







Canada-United States-Ontario-Michigan Border Transportation Partnership



Executive Summary

As part of the impact assessment of the Detroit River International Crossing (DRIC) study, an assessment of built heritage features and cultural landscapes is being undertaken. As a means of determining the existence of previously identified built heritage features and cultural landscapes within the Area of Continued Analysis (ACA), contact was made with the City of Windsor's Heritage Planner. The Ministry of Culture's Ontario Heritage Properties Database and Parks Canada's listing of National Historic Sites were also consulted. Additional information was sought from the residents of Sandwich with respect to locally identified sites of heritage significance.

Historical research was conducted to identify broad agents or themes of historical change and cultural landscape development in this area. Previously identified heritage resources were then categorized according to their heritage protection status and their inclusion on municipal, provincial and federal inventories and heritage designation lists.

In October 2006, a field review of the ACA was conducted and previously identified features were confirmed. Additional field investigations led to the identification of features of heritage interest, including Built Heritage Features (BHFs) and Cultural Landscape Units (CLUs) that were then added to the inventory. An inventory page was prepared for each above-ground cultural heritage resource and all features of heritage interest were mapped using GIS data co-ordinates.

Within the ACA there are 20 BHFs and three CLUs. Of these, one property is listed on the City of Windsor's heritage inventory and one monument was erected by the Historic Sites and Monuments Board of Canada to commemorate the Capture of Detroit. Most of the field-identified built heritage features were constructed between 1900 and 1930 and are residences of the same general building type and era. These houses represent the first suburban infill of rural agricultural lands in the early twentieth century. The heritage significance of these houses has not been determined but will be confirmed as part of the assessment of the Technically and Environmentally Preferred Alternative (TEPA). At this time, it is known that only three BHFs pre-date 1900. Also of interest is Branch 594 of the Royal Canadian Legion, which was constructed in the early 1960s.

Although no significant portion of Sandwich is within the ACA, Sandwich as a whole is a heritage sensitive area and the selection of a bridge crossing location must take into account any direct or indirect impacts on the adjacent historic community.

All alternatives are considered to be low impact, therefore conclusions have been made based on the number of impacted cultural heritage resources in each alternative.

PREFACE

The Detroit River International Crossing (DRIC) Environmental Assessment Study is being conducted by a partnership of the federal, state and provincial governments in Canada and the United States in accordance with the requirements of the Canadian Environmental Assessment Act (CEAA), the Ontario Environmental Assessment Act (OEAA), and the U.S. National Environmental Policy Act (NEPA). In 2006, the Canadian and U.S. Study Teams completed an assessment of illustrative crossing, plaza and access road alternatives. This assessment is documented in two reports: *Generation and Assessment of Illustrative Alternatives Report (Draft November 2006)* (Canadian side) and *Evaluation of Illustrative Alternatives Report (December 2006)* (U.S. side). The results of this assessment led to the identification of an Area of Continued Analysis (ACA).

Within the ACA, practical alternatives were developed for the crossing, plaza and access route alternatives. The evaluation of practical crossing, plaza and access route alternatives is based on the following seven factors:

- Changes to Air Quality
- Protection of Community and Neighbourhood Characteristics
- Consistency with Existing and Planned Land Use
- Protection of Cultural Resources
- · Protection of the Natural Environment
- Improvements to Regional Mobility
- Cost and Constructability

This report pertains to the Built Heritage and Cultural Landscape factor and is one of several reports that will be used in support of the evaluation of practical alternatives and the selection of the Technically and Environmentally Preferred Alternative (TEPA). This report will form a part of the environmental assessment documentation for this study.

Additional documentation pertaining to the evaluation of practical alternatives is available for viewing/downloading at the study website (www.partnershipborderstudy.com).

Table of Contents

1. Introduction	1
1.1 Background	1
1.2 Purpose and Scope	1
1.3 Data Collection	6
2. Heritage Properties in the Area of Continued Analysis	6
2.1 Introduction	6
2.2 Area of Continued Analysis: Existing Conditions – Field Review Results	7
2.3 Area of Continued Analysis: Existing Conditions – Identified Heritage Resources	12
2.4 Conclusions	
3. Heritage Impact Assessment	17
3.1 Introduction	17
3.2 Methodology	
3.3 Results	
3.4 Most and Least Preferred Alternatives	
3.5 Conclusions: Most and Least Preferred Alternatives	
4. Recommendations	
5. Further Work	
6. References	25
List of Exhibits	
Exhibit 1: Key Plan of the Area of Continued Analysis	
Exhibit 2a - b: Cultural Heritage Features within the Area of Continued Analysis	
Exhibit 3: Heritage Features within the Initial Study Area	44
List of Tables	
Table 1a: Identified Cultural Heritage Resources in the Area of Continued Analysis –	
Cultural Landscape Units (CLU)	13
Table 1b: Identified Cultural Heritage Resources in the Area of Continued Analysis – Bui	
Heritage Features (BHF)	
Table 2: Summary of Evaluation Matrices	21-22
Appendices	
Appendix A: Summary Euro-Canadian History Summary	27
Appendix B: Heritage Sensitive Areas within the Initial Study Area.	34
Appendix C: Heritage Properties in the Initial Study Area	
Appendix D: Cultural Heritage Resource Inventory within the Area of Continued Analysis.	
Appendix E: Evaluation of the Practical Alternatives within the Area of Continued Analysis	

1. Introduction

1.1 Background

The Canada-U.S. – Ontario–Michigan Border Transportation Partnership includes the Transportation Authorities from two federal governments and two provincial/state governments. The Federal Highway Administration (FHWA) and Transport Canada (TC) represent federal levels of government while the Ontario Ministry of Transportation (MTO) and the Michigan Department of Transportation (MDOT) are the provincial and state agencies with roadway jurisdictions on each side of the border. The purpose of the Partnership is to improve the movement of people, goods, and services across the United States and Canadian border within the region of Southeast Michigan and Southwestern Ontario.

This international transportation improvement project will require approvals from governments on both sides of the border. The Partnership has developed a coordinated process that will enable the joint selection of a recommended crossing location that meets the requirements of Ontario Environmental Assessment Act (OEAA), Canadian Environmental Assessment Act (CEAA), and National Environmental Policy Act (NEPA).

1.2 Purpose and Scope

Archaeological Services Inc. (ASI) was contracted by URS Canada Inc. of Markham, to conduct a Built Heritage and Cultural Landscape Impact Assessment within Western Essex County for the Detroit River International Crossing Study.

The assessment was conducted under the project direction of cultural heritage specialist Mary L. MacDonald, MA, CAHP, of ASI.

This report presents the results of background research, outlining aggregate areas and individual properties of heritage significance within the study area as a whole (the Initial Study Area), as well as describes the results of the field review and an impact assessment of practical alternatives within the ACA (Exhibit 1). These alternatives include access routes, plazas and crossings.

This cultural heritage assessment considers cultural heritage resources in the context of improvements to specified areas, pursuant to the provincial *Environmental Assessment Act*. This assessment addresses above ground cultural heritage resources over 50 years old.

Changes to transportation corridors have the potential to affect cultural heritage resources in a variety of ways. These include the loss or displacement of resources through removal or demolition and the disruption of resources by introducing physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.

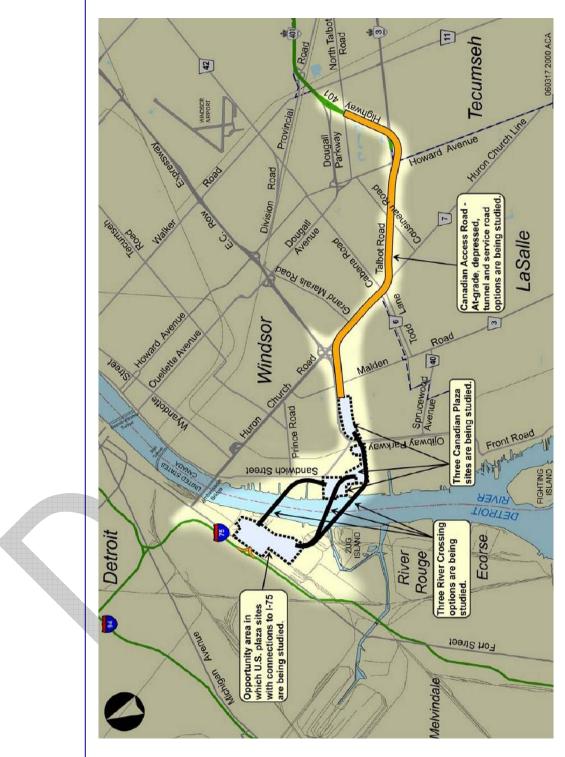


Exhibit 1: Key Plan of the Area of Continued Analysis

For the purposes of this assessment, the term cultural heritage resources was used to describe both cultural landscapes and built heritage features. A cultural landscape is perceived as a collection of individual built heritage features and other related features that together form farm complexes, roadscapes and nucleated settlements. Built heritage features 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*, environment is defined in subsection 1(c) to include:

Cultural conditions that influence the life of man or a community;

as well as.

Any building, structure, machine or other device or thing made by man.

The Minister of Culture is charged under Section 2 of the *Ontario Heritage Act* (2005) 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: *Guidelines for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992) and *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (1980). Accordingly, both guidelines have been utilized in this assessment process.

The *Guidelines on the Man-Made Heritage Component of Environmental Assessments* 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* (1980) distinguish between two basic ways of visually experiencing this heritage in the environment, namely as cultural landscapes and as cultural features.

Within this document, cultural landscapes are defined as follows:

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 homogenous character; or as an intermediate sized area of homogenous 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:

...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.

Additionally, the *Planning Act* (2005) and related Provincial Policy Statement make a number of provisions relating to heritage conservation. One of the purposes of the *Planning Act* is to integrate matters of provincial interest in provincial and municipal planning decisions, and the wise use and management of cultural heritage resources over the long term is a key provincial interest. The *Planning Act* and related Provincial Policy Statement make a number of provisions relating to heritage conservation. 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

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

This provides the context not only for discrete planning activities detailed in the *Act.* but also for the foundation of policy statements issued under Section 3 of the *Act.*

The Policy Statement indicates in Section IV. Implementation/Interpretation that:

4.5 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 municipal official plans. Municipal official plans shall identify provincial interests and set out appropriate land use designations and policies. Municipal official plans should also coordinate cross-boundary matters to complement the actions of other planning authorities and promote mutually beneficial solutions.

Municipal official plans shall provide clear, reasonable and attainable policies to protect provincial interests and direct development to suitable areas.

Those policies of particular relevance for the conservation of heritage features are contained in Section 2, *Wise Use and Management of Resources*, in which the preamble states that "Ontario's long-term prosperity, environmental health, and social well-being depend on protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits."

Accordingly, in subsection 2.6, *Cultural Heritage and Archaeological Resources*, makes the following provisions:

2.6.1 Significant built heritage resources and 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".

Built heritage resources:

means one or more significant buildings, structures, monuments, installations or remains associated with architectural, cultural, social, political, economic or military history and identified as being important to a community. These resources may be identified through designation or heritage conservation easement under the *Ontario Heritage Act* (2005) or listed by local, provincial or federal jurisdictions.

Cultural heritage landscape:

means a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. Examples may include, but are not limited to, heritage conservation districts designated under the *Ontario Heritage Act*, and villages, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways and industrial complexes of cultural heritage value.

In addition, "Significant" 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. In regard to cultural heritage and archaeological 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.

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.

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

1.3 Data Collection

For the purposes of determining the existence of previously identified built heritage features and cultural landscapes within the initial study area, historical research was conducted for the purposes of identifying broad agents or themes of historical change and cultural landscape development in this area. A summary of the Euro-Canadian history can be found in Appendix A.

Contact was made with the City of Windsor's Heritage Planner and with the Town of Amherstburg. The Ministry of Culture's Ontario Heritage Properties Database was also consulted as was the Parks Canada listing of National Historic Sites. Additional information was sought from the residents of the historic town of Sandwich with respect to locally identified sites of heritage significance. Previously identified heritage resources were then categorized according to their heritage protection status and their inclusion on municipal, provincial and federal inventories and heritage designation lists. All heritage sites and heritage sensitive areas were mapped using GIS data co-ordinates (see Appendix C, Figure 2). Results of this data collection can be found in Appendices B and C.

In October 2006 a field review within the ACA (see Exhibit 1) was conducted for an analysis envelope defined by the alternatives under consideration and the addresses of previously identified features were confirmed. Additional field-identified features of heritage interest (including built heritage features and cultural landscapes) were added to the inventory and an inventory page was prepared for each above ground cultural heritage resource. All field-identified features of heritage interest were mapped using GIS data coordinates. Results of this phase of data collection can be found in Section 2. Tables 1a and 1b provide a summary of identified heritage features while Exhibit 2a and 2b show their location. Appendix D comprises the cultural heritage inventory, including inventory pages.

2. HERITAGE PROPERTIES IN THE AREA OF CONTINUED ANALYSIS

2.1 Introduction

The Detroit River International Crossing Environmental Assessment has followed an assessment process of which the underlying principal was to start with a broad perspective and become more focused as the project progressed. The long list of alternatives that the project started with has been narrowed progressively during the study steps. As the range of alternatives has narrowed the depth of analysis at each subsequent step has increased.

The process began with the identification of Illustrative alternatives for a new or expanded crossing with connections to the provincial highway network and interstate freeway system. The Illustrative alternatives¹ were assessed to determine Practical Alternatives²;

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¹ Illustrative Alternatives represent the full set of alternative crossing locations/inspection plaza sites/connecting roadway alignments to be considered.

² Practical Alternatives represent the set of illustrative alternatives that, upon an evaluation of

based on additional study, and consultation. As Illustrative and Practical Alternatives were developed, information on area features was supplemented with field investigations and additional research, as required.

The results of the end-to-end evaluation of Illustrative Alternatives led to the identification of an ACA for possible practical crossings, plazas, and connecting route alternatives. This area, on the Canadian side of the river, extends along the river from Broadway Avenue to Brock Street in Sandwich. The area also includes the connecting route corridor along Huron Church Road, and Talbot Road/Highway 3 to Highway 401 (Exhibit 1).

Section 2 and Appendix D provide a detailed heritage inventory of resources found within the ACA, while Section 3 and Appendix E provide an assessment of potential impacts within each Practical Alternative, including access roads, plazas and crossings.

2.2 Area of Continued Analysis: Existing Conditions – Field Review Results

The majority of the land adjacent to the Detroit River is currently being used for industrial purposes (Plates 1 – 3), with the exception of Black Oak Heritage Park and the land to the north and northwest of the park, in the Brighton Beach area. This land, extending to the west from Ojibway Parkway south of Chappus Street, north and west of Black Oak Heritage Park, is generally overgrown or wooded, and, in the northern part of it, between Chappus Street and Broadway Street and between Chappus Street and Wright Street, there is a subdivision-like arrangement of dirt streets surrounded by regenerated vegetation (Plate 4.) This area, known locally as Brighton Beach (CLU 2), is an abandoned residential area that still contains a small concentration of nineteenth and early twentieth century heritage resources (BHF 15-17).

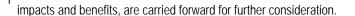




Plate 1: View of industrial land along the Detroit River, northwest of Maplewood Drive at the southern edge of the field review area (in the Ojibway area).



Plate 2: View south along the east side of Sandwich St. from the junction of Sandwich St. and Ojibway Parkway.



Plate 3: View north along Sandwich St. from the junction of Sandwich St. and Ojibway Parkway.



Plate 4: View to the east along Page St. in the Brighton Beach area.

Within the industrial-use area north of Brighton Beach and south of the old town of Sandwich, a cairn has been erected at the junction of Prospect Avenue and Sandwich Street / Ojibway Parkway by the Historic Sites and Monuments Board of Canada to commemorate a National Historic Event (BHF 12, Plate 5). The plaque on this cairn presents the following text:

THE CAPTURE OF DETROIT

LA PRISE DE DÉTROIT

Confident of victory, General Hull had invaded Canada in July 1812, but failed to take advantage of his early success and the demoralization of the defenders. Fear of the Indians then rallying to the British cause and an inability to maintain supply lines dictated Hull's withdrawal to Detroit. In a daring move on 16 August General Brock embarked his troops at McKee's Point, crossed the river and forced the surrender of the Americans. This important victory raised the spirits of the Canadians and ensured the continuing support of their Indian allies [followed by the French translation].



Plate 5: Historic Sites and Monuments Board of Canada monument (BHF 12) at Ojibway Parkway / Sandwich St. and Prospect Ave

North of Ojibway Parkway, between Sandwich Street and the Essex Terminal Railway, and south of the old town of Sandwich lies the Lou Romano Water Reclamation Plant. North of this industrial area, the landscape is a mix of industrial properties; relatively open areas of lawn, park, or less-intensive commercial/institutional/residential land use; and dense residential development. The southernmost part of the old town of Sandwich is within the ACA, including two residential structures (BHF 13 and BHF 14) close to the shoreline and one of the proposed bridge crossing areas.

Adjacent to the ACA is the core of the old town of Sandwich (CLU 3) including the Sandwich First Baptist Church, a National Historic Site, at 3652 Peter Street, between Watkins Street and Prince Street (Plate 6). Two plaques have been placed at this site, one placed by the Historic Sites and Monuments Board of Canada and the other by the Ontario Heritage Foundation. The former Lido Venice Tavern at 3885 Sandwich Street (Plate 7) was destroyed by fire in the summer of 2006.



Plate 6: Sandwich First Baptist Church



Plate 7: Lido Venice Tavern before the fire

East of the Essex Terminal Railway and west of Huron Church Road north of Ojibway Parkway and E.C. Row Expressway the field review area features a variety of land uses. The majority of the land immediately north of Ojibway Parkway and E.C. Row Expressway is currently used for industrial purposes and Malden Park, between Matchette Road and Malden Road south of Chappell Avenue is a former landfill site. East of Huron Church Road, south of E.C. Row Expressway, the land subject to field review is almost entirely an intensively-developed post 1960 residential area, with the exception of a number of small parks and institutional properties. Huron Church Road itself is, for the most part, flanked by small industrial and commercial properties. There are a small number of heritage resources along the corridor including a 1961 Royal Canadian Legion Branch (BHF 2, Plate 8) and an early farmhouse perched on a rise above the convergence of Talbot Road and Huron Church Line (BHF 1, Plate 9).



Plate 8: Royal Canadian Legion Branch 594



Plate 9: Mid-nineteenth century farmhouse on Talbot Road

The land south of E.C. Row Expressway and west of Huron Church Road is predominantly open space, although residential development is evident on Spring Garden Road (Plate 10), Malden Road and Armanda Street. Two of the Malden Road properties are dated to the nineteenth century settlement of the area (BHF 10 and BHF 11) and one of them is on the Windsor Heritage Inventory (Plate 11).



Plate 10: Spring Garden Road house (BHF 8) circa 1929



Plate 11: Malden Road house (BHF 11) on the Windsor Heritage Inventory

Within the relatively undeveloped area west of Huron Church Road and south of E.C. Row Expressway, and in many places remnant tree lines indicate the boundaries of long, narrow agricultural fields laid out according to the French *seigneurial* system.

Area of Continued Analysis: Existing Conditions – Identified Heritage Resources

The DRIC study ACA is largely free of significant cultural heritage resources, with the exception of old Sandwich town (CLU 3), which, due to its close proximity, is an important issue with respect to choosing a crossing location. The remaining features are considered to be low in significance.

Within the ACA there are twenty (20) built heritage features and three (3) cultural landscapes. Tables 1a and 1b provide a summary of identified heritage features while Figures 4a and 4b show their location. Of these, one property (BHF 11) is listed on the City of Windsor's heritage inventory and one monument (BHF 12) was erected by the Historic Sites and Monuments Board of Canada to commemorate the Capture of Detroit. Eight

2.3

BHFs pre-date 1900 (BHF 1, BHF 10, BHF 11, BHF 14, BHF 17, BHF 18, BHF 19 and BHF 20) and are related to agricultural settlement. Eight field-identified built heritage features were constructed in the first third of the twentieth century and are residences of the same general building type and era (BHF 3, BHF 4, BHF 5, BHF 6, BHF 7, BHF 8, BHF 9 and BHF 13). These houses represent the first suburban infill of rural agricultural lands in the early twentieth century. Also of interest is Branch 594 of the Royal Canadian Legion (BHF 2) which was constructed in the early 1960s.

The three cultural landscapes identified within the ACA comprise an unconfirmed tunnel associated with the underground railway in the Town of Sandwich (CLU 1), the abandoned Brighton Beach subdivision (CLU 2) and the historic town of Sandwich (CLU 3). Although no significant portion of the historic town of Sandwich is within the ACA, Sandwich as a whole is a heritage sensitive area and thus the selection of a bridge crossing location must take into account any direct or indirect impacts on the adjacent historic community. These impacts may include the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.

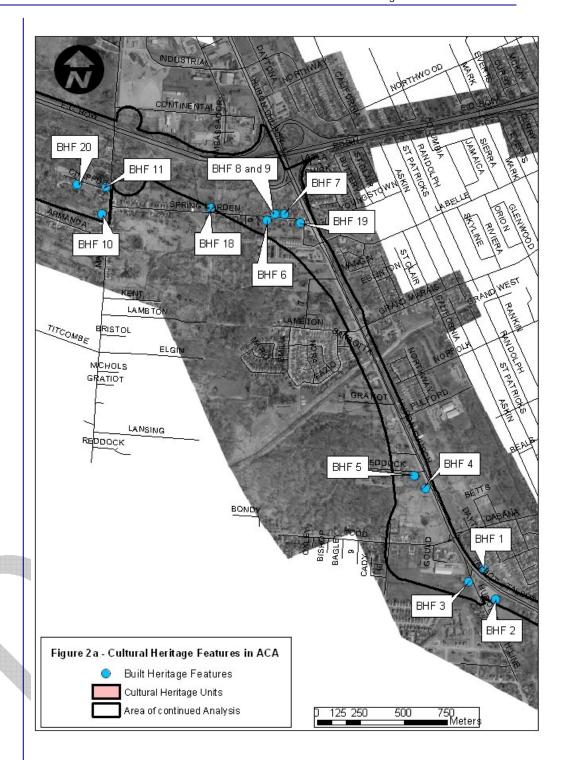
Table 1a Identified Cultural Heritage Resources in the Area of Continued Analysis -- Cultural Landscape Units (CLU)

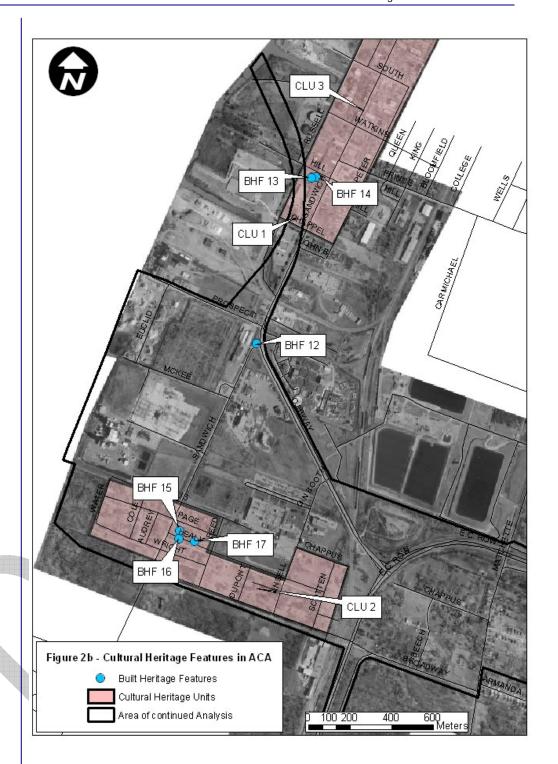
Feature	Address	Feature Type	Status	Approx. Age
CLU 1	Chappel Street and Russell Street	Tunnels – unconfirmed oral report	Local lore	Pre-1900
CLU 2	Water Street to the west, Chappus to the north, Scotten to the east and Broadway/Wright to the south	Brighton Beach housing subdivision	Field	Abandoned
CLU 3	Town of Sandwich	Historic settlement	Field	Pre-1900

Table 1b Identified Cultural Heritage Resources in the Area of Continued Analysis -- Built Heritage Features (BHF) $^{\rm 3}$

Feature	Address	Feature Type	Status	Approx. Age	
BHF 1	2746 Talbot Road	Farmhouse	Field	1860- 1880	
BHF 2	3920 Huron Church Line	Legion	Field	1961	
BHF 3	3905 Huron Church Line	House	Field	1901- 1939	
BHF 4	3495 Huron Church Road	House	Field	1901- 1939	
BHF 5	2765 Reddeck Avenue	House	Field	1901- 1939	
BHF 6	2261 Spring Garden Road	House	Field	1901- 1939	
BHF 7	2310 Spring Garden Road	House	Field	1901- 1939	
BHF 8	2290 Spring Garden Road	House	Field	1901- 1939	
BHF 9	2284 Spring Garden Road	House	Field	1901- 1939	
BHF 10	4784 Malden Road	House	Field	Pre-1900	
BHF 11	4688 Malden Road	House	Windsor Inventory	Pre-1900	
BHF 12	Ojibway Parkway at Sandwich Street	Monument	Federal	Plaqued in 1927	
BHF 13	261 Hill Street	House	Field	1901- 1939	
BHF 14	3769 Russell Street	House	Field	Pre-1900	
BHF 15	325 Page Street	House	Field	1901- 1939	
BHF 16	332 Healy Street	House	Field	1901- 1939	
BHF 17	354 Healey Street	House	Field	Pre-1900	
BHF 18	2090 Spring Garden Road (moved from another location)	House	Field	Pre-1900	
BHF 19	2369 Spring Garden Road (unconfirmed log structure)	House	Field	Likely pre-1900	
BHF 20	1649 Chappus Road (original house integrated)	House	Field	Pre-1900	

 $^{^{3}}$ Note: None of these features is currently designated in national, provincial or municipal registries and all are considered to be low significance.





2.4 Conclusions

For the purposes of an impact assessment of proposed Practical Alternatives, a smaller study area was defined (the ACA). Within the ACA there are twenty (20) built heritage features and three (3) cultural landscapes. Of these, one property is listed on the City of Windsor's heritage inventory and one monument was erected by the Historic Sites and Monuments Board of Canada. Eight BHFs are residences that pre-date 1900 and are related to agricultural settlement. Another ten BHFs were constructed in the first third of the twentieth century. Also of interest is Branch 594 of the Royal Canadian Legion. All BHFs are considered to be low significance.

The three cultural landscapes identified within the ACA comprise an unconfirmed tunnel associated with the underground railway in the Town of Sandwich, the abandoned Brighton Beach subdivision and the historic town of Sandwich. Although no significant portion of the historic town of Sandwich is within the ACA, Sandwich as a whole is a heritage sensitive area and thus the selection of a bridge crossing location must take into account any direct or indirect impacts on the adjacent historic community.

3. HERITAGE IMPACT ASSESSMENT

3.1 Introduction

The construction of a new bridge crossing, associated access route alternatives and a plaza may have a variety of impacts upon built heritage features and cultural landscapes. MOE guidelines do not address "nuisance" impacts to cultural heritage resources but Ministry of Culture guidelines and advisory notes advise that an adverse effect upon cultural heritage may be defined as one or more of the following conditions:

- "destruction or unsympathetic alteration of all or part of a cultural property;
- isolation of a cultural property from its surrounding environment; or
- introduction of physical, visual, audible or atmospheric elements that are not in character with a cultural property and its setting."

For the purposes of this assessment, a heritage feature was considered to be displaced if the proposed right-of-way for the new crossing, plaza or access road passed through the property limits of the heritage feature. A feature was considered disrupted (indirectly affected) if the edge of the proposed right-of-way was within 50 metres of the heritage feature. Section 3.3 summarizes the results and provides the impact of each alternative in tabular form.

To view a complete set of Practical Alternatives mapping see the Ministry of Transportation's Detroit River International Crossing Study, Practical Alternatives Mapping (November 2006).

3.2 Methodology

In assessing the significance of impacts to heritage resources, the following regulatory acts were considered:

- Ontario Heritage Act (2005) and associated Provincial Policy Statement (2005)
- Ontario Planning Act (2005)
- Ontario Environmental Assessment Act (1990)

The following information sources were also consulted in assessing the significance of identified heritage features:

- Parks Canada list of National Historic Sites
- Ontario Heritage Bridge Program (MCL and Ministry of Transportation)
- Ontario Heritage Properties Database (MCL)
- City of Windsor Heritage Inventory
- Local identification and field review

Heritage features were then ranked according to hierarchy of significance.

Heritage Feature Ranking:

- 1: **National Historic sites**; **score as 100**: Features that are recognized as being of national significance have cultural heritage value beyond the immediate study area and they contribute to the understanding of our nation's history. Therefore, they scored the highest within a comparative framework.
- 1: Heritage District and/or significant Cultural Heritage Landscapes; score as 100: Heritage Districts or significant cultural heritage landscapes exhibit aggregate heritage resources of local, provincial or national significance and in their concentration assume a high heritage value.
- 1: Heritage Bridge; score as 100: Heritage bridges have a unique character with a context outside the local area and they are provincially significant.
- 2: Heritage Easements; score as 75: Properties on which heritage easements are held are of both local and provincial significance.
- 2: **Heritage Designation (Provincial)**; **score as 75**: Properties designated under Part IV of the Ontario Heritage Act are of both local and provincial significance.
- 3: Windsor Heritage Inventory; score as 25: Properties on the heritage inventory are recognized by the city as being of local interest.
- 4: **Field Review Siting**; **score as 25**: Properties identified during the field review are considered to be representative of local historical trends and are of potential local heritage interest.
- 4: Locally identified heritage resource; score as 25: Properties identified by individuals within the Windsor heritage community are considered to be of local heritage interest.

4: Cultural Landscape; score as 25: Cultural landscapes identified during the field review are representative of local historical trends and are of potential local heritage interest.

Areas of Impact

In order to assess the potential for disruption or displacement of identified heritage features, the following buffers were added to the proposed route segments, plazas and crossings:

Route segments: 100 m wide ROW plus 250 m buffer on either side

Plazas: 250 m buffer around plaza perimeter

Crossings: 100 m wide ROW plus 250 m buffer on either side

Impact Evaluation

Displacement or disruption of built heritage features within each study area (route segment, plaza or crossing) was evaluated based on the cumulative score of all heritage features mapped within it:

Scores of 100+ are considered to have **High Impact** and given a *factor score* of 1

Scores of 50-99 are considered to have **Medium Impact** and given a *factor score* of 2

Scores of 25-49 are considered to have Low Impact and given a factor score of 3

Score of 0 are considered to have No Impact and given a factor score of 4

The relative impact of each alternative was determined by calculating the overall magnitude of potential displacements and disruptions. The magnitude was arrived at by adding the rank score of each affected feature.

3.3 Results

A complete tabular analysis of potential impacts within each alternative (access roads, plazas and plaza/crossing alternatives) can be found in Appendix E and a summary table is provided at the end of this section.

Access road alternatives

In total, eleven built heritage features are potentially displaced by access road alternatives. Of these, two features (a pre-1900 farmhouse and the Royal Canadian Legion) are of potential heritage significance. All of the alternatives affect these two features. With respect to those access road alternatives associated with Plaza A, the Parkway alternative and Alternatives 1A and 1B (both options) will each displace seven field-identified features, while Alternative 3 displaces six. Alternatives 2A and 2B (both options), will each displace five field-identified features. Of higher impact are the alternatives associated with Plazas B and C. The Parkway alternative, Alternatives 1A and 1B (both options) and Alternative 3 will each displace eight field-identified features, while Alternatives 2A and 2B (both options) displace only five field-identified built heritage features.

Access road alternatives that displace four or more features will, based on the quantity of their displacements, have an adverse impact on the study area. In all cases, however, displaced features are without any recognized heritage status.

Plazas

Plaza A will displace one field-identified feature, which represents a very minor impact. Plaza B and Plaza B1 will both displace three features, and Plaza C will displace two features and disrupt one feature in the former Brighton Beach area; these features have no recognized heritage status although one is likely a sole surviving pre-1900 farmhouse in the immediate area. Plaza B, B1 and C will also displace one cultural landscape unit.

Crossing alternatives

Depending on which crossing alternative is selected, between three and eight homes constructed before 1954 will be disrupted or displaced and three cultural heritage landscapes will potentially be affected. Of these features, the town of Sandwich is considered the most significant given its proposed designation as a heritage district and its recognized cultural heritage value. The tunnel crossing is considered the least significant because of its unconfirmed status, while Brighton Beach is of limited local interest.

In general, crossing alternatives associated with Plaza A have the least amount of impact. From Plaza A, Crossing Alternative A displaces only one field-identified BHF and disrupts three, Crossing Alternative B and C both displace two field-identified BHFs and disrupt two, Crossing Alternative C1 will displace two field-identified BHFs and disrupt six (including a historic monument). Crossing C from Plaza B will displace three field-identified BHFs and disrupt three. Crossing B from Plaza B1 will displace three field-identified BHFs. Crossing C from Plaza C will displace two field-identified BHFs and disrupt four.

In addition, the three crossings have the potential to disrupt identified cultural landscapes in this area of the City. Portions of the Brighton Beach area will be affected by all crossing alternatives (although this is not considered to be a significant impact), while Crossing C will also disrupt the underground tunnels reported to be in the Chappell/Russell area. Potential impacts associated with the reported tunnels are difficult to assess given the lack of information and the inability to confirm their location and/or existence. Therefore, until further information can be obtained, the rumored tunnels cannot form a significant part of this impact assessment. The greatest potential for a visual impact to cultural landscapes occurs in association with Crossing C because of its proximity to the historic town of Sandwich. Although it is recognized that mitigation could be addressed through a compatible bridge design, placing the crossing as far away from the historic core as possible is the preferred course of action from the outset.

All the crossing alternatives are considered to have low to no impact.

Table 2. Summary of Evaluation Matrices – Access Roads

Performance Measure	Criteria Indicator	Measurement/Units	Alternative 1A		Alternative 1B		Alternative 2A		Alternative 2B		Altema- tive 3	Parkway
			Option 1	Option 2	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2		
BUILT HERITAGE	Displacement of built heritage	a) Number of national historic sites displaced	0	0	0	0	0	0	0	0	0	0
FEATURES	features	b) Number of provincially designated properties displaced	0	0	0	0	0	0	0	0	0	0
		c) Number of features with heritage easements displaced	0	0	0	0	0	0	0	0	0	0
		d) Number of municipally listed built heritage features displaced	0	0	0	0	0	0	0	0	0	0
		e) Number of locally identified built heritage features displaced	0	0	0	0	0	0	0	0	0	0
		f) Number of field review identified built heritage features displaced	7 to 8	7 to 8	7to8	7 to 8	5	5	5	5	6 to 8	7 to 8
	Disruption of built heritage	a) Number of national historic sites disrupted	0	0	0	0	0	0	0	0	0	0
	features	b) Number of provincially designated properties disrupted	0	0	0	0	0	0	0	0	0	0
		c) Number of features with heritage easements disrupted	0	0	0	0	0	0	0	0	0	0
		d) Number of municipally listed built heritage features disrupted	0	0	0	0	0	0	0	0	0	0
		e) Number of locally identified built heritage features disrupted	0	0	0	0	0	0	0	0	0	0
		f) Number of field review identified built heritage features disrupted	1 to 3	1 to 3	1 to 3	3 to 4	6	6	6	6	3 to 5	3 to 4
		g) Subjective assessment	Alt 1a and 1b are similar in the number of Built Heritage features present in the alternative footprints.				Alt 2a and 2b are similar in the number of Built Heritage features present in the alternative footprints.					

Table 2 Cont'd. Summary of Evaluation Matrices – Plaza and Crossing Alternatives

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect (Cultural Resources	Plaza Segments-Crossings to Malden Rd							
	Plaza A			Plaza B	Plaza B1	Plaza C				
Performance Measure	Criteria Indicator	Measurement Units	From Crossing A	From Crossing B	From Crossing C	From Crossing C1	From Crossing C	From Crossing B	From Crossing C	
BUILT HERITAGE FEATURES	Displacement of built heritage	a) Number of national historic sites displaced	0	0	0	0	0	0	0	
FEATURES	features	b) Number of provincially designated properties displaced	0	0	0	0	0	0	0	
		c) Number of features with heritage easements displaced	0	0	0	0	0	0	0	
		d) Number of municipally listed built heritage features displaced	0	0	0	0	0	0	0	
		e) Number of locally identified built heritage features displaced	0	0	1	0	0	0	0	
		f) Number of field review identified built heritage features displaced	1	2	1	2	3	3	2	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0	0	0	0	0	0	0	
		b) Number of provincially designated properties disturbed	0	0	0	0	0	0	0	
		c) Number of features with heritage easements disturbed	0	0	0	0	0	0	0	
		d) Number of municipally listed built heritage features disturbed	0	0	0	1	0	0	0	
		e) Number of locally identified built heritage features disturbed	0	0	0	1	1	0	1	
		f) Number of field review identified built heritage features disturbed	3	2	2	4	2	0	3	
LANDSCAPE UNITS	Displacement or disruption of cultural landscapes	a) Number of cultural landscapes displaced	1	1	2	2	2	1	2	
		a) Number of cultural landscapes disrupted	0	0	0	0	0	0	1	

3.4 Most and Least Preferred Alternatives

All of the alternatives are considered to have low to no impact. The following discusses the preference of alternatives based solely on the number of built heritage features and cultural landscape units potentially displaced and/or disturbed.

Plazas

Of the possible plaza alternatives examined, Plaza A has the lowest impact with the least number of potentially displaced field-identified features. Only one field-identified feature will be potentially displaced by Plaza A. Plazas B, B1 and C, have higher impacts to field-identified features and are considered to be least preferred. Both plazas potentially displace three field-identified features and one cultural landscape unit. Plaza C potentially displaces two field-identified features and one cultural landscape unit, and also potentially disrupts one field-identified feature.

Access Road Alternatives

To Plaza A

If we look at the total number of heritage features that will be displaced or disrupted in all access road alternatives leading to Plaza A, Alternative 1A (Options 1 and 2) and Alternative 1B (Option 1) will affect the least number of features (eight), and will therefore have the lowest impact to identified built heritage features. All remaining alternatives will affect a total of 11 features.

To Plaza B or C

In considering access road alternatives leading to Plazas B or C, Alternatives 2A and 2B are the most preferred because they have the least impacts to known heritage features. Only five features are potentially displaced. Alternatives 1A, 1B, 3, and the Parkway to Plaza B or C potentially displace eight built heritage features. All alternatives will impact a total of 11 features, including features that will be both displaced and disrupted.

Plaza / Crossing Combinations

Plaza Crossings: Plaza A

Four crossing alternatives are proposed for Plaza A. Crossing A and Crossing B are the most preferred alternatives, displacing one and two field-identified features and disrupting three and two field-identified features, respectively. They will both also displace one cultural landscape unit. For Crossing C, two field-identified built heritage features and two cultural landscape units will be potentially displaced while two field-identified built heritage features will be potentially disrupted. Crossing C1 has the potential to displace two field-identified built heritage features and two cultural landscape units, as well as the potential to disrupt one municipally designated feature, one locally identified feature and four field-identified built heritage features.

Plaza Crossings: Plaza B

One crossing is proposed for Plaza B. Crossing C will potentially displace three field-identified features and two cultural landscape units and has the potential to disrupt one locally-identified feature and two field-identified features.

Plaza Crossings: Plaza B1

One crossing is proposed for Plaza B1. Crossing B will potentially displace three field-identified features and one cultural landscape unit.

Plaza Crossings: Plaza C

One crossing is proposed for Plaza C. Crossing C will potentially displace two field-identified features and two cultural landscape units and has the potential to disrupt one locally-identified feature and three field-identified features.

3.5 Conclusions: Most and Least Preferred Alternatives

Based on the assessment of all Plaza, Plaza/Crossing and Access Road alternatives, it is possible to conclude that there are preferred alternatives based on cultural heritage considerations. All alternatives are considered to have low to no impact, therefore conclusions are based on the number of cultural heritage features that will be affected.

Plaza A is preferred over all other Plaza Alternatives, followed by Plaza B and B1, and finally Plaza C.

In terms of Plaza/Crossing Alternatives, the Plaza A Crossings are the most preferred (Crossing C1, followed by Crossing B and C, followed by Crossing A), followed by the Plaza B and C Crossings, with the Plaza B1 Crossing being the least preferred.

With respect to Access Road Alternatives, Alternative 1A (Options 1 and 2) and Alternative 1B (Option 1) are the most preferred routes to Plaza A, followed by Alternatives 2A, 2B, 3 and the Parkway (all equal). Alternatives 2A and 2B are the most preferred routes to Plaza B or C, with Alternatives 1A, 1B, 3, and the Parkway being the least preferred (all equal).

4. RECOMMENDATIONS

The DRIC study ACA is largely free of significant cultural heritage resources, although the close proximity of old Sandwich town is an important issue with respect to choosing a crossing location. Therefore the following recommendation applies:

 Although no significant portion of the historic town of Sandwich (CLU 3) is within the ACA, Sandwich as a whole is a heritage sensitive area and thus the selection of a bridge crossing location must take into account any direct or indirect impacts on the adjacent historic community. For the remainder of resources within the ACA, the following general recommendations should apply.

- 1. Any proposed work through the study area should be suitably planned in a manner that avoids any identified, above ground, cultural heritage resource.
- 2. Encroachment of lands close to BHFs or CLUs should be avoided wherever possible.
- 3. Where any identified, above ground, cultural heritage resource is to be affected by loss, displacement or disruption, further research should be undertaken to identify the specific heritage significance of the affected cultural heritage resource and appropriate mitigation measures adopted where appropriate.

In this regard to all the foregoing recommendations, provincial guidelines should be consulted for advice and further heritage assessment work undertaken as necessary.

5. Further Work

Once a Technically and Environmentally Preferred Alternative has been established, construction impacts will be assessed and mitigation measures will be recommended. Further recommendation will be made as required.

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APPENDIX A

SUMMARY EURO-CANADIAN HISTORY

Thematic Overview of the Focused Analysis Area

The first European settlement in the Detroit-Windsor area occurred in the year 1701 when the Sieur De Lamothe Cadillac and approximately 100 military and civilian personnel arrived to found Fort Pontchartrain on the Detroit side of the river.

European settlement remained largely on the Detroit side until 1748 when the Jesuit mission to the Huron Indians was established on the south shore near the foot of the present Huron Church Road and the Ambassador Bridge. From 1748 to 1760, a French agricultural settlement developed in this area paralleling a similar settlement across the water.

Although Fort Pontchartrain surrendered to the British in 1760 and the Detroit side of the river was again officially surrendered to the United States in 1783, both sides remained under British control until 1796, when U.S. forces took up actual occupation of Detroit. During this period, the settlement continued to grow but remained predominantly French in population. Few buildings from the period of French settlement have survived, although the street pattern of the City still reflects the French method of agricultural land division i.e. long narrow farms fronting the river. In 1797, the original townsite of *Sandwich* was established to accommodate persons of both French and British origin from the U.S. who wished to remain under British rule following American occupation of Detroit. This constituted the first urban settlement in what is now the City of Windsor, and also the first significant migration of English speaking people into the Windsor area. Sandwich developed over the following decades as the seat of government and the courts for the County of Essex. The surrounding area remained largely rural until the early twentieth century when a variety of housing subdivisions were registered.

As the chief port-of-entry to the region opposite Detroit, the *Town of Windsor* (now the downtown area) was already catching up to Sandwich, in terms of population, when the Great Western Railway chose Windsor as its termination point in 1854. The arrival of the railway also marked the beginning of significant industrial development in Windsor. The railway also sparked the foundation of the third of Windsor's oldest settlements, *Walkerville*. In 1857, Hiram Walker established his distillery at the point east of downtown, where the Great Western Railway first met the waterfront. On his lands running south of the river, Walker planned a complete town including provisions for industry, commerce, residences and agriculture (Walker Farms). The housing, a large part of which was built by Walker's own contractors, ranged from E. Chandler Walker's estate of Willistead (1906), built in the style of a Tudor manor house, to blocks of row housing for his industrial workers (1880s).

Although the Ford Motor Car Company was established in Windsor as early as 1904 to gain the benefit of Imperial trade preferences, it was the period during and following World War I that saw the auto industry assume predominance in the city. An area known as *Ford*

City was developed around the industrial complex. Numerous large residences were built overlooking the river at that time although most have since been demolished.

The automotive industry changed Windsor from a relatively slow growing collection of border communities to a rapidly growing, modern, industrial city. By the early 1930s, the separate Border Cities of Windsor, East Windsor (Ford City), Walkerville and Sandwich amalgamated politically into a single community with a population of over 100,000. During World War II, industrial production increased dramatically attracting many new workers and resulting in substantial residential growth within the city and in the surrounding townships. In 1966 the City annexed the *Towns of Riverside* and *Ojibway*, and parts of *Sandwich East*, *Sandwich South* and *Sandwich West* Townships.

South of Windsor along the Detroit River is the *Town of Amherstburg*. Amherstburg came into being around 1796 when a portion of the *Fort Malden* military reserve was laid out as a town site and settled by United Empire Loyalists from Detroit. However, the region's European history can be traced even earlier to the early French explorers, the days of French rule and the arrival of French traders and settlers in the 1730's. By 1763, when France surrendered Canada to the British, several hundred French settlers were scattered along the Detroit River. The French colony continued to flourish under British rule, and few British settlers came to the area until the American Revolution brought an influx of Loyalists. The first to take up land grants in the vicinity of Amherstburg were members of Butler's Rangers who came in 1784.

By 1851 the settlement of Amherstburg was separated from the *Township of Malden* and was incorporated as a village with town powers. Amherstburg was incorporated as a town in 1878 and by the 1880s's it had become a thriving mercantile and manufacturing centre. Amherstburg is also known as an important stop along the Underground Railway that helped black slaves escape from their servitude south of the border. By the 1840s, Amherstburg had become the centre of Ontario's Black population.

Amherstburg amalgamated with the neighbouring Townships of *Anderdon* and *Malden* in January of 1999 to create the *Town of Amherstburg. Anderdon Township* was surveyed as a part of Essex County in 1839, but the settlement had already begun prior to that date in the northern portion around the River Canard by French people coming south from *Sandwich Township* and in the southern portion by United Empire Loyalists. By 1850 there were 774 settlers in the township, concentrated in two main settlements, *Gordon* on the shore of the Detroit River, and *McGregor* on the eastern boundary. In the 1860's the Canada Southern Railway was built through the township and this encouraged growth in the largely agricultural township. There remains only three small communities of any size within the original historic boundary: *Auld, River Canard* and *McGregor*.

Malden Township was surveyed as part of Essex County in the early nineteenth century and it likewise contained a mix of early French and Loyalist settlers. Like Anderdon, Malden's rural economy benefited greatly from the construction of the Canada Southern Railway, which constructed a branch line from Amherstburg to Essex.

Summary Review of Historic Mapping

A survey of selected historical sources and a review of historical mapping were conducted in order to provide location information with respect to land use following the arrival of Europeans in the area, and to clarify the history of settlement in the vicinity from the late seventeenth century through the late nineteenth century.

The French Regime (Late 17th Century to 1760)

The earliest maps showing the south-western portion of the province of Ontario pre-date the actual settlement of the Detroit area by the French by nearly half a century. The first reference to a map of what was to become Essex County was drawn by the Jesuit Father Chaumont in 1641. This map referred to an Aboriginal village named "Khioetoa," which the missionaries renamed St. Michel. There is no known copy of that map today, although it may have served as the basis for two subsequent maps. The first extant map which showed this region was published by Pierre Mariette for geographer Sanson d'Abbeville in Paris in 1656, and was entitled "Le Canada, ou Nouvelle France &c." The map reflects with some degree of accuracy the early understanding of the position of the Great Lakes and the major watersheds which flowed into them. The re-named Aboriginal village of St. Michel was shown. This was followed shortly thereafter by a map published in 1660 by the Jesuit historian Du Creux which did not differ significantly in detail from the previous Sanson map.

The next map produced was in 1670 following a voyage undertaken by Casson and Galinee who were ordered to follow the Ohio River in order to determine whether it entered the South Sea and provided a route to China. This map does not provide a significant amount of detail about the south-western peninsula with the exception of the remark "grandes prairies."

The first European settlement in the area was in 1701, when Sieur De Lamothe Cadillac and approximately 100 civilians and military personnel established Fort Pontchartrain on what is now the Michigan side of the Detroit River (ASI 2002). Sometime thereafter, Black and Aboriginal slaves were first brought into the area, the importation of Black slave labourers to New France having been authorized by King Louis XIV in 1701 (Hill 1981: 4; Winks 1971: 5).

In 1730, a map was published by DeBoishebert entitled "Carte du Detroit Erie montent jusqu'au Lac Huron" which showed the "village des 8aouacs (Outaouais)" in the vicinity of Windsor.

French settlement remained largely on the Michigan side of the Detroit River until 1748, when a Jesuit mission was established on what is now the Ontario shore, near the foot of present-day Huron Church Road and the Ambassador Bridge. From 1748 to 1760, a French agricultural settlement developed in this area paralleling a similar settlement across the water (ASI 2002).

The first detailed French map of the south (Ontario) shore was not produced until 1749. Entitled "Carte de la Riviere Du Detroit" this map was published by Chaussegros De Lery in Paris in 1749. It showed the first "nouvelle habitation française de 1749" with the land divided along the river into the long, narrow "seigneurial" allotments characteristic of the French ancien regime. A few farms were somewhat larger, such as the tract of 12 arpans

in width occupied by Mr. Le Chevalier de Longueuil. The main area of the "nouvelle habitation" was situated along the Detroit River south of the area that would later become the old town of Sandwich. This area was known as Petite Côte.

On the same 1749 map, Aboriginal settlements include a "village outa8ois," "village huron," and a "village huron abandonne en 1748." The European presence is shown by "ruisseau de la Parise," "emplacement du forgeron des Hurons" and "emplacement des R.P. Jesuites missionnaire ou est une Eglise."

In 1754 a "Plan Topographique du Detroit" was published by De Lery. This map showed that the limits of the French settlement within a five year period had extended south of Turkey Creek. The map also indicates the "Village et Culture des Hurons" on the site of present day Windsor, as well as the "Cimetière des Ottawas."

In 1709, the government of New France formally established the institution of slavery with the legal ruling that Black and Aboriginal people who had been purchased were the property of their purchasers (Winks 1971: 6), removing any vestiges of doubt with respect to the legality of slavery following the royal authorization of 1701. Slaves remained a part of the French settler society in the area, although the absolute number of slaves was relatively small in comparison to the British colonies to the south. Most slaves were domestic workers, although many worked as field labourers (Winks 1971: 12; Hill 1981: 4).

The British Regime (1760 to 1867)

Fort Pontchartrain surrendered to the British in 1760. Perhaps the first detailed British map for the Windsor border area was published by John Montresor shortly after the conquest and Pontiac's uprising in 1763. Entitled "Plan of Detroit with its Environs," this map showed the layout of the cultivated fields directly opposite Detroit as well as the Aboriginal villages.

Following the end of the American Revolutionary War, a number of Loyalists, including Black Loyalists, and disbanded troops settled around Detroit on the American side of the river. Black Loyalists also settled on the opposite (Sandwich/Windsor) side of the river in the 1780s (Hill 1981: 46). The settlement at Detroit continued to grow but remained predominantly French in population (ASI 2002). The growing requirements for land in the area, and the recognition that the Michigan area was to be transferred to the United States, prompted the British to begin acquiring Aboriginal land on the Canadian side of the river. By 1791, the first surveys of this territory were undertaken by Patrick McNiff. Newcomers to the area, including slaves and perhaps free Black people, began to settle on the land around what would become Sandwich, and around Fort Malden to the south (Amherstberg) (Hill 1981: 13).

Few buildings from the period of French settlement have survived, although the street pattern of Detroit and the pattern of lots along the waterfront in Windsor and south of the town of Sandwich still reflect the French method of "seigneurial" agricultural land division, i.e. long narrow farms fronting the river.

McNiff's survey showed details not included on the earlier French maps such as the position of six windmills, two labelled as "Battishaw" and "Maisonville." His map of 1791 also showed the "Huron Church" and "land reserved for Indians."

Following the 1763 Treaty of Paris, by which the French territory in Canada became British, the institution of slavery in former French land was protected and governed by British law, and the importation of slaves was re-invigorated (Hill 1981: 6; Silverman 1985:

2). However, until the end of the American Revolutionary War in 1783, the actual use of slaves continued in the previously established fashion, i.e., comparatively few slaves, many or most of whom are domestic workers (the remainder largely put to work in the fields) (Silverman 1985: 5; Winks 1971: 24-29). During the American Revolutionary War, slaves who volunteered to join the British forces were offered freedom; however, slaves captured during the war were treated as booty. A number of free Black people in areas of troop movement were captured and enslaved as well (Winks 1971: 29-30). Free and enslaved Black people arriving after 1783 included skilled labourers and tradespeople, and slaves began to work at a far greater variety of jobs, rather than just performing domestic work and field work.

During the American Revolutionary War and after, various American states began passing anti-slavery legislation. An enactment of 1787 applied to the Northwest Territory and therefore, theoretically, to the lands on the American side of the Detroit River (Hill 1981: 13). The British continued to occupy and govern this area for several years, and slavery remained in practice there as well as in the rest of British North America, yet several slaves from the Canadian side of the river escaped across the water, encouraged by the promise of freedom.

In 1793, Upper Canada's first Legislative assembly passed a bill that prohibited the importation of slaves. The bill also provided that children of those currently enslaved would be free at age 25 (Winks 1971: 96-99; Hill 1981: 16-17). Although no slaves were freed by this bill, the decline of the slave population and of slavery as an institution began once the importation of new slaves was prevented (Winks 1971: 99). Manumission (freeing) of slaves was also promoted and the freeing of slaves increased thereafter, spurred on by the new legislation, the rise of abolitionist feeling, and the fact that slave-owning was relatively unprofitable in Upper Canada (Hill 1981: 18; Silverman 1985: 13; Winks 1971: 112). This bill also had the effect of encouraging slaves to escape to free territories such as the American Northwest Territory.

After Jay's Treaty was ratified and implemented in 1796, the British transferred governance of Detroit to the Americans, and British subjects in the Detroit area were resettled in Upper Canada. Slaves from Upper Canada continued to escape into the Michigan area, even forming a militia in Detroit (Winks 1971: 99).

In 1797, the original town site of Sandwich was established (ASI 2002). This constituted the first urban settlement in what is now the City of Windsor, and Sandwich developed over the following decades as the seat of government and the courts for the County of Essex.

It is important to note that during the War of 1812, the Essex County area was the scene of several battles. The Windsor/Sandwich area and the area along the Detroit River down to Fort Malden (Amherstberg) formed a contested zone through which several significant troop movements (both American and British-allied) were carried out and in which several battles or skirmishes were fought.

In 1815, after the war ended, the number of Black people entering Upper Canada increased as Black veterans were offered land grants and Black refugees from the war made their way north as well (Winks 1971: 113; Hill 1981: 18). Fugitives from slavery in America also began to arrive in Upper Canada, including many who settled in the Windsor and Sandwich area between 1817 and 1822 (Hill 1981: 18, 48). By the 1820s, significant numbers of freedom-seekers were crossing the Detroit River and settling on the Canadian side, most notably in the Amherstberg area (Winks 1971: 144-145), perhaps encouraged

by the 1819 pronouncement of the Attorney General of Upper Canada that Black people taking up residence in Canada were free and legally protected by British law, regardless of their status in their former country of residence (Hill 1981: 25; Silverman 1985: 36).

The escape of fugitive slaves into Canada was becoming organized as part of a developing system known as the Underground Railroad, by means of which freedom-seekers were assisted in escaping to northern American states (that had abolished slavery) and to Canada (Hill 1985: 25-28). The extension of the Underground Railroad into Canada, and the migration of free Black people from northern states into Canada as well, was motivated by harshly discriminatory laws in those northern states (Silverman 1971: 22). Meanwhile, as manumission continued, the institution of slavery in Upper Canada was dying and, by the end of the 1820s, was effectively dead in the province (Silverman 1985: 12; Winks 1971: 110). Slavery was not, however, illegal in Upper Canada until 1833, when it was abolished throughout the British Empire by the Imperial Act (Silverman 1985: 13; Winks 1971: 111).

Throughout the 1830s and 1840s, freedom-seekers came in increasing numbers to settle in the Sandwich area and in many parts of Upper Canada—Canada West after 1840 (Winks 1971: 145). This was accompanied by a rise in racial tension in many places, the beginnings of unofficial racial segregation, and the *de facto* exclusion of Black people from many churches and schools (Hill 1981: 91-102; Winks 1971: 148).

In 1826, a church congregation was formed in Amherstburg to meet the needs of a growing community of Black refugees, and in 1828, the African Methodist Episcopal Nazrey Church was organized in the same community (Hill 1981: 132; Silverman 1985: 89). A church building was constructed by this congregation in 1839. Amherstburg's First Baptist Church was founded between 1838 and 1841 (Hill 1981: 140). The First Baptist Church in Sandwich was founded in 1840 as The Close Communion of Baptists, by 11 exslaves who met, according to D.G. Hill (1981: 141), "at the foot of Huron Road." It is unclear if Hill is referring to Huron Church Road or Brock Street (former Huron Street), although Brock Street seems more likely. The congregation gathered outside or in homes until 1848, when the members (who numbered 29 in 1847) built a small log structure (Hill 1981: 141-142). A patent was given to Henry Brown allowing him to use a half-hectare of land for a church and graveyard and, by 1851, the congregation had built a brick church, by their own labour, on Lot 22, West Peter Street (Hill 1981: 142). This church is still standing today at 3652 Peter Street, and is designated a National Historic Site of Canada.

In 1846, a Black convention was held in Windsor to address the issue of Black unemployment in the region, due to the concentration of approximately four thousand poor Black people living in the area around Amherstburg (Silverman 1985: 58; Hill 1981: 74). The convention formed the Sandwich Mission with the intention of buying up a large tract of land north of Amherstburg, some of it already owned by Blacks, for re-sale to the freedom-seekers (Silverman 1985: 58; Hill 1981: 74). The plan was to create a Black community, and by 1851, T. Willis, a Black, Methodist preacher, had purchased 80 hectares for the Mission (Hill 1981: 74). In 1852, the Sandwich Mission, having already been re-named the Fugitives Union Society, merged with the Refugee Home Society from Michigan (Silverman 1985: 205). The Refugee Home Society planned to undertake community-building on a much larger scale and set about purchasing land in a number of places in northwest Essex County (Hill 1981: 74-75; Silverman 1985: 58-59; Winks 1971: 205). Freedom-seekers did buy land and a community was begun, but it ultimately failed to develop and the settlers disbanded in the 1860s (Hill 1981: 76; Winks 1971: 208).

Many of the British-produced maps of the Windsor area are concerned with administrative and defensive matters. Other surveys laid out new county towns, confirmed previously granted lands held by French settlers, and allocated new lands for Loyalists and disbanded soldiers. Other maps show details of the early infrastructure important to provincial administrators and the land board. These include features such as the location of saw and grist mills, wind mills, wharves and water lots, roads and bridges. Other maps attempt to demarcate the boundaries of British settlement and establish the limits of the Aboriginal reserve. One map, produced by the Baron de Rottenburg around 1850, consolidated many of these features and included a final important feature—taverns and inns situated upon the Front Road.

As the chief port-of-entry to the region opposite Detroit, the Town of Windsor (now the downtown area of the City of Windsor) was already catching up to Sandwich, in terms of population, when the Great Western Railway (now part of the CN Rail network) chose Windsor as its termination point in 1854 (ASI 2002). The arrival of the railway marked the beginning of significant industrial development in Windsor.

The Fugitive Slave Act, passed in 1850, caused widespread fear and dismay by giving legal authority to slave-hunters tracking down fugitives anywhere in the U.S. and led to both an increase in the danger to freedom-seekers and their helpers in the Underground Railroad movement and to the numbers of freedom-seekers arriving in the Windsor and Sandwich area via the Underground Railroad (Hill 1981: 32, 53). The majority of these freedom-seekers settled in Essex and Kent Counties, and the Black populations of centres such as Windsor and Sandwich came to account for a quarter of the total populations of these towns (Silverman 1985: 151). In 1855, 21 Black families were counted in the town of Sandwich by Benjamin Drew (1856), who estimated a Black population of 100 based on this figure. Drew also visited Windsor and counted 50 families, some boarding freedom-seekers in their homes. Drew records an estimate of approximately 500 Black people living within the town of Amherstburg (Drew 1856: 321-348).

The Black population of these areas declined in the 1860s due to enlistment in the American Union Army and to a return migration of many freedom-seekers after the abolition of slavery in the U.S. When President Abraham Lincoln proclaimed emancipation in 1863 and in the same year announced that Black people could join the Union Army, many Blacks from Canada West moved quickly to enlist (Silverman 1985: 158). Following the end of the war in 1865, the freedom-seekers began to return to the U.S. in large numbers, such that by 1871, less than half of the freedom-seekers remained in Canada West (Silverman 1985: 159).

Post-Confederation (After 1867)

The late nineteenth century and early-to-mid twentieth century saw significant development in the Windsor area and by the early 1930s, the separate border cities of Windsor, East Windsor (Ford City), Walkerville, and Sandwich amalgamated politically into a single community with a population of over 100,000. During World War II, industrial production increased dramatically, attracting many new workers and resulting in substantial residential growth within the city and in the surrounding townships.

In 1966, the City of Windsor annexed the Towns of Riverside and Ojibway, and parts of Sandwich East, Sandwich South, and Sandwich West Townships (ASI 2002).

APPENDIX B

HERITAGE SENSITIVE AREAS WITHIN THE INITIAL STUDY AREA

Introduction

The following areas have been identified through various data sources and are considered to be of special heritage significance. They represent aggregate areas of historic activity and resources within the initial study area.

Results were mapped using GIS data co-ordinates (see Figure 2).

Heritage Sensitive Areas

Ambassador Bridge

The Ambassador Bridge, built in 1929, is listed on the Ontario Heritage Bridge List. This list includes approximately 90 heritage bridges of provincial significance. It helps ensure that the significance of these bridges is taken into account when municipalities undertake construction projects covered by the *Environmental Assessment Act*. Alterations to the bridge are subject to a heritage impact assessment and to the approval of the Ontario Ministry of Culture.

Sandwich

The original town of Sandwich retains a number of buildings of the pre-confederation era that are of historical significance and/or which exemplify the Neo-classical and Georgian styles of architecture, which were in vogue during the first half of the nineteenth century. A number of designated heritage properties can be found along the following streets: Russell Street, Sandwich Street, Peter Street, Detroit Street, Mill Street, Brock Street, Chippewa Street. South Street, Watkins Street and Prince Road.

Highway 18

King's Highway 18, between Amherstburg and Leamington, is a heritage highway and is generally considered to be the oldest road in Ontario. Portions of Highway 18 between Amherstburg and Windsor have been altered from their original alignment, particularly within the Windsor City Limits.

Huron Church Road

Between University Avenue and Wyandotte St. W., Huron Church Road has several properties of heritage interest.

Town of Windsor

Due to numerous fires and the continuous redevelopment of the area over the decades, few of the early buildings in downtown Windsor still exist, but a number of late nineteenth century and early twentieth century buildings remain, including in particular a number of larger, upper income houses in areas immediately adjacent to the downtown area. Of particular heritage interest is Victoria Avenue, along which several designated properties are situated.

Highway 3 (The Talbot Road)

First surveyed by Colonel John Talbot beginning in 1809, the Talbot Road (the old Indian trail and now Highway 3) was interrupted by the War of 1812, but reached Essex County in 1818. The Talbot Road was surveyed to follow a natural ridge of glacial moraine which stretched from Windsor to Point Pelee. It was termed a corduroy road for in areas of swampy land, three inch planks, flattened on the upward side, were laid down side by side across the road. Highway 3 (the Talbot Road) is celebrated with a provincial plaque west of St. Thomas that attests to its heritage interest and value. Significant villages along the route include *Oldcastle* and *Maidstone*.

Highway 46 (The Middle Road)

Also surveyed by Colonel Talbot (and incorporating a native trail), the settlers along the Middle Road were largely emigrants from Ireland who came to escape the potato famine of the 1840s. Along the Middle Road and up toward Lake St. Clair the "Irish Settlement" grew and fourth and fifth generation descendants remain today. The village of Maidstone was the centre of the Irish community.

Amherstburg

Bounded by the Detroit River to the west, Alma Street to the north, the Lowes Side Road to the south and Meloche Road to the east, and situated approximately 32 km southwest of Windsor across from Boblo Island (Bois Blanc), Amherstburg is one of the oldest towns in the province. As early as 1640, French explorers, Jesuit and Recollect missionaries, are known to have paddled the river past the site where Amherstburg now stands. In 1796, the British military post was re-established and the area played a major role in the War of 1812 with the Capture of Fort Detroit and the Canadian Rebellion of 1837-38. In 1851 when the Municipal Act was passed, Amherstburg was one of the first towns to be incorporated as a "village with town powers", thus entering into its independent existence. Being the nearest British town, Amherstburg served as a launching point into Canada for fugitive slaves fleeing from American states. The North American Black Historical Museum is located here as is Fort Malden National Historic Park. Restoration architect Peter J. Stokes completed a preliminary inventory of heritage properties in 1976 and it has not been updated. However, the following streets have the highest concentration of heritage structures and are therefore considered to be of particular heritage interest: Brock Street, George Street, King Street, Seymour Street, Sandwich Street, Bathurst Street, Ramsay Street, Dalhousie Street, North Road, Rankin Avenue, Richmond Street, Murray Street, Gore Street, Simcoe Street, Park Street.

Despite its modern business establishment and plants, Amherstburg retains its historic atmosphere. In the older section of town the streets are narrow and houses front directly

on the sidewalk.

Fort Malden National Historic Park

Located on Laird Avenue in Amherstburg, Fort Malden preserves elements of the second fort built by the British on the eastern bank of the Detroit River to defend the Canadian border from American attack in the first half of the 19th century. The first post, known as Fort Amherstburg, was constructed in 1796 near the mouth of the Detroit River where it empties into Lake Erie. This post was the headquarters for the British forces in southwestern Upper Canada during the War of 1812. Fort Malden was erected after the war and rebuilt in 1838-40 and served once again as a centre for the British defence during the Upper Canada Rebellion of 1837-39. Today the 4.5 hectare site includes remains of the 1840-period earthworks and four buildings, including a restored and furnished 1819 brick barracks.



APPENDIX C HERITAGE PROPERTIES IN THE INITIAL STUDY AREA

Introduction

The following properties have been previously identified as being of heritage significance. They have been grouped according to the status and protection conferred upon them by various easements and government designations. Results were mapped using GIS data co-ordinates (see Exhibit 3).

National Historic Sites of Canada

On the advice of the Historic Sites and Monuments Board of Canada, the Minister of the Environment has designated the following properties as *National Historic Sites of Canada*. These sites are administered by Parks Canada.

3652 Peter St	Windsor	Sandwich First Baptist Church	1851
<u>254 Pitt St W</u>	Windsor	Francois Baby House	1811
Boblo Island	Amherstburg	Bois Blanc (Boblo) Lighthouse	1837
Boblo Island	Amherstburg	Bois Blanc (Boblo) Blockhouse	1839
240-250 Dalhousie Street	Amherstburg	Amherstburg Naval Yard	1831
525 Dalhousie Street	Amherstburg	Bellevue House	1816
277 King Street	Amherstburg	Nazrey A. M. E. Church (museum)	1848
100 Laird Avenue	Amherstburg	Fort Malden Barracks	1819
100 Laird Avenue	Amherstburg	Fort Malden Earthworks	1838

Heritage Easements

The following properties have heritage easements held on them in perpetuity by either the local municipality or the Ontario Heritage Foundation

350 Huron Church Rd	Windsor	Assumption R.C. Church	1843
Riverside Dr W near Hur	on Church Rd	Windsor Assumption Park	n/a

3277 Sandwich St	Windsor	Mackenzie Hall - Court House	1855
350 Devonshire Rd	Windsor	Walkerville Town Hall (relocated)	1904
420 Devonshire Rd	Windsor	Walkerville post office	1914
546 Devonshire Rd	Windsor	Semi-detached house	1889
548 Devonshire Rd	Windsor	Semi-detached house	1889
606-610 Devonshire Rd	Windsor	Bank building	n/a
650 Devonshire Rd	Windsor	Semi-detached house	n/a
3203 Peter St	Windsor	Mason-Girardot House	1877
224 Sunset Ave	Windsor	Jasperson-Appel House	n/a
694 Victoria Ave	Windsor	Abner F. Nash House	n/a
1900-42 Wyandotte St E	Windsor	Imperial Building	n/a
317 Ramsay Street	Amherstburg	Christ Anglican Church	1818

Designated Under Part IV of the *Ontario Heritage Act*

The following properties are protected under Part IV of the *Ontario Heritage Act*.

253 Freedom Way/			
37 University Ave E	Windsor	Property	n/a
401 Sunset Avenue	Windsor	The University of Windsor	1857
3069 Alexander Blvd	Windsor	Masson-Deck House	1924
819 Argyle Rd	Windsor	Wallmay Carriage House	n/a
823 Argyle Rd	Windsor	Elmscroft Carriage House	n/a
378 Brock St	Windsor	Windsor Jail MBS-ORC	1925
356 Brock St	Windsor	Registry Office - Windsor Jail	1876
567 Church St	Windsor	Revell-D'Avignon House	n/a
City Hall Square	Windsor	All Saints Anglican Church	1855

	204 Curry St	Windsor	Robert Gordon House	n/a
	908 Dawson	Windsor	fieldstone & stucco bungalow	1925
	378-396 Devonshire Rd	_Windsor	Crown Inn	1892
	982 Devonshire Rd	Windsor	Foxley	1924
	415 Devonshire Rd	Windsor	Bank of Commerce	1907
	656 Devonshire Rd	Windsor	Semi-detached house	n/a
	325 Devonshire Rd	Windsor	Walker Power Building	1911
	1094 Drouillard St	Windsor	St. John the Divine Church	1950
	705 Erie St E	Windsor	St. Angela Merici Church	1939
	Farm Lot 108	Windsor	Property/Building	n/a
	167 Ferry St	Windsor	Windsor Star Building	1926
	115 Giles St E	Windsor	Shaar Hashomayim Congregation	1929
	400 Huron Church Line	Windsor	Assumption University	1875
	849 Kildare Rd	Windsor	The Cobbles	1906
	889 Kildare Rd	Windsor	Griggs House	n/a
	904 Lawrence Rd	Windsor	property/building	1920
99999	711 McEwan St	Windsor	Holy Name of Mary Church	1928
	1960 Meldrum	Windsor	Grachanica Serbian Church	1951
	<u>363 Mill St</u>	Windsor	Sandwich Fire Hall & Stable	1921
(A) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	<u>351 Mill St</u>	Windsor	Langlois house	1888
	245 Mill St	Windsor	Queen Anne Revival style house	1895
	221 Mill St	Windsor	Duff-Baby House	1798
	245 Mill St	Windsor	Property	n/a
	716 Monmouth Rd	Windsor	Semi-detached house	n/a
	704 Monmouth Rd	Windsor	Semi-detached house	n/a

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	756 Monmouth Rd	Windsor	Semi-detached house	n/a
	744 Monmouth Rd	Windsor	Semi-detached house	n/a
	1899 Niagara St	Windsor	Willistead Manor	1906
	1899 Niagara St	Windsor	Willistead Manor gatehouse	1906
	1899 Niagara St	Windsor	Queen Victoria Fountain	1897
	1899 Niagara St	Windsor	Willistead Manor coach house	1906
	2021 Ontario St	Windsor	Low-Martin house	1928
	374 Ouellette	Windsor	Canada Building	1930
	986 Ouellette Ave	Windsor	Border Masonic Temple	n/a
	1011 Ouellette Ave	Windsor	Medical Arts Building	n/a
	Park St E	Windsor	St. Alphonsus RC Church	1871
	280 Park St W	Windsor	Royal Windsor Apartments	1929
	511 Pelissier St	Windsor	YMCA	1925
	Pelletier St	Windsor	Windsor CN railway station	1910
	3281 Peter St	Windsor	Gauthier House 1	1895
	2100 Richmond St	Windsor	Walkerville High School	1922
	Riverside Drive	Windsor	Our Lady of the Rosary Church	1909
	4371 Riverside Dr E	Windsor	Patrice Parent House	n/a
	2072 Riverside Dr E	Windsor	Hiram Walker & Sons Building	1892
	5325 Riverside Dr E	Windsor	property/building	1928
	3200-04 Sandwich St	Windsor	Robinet Winery	1895
	3118 Sandwich St	Windsor	McGregor-Cowan House	1809
	3201 Sandwich St	Windsor	Sandwich post office	1905
	3164 Sandwich St	Windsor	Wigle-Nanaka house	1890
1				

	3140 Sandwich St	Windsor	Dominion House	1880
	3199 Sandwich St	Windsor	John Spiers' general store	1880
	3402 Sandwich St	Windsor	Baby-Lajeunese house	1855
	3305 Sandwich St	Windsor	St. John's Church & cemetery	1871
	1983 St. Mary's Gate	Windsor	St. Mary's Church & rectory	1904
	Sunset St	Windsor	Dillon Hall - University of Windsor	1928
	166 Tecumseh Rd W	Windsor	St. Clare of Assisi church	1931
	245 Tecumseh St E	Windsor	W. C. Kennedy High School	1929
	37 University Ave E	Windsor	Windsor Armoury	1900
	101 University Ave W	Windsor	The Capitol Theatre	n/a
	719 Victoria Ave	Windsor	Treble-Large House	1895
	803 Victoria Ave	Windsor	Henderson House	1900
	742 Victoria Ave	Windsor	Taylor-Growe House	n/a
	1148 Victoria Ave	Windsor	property/building	n/a
	916-918 Victoria Ave	Windsor	William McGregor House	1917
	Victoria Ave & Park St W	Windsor	St. Andrew's Presbyterian Church	1895
Allegie	739 Walker Rd	Windsor	Semi-detached house	n/a
	753 Walker Rd	Windsor	Semi-detached house	n/a
	731 Walker Rd	Windsor	Semi-detached house	n/a
Approx.	749 Walker Rd	Windsor	Semi-detached house	n/a
	721 Walker Rd	Windsor	Semi-detached house	n/a
	763 Walker Rd	Windsor	Semi-detached house	n/a
	2011 Willistead Cres	Windsor	Easton House	n/a
	2086 Willistead Cres	Windsor	Dr. Charles Hoare Residence	n/a
	1799 Wyandotte St E	Windsor	Bank of Montreal building	1912

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	1495 Wyandotte St W	Windsor	John Richardson Library	n/a
	225 Brock Street	Amherstburg	St. John the Baptist RC Church	1844
	214 Dalhousie Street	Amherstburg	Pensioner's Cottage	n/a
	214 Dalhousie Street	Amherstburg	Park House Museum	1796
	240-250 Dalhousie Street	Amherstburg	Callam Residence – Commissariat	1831
	252 Dalhousie Street	Amherstburg	Salmoni Building	1849
	262 Dalhousie Street	Amherstburg	Gordon House	1798
	267 Dalhousie Street	Amherstburg	Bullock's Tavern	1836
	273 Dalhousie Street	Amherstburg	Jones China Shop	1849
	449 Dalhousie Street	Amherstburg	Murray Smith Residence	1870
	455 Dalhousie Street	Amherstburg	Robertson Residence	n/a
	459 Dalhousie Street	Amherstburg	Fox Residence	1875
	232 George Street	Amherstburg	First Baptist Church	1849
	109 Gore Street	Amherstburg	Lloyd Brown Residence	1865
	193 Gore Street	Amherstburg	Gibb House	1837
	197 Gore Street	Amherstburg	Blacksmith Shop	n/a
	207 Gore Street	Amherstburg	Bondy Residence	1837
	217 Gore Street	Amherstburg	Ralph Jimmerfield saltbox house	n/a
	246 King Street	Amherstburg	Church of God in Christ	n/a
248	266 King Street	Amherstburg	St. John the Baptiste Parish Hall	1875
	277 King Street	Amherstburg	North American Black Historical MuseumTaylor Log Cabin	1860
	281 King Street	Amherstburg	Melvin Simpson residence	n/a
	187 Murray Street	Amherstburg	Adriano Tonon residence	n/a
	273 Ramsay Street	Amherstburg	Dunbar residence	1849

284 Ramsay Street	Amherstburg	Frank Kehl residence	1840
296 Ramsay Street	Amherstburg	Chittendon House	1840
298 Ramsay Street	Amherstburg	John Askin residence	n/a
140 Richmond Street	Amherstburg	Michigan Central Railway Station	1892
259 Richmond Street	Amherstburg	Roman Catholic Convent	1850
232 Sandwich Street	Amherstburg	Carnegie Public Library	1911
129 Simcoe Street	Amherstburg	St. Andrew's Presbyterian Church	n/a
9399 Townline Road	Amherstburg	St. Joseph's Church	1910

Ontario Heritage Bridge List

The following sites have been placed on the Ontario Heritage Bridge List compiled by the Ministry of Culture.

Windsor Ambassador Bridge 1929

Municipal Heritage Inventories

The City of Windsor and Town of Amherstburg Heritage Inventories contain listings of over 700 properties with heritage structures. These sites may be worthy of designation under Part IV of the *Ontario Heritage Act*, or they may simply contribute to the character of the street through their surviving heritage features. Regardless of their provincial status, all identified heritage resources are subject to survey when municipalities undertake road projects covered by the *Environmental Assessment Act*. Appropriate mitigation measures must be municipally approved (in consultation with the Windsor or Amherstburg Architectural Conservation Advisory Committees—advisory bodies to City Councils and municipalities on matters pertaining to built heritage in the City of Windsor and the Town of Amherstburg) when disruptions or displacement are anticipated for inventoried properties.

The City of Windsor's inventory is updated on an on-going basis and the current listing as at April 2005 was been mapped using GIS co-ordinates (see Exhibit 3).

The Town of Amherstburg's inventory was compiled in 1976 by restoration architect Peter J. Stokes and has not been updated since that time. Given the age of the document, the Amherstburg inventory needs to be field checked to confirm accuracy. However, Section 3.2 lists streets of particular heritage interest within the town centre. These streets were chosen because they contain a high concentration of previously inventoried structures. The boundary of this heritage sensitive area has been mapped using GIS co-ordinates (see Exhibit 3).

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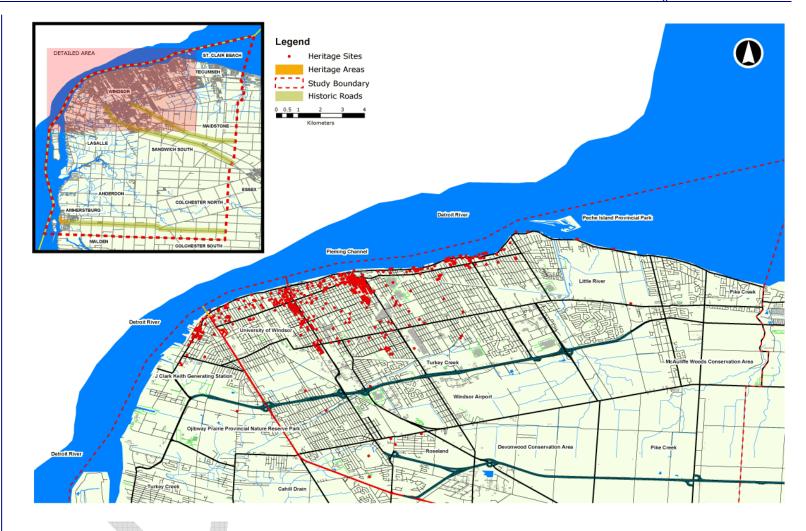


Exhibit 3. Heritage Features within the Initial Study Area

APPENDIX D

CULTURAL HERITAGE RESOURCE INVENTORY WITHIN THE AREA OF CONTINUED ANALYSIS





Address: 2746 Talbot Road

Feature Type: House

Construction Period: Pre-1900; 1930s rear additions and textual concrete

Construction Material: Stone and textural concrete foundation

Description: One and one-half storey house with an asphalt side gable roof and synthetic

siding. There is a front porch stretching across the width of the house. The

house is much altered with newer windows.

Architecture Type: Vernacular

Integrity: Fair

Historical Associations: Township settlement

Other Comments: This former 19th century farmhouse sits on a rise above Talbot Road. It is on the

edge of a subdivision that has maintained a number of mature trees, including a portion of a former orchard. During the field assessment, the present owner came forward and indicated that this house may have been associated with Colonel Talbot; this was later withdrawn. Over the 20th century, archaeological

finds have been associated with this property and the area.





Address: 3920 Huron Church Line

Feature Type: Royal Canadian Legion Branch 594

Construction Period: 1961

Construction Material: Concrete walling on unknown foundation

Description: One storey structure with a flat roof

Architecture Type: Typical Legion design

Integrity: Very good

Historical Associations: Post-war Military history

Other Comments: There is a small museum within the Legion, including a display case and historic

photographs.



Address: 3905 Huron Church Line

Feature Type: House

Construction Period: 1901-1939

Construction Material: Unknown walling on textured concrete foundation

Description: One and one-half storey structure with an asphalt cross gable roof with a gabled

dormer window. The house is clad with synthetic cladding. It has an enclosed

porch and aluminum windows.

Architecture Type: Vernacular

Integrity: Fair

Historical Associations: Township settlement

Other Comments: This abandoned farmhouse has an associated shed as well as an outbuilding to

the rear. It is bordered to the south and west by productive agricultural land.



Address: 3495 Huron Church Road

Feature Type: House

Construction Period: 1901-1939

Construction Material: Unknown walling on textured concrete foundation

Description: One and one-half storey structure with an asphalt side gable roof and synthetic

siding. The house has some aluminum windows and a centre dormer which is

likely a later addition.

Architecture Type: Vernacular

Integrity: Good

Historical Associations: Township settlement

Other Comments: The house is angled sideways reflecting the former seigniorial pattern.



Address: 2765 Reddock Avenue

Feature Type: House

Construction Period: 1901-39

Construction Material: Unknown walling on textured concrete foundation

Description: Two storey structure with an asphalt hipped roof and a center dormer on the

second floor. The house is clad in synthetic siding. This sizeable early twentieth century house has an enclosed porch and a rear outbuilding. There are some

newer windows.

Architecture Type: Vernacular; Four-square

Integrity: Fair

Historical Associations: Township settlement

Other Comments: Mature trees dot the property.

During an archaeological assessment conducted to the rear of the house, a stone faced crossed was recovered. The association of this artifact to the property is

unknown.



Address: 2261 Spring Garden Road

Feature Type: House

Construction Period: 1901-39

Construction Material: Unknown walling on textured concrete foundation

Description: One storey bungalow with an asphalt hipped roof and synthetic siding. It has a

full length front porch, a central chimney stack and newer windows.

Architecture Type: Vernacular

Integrity: Good

Historical Associations: Early residential housing

Other Comments:



Address: 2310 Spring Garden Road

Feature Type: House

Construction Period: 1901-39

Construction Material: Asbestos covered frame walling with a textured concrete foundation

Description: One storey bungalow with an asphalt hipped roof with a centre dormer. The front

has large windows with shutters and there are newer aluminum windows to the

rear. There is also a newer concrete porch.

Architecture Type: Vernacular

Integrity: Good

Historical Associations: Early residential housing

Other Comments: There is a garage/shed in the rear. An oral history provided at a Public

Information Centre indicates that this house and 2290 Spring Garden Road (BHF

8) were originally built by two brothers.



Address: 2290 Spring Garden Road

Feature Type: House

Construction Period: 1929

Construction Material: Frame on textured concrete foundation

Description: One and one-half storey house with a sloping asphalt side gable roof held up by

three pillars. A large dormer provides a significant extension on the upper floor. The house is clad in synthetic siding and has newer windows. The front porch

has been rebuilt.

Architecture Type: Vernacular Arts and Crafts

Integrity: Very good

Historical Associations: Early residential housing

Other Comments: The property is treed.

An oral history provided at a Public Information Centre indicates that this house and 2310 Spring Garden Road (BHF 7) were originally built by two brothers.



Address: 2284 Spring Garden Road

Feature Type: House

Construction Period: 1901-39

Construction Material: Frame walling on textured concrete foundation

Description: One and one-half storey house with an asphalt side gable roof with a large

dormer. The house has six windows on the front, as well as a front addition. It is

clad in synthetic siding.

Architecture Type: Vernacular

Integrity: Good

Historical Associations: Early residential housing

Other Comments: The house is located on larger lot.



Address: 4784 Malden Road

Feature Type: House

Construction Period: Pre-1900

Construction Material: Frame walling on textured concrete foundation

Description: One storey house with an asphalt side gable roof and synthetic siding. There are

aluminum windows and a rear porch on a concrete block.

Architecture Type: Vernacular

Integrity: Fair. Considerably altered

Historical Associations: Township settlement

Other Comments: The house is set back from the road on a treed property. An oral history provided

at a Public Information Centre indicates that this house is the original Matchette

homestead.





Address: 4688 Malden Road

Feature Type: House

Construction Period: Pre-1900 with twentieth century alterations

Construction Material: Mixed stone and brick walling on unknown foundation

Description: One and one-half storey house with an asphalt side gable roof. There is a stone

chimney stack on the south elevation and a brick chimney stack on at the centre/rear of the house. There are decorative stone voussoirs over newer

windows.

Architecture Type: Vernacular

Integrity: Very good

Historical Associations: Township settlement

Other Comments: There is a rear outbuilding and stone gates.





Address: Ojibway Parkway at Sandwich Street

Feature Type: Monument

Construction Material: Stone walling and foundation

Comments: "The Capture of Detroit", erected by the Historic Sites and Monuments Board of

Canada. Text reads:

THE CAPTURE OF DETROIT LA PRISE DE DÉTROIT

Confident of victory, General Hull had invaded Canada in July 1812, but failed to take advantage of his early success and the demoralization of the defenders. Fear of the Indians then rallying to the British cause and an inability to maintain supply lines dictated Hull's withdrawal to Detroit. In a daring move on 16 August General Brock embarked his troops at McKee's Point, crossed the river and forced the surrender of the Americans. This important victory raised the spirits of the Canadians and ensured the continuing support of their Indian allies. [followed by the French translation]



Built Heritage Feature: BHF 13 **Address**: 261 Hill Street

Feature Type: House

Construction Period: 1901-39

Construction Material: Brick walling on textured concrete foundation

Description: One storey structure with an asphalt side gable roof. This arts and crafts

influenced house has wood windows of atypical shapes and wood frames with brick sills. The facing is comprised of irregular wood shingles. The front portion

of the house has a sloped roof.

Architecture Type: Vernacular

Integrity: Very good

Historical Associations: Early residential housing

Other Comments: Very decorative.



Address: 3769 Russell Street

Feature Type: House

Construction Period: Pre-1900

Construction Material: Wood frame on cinderblock foundation

Description: One and one-half storey structure with an asphalt side gable roof. A dormer

window projects from the upper floor. The house is clad with synthetic siding. It

is entirely altered with new windows, a new roof, and aluminum siding.

Architecture Type: Vernacular

Integrity: Fair. Much altered

Historical Associations: Township settlement

Other Comments: This much altered nineteenth century house sits on a rise above Russell Street.

The property has mature trees. Remnants of an older fence are visible. The current owner attended the Public Information Centre and indicated that his family had owned the house for quite some time.



Address: 325 Page Street (Brighton Beach)

Feature Type: House

Construction Period: 1901-39

Construction Material: Brick walling on textured concrete foundation

Description: One and one-storey house with an asphalt roof

Architecture Type: Vernacular

Integrity: Fair

Historical Associations: Early residential housing; Brighton Beach

Other Comments: This residence is one of three occupied houses in the Brighton Beach area.

There are mature trees on the property.





Address: 332 Healy Street (Brighton Beach)

Feature Type: House

Construction Period: 1901-39

Construction Material: Brick walling on unknown foundation

Description: Two storey structure with an asphalt hipped roof. A dormer projects from the

upper floor.

Architecture Type: Vernacular; Foursquare

Integrity: Fair

Historical Associations: Early residential housing; Brighton Beach

Other Comments: There are mature trees on the property.



Address: 354 Healy Street

Feature Type: House

Construction Period: Pre-1900

Construction Material: Unknown walling on unknown foundation

Description: One storey structure with an asphalt hipped roof and synthetic siding. The centre

chimney stack indicates an earlier date.

Architecture Type: Vernacular; Ontario cottage

Integrity: Poor. Much altered

Historical Associations: Township settlement

Other Comments: The property is used to store scrap metal.



Address: 2090 Spring Garden Road (moved from Sandwich West)

Feature Type: House

Construction Period: Pre-1900 (portions)

Construction Material: Wood frame with insulbrick siding.

Description: Two storey structure with a shallow pitched asphalt roof. This much altered

house has a pre-1900 structure at the core. The windows are newer aluminum

and a chimney has been added to the east elevation.

Architecture Type: Vernacular

Integrity: Poor. Much altered

Historical Associations: Not at original location. Unknown historic associations.

Other Comments:



Address: 2369 Spring Garden Road

Feature Type: House

Construction Period: Pre-1900

Construction Material: Likely frame, potentially log on an unknown foundation.

Description: One storey structure with a shallow pitched asphalt roof. This potentially early

structure has been much altered. It has a three-bay design with newer aluminum

windows and synthetic siding. A rear addition slopes in a salt-box design.

Architecture Type: Vernacular

Integrity: Poor. Much altered

Historical Associations: Township settlement

Other Comments: A neighbour who attended a Public Information Centre suggested that this house

may have an early log structure at its core and the design supports this idea. It

has been added to the inventory based on this report.



Address: 1649 Chappus Road

Feature Type: House

Construction Period: Pre-1900 (portion)

Construction Material: Unknown walling on unknown foundation

Description: One and a half storey structure with an asphalt roof. Newer aluminum windows.

Architecture Type: Vernacular

Integrity: Poor. Much altered

Historical Associations: Township settlement

Other Comments: A neighbour who attended a Public Information Centre suggested that this house

may have an early structure at its core. It has been added to the inventory based

on this report.

Mature trees on a landscaped property.



Cultural Landscape Unit: CLU 1

Address: Chappell Street and Russell Street

Landscape Feature Type: Tunnel

Description: Local history/lore suggests that a tunnel runs under this woodlot to an area

behind the now burned and demolished Lido Venice tavern at the corner of Chapell and Sandwich streets. This tunnel system associated with the Underground Railroad and/or prohibition remains unsubstantiated by existing

primary and secondary sources.





Cultural Landscape Unit: CLU 2

Address: Area bordered by Water Street to the west, Chappus to the north, Scotten to the

east and Broadway/Wright to the south

Landscape Feature Type: Brighton Beach subdivision

Description: This planned subdivision was laid out in the early twentieth century and a

community resided there until the area was cleared in the 1970s. Roads and driveways are evident in the landscapes. There are mature trees in the area.



Cultural Landscape Unit: CLU 3

Address: Sandwich (old town)

Landscape Feature Type: Historic settlement

Description: The original town of Sandwich retains a number of buildings of the pre-

confederation era that are of historical significance and/or which exemplify the Neo-classical and Georgian styles of architecture, which were in vogue during the first half of the nineteenth century. A number of designated heritage properties can be found along the following streets: Russell Street, Sandwich Street, Peter Street, Detroit Street, Mill Street, Brock Street, Chippewa Street, South Street,

Watkins Street and Prince Road.

APPENDIX E

EVALUATION OF THE PRACTICAL ALTERNATIVES WITHIN THE AREA OF CONTINUED ANALYSIS

Detroit River International Crossing Methodology for Cultural Heritage Ranking and Score

Regulatory Context:

- -- Ontario Heritage Act (2005)
- --Ontario Planning Act (2005)
- --Ontario Environmental Assessment Act (1990)

Information Sources:

- --Ontario Heritage Bridge Program (MCL and Ministry of Transportation)
- --Ontario Heritage Properties Database (MCL)
- --City of Windsor Archaeological Master Plan (WAMP): final draft dates to 2002 (note: this document has still not been approved by the City of Windsor)
- --GIS data
 - --layers from City of Windsor re: sites from Windsor Heritage Inventory
- --published and unpublished archaeological literature (e.g. license reports, publications, newspaper articles, etc.)
- -- Parks Canada, National Historic Sites of Canada
- --historical archives including primary and secondary resource material (see attached)

Baseline Conditions

- -- Built Heritage:
- 1) location of previously identified Heritage Features: GIS coordinates obtained from the City of Windsor or manually plotted
- --Cultural Landscapes: at this time, these resources are only considered within Built Heritage as they are reflected in the various Heritage Inventories for the study area provided by the City of Windsor, Ontario and Canada

Results of Inventory

Built Heritage:

- Heritage Features: these features were ranked as follows:
 - 1: National Historic sites; score as 100
 - 1: Heritage District; score as 100
 - 1: Heritage Bridge; score as 100
 - 2: Heritage Easements; score as 75
 - 2: Heritage Designation (Provincial); score as 75
 - 3: Windsor Heritage Inventory; score as 25

- 4: Field Review Siting; score as 25 (to be used after field review is completed during practical alternative stage)
- 4: Locally identified heritage resource; score as 25
- 4: Cultural Landscape; score as 25

Impact Evaluation: *displacement or disruption of built heritage features* within each study area (route segment, plaza or crossing) was evaluated based on the cumulative score of all heritage features mapped within it:

Scores of 100+ are considered to have High Impact and given a factor score of 1

Scores of 50-99 are considered to have Medium Impact and given a *factor score* of 2

Scores of 25-49 are considered to have Low Impact and given a factor score of 3

Score of 0 are considered to have No Impact and given a factor score of 4

A Cultural Heritage Factor Score for each study area (e.g. individual route segment, plaza or crossing, or combination of them) is calculated based on the (rounded off) average of the individual factor scores for Built Heritage Features, Archaeological Sites and Archaeological Site Potential.



ALT 1A to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
					Segments-Malden F	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		 b) Number of provincially designated properties disrupted 	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	atmospheric elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	0 (score of 4)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.9	3.7	4	4	4	4	3.9

ALT 1A to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
					Segments-Malden I	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	4 (score of 1)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	, and the second
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	2 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.6	3.7	4	4	4	4	3.9

ALT 1A Option 2 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	t Cultural Resources							
					Segments-Malden	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 1)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	0 (score of 4)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.8	3.7	4	4	4	4	3.9

ALT 1A Option 2 to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
					Segments-Malden Ro	ad to North Talbot Ro	d		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	4 (score of 1)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	atmospheric elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	2 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.6	3.7	4	4	4	4	3.9

ALT 1B to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
					Segments-Malden	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		 d) Number of municipally listed built heritage features displaced 	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	3
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	0 (score of 4)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Factor Score
	Average Factor Score		3.9	3.7	4	4	4	4	3.9

ALT 1B to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
				S	Segments-Malden Ro	ad to North Talbot Ro			
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	4 (score of 1)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		 b) Number of provincially designated properties disrupted 	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	atmospheric elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	2 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.6	3.7	4	4	4	4	3.9

ALT 1B Option 2 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
					Segments-Malden I	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.7	3.7	4	4	4	4	3.9

ALT 1B Option 2 to Plaza B and C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Factor: Protect Cultural Resources							
					Segments-Malden	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		 d) Number of municipally listed built heritage features displaced 	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	4 (score of 1)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	2 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.6	3.7	4	4	4	4	3.9

ALT 2A to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
					Segments-Malden	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	1-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.7	3.7	4	4	4	4	3.9

ALT 2A to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	: Cultural Resources							
					Segments-Malden F	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	atmospheric elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.7	3.7	4	4	4	4	3.9

ALT 2A Option 2 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	: Cultural Resources							
					Segments-Malden I	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	-
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.7	3.7	4	4	4	4	3.9

ALT 2A Option 2 to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
					Segments-Malden	Road to North Talbot	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	ooug.
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced			0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.7	3.7	4	4	4	4	3.9

ALT 2B to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources										
			Segments-Malden Road to North Talbot Rd									
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments			
			G-H	H-I	I-J	J-K	K-L	L-M				
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		 d) Number of municipally listed built heritage features displaced 	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		 f) Number of field review identified built heritage features displaced 	3 (score of 2)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of			
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric			
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.			
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score			
	Average Factor Score		3.7	3.7	4	4	4	4	3.9			

ALT 2B to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources							
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	atmospheric elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.7	3.7	4	4	4	4	3.9

ALT 2B Option 2 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Factor: Protect Cultural Resources							
					Segments-Malden I	Road to North Talbot I	Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	atmospheric elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.7	3.7	4	4	4	4	3.9

ALT 2B Option 2 to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources	Cultural Resources							
					Segments-Malden I	Road to North Talbot I	₹d		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		 d) Number of municipally listed built heritage features displaced 	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score		3.7	3.7	4	4	4	4	3.9

ALT 3 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect	Cultural Resources										
			Segments-Malden Road to North Talbot Rd									
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments			
			G-H	H-I	I-J	J-K	K-L	L-M				
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		f) Number of field review identified built heritage features displaced	2 (score of 2)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of			
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric			
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.			
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	3			
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		f) Number of field review identified built heritage features disrupted	4 (score of 1)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
	features		0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score			
	Average Factor Score			3.7	4	4	4	4	3.9			

ALT 3 to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	ALTERNATIVE Factor: Protect Cultural Resources											
			Segments-Malden Road to North Talbot Rd									
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments			
			G-H	H-I	I-J	J-K	K-L	L-M				
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		f) Number of field review identified built heritage features displaced	4 (score of 1)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of			
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or atmospheric			
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	elements that are not in keeping with the resources and/or their setting.			
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
		f) Number of field review identified built heritage features disrupted	2 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)				
	features		0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score			
	Average Factor Score			3.7	4	4	4	4	3.9			

Parkway to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pro	otect Cultural Resources							
					Segments-Malde	n Road to North Talb	ot Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE	Displacement of built heritage	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
FEATURES	features	b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	3 (score of 2)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	physical, visual, audible or
		 c) Number of features with heritage easements disrupted 	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	atmospheric elements that are not
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	in keeping with the resources and/or their setting.
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE	Displacement or disruption of built	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
UNITS	cultural landscape features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Factor Score			3.7	4	4	4	4	3.9

Р	arkway to Pla	aza B or C							
PRACTICAL ALTERNATIVE EVALUATION	Factor: Pro	otect Cultural Resources							
					Segm	ents-Malden Road t	to North Talbot Rd		
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE	Displacement of built heritage	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
FEATURES	features	b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features displaced	4 (score of 1)	4 (score of 1)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
		f) Number of field review identified built heritage features disrupted	2 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
CULTURAL LANDSCAPE	Displacement or disruption of built	a) Number of cultural landscapes displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	
UNITS	cultural landscape features	b) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	Total Average Factor Score
	Average Facto	or Score	3.6	3.7	4	4	4	4	3.9

PRACTICAL ALTERNATIVE	Factor: Protect	Cultural Resources													
EVALUATION	1 40.01. 1 10.001	Guitarur (1000ur000				Plaz	a Segm	ents-C	rossing	s to Ma	lden Rd				
				Pla	aza A			Plaza B		Plaz	a B1		Plaz	za C	
Performance	Criteria/Indicator	Measurement/Units	From Crossing A	From Crossing B	From Crossing C	From Crossing C	Fr	om Crossinç	j C	From Cr	ossing B		From Cr	ossing C	
Measure			A-G	B-G	C-G	C-E-G	C-E	E-F	F-G	B-F	F-G	C-D	D-E	E-F	F-G
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)			
		b) Number of provincially designated properties displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)
		c) Number of features with heritage easements displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)
		d) Number of municipally listed built heritage features displaced	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)			
		e) Number of locally identified built heritage features displaced	0 (score of 4)	0 (score of 4)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)
		f) Number of field review identified built heritage features displaced	1 (score of 3)	2 (score of 2)	1 (score of 3)	2 (score of 2)	3 (score of 2)	0 (score of 4)	0 (score of 4)	3 (score of 2)	0 (score of 4)	0 (score of 4)	2 (score of 2)	0 (score of 4)	0 (score of 4)
BUILT HERITAGE FEATURES	Disruption of built heritage features	 a) Number of national historic sites disrupted 	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)			
		b) Number of provincially designated properties disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)			
		c) Number of features with heritage easements disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)
		e) Number of locally identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	1 (score of 3)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)
		f) Number of field review identified built heritage features disrupted	3 (score of 2)	2 (score of 2)	2 (score of 2)	4 (score of 1)	2 (score of 2)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	2 (score of 2)	1 (score of 3)	0 (score of 4)	0 (score of 4)
CULTURAL LANDSCAPE UNITS	Displacement or disruption of cultural landscapes	a) Number of cultural landscapes displaced	1 (score of 3)	1 (score of 3)	2 (score of 2)	2 (score of 2)	2 (score of 2)	1 (score of 3)	0 (score of 4)	1 (score of 3)	0 (score of 4)	1 (score of 3)	1 (score of 3)	1 (score of 3)	0 (score of 4)
Olillo	шпазоарез	a) Number of cultural landscapes disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	0 (score of 4)	1 (score of 3)	0 (score of 4)	0 (score of 4)	0 (score of 4)			
	Average Factor Sc	ore	3.7	3.6	3.6	3.3	3.5	3.9	4	3.8	4	3.6	3.7	3.9	4
-	Total Average Factor	Score	3.7	3.6	3.6	3.3		3.8		3.	.9		3.	.8	

Plazas	Factor: Changes in Social Environment		PLA	ZAS		
Performance Measure	Criteria/Indicator	Measurement/Units	Plaza A	Plaza B	Plaza B1	Plaza C
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0 (score of 4)			
FEATURES		b) Number of provincially designated properties displaced	0 (score of 4)			
		c) Number of features with heritage easements displaced	0 (score of 4)			
		d) Number of municipally listed built heritage features displaced	0 (score of 4)			
		e) Number of locally identified built heritage features displaced	0 (score of 4)			
		f) Number of field review identified built heritage features displaced	1 (score of 3)	3 (score of 2)	3 (score of 2)	2 (score of 2)
BUILT HERITAGE FEATURES	Disruption of built heritage features	a) Number of national historic sites disrupted	0 (score of 4)			
FEATURES		b) Number of provincially designated properties disrupted	0 (score of 4)			
		c) Number of features with heritage easements disrupted	0 (score of 4)			
		d) Number of municipally listed built heritage features disrupted	0 (score of 4)			
		e) Number of locally identified built heritage features disrupted	0 (score of 4)			
		f) Number of field review identified built heritage features disrupted	0 (score of 4)	0 (score of 4)	0 (score of 4)	1 (score of 3)
CULTURAL LANDSCAPE UNITS	Displacement or disruption of cultural landscapes	a) Number of cultural landscapes displaced	0 (score of 4)	1 (score of 3)	1 (score of 3)	1 (score of 3)
UNITS		a) Number of cultural landscapes disrupted	0 (score of 4)			
	Average Factor So	cores	3.9	3.8	3.8	3.7