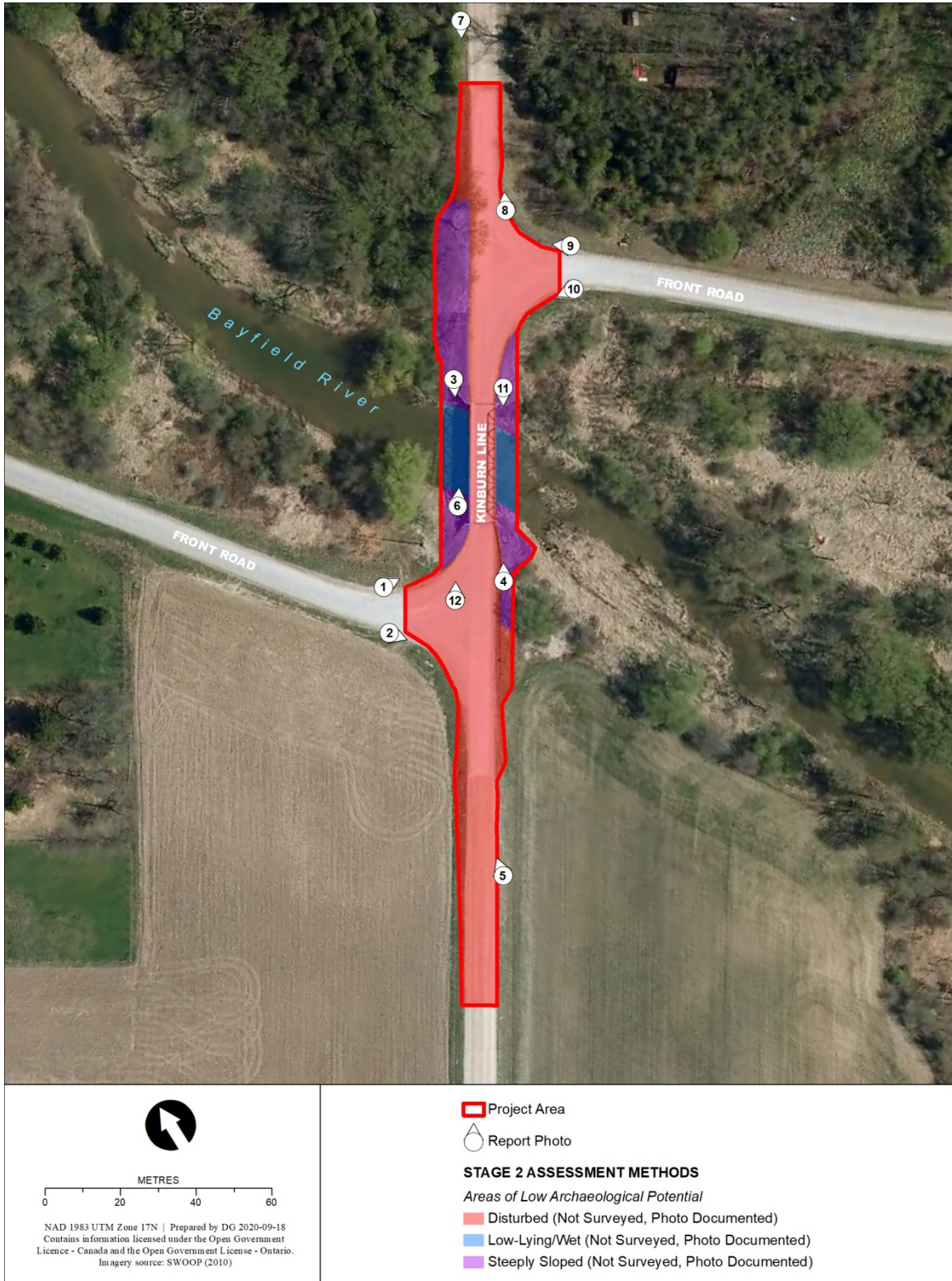
Map 9: Former Kinburn Line Bridge and Road Alignment





**Map 10: Location of the Project Area Shown on 1954 Aerial Photograph**





**Map 11: Stage 2 Field Conditions and Assessment Methods**







**Map 12: Stage 2 Field Conditions and Assessment Methods Shown on Proponent Mapping**



