



APPENDIX C5

Built Heritage Resources and Cultural Heritage Landscapes

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**PRELIMINARY CULTURAL HERITAGE RESOURCE ASSESSMENT:
BUILT HERITAGE RESOURCES AND CULTURAL HERITAGE LANDSCAPES**

EXISTING CONDITIONS AND IMPACT ASSESSMENT

**KIRBY ROAD EXTENSION FROM DUFFERIN STREET TO BATHURST STREET
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
CITY OF VAUGHAN
REGIONAL MUNICIPALITY OF YORK, ONTARIO**

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EXECUTIVE SUMMARY

ASI was contracted by Schaeffers Consulting Engineers to conduct a Cultural Heritage Resource Assessment as part of the Kirby Road Extension Municipal Class Environmental Assessment study. The Kirby Road Extension study area is centered on Kirby Road, extending from Dufferin Street in the west to Bathurst Street in the east. The study area is generally bounded by woodlots, a quarry and aggregate sorting facility, and a rural agricultural residence.

The results of background historical research and a review of secondary source material revealed a study area with a rural land use history dating back to the late-eighteenth century. A field review was conducted to confirm the location of previously identified cultural heritage resources and to document any newly discovered ones.

Background research, data collection, and field review was conducted for the study area and it was determined that one cultural heritage resource is located within or adjacent to the Kirby Road Extension EA study area. Based on the results of the assessment, the following recommendations have been developed:

1. Construction activities and staging should be suitably planned and undertaken to avoid impacts to contributing elements of identified cultural heritage resources. Specifically, structures and landscape elements associated with the farmscape at 11490 Bathurst Street (CHL 1) should be avoided during construction and staging activities. As a retaining wall is anticipated to be constructed adjacent to the residence at 11490 Bathurst Street, instructions should be issued to workers and no-go limits established to ensure construction and excavation activities are conducted in a way that prevents any impacts to the residence.
2. CHL 1 should be subject to photographic documentation and compilation of a resource-specific cultural heritage impact assessment report by a qualified heritage consultant. Where cultural heritage resources are expected to be impacted through alteration to their setting, a resource-specific cultural heritage impact assessment report should be prepared in advance of construction activities.
3. CHL 1 is expected to be impacted through alteration to setting by the removal of replaceable landscape features (i.e. vegetation, and mature trees). The feasibility of implementing tree protection zones should be investigated for all identified cultural heritage resources where



tree removals are planned. If possible, tree protection zones should be implemented for CHL 1;

4. Post-construction landscaping and rehabilitation plans should be undertaken in a manner that is sympathetic to the overall setting. Wherever possible, landscaping with appropriate or sympathetic historic plant materials is recommended. Post-construction landscaping is recommended for CHL 1 where feasible, which will be subject to the removal of vegetation or replaceable landscape features (i.e. established trees, shrubs) during construction; and,
5. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential heritage resources.



PROJECT PERSONNEL

| | |
|--------------------------------|---|
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1.0 INTRODUCTION

ASI was contracted by Shaeffers Consulting Engineers to conduct a Cultural Heritage Resource Assessment as part of the Kirby Road Extension Municipal Class Environmental Assessment study. The Kirby Road Extension study area is centered on Kirby Road, extending from Dufferin Street in the west to Bathurst Street in the east. The study area is generally bounded by woodlots, a quarry and aggregate sorting facility, and a rural agricultural residence (Figure 1).

The results of background historical research and a review of secondary source material revealed a study area with a rural land use history dating back to the late-eighteenth century. A field review was conducted to confirm the location of previously identified cultural heritage resources and to document any newly discovered ones.

The purpose of this report is to present a cultural resource inventory of cultural heritage resources, identify existing conditions of the Kirby Road Extension study area, identify impacts to cultural heritage resources, and propose appropriate mitigation measures. This research was conducted by John Sleath, Cultural Heritage Assistant, under the senior project management of Annie Veilleux, Manager of the Cultural Heritage Division, both of ASI.

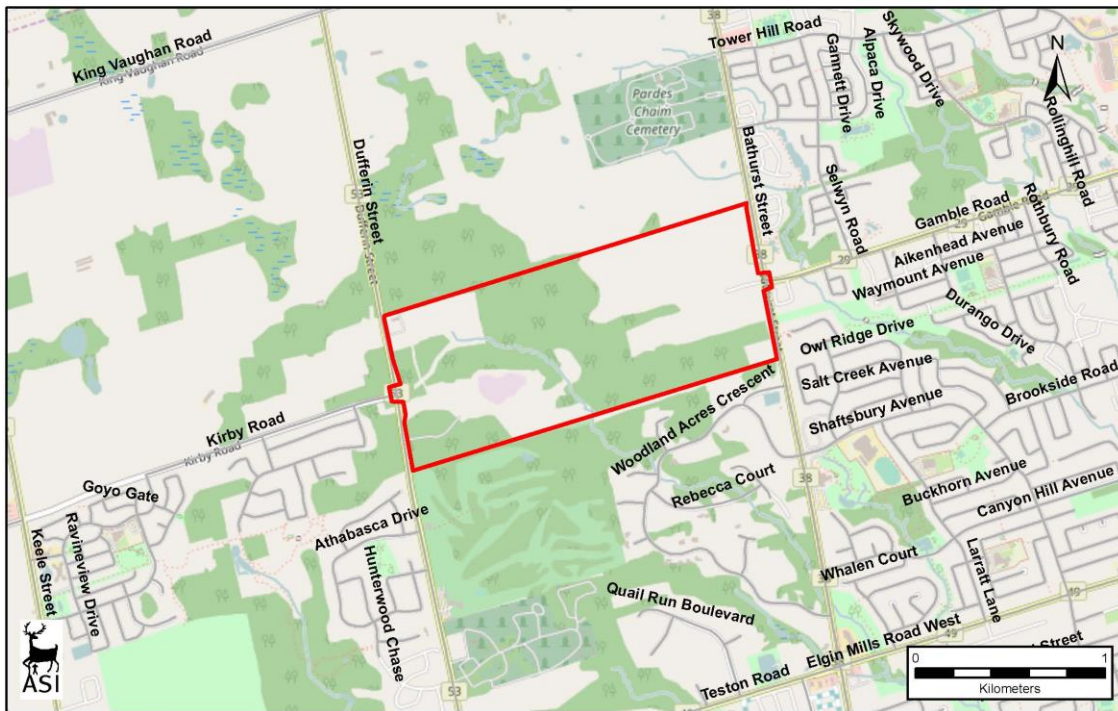


Figure 1: Location of the study area

Base Map: ©OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)



2.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT CONTEXT

2.1 Legislation and Policy Context

This cultural heritage assessment considers cultural heritage resources in the context of improvements to specified areas, pursuant to the *Environmental Assessment Act*. This assessment addresses above ground cultural heritage resources over 40 years old. Use of a 40 year old threshold is a guiding principle when conducting a preliminary identification of cultural heritage resources (Ministry of Transportation 2006; Ministry of Transportation 2007; Ontario Realty Corporation 2007). While identification of a resource that is 40 years old or older does not confer outright heritage significance, this threshold provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from retaining heritage value.

For the purposes of this assessment, the term cultural heritage resources was used to describe both cultural heritage landscapes and built heritage resources. A cultural landscape is perceived as a collection of individual built heritage resources and other related features that together form farm complexes, roadsides and nucleated settlements. Built heritage resources are typically individual buildings or structures that may be associated with a variety of human activities, such as historical settlement and patterns of architectural development.

The analysis throughout the study process addresses cultural heritage resources under various pieces of legislation and their supporting guidelines. Under the *Environmental Assessment Act* (1990) environment is defined in Subsection 1(c) to include:

- cultural conditions that influence the life of man or a community, and;
- any building, structure, machine, or other device or thing made by man.

The Ministry of Tourism, Culture and Sport is charged under Section 2 of the *Ontario Heritage Act* with the responsibility to determine policies, priorities and programs for the conservation, protection and preservation of the heritage of Ontario and has published two guidelines to assist in assessing cultural heritage resources as part of an environmental assessment: *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992), and *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (1981). Accordingly, both guidelines have been utilized in this assessment process.

The *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (Section 1.0) states the following:

When speaking of man-made heritage we are concerned with the works of man and the effects of his activities in the environment rather than with movable human artifacts or those environments that are natural and completely undisturbed by man.

In addition, environment may be interpreted to include the combination and interrelationships of human artifacts with all other aspects of the physical environment, as well as with the social, economic and cultural conditions that influence the life of the people and communities in Ontario. The *Guidelines on the Man-Made Heritage Component of Environmental Assessments* distinguish between two basic ways of visually experiencing this heritage in the environment, namely as cultural heritage landscapes and as cultural features.



Within this document, cultural heritage landscapes are defined as the following (Section 1.0):

The use and physical appearance of the land as we see it now is a result of man's activities over time in modifying pristine landscapes for his own purposes. A cultural landscape is perceived as a collection of individual man-made features into a whole. Urban cultural landscapes are sometimes given special names such as townscapes or streetscapes that describe various scales of perception from the general scene to the particular view. Cultural landscapes in the countryside are viewed in or adjacent to natural undisturbed landscapes, or waterscapes, and include such land uses as agriculture, mining, forestry, recreation, and transportation. Like urban cultural landscapes, they too may be perceived at various scales: as a large area of homogeneous character; or as an intermediate sized area of homogeneous character or a collection of settings such as a group of farms; or as a discrete example of specific landscape character such as a single farm, or an individual village or hamlet.

A cultural feature is defined as the following (Section 1.0):

...an individual part of a cultural landscape that may be focused upon as part of a broader scene, or viewed independently. The term refers to any man-made or modified object in or on the land or underwater, such as buildings of various types, street furniture, engineering works, plantings and landscaping, archaeological sites, or a collection of such objects seen as a group because of close physical or social relationships.

The Minister of Tourism, Culture, and Sport has also published *Standards and Guidelines for Conservation of Provincial Heritage Properties* (April 2010; Standards and Guidelines hereafter). These Standards and Guidelines apply to properties the Government of Ontario owns or controls that have cultural heritage value or interest. They are mandatory for Ministries and prescribed public bodies and have the authority of a Management Board or Cabinet directive. Prescribed public bodies include:

- Agricultural Research Institute of Ontario
- Hydro One Inc.
- Liquor Control Board of Ontario
- McMichael Canadian Art Collection
- Metrolinx
- The Niagara Parks Commission.
- Ontario Heritage Trust
- Ontario Infrastructure and Lands Corporation
- Ontario Lottery and Gaming Corporation
- Ontario Power Generation Inc.
- Royal Botanical Gardens
- Toronto Area Transit Operating Authority
- St. Lawrence Parks Commission

The Standards and Guidelines provide a series of definitions considered during the course of the assessment:



A provincial heritage property is defined as the following (14):

Provincial heritage property means real property, including buildings and structures on the property, that has cultural heritage value or interest and that is owned by the Crown in right of Ontario or by a prescribed public body; or that is occupied by a ministry or a prescribed public body if the terms of the occupancy agreement are such that the ministry or public body is entitled to make the alterations to the property that may be required under these heritage standards and guidelines.

A provincial heritage property of provincial significance is defined as the following (14):

Provincial heritage property that has been evaluated using the criteria found in *Ontario Heritage Act* O.Reg. 10/06 and has been found to have cultural heritage value or interest of provincial significance.

A built heritage resource is defined as the following (13):

...one or more significant buildings (including fixtures or equipment located in or forming part of a building), structures, earthworks, monuments, installations, or remains associated with architectural, cultural, social, political, economic, or military history and identified as being important to a community. For the purposes of these Standards and Guidelines, “structures” does not include roadways in the provincial highway network and in-use electrical or telecommunications transmission towers.

A cultural heritage landscape is defined as the following (13):

...a defined geographical area that human activity has modified and that has cultural heritage value. Such an area involves one or more groupings of individual heritage features, such as structures, spaces, archaeological sites, and natural elements, which together form a significant type of heritage form distinct from that of its constituent elements or parts. Heritage conservation districts designated under the *Ontario Heritage Act*, villages, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trails, and industrial complexes of cultural heritage value are some examples.

Additionally, the *Planning Act* (1990) and related *Provincial Policy Statement (PPS)*, which was updated in 2014, make a number of provisions relating to heritage conservation. One of the general purposes of the *Planning Act* is to integrate matters of provincial interest in provincial and municipal planning decisions. In order to inform all those involved in planning activities of the scope of these matters of provincial interest, Section 2 of the *Planning Act* provides an extensive listing. These matters of provincial interest shall be regarded when certain authorities, including the council of a municipality, carry out their responsibilities under the *Act*. One of these provincial interests is directly concerned with:

2.(d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest

Part 4.7 of the *PPS* states that:

The official plan is the most important vehicle for implementation of this Provincial Policy Statement. Comprehensive, integrated and long-term planning is best achieved through official plans.



Official plans shall identify provincial interests and set out appropriate land use designations and policies. To determine the significance of some natural heritage features and other resources, evaluation may be required.

Official plans should also coordinate cross-boundary matters to complement the actions of other planning authorities and promote mutually beneficial solutions. Official plans shall provide clear, reasonable and attainable policies to protect provincial interests and direct development to suitable areas.

In order to protect provincial interests, planning authorities shall keep their official plans up-to-date with this Provincial Policy Statement. The policies of this Provincial Policy Statement continue to apply after adoption and approval of an official plan.

Those policies of particular relevance for the conservation of heritage features are contained in Section 2- Wise Use and Management of Resources, wherein Subsection 2.6 - Cultural Heritage and Archaeological Resources, makes the following provisions:

2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved.

A number of definitions that have specific meanings for use in a policy context accompany the policy statement. These definitions include built heritage resources and cultural heritage landscapes.

A built heritage resource is defined as: “a building, structure, monument, installation or any manufactured remnant that contributes to a property’s cultural heritage value or interest as identified by a community, including an Aboriginal community” (Ministry of Municipal Affairs and Housing 2014).

A cultural heritage landscape is defined as “a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Aboriginal community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association” (Ministry of Municipal Affairs and Housing 2014). Examples may include, but are not limited to farmscapes, historical settlements, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways, and industrial complexes of cultural heritage value.

In addition, significance is also more generally defined. It is assigned a specific meaning according to the subject matter or policy context, such as wetlands or ecologically important areas. With regard to cultural heritage and archaeology resources, resources of significance are those that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people (Ministry of Municipal Affairs and Housing 2014).

Criteria for determining significance for the resources are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation (Ministry of Municipal Affairs and Housing 2014).

Accordingly, the foregoing guidelines and relevant policy statement were used to guide the scope and methodology of the cultural heritage assessment.



2.2 York Region Municipal Heritage Policies

The Region of York's *Official Plan* (consolidated version April 2016), Section 3.4 (Cultural Heritage) states that the City will "recognize, conserve and promote cultural heritage and its value and benefit to the community." To achieve this objective the Official Plan outlines a number of policies relating to cultural heritage resources.

It is the policy of the Council:

- 3.4.1 To encourage local municipalities to compile and maintain a register of significant cultural heritage resources, and other significant heritage resources, in consultation with heritage experts, local heritage committees, and other levels of government.
- 3.4.2 To ensure that cultural heritage resources under the Region's ownership are conserved.
- 3.4.3 To require local municipalities to adopt official plan policies to conserve significant cultural heritage resources.
- 3.4.4 To promote heritage awareness and support local municipal efforts to establish heritage conservation districts.
- 3.4.5 To ensure that identified cultural heritage resources are evaluated and conserved in capital public works projects.
- 3.4.6 To require that cultural heritage resources within secondary plan study areas be identified, and any significant resources be conserved.
- 3.4.7 To encourage local municipalities to use community improvement plans and programs to conserve cultural heritage resources.
- 3.4.8 To encourage local municipalities to consider urban design standards in core historic areas that reflect the areas' heritage, character and streetscape.
- 3.4.9 To encourage access to core historic areas by walking, cycling and transit, and to ensure that the design of vehicular access and parking complements the historic built form.
- 3.4.10 To recognize and celebrate the rich cultural heritage of the Region's ethnic and cultural groups.
- 3.4.11 To require local municipalities to adopt official plan policies to conserve significant cultural heritage resources and ensure that development and site alteration on adjacent lands to protected heritage properties will conserve the heritage attributes of the protected heritage property.



2.3 City of Vaughan Municipal Heritage Policies

The City of Vaughan's *Official Plan* (consolidated version October 2014), Section 6.1 (Cultural Heritage) confirms that the City will "recognize and conserve cultural heritage resources, including heritage buildings and structures, cultural heritage landscapes, and other cultural heritage resources, and to promote the maintenance and development of an appropriate setting within, around and adjacent to all such resources" (6.1.1.1). Heritage conservation is undertaken in an effort to "support an active and engaged approach to heritage conservation and interpretation that maximizes awareness and education and encourages innovation in the use and conservation of heritage resources" (6.1.1.2).

In addition, the City of Vaughan's *Official Plan* provides policies specific to the protection of designated heritage properties (6.2.2), non-designated heritage properties (6.2.3), cultural heritage landscapes (6.3.1), heritage conservation districts (6.3.2), cultural heritage character areas (6.3.3), and archaeological resources (6.4).

As per Section 6.2.4, "cultural heritage impact assessments provide the City with information about the potential impacts development may have on a cultural heritage resource and provide a basis for establishing how those impacts may be avoided or mitigated. Cultural heritage impact assessments may be required for many development activities on or adjacent to heritage resources."

2.4 Data Collection

In the course of the cultural heritage assessment, all potentially affected cultural heritage resources are subject to inventory. Short form names are usually applied to each resource type, (e.g. barn, residence). Generally, when conducting a preliminary identification of cultural heritage resources, three stages of research and data collection are undertaken to appropriately establish the potential for and existence of cultural heritage resources in a particular geographic area.

Background historical research, which includes consultation of primary and secondary source research and historic mapping, is undertaken to identify early settlement patterns and broad agents or themes of change in a study area. This stage in the data collection process enables the researcher to determine the presence of sensitive heritage areas that correspond to nineteenth and twentieth-century settlement and development patterns. To augment data collected during this stage of the research process, federal, provincial, and municipal databases and/or agencies are consulted to obtain information about specific properties that have been previously identified and/or designated as retaining cultural heritage value. Typically, resources identified during these stages of the research process are reflective of particular architectural styles, associated with an important person, place, or event, and contribute to the contextual facets of a particular place, neighbourhood, or intersection.

A field review is then undertaken to confirm the location and condition of previously identified cultural heritage resources. The field review is also used to identify cultural heritage resources that have not been previously identified on federal, provincial, or municipal databases.

Several investigative criteria are utilised during the field review to appropriately identify new cultural heritage resources. These investigative criteria are derived from provincial guidelines, definitions, and past experience. During the course of the environmental assessment, a built structure or landscape is identified as a cultural heritage resource if it is considered to be 40 years or older, and if the resource satisfies at least one of the following criteria:



Design/Physical Value:

- It is a rare, unique, representative or early example of a style, type, expression, material, or construction method.
- It displays a high degree of craftsmanship or artistic merit.
- It demonstrates a high degree of technical or scientific achievement.
- The site and/or structure retain original stylistic features and has not been irreversibly altered so as to destroy its integrity.
- It demonstrates a high degree of excellence or creative, technical or scientific achievement at a provincial level in a given period.

Historical/Associative Value:

- It has a direct association with a theme, event, belief, person, activity, organization, or institution that is significant to: the City of Vaughan; York Region; the Province of Ontario; or Canada.
- It yields, or has the potential to yield, information that contributes to an understanding of the history of the: the City of Vaughan; York Region; the Province of Ontario; or Canada.
- It demonstrates or reflects the work or ideas of an architect, artist builder, designer, or theorist who is significant to: the City of Vaughan; York Region; the Province of Ontario; or Canada.
- It represents or demonstrates a theme or pattern in Ontario's history.
- It demonstrates an uncommon, rare or unique aspect of Ontario's cultural heritage.
- It has a strong or special association with the entire province or with a community that is found in more than one part of the province. The association exists for historic, social, or cultural reasons or because of traditional use.
- It has a strong or special association with the life or work of a person, group or organization of importance to the province or with an event of importance to the province.

Contextual Value:

- It is important in defining, maintaining, or supporting the character of an area.
- It is physically, functionally, visually, or historically linked to its surroundings.
- It is a landmark.
- It illustrates a significant phase in the development of the community or a major change or turning point in the community's history.
- The landscape contains a structure other than a building (fencing, culvert, public art, statue, etc.) that is associated with the history or daily life of that area or region.
- There is evidence of previous historic and/or existing agricultural practices (e.g. terracing, deforestation, complex water canalization, apple orchards, vineyards, etc.)
- It is of aesthetic, visual or contextual important to the province.

If a resource meets one of these criteria it will be identified as a cultural heritage resource and is subject to further research where appropriate and when feasible. Typically, detailed archival research, permission to enter lands containing heritage resources, and consultation is required to determine the specific heritage significance of the identified cultural heritage resource.

When identifying cultural heritage landscapes, the following categories are typically utilized for the purposes of the classification during the field review:



| | |
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| Farm complexes: | comprise two or more buildings, one of which must be a farmhouse or barn, and may include a tree-lined drive, tree windbreaks, fences, domestic gardens and small orchards. |
| Roadscapes: | generally two-lanes in width with absence of shoulders or narrow shoulders only, ditches, tree lines, bridges, culverts and other associated features. |
| Waterscapes: | waterway features that contribute to the overall character of the cultural heritage landscape, usually in relation to their influence on historic development and settlement patterns. |
| Railscapes: | active or inactive railway lines or railway rights of way and associated features. |
| Historical settlements: | groupings of two or more structures with a commonly applied name. |
| Streetscapes: | generally consists of a paved road found in a more urban setting, and may include a series of houses that would have been built in the same time period. |
| Historical agricultural landscapes: | generally comprises a historically rooted settlement and farming pattern that reflects a recognizable arrangement of fields within a lot and may have associated agricultural outbuildings, structures, and vegetative elements such as tree rows. |
| Cemeteries: | land used for the burial of human remains. |

Results of the desktop data collection are contained in Section 3.0, while Sections 4.0 and 5.0 contain conclusions and recommendations with respect to potential impacts of the undertaking on identified cultural heritage resources. Cultural heritage resource location mapping is provided in Section 7.0.

3.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT

This section provides a brief summary of historical research and a description of identified above ground cultural heritage resources that may be affected by the proposed undertaking.

3.1 Background Historical Summary

A review of available primary and secondary source material was undertaken to produce a contextual overview of the study area, including a general description of physiography, as well as Indigenous and Euro-Canadian land use and settlement.



3.1.1 Physiography

The study area is situated within the the Oak Ridges Moraine physiographic region of southern Ontario (Chapman and Putnam 1984:166-169). The Oak Ridges Moraine extends from the Niagara Escarpment to the Trent River forming the height of land separating the drainage basin of Lake Ontario from the drainage basins of Georgian Bay and the Trent. This physiographic region, covering approximately 1,300 square kilometres, is characterized by hilly, “knob and basin” topography of sandy or gravelly till. The moraine was created during the melting of the Laurentian Glaciers 13,000-12,000 B.P. The meltwater ran into present day Georgian Bay and Lake Simcoe areas, and into the Great Lakes, forming Lake Iroquois to the south (over present day Lake Ontario), and Lake Algonquin to the north (over present day Lake Huron, Georgian Bay and Lake Simcoe). On the moraine itself, glacial melting formed a series of kettle lakes (Bennet and Glasser 1996:262).

3.1.2 Indigenous Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years before present (BP) (Ferris 2013). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 BP, the environment had progressively warmed (Edwards and Fritz 1988) and populations now occupied less extensive territories (Ellis and Deller 1990).

Between approximately 10,000-5,500 BP, the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 BP; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest evidence for cemeteries dates to approximately 4,500-3,000 BP and is indicative of increased social organization, investment of labour into social infrastructure, and the establishment of socially prescribed territories (Ellis et al. 1990, 2009; Brown 1995:13).

Between 3,000-2,500 BP, populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. Exchange and interaction networks broaden at this time (Spence et al. 1990:136, 138) and by approximately 2,000 BP, evidence exists for macro-band camps, focusing on the seasonal harvesting of resources (Spence et al. 1990:155, 164). It is also during this period that maize was first introduced into southern Ontario, though it would have only supplemented people’s diet (Birch and Williamson 2013:13–15). Bands likely retreated to interior camps during the winter. It is generally understood that these populations were Algonquian-speakers during these millennia of settlement and land use.

From approximately 1,000 BP until approximately 300 BP, lifeways became more similar to that described in early historical documents. During the Early Iroquoian phase (AD 1000-1300), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson 1990:317). By the second quarter of the first millennium BP, during the Middle Iroquoian phase (AD 1300-1450), this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al. 1990:343). In the Late Iroquoian phase



(AD 1450-1649) this process continued with the coalescence of these small villages into larger communities (Birch and Williamson 2013). Through this process, the socio-political organization of the First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed.

By AD 1600, the communities within Simcoe County had formed the Confederation of Nations encountered by the first European explorers and missionaries. In the 1640s, the traditional enmity between the Haudenosaunee (Five Nation Iroquois) and the Wendat (and their Algonkian allies such as the Nippissing and Odawa) led to the dispersal of the Wendat.

After the dispersal, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario, including Teyaiagon, near the mouth of the Humber River; and Ganestiquiagon, near the mouth of the Rouge River. Their locations near the mouths of the Humber and Rouge Rivers, two branches of the Toronto Carrying Place, strategically linked these settlements with the upper Great Lakes through Lake Simcoe. The west branch of the Carrying Place followed the Humber River valley northward over the drainage divide, skirting the west end of the Oak Ridges Moraine, to the East Branch of the Holland River. Another trail followed the Don River watershed.

When the Senecas established Teiaiagon at the mouth of the Humber, they were in command of the traffic across the peninsula to Lake Simcoe and the Georgian Bay. Later, Mississauga and earliest European presence along the north shore, was therefore also largely defined by the area's strategic importance for accessing and controlling long established economic networks. Prior to the arrival of the Seneca, these economic networks would have been used by indigenous groups for thousands of years. While the trail played an important part during the fur trade, people would also travel the trail in order to exploit the resources available to them across south-central Ontario, including the various spawning runs, such as the salmon coming up from Lake Ontario or herring or lake trout in Lake Simcoe.

Due, in large part, to increased military pressure from the French upon their homelands south of Lake Ontario, the Iroquois abandoned their north shore frontier settlements by the late 1680s, although they did not relinquish their interest in the resources of the area, as they continued to claim the north shore as part of their traditional hunting territory. The territory was immediately occupied or re-occupied by Anishinaabek groups, including the Mississauga, Ojibwa (or Chippewa) and Odawa, who, in the early seventeenth century, occupied the vast area extending from the east shore of Georgian Bay, and the north shore of Lake Huron, to the northeast shore of Lake Superior and into the upper peninsula of Michigan. Individual bands were politically autonomous and numbered several hundred people. Nevertheless, they shared common cultural traditions and relations with one another and the land. These groups were highly mobile, with a subsistence economy based on hunting, fishing, gathering of wild plants, and garden farming. Their movement southward also brought them into conflict with the Haudenosaunee.

Peace was achieved between the Iroquois and the Anishinaabek Nations in August of 1701 when representatives of more than twenty Anishinaabek Nations assembled in Montreal to participate in peace negotiations (Johnston 2004:10). During these negotiations captives were exchanged and the Iroquois and Anishinaabek agreed to live together in peace. Peace between these nations was confirmed again at council held at Lake Superior when the Iroquois delivered a wampum belt to the Anishinaabek Nations.

In 1763, following the fall of Quebec, New France was transferred to British control at the Treaty of Paris. The British government began to pursue major land purchases to the north of Lake Ontario in the early nineteenth century, the Crown acknowledged the Mississaugas as the owners of the lands between



Georgian Bay and Lake Simcoe and entered into negotiations for additional tracts of land as the need arose to facilitate European settlement.

The eighteenth century saw the ethnogenesis in Ontario of the Métis, when Métis people began to identify as a separate group, rather than as extensions of their typically maternal First Nations and paternal European ancestry (Métis National Council n.d.). Living in both Euro-Canadian and Indigenous societies, the Métis acted as agents and subagents in the fur trade but also as surveyors and interpreters. Métis populations were predominantly located north and west of Lake Superior, however, communities were located throughout Ontario (MNC n.d.; Stone and Chaput 1978:607,608). During the early nineteenth century, many Métis families moved towards locales around southern Lake Huron and Georgian Bay, including Kincardine, Owen Sound, Penetanguishene, and Parry Sound (MNC n.d.). By the mid-twentieth century, Indigenous communities, including the Métis, began to advance their rights within Ontario and across Canada, and in 1982, the Métis were federally recognized as one of Canada's distinct Indigenous peoples. Recent decisions by the Supreme Court of Canada (Supreme Court of Canada 2003, 2016) have reaffirmed that Métis people have full rights as one of the Indigenous people of Canada under subsection 91(24) of the Constitution Act, 1867.

3.1.3 Historical Euro-Canadian Land Use: Township Survey and Settlement

Historically, the study area is located in Lots 30 and 31, Concession 2, within the former Township of Vaughan, County of York. The background historical research and historical mapping demonstrates that the study area was situated within a rural agricultural setting in the nineteenth century. Kirby Road is depicted in the centre of the study area, occupying the road allotment between Bathurst Street to the east and Dufferin Street to the west on the 1860 *Tremaine's Map of the County of York* (Tremaine 1860) and the 1878 *Illustrated Atlas of the County of York* (Miles & Co. 1878).

Township of Vaughan

Early Settlement

The land within Vaughan Township was acquired by the British from the Mississaugas in 1784. The first township survey was undertaken in 1793, and the first legal settlers occupied their land holdings in 1796. The township was named in honour of Benjamin Vaughan, who was one of the negotiators for the Treaty of Paris which ended the American Revolutionary War in 1783. In 1805, Boulton noted that the soil in Vaughan was “much improved,” and due to its proximity to York “may be expected to form an early and flourishing settlement.” Vaughan was initially settled by Loyalists, the children of Loyalists, disbanded soldiers, and by Americans including the Pennsylvania Dutch, French Huguenots, and Quakers (Boulton 1805:89; Smith 1846:199; Reaman 1971:19; Armstrong 1985:148; Rayburn 1997:355).

In the period between 1814 and 1860, the lots and concessions that had been previously surveyed formed the basis for the clearing of land for future agricultural development. The farms were often basic in the beginning with the 200-acre properties later evolving to include a more substantial residence either built of frame, brick, or stone masonry complemented with agricultural outbuildings such as a barn, driveshed, silo, and storage sheds.



Although there was some immigration from Britain in the post War of 1812 period, the township population grew slowly until the 1820s when Crown and Clergy Reserve land became available for purchase. In the late 1820s and early 1830s there was a substantial increase in British immigration.

Smith's *Canadian Gazetteer* described the Township in 1846 as follows:

In Vaughan, 60,496 acres are taken up, 19,766 of which are under cultivation. This is a township of excellent land; it is well settled and contains numerous, well cleared and highly cultivated farms. The land is generally rolling, and the timber a mixture of hardwood and pine. The land is watered by branches of the River Humber. The Yonge Street Road separates the township from that of Markham. There are six grist and twenty-five saw mills in the township. Population in 1842, 4,300.

The Township prospered economically as a farming area between 1840 and 1867 with Toronto to the south a major market. Centres of settlement developed as service and institutional communities to support the burgeoning agricultural growth in Vaughan. Churches, cemeteries and post offices were created. During this time period, the lots surrounding settlement centers would have been slowly cleared of the forest as new settlers attempted to establish homes and farms for themselves and their families.

The Township was incorporated in 1850 as a municipal government. Construction for the Ontario Simcoe and Huron Railway began in 1852 and the line was opened through Vaughan Township in 1853 with a station in Concord. It was renamed the Northern Railway Company in 1858, and later became part of the Grand Trunk Railway and then Canadian National Railway c1920. The Toronto, Grey and Bruce Railway (T.G.&B.R.) was opened through the west part of the Township in 1871.

Tremaine's map (1860) shows a developed agricultural landscape, traversed by the Humber River and its tributaries, with small hamlets, a local road system and churches and schoolhouses. The Township continued to develop economically in the 1860s and 1870s. The *Illustrated Historical Atlas* (1878) shows a well-established and prosperous agricultural township dotted with farmsteads, small hamlets and villages. Although Yonge Street on the east side of the township was the principal route to the markets in York to the south, the construction of the two railways through the township greatly increased market access for the farmers and contributed to the township's prosperity. Agriculture continued as the principal land use throughout the nineteenth century.

Urbanization

In the period from 1850 to 1950 Vaughan witnessed the introduction of railways, improved rural-urban roadways, larger villages and towns and industrialization. This facilitated growth in population of both rural and urban communities in the Township of Vaughan. The result during this period was more established commercial-industrial centres with residential housing and institutional amenities. Improvements to water and sewage infrastructure aided development.

After World War II an influx of immigration occurred in the Township, and the process of urbanization of the land began in the south and gradually moved northward. Highway 400 was built north to south through the western part of Vaughan Township in the late 1940s. Urbanization of the township slowly moved northward from Steeles Avenue, and the southern part of Vaughan Township developed quickly from the 1970s onwards. In 1971, the new regional government of York Region was established and Vaughan Township merged with the Village of Woodbridge to form the Town of Vaughan. That same year, the Police Village of Thornhill ceased to exist and the community was divided between the newly



created Towns of Markham and Vaughan in the Regional Municipality of York Act. In 1991, it officially changed its legal status to City of Vaughan.

The Province of Ontario acquired land in Vaughan Township as part of the Parkway Belt West Plan in the mid 1970s under the provisions of The Parkway Belt Planning and Development Act, 1973. The Plan was implemented in 1978 for the purposes of creating a multi-purpose utility corridor, urban separator, and linked open space system with public use area designated for public open space and buffer area, utility, electric power facility, road, and inter-urban transit. In Vaughan it was located east to west from Highway 400 to Yonge Street between Steeles Avenue and Highway 7 to Dufferin Street, and then northeastward to Richmond Hill and Yonge Street. The principal north roads were improved as development moved northward. In the late 1990s, Highway 407 was built east to west through the southern part of the City of Vaughan in the Parkway Belt West lands with interchanges at the principal north-south roads; Highway 7 became a regional arterial road.

The City of Vaughan has continued to evolve through the urbanization of the agricultural lands and intensification of former nineteenth-century hamlets and villages. Echoes of its early centres of settlements still remain, with names such as Carrville, Coleraine, Elder Mills, Nashville, Patterson, Pinegrove, Purpleville, Richvale, Teston, and Vellore. At the same time the larger historical centres of settlement, such as Thornhill and Woodbridge, grew correspondingly as new families moved to more affordable, larger residential properties and sought commercial centres. New nodes of residential and commercial areas have begun to emerge as a result of the development.

By 1950, the City of Vaughan especially south of Major Mackenzie Drive saw an increase in suburban development through tract housing projects combining detached and semi-detached housing. Associated municipal services in the form of educational facilities and developed parks and recreation facilities followed. Slowly, the active family-owned farms were purchased early in this period by the development industry for potential commercial, industrial and residential development.

While the period after World War II saw an influx of immigration in Vaughan Township, the process of the urbanization of the land began in the south. An aerial photograph from 1954 confirms that the study area remained virtually unchanged from its nineteenth-century rural and agricultural land use throughout this initial urbanization period.

3.1.4 Review of Historic Mapping

The 1860 *Tremaine's Map of the County of York* and the 1878 *Illustrated Historical Atlas of the County of York* were reviewed to determine the potential for the presence of cultural heritage resources within the study area from the nineteenth century (Figures 2 and 3). It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases.

Historically, the study area is located in the former Township of Vaughan, York County. Details of historic property owners and historic features in the study area are listed in Table 1.



Table 1: Kirby Road Extension Study Area – Nineteenth-century property owner(s) and historical features(s)

| Con # | Lot # | 1860 <i>Tremaine's Map of the County of York</i> | | 1878 <i>Illustrated Historical Atlas of the County of York</i> | |
|-------|-------|--|-----------------------|--|-----------------------|
| | | Property Owner(s) | Historical Feature(s) | Property Owner(s) | Historical Feature(s) |
| II | 30 | M and S Oster (W 1/4) | None | McGill (W 1/4) | Farmhouse |
| | 30 | John Oster Estate (E 3/4) | None | Mrs. Gorman | Farmhouse |
| | 31 | Amos Wright, Esq. MPP (N 1/2) | None | Michael McHugh (NW 1/4) | Farmhouse |
| | 31 | - | - | William McBean (N 1/4) | Farmhouse |
| | 31 | - | - | A. Prentice (NE 1/4) | Farmhouse |
| | 31 | Jason Magee and Co (S 1/2) | None | William McBean (S 1/2) | Farmhouse |

The 1860 *Tremaine Map* (Figure 2) shows that both Dufferin Street and Bathurst Street are historically surveyed roads, and that the proposed Kirby Road extension was once a surveyed road as well. No structures are illustrated within the study area, although individual landowners are listed in each of the lots. The community of Maple is depicted as a small settlement to the southwest, and Richmond Hill is depicted as a large settlement to the southeast. A small watercourse is illustrated to the immediate south of the study area. Overall, the study area is located in a rural agricultural context.

The 1878 *Illustrated Historical Atlas* (Figure 3) depicts the study area in a similar rural agricultural context to the earlier mapping, with the addition of farmsteads also noted. Kirby Road is still depicted as connecting Dufferin Street and Bathurst Street in the study area, with two farmhouses accessed by it on the south. A total of eight residences are noted in the study area, with two located in a small lots on the southeast corner of Dufferin Street and Kirby Road. A residence is also depicted to the immediate west of the study area in Lot 30, Concession III. The settlements of Maple and Teston are located southwest of the study area, and Richmond Hill is to the southeast. A small watercourse continues to be illustrated to the immediate south of the study area.

In addition to nineteenth-century mapping, historical topographic mapping and aerial photographs from the twentieth century were examined. This report presents maps and aerial photographs from 1917, 1954, 1963, and 1994. These do not represent the full range of maps consulted for the purpose of this study but were judged to cover the full range of land uses that occurred in the area during this period.

The 1917 topographic map demonstrates that no significant residential development occurred in the late nineteenth century, with fewer farmsteads depicted than in earlier mapping (Figure 4). Kirby Road is not depicted between Dufferin Street and Bathurst Street, indicating that it was closed in the late-nineteenth or early-twentieth century. The western two-thirds of study area is composed of a large woodlot, while the eastern third is depicted as a cleared area with varying topography and a total of three residences fronting on Bathurst Street. The three eastern residences are also depicted on the 1978 mapping. The western portion of the study area only depicts one residence fronting on Dufferin Street Its location does not correspond to that of the residences on the earlier mapping. The residence in adjacent Lot 30, Concession III outside of the study area is depicted in the same location as on the 1878 mapping, as is the small watercourse to the south of the study area



The 1954 aerial photo demonstrates that the study area continued to feature rural, agricultural lands in the eastern portion of the study area, and primarily a woodlot in the west in the mid-twentieth century (Figure 5). The three farmscapes in the eastern portion are visible, as is the adjacent farmscape in Lot 30, Concession III. All major roadways are illustrated in their extant alignment. The southern watercourse is visible within the study area, with the woodlot occupying a significant portion of the floodplain. The former alignment of Kirby Road is visible as a wide field divider with intermittent mature trees separating Lots 30 and 31, Concession II.

The 1963 topographical map depicts the study area in a similar rural agricultural context as earlier mapping (Figure 6). Residences within and adjacent to the study area are depicted as described in earlier mapping, as is the watercourse. The 1963 topographical map demonstrates that the study area retained a rural context into the latter half of the twentieth-century.

The 1994 topographical map confirms the study area retained its rural agricultural context as seen on earlier mapping (Figure 7). Residences to the east of the study area are depicted in the same location as the 1878 mapping, as is the adjacent residence in Lot 30, Concession III. The central and western portion of the study area continue to be depicted as woodlot and wooded floodplain, with a small watercourse and ponds visible. A residential subdivision is visible to the south of the study area with access from Bathurst Street, and a golf course is visible to the south off Dufferin Street.

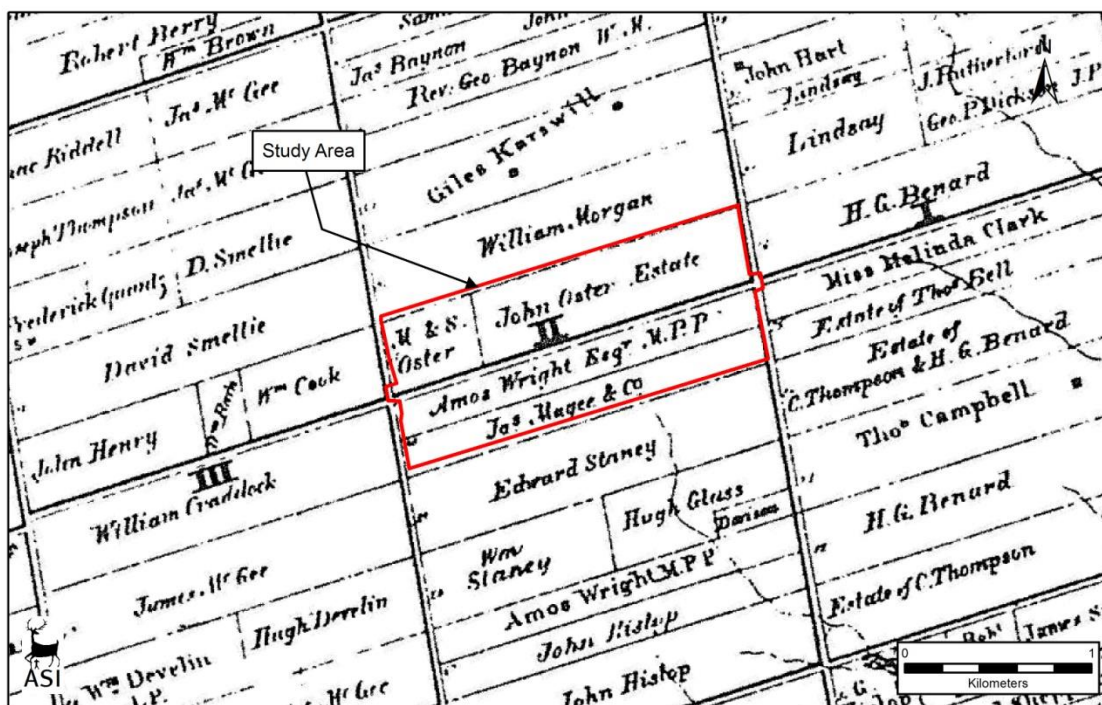


Figure 2: The study area overlaid on the 1860 Tremaine map

Base Map: Tremaine 1860



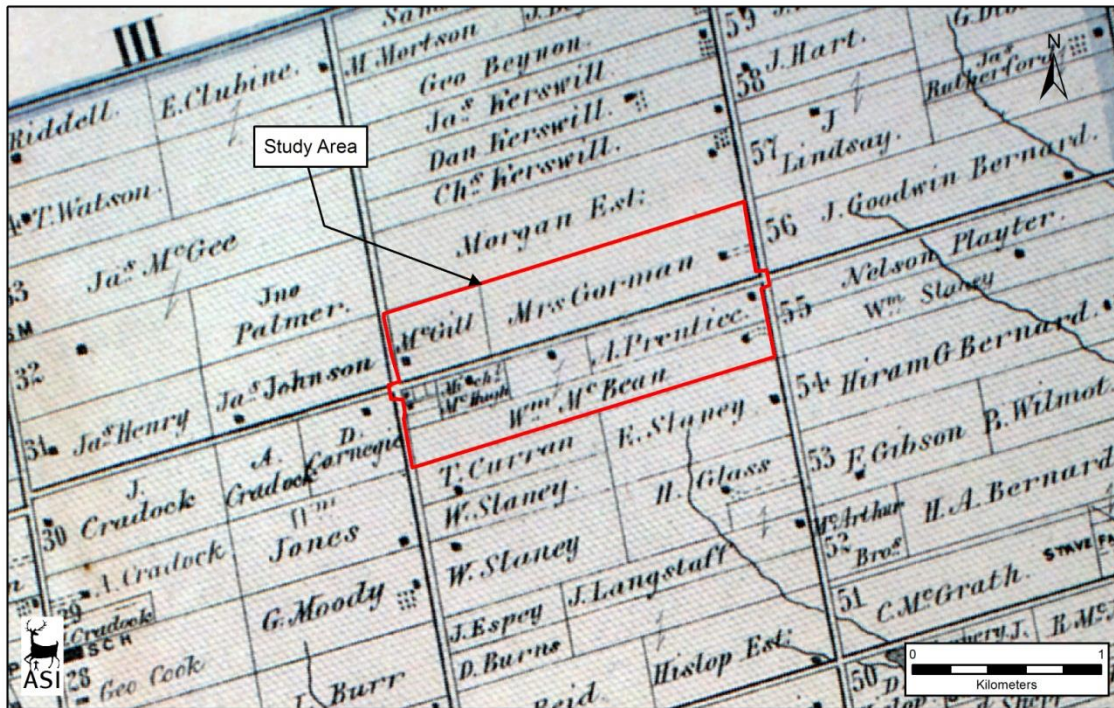


Figure 3: The study area overlaid on the 1878 *Illustrated Historical Atlas*

Base Map: Miles and Co 1878

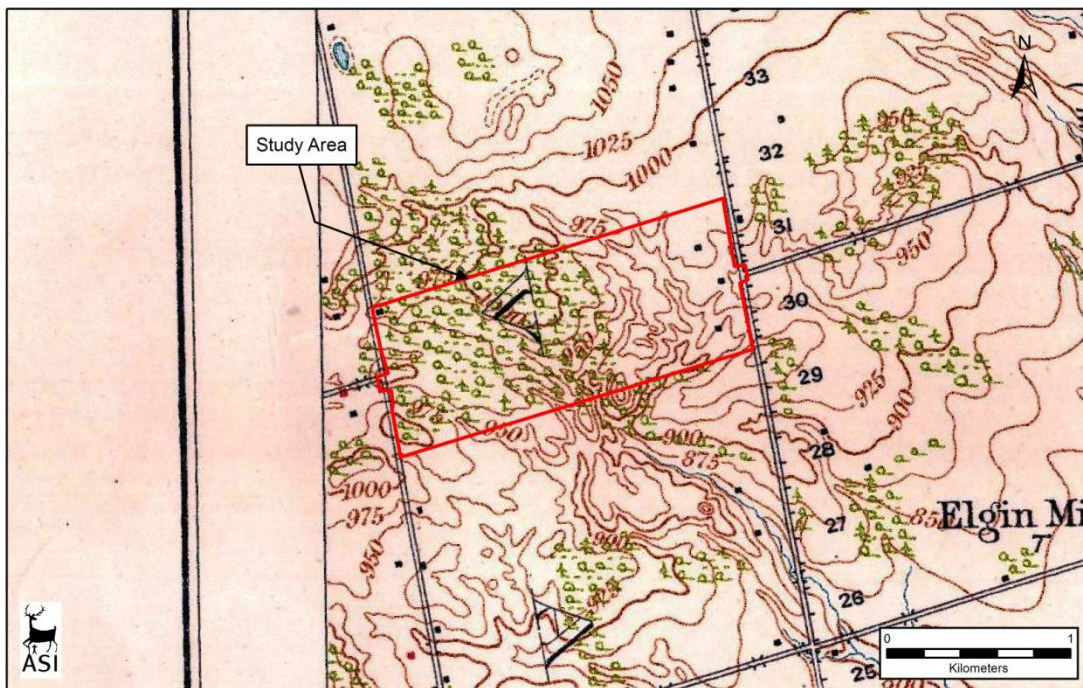


Figure 4: The study area overlaid on the 1917 topographical map

Base Map: NTS Markham Sheet No. 58 (Department of Militia and Defense 1917)





Figure 5: The study area overlaid on the 1954 aerial photograph of Southern Ontario
Base Map: Plate 738.792 (Hunting Survey Corporation 1954)

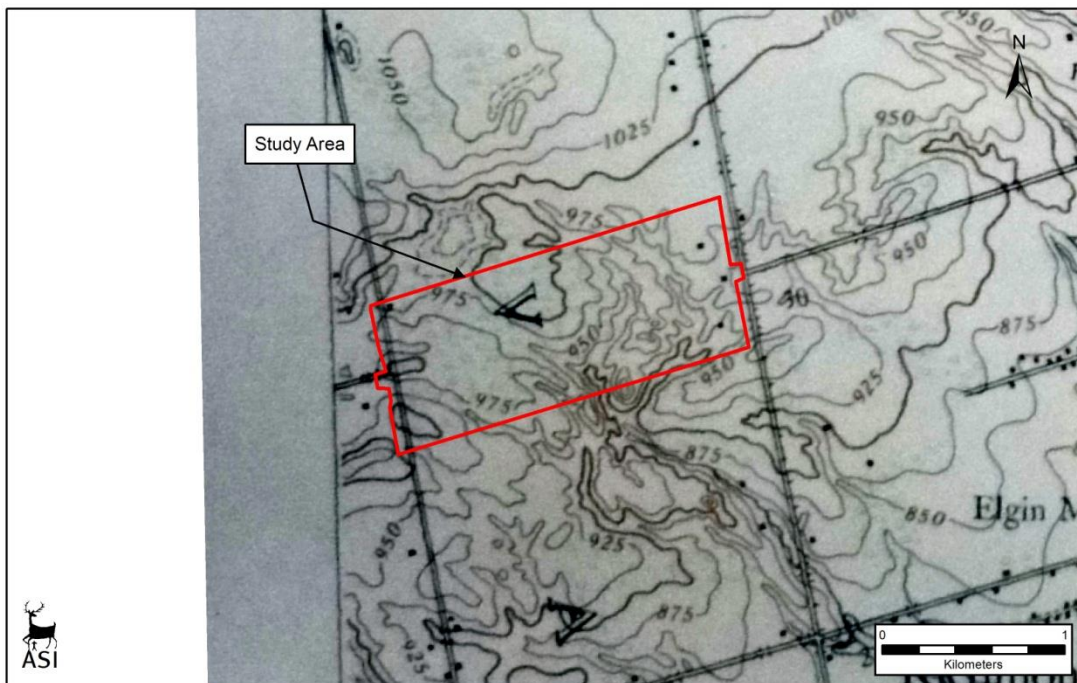


Figure 6: The study area overlaid on the 1963 topographical map
Base Map: NTS Sheet 30/M-14 (Markham) (Department of Energy, Mines and Resources 1963)

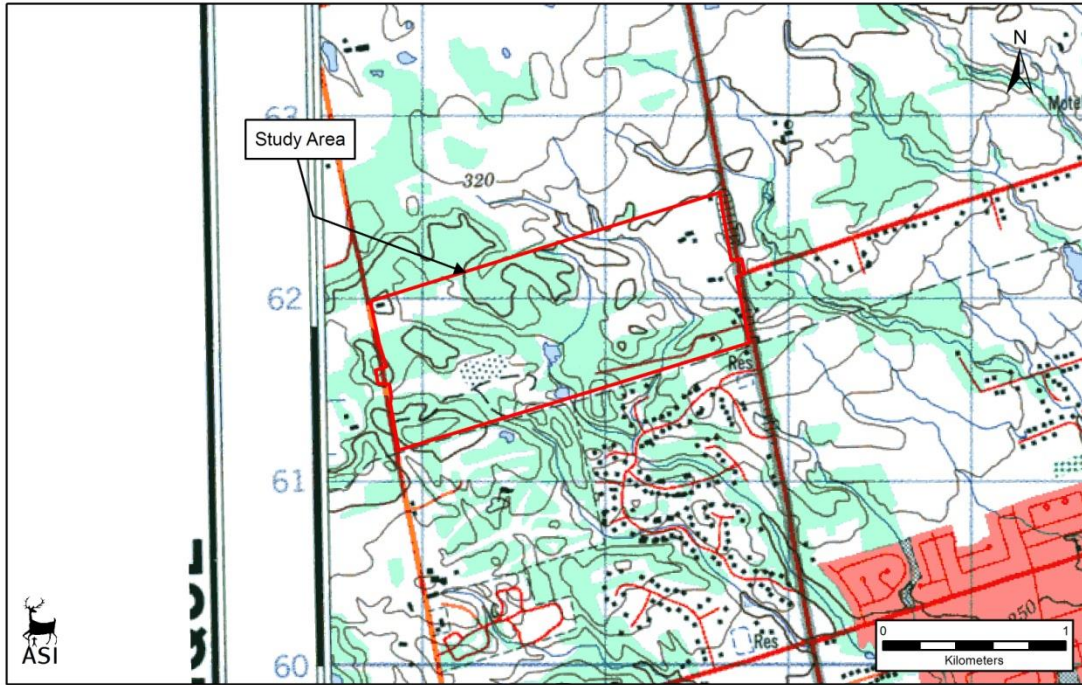


Figure 7: The study area overlaid on the 1994 topographical map
Base Map: NTS Sheet 30/M-14 (Markham) (Department of Energy, Mines and Resources 1994)

3.2 Existing Conditions

3.2.1 Review of Existing Heritage Inventories

The preliminary identification of existing cultural heritage resources within the study corridor was undertaken by consulting the following resources:

- *City of Vaughan Heritage Inventory*¹, a municipal register that contains information on heritage properties including those listed and designated under Part IV and V of the *Ontario Heritage Act*.
- The inventory of Ontario Heritage Trust easements;²
- The Ontario Heritage Trust's *Ontario Heritage Plaque Guide*, an online, searchable database of Ontario Heritage Plaques;³
- *Ontario's Historical Plaques* website;⁴
- Inventory of known cemeteries/burial sites in the Ontario Ministry of Government and Consumer Services and the Ontario Genealogical Society's online databases;⁵
- Parks Canada's *Canada's Historic Places* website: available online, the searchable register provides information on historic places recognized for their heritage value at the local, provincial, territorial, and national levels;⁶
- Parks Canada's *Directory of Federal Heritage Designations*, a searchable on-line database that identifies National Historic Sites, National Historic Events, National Historic People, Heritage Railway Stations, Federal Heritage Buildings, and Heritage Lighthouses;⁷
- Canadian Heritage River System. The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage;⁸ and,
- United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites.⁹

In addition, the following stakeholders were contacted to gather information on potential cultural heritage resources, active and inactive cemeteries, and areas of identified Indigenous interest within and/or adjacent to the study area:

- Katrina Guy, Cultural Heritage Coordinator, City of Vaughan (email communication 5 April, 11-12 August, 2017, May 24 and May 29, 2018). Responses confirmed that the farmscape at 11490 Bathurst Street is considered to be a property of heritage interest in the *City of Vaughan Heritage Inventory*.

¹ Reviewed 5 April, 2017

(https://www.vaughan.ca/services/business/heritage_preservation/General%20Documents/Vaughan%20Heritage%20Inventory.pdf)

² Reviewed 5 April, 2017 (<http://www.heritagetrust.on.ca/en/index.php/property-types/easement-properties>)

³ Reviewed 5 April, 2017 (<http://www.heritagetrust.on.ca/Resources-and-Learning/Online-Plaque-Guide.aspx>)

⁴ Reviewed 5 April, 2017 (www.ontarioplaques.com)

⁵ Reviewed 5 April, 2017 (<http://vitacollections.ca/ogscollections/2818487/data?grd=3186> and <https://www.consumerbeware.mgs.gov.on.ca/eseach/cemeterySearch.do?eformsId=0>)

⁶ Reviewed 5 April, 2017 (<http://www.historicplaces.ca/en/pages/about-afropos.aspx>)

⁷ Reviewed 5 April, 2017 (http://www.pc.gc.ca/apps/dfhd/search-recherche_eng.aspx)

⁸ Reviewed 5 April, 2017 (<http://chrs.ca/the-rivers/>)

⁹ Reviewed 5 April, 2017 (<http://whc.unesco.org/en/list/>)



- The Ministry of Tourism, Culture and Sport (email communication 11 August, 2017). A response was outstanding at the time of report submission.¹⁰

Based on the review of available municipal, provincial, and federal data, there is one previously identified resource within and/or adjacent to the Kirby Road Extension study area—a farmstead at 11490 Bathurst Street. Table 2 lists this cultural heritage resource within the study area, and Section 7 provides locational mapping.

3.2.2 Kirby Road Extension Study Area– Field Review

A field review of the portion of the study area was undertaken by Peter Carruthers of ASI, on 9 August, 2017 to document the existing conditions of the study area. The field review was preceded by a review of available, current and historical, aerial photographs and maps (including online sources such as Bing and Google maps). These large-scale maps were reviewed for any potential cultural heritage resources which may be extant in the study area. The existing conditions of the study area are described below. Identified cultural heritage resources are discussed in Section 3.2.3 and are mapped in Section 8.0 of this report.

The Kirby Road Extension study area is centered on Kirby Road, extending from Dufferin Street in the west to Bathurst Street in the east. The study area features woodlots, a quarry and aggregate sorting facility, active agricultural fields, and a rural agricultural residence. The subject property is approximately 400 acres in area, and consists of an active agricultural landscape featuring a farmhouse on the northwest and an active quarry on the southwest fronting on Dufferin Street, and active agricultural landscapes on the east side fronting on Bathurst Street. The central portion of the study area features woodlots and wetlands, and remains undeveloped. A tree-lined road allowance is oriented in an east-west direction in the central portion of the study area, and is historically a portion of Kirby Road. Utilities infrastructure is located at the southeast corner of the study area, and is surrounded by woodlots and low lying grasslands. A farmscape in the southeast portion of the study area located at 11490 Bathurst Street is identified as a property of heritage interest in the *City of Vaughan Heritage Inventory*. This farmscape is located to the north of the Kirby Road allowance and consists of the foundations of a remnant agricultural outbuilding and a residence surrounded by overgrown vegetation. The location and orientation of photographic plates (Plates 1-17) are provided in Figure 8.

¹⁰ Contacted 11 August, 2017 at registrar@ontario.ca.





Plate 1: Kirby Rd. allowance, looking west from Bathurst.



Plate 2: The eastern portion of the study area, looking south down Bathurst Street.



Plate 3: East portion of the study area, looking north with Bathurst St. at right.



Plate 4: Farmscape in eastern portion of study area, looking north.



Plate 5: Agricultural fields, looking north.



Plate 6: Agricultural fields and tree-lined Kirby Rd. allowance, looking southwest.



Plate 7: Former farmscape north of Kirby Rd. allowance, looking north.



Plate 8: Stone barn foundation in farmscape, looking northwest.



Plate 9: South and west elevations of the residence at 11490 Bathurst St.



Plate 10: North and west elevations of the residence at 11490 Bathurst St.



Plate 11: Pathway in trees in the north-portion of the study area, looking west.



Plate 12: Agricultural fields in the central portion of the study area, looking east.



Plate 13: Mature woodlots in the central portion of the study area, looking west.



Plate 14: Western entrance drive to aggregate yard, looking east.



Plate 15: Vacant fields with aggregate yard in rear, looking west.



Plate 16: Gravel piles in aggregate yard looking west.



Plate 17: Internal access road in aggregate yard, looking east.

3.2.3 Kirby Road Extension Study Area– Identified Cultural Heritage Resources

Based on the results of the background research and field review, one cultural heritage resources (CHR) was identified within and/or adjacent to the Kirby Road Extension study area (see Figure 8). The cultural heritage resource includes one cultural heritage landscape (CHL) (Table 2). A detailed inventory of this cultural heritage resource within the study area is presented in Section 7.0 and mapping of this feature is provided in Section 8.0 of this report.

Table 2: Summary of cultural heritage landscapes (CHL) in the study area

| Feature | Location | Type | Recognition |
|---------|-----------------------|-----------|--|
| CHL 1 | 11490 Bathurst Street | Farmscape | Identified as a property of heritage interest in the <i>City of Vaughan Heritage Inventory</i> |

3.3 Screening for Potential Impacts

To assess the potential impacts of the undertaking, identified cultural heritage resources are considered against a range of possible impacts as outlined in the document entitled *Screening for Impacts to Built Heritage and Cultural Heritage Landscapes* (MTC 2006) which include:

- Destruction of any, or part of any, significant heritage attributes or features;
- Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance;
- Shadows created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;
- Isolation of a heritage attribute from its surrounding environment, context or a significant relationship;
- Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features;
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces;
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource.

A number of additional factors are also considered when evaluating potential impacts on identified cultural heritage resources. These are outlined in a document set out by the Ministry of Culture and Communications (now Ministry of Tourism, Culture and Sport) and the Ministry of the Environment entitled *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (October 1992) and include:

- Magnitude: the amount of physical alteration or destruction which can be expected;
- Severity: the irreversibility or reversibility of an impact;
- Duration: the length of time an adverse impact persists;
- Frequency: the number of times an impact can be expected;
- Range: the spatial distribution, widespread or site specific, of an adverse impact; and
- Diversity: the number of different kinds of activities to affect a heritage resource.



For the purposes of evaluating potential impacts of development and site alteration, MTC (2010) defines “adjacent” as: “contiguous properties as well as properties that are separated from a heritage property by narrow strip of land used as a public or private road, highway, street, lane, trail, right-of-way, walkway, green space, park, and/or easement or as otherwise defined in the municipal official plan.”

Where any above-ground cultural heritage resources are identified, which may be affected by direct or indirect impacts, appropriate mitigation measures should be developed. This may include completing a heritage impact assessment or documentation report, or employing suitable measures such as landscaping, buffering or other forms of mitigation, where appropriate. In this regard, provincial guidelines should be consulted for advice and further heritage assessment work should be undertaken as necessary.

3.3.1 Potential Impacts of the Proposed Undertaking

The proposed undertaking for the Kirby Road Extension EA study area consists of four short-listed alternatives (Alternatives 4, 5, 6, and 6a), each involving the construction of a new roadway extending existing Kirby Road from Dufferin Street in the west to Bathurst Street at Gamble Road in the east. Each of the four proposed short-listed alignments use between 150 metres and 2 kilometers of an existing Kirby Road allowance depicted in the nineteenth century mapping (Figure 2 and Figure 3). However, grading limits required to construct the roadway will moderately impact the farmscape located at 11490 Bathurst Street (CHL 1) and will result in the demolition of the foundation of a remnant agricultural outbuilding in all four alternatives. A retaining wall will be constructed adjacent to the existing residence to prevent demolition in all four alternatives (See Section 8.0).

The four short listed alternatives for the proposed undertaking all involve a similar magnitude, severity, duration, frequency, range, and diversity of impacts to the identified cultural heritage resource (CHL 1). Each of these four alternatives is considered to have moderate to significant impacts on the farmscape at 11490 Bathurst Street, including the demolition of the existing agricultural outbuildings adjacent to the residence and removal of landscape features such as established trees and vegetation, and the same mitigation measures are recommended for each alternative.

The four short listed alignments for the proposed undertaking will each utilize a section of existing road allowance to the immediate west of Bathurst Street, with Alternatives 4, 6, and 6a utilizing approximately 230 m west before diverting to the north into an agricultural field. Alternative 5 will utilize the entire portion of the road allowance adjacent to CHL 1, approximately 1 km in length. This portion of road allowance is overgrown and features established field boundaries with fencing and mature trees in some portions. The grading limits associated with each of the four alternatives varies in width from approximately 50-150 metres in throughout the study area. The proposed grading activities are anticipated to remove mature trees and established field boundaries associated with 11490 Bathurst Street, as well as the foundation of a remnant agricultural outbuilding near the residence in the eastern portion of the study area. A retaining wall will be constructed adjacent to the residence to reduce the grading limits on the southern side of the east portion of the study area and prevent the demolition of the residence.

Due to the large area of vegetation removal anticipated in Alternative 5, it is considered the least desirable alternative with respect to impacts to cultural heritage. Alternative 4 is anticipated to result in the least negative impact to the established vegetation and is therefore the preferred alternative.

Figure 8 (Section 8.0) shows the study area in relation to the identified cultural heritage resource. Table 3 lists potential impacts to the identified cultural heritage resource for each of the proposed alternatives.



Table 3: Potential Impacts of the Proposed Undertaking

| Alternative | Potential Impact(s) to Identified Cultural Heritage Resources |
|---|---|
| Alternative 4: Minor Northerly Diversion with Wetland Crossing to Minimize Impacts to Forest | The proposed undertaking will result in the modification of the existing road allowance for the western 950 m portion and the eastern 190 m portion of the study area, with the rest of the roadway diverting to the north. This will result in the removal of established trees, landscape elements, and the foundation of a remnant agricultural outbuilding associated with the farmscape at 11490 Bathurst Street (CHL 1) in the eastern 190 m portion of the existing road allowance. The residence at 11490 Bathurst Street is anticipated to be retained with the construction of a retaining wall. Impacts are anticipated to be moderate, and a resource-specific heritage impact assessment (HIA) is recommended for CHL 1 to develop suitable mitigation measures. |
| Alternative 5: Direct Extension with Wetland Crossing | The proposed undertaking will result in the modification of the existing road allowance for the entire 2 km length of the study area between Dufferin Street in the west and Bathurst Street in the east. This will result in the removal of established trees, landscape elements, and the foundation of a remnant agricultural outbuilding associated with the farmscape at 11490 Bathurst Street (CHL 1). The residence at 11490 Bathurst Street is anticipated to be retained with the construction of a retaining wall. Impacts are anticipated to be significant, and a resource-specific heritage impact assessment (HIA) is recommended for CHL 1 to develop suitable mitigation measures. |
| Alternative 6: South to North Minor Jog Diversion to Avoid Wetland and Minimize Impact to Forest | The proposed undertaking will result in the modification of the existing road allowance for the western 628 m portion and the eastern 230 m portion of the study area, with the rest of the roadway diverting south to avoid a wetland, and then north of CHL 1 to avoid dense trees. This will result in the removal of established trees, landscape elements, and the foundation of a remnant agricultural outbuilding associated with the farmscape at 11490 Bathurst Street (CHL 1) in the eastern 230 m portion of the existing road allowance. The residence at 11490 Bathurst Street is anticipated to be retained with the construction of a retaining wall. Impacts are anticipated to be moderate, and a resource-specific heritage impact assessment (HIA) is recommended for CHL 1 to develop suitable mitigation measures. |
| Alternative 6a: South to North Minor Jog Diversion to Avoid Wetland and Minimize Impact to Forest | The proposed undertaking will result in the modification of the existing road allowance for the western 150 m portion and the eastern 230 m portion of the study area, with the rest of the roadway diverting south to avoid a wetland, and then north of CHL 1 to avoid dense trees. This will result in the removal of established trees, landscape elements, and the foundation of a remnant agricultural outbuilding associated with the farmscape at 11490 Bathurst Street (CHL 1) in the eastern 230 m portion of the existing road allowance. The residence at 11490 Bathurst Street is anticipated to be retained with the construction of a retaining wall. Impacts are anticipated to be moderate, and a resource-specific heritage impact assessment (HIA) is recommended for CHL 1 to develop suitable mitigation measures. |



4.0 CONCLUSIONS

The results of background historical research and a review of secondary source material, including historical mapping, revealed a study area with a rural Euro-Canadian land use history dating back to the late-eighteenth century. A review of federal registers and municipal and provincial inventories revealed that there is one previously identified feature of cultural heritage value within the Kirby Road Extension study area, a farmscape at 11490 Bathurst Street (CHL 1). Based on the results of the background research, data collection, and field review, no additional cultural heritage resources were noted.

Key Findings

- A field review of the study area confirmed that there is one cultural heritage resource consisting of one cultural heritage landscape (CHL) within or immediately adjacent to the study area.
- The identified cultural heritage resource includes the farmscape at 11490 Bathurst Street (CHL 1), identified as a property of heritage interest in the *City of Vaughan Heritage Inventory*;
- The identified cultural heritage resource is historically, architecturally, and contextually associated with nineteenth- and twentieth-century land use patterns in the City of Vaughan;
- Each of the four proposed alternatives (Alternatives 4, 5, 6, and 6a) are anticipated to result in the removal of established trees, landscape elements, and the foundation of a remnant agricultural outbuilding associated with the farmscape at 11490 Bathurst Street (CHL 1); and
- The residence at 11490 Bathurst Street is anticipated to be retained with the construction of a retaining wall in each of the four alternatives (Alternatives 4, 5, 6, and 6a).

5.0 RECOMMENDATIONS

Background research, data collection, and field review was conducted for the study area and it was determined that one cultural heritage resource is located within or adjacent to the Kirby Road Extension EA study area. Based on the results of the assessment, the following recommendations have been developed:

1. Construction activities and staging should be suitably planned and undertaken to avoid impacts to contributing elements of identified cultural heritage resources. Specifically, structures and landscape elements associated with the farmscape at 11490 Bathurst Street (CHL 1) should be avoided during construction and staging activities. As a retaining wall is anticipated to be constructed adjacent to the residence at 11490 Bathurst Street, instructions should be issued to workers and no-go limits established to ensure construction and excavation activities are conducted in a way that prevents any impacts to the residence.
2. CHL 1 should be subject to photographic documentation and compilation of a resource-specific cultural heritage impact assessment report by a qualified heritage consultant. Where cultural heritage resources are expected to be impacted through alteration to their setting, a resource-specific cultural heritage impact assessment report should be prepared in advance of construction activities.



3. CHL 1 is expected to be impacted through alteration to setting by the removal of replaceable landscape features (i.e. vegetation, and mature trees). The feasibility of implementing tree protection zones should be investigated for all identified cultural heritage resources where tree removals are planned. If possible, tree protection zones should be implemented for CHL 1;
4. Post-construction landscaping and rehabilitation plans should be undertaken in a manner that is sympathetic to the overall setting. Wherever possible, landscaping with appropriate or sympathetic historic plant materials is recommended. Post-construction landscaping is recommended for CHL 1 where feasible, which will be subject to the removal of vegetation or replaceable landscape features (i.e. established trees, shrubs) during construction; and,
5. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted to confirm the impacts of the proposed work on potential heritage resources.



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- 2017a Figure 5-A (Short Listed Alignments Study Corridor). Data on file at ASI.
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7.0 CULTURAL HERITAGE RESOURCE INVENTORY

Table 4: Inventory of Cultural heritage resources (CHR) in the study area

| Resource | Type | Address/Location | Recognition | Description | Photos |
|----------|-----------|-----------------------|---|--|---|
| CHL 1 | Farmscape | 11490 Bathurst Street | Identified as a property of heritage interest in the <i>City of Vaughan Heritage Register</i> | <p>Historical:</p> <ul style="list-style-type: none"> -Farmhouse constructed in 1870 (City of Vaughan n.d.:2) -Farmhouse depicted in 1878 <i>Illustrated Historical Atlas</i> under the ownership of A. Prentice. -Associated with the historical development of the City of Vaughan and County of York. <p>Design:</p> <ul style="list-style-type: none"> -Farmhouse is constructed in Ontario House architectural style (City of Vaughan n.d.:2) -One-and-a-half storey frame structure with intersecting gable roof and rectangular footprint. -Residence is located on a prominent ridge overlooking Bathurst Street to the east. -Farmscape retains landscape features such as established circulation routes, mature plantings, established field boundaries, and active agricultural fields. <p>Context:</p> <ul style="list-style-type: none"> -Located on the west side of Bathurst Street, an early transportation route. -Reflects the nineteenth-century settlement along Bathurst Street through its style, scale/massing, set back and landscape features -Currently operated as Front Step Farms, an agricultural producer and produce vendor. |  <p>East elevation of the farmhouse at 11490 Bathurst Street, looking west.</p> |

8.0 CULTURAL HERITAGE RESOURCE LOCATION MAPPING

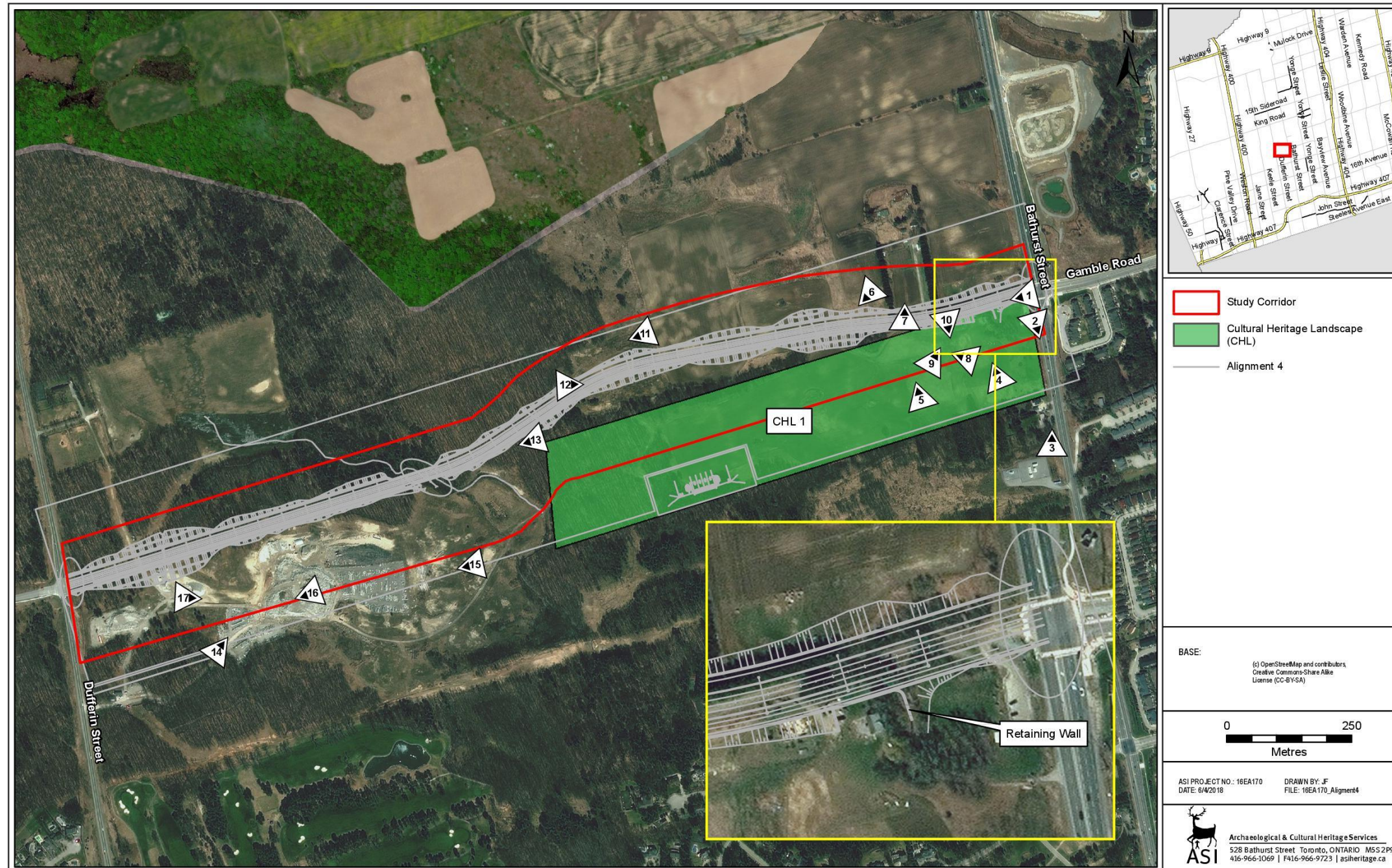


Figure 8: Location of Cultural Heritage Resources in the Kirby Road Extension Study Area- Alternative 4.

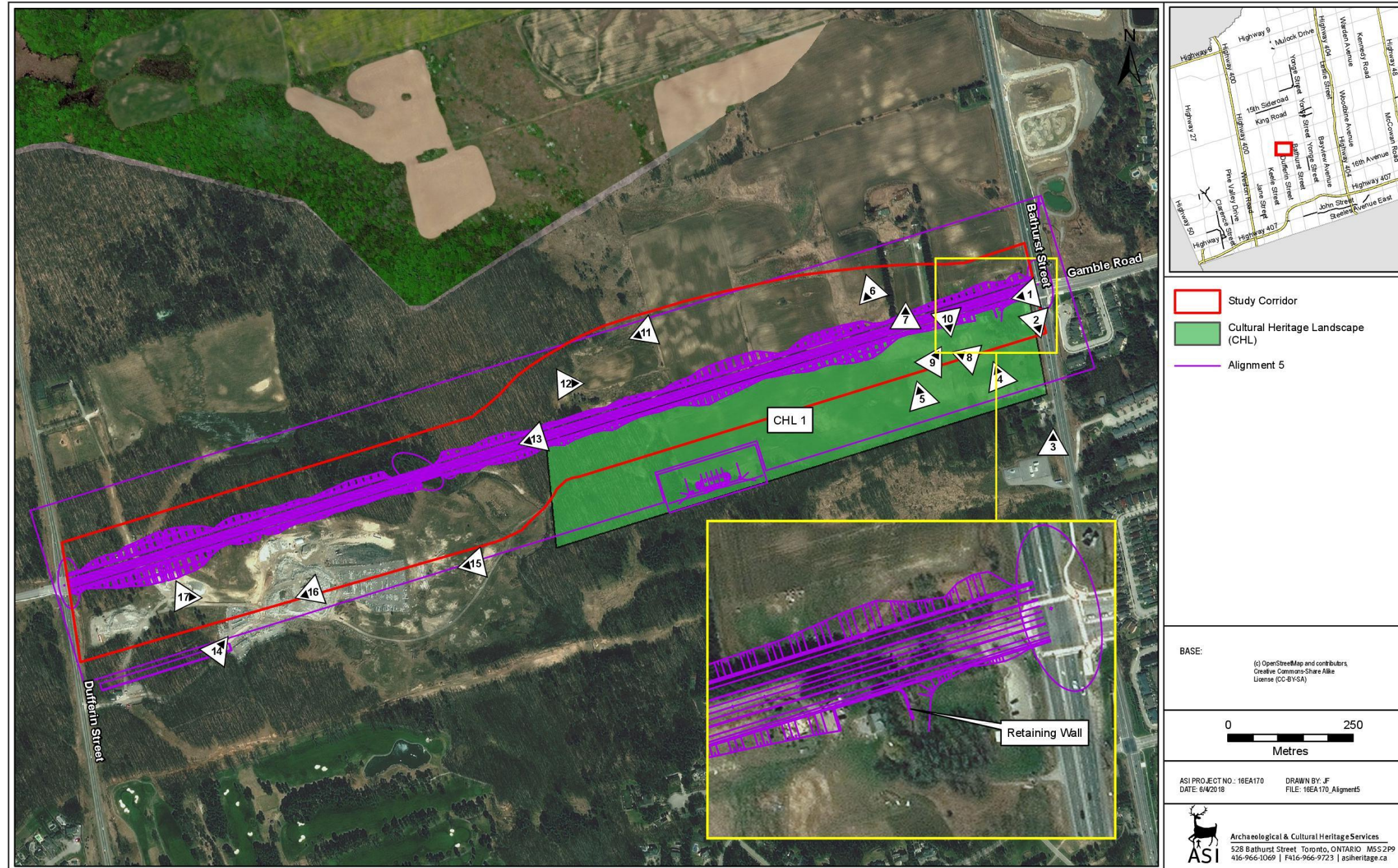


Figure 9: Location of Cultural Heritage Resources in the Kirby Road Extension Study Area- Alternative 5

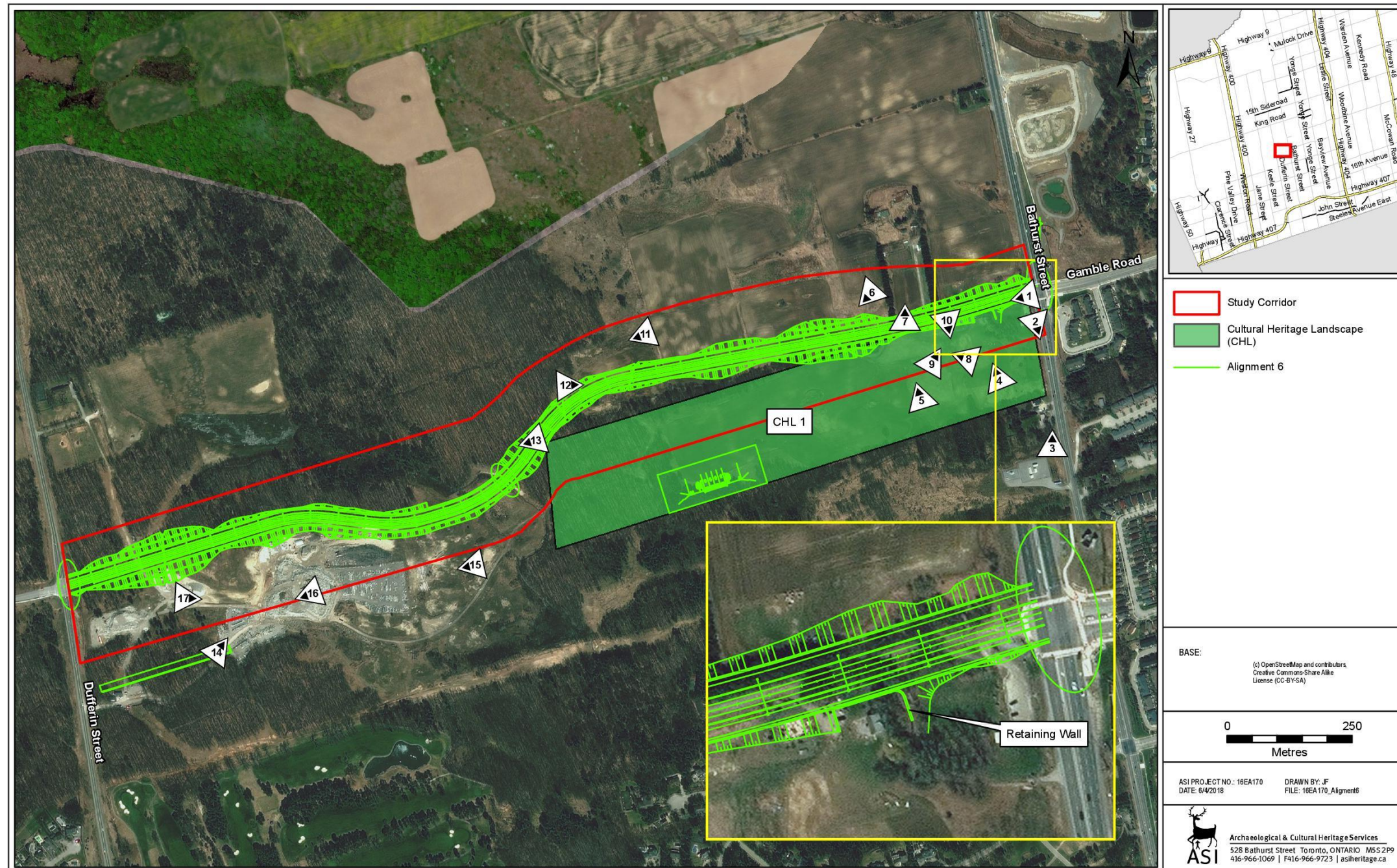


Figure 10: Location of Cultural Heritage Resources in the Kirby Road Extension Study Area- Alternative 6

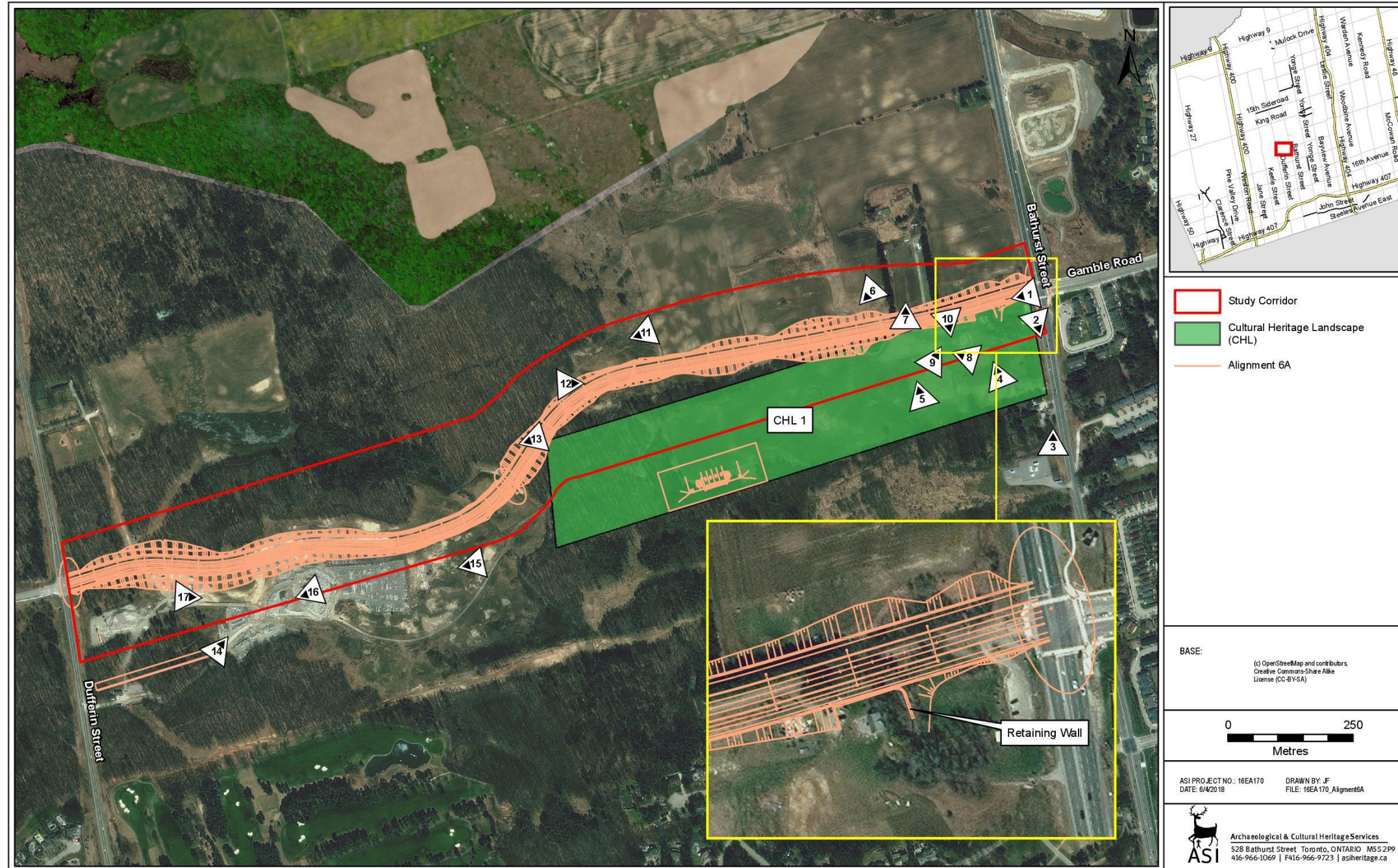


Figure 11: Location of Cultural Heritage Resources in the Kirby Road Extension Study Area- Alternative 6a