Appendix G: Cultural Heritage Resource Assessment



407 TRANSITWAY - KENNEDY ROAD TO BROCK ROAD

MINISTRY OF TRANSPORTATION - CENTRAL REGION

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

EXISTING CONDITIONS - IMPACT ASSESSMENT

HIGHWAY 407 TRANSITWAY TPAP FROM EAST OF KENNEDY ROAD TO EAST OF BROCK ROAD

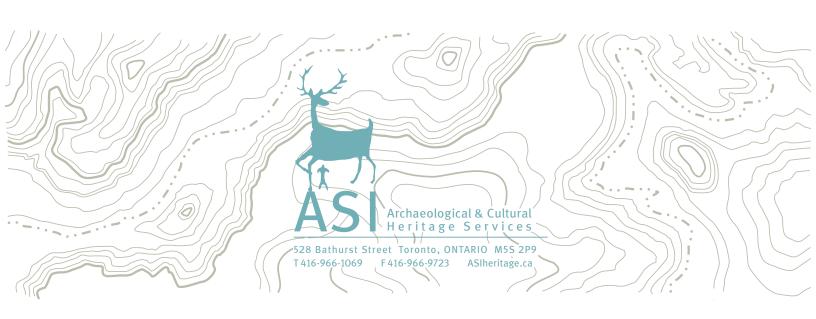
CITY OF MARKHAM, YORK REGION AND CITY OF PICKERING, DURHAM REGION

Prepared for:

LGL Limited 22 Fisher Street, P.O. Box 280 King City, ON L7B 1A6 T. 905-833-1244

ASI File: 14EA-013

September 2014 (Updated July and December 2015 and February and December 2016)



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

EXISTING CONDITIONS - IMPACT ASSESSMENT

HIGHWAY 407 TRANSITWAY TPAP FROM EAST OF KENNEDY ROAD TO EAST OF BROCK ROAD

CITY OF MARKHAM, YORK REGION AND CITY OF PICKERING, DURHAM REGION

EXECUTIVE SUMMARY

ASI was contracted by LGL Limited on behalf of the Ministry of Transportation to conduct a Cultural Heritage Resource Assessment (CHRA) for the Highway 407 Transitway from east of Kennedy Road to east of Brock Road. The Ministry of Transportation (MTO) is proposing a 18 km segment of a transitway facility along the Highway 407 corridor through York Region and Durham Region, from east of Kennedy Road in the City of Markham to east of Brock Road in the City of Pickering (407 Transitway). The 407 Transitway will include a number of stations to be determined during this study. The environmental impact of this transit project will be assessed according to the transit project assessment process (TPAP) as prescribed in Ontario Regulation 213/08, Transit Projects and Metrolinx Undertakings.

In September 2014, ASI conducted a desktop data collection report of the initial overall study area. 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 for a more refined study area, including the location of six proposed station locations.

The background research, data collection, and field review conducted for the study area determined that 10 cultural heritage resources are located within or adjacent to the refined Highway 407 Transitway TPAP study area and proposed station locations. 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 identified cultural heritage resources. In particular, construction activities should be planned to avoid impacts to CHL 1 and CHL 2 which are both designated under Part IV of the Ontario Heritage Act. It should be noted that Cultural Heritage Evaluation Reports and Heritage Impact Assessments are currently being undertaken for both of these properties.
- 2. Where technically possible, make further adjustments to the profile, cross-section, and grading limits of the proposed Transitway and Station Locations to reduce encroachment and avoid removal of mature trees (CHL 1, CHL 2, and CHLs 6-10).
- 3. Where impacts to existing vegetation are anticipated, post-construction rehabilitation should include plantings sympathetic to the historical context of the resource (CHL 1, CHL 2, CHL 4, CHLs 6-10).



- 4. Given the proximity of the structure and mature trees on CHL 10 to the proposed impact area limits, steps must be taken to ensure the residence and other structures and surrounding vegetation are retained and protected during construction-related activities.
- 5. Where built heritage resources and cultural heritage landscapes 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 to serve as a final record of each of the resources and the study area in general. CHL 1, CHL 2, and CHL 10 should be subject to photographic documentation and compilation of a resource-specific cultural heritage impact assessment report by a qualified heritage consultant and the report submitted to the Ministry of Tourism, Culture, and Sport, the Cities of Markham and Pickering, and the Regions of York and Durham for archival purposes (note-a combined CHER/HIA is currently being prepared for CHL 1 and CHL 2).
- 6. Minimal impacts are anticipated for CHL 9 in the event of the construction of a road bridge over the resource. However, if the proposed impacts do not involve the construction of a bridge causing the destruction of the resource or a significant change in alignment, the areas of impact should be subject to photographic documentation and compilation of a resource-specific cultural heritage impact assessment report prior to alteration.
- 7. The Rouge National Urban Park transverses the study area from east of the CP/Havelock Railway eastwards to York-Durham Line. One of the objectives under the Rouge National Urban Park Act is "to protect the cultural landscapes of the park and identify its heritage values to facilitate an understanding and appreciation of the history of the region". Further the draft Rouge National Urban Park (2014) states that one of its objectives is to "identify, conserve, and communicate the cultural heritage values of the park, including such cultural resources as building and engineering works, archaeological sites, cultural landscapes, as well as heritage values such as community values, traditions, and stories of past and present inhabitants". The ensemble of the two heritage buildings (CHL 1, and CHL 2) on Reesor Road and Reesor Road (CHL 4) should be addressed collectively to maintain the cultural heritage character of the area. Reesor Road has been identified as having cultural heritage interest both from the Rouge National Urban Park and City of Markham's perspective. Post-construction rehabilitation should include plantings sympathetic to the historical context of the identified cultural heritage resources and adjacent to the Rouge National Urban Park in consultation with Parks Canada.
- 8. Should future work require an expansion of the Highway 407 Transitway TPAP study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential cultural heritage resources.
- 9. This report should be submitted to the Ministry of Tourism, Culture, and Sport, the Cities of Markham and Pickering, and the Regions of York and Durham for review and comment.



PROJECT PERSONNEL

Senior Project Manager: Annie Veilleux, MA

Cultural Heritage Specialist

Manager, Cultural Heritage Division

Cultural Heritage Assistant: John Sleath, MA

Cultural Heritage Assistant

Project Coordinator: Sarah Jagelewski, Hon. BA

Staff Archaeologist

Assistant Manager, Environmental Assessment Division

Project Administration: Carol Bella, Hon. BA

Research Archaeologist Administrative Assistant

Report Preparation: Joel Konrad, PhD

Cultural Heritage Specialist

John Sleath

Graphics: Shady Abbas, Hon. BSc

Geomatics Specialist

Jonas Fernandez, MSc Geomatics Specialist

Joel Konrad, PhD

Cultural Heritage Specialist

John Sleath

Report Reviewer: Lindsay Graves, MA, CAHP

Cultural Heritage Specialist

Assistant Manager, Cultural Heritage Division

Annie Veilleux



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1.0 INTRODUCTION

ASI was contracted by LGL Limited on behalf of the Ministry of Transportation to conduct a Cultural Heritage Resource Assessment (CHRA) for the Highway 407 Transitway from east of Kennedy Road to east of Brock Road (Figures 1 and 2). The Ministry of Transportation (MTO) is proposing a 18 km segment of a transitway facility along the Highway 407 corridor through York Region and Durham Region, from east of Kennedy Road in the City of Markham to east of Brock Road in the City of Pickering (407 Transitway). The 407 Transitway will include a number of stations to be determined during this study. Subject to the outcome of the study, the 407 Transitway will be implemented initially as bus rapid transit (BRT) with the opportunity to convert to light rail transit (LRT) in the future.

This 18 km segment forms part of the 150 km long high-speed interregional facility planned to be ultimately constructed on a separate right-of-way that parallels Highway 407 from Burlington to Highway 35/115, with stations, parking and access connections. This transitway is a component of the official plans of the stakeholder municipalities and of the Province's commitment to support transit initiatives in the Greater Golden Horseshoe through the Metrolinx Regional Transportation Plan.

The transitway will be a high-speed fully grade separated facility on a separate right-of-way running parallel, and crossing over or under Highway 407. This 18 km section will include up to eight (8) stations, potentially at McCowan Road, Markham Road, 9th Line, Donald Cousens Parkway/Reesor Road, York Durham Line, Whites Road (Sideline 26), Dixie Road/Rossland Road (Sideline 22) and Brock Road. The station design will include bus access to and egress from the stations, bus platforms, layout of the access(es) to/from the arterial road, integration with local transit (bus platforms), parking spaces, Passenger Pick Up and Drop Off (PPUDO), shelters, building and other amenities. The transitway and the stations will initially be designed to support the busway service with provisions for future conversion to light-rail transit technology. The project limits are presented in Figures 1 and 2.

The environmental impact of this transit project will be assessed according to the transit project assessment process as prescribed in Ontario Regulation 213/08, Transit Projects and Metrolinx Undertakings.

In September 2014, ASI completed a Desktop Data Collection report as part of this project to compile an inventory of previously identified cultural heritage resources located within or adjacent to the overall Highway 407 Transitway study area as illustrated in Figures 1 and 2 (ASI 2014). The previously identified cultural heritage resources are found individually and in clusters at various locations along the study area. A number of cultural heritage resources, both Designated under Part IV of the *Ontario Heritage Act* and listed on the City of Markham's and the City of Pickering's heritage inventories are located within the study area. This report presents a more refined study area, with the proposed Highway 407 Transitway corridor generally running along the south side of the existing 407 ETR. This report also presents a cultural heritage resource assessment for six proposed station locations (Figure 3).

The purpose of this report is to present a built heritage and cultural landscape inventory of cultural heritage resources and identify existing conditions of the Highway 407 Transitway TPAP study area. The research carried out for this CHRA was conducted under the senior project management of Annie Veilleux of ASI.





Figure 1: Location of the general study area.

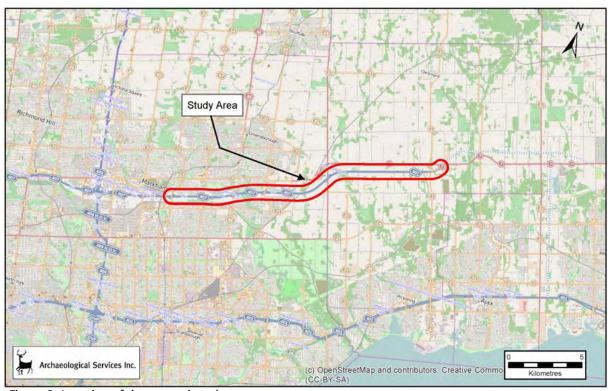


Figure 2: Location of the general study area

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



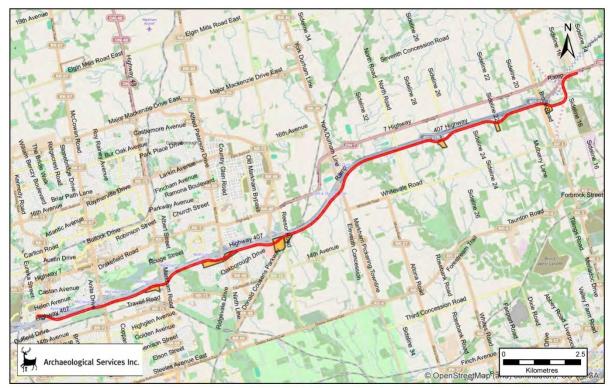


Figure 3: Location of the refined study area with proposed station locations

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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 *Transit Project Assessment Project* (TPAP) and the Ontario *Environmental Assessment Act* (OEAA). 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.

Road construction has the potential to affect cultural heritage resources in a variety of ways. Impacts can include: direct impacts that result in the loss of resources through demolition, or the displacement of resources through relocation; and indirect impacts that result in the disruption of resources by introducing physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting. Potential impacts on identified cultural heritage resources were identified based on the proximity of a resource to the proposed undertaking.

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, roadscapes 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.
- Infrastructure Ontario
- Liquor Control Board of Ontario
- McMichael Canadian Art Collection
- Metrolinx
- The Niagara Parks Commission.
- Ontario Heritage Trust
- Ontario Lottery and Gaming Corporation
- Ontario Power Generation Inc.
- Ontario Realty Corporation
- 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" (PPS 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" (PPS 2014). Examples may include, but are not limited to farmscapes, historic 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 (*PPS* 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 (*PPS* 2014).

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

2.2 Municipal Policies

The 407 Transitway TPAP study area falls within both the City of Markham and the City of Pickering. The City of Markham's Official Plan (2014, Section 2.5) and the City of Pickering's Official Plan (Edition 6, 2010, Section 8) set out a number of policies with regard to cultural heritage resources. Goals and policies of relevance to the present assessment include the following:

City of Markham

(Official Plan, 2014 Section 2.5)

2.5 Heritage Conservation

a) Goal: To preserve and continue the distinctive tradition, history and heritage of Markham's communities in coordination with the comprehensive planning needs and requirements of the Town.



b) Objectives:

- i) To ensure the protection, preservation and/or continued use of historically and/or architecturally significant buildings, areas and sites.
- ii) To assemble and collect historical artifacts and buildings in a protected environment for the purpose of preservation and interpretation.
- iii) To promote an understanding and appreciation of the historical resources of the Town to both residents and visitors.

2.5.1 Policies

- g) Retention/Relocation/Demolition of Heritage Buildings
 - i) The Town shall endeavour to prevent the demolition of all buildings of architectural and/or historical significance listed in the Inventory referred to in Section 2.5.1b) and shall actively encourage the conservation, and where appropriate, the restoration of these buildings. The Town, under Section 34 of the Ontario Heritage Act, R.S.O.1990, c.O.18, as amended, may withhold a demolition permit for an individually designated heritage building or a building in a designated Heritage District for 180 days and until a building permit for the redevelopment of the site has been issued by the Town. Through the use of Zoning By-laws, Sign By-laws, Site Plan Agreements and other controls, the Town will ensure that development within or adjacent to heritage buildings is designed, sited or regulated in such a manner so as not to conflict with or destroy such features whenever possible.
 - ii) Council shall encourage the retention of buildings of architectural and/or historical merit in their original locations whenever possible. Before such a building is approved for relocation to any other site, all options for on-site retention shall be investigated. The following alternatives, in order of priority, shall be examined prior to approval for relocation:
 - Retention of the building on-site in its original use. In a residential subdivision, a heritage dwelling could be retained on its own lot for integration into the residential community. Retention of the building on-site in an adaptive re-use, e.g. in a residential subdivision, a heritage dwelling could be retained for a community centre or a day care centre.
 - Relocation of the building on the development site. A heritage building, if of significant historical, architectural or contextual importance, could be relocated to another location within the proposed development.
 - Relocation of the building to a sympathetic site. If interest is demonstrated, the heritage building could be relocated to an available lot at a sympathetic site within the Town. Consideration may be given to the relocation of significant heritage buildings to the Markham Heritage Estates, subject to the policies of Section 3.3.4.
 - iii) The Town shall preserve, wherever feasible, heritage buildings and structures that are in its ownership.
 - iv) The Town will endeavour to conform to and further the heritage objectives and policies, where feasible, through its by-laws, programs and public works.
 - v) The Town, in commenting to the Committee of Adjustment on applications for severance or minor variance affecting properties designated under the Ontario Heritage Act, R.S.O. 1990,



c.O.18, as amended, will support such applications only if the proposed severance or minor variance is compatible with the objectives and policies of this Section.

City of Pickering

(Official Plan, Edition 6, 2010)

8.1 City Council shall respect its cultural heritage, and conserve and integrate important cultural heritage resources from all time periods into the community.

8.2 City Council shall,

- (a) identify important cultural heritage resources from all time periods, so that they can be appropriately conserved and integrated into the community fabric, including,
 - (i) significant heritage structures, features and sites;
 - (ii) buildings, sites, and artifacts of historical, archaeological and architectural significance including modern or recent architecture;
 - (iii) significant landscape features and characteristics, including vistas and ridge lines; and
 - (iv) other locally important cultural heritage resources;
- (b) foster public awareness and appreciation of the City's cultural heritage;
- (c) prevent the demolition, destruction or inappropriate alteration of important cultural heritage resources to the extent possible;
- (d) where possible, restore, rehabilitate, maintain and enhance important cultural heritage resources owned by the City, and encourage the same for those owned by others;
- (e) where possible, ensure development, infrastructure, capital works and other private and public projects conserve, protect and enhance important cultural heritage resources; and
- (f) involve the public, business-people, landowners, local heritage experts, heritage committees, relevant public agencies, and other interested groups and individuals in cultural heritage decisions affecting the City.

8.3 City Council shall,

- (a) assist in identifying, protecting and promoting cultural heritage resources in the municipality, in cooperation with Federal, Provincial and Regional levels of government, as well as private agencies and individuals;
- (b) consult with its local architectural conservation advisory committee and other heritage committees, and participate with these committees and others in protecting important heritage resources, as necessary, through assembling, resale, public-private partnerships, acquisition or other forms of involvement;
- (c) ensure that plans, programs and strategies prepared by or for the City and its boards or commissions, shall respect the character and significance of the City's heritage resources; and
- (d) use and encourage the use of available government and non-government funding and programs to assist in cultural heritage resource conservation.
- 8.8 City Council, in consultation with its heritage committee, shall,
- (a) allow alterations, additions or repairs to buildings designated under the Ontario Heritage Act, provided the changes to the building do not detrimentally affect the heritage value;
- (b) allow new buildings, or alterations, additions or repairs to existing buildings within a Heritage Conservation District that are consistent with the District Conservation Guidelines;
- (c) discourage or prevent the demolition or inappropriate alteration of a heritage resource, but where demolition or inappropriate alteration is unavoidable,
 - (i) consider the acquisition and conservation of the resource; and



- (ii) if acquisition is not possible, conduct a thorough review and documentation of the resource for archival purposes; and
- (d) ensure that designated cultural heritage buildings, and other important cultural heritage resources that are vacant for an extended period of time are inspected regularly to discourage vandalism and monitor conformity with the City's Maintenance and Occupancy By-law.
- 8.9 City Council shall consider the following guidelines on the use and reuse of heritage resources,
- (a) maintain, if possible, the original use of heritage structures and sites, and if possible, retain the original location and orientation of such structures;
- (b) where original uses cannot be maintained, support the adaptive reuse of heritage structures and sites to encourage resource conservation; and
- (c) where no other alternative exists for maintaining heritage structures in their original locations, allow the relocation of the structure to appropriate sites or areas.

2.3 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 historic 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, neighborhood, 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 utilised 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 retains 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 Markham and the City of Pickering; 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 City of Markham and the City of Pickering; 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 Markham and the City of Pickering; 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:

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 and field review are contained in Sections 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.

3.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT

3.1 Introduction

This section provides a brief summary of historic research and a description of identified above ground cultural heritage resources that may be affected by the proposed road improvements. 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 Euro-Canadian settlement and land use. Historically, the study area is located in the following lots and concessions:

The Township of Markham, County of York

- Concession VI, Lots 6-9
- Concession VII, Lots 6-9
- Concession VIII, Lots 6-9
- Concession IX, Lots 7-10
- Concession X, Lots 7-12

The Township of Pickering, County of Ontario

• Concession V, Lots 16-35



Concession VI, Lot 16-18

3.2 Township Survey and Settlement

3.2.1 The Township of Markham, County of York

The land within the Township of Markham was first settled by German families from New York State, who arrived around 1790, before the township had been surveyed. At this time, York was just a hamlet and Yonge Street did not exist, although its line had been established. As more settlers began to arrive, Governor Simcoe encouraged United Empire Loyalists to take up land alongside English immigrants who also came in increasing numbers. The Township of Markham was then partially surveyed in 1794, being the third in the county to be marked, Yonge Street became the base of the township and each concession, of which there were ten, contained 35 lots, making the Township an almost perfect square (Town of Markham 2001).

Markham's many rivers and tributaries soon supported water-powered mills, and a number of historic communities were established around these sites. Such hamlets include German Mills, Almira, Buttonville, Cedar Grove and Unionville. In 1851 Smith's *Canadian Gazeteer* described Markham as "a considerable village, containing between eight and nine hundred inhabitants, pleasantly situated on the River Rouge. It contains two grist mills with three run of stones each, a woollen factory, oatmeal mill, barley mill and distillery, foundry, two tanneries, brewery, etc., a temperance hall, and four churches – Episcopal, Presbyterian, Congregational, and Wesleyan Methodist" (Robinson 1885: 199). By 1857, the lumber industry had managed to clear most of the township of trees and the land was then under cultivation. Improved transportation routes such as Yonge Street and increased populations led to the expansion of such villages as Markham, Thornhill and Unionville, and the establishment of more specialized industries, such as tanneries, wagon works, and furniture factories (Town of Markham 2001).

The arrival of the Toronto and Nipissing Railway in 1871, with stations in Unionville and Markham, brought additional growth and prosperity to the township. The Village of Markham itself, which was incorporated in 1873, had a population of 1,100 in 1891 (Town of Markham 2001). Increased contact with Toronto brought about by the rail line and other transportation and communication improvements however, diminished the industrial role of the villages within the Township of Markham by the turn of the century. The township returned to its agricultural roots and relied on such industries until after World War II (Town of Markham 2001).

Rapid population growth and an influx of immigrants saw the establishment of the Municipality of York by the Province of Ontario, and the incorporation of the Town of Markham in 1971. As of July 1, 2012 the Town of Markham has been re-designated as the City of Markham (CBC News 2012).

3.2.2 Township of Pickering, County of Ontario

Pickering Township, when first laid out in the 1790s, was designated Township 8 although the name was changed shortly thereafter to Edinburgh. The first survey of this township was made in 1791. The first legal settler in Pickering, said to have been William Peak, arrived in 1798 (Armstrong 1985: 146). Peak was reputed to have been a trader and interpreter who settled along the lakeshore at the mouth of Duffins Creek. The westerly portion of the township was settled in part by German settlers attracted to the area through the settlement proposal of William Berczy. The remainder of the township was settled by



Loyalists, disbanded soldiers, emigrants from the United Kingdom, and a large number of Quakers from both Ireland and the United States. The township population stood at 187 in 1809, at 375 in 1820, at 1,042 in 1828, at 3,752 in 1842, and at 5,285 in 1901.

In 1805, D'Arcy Boulton predicted that Pickering would become a township of some importance due to its proximity to York, "though at present no great advantage exists, at a future period it must be beneficial" (Boulton 1805: 86). In 1851, Smith noted that Pickering was "one of the best settled townships in the County, and contains a number of fine farms, and has increased rapidly in both population and prosperity, within the last few years" (Smith 1851: 22). Maps produced later in the nineteenth century, such as the 1860 Tremaine map and the 1877 *Historcal Atlas* (Figures 3 and 5) show the township to be heavily settled and period census returns demonstrate that the township contained a wide variety of industries and small businesses as well as husbandmen engaged in mixed agriculture. The main settlements which were established in Pickering were located along Duffins Creek where early mills and various industries utilized the available hydraulic power of this watershed. One of the earliest roads constructed across Pickering was the Kingston Road, built by Asa Danforth in 1796 along the south end of the township near the lake. This road was identified on several early township maps. The road network in Pickering developed slowly, and in 1850 the de Rottenburg map indicated just three major north-south arteries between the Kingston Road and Highway 7.

Pickering Township experienced a decline in population in the rural areas in the early- and mid-twentieth century. The township generally remained agricultural in nature with little change in the established, latenineteenth century field patterns, fence lines, and hedgerows north of the lakeshore area, even with some loss of earlier farmsteads. A gradual subdivision of some farmland occurred in the latter half of the twentieth century.

3.3 Review of Historic Mapping

3.3.1 Nineteenth Century Mapping

The 1860 Tremaine's Map of the County of York and Tremaine's Map of the County of Ontario as well as the 1878 Historical Atlas of the County of York and 1877 Historical Atlas of the County of Ontario were reviewed to determine the potential for the presence of historical resources in the study area from the nineteenth century (Figures 3-8).

Historically, the study area is located in the former Township of Pickering (Lots 16 to 35, Concessions V and VI), County of Ontario, and the former Township of Markham (Lots 6 to 12, Concessions V to X), County of York. Details of historic property owners and features are provided in Table 1. 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.

The nineteenth century maps demonstrate several notable transformations taking place within the Townships of Markham and Pickering. Significantly, the settlements at Brougham and Whitevale appear to have increased substantially between 1860 and 1878. In addition, the former settlement of Major had changed its name to Whitevale and Sparta had changed its name to Box Grove by 1878. Numerous historical features are depicted on lots within the study area, including farmsteads, grist and saw mills, schools, churches, and orchards.



Historic mapping also demonstrates that there were numerous nineteenth-century settlements in the study area. These include Hagerman's Corners, Vinegar Hill, Belford, Locust Hill, Markham, and Brougham. Markham and Brougham stretch north of the study area and Unionville is depicted to the northwest of the study area along Kennedy Road. Box Grove and Whitevale are located directly to the south. The Toronto and Nippising Railway (now CNR) passes to the northwest of the study area.

Several historic roads are shown running through the study area, from Kennedy Road in Markham Township to Brock Road in Pickering Township, between the historic thoroughfares of Steeles Avenue and 16th Line in Markham Township and Whitevale Road and the current Highway 7 right of way in Pickering Township. Many of the thoroughfares within the study area have disappeared or have been greatly altered, particularly within the former Township of Markham, where the alignments of the historic thoroughfares of Kennedy Road and Ninth Line have been significantly changed. A list of all the historic roads in the study area includes: McCowan Road, Markham Road, Ninth Line, Reesor Road, York-Durham Line, and Brock Road.

Table 1: Nineteenth-century property owner(s) and historical feature(s)

Con. #	Lot #	Property Owner(s) (1860)	Property Owners (1877/1878)	Historical Feature(s) (1860)	Historical Feature(s) (1877/1878)
Townsh	ip of Picke	ring			
V	16	Ira B. Carpenter D. Palmer	I.B. Carpenter T. Brignal H. Howel	"Pine Hall" Building Waterways (2)	Farmsteads (2) Waterways (2)
	17	Thomas Smith Thomas Stevenson	W. Ellicot T. Stephenson	Waterway (2)	Farmsteads (2) Waterways (2)
	18	John Gould J.H. Bentley F. Marr and H. Hubbard R. Crawford M. Widdifield	Alexander Robertson William Wilson Mrs. T.C. Hubbard J. Rilecott	Farmsteads (1) Settlement of Brougham Settlement of Thompsons Corners	Farmsteads (5) Settlement of Brougham
	19	A. Thompson I.B. Hubbard J. Connor I.B. Hubbard	R. Brignal Mrs. T.C. Hubbard R. Wilson	Farmsteads (1) Churches (1) Tanneries (1) Steam Saw Mill (1) Settlement of Brougham	Farmsteads (3) Settlement of Brougham
	20	N. Hastings D. Hogle J. Churchill	J. Hasting D. & P. Hogle	n/a	Farmsteads (4) Graveyards (1)
	21	Francis Linton J. Wilson Mrs. J Cowie	L. & G. Linton J. Wilson D. &. P Hogle C. Phillips	n/a	Farmsteads (3)
	22	N. Hastings Joseph Wilson Jonathan Phillips	T. Pugh J. Wilson J. Phillips	n/a	Farmsteads (3)
	23	William Davidson D. Thornton J. Turner	W. Brignal J. Thornton J. Turner	Farmsteads (1)	Farmsteads (4)



Con. #	Lot #	Property Owner(s) (1860)	Property Owners (1877/1878)	Historical Feature(s) (1860)	Historical Feature(s) (1877/1878)
		E. McConville	Mrs. Hubbard		
			W. Hubbard		
	24	N. Hastings	A. & E. Hastings	Farmsteads (1)	Farmsteads (2)
		W. Bentley	Mrs. G. Turner	Churches (1)	Churches (1)
		G. Turner	W. Hubbard		
		T. Hubbard	Mrs. Hubbard		
	25	Aaron Albright	A. Albright	n/a	Farmsteads (3)
		Moses Gamble	R. Grieg		
			A. Perry		
	26	William Major	W. and W.H. Major	Farmsteads (1)	Farmsteads (2)
	27	John Sleigh	J. Sleigh	Farmsteads (2)	Farmsteads (2)
		William Major	W. & W.H. Major	Schools (1)	
		J. Pursey	U. Percy		
	28	W. White	W. White	Farmsteads (1)	Farmsteads (2)
		Uriah Young	J. Young Sr.	Schools (1)	Schools (1)
	29	William Turner	William Turner	Farmsteads (3)	Farmsteads (5)
		Isaac Turner	C. Lott	Stores (1)	
			L. Turner		
	30	T. Barton	T. Barton	Farmsteads (1)	Farmsteads (4)
		W. Turner	J.M. & D. S. Turner	Schools (1)	
		Edward Vardon	E. Vardon		
		T. Vardon	D. Brown		
	31	T.P. White	D. McIntyre	Grist Mills (1)	Farmsteads (7)
		C. Wideman	E. Vardon	Settlement of Major	Settlement of
		I. Young	S. Vardon	Waterways (1)	Whitevale
		Edward Vardon	S. Vardon		Whitevale Post
		N. McIntyre		• • • • • • • • • • • • • • • • • • • •	Office
	32	T. P. White	T. P. White	Saw Mills (1)	Farmsteads (3)
		D. Poucher	S. Windsonr	Farmsteads (1)	Sawmills (1)
	22	S. Windsor	J. & E. Wilson	Waterway (1)	Waterways (1)
	33	Matthew Wilson	H.P. Crosby	Waterways (1)	Farmsteads (2)
	24	William Hagarman	J. & E. Wilson	Cow Mills (1)	Waterways (1)
	34	William Hagerman Lymon Rice	L. Hagerman	Saw Mills (1)	Farmsteads (3) Settlement of Green
		A. Noble	G. Hagerman L. Rice	Waterways (1)	River
		A. Noble	O. Ferrier		Rivei
	35	O. Brand	V. Skinner	n/a	Farmsteads(4)
))	D. Brand	D. Brand	11/α	Tarmsteaus(4)
		William M. Button	W. Burton		
		William Farrier	W. Farrier		
		Wittiam Famer	J.H.S.		
VI	16	Oliver Johnson	O. Johnson	n/a	Farmsteads (2)
		Mrs. S. Burton	J. Burton	/ 	
	17	Jason Brown	T. Stevenson	Waterway (1)	Farmsteads (2)
		William Mathews	S. Stevenson	, (- /	Waterway (1)
		Jason Miller	James Miller		, (-)
	18	Jason Brown	T. Stevenson	n/a	Farmsteads (1)
		William Lang	D. & M. Stevenson	•	Settlement of
		Wittialli Lalis	D. C. IVI. SIEVEIISUII		Jettienienie or



Con. #	Lot #	Property Owner(s) (1860)	Property Owners (1877/1878)	Historical Feature(s) (1860)	Historical Feature(s) (1877/1878)
Townsh	nip of Mark	ham			
V	6	Nicholas Hagerman John Hagerman Sinclair Hagerman Henry Hagerman	Sinclair Hagerman Jonathan Hagerman Nicholas Hagerman	Farmsteads (4) Stores (1)	Farmsteads (3) Mills (1) Post Office (1) Orchards (2)
	7	John Fierheller Henry Housoyer Christopher Chapman	Sinclair Hagerman Josh Lunan Joshua Fierheller	Farmsteads (1)	Farmsteads (3) Orchards (1)
	8	Thomas Revis Alex Bradburn	Hy Lunan Jonathan T. Carr	Farmsteads (1) Waterway (1)	Farmsteads (2) Orchards (1) Settlement of Hagermans Corners
VI	6	Samuel Breesby J. Canning Jr. J. Canning Sr.	Jason Forbes William Hutchinson Jonathan Canning Jr. Jonathan Canning	Farmsteads (3) Settlement of Hagerman's Corners	Farmsteads (7) Hotels (1) Orchards (2)
	7	Jerum Eckardt Bernard Eckardt Abraham Eckardt	Sr. Rob Armstrong Joram Eckardt William McDonald	Farmsteads (1)	Farmsteads (3) Orchards (4)
	8	Frunen Hemkey William Whiteoak Peter Milne Abraham Eckardt	Justin Brunder Hy Hebunkay Mrs. McDonald Peter Milne	n/a	Farmsteads (3) Orchards (1)
	9	Thomas Revis Ambrose Barnett Archibald McKinnon	Hugh McKinnon Stephen G. Barnett Archibald McKinnon	Farmsteads (1)	Farmsteads (3) Orchards (2)
VII	6	John Stouffer Elijah Miller	Jacob Ekardt Mrs. McKay G. Herrington Thomas McAuley Jason Stacy	Farmsteads (1)	Farmsteads (1) Orchards (1) School Houses (1)
	7	Abraham Eckardt Christian Henrick	James Duncan Jacob Eckardt	Farmsteads (1)	Farmsteads (2) Orchards (2)
	8	Chauncy Crosby	Chancy Crosby W.D. Crosby	Farmsteads (1) Waterways (1)	Farmsteads (2) Orchards (2) Waterways (1)
	9	Thomas A. Milno	Thomas A. Milno	Farmsteads (3) Waterways (1)	Grist Mills (1) Settlement of Markham Waterways (1)
VIII	7	David Break Joseph Break John Reesor	Jonathan Reesor David Brake C.C.	Farmsteads (1) Waterways (1)	Farmsteads (3) Orchards (2) Waterways (1)
	8	Daniel Break David Break John Reesor	G.W. Reesor Jonathan Reesor Daniel Brake	Farmsteads (2) Waterway (1)	Farmsteads (2) Gristmills (1) Orchards (1)



Con. #	Lot #	Property Owner(s) (1860)	Property Owners (1877/1878)	Historical Feature(s) (1860)	Historical Feature(s) (1877/1878)
	9	William Armstrong	David Brake R.G. Armstrong	Farmstead (1) Waterway (2)	Waterways (1) Waterways (2) Settlement of Markham
	10	William Armstrong	R.G. Armstrong	Farmsteads (2) Waterway (2) Settlement of Markham	Farmsteads (1) Orchards (1) Settlement of Markham
IX	7	Sylvester Tomlinson Widow Reeser	David Reesor S. Tomlinson R. Reesor	n/a	Farmsteads (1) Orchards (2)
	8	Benjamin G. Reesor Widow Reesor William Johnston	J. McCreight R. Reesor Johnson Est	Farmsteads (1)	Farmsteads (3)
	9	John Reesor Jr. Benjamin G. Reesor	A. Burkholder A.B. Reesor		Farmsteads (2)
	10	John Reesur Jr. John Reesor Sr.	W. Rolph Jonathan G. Reesor	Farmsteads (1)	Farmsteads (4) Orchard (2)
X	7	Ira White James Trau	Ira White Jason Tran	Farmsteads (1) Waterways (1)	Farmsteads (2) Grist Mill (1) Waterways (1)
	8	John Laughlin James Trau	William Harding Jason Tran	Farmsteads (1) Waterways (1)	Farmsteads (2) Orchards (1) Waterways (1) Bedford Post Office
	9	William Johnston William Armstrong	Johnson Est William Armstrong	Settlement of Belford Waterways (1)	
	10	William Reynolds William Armstrong Justice Reynolds	Perry R. Reynolds William Armstrong Albert Clarry	Farmsteads (4) Waterways (1)	Farmsteads (3) Orchards (4) Waterways (1) Hotels (1)
	11	Christian Reeser William M. Button	Reesor Est Col. William H. Button	Waterways (1)	Mills (1) Farmsteads (3) Orchards (1) Waterways (1) The St. Clain Farm
	12	William M. Button S.W. Christian Reeser	Jonathan Pike Berg Haggerman Col William M. Button William Pallister	Waterways (1)	Farmsteads (1) Waterways (1)

3.3.2 Twentieth-Century Mapping

A series of six topographical maps, from 1914, 1917, 1936, 1943, 1951, and 1994 illustrate the development of the study area over the course of the twentieth century (Figures 9-14). Generally, these maps demonstrate a period of minimal growth in the early twentieth century followed by a period of rapid growth and development in the late twentieth century.



A steady trend of urbanization along traditional settlement roads occurred between 1914 and 1943 (Figures 9-12). During this period, smaller settlements such as Vinegar Hill, Locust Hill and Box Grove increased in size while additional residences appeared in the surrounding rural landscape. However, the larger settlement of Markham appears to have had moderate growth prior to 1943. While few paved roads were recorded on these maps in the first quarter of the twentieth century, by 1943 Highway 7 was paved (Figure 12). The Canadian Pacific Railway, built in the late nineteenth century to connect Toronto to Peterborough, bisects the study area, running northeast-southwest between Box Grove and Whitevale and through Locust Hill. In addition, a cemetery is visible in topographic mapping from 1917, located just west of McCowan Road.

There was a rapid trend of urbanization in the Township of Markham during the second half of the twentieth century. While Figure 13 indicates the village of Markham had increased moderately since 1943, Figure 14 demonstrates that rapid and considerable expansion had occurred by 1994. In particular, the winding crescents of suburban development are visible and the settlements of Vinegar Hill and Hagerman's Corners had been subsumed by suburban development. All new and existing roads were paved by this time and a hydro corridor had been constructed along the southern boundary of the study area between Markham and Kennedy roads.

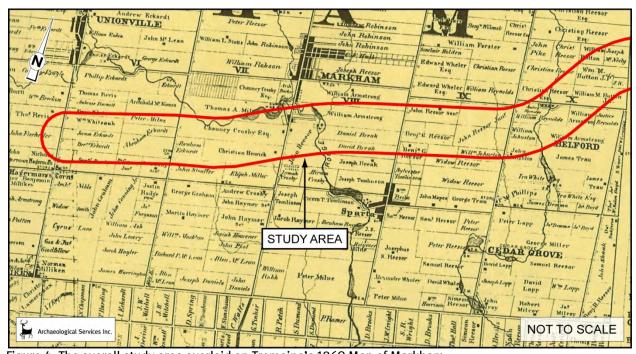


Figure 4: The overall study area overlaid on Tremaine's 1860 Map of Markham

Base Map: *Tremaine's Map of the County of York, Canada West* (Tremaine 1860)



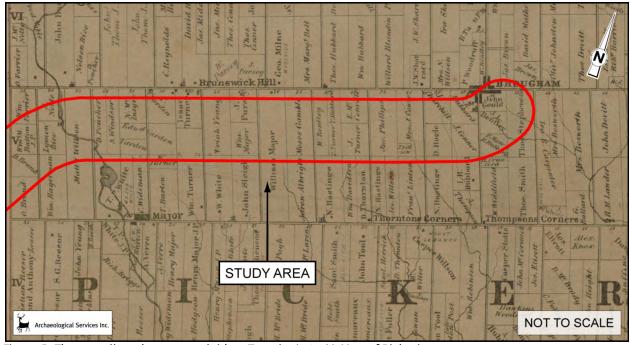


Figure 5: The overall study area overlaid on Temaine's 1860 Map of Pickering

Base Map: *Tremaine's Map of the County of Ontario, Canada West* (Tremaine 1860)

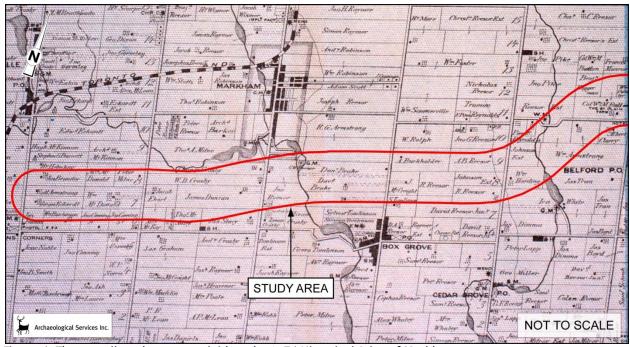


Figure 6: The overall study area overlaid on the 1876 Historical Atlas of Markham

Base Map: Miles and Co. *Illustrated Historical Atlas of the County of York* (1878)



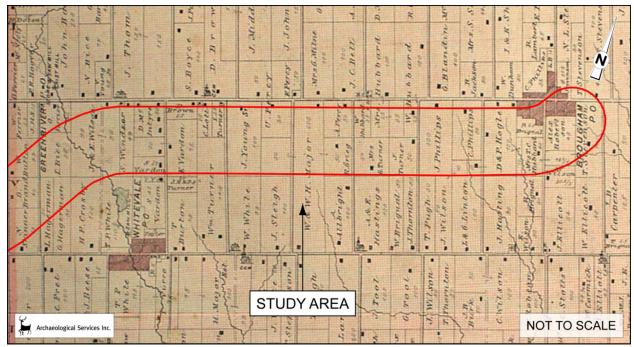


Figure 7: The overall study area overlaid on the 1876 Historical Atlas of Pickering

Base Map: J.H. Beers and Co, *Illustrated Historical Atlas of the County of Ontario* (1877)



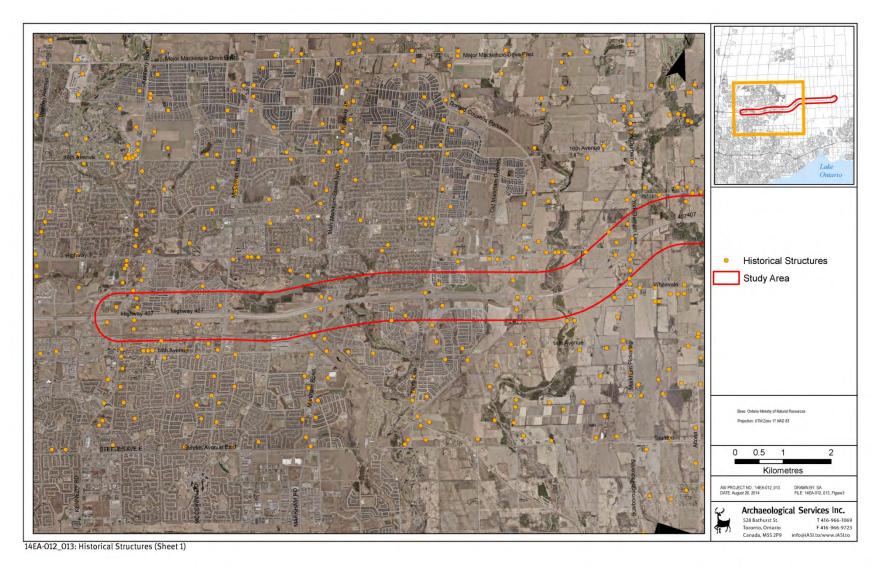


Figure 8: Location of historical features indicated in the *Illustrated Historical Atlas of the County of York* (1878) in relation to the current road grid

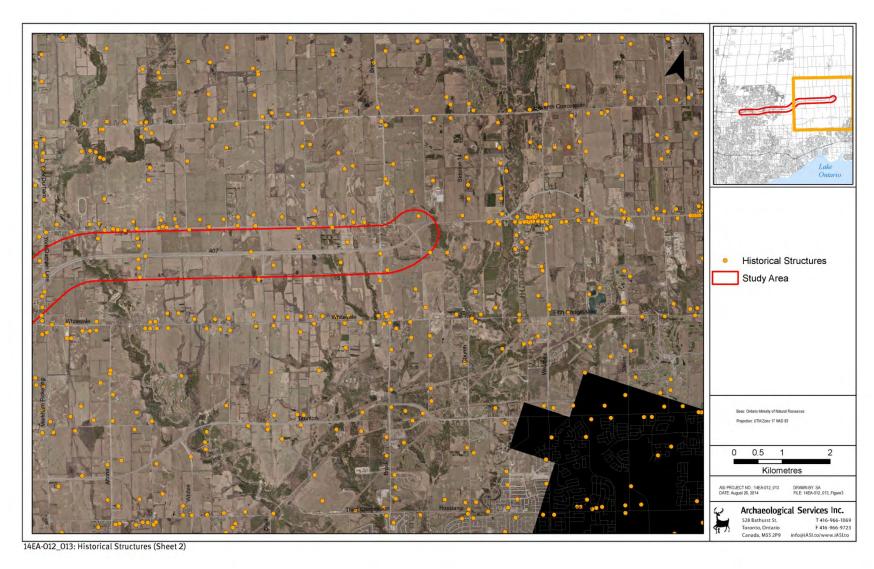


Figure 9: Location of historical features indicated in the *Illustrated Historical Atlas of the County of Ontario* (1877) in relation to the current road grid

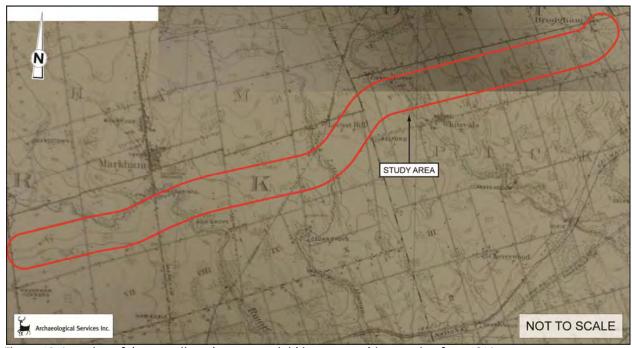


Figure 10: Location of the overall study area overlaid in topographic mapping from 1914

Base Map: Department of National Defense, NTS Sheet Markham 30 M/14 (1914)

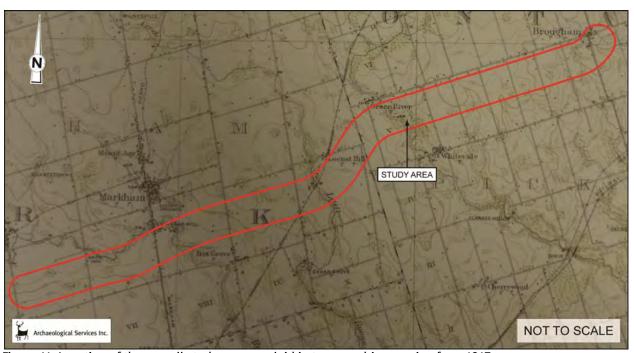


Figure 11: Location of the overall study area overlaid in topographic mapping from 1917

Base Map: Department of Militia and Defense, NTS Sheet Markham 30 M/14 (1917)



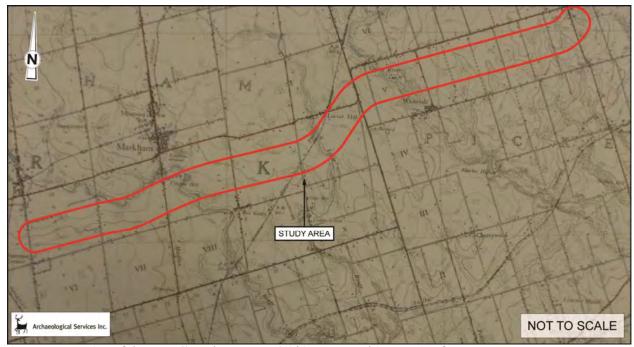


Figure 12: Location of the overall study area overlaid in topographic mapping from 1936

Base Map: Department of National Defense, NTS Sheet Markham 30 M/14 (1936)

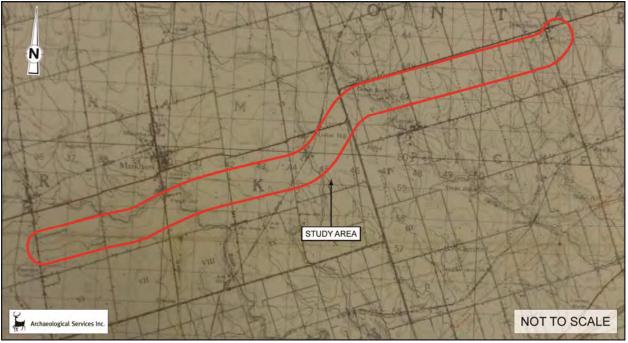


Figure 13: Location of the overall study area overlaid in topographic mapping from 1943

Base Map: Department of National Defense, NTS Sheet Markham 30 M/14 (1943)



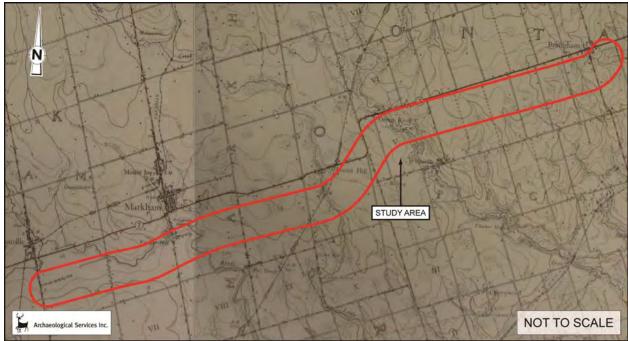


Figure 14: Location of the overall study area overlaid in topographic mapping from 1951

Base Map: Department of National Defense, NTS Sheet Markham 30 M/14 (1951)

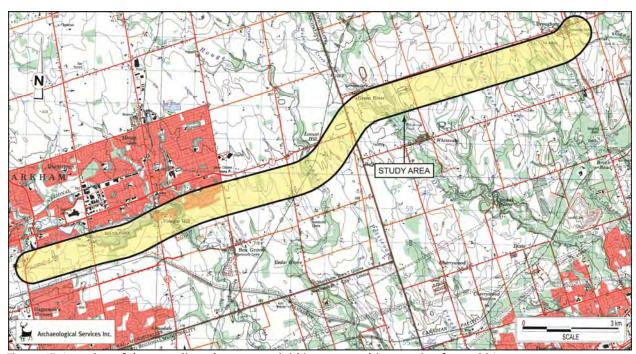


Figure 15: Location of the overall study area overlaid in topographic mapping from 1994

Base Map: Department of Energy, Mines and Resources NTS Sheet Markham 30 M/14 (1994)



3.4 Existing Conditions

In order to make a preliminary identification of existing cultural heritage resources within the study area, the following resources were consulted:

- The City of Markham's and the City of Pickering's lists of *Properties Designated Under Ontario Heritage Act, Part IV* which provides an inventory of cultural heritage resources that are designated under Part IV of the *Ontario Heritage Act* and an inventory of listed properties that are of cultural heritage value or interest to the city¹;
- Ontario Ministry of Culture's *Ontario Heritage Properties Database*: available online, the database provides information on properties designated under the *Ontario Heritage Act*. The database was last updated in 2005²;
- 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 levels³;
- the Canadian Heritage Rivers System inventory;
- the Federal Heritage Buildings Review Office (FHBRO) (these properties are recognized under the Treasury Board Policy on the Management of Real Property (TBPMRP)); and,
- The City of Markham and the City of Pickering were contacted directly to gather any information on cultural heritage resources within the study area (email communication 26 August 2014).

Based on the review of available data, there were fifteen previously identified resources within and/or adjacent to the general study area (ASI 2014).

A field review of the refined study area and six proposed station locations was undertaken by John Sleath of ASI, on 9-10 June, 2015, to document the existing conditions of the study area. The field review was preceded by a review of available, current and historic, 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 3.4.2 and are mapped with plate locations and directions in Section 8.0 of this report.

3.4.1 407 Transitway TPAP Study Area – Existing Conditions

The study area is composed of the area around the current alignment of the Highway 407 between Kennedy Road in Markham and Brock Road in Pickering. The majority of the 407 Transitway TPAP study area is directly south of the existing Highway 407 right-of-way (ROW), with a total of eight proposed station locations at several major arterial intersections along the transitway route. The study area is primarily located within and adjacent to the existing 407 ROW, oriented east-west, and as such has been subject to soil disturbance and ditching activities. Large portions of the proposed transitway and station locations are located in agricultural fields or undeveloped portions of grassland or wooded areas adjacent to residential or commercial areas. The study area includes several previously identified cultural heritage resources, as well as additional roads, railways, creeks, and farmscapes.



¹ Reviewed 4 April 2015 (https://notl.civicweb.net/document/5044/PartIV.pdf)

² Reviewed 21 April 2015 (http://www.hpd.mcl.gov.on.ca/scripts/hpdsearch/english/default.asp)

³ Reviewed 4 April 2015 (http://www.historicplaces.ca/en/pages/about-apropos.aspx)

The western portion of the 407 Transitway begins on the east side of Kennedy Road on the north side of Highway 407, and immediately turns south and crosses onto the southern 407 ROW (Figure 16). This area on the northeast side of the 407 and Kennedy road consists of a car dealership, a storm water management pond, and grasslands (Plates 1 and 2). A heritage property Designated under *Part IV* of the *Ontario Heritage Act* was formerly located at 31 Helen Drive, adjacent to the study area, although it was demolished at the time of field review (Plate 1) The study area then continues to the east in an east-west orientation across mixed agricultural fields, grasses, and small woodlots and intersects McCowan Road (Plate 3, Figures 17 and 18). The study area continues east of McCowan Road, and continues to consist of a mix of active agricultural fields, grasslands, and wooded areas until Markham Road (Plate 4, Figures 19 and 20), where a proposed station will be located. The Markham Road station area consists of active agricultural fields and a stand of deciduous trees adjacent to an electrical transfer station (Plate 5, Figures 20 and 21

The 407 Transitway study area continues east of Markham Road following the same east-west alignment on the south side of Highway 407 until it intersects Rouge Creek (CHL 6) (Figure 22). Rouge Creek is noted in nineteenth century mapping along the same alignment as presently, and is surrounded by a steep sloped wooded creek valley and a wide floodplain.

East of Rouge Creek, the study area continues along the southern limit of the 407 ROW through mixed grasses and shrubs to Ninth Line, where a proposed station location is planned to impact both an area east and west of Ninth Line between the southern limit of the 407 ROW and the northern limit of residential and commercial developments to the south (Figures 23 and 24). The western portion of the proposed Ninth Line Station study area is composed of undeveloped grassland bound by a wooden post and rail fence to the west and south which serves to separate it from a residential area, to the north by the 407 ROW, and the east by Ninth Line (Plate 6). The eastern portion of the proposed Ninth Line Station study area is composed of low-lying grasses that may have been subject to soil disturbance with the construction of Highway 407 to the east, and a higher and likely un-disturbed portion consisting of deciduous trees and scrub to the east (Plate 7). This eastern portion of the proposed Ninth Line Station study area is bound on the west by Ninth Line, the north by the Highway 407 ROW, the east by a low lying creek valley, and on the south by an undeveloped lot and commercial complex (Plate 7).

The 407 Transitway study area continues east of Ninth Line across grasslands following the east-west alignment of the southern limit of the 407 ROW passing north of a large commercial shopping complex (Plate 8) until it intersects with Donald Cousens Parkway (Figure 25 and 26).

The intersection of Donald Cousens Parkway and Highway 407 is the location of the proposed Donald Cousens Station (Figures 26 and 27), which also encompasses nearby Reesor Road (CHL 4) and has been discussed at length in a previous assessment (ASI 2015). The proposed Donald Cousens Station study area is composed of two portions; the western portion consists of a low lying treed area to the north and previously identified farmscape at 8042 Reesor Road (CHL 2) to the south, and is bound by Donald Cousens Parkway to the west, Highway 407 to the north, Reesor Road (CHL 4) to the east, a Canadian Pacific Railway line (CHL 5) to the southeast, and mixed woodlot and grassland to the south (Plate 9). The eastern portion of the proposed Donald Cousens Station study area and the Transitway consists of a previously identified farmscape at 8119 Reesor Road (CHL 1), and is bounded by Reesor Road (CHL 4) on the west, by the Highway 407 ROW on the north, and by the CP Railway (CHL 5) on the southeast (Plate 10).

The 407 Transitway study area continues east from the proposed Donald Cousens Station where it intersects Little Rouge Creek (CHL 7) and Rouge Park, a wooded area east of the Little Rouge Creek



(Figure 27). Continuing east from Rouge Park, the study area continues adjacent to the south limit of the Highway 407 ROW, where it curves slightly and is oriented southwest to northeast, crossing agricultural land and mixed shrubs and grasses until it reaches York-Durham Line(Plate 11, Figures 28, 29 and 30). This roadway marks the boundary between The City of Markham in York Region to the west, and the City of Pickering in Durham Region to the east.

East of York-Durham Line, the study area continues in a southwest- northeast orientation until it curves along the southern limit of the Highway 407 ROW and resumes an east-west orientation (Figure 30 and 31). At this point, the study area intersects Green River, a tributary of the West Duffins Creek (CHL 8), and the Seaton Hiking Trail (CHL 9), a forested recreational park area (Plate 12).

East of the Seaton Lands within the study area, the proposed Transitway continues along an east-west orientation south of the Highway 407 ROW through an area of mixed grasses until it intersects North Road (Plate 13, Figure 32 and 33). East of North Road the Transitway study area continues to consist of a mix of active agricultural land and grass sections adjacent to the 407 ROW until it diverts south forming the proposed Whites Road Station study area (Figures 34 and 35), which is only visible from the Highway 407 ROW, and consists of an active agricultural field and treed field divider. The Transitway curves north immediately after the proposed Whites Road Station where it intersects with a wooded valley and *Ganatsekiagon*, a small tributary of the West Duffins Creek (Figure 35).

The proposed Transitway continues east through mixed grasses where it intersects with Sideline 24 (Plate 14, Figure 36). East of Sideline 24 the Transitway study area continues to consist of a mix of grasslands (Plate 15), active agricultural fields, treed field dividers, and dense woodlots (Figures 37 and 38) until it intersects with a farmscape (CHL 10) west of Brock Road (Plate 16).

Immediately west of Brock Road is CHL 10, a farmscape located at 3490 Brock Road. Farmscape CHL 10 is bound on the north by the 407 ROW, the east by Brock Road, and on the south and west by agricultural fields (Figure 39). East of Brock Road, the proposed Transitway curves to the south to the proposed Brock Road Station study area, composed of an active agricultural field to the south and a construction zone to the north, separated by a treed field divider (Figures 39 and 40).

East of Brock Road, the study area continues to curve to the southeast away from the 407 ROW then curves back up the northeast through active agricultural fields until it intersects with Sideline 16 (Plate 19, Figure 40). At Sideline 16 the Transitway study area turns sharply to the north, where it continues in a northerly orientation on the east side of Sideline 16 through mixed grass and scrub lands until it intersects the Highway 407 ROW and diverts east along the southern ROW limit (Plate 20, Figure 41)





Plate 1: North of the study area at Kennedy Road, showing the former location of heritage property at 31 Helen Drive.



Plate 2: Study area northeast of the intersection of Highway 407 and Kennedy Road, looking southwest.



Plate 3: Study area west of McCowan Road, looking west.



Plate 4: Study area west of Markham Road, looking west.



Plate 5: Proposed Markham Road Station location, looking west.



Plate 6: Proposed Ninth Line Station location west of Ninth Line, looking northeast.





Plate 7: Proposed Ninth Line Station location east of Ninth Line, facing northwest.



Plate 8: Study area west of Donald Cousens Parkway, looking west.



Plate 9: Proposed Donald Cousens Station location including CHL 2, looking southwest.



Plate 10: Proposed Donald Cousens Station location, including Reesor Road (CHL 4) in foreground and CHL 1 in rear, looking northeast.



Plate 11: Study area west of York-Durham Line, looking west



Plate 12: Study area in Seaton Forest (CHL 9), looking east.





Plate 13: Study area west of North Road, looking west.



Plate 14: Study area west of Sideline 24, looking west.



Plate 15: Study area east of Sideline 24, looking east.



Plate 16: Study area west of Brock Road including CHL 10, looking west



Plate 17: Proposed Brock Road Station location, looking southeast.



Plate 18: Proposed Brock Road Station location, looking northeast.







Plate 19: Study area west of Sideline 16, looking west.

Plate 20: Study area east of Sideline 16, looking north

3.4.2 Highway 407 Transitway TPAP- Identified Cultural Heritage Resources

Based on the results of the background research and field review, 10 cultural heritage resources (CHR) were identified within and/or adjacent to the refined Highway 407 Transitway TPAP study area and six proposed station locations (see Figure 3). The 10 resources are all cultural heritage landscapes (CHL) (Table 2). The study area assessed in the desktop data review (ASI 2014) contained other identified CHRs which are presented in Table 2 along with the CHLs from the refined study area. However only the CHLs located within the refined study area are discussed in detail. A detailed inventory of these cultural heritage resources within the refined study area is presented in Section 7.0 and mapping of these features is provided in Section 8.0 of this report.

Table 2: Summary of built heritage resources (BHR) and cultural heritage landscapes (CHL) in the study area

Feature	Location	Туре	Recognition	Location on Transitway Mapping Sheets
CHL 1	8119 Reesor	Farmscape	Designated,	Figures 26 and 27, in location of potential Donald
(CHR 7)*	Rd.		Part IV	Cousens Station.
CHL 2	8042 Reesor	Farmscape	Designated,	Figure 26, in location of potential Donald Cousens
(CHR 8)*	Rd.		Part IV	Station.
CHL 3	7960 Reesor	Farmscape	Listed, City	Figure 26, in vicinity of potential Donald Cousens
(CHR 9)*	Rd.		of Markham	Station location.
CHL 4	Reesor Road	Streetscape	Identified	Figure 26, in location of potential Donald Cousens
			during field	Station.
			review	
CHL 5	CP Rail Line	Railscape	Identified	Figures 26 and 27, in vicinity of potential Donald
			during field	Cousens Station location.
			review	
CHL 6	Rouge Creek	Watercourse	Identified	Figure 22, located within the proposed Transitway
			during field	ROW
			review	
CHL 7	Little Rouge	Watercourse	Identified	Figure 27, located within the proposed Transitway
	Creek		during field	ROW
			review	
CHL 8	Green River	Watercourse	Identified	Figure 31, located within the proposed Transitway
			during field	ROW



Feature	Location	Туре	Recognition	Location on Transitway Mapping Sheets
			review	
CHL 9	Seaton Hiking Trail		Identified during field review	Figure 31, located within the proposed Transitway ROW
CHL 10	3490 Brock Rd.	Farmscape	Identified during field review	Figure 39, located within the proposed Transitway ROW
(CHR 1)*	99 YMCA Blvd.	Homestead	Designated, Part IV	Located outside of the refined study area
(CHR 2)*	31 Helen Ave.	Homestead	Designated, Part IV	Located outside of the refined study area
(CHR 5)*	95 Russell Jarvis Dr.	Homestead	Designated, Part IV	Located outside of the refined study area
(CHR 3)*	McCowan Road	Cemetery	Cemetery	Located outside of the refined study area
(CHR 4)*	N/A	Cultural Heritage District	Designated, Part V	Located outside of the refined study area
(CHR 6)*	8359 Reesor Rd.	Farmscape	Listed, City of Markham	Located outside of the refined study area
(CHR 10)*	7939 Reesor Rd.	Farmscape	Listed, City of Markham	Located outside of the refined study area
(CHR 11)*	7914 14 th Ave.	Farmscape	Designated, Part IV	Located outside of the refined study area
(CHR 12)*	3590 Brock Rd.	Homestead	FHBRO	Located outside of the refined study area
(CHR 13)*	1613 Highway 7	School	FHBRO	Located outside of the refined study area
(CHR 14)*	1709 Highway 7	Hotel	FHBRO	Located outside of the refined study area
(CHR 15)*	3545 Brock Rd.	Former Government Building	FHBRO	Located outside of the refined study area

^{*} CHR numbers refer to preliminary identifiers in the desktop data report (ASI 2014:22-23)

3.5 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 November 2010) which include:

- Destruction, removal or relocation of any, or part of any, significant heritage attribute or feature (III.1).
- Alteration which means a change in any manner and includes restoration, renovation, repair or disturbance (III.2).
- Shadows created that alter the appearance of a heritage attribute or change the exposure or visibility of a natural feature or plantings, such as a garden (III.3).
- Isolation of a heritage attribute from its surrounding environment, context, or a significant relationship (III.4).



- Direct or indirect obstruction of significant views or vistas from, within, or to a built or natural heritage feature (III.5).
- 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 (III.6).
- Soil disturbance such as a change in grade, or an alteration of the drainage pattern, or excavation, etc (III.7)

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."

Once a technically preferred preliminary design for the Highway 407 Transitway and proposed station locations have been identified, all cultural heritage resources identified within and adjacent to the study area will be evaluated against the above criteria and a summary of impact screening results will be provided. Various works associated with infrastructure improvements have the potential to affect cultural heritage resources in a variety of ways, and as such, appropriate mitigation measures for the undertaking need to be considered.

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.

3.5.1 Potential Impacts to Cultural Heritage Resources of the Preliminary Preferred Design

The preferred design alternative for the Highway 407 Transitway TPAP was refined and is presented in Section 8.0.

The following table (Table 3) considers the impacts of the preferred alternative on identified cultural heritage resources, based on the Ministry of Tourism and Culture document entitled *Screening for Impacts to Built Heritage and Cultural Heritage Landscapes* (November 2010). Table 3 also recommends mitigation strategies.



Table 3: In	pacts to Identified Cultural Heritage Resources	and Recommended Mitigation Strategies
Resource	Discussion of Impact(s)	Mitigation Strategies
CHL 1	Alterations to this resource include the removal of a barn, driveshed, fenced yard, and gravel driveway leading to Reesor Road. Anticipated impacts also include excavation, grading and the removal of landscape features including mature trees and pastures.	Prior to alteration of the setting, the areas of impact should be subject to a property-specific Cultural Heritage Evaluation Report and Heritage Impact Assessment Report. Note: A CHER and HIA have been submitted and are pending review and approval. The destruction of mature trees should be avoided, and post-construction rehabilitation should include plantings sympathetic to the historical context of the resource.
CHL 2	Anticipated impacts include excavation, grading and the removal of landscape features including mature trees and pastures to the north and west of the residence and outbuildings. There are no anticipated impacts to the existing structures.	Prior to alteration of the setting, the areas of impact should be subject to a property-specific Cultural Heritage Evaluation Report and Heritage Impact Assessment Report. Note: A CHER and HIA have been submitted and are pending review and approval. Instructions should be issues to construction crews, and fenced no-go zones should be established in order to prevent impacts to the existing structures. The destruction of mature trees should be avoided, and post-construction rehabilitation should include plantings sympathetic to the historical context of the resource.
CHL 3	Based on the available design drawings, there are no anticipated impacts to this cultural heritage resource.	No further work is required.
CHL 4	Alterations to this resource include disturbance due to the construction of a bridge over Reesor road, involving construction activities such as grading and excavation on the road margins. However, due to the temporary nature of the impacts and the previous construction of the Highway 407 bridges directly to the north, these impacts are not considered to negatively impact the historical context of the resource.	No further work is required. Post-construction rehabilitation should include plantings sympathetic to the historical context of the resource.
CHL 5	Alterations to this resource include temporary construction-related impacts from the construction of a bridge over the existing tracks. Due to the temporary nature of the	No further work is required.



Resource	pacts to Identified Cultural Heritage Resources Discussion of Impact(s)	Mitigation Strategies
RESOUTE	impacts and the previous construction of the Highway 407 bridges directly to the north, these impacts are not considered to negatively impact the historical context of the resource. There are no anticipated impacts to the present railway alignment.	muguion strategies
CHL 6	Alterations to this resource include excavation and grading of the creek valley and the removal of mature trees to facilitate construction of a road bridge over the resource.	No further work is required. Post-construction rehabilitation should include plantings sympathetic to the historical context of the resource.
CHL 7	Alterations to this resource include excavation and grading of the creek valley and the removal of mature trees to facilitate construction of a road bridge over the resource.	No further work is required. Post-construction rehabilitation should include plantings sympathetic to the historical context of the resource.
CHL 8	Alterations to this resource include excavation and grading of the creek valley and the removal of mature trees to facilitate construction of a road bridge over the resource.	No further work is required. Post-construction rehabilitation should include plantings sympathetic to the historical context of the resource.
CHL 9	Alterations to this resource include excavation and grading of the creek valley and the removal of mature trees to facilitate construction of a road bridge over the resource. There is no anticipated impact to the present alignment or structure of the pedestrian trail.	No further work is required. Post-construction rehabilitation should include plantings sympathetic to the historical context of the resource. However, if the proposed impacts do not involve the construction of a bridge causing the destruction of the resource or a significant change in alignment, additional work is required. In this case, prior to alteration of the setting, the areas of impact should be subject to photographic documentation and compilation of a resource-specific cultural heritage impact assessment report.
CHL 10	Alterations to this resource include the removal of a barn, two outbuildings, and fenced pasture. Anticipated impacts also include excavation, grading and the removal of landscape features including mature trees and agricultural fields.	Prior to alteration of the setting, the areas of impact should be subject to a property-specific Cultural Heritage Evaluation Report and Heritage Impact Assessment Report. Construction and staging areas should be suitably planned in order to avoid the residence and mature trees directly south of the proposed impact area. Post-construction rehabilitation should include plantings sympathetic to the



Table 3: Im	Table 3: Impacts to Identified Cultural Heritage Resources and Recommended Mitigation Strategies				
Resource	Discussion of Impact(s)	Mitigation Strategies			
		historical context of the resource.			

4.0 CONCLUSIONS

The results of background historic research and a review of secondary source material, including historic mapping, revealed that the study area was originally located within rural landscape dating back to the late eighteenth century, with major roadways connecting various settlements in the area and several creeks and smaller tributaries throughout. The area has been subject to considerable urban and suburban development, especially in the City of Markham. Also, substantial roadway improvement and development, most notably due to the construction of Highway 407, has significantly impacted many of the north-south oriented roads, causing a shift in alignment, the creation of bridges over the highway, or the severing of the roadway entirely in some cases. The field review confirmed that the refined study area and proposed station locations retains nine nineteenth century and one twentieth century cultural heritage resources. The following provides a summary of the assessment results:

Key Findings

- The overall study area (Figures 1 and 2) that was used in the Desktop Data Collection (ASI 2014) identified fifteen Cultural Heritage Resources (CHRs);
- A field review of the refined study area and proposed station locations confirmed that there are 10 cultural heritage resources consisting of 10 cultural heritage landscapes (CHLs) within or immediately adjacent to the refined study area.
- Of these, one is listed by a municipality (CHL 3) and two are designated under Part IV of the *OHA*, (CHL 1 and CHL 2);
- Of the 10 cultural heritage landscapes, four are farmscapes (CHL 1, CHL 2, CHL 3, and CHL 10), one is an historically surveyed road (CHL 4), three are watercourses noted on nineteenth century mapping (CHL 6, CHL 7, CHL 8), one is an early nineteenth century railway (CHL 5), and one is a twentieth century recreational hiking trail (CHL 9).
- Identified cultural heritage resources are historically, architecturally, and contextually associated with late eighteenth to mid-twentieth century land use patterns in the City of Markham and the City of Pickering.



5.0 RECOMMENDATIONS

The background research, data collection, and field review conducted for the study area determined that 10 cultural heritage resources are located within or adjacent to the refined Highway 407 Transitway TPAP study area and proposed station locations. 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 identified cultural heritage resources. In particular, construction activities should be planned to avoid impacts to CHL 1 and CHL 2 which are both designated under Part IV of the Ontario Heritage Act. It should be noted that Cultural Heritage Evaluation Reports and Heritage Impact Assessments are currently being undertaken for both of these properties.
- 2. Where technically possible, make further adjustments to the profile, cross-section, and grading limits of the proposed Transitway and Station Locations to reduce encroachment and avoid removal of mature trees (CHL 1, CHL 2, and CHLs 6-10).
- 3. Where impacts to existing vegetation are anticipated, post-construction rehabilitation should include plantings sympathetic to the historical context of the resource (CHL 1, CHL 2, CHL 4, CHLs 6-10).
- 4. Given the proximity of the structure and mature trees on CHL 10 to the proposed impact area limits, steps must be taken to ensure the residence and other structures and surrounding vegetation are retained and protected during construction-related activities.
- 5. Where built heritage resources and cultural heritage landscapes 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 to serve as a final record of each of the resources and the study area in general. CHL 1, CHL 2, and CHL 10 should be subject to photographic documentation and compilation of a resource-specific cultural heritage impact assessment report by a qualified heritage consultant and the report submitted to the Ministry of Tourism, Culture, and Sport, the Cities of Markham and Pickering, and the Regions of York and Durham for archival purposes (note- a combined CHER/HIA is currently being prepared for CHL 1 and CHL 2).
- 6. Minimal impacts are anticipated for CHL 9 in the event of the construction of a road bridge over the resource. However, if the proposed impacts do not involve the construction of a bridge causing the destruction of the resource or a significant change in alignment, the areas of impact should be subject to photographic documentation and compilation of a resource-specific cultural heritage impact assessment report prior to alteration.
- 7. The Rouge National Urban Park transverses the study area from east of the CP/Havelock Railway eastwards to York-Durham Line. One of the objectives under the Rouge National Urban Park Act is "to protect the cultural landscapes of the park and identify its heritage values to facilitate an understanding and appreciation of the history of the region". Further the draft Rouge National Urban Park (2014) states that one of its objectives is to "identify, conserve, and communicate the cultural heritage values of the park, including such cultural resources as building and engineering works, archaeological sites, cultural landscapes, as well as heritage values such as community values, traditions, and stories of past and present



inhabitants". The ensemble of the two heritage buildings (CHL 1, and CHL 2) on Reesor Road and Reesor Road (CHL 4) should be addressed collectively to maintain the cultural heritage character of the area. Reesor Road has been identified as having cultural heritage interest both from the Rouge National Urban Park and City of Markham's perspective. Post-construction rehabilitation should include plantings sympathetic to the historical context of the identified cultural heritage resources and adjacent to the Rouge National Urban Park in consultation with Parks Canada.

- 8. Should future work require an expansion of the Highway 407 Transitway TPAP study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential cultural heritage resources.
- 9. This report should be submitted to the Ministry of Tourism, Culture, and Sport, the Cities of Markham and Pickering, and the Regions of York and Durham for review and comment.



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1860 Tremaine's Map of the County of Ontario, Canada West



7.0 CULTURAL HERITAGE RESOURCE INVENTORY

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

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Resource	Туре	Address/Location	Recognition	Description	Photos			
CHL 1	Farmstead	8119 Reesor Rd.	Designated, Part IV, OHA	Associated with the historical development of the Township of Markham -Known as the William Harding House, was constructed c. 1853 by John Laughlin Design: -One and a half storey farmhouse built in the Gothic Revival Style -Features a rectangular footprint and a rear tail, a gable roof with a centre gable, and a three-bay façade -There is an external chimney on the north elevation and covered porch on the front with decorative posts -A gambrel barn and other outbuilding(s) are located to the north of the farmhouse -Landscape features on the property include a wind break and other tree lines, fence lines, circulation routes and fields Context: -Located on the east side of Reesor Road, an early transportation route -Reflects the nineteenth-century settlement along Reesor Road through its style, scale/massing, set back and landscape features	West Elevation of the farmhouse West elevation of the barn with the house located behing the treeline to the right			



Resource	Туре	Address/Location	Recognition	Description	Photos
CHL 2	Farmstead	8042 Reesor Rd.	Designated, Part IV, OHA	Historical: -Associated with the historical development of the Township of Markham -Known as the Captain Robert Reesor House -Constructed in 1867 -Associated with one of the earliest families to settle and prosper in Markham Township Design: -One and a half storey farmhouse that blends elements of Gothic Revival and Classic Revival detailing -Features a gable roof with a centre gable, and a three-bay façade -Notable elements include a large gothic window in the front gable, board and batten siding, and Classical Revival detailing -A gambrel barn, silo and other outbuildings are located to the north of the farmhouse -Landscape features on the property include tree lines, mature trees, fence lines, circulation routes and fields Context: -Located on the west side of Reesor Road, an early transportation route -Reflects the nineteenth-century settlement along Reesor Road through its style, scale/massing, set back and landscape features	East elevation of the farmhouse and silo. Barn, silo, and outbuildings shielded by the treeline along Reesor Rd.



Resource	Туре	Address/Location	Recognition	Description	Photos
CHL 3	Farmstead	7960 Reesor Rd.	Listed, City of Markham	Historical: -Associated with the historical development of the Township of Markham -Known as Silver Spring Farm, the farmhouse was owned by David Reesor -Known as the site of grand garden parties sponsored by the Zion Presbyterian Church in the late nineteenth century with attendance of over 5000 people Design: -Two and a half storey farmhouse with Italianate detailing -Features a gable roof with dormers, and appears to have a T-shaped plan with a number of accretions -Notable elements include a two-storey veranda, shutters, and gingerbread -A gable barn, silo and stone barn foundations are located on the property -Landscape features on the property include tree lines, mature trees, fence lines, and circulation routes Context: -Located on the west side of Reesor Road, an early transportation route -Accessed but not visible from Reesor Road; visible from Donald Cousens Parkway	West and south elevations of the farmhouse View of the barn from Donald Cousens Parkway
CHL 4	Roadscape	Reesor Road	Identified during field review	Reesor Road is a two-lane paved roadway with narrow gravel shoulders and shallow ditches. It is bounded on either side by agricultural properties, some of which are lined with trees. Reesor Road is an historically surveyed road which appears on 1860 mapping.	Looking north along Reesor Road toward Highway 407



Resource	Туре	Address/Location	Recognition	Description	Photos
CHL 5	Railscape	Canadian Pacific Rail line	Identified during field review	The Canadian Pacific Rail Line crosses the study area in a southwest-northeast direction and is generally constructed at grade. It is bounded on both sides by tree lines. The rail line appears on 1914 mapping.	Looking northeast along the CP rail line toward Highway 407



Resource	Туре	Address/Location	Recognition	Description	Photos
CHL 6	Watercourse	Rouge Creek	Identified during field review	Watercourse and associated wooded valleylands present in mapping beginning in 1860. Rouge creek served as an important drainage in the communities of Markham and Sparta (renamed Box Grove), and facilitated the operation of numerous grist and sawmills in the area.	Rouge Creek south of Highway 407, looking west. Rouge Greek south of Highway 407, looking west.
	1		I		



Resource	Туре	Address/Location	Recognition	Description	Photos
CHL 7	Watercourse	Little Rouge Creek	Identified during field review	Watercourse and associated wooded valleylands present in mapping beginning in 1860. Little Rouge Creek was an important drainage for the community of Cedar Grove, and facilitated the development of numerous sawmills and gristmills in the area.	Miles Orest Research 19 19 19 19 19 19 19 19 19 19 19 19 19
CHL 8	Watercourse	Green River	Identified during field review	Watercourse and associated wooded valleylands present in mapping beginning in 1860. The Green River is a tributary of the West Duffins Creek, and served as an important watercourse for the residents of the communities of Green River and Whitevale (depicted as Major in the 1860 mapping).	Green River south of Highway 407, looking south.



Resource	Туре	Address/Location	Recognition	Description	Photos
CHL 9	Trailscape	Seaton Hiking Trail	Identified during field review	The Seaton Hiking Trail is a recreational forest and trail system that was founded in the early 1970s and follows the course of the West Duffins Creek and passes through woodlots depicted beginning in the 1914 topographical maps. It is a well used 13 km long trail maintained by various organizations.	Seaton Hiking Trail south of Highway 407, looking south.



	Туре	Address/Location	Recognition	Description	Photos
CHL 10	Farmstead	3490 Brock Road	Identified during field review	Historical: -Associated with the historical development of the village of Brougham -Appears on the 1877 Historical Atlas map on the property of Mrs. T.C. Hubbard Design: -One and a half storey frame farmhouse with L-shaped footprintFeatures a gable roof with a centre gable that formerly contained a Gothic window based on evidence of repairs, and a three-bay façade -Notable elements include symmetrical fenestration, wooden clapboard siding, internal red brick chimneyA gambrel barn and other outbuildings are located to the west of the farmhouse -Landscape features on the property include mature trees in the Urfe Creek valley, fence lines, circulation routes, cattle pasture and fields Context: -Located on the west side of Brock Road, an early transportation route -Reflects the nineteenth-century settlement along Brock Road through its style, scale/massing, set back and landscape features	Farmhouse, looking west Barn and outbuilding, looking west across pasture
					Barn and outhuilding looking west across nasture



8.0 CULTURAL HERITAGE RESOURCE LOCATION MAPPING



Figure 16: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 17: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 18: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)



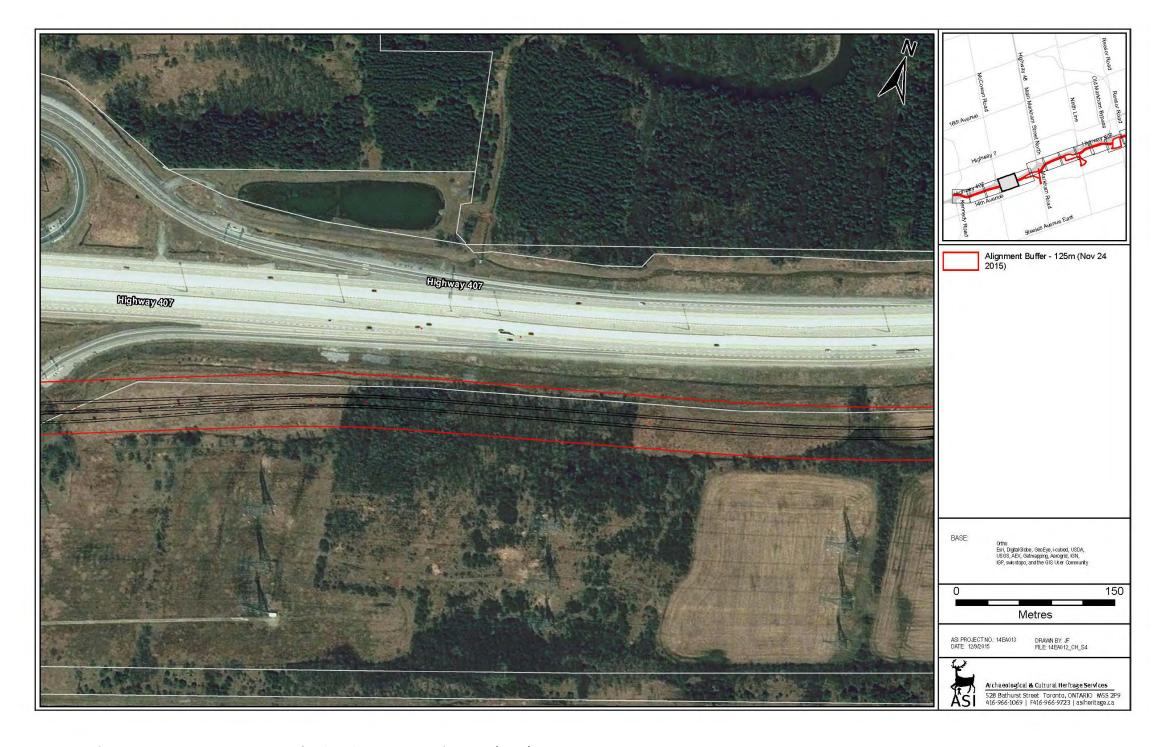


Figure 19: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 20: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 21: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 22: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)



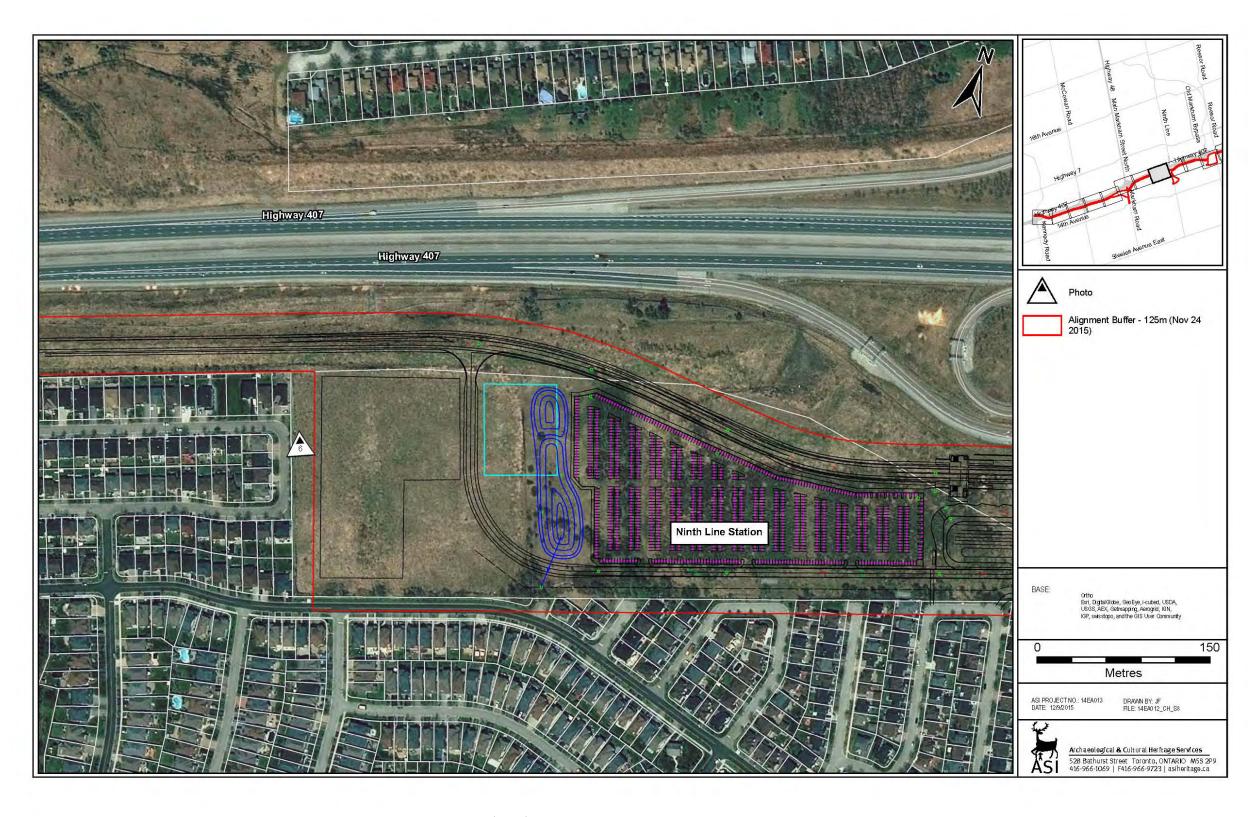


Figure 23: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 24: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 25: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 26: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)



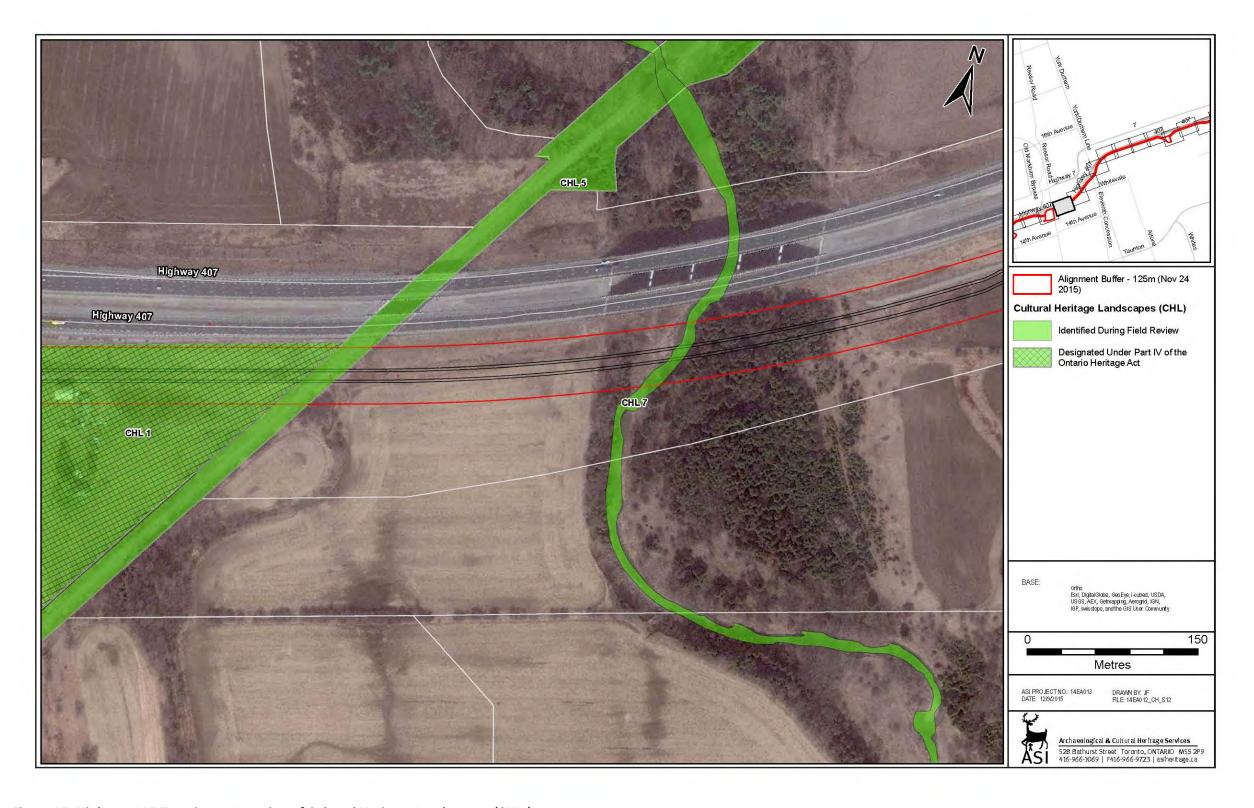


Figure 27: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)



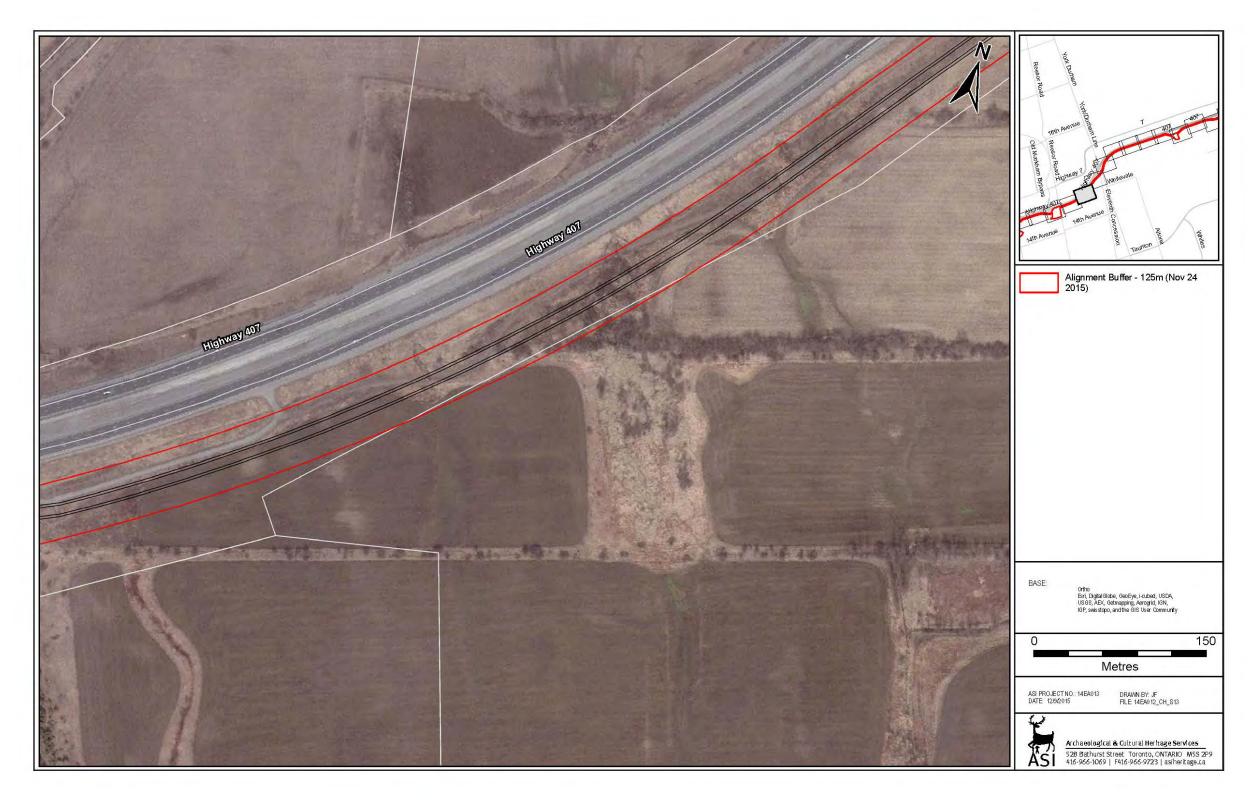


Figure 28: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)



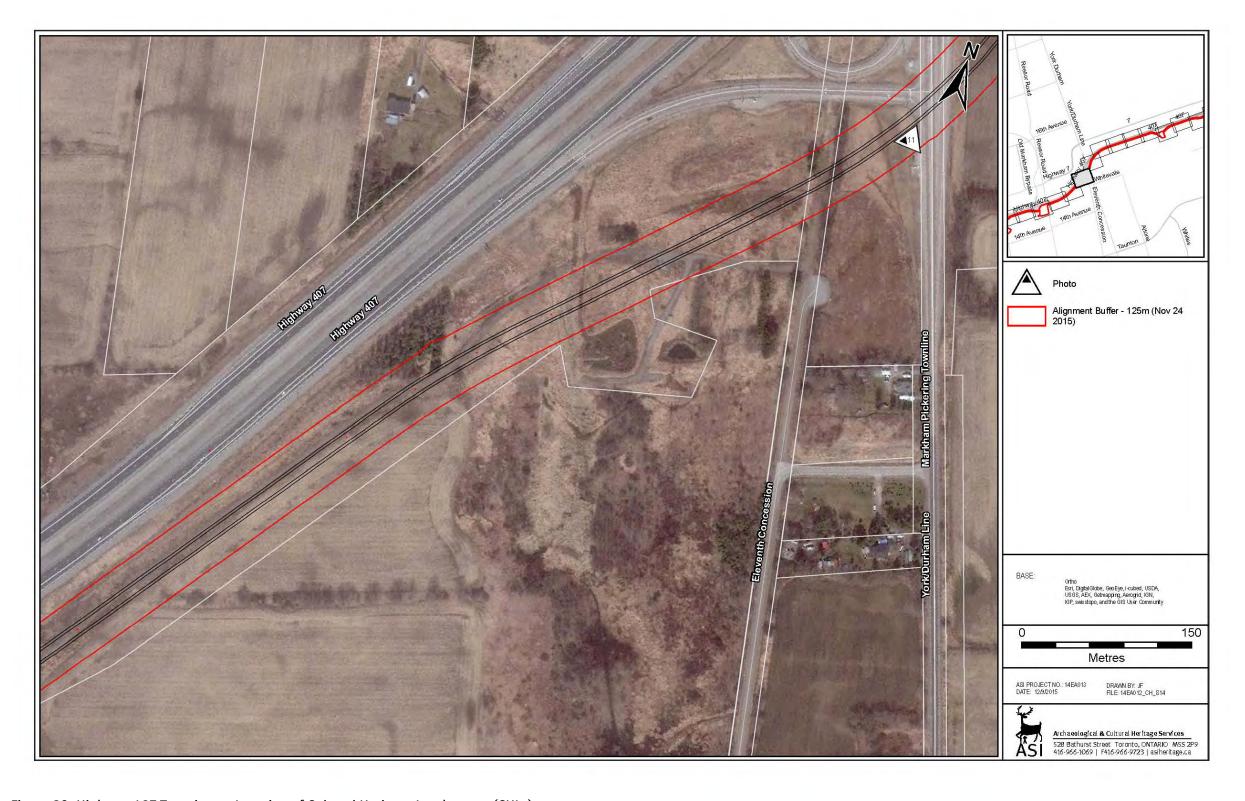


Figure 29: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 30: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 31: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 32: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 33: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 34: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 35: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 36: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 37: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)



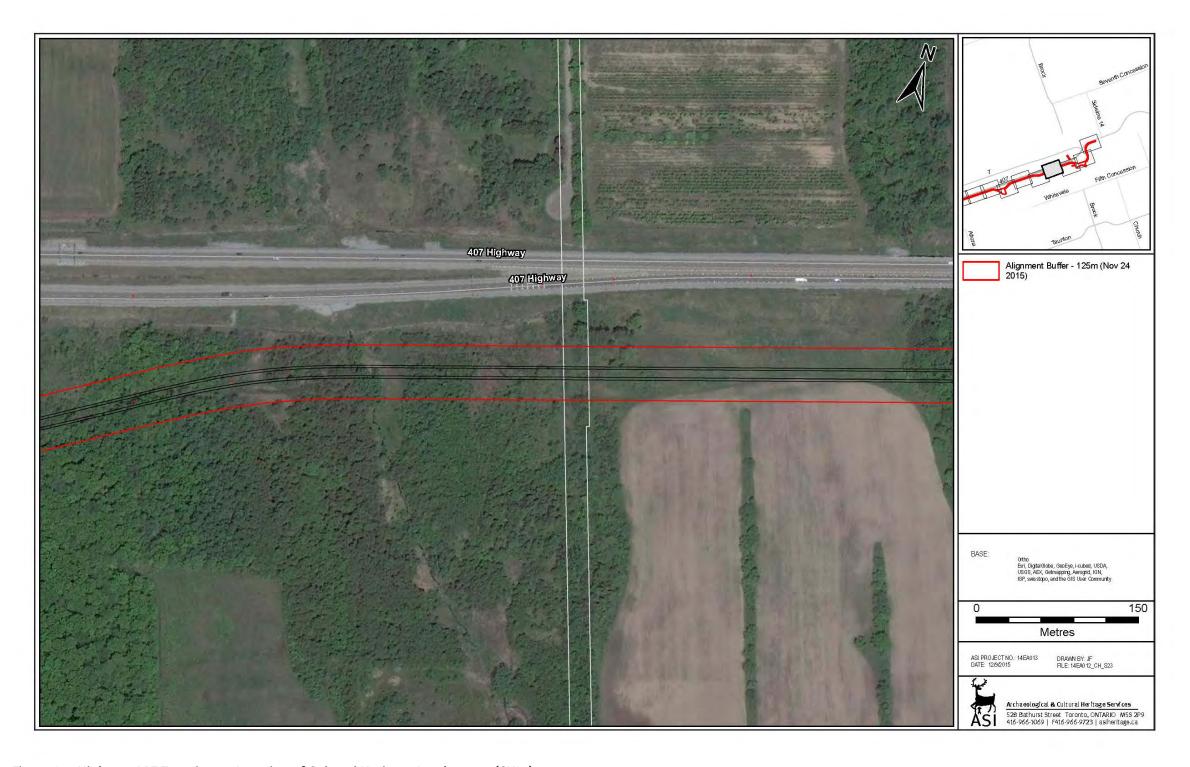


Figure 38: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)



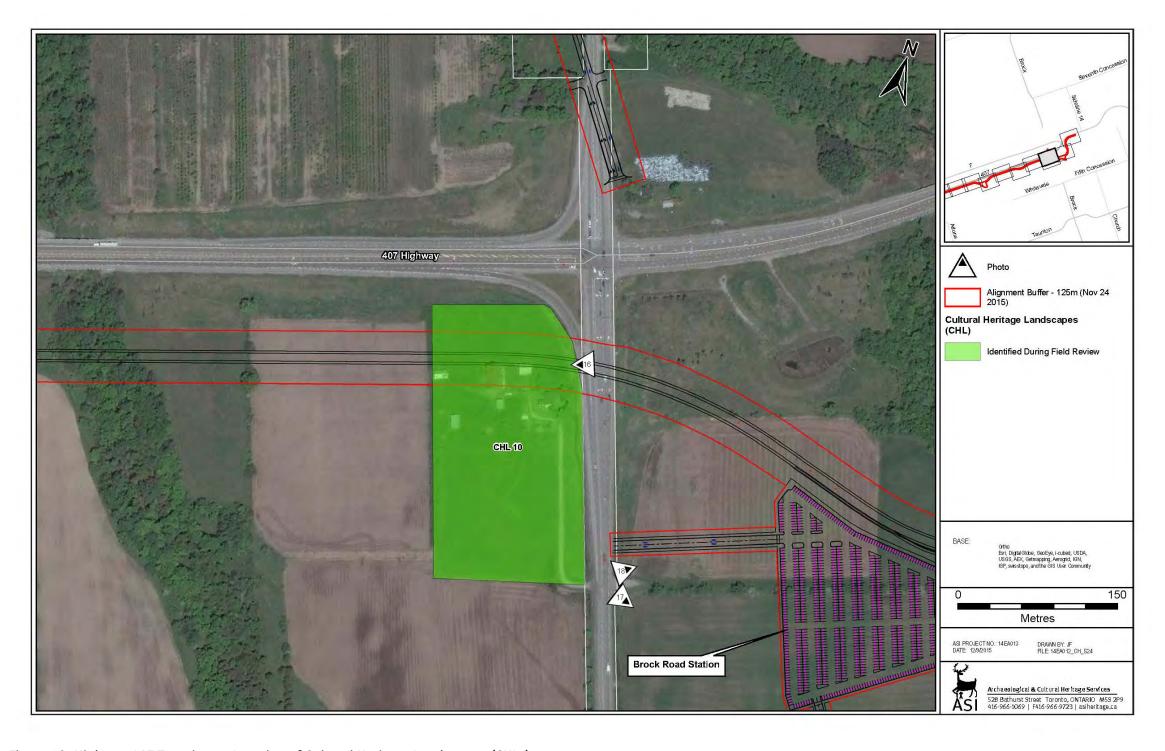


Figure 39: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)





Figure 40: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)



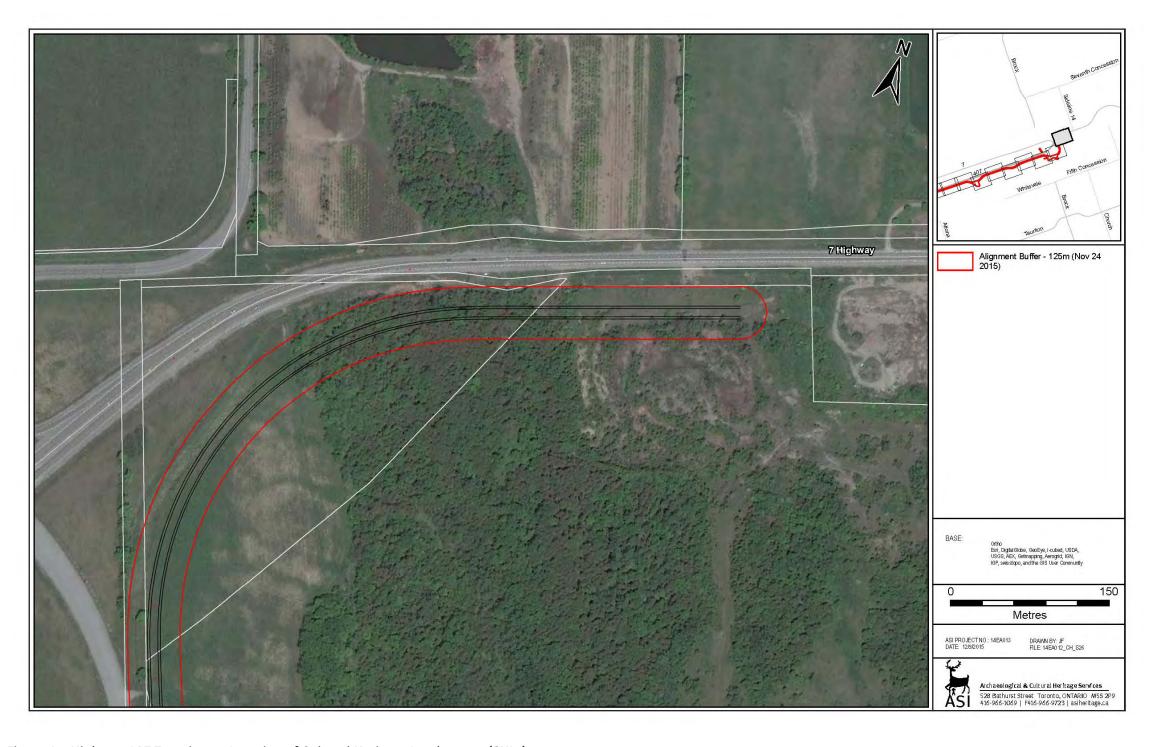


Figure 41: Highway 407 Transitway- Location of Cultural Heritage Landscapes (CHLs)

