





**EXISTING CONDITION: 637 BROCK STREET**

Vacant Single Unit Residential Dwelling

**THE CORPORATION OF THE CITY OF WINDSOR  
POLICY**

Service Area:	<b>Commissioner of Finance</b>	Policy No.:	
Department:	<b>Financial Accounting</b>	Approval Date:	<b>July 22, 2024</b>
Division:	Financial Accounting & Reporting	Approved By:	<b>Janice Guthrie</b>
		Effective Date:	<b>January 1, 2023</b>
Subject:	<b>Asset Retirement Obligations</b>	Procedure Ref.:	
Review Date:	<b>January 1, 2029</b>	Pages:	Replaces: N/A.
Prepared By:	Stephen Cipkar		Date:

## **1. POLICY**

1.1. The Corporation of the City of Windsor will employ necessary and appropriate controls for the recording and reporting requirements of Asset Retirement Obligations (AROs) compliant with generally accepted accounting principles as outlined in the Public Sector Accounting Board (PSAB) 3280 standard (compliance required by legislation).

## **2. PURPOSE**

2.1. This policy will facilitate PSAB 3280 compliance in establishing criteria for:

- 2.1.1. The identification, valuation and write-downs of AROs.
- 2.1.2. The recording and reporting of AROs on the City's consolidated financial statements.
- 2.1.3. The monitoring of compliance to PS 3280 and other related corporate policies and procedures.

## **3. SCOPE**

3.1. This policy applies to all City of Windsor departments, Agencies, Board and Commissions (ABCs) funded by the City of Windsor, in whole or in part, or whose governing body contains City of Windsor representation AND whose transactions are accounted for within the City of Windsor's financial systems.

3.2. Exclusion:

- 3.2.1. ABCs that produce their own audited financial statements.

## **4. RESPONSIBILITY**

4.1. The **Mayor and Council** are responsible to:

- 4.1.1. Ensure, through administration, that policies and procedures are in place to provide for the recording and reporting of all City of Windsor AROs.

**4.2. The Chief Administrative Officer** or designate is responsible to:

- 4.2.1. Ensure compliance with this policy and all related ARO procedures that facilitate the recording and reporting of AROs.

**4.3. The City Treasurer** or designate is responsible for/to:

- 4.3.1. Compliance with PS 3280 reporting requirements for AROs.
- 4.3.2. Providing an acceptable accounting structure that supports the recording and reporting of AROs.
- 4.3.3. Providing communication, training and ongoing support on the use of this Policy and related procedures.
- 4.3.4. Direct the review of this Policy and related procedures or schedules at a minimum every five **(5)** years, or sooner if required, and recommend updates as necessary in consultation with the City's external auditors.

**4.4. The Manager of Financial Accounting** is responsible for/to:

- 4.4.1. Assessing current TCAs with an asset retirement obligation for completeness, accuracy and suitability for audit examination.
- 4.4.2. Assessing newly acquired or constructed TCAs to determine the existence of an asset retirement obligation according to the requirements of PS 3280.
- 4.4.3. Maintain the City's continuity schedule of AROs that are reported on the City's consolidated financial statements.
- 4.4.4. Liaise with the City's external auditors when required on the City's reported AROs.

## **5. GOVERNING RULES AND REGULATIONS**

**5.1. Definitions:**

**Asset Retirement Obligation (ARO):** A legal obligation associated with the retirement of a tangible capital asset (TCA). ARO activities may include decommissioning or dismantling of TCAs, remediation of TCA contamination, post-retirement activities, and constructing other TCAs to perform post-retirement activities. Examples of AROs include, but are not limited to:

- Asbestos
- Lead
- Landfills
- Closure and post-closure care, etc.

**Tangible Capital Asset (TCA):** A physical asset held for service delivery and administrative purposes within the city of Windsor (**See Tangible Capital Policy**).

## 5.2. Recognition

5.2.1. A TCA is considered within the scope of this policy if it meets the following criteria:

- 5.2.1.1. The asset is a TCA (See TCA Policy).
- 5.2.1.2. The City controls the asset, including leased TCAs.
- 5.2.1.3. A legal or contractual obligation exists for the city to perform retirement activities for the TCA.
- 5.2.1.4. The asset is in productive use or not in productive use.

5.2.2. A liability must be recognized when all the criteria below are present as at the financial reporting date:

- 5.2.2.1. There is a legal obligation to incur retirement costs related to an TCA.
- 5.2.2.2. The past transaction or event resulting in this obligation has already occurred.
- 5.2.2.3. It is expected that the City will have to give up future economic benefits.
- 5.2.2.4. A reasonable estimate of the amount can be made.

## 5.3. Legal Obligation

5.3.1. A legal obligation establishes a clear duty or responsibility to another party that the City must fulfill. An obligation can result from:

- 5.3.1.1. Agreements or contracts.
- 5.3.1.2. Legislation from higher level of government.
- 5.3.1.3. The City's own legislation.
- 5.3.1.4. A promise made to another party that could be legally enforced.

## 5.4. Exclusions

5.4.1. Certain retirement and disposal activities not directly attributable to fulfilling required and predictable costs are excluded from the cost of an ARO. These include:

- 5.4.1.1. Acquisition – original costs to acquire, construct or develop the related TCA.
- 5.4.1.2. Replacement – costs relating to routine replacement of TCAs. For example, infrastructure such as roads and bridges are typically

subject to maintenance rather than permanent removal from service due to a legal requirement.

- 5.4.1.3. Maintenance – Costs relating to routine maintenance of TCAs. These costs shall be expensed as incurred.
- 5.4.1.4. Remediation of contamination – Remediation of contamination that is not a predictable result of the normal use of the TCAs, such as contamination from accidents or spills. Contamination that is beyond the threshold set by environmental regulations is accounted for separately and not within the scope of this policy.
- 5.4.1.5. Catastrophic events – costs resulting from catastrophic events such as flooding or fires.
- 5.4.1.6. Repurposing – costs relating to the preparation of a TCA for an alternative use.
- 5.4.1.7. Clean up and by-products – costs related to clean up of waste or by-products produced by the TCAs normal use. These costs represent routine operations and are not associated with the retirement of the asset.
- 5.4.1.8. Improper use – costs caused by improper use of an asset.
- 5.4.1.9. Sale or disposal – costs to prepare a TCA for sale or disposal that arises from the plan to sell or dispose of the TCA rather than a legal or contractual requirement.

## 5.5. Measurement

5.5.1. The estimate of the ARO must include all costs directly attributable to required retirement activities as best estimated at the financial reporting date. The estimate should include:

- 5.5.1.1. Materials and equipment.
- 5.5.1.2. Payroll and benefits.
- 5.5.1.3. Directly attributable overhead costs.
- 5.5.1.4. Legal and professional fees.
- 5.5.1.5. Post-retirement operation, maintenance and monitoring required to fulfill the ARO.
- 5.5.1.6. Cost of new TCAs acquired solely for asset retirement activities. For example, as part of retiring a landfill, new water monitoring wells might be constructed.

5.5.2. Sources of cost information to estimate the ARO may include:

- 5.5.2.1. Third party proposals and quotes for the required activities.
- 5.5.2.2. External quotes and market data on costs of similar activities.
- 5.5.2.3. Historical costing information on similar activities completed by the City.

- 5.5.3. When the cash flows and timing required to fulfill the retirement obligation can be reasonably estimated, a present value technique shall be used to account for the obligation. The liability is discounted to its present value upon initial recognition and adjusted yearly for accretion expense.
- 5.5.4. When there is uncertainty about the amount or timing of cash flows to settle the ARO, the present value technique may not be used. Uncertainties about timing and amount to settle an ARO does not remove the obligation but will affect its measurement. Any such uncertainty must be identified and disclosed in the notes to the financial statements.
- 5.5.5. The ARO asset must be amortized in a systematic manner over the useful life of the TCA it relates to. The amortization of ARO assets for the City should be done in a manner consistent with the City's treatment of the TCA it relates to.

## **5.6. Re-measurement**

- 5.6.1. The estimate of the ARO should be based on the best available information on the financial reporting date.
- 5.6.2. Over time, as new information becomes available, estimates used to calculate the ARO are likely to change. Estimates (including the amount and timing of retirement costs and, if applicable, the discount rate used) must be reviewed every fiscal year and appropriately reflected in the financial statements.
- 5.6.3. Examples of new information that will impact the estimate include:
  - 5.6.3.1. Revisions to the useful life of the TCA (see TCA Policy).
  - 5.6.3.2. New information on the cost of the ARO activities.
  - 5.6.3.3. Changes in expectations of market inputs, such as discount and inflation rates.
  - 5.6.3.4. New, more cost-effective technologies.
  - 5.6.3.5. Changes to the legal requirements.
- 5.6.4. Accretion due to passage of time must be accounted for first, prior to applying any changes in estimates. Any change in estimate should be applied prospectively as a revision to the ARO liability, with a corresponding adjustment to the TCA asset if it is a recognized TCA in productive use.
- 5.6.5. When a TCA is no longer in productive use, all subsequent changes in the estimate of the related ARO liability should be recognized as an expense in the fiscal year it is incurred.

5.6.6. The liability for an ARO continues to be recognized until it is settled or otherwise extinguished.

5.6.7. On retirement of a TCA:

5.6.7.1. Asset retirement costs should be deducted from the ARO liability as the related cash flows are incurred.

5.6.7.2. If the actual cash flows are higher than the ARO liability recognized by the City, the excess cash flows should be expensed in the period incurred.

5.6.7.3. If the actual cash flows are less than the ARO liability recognized by the City, the excess liability should be offset by a prior year recovery.

5.6.8. Any changes to the ARO asset due to changes in estimate must be applied prospectively in the period of the change without any revision to amortization previously booked. The revised ARO asset is amortized over the remaining useful life of the related TCA.

## 5.7. Recoveries

5.7.1. If a portion of the asset retirement costs are recoverable by the City from another party, the recovery must be accounted for. The amount recovered will be accounted for as revenue in the fiscal year it is received.

5.7.2. A recovery related to ARO should be recognized when:

5.7.2.1. The recovery can be appropriately measured.

5.7.2.2. A reasonable estimate of the amount can be made.

5.7.2.3. It is expected that future economic benefits will be obtained.

5.7.3. A recovery shall not be netted against the liability.

5.7.4. The sale of an asset on retirement may qualify as a recovery if the criteria above for a recovery are met, however a plan to sell an asset in the future would not be sufficient to confirm that future economic benefits will be received or result in a reasonable measurement of the recovery.

## 6. RECORDS, FORMS AND ATTACHMENTS

6.1. Tangible Capital Assets Policy and related procedures.

# **APPENDIX 1**

**AMENDMENT NO. 179**

**TO THE OFFICIAL PLAN**

**CITY OF WINDSOR**

Part B (Details of the Amendment) contained in the following text of the  
City of Windsor Official Plan constitute  
Amendment No. 179

Also included, but not constituting part of the Amendment are: Part A  
(Basis); Part C (Implementation) and Appendix A (Results of Public  
Consultation).

June 12, 2024

This Official Plan Amendment contains the following Parts:

Part A: Basis

Part B: Details of the Amendment

Part C: Implementation

Appendix A: Results of Public Consultation

## **PART A: BASIS**

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### **1.0 PURPOSE**

The purpose of this amendment is to implement policies that will further enhance and expedite the development approval process. The policies in this amendment update the current Official Plan policies to clearly identify the information required when a planning application is submitted, define the process that will be completed by the applicants and the City and clarify the criteria that will be considered when making decisions on those applications.

### **2.0 LOCATION AND DESCRIPTION OF LANDS AFFECTED BY THE AMENDMENT**

The amendment affects all lands in the City of Windsor.

### **3.0 BACKGROUND**

This Amendment is the third and final phase of work undertaken by the City of Windsor in an effort to streamline development approvals to expedite the development approval process. The works have been undertaken to respond to legislative changes contained in Provincial Bills 108, 109 and 185.

Phase 1 of the project resulted in Official Plan and Zoning By-law amendments that designated lands and pre-zoned lands to remove the requirement for Official Plan Amendments and Zoning By-law Amendments in specified parts of the City to provide great opportunities for mixed-use development in higher intensity built forms. Phase 2 of the project provided recommendations regarding the development process for planning applications in the City in an effort to reduce timelines between an application being deemed complete and a decision of City Council.

Phase 3 of the streamlining project, and the subject of this OPA, focuses on changes that will provide greater clarity and guidance to applicants regarding the City's requirements in the development approval process. In addition, the Amendments will provide enabling policies that will provide City staff and Committees opportunities to expedite development approvals by providing greater flexibility in the approval process. Finally, the amendments are intended to reduce uncertainty for the development industry and residents and to encourage investment in the City. The proposed Amendments would revise the current Official Plan policies regarding:

- Committee of Adjustment;
- Consent;
- Part Lot Control
- Non-Conforming Uses;
- Minor Rezoning;
- Supporting Studies and Guidelines;
- Alternate Notice; and
- Site Plan Control.

## **PART B: DETAILS OF THE AMENDMENT**

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Volume 1 of the Official Plan for the City of Windsor is hereby amended as follows:

- 1. Section 10.2, Supporting Studies and Information is hereby deleted and replaced with the following:**

### **10.2 Development Applications**

The following policies describe how development applications will be submitted, reviewed and processed.

CONSULTATION	10.2.1	Formal consultation with the City and relevant commenting agencies shall be permitted prior to the submission of any development application required under the Planning Act. The objective of consultation shall be to inform an applicant of the approval process, including the City's requirements for supporting information and material to be submitted as part of a complete application.
PURPOSE	10.2.2	The purpose of the consultation will be to review a draft development proposal for the lands affected and identify the need for, and the scope of Supporting Technical Studies and other information and materials considered necessary by the City and other affected agencies to allow for a comprehensive assessment of the development application(s).
CONSULTATION STAGES	10.2.3	Consultation shall involve two stages:  a) <i>Stage 1</i> - Identifying a preliminary list of required Supporting Technical Studies, plans, other information and material to be submitted with a complete application, including fees or approvals from other agencies as may be required. As part of this stage, the applicant will also be advised if a proposed development is identified as being "viable". The term "viable"

will be used to help the applicant to decide if they wish to proceed to Stage 2 of the application process or if they might also consider revising their proposal;

- b) *Stage 2* - The applicant will submit an application with fees together with copies of all Supporting Technical Studies identified as being required in Stage 1. All studies will be reviewed by Administrative Departments and local agencies. If a peer review is required, it will be completed at the expense of the applicant.

REQUIRED INFORMATION	10.2.4	<p>The applicant shall initiate the consultation process by completing and submitting a Planning Consultation Stage 1 application that includes:</p> <ul style="list-style-type: none"><li>a) Mapping that identifies the location of the Subject Site and surrounding context;</li><li>b) A description of the existing Official Plan designation and Zoning affecting the Subject Site; and</li><li>c) A preliminary description of the proposed development concept, including, where applicable, a description of the proposed Official Plan and/or Zoning amendments to be requested.</li></ul>
EXEMPTIONS	10.2.5	<p>The City may forgo consultation, where the City has identified that due to the nature of the proposal, the need for and scope of required information and materials can be determined without formal Stage 1 and/or Stage 2 consultation.</p>

INCOMPLETE APPLICATIONS	10.2.6	Development applications submitted to the City prior to completion of the Stage 1 and Stage 2 consultation without the necessary supporting information and materials may be deemed as incomplete and returned to the applicant.
COMPLETE APPLICATION REQUIREMENTS	10.2.7	The City shall determine if the information and materials necessary for submission with the application based on the nature of the proposal and generally in accordance with the list of Supporting Technical Studies identified in this Plan.
TECHNICAL STUDIES REQUIRED	10.2.8	Any or all of the Supporting Technical Studies identified in this Plan may be requested from applicants to ensure that all relevant and required information pertaining to a development application is available at the time of submission, or, if subsequently deemed necessary, prior to a prescribed public meeting.
STUDY PURPOSE	10.2.9	<p>It is the intent of the Supporting Technical Studies to enable the City to make informed decisions within the time periods set out in the Planning Act. The City may require provision of Supporting Technical Studies at its sole discretion as part of a complete application, at any time during the processing of an application under the Planning Act: including but not limited to those Studies listed below:</p> <p>a) <i>Planning Rationale Report</i> - The purpose of the Planning Rationale Report is to provide a framework for an applicant seeking development approval to explain salient details of the application and provide supporting land use planning reasons and opinions why the proposal should be considered and approved. This document is also intended to assist staff with their review and processing responsibilities;</p>

- b) *Urban Design Study* - The purpose of an Urban Design Study is to provide direction for the protection and enhancement of the character of a planning district, neighbourhood, corridor or any other identified area, and the thoughtful implementation of good urban design principles based on an assessment of the characteristics and opportunities of the surrounding community;
- c) *Built Heritage Impact Study* - The purpose of a Heritage Impact Study is to identify and evaluate cultural heritage resources and determine if any heritage resources, including listed or designated heritage resources, are impacted by development proposals and the potential need for mitigation measures;
- d) *Archaeological Assessment* - The purpose of an Archaeological Assessment is to ensure archaeological resources on site are evaluated, documented and mitigated prior to land disturbance/site development;
- e) *Block Plan* - The purpose of a Block Plan is to provide comprehensive and specific direction for areas where the existing land use designations are appropriate but more detailed guidance is required for areas experiencing transition or development pressures in order to optimize development potential and infrastructure;
- f) *Environmental Impact Study* - The purpose of an Environmental Impact Study is to demonstrate that a proposed development or infrastructure undertaking may proceed with consideration to species at risk, lands designated or adjacent to Natural Heritage, Environmental Policy Area A or B and/or Candidate Natural Heritage Site without causing negative impact on the feature or its associated ecological functions;
- g) *Watershed/Subwatershed Plan* - The purpose of a Watershed/Subwatershed Plan is to inventory,

assess and present information about water resources and related features and how they should be protected and enhanced to ensure the long-term health of the ecosystem as land uses changes on the basis of an entire watershed, or subwatershed;

- h) *Stormwater Management Report* - The purpose of a Stormwater Management Report is to identify measures required to control the quantity, quality and runoff flowrate associated with the development of a specific area;
- i) *Functional Servicing Study* - The purpose of a Functional Servicing Study is to determine how an area proposed for development will be serviced taking into consideration the future sanitary, water and storm sewer servicing needs.;
- j) *Transportation Impact Study and/or Transportation Impact Statement* - The purpose of these studies is to identify the transportation network improvements and on-site design elements necessary to accommodate additional vehicle, cyclist, pedestrian and transit traffic and parking the proposed development will generate and ensure its impact on adjacent land uses is safe and acceptable;
- k) *Noise and/or Vibration Study* - The purpose of a Noise and/or Vibration Study is to demonstrate that a proposed development may proceed in such a manner that the sensitive land uses are protected from unacceptable levels of noise and vibration associated with uses such as industrial operations, public highways, rail corridors and yards, and airports;
- l) *Tree Inventory and Preservation Study* - The purpose of a Tree Inventory and Preservation Study is to investigate and inventory existing

trees and vegetation within and adjacent to development and determine how protection and enhancement can coincide with proposed development;

- m) *Lighting Study* - The purpose of a Lighting Study is to evaluate the intensity and impact of light pollution generated by development, the potential impacts on residential property and wildlife, and to ensure visibility, safety and mitigation;
- n) *Climate Change and Energy Studies* - The purpose of a study regarding Climate Change or Energy is to evaluate how the proposed development could alter the climate by impacting: wind; shadow and sunlight penetration; urban heat island effects (extreme heat); flooding and to determine the appropriate design measures to reduce the impacts of climate change and mitigate the contribution of greenhouse gas emission;
- o) *Financial Impact Study* – The purpose of a Financial Impact Study is to evaluate the growth-related financial impact of proposed development, including impacts to the City's capital and operating budgets triggered by the proposed development. It is also used to estimate the cost and timing of local municipal capital infrastructure required to service the new development; and
- p) *Other Studies of Relevance* – recognizing that many applications are unique, the City reserves the ability to ask for any other special studies, reports or plans that may be required to effectively evaluate any development proposal.

TERMS OF  
REFERENCE

10.2.10

The City has prepared terms of reference for a number of the Supporting Technical Studies to provide information on the scope of work required in

order to assist in the preparation and review of these studies.

STUDY SCOPE	10.2.11	Supporting Technical Studies may vary in scope, depending on the size, nature and intent of the proposal and the level of impact on the adjacent land use. Proponents of all development applications shall be advised by the City of the required study contents during the Stage 1 consultation process.
APPLICATION DEEMED TO BE COMPLETE	10.2.12	<p>Where the need for one or more Supporting Technical Studies has been identified, the application shall only be deemed to be complete when the required Supporting Technical Studies are prepared and submitted subject to the following requirements:</p> <ul style="list-style-type: none"><li>a) Shall be prepared to the satisfaction of the City and, where appropriate, in consultation with relevant public agencies and affected parties;</li><li>b) Shall be prepared in accordance with the policies of this Plan and any relevant federal and provincial legislation, policies and appropriate guidelines;</li><li>c) Shall be prepared by an appropriately accredited qualified professional retained by, and at the sole expense of the applicant;</li><li>d) May be subject to a peer review where the City:<ul style="list-style-type: none"><li>i. Lacks the appropriate expertise and/or internal resources to review such Supporting Technical Studies; and/or</li></ul></li></ul>

ii. Is not satisfied with the extent and quality of the work submitted by the applicant.

e) Such peer review shall be completed by an appropriate agency or professional consultant retained by the City, at the applicant's expense;

f) Where a peer review is requested by the City, the application may not be deemed complete until:

i. The peer review study has been submitted to the City, and the City is fully satisfied with the extent and quality of the work, including any requirements for additional or supplementary work identified through the peer review process; and

ii. The City has been fully reimbursed by the applicant for the cost of the peer review study.

ASSESSING MERITS

10.2.13

To augment the policies in this Plan, the City may develop performance checklists or indices to assist with evaluating the merits of development applications in the context of the policies in this Plan addressing such matters as, but not limited to; healthy development, sustainability, climate change resiliency, green development and urban design.

CONDITIONS OF APPROVAL

10.2.14

All relevant mitigation recommendations included in a Supporting Technical Study shall be included as conditions of approval to be implemented by the proponent of a development.

PUBLIC  
INFORMATION

10.2.15

Council shall ensure that information and material provided by a person or public body that has submitted a complete application for development approval shall be available to the public for review once the application has been deemed complete.

COMPLETE  
APPLICATION

10.2.16

For any planning applications to be deemed complete, the following mandatory items shall be submitted to the City:

- a) Application Form;
- b) Explanatory Letter;
- c) Proof of Ownership or Completed Offer of Purchase;
- d) Plan of Survey;
- e) Materials required by the Planning Act or any other relevant legislation/regulation;
- f) Supporting Technical Studies as required by the City and applicable agencies;
- g) Required Fees and deposits, including a signed contingency deposit agreement where applicable;
- h) Lands for parkland dedication, if applicable, have been identified;

- i) All confirmations, clearances, permits, peer reviews, materials and information required during the Stage 1 and Stage 2 planning consultation have been submitted and considered to be satisfactory by the City;
- j) The required Development Application sign has been posted on the subject property; and
- k) If an Open House is required as part of the Stage 1 planning consultation, a record of the Open House is provided to the City.

INCOMPLETE APPLICATIONS	10.2.17	Incomplete applications submitted to the City will not be accepted and shall be returned to the applicant. The City may deem an application to be incomplete and refuse all information, supporting documents and materials, submitted as part of the application(s) if it considers the quality of the submission unsatisfactory.
NOTICE OF COMPLETE APPLICATION	10.2.18	Notification of an application deemed to be complete shall be given to the applicant, the public and all other parties by the Municipality in accordance with the Planning Act.

**2. Chapter 10, Tools is hereby amended by deleting section 10.6, Public Participation and replacing it with the following:**

**10.6 Public Participation**

Individuals and organizations must be made aware of various development and related infrastructure proposals and be given the opportunity to express their views on such matters. The following public participation policies are intended to ensure

public access to relevant information, provide opportunities for public involvement well in advance of decision formulation.

PUBLIC ENGAGEMENT	10.6.1	The opinions and advice of the public will be sought as a part of the decision-making process. The community engagement process will be transparent, accessible and inclusive.
PUBLIC NOTIFICATION	10.6.2	The City will ensure the public is notified on development applications in accordance with relevant provincial legislation and municipal policies. Where persons, groups or corporations regularly communicate with the City through email, the City may use email rather than postal mail. The City will adopt standards for posting of development application signs to be placed on properties where development applications have been proposed.
PUBLIC INFORMATION	10.6.3	The City will provide interested parties affected by a development proposal with the information necessary to understand the nature of the proposal. In addition to providing hard copies of documents in the Planning Department, the City will ensure that digital copies of documents area available on the City's website.
TIMING OF NOTICES	10.6.4	Within 15 days after an affirmative notice of acceptance of a complete application is provided for applications made under the Planning Act requiring public notice, the City will provide a Notice of Application to the persons and public bodies prescribed under the Planning Act, and make the required information and material available to the public.
LARGE SCALE APPLICATIONS	10.6.5	Council may consider using a variety of public participation techniques for development proposals issues having a broad scope such as Secondary Plans, Official Plan Amendments and large subdivisions including, but not limited to, open houses, public displays, area meetings, newspaper notices, signage, internet-based tools, city website and social media.

OPEN HOUSE

10.6.6

The applicant may be required to host an open house as part of the Stage 2 planning consultation process and produce an Open House Report summarizing the results of the open house. The purpose of the open house is to provide opportunity for consultation by the applicant with the area residents/property owners who may be impacted by the proposal before the application is deemed to be complete. The required open house:

- a) Will be hosted by the applicant and will be provided at the applicant's expense. The City will provide mailing labels;
- b) Should be held at a location that is accessible to the public and may be accessed by walking, bicycling and public transit and should be located within 1km of the Subject Site, when practical. The location should be in a structure that meets or exceeds the requirements of the Accessibility for Ontarians with Disabilities Act. In addition, virtual attendance shall be enabled;
- c) Should be comprised of the following components:
  - i. Notice to the area residents/property owners and Ward Councillor which contains sufficient information as determined by the City Planner;
  - ii. Attendance of assigned municipal staff as determined by the City Planner. The assigned Planner will be responsible for notifying staff;
  - iii. Display boards which provide the primary details of the application together with sufficient information as determined by the City Planner;
  - iv. Copies of any reports or studies that have been prepared as part of the application; and
  - v. The availability of the applicant or the applicant's agent to answer any questions that the public may have about the application.

- d) The required Open House Report shall be comprised of:
  - i. A summary of the results of the open house including issues raised and responses provided;
  - ii. A copy of the Notice provided;
  - iii. A copy of any presentation(s) and graphics;
  - iv. A copy of written questions from the public and written responses to these questions by the applicant; and
  - v. A copy of the attendee sign-in sheet and list of persons who attended virtually.

ENGAGEMENT WITH FIRST NATIONS      10.6.7      Engagement with First Nations will take place as part of a development application or detailed planning study. Engagement will be the responsibility of the proponent in consultation with the City and at the cost of the applicant.

NO NOTICE REQUIRED      10.6.8      City Council may delegate authority to the City Planner to forego public notification as prescribed under the Planning Act to allow for changes of a minor nature to correct a technical error or omission contained in an Official Plan Amendment or Zoning By-law Amendment to change punctuation or format, or correct clerical, grammatical, mapping, or typographical errors; and to insert footnotes or similar annotations to indicate the origin and approval of each provision.

**3. Subsection 11.4.3, Consents, is hereby deleted and replaced with the following:**

**11.4.3      Consent Policies**

COMMITTEE OF ADJUSTMENT      11.4.3.1      Council has delegated by by-law the authority to grant consents to the Committee of Adjustment.

APPROPRIATE REASONS FOR CONSENTS	11.4.3.2	<p>Without limiting the relevant provisions of the Planning Act, Consents may only be granted where completing a subdivision process is deemed not to be necessary to ensure the proper and orderly development of the subject lands. The consent process will be used for matters such as granting easements and rights of way, leases or other interests in land lasting in excess of 21 years or lot line adjustments. Consents may be used for lot creation in the following circumstances;</p> <ul style="list-style-type: none"> <li>a) Small scale Infilling or intensification for development that is compatible with the neighbourhood;</li> <li>b) Lot line adjustments;</li> <li>c) An entire parcel is being developed and there are no remaining lands;</li> <li>d) There is no need to extend or improve municipal services outside of the subject lands;</li> <li>e) Where there is no phasing of the development; and</li> <li>f) Where parkland dedication may be cash-in-lieu.</li> </ul>
CONFORM WITH PERMITTED USES	11.4.3.3	Consents shall only be granted for the creation of lots which comply with the Official Plan and Zoning By-law.
ACCESS TO A PUBLIC HIGHWAY	11.4.3.4	Consents shall only be granted for lots that will have access to a public road that meets municipal standards for construction. Where the abutting road requires improvement, the City may require the land owner to contribute to the improvement costs.
MUNICIPAL SERVICES	11.4.3.5	All new lots created by consent shall be serviced by municipal sanitary sewer and water services and provide for stormwater management.

EVALUATION CRITERIA	11.4.3.6	<p>Without limiting the relevant provisions of the Planning Act, the approval authority shall evaluate applications for consent in the same manner as an application for plan of subdivision, including;</p> <ul style="list-style-type: none"> <li>a) Provincial legislation, provincial policies and applicable provincial guidelines;</li> <li>b) Conformity with the policies of this Plan, Volume II: Secondary Plans and Special Policy Areas and other relevant municipal standards and guidelines;</li> <li>c) Conformity with the recommendations of any support studies prepared as part of the application;</li> <li>d) The continuation of an orderly development pattern and the lot pattern in the neighbourhood;</li> <li>e) Impact of the development on adjacent properties and the lot pattern and density in the community; and</li> <li>f) The requirements or comments of Municipal departments and public agencies or authorities.</li> </ul>
CONDITIONS OF APPROVAL	11.4.3.8	<p>The approval authority may attach such conditions as it deems appropriate to the approval of a consent. Such conditions may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>a) The fulfillment of any financial requirement to the City;</li> <li>b) The conveyance of lands for public open space purposes or payments-in-lieu thereof in accordance with the Open Space policies of this Plan;</li> <li>c) The conveyance of lands for public highways or widenings as may be required;</li> <li>d) The conveyance of appropriate easements;</li> </ul>

- e) The provision of municipal infrastructure or other services;
- f) The completion of a development or servicing agreement with the City if required; and
- g) Other such matters as the approval authority considers necessary and/or appropriate.

**4. Subsection 11.4.4, Part Lot Control, is hereby deleted and replaced with the following:**

<b>11.4.4 Part Lot Control Policies</b>	
<i>PART LOT CONTROL BY-LAWS</i>	<p>11.4.4.1 Council may pass by-laws to exempt all or parts of registered plans of subdivision from part lot control to permit further subdivision in accordance with the <i>Planning Act</i>, and in conformity with the Zoning By-law.</p>
AMENDING BY-LAW	<p>11.4.4.2 Part lot control by-laws may be subsequently repealed, amended or limited to a period of not more than 5 years by Council.</p>
<i>AREAS FOR PART LOT CONTROL</i>	<p>11.4.4.3 Council will generally limit the use of part lot control by-laws to the following:</p> <ul style="list-style-type: none"> <li>a) The splitting of lots upon which semi-detached dwellings or street row housing is intended to be built;</li> <li>b) The resubdivision of older registered plans of subdivision where no new rights-of-ways are to be created. and</li> <li>c) The division of blocks within an approved plan of subdivision where the subdivision agreement anticipates that the final lot pattern will be established through the part lot control process.</li> </ul>

**5. Subsection 11.6.3, Zoning By-law Amendment Policies, is hereby amended by adding the following:**

DELEGATION OF AUTHORITY	<p>11.6.3.4 Council may pass a By-law under Section 39.2 of the Planning Act to delegate the authority to make zoning amendments to:</p> <ul style="list-style-type: none"> <li>a) Remove an 'H' Holding Symbol; or</li> <li>b) Extend a Temporary Use; or</li> </ul>
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- c) Allow for amendments to the Zoning By-law that are minor in nature under the following conditions:
  - i. making technical amendments or to correct errors in text or mapping;

**6. Subsection 11.6.6, Minor Variance Policies, is hereby deleted and replaced with the following:**

<i>COMMITTEE OF ADJUSTMENT</i>	11.6.6.1	Council has appointed a Committee of Adjustment pursuant to the Planning Act to consider applications for minor variance from the Zoning By-law(s) and/or any other By-laws that implements the Official Plan.
<i>EVALUATION CRITERIA</i>	11.6.6.2	<p>When reviewing an application for minor variance the Committee of Adjustment shall be satisfied that:</p> <ul style="list-style-type: none"> <li>a) The general intent and purpose of the Official Plan, including the Strategic Directions, Goals and Objectives of the land use designation in which the property is located, is maintained;</li> <li>b) The general intent and purpose of the By-law being varied is maintained;</li> <li>c) The variance or the number of variances to the By-law are minor in nature, would not more appropriately be considered through an application to amend the Zoning By-law due to the cumulative impacts of the variances, preserves the pattern, scale and character of the blockface;</li> <li>d) The variance(s) are generally not more than 20 percent above the By-law regulation being varied where the variances would increase the building envelope of a main building or accessory building containing a dwelling unit. For clarity this includes variances related to lot width; lot area; lot coverage;</li> </ul>

front, rear, and side yard depth; building height; and maximum gross floor area; and

- e) The variance is desirable for the appropriate use of the land, building or structure and would not hinder the reasonable development and/or use of properties in the neighbourhood, would not cause a detriment, safety concerns, or would not detract from the character or amenity of nearby properties or the neighbourhood. The area of influence or the neighbourhood will vary with the scale of development and associated areas of potential impact.

<i>EXISTING UNDERSIZED LOTS</i>	11.6.6.3	Notwithstanding the provisions of sub-section (d) above, the Committee may give further consideration to variances required to enable appropriate development for existing undersized lots, where existing non-complying structures are being altered or where infilling and intensification is occurring provided that the Committee is satisfied that the provisions of 11.6.6.2 subsections (c) and (e) have been fully addressed.
<i>TERMS &amp; CONDITIONS</i>	11.6.6.4	<p>The Committee of Adjustment may attach such terms and conditions as it deems reasonable and appropriate to the approval of the application for a minor variance. The conditions shall relate directly to the impact of the variance and may include measures required to mitigate the impact of altering the zoning regulations on the resulting built form or property development, including but not limited to:</p> <ul style="list-style-type: none"><li>a) Specifying architectural elements such as window location, outdoor amenity space, fencing or other screening and door location;</li><li>b) Requiring additional landscaping including low impact design elements;</li><li>c) Providing additional bicycle facilities in lieu of motor vehicle parking; and</li><li>d) Improvement to grading and stormwater management.</li></ul>

*AGREEMENTS* 11.6.6.5 The Committee of Adjustment may require the owner of the land to enter into one or more agreements with the Municipality and address the impacts of the variance dealing with some or all of the terms and conditions of its decision. An agreement may be registered against the land to which it applies, and the Municipality is entitled to enforce the agreement against the owner and, subject to the Registry Act and the Land Titles Act, against any and all subsequent owners of the land.

**7. Section 11.7, Site Plan Control, is hereby amended by deleting the section and replacing it with the following:**

**11.7 Site Plan Control**

Site Plan Control may be used to regulate the design of a development in accordance with the provisions of the *Planning Act*.

*OBJECTIVE* 11.7.1.1 Site Plan Control will be used by the City as a means of achieving well-designed, functional, accessible, safe, sustainable built form and public space. Site Plan Control, including reference to Section 41 of the Planning Act, is one of the key tools for implementing the City’s policies on urban design in accordance with this Plan, policies and guidelines within Council adopted Secondary Plans, Community Improvement Plans and the Urban Design Guidelines.

*SITE PLAN CONTROL BY-LAW* 11.7.1.2 The City will establish by By-law, a Site Plan Approval Area which encompasses all of the lands within the boundaries of the City and is applicable to all forms of development, with the specific exemption of new residential development that includes 10 dwelling units or less. The By-law shall also reference any provincial regulations concerning the timeline for the lapsing of approved site plans.

Notwithstanding that specific exemption, the City may apply Site Plan Control to all forms of development,

including residential developments that contain 10 dwelling units or less, where the development site is within 120 metres of a shoreline or 300 metres of a railway line.

**EXEMPTIONS**    11.7.1.3    Within the Site Plan Control By-law, the City may exempt some forms of development which would otherwise be subject to Site Plan Control where it considers such approval to be unnecessary due to the type or scale of development proposed.

**SITE PLAN REQUIREMENTS**    11.7.1.4    The City may require Site Plan Control:

- a)    As a condition of a subdivision/condominium approval or any other type of development approval;
- b)    As a condition of a decision of the Committee of Adjustment; and
- c)    Prior to the issuance of a demolition permit(s) for properties designated under the Ontario Heritage Act, and for those properties that the City has identified as having significant heritage attributes.

## **PART C: IMPLEMENTATION**

Official Plan Amendment 179 will be implemented by making the referenced changes to the text of the City of Windsor Official Plan and Council passing of the required delegation of authority by-laws. No amendments to the schedules of the Official Plan are necessary.

## **Appendix A (Results of Public Consultation)**

*(Minutes of the statutory public meeting required under the Planning Act will be included here following the meetings of the Development & Heritage Standing Committee and Windsor City Council).*

## APPENDIX 2:

### Terms of Reference – Planning Application Technical Studies

Where the City requires technical studies to be submitted in conjunction with a planning application, the Terms of Reference for the required studies shall be based on the following guidelines. The City may scope the scale of the study in terms of the study area, the duration of the study and the reporting requirements in a manner that reflects the scale and/or complexity of the development. These guidelines are not part of the Official Plan and may be amended from time to time to reflect changing conditions and circumstances.

### Planning Rationale Report

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#### ***Purpose:***

*The purpose of the Planning Rationale Report is to provide a framework for an applicant seeking development approval to explain salient details of the application and provide supporting reasons why the proposal should be considered and approved. This document is also intended to assist staff with their review and processing responsibilities.*

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Where a Planning Rationale Report is required, such a study should:

1. Provide a clear description of the proposal together with any appendices, maps or plans that help to provide the context of the location and approvals required;
2. Include a conceptual plan for the development including items such as building design and orientation, landscaping, streetscaping, access locations, pedestrian and vehicular circulation, and development statistics including height, density, proposed setbacks, parking (existing, required, and proposed), and any potential phasing plans;
3. Describe the site's previous development approval history;
4. Describe major physical features or attributes of the site including current land uses(s) and surrounding land uses, built form and contextual considerations together with maps and appendices which assist with context;
5. Provide a professional opinion on:
  - i. How the proposal addresses the relevant requirements of the Planning Act, and how the proposal is consistent with the Provincial Policy Statement;
  - ii. Compliance with relevant Official Plan policies, including both general policies and site-specific land use designations and policies;
  - iii. How the proposal addresses the Community Strategic Plan and/or any applicable City adopted Design Guidelines;

- iv. The suitability of the site and indicate reasons why the proposal is appropriate for this site and will function well to meet the needs of the intended future users;
  - v. Compliance and/or non-compliance with the Zoning By-law.
6. Provide an analysis of the compatibility of the design and massing of the proposed developments and land use designations on properties in the vicinity;
  7. Provide a summary of the questions, concerns and/or comments raised at any Open House, together with a response that sufficiently addresses each item raised;
  7. Provide an analysis and professional opinion as to why the proposal represents good planning, including the details of any methods that are used to mitigate potential undue, adverse impacts;
  12. Provide a summary on the policy and planning analysis, including a summary of recommendations from other supporting studies required as part of the complete application, and how they have informed the Planning Justification Report;
  14. Provide a comprehensive professional planning conclusion demonstrating how a proposal conforms to applicable planning policy documents and good planning principles; and
  15. Where modifications to the Official Plan and/or zoning by-law provisions are proposed, a draft Amendment and detailed concept plan shall be provided applying all applicable policy and zoning regulations;

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### **Qualifications:**

*A Planning Rationale Report must be completed by a Registered Professional Planner (RPP), registered with the Ontario Professional Planners Institute (OPPI), to the satisfaction of the City Planner.*

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# Urban Design Study

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## **Purpose:**

*The purpose of an Urban Design Study is to provide direction for the protection and enhancement of the character of a planning district, neighbourhood, corridor or any other identified area, and the thoughtful implementation of good urban design principles based on an assessment of the characteristics and opportunities of the surrounding community.*

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Where an Urban Design Study is required, such a study should:

- Define the surrounding community, or the area of impact of the proposed development (study area), based on the scale of the proposed development;
- Document the character of the surrounding community on a street and block pattern (both sides) basis showing the size, orientation and lotting of each block;
- Identify the existing urban design elements, such as built form, massing, setbacks, rooflines, street cross sections, landscape quality and architectural styles/details, which contribute to the character of the surrounding community and to its physical form and development pattern;
- Provide an analysis of the design rationale for the building, landscape, and site design elements of the proposed development and explain why the proposed development represents the optimum design solution and is compatible with the surrounding community. The analysis should consider the following:
  - i. How the design of the proposed development is consistent with the City's applicable Design Guidelines and is in conformity with any relevant design policies;
  - ii. How the design addresses existing site conditions and constraints such as lot size, grading, and/or natural heritage features;
  - iii. How the design of the proposed development integrates with the existing surrounding community and enhances its character and function without causing any undue, adverse impacts on adjacent properties;
  - iv. How the design of the proposed development will influence and integrate with future development in the surrounding community;
- The Urban Design Study should include a written description, three dimensional plans, elevations, diagrams, and/or photographs to illustrate the design choices of the proposed development. Depending on the scale and complexity of the development proposal, explain how the following design considerations have been addressed:
  - i. Street and block pattern (e.g., connectivity, pedestrian access);
  - ii. Lot sizes;
  - iii. Building orientation and site layout;
  - iv. Built form, height scale, and massing;

- v. Building articulation and detailing;
- vi. Building materials;
- vii. Setbacks from adjacent properties and the street;
- viii. Building step back (if applicable);
- ix. Building transition to adjacent communities;
- x. Heritage considerations (if applicable);
- xi. Location of parking (surface or underground), driveways, ramps, drop-off areas;
- xii. Access to transit;
- xiii. Bicycle parking/storage;
- xiv. Location of servicing, garbage, organics, and recycling storage and collection, and loading areas;
- xv. Streetscape elements (e.g, boulevard design, landscaping, street furniture, public art, signage, lighting, etc.);
- xvi. On-site landscaping and buffering; and
- xvii. The mitigation of undue, adverse impacts on adjacent properties.

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***Qualifications:***

*An Urban Design Study or Brief must be completed by a Registered Professional Planner in the Province of Ontario, and/or an Architect who is a full member of the Ontario Association of Architects, and/or Landscape Architect who is a full member of the Ontario Association of Landscape Architects. All of the identified professionals shall have a demonstrated expertise in urban design, to the satisfaction of the City.*

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# Heritage Impact Study

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## **Purpose:**

*The purpose of a Heritage Impact Study is to identify and evaluate cultural heritage resources and determine if any heritage resources, including listed or designated heritage resources, are impacted by development proposals and the potential need for mitigation measures.*

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This Guideline details components of a Built Heritage Impact Study/Heritage Impact Assessment that is required to the satisfaction of the City of Windsor.

The Built Heritage Impact Study or Heritage Impact Assessment (HIA) is a study used to identify and evaluate the impacts of proposed development on the cultural heritage resources, and to determine the appropriate conservation strategy for it. The HIA shall be based on accepted conservation principles and guidelines, including the following:

- The Parks Canada [Standards and Guidelines for the Conservation of Historic Places in Canada](#);
- Ontario Ministry of Tourism, Culture & Sport's [Eight Guiding Principles in the Conservation of Historic Properties](#);
- Ontario Ministry of Tourism, Culture & Sport's [Ontario Heritage Tool Kit](#), in particular,
- Ontario's [Heritage Conservation Principles for Landuse Planning](#); and
- [Well Preserved: the Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation](#)
- [City of Windsor Official Plan](#) Policies
- Windsor Intensification Guidelines (June 2022) resulting from the [Multi-Residential Interim Control By-law Study](#)

## **Details of Contents to Identify the Cultural Heritage Resource:**

### *1. Site Documentation and Analysis/Site Information*

- i. Document the context in which the site is located (may include Aerial Photo, Location Map and context with the area), including adjacent properties and land uses. This includes identifying all nearby impacted heritage properties and land uses. Identify the Heritage Register properties through mapping and photographs, in relation to the subject property.
- ii. Describe the site and all structures on property and its heritage status under the *Ontario Heritage Act* and identification of any heritage easements or restrictions
- iii. Document the existing condition or concerns surrounding the property, including quality photo documentation

### *2. Research on Design/Physical and Historical/Associative and Contextual Values*

- i. Describe all heritage resources and values within the subject property (include exterior and interior, landscaping etc.)
- ii. Include a chronological history of the property from land and development history, building history (document any additions or alterations etc. to property), with confirmation to construction dates

- iii. Include ownership and user history
- iv. Research material should include relevant historical maps, drawings, photographs, land records, assessment rolls, city directories, news articles etc.
- v. Provide summary on significance and heritage attributes for each structure existing on the property
- vi. Provide a draft statement of cultural heritage or interest of the property in accordance with Ontario Regulation 9/06 and 385/21.

### 3. *Description of proposed Site Changes/Development and Impact to the Cultural Heritage Resource*

- i. Describe site changes to heritage resource
- ii. Describe positive and adverse impacts of site changes to the heritage resource and surrounding lands. Refer to adverse impacts identified in the *Ontario Heritage Toolkit* which may include but not limited to:
  - a. Removal/destruction of heritage features and loss to cultural heritage values
  - b. Changes to the historic fabric and impact on the appearance
  - c. Shadowing impact that may alter the appearance of the heritage attribute and heritage resources through a Shadow Impact Study (particularly during the autumnal equinox and winter solstice)
  - d. Isolation of heritage attribute from its surrounding environment, context or a significant relationship
  - e. Obstruction of significant views or vistas within, from, or of built and natural features
  - f. Change in use and impact on heritage resource
  - g. Land disturbance and impact on soils, drainage patterns affecting built heritage or archaeological resources
- iii. Provide full set of construction drawings. Proposal construction drawing must be in context with surrounding heritage resources.
- iv. Provide visual depiction of subject proposal and streetscapes with neighbouring properties (eg. composite photograph of the subject property streetscape with and without the proposed development, cross-section diagrams, for heritage areas/districts a visual contextual analysis with surrounding properties to demonstrate compatibility with common datum regulating lines and floor to height ratios of surrounding heritage buildings)
- v. Assess and describe the structural concern of the impact of proposed changes to the heritage resource.
- vi. Construction Vibration Assessment may be required at a later date, and is to include consideration of the surrounding heritage resources. The assessment may include:
  - (a) Analysis of all construction activities potentially causing vibration impacts on the heritage resources
  - (b) Establishment of more stringent vibration criterion for heritage resource based on the potential for architectural and structural damage
  - (c) Background vibration measurements of the site and surrounding areas
  - (d) Predict extent of vibration impacts and identify all heritage structures within the vibration zone of influence
  - (e) Conduct pre-condition survey to establish condition of existing heritage structures
  - (f) Recommend vibration mitigation and monitoring program with establishment of “do-not-exceed” threshold levels, and a construction vibration control plan.

The Construction Vibration Assessment is to be completed by a qualified vibration engineer, as a condition of development approvals, and to the satisfaction of City Administration prior to any building permit issuance.

#### 4. *Analysis of Development Impact*

- i. Demonstrate that policies from the City of Windsor [Official Plan](#) and the Provincial Policy Statement have been addressed. Address Windsor Intensification Guidelines (June 2022) resulting from the [Multi-Residential Interim Control By-law Study](#) where relevant.
- ii. Provide description and rationalization of conservation treatment, detailing analysis of each alteration and intervention according to the *Standards & Guidelines*

#### 5. *Options for Mitigation and Alternatives*

- i. Consider and describe alternative conservation/mitigation and development options that reduce and avoid negative impacts to the heritage resource
- ii. Assess and clarify the benefits and negatives of each options proposed and conservation principles used
- iii. Demonstrate effort to mitigate impact, maximizing integrity and compatibility with heritage resources impacted by provision of description of work and analysis of visual impact of proposal with heritage resources

#### 6. *Recommended Conservation Strategy*

- i. Rationale and Justification for chosen option, specifying how the option ensures protection and enhancement of the heritage resource
- ii. Conservation Scope of Work
- iii. Implementation and Monitoring Plan when development is undertaken
- iv. Provide References/Samples/Precedents to Conservation work

#### 7. *Other Requirements*

- i. Provide bibliographical sourcing of all research material
- ii. HIA is to be prepared by a qualified cultural heritage conservation professional who is a member of the [Canadian Association of Heritage Professionals](#).
- iii. City Staff will determine completeness or acceptance of the HIA
- iv. For review of the HIA, City staff may require to conduct site visit(s) on the property
- v. City Staff reserves the ability to require an alternative option for mitigation for consideration

#### 8. *Other Recommended Resources:*

- National Park Service, U.S. Department of the Interior's [Preservation Briefs](#).
- National Park Service, U.S. Department of the Interior's [Preservation Tech Notes](#).
- Region of Waterloo's [Practical Conservation Guides for Heritage Properties](#)

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## **Qualifications:**

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*A Heritage Impact Study must be completed by a professional who is a member of the Canadian Association of Heritage Professionals, to the satisfaction of the City.*

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# Archaeological Assessment

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## **Purpose:**

*The purpose of an Archaeological Assessment is to ensure archaeological resources on site are evaluated, documented, and mitigated prior to land disturbance/site development.*

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Where an Archaeological Assessment is required, the Assessment shall be undertaken in accordance with criteria established by the Province. There are four stages of Archaeological Studies. The requirement to proceed to a higher stage of study shall be determined by Provincial Guidelines and in consultation with the City. The following describes the study requirements by stage;

### *Stage 1: Background Study and Property Inspection*

The archaeologist determines whether there is potential for archaeological sites on the property. They review geographic, land use and historical information for the property and the relevant surrounding area, visit the property to inspect its current condition and contact the ministry to find out if there are any known archaeological sites on or near the property. A Stage 2 assessment is required when the consultant archaeologist identifies areas of archaeological potential. Stage 1 may only be used to recommend exempting a property from Stage 2 assessment where it has been confirmed through a property inspection that potential for the entire project has been removed by extensive and deep ground disturbance. (ie. In accordance with 2011 S&G s. 1.4.2, recommending no further concern must be verified in person and cannot be a desktop study only).

### *Stage 2: Property Assessment*

The archaeologist surveys the land to identify any archaeological resources on the property. For a ploughed field, they will walk back and forth over it looking for artifacts on the surface. In forests, overgrown pasture areas or any other places that cannot be ploughed, they will dig parallel rows of small holes, called test pits, down to sterile subsoil at regular intervals and sift the soil to look for artifacts. They may use other strategies if properties are paved, covered in fill or have deeply buried former topsoils (such as floodplains or former sand dunes). The archaeologist will determine whether any archaeological resources found are of sufficient cultural heritage value or interest to require Stage 3 assessment.

### *Stage 3: Site-specific Assessment*

The consultant archaeologist determines the dimensions of the archaeological site, evaluates its cultural heritage value or interest and, where necessary, makes recommendations for Stage 4 mitigation strategies. To this end, they conduct further background research and fieldwork that expands the information gathered in Stage 2. They map the spatial limits of a site and acquire further information about the site's characteristics by excavating one-metre by one-metre square test units across the site. Based on circumstances, some sites (for example, ones that have been paved or are deeply buried) may require specialized methods of assessment. The archaeologist will determine whether any archaeological sites have sufficient cultural heritage value or interest to require Stage 4 mitigation of development impacts.

#### *Stage 4: Mitigation of Development Impacts*

This stage involves implementing conservation strategies for archaeological sites. Determining the best approach for conserving the site may include reviewing possible strategies with the development proponent, the municipality or other approval authority, Indigenous communities, and other heritage stakeholders. Conserving archaeological sites does not mean stopping development. Conservation can involve putting long-term protection measures in place around an archaeological site to protect it intact. The site is then avoided while development proceeds around it. This is called protection in situ and is always the preferred option for mitigation of development impacts to a site. If protection is not viable, mitigation can involve documenting and completely excavating an archaeological site before development takes place.

Where an Archaeological assessment predates the 2011 Standards and Guidelines for Consultant Archaeologist, the applicant can choose to conduct a new assessment or submit the study to the City of Windsor Planning Department, who will then forward the assessment to the Ministry for acceptability or not. The Ministry shall hold the final decision on the acceptability of the Report.

No land disturbance shall be permitted until notification has been received from the Ministry of Citizenship and Multiculturalism that the property has been cleared of archaeological concerns.

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#### ***Qualifications:***

*An Archaeological Assessment must be completed by a professional Archaeologist, licensed in the Province of Ontario, to the satisfaction of the City.*

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# Block Plan

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## **Purpose:**

*The purpose of a Block Plan is to provide comprehensive and specific direction for areas where the existing land use designations are appropriate but more detailed guidance is required for areas experiencing transition or development pressures in order to optimize development potential and ensure proper coordination.*

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A Block Plan is a Council adopted, non-statutory document which will inform and guide the content of subsequent development approvals required under the Planning Act. The Study Area, scope and level of detail included in the Block Plan will be determined through Terms of Reference approved by the City, and shall be supported by a number of detailed technical studies to be completed. The Study Area, scope and level of detail as well as the list of technical studies to be completed will be confirmed at the pre-consultation stage. All components of a required Block Plan shall be completed at the cost of the Proponent to the satisfaction of the City and/or any other agency having jurisdiction.

1. Where a Block Plan is required, the background information shall:
  - i. Describe the basis or rationale for the preparation of the Block Plan;
  - ii. Describe the Study Area in detail, including a reference map, and a description of the role and relationship of the area to the City as a whole.
  - iii. Identify the existing land uses, Official Plan designation(s) and zoning of the Study Area;
  - iv. Identify previous and current development applications in the Study Area;
  - v. Identify and assess the Study Area and surrounding land uses in terms of existing cultural, physical and environmental features, urban design attributes and other characteristics particular to the area;
  - vi. Identify any potential development constraints in the Study Area;
2. The required Block Plan shall serve as a development framework and shall outline the structural elements of the proposed development, including, at a minimum the following:
  - i. A description of the desired development concept for the Study Area including a conceptual master plan to demonstrate how the plan is designed to meet community needs and Provincial and City policies;
  - ii. The articulation of the proposed land use designations/boundaries and how proposed land uses integrate with existing and planned uses;
  - iii. Details with respect to street type and lot patterns, development yields by land use, density and placement of housing type, dwelling unit type and built form type;
  - iv. The location and means of protection of all significant natural heritage features and their associated ecological functions;
  - v. The location and means of conservation of all designated and listed cultural heritage resources;

- vi. The location, function and scale of all public service facilities;
  - vii. The articulation of a robust public parks system and Active Transportation Network;
  - viii. All servicing and infrastructure requirements, including the identification of public roads and stormwater management facilities; and
3. Block Plans shall include a Phasing Plan that identifies the potential sequencing of phases based on the logical extension of public service facilities and municipal infrastructure, including roads, sewer, water and stormwater management facilities.

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***Qualifications:***

*A Block Plan is a comprehensive undertaking that will require the involvement of a number of professional disciplines. However, it is expected that the Block Plan will be supported, at a minimum by a Registered Professional Planner in the Province of Ontario in consultation with professional civil engineers and professional biologists/ecologists, certified to practice in Ontario, to the satisfaction of the City.*

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# Environmental Impact Study

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## **Purpose:**

*The purpose of an Environmental Impact Study is to demonstrate that a proposed development or infrastructure undertaking may proceed in or adjacent to lands designated as Natural Heritage, Environmental Policy Area A or B and/or Candidate Natural Heritage Site without causing negative impact on the feature or its associated ecological functions.*

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Environmental Impact Studies under this Terms of Reference will be considered fulfilling the requirements of an Environmental Impact Statement as described in Provincial policy and/or guidelines. When an Environmental Assessment of a proposal is carried out under the Environmental Assessment Act, or other relevant Federal or Provincial legislation, that assessment may be considered by Council as fulfilling the Environmental Impact Study required by this Plan. Where an Environmental Impact Study is required, it shall:

1. Identify current land uses;
2. Describe the historical and present uses of the property;
3. Description of site context/study area and the subject property's relationship to the surrounding landscape
4. Include maps of the development location and extent of the area to be studied; orthographic maps with known natural heritage features/ areas overlaid;
5. Describe designation and zoning for the subject property and for the adjacent lands;
6. Type of required development applications;
7. Include map(s) of the development location and extent of the area to be studied, including current zone and land use;
8. Identify environmental legislative, regulatory, and policy requirements that may affect the development proposal;
9. Identify relevant information including existing studies, plans, databases, and other sources to be analyzed. (E.g., such as current and historical air photos, watershed or subwatershed studies, secondary plans, master plans, and supporting studies, EIS or EIR information from adjacent lands, natural heritage databases (NHIC), data on file with the City of Windsor and/or Essex Region Conservation Authority);
10. Scan for endangered species and species at risk and their associated habitats within the Study Area using the NHIC database, preliminary site visits and pre-consultations with relevant agencies and the City  
NOTE: Natural heritage records are generally considered in need of field verification after a period of 5 yrs;
11. Characterize the natural environment in the study area(s):
  - I. Identify whether there are potential natural heritage features and areas that do not need to be assessed and provide a rationale for their exclusion;
  - II. Using the background information, determine whether or not field verification studies are required and describe the approach and methods chosen;
  - III. Conduct field studies using protocols that are:
    - a. Suitable for the type of natural heritage features and areas on site
    - b. Are designed to provide the information needed to determine whether a feature is significant (or not).
    - c. Appropriate timing or work (season, time of day, weather, etc.), level of efforts (number of site visits, field hours, number of searchers, etc.), maps showing locations for species-specific surveys, technology being used, spatial extent and level of effort for supporting field studies
  - IV. Identify and describe the approach and methods to be used to assess the natural environment and ecological function of the subject property and the adjacent lands for:
    - a. Geology and soils
    - b. Hydrology and hydrogeology

- c. Aquatic and fish habitat
  - d. Terrestrial vegetation (including wetlands)
  - e. Vegetation communities
  - f. Plants
  - g. Wildlife
  - h. Natural Hazards
  - i. Connectivity and ecological linkages
  - j. Species at Risk and Species at Risk Habitats
12. Assess the various natural heritage features against the appropriate policies, guidelines, and plans to determine significance;
  13. Assess the various natural heritage features and areas against the appropriate policies and guidelines related to natural hazards;
  14. Carry out an analysis of the individual and cumulative environmental effects that are expected to occur as a result of the proposed development and future uses;
  15. Provide recommendations for appropriate environmental buffers and/or setbacks for each natural heritage feature and area, and natural hazard lands;
  16. Identify, explain and recommend specific actions to be undertaken to eliminate, reduce or compensate for the expected impacts consistent with accepted ecological, planning, engineering, and resource management techniques and practices;
  17. Provide a mitigation strategy, including measures for compliance and long term monitoring, and the ongoing management of measures for the protection, maintenance, and enhancement of natural features, functions and linkages to achieve long term ecosystem health;
  18. Include a monitoring plan for performance and effectiveness of mitigation measures. Consider whether adequate baseline information have been collected and provide recommended timeframe for monitoring program;
  19. Indicate the nature and extent of public and agency consultation and/or input;
  20. Recommend appropriate planning designations and policies for the Study Area;
  21. Include a concluding statement with appropriate: appendices and attachments; mapping and figures; species lists; and additional technical studies, as applicable

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### **Qualifications:**

*An Environmental Impact Study must be completed by a professional biologist or ecologist, certified to practice in the Province of Ontario, to the satisfaction of the City.*

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# Watershed/Subwatershed Plan

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## **Purpose:**

*The purpose of a Watershed/Subwatershed Plan is to inventory, assess and present information about water resources and related features and how they should be protected and enhanced to ensure the long-term health of the ecosystem as land uses changes on the basis of an entire watershed, or subwatershed.*

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Council will seek the participation in, and joint funding and implementation of, Watershed and Subwatershed Plans from the Province, Essex Region Conservation Authority, adjacent municipalities and other interested or affected parties. The following policies should be read in conjunction with subsections 5.3.8 and 7.3.4 of this Plan. Where a *Watershed Plan* is required, such a study should:

1. Take a broad ecosystem approach to water, water related natural features, terrestrial resources, fisheries, and water dependencies/linkages;
2. Provide watershed policy and direction for:
  - i. Ecological integrity and carrying capacity;
  - ii. The protection of water systems;
  - iii. Greenway System planning;
  - iv. The management of water quantity and quality;
  - v. Aquifer and ground water management;
  - vi. Fisheries management;
  - vii. The implementation of watershed policies and programmes;
  - viii. Regional opportunities and constraints; and
  - ix. Servicing needs and/or availability of water and sewage treatment facilities.

Where a *Subwatershed Plan* is required, such a study should:

1. Identify key issues facing the subwatershed and improve the detail of information required to address local ecological issues;
2. Establish detail and implementation specific subwatershed targets, goals and objectives to establish:
  - i. Natural system linkages and functions;
  - ii. Measures to protect and enhance surface and groundwater quantity and quality;
  - iii. Measures to enhance and/or rehabilitate natural features;
  - iv. Development constraints due to flooding and erosion and areas best suited for development;

- v. Best management practices for incorporation into infrastructure and subdivision design;
  - vi. An implementation strategy including responsibilities for all recommendations;
  - vii. Best management practices for open space areas and Greenway System components;
3. Delineate subwatershed planning areas and limits of Regional and 100 year storm events;
  4. Present targets, goals and objectives for subwatersheds and outline directives for stormwater management plans and other studies or designs for specific areas within the subwatershed; and
  5. Outline future monitoring requirements.

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### **Qualifications:**

*A Watershed or Sub-Watershed Plan must be completed by a project team comprised of civil engineers, biologists/ecologists, planners, hydrologists and hydrogeologists, as well as other experts to the satisfaction of the City.*

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# Stormwater Management Plan

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## **Purpose:**

*The purpose of a Stormwater Management Plan is to identify measures required to control the quantity, quality and velocity of runoff associated with the development of a specific area.*

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Where a Stormwater Management Plan is required, such a study should:

1. Be consistent with approved watershed/subwatershed plan recommendations;
2. Provide all of the technical information on which the recommendations have been made, including but not limited to:
  - i. All water resources and functions;
  - ii. Existing overland flow routes;
  - iii. The proposed development;
  - iv. Existing and proposed surface features and associated pre and post development infiltration rates;
  - v. Topographic features including top of bank and flood elevations;
  - vi. Underground utilities and services;
3. Assess the impacts of development on receiving waters, both before and after construction, with respect to quantity control, and the potential for flooding, erosion and sedimentation;
4. Identify the effect of development on water quality and describe and recommend measures to limit any negative impact and, if possible improve water quality;
5. Describe mitigation measures which would, if necessary, prevent adverse impacts on-site, on the receiving water, flora and fauna and recreational uses;
6. Identify the effects of development on aquatic habitats and describe and recommend water management practices to ensure they remain sustainable;
7. Identify long-term costs on managing and maintaining the function of the stormwater management system;
8. Identify how the stormwater management system can integrate with the Greenway System and over-all urban design; and
9. Identify the Federal, Provincial and Conservation Authority approvals required for the project and be consistent with the requirements of the appropriate agencies.

The Stormwater Management Plan shall be coordinated with the Environmental Impact Study to ensure a consistent approach to maintaining or improving the ecological conditions of the Study Area. For large scale development proposals the Stormwater Management Plan may be done in two stages to avoid significant revisions to technical reports as detailed design evolves. The stages include:

1. *Stage 1* - The Stage 1 Report outlines the design assumptions and conceptual engineering schemes to manage both quantity and quality of run-off and determine the areas that need to be set aside for stormwater management purposes. The Stage 1 Report is to be submitted when the application is initiated and must be accepted prior to draft plan approval of a Plan of Subdivision or a prior to the acceptance of a Rezoning application if it is being submitted in conjunction with a site plan application; and
2. *Stage 2* - The Stage 2 Report provides the detailed calculations and design of the stormwater management facilities and drainage systems, including associated landscaping, based on the accepted principles in the Preliminary Report, and must be accepted prior to, or in conjunction with, the final acceptance of the engineering drawings.

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### ***Qualifications:***

*A Stormwater Management Plan must be completed by a professional civil engineer certified to practice in Ontario, to the satisfaction of the City.*

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# Functional Servicing Report

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## **Purpose:**

*The purpose of a Functional Servicing Report is to determine how an area proposed for development will be serviced taking into consideration the future sanitary, water and storm sewer servicing needs.*

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Where a Functional Servicing Report is required, such a report should:

1. Identify the routing of services;
  2. Identify the sizing of services including over-sizing as may be required;
  3. Identify the requirements for fire-fighting capacity;
  4. Identify the cost sharing responsibilities of developing the services;
  5. Identify the timing of services;
  6. Describe any interim servicing measures and how those services shall be decommissioned or modified; and
  7. Detail any implementation requirements, including how the disturbed areas will be rehabilitated.
- 

## **Qualifications:**

*A Functional Servicing Report must be completed by a professional civil engineer certified to practice in Ontario, to the satisfaction of the City.*

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# Transportation Impact Study and/or Transportation Impact Statement

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## **Purpose:**

*The purpose of these studies is to identify the transportation network improvements and on-site design elements necessary to accommodate additional vehicle, cyclist, pedestrian and transit traffic and parking the proposed development will generate and ensure its impact on adjacent land uses is safe and acceptable;*

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Where a Transportation Impact Study is required, such study should:

1. Include the collection and projection of traffic related data from the nearby and adjacent road network based on existing and future conditions;
2. Assess trip generation, assignment and distribution from the proposed development as well as existing, permitted and proposed developments within the Study Area to a horizon year directed by the City during the pre-application process;
3. Assess street and intersection capacity and queuing including current and projected operational deficiencies that may arise as a result of growth from background traffic, future conditions and traffic generated by the proposed development;
4. Describe and recommend measures required to achieve the transportation goals, objectives and policies set out in the Transportation Chapter of this Plan and the City's capital projections included in the Development Charges By-law;
5. Describe and recommend specific site design practices, including Transportation Demand Management measures, to ensure priority is given to sustainable modes of transportation over vehicle use;
6. Employ Transportation Association of Canada and other applicable guidelines regarding driveway access design, location, throat length and function;
7. Describe the final outcome that will be achieved by the transportation network with the proposed development and associated improvements to the network to the defined planning horizon;
8. Describe how the proposal will promote development patterns that will generate positive impacts on transportation;
9. Ensure that driveway, loading and vehicular and bicycle parking requirements are provided and suitably located in the development;
10. Ensure that facilities are provided for ease and safety of pedestrian movement through the development including, but not limited to, walkways, pedestrian crossings, and overpasses/underpasses; and
11. Evaluate the proportion of development that is in proximity to existing or planned transit stops along transit routes.
12. Names and sections of technical guidelines used and assumptions made, should be attached to the study.

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**Qualifications:**

*A Transportation Impact Study must be completed by a professional transportation engineer certified to practice in Ontario, to the satisfaction of the City.*

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## Noise and/or Vibration Study

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### **Purpose:**

*The purpose of a Noise and/or Vibration Study is to demonstrate that a proposed development may proceed in such a manner that sensitive land uses are protected from unacceptable levels of noise and/or vibration associated with uses such as industrial operations, public highways, rail corridors and yards, and airports;*

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The following policies should be read in conjunction with subsection 5.4.5 of this Plan. Where a Noise and/or Vibration Study is required, such a study should:

1. Identify sources of noise and/or vibration that may impact identified sensitive land uses and assess the existing and projected noise and/or vibration levels on the identified sensitive land uses based on existing and approved future conditions and relevant standards and criteria;
2. Identify and recommend various mitigation measures, warning clauses, and/or other appropriate measures, which can be implemented and secured by way of zoning (including 'H' Holding Symbol), site plan approval and/or development agreement that can mitigate the impact of noise and/or vibration on the identified sensitive land uses;
3. Identify how any lawfully existing stationary noise sources and/or existing transportation corridors may benefit from a Class 4 Area designation as it relates to any proposed sensitive land uses as referenced in Provincial guidelines (including NPC-300);
4. Have regard to relevant Federal and Provincial legislation, policies and appropriate guidelines and conduct the Noise and/or Vibration Studies in a manner that will satisfy all levels of authority; and
5. In circumstances where statutory Provincial approvals for noise and/or vibration are required, the City will require that a Certificate of Approval is sought and obtained from the relevant authorities before development proceeds.

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### **Qualifications:**

*A Noise and/or Vibration Study must be completed by a registered professional engineer or registered professional planner with appropriate acoustic/vibration expertise in the Province of Ontario, to the satisfaction of the City.*

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# Tree Inventory and Preservation Study

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## **Purpose:**

*The purpose of a Tree Inventory and Preservation Study is to investigate existing trees/woodlots, within and adjacent to a development proposal and to determine how protection and enhancement can coincide with proposed development.*

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A Tree Inventory and Preservation Study may be required where a full Environmental Impact Study is not required. The following policies should be read in conjunction with subsection 5.3.6 and 10.2 of this Plan, Site Control Plan guidelines and the City's Development manual, 2015 Section 1.17. Where a Tree Inventory and Preservation Study is required, such a study should include:

1. Consultation with the City's Planning Department before undertaking a Tree Inventory and Preservation Study to ensure appropriate methodology;
2. A Tree Inventory and Preservation Study must include an inventory of trees by species and diameter at breast height (DBH – 1.4 m) and the condition of each tree that may be impacted by the development, including trees on adjacent lands and including all trees in excess of 100mm (4 inches) DBH, as well as major shrub groupings, including the details of the trees and significant associated vegetation worthy of protection; Tree condition assessments should follow city and ISA Guidelines for assessment and should include pre and post construction assessments in order to track potential changes or unknown impacts;
3. All trees and significant vegetation that meet the required threshold are to be mapped with GPS sub-meter accuracy as a means of identification in the field and be accurately located and assessed to determine; potential impacts that the proposed development layout, storm water management systems, grading and servicing will have on the remaining vegetation, the need for suitable protection measures, possible preservation techniques to enhance the condition of residual trees;
4. An evaluation of the potential impacts of the proposed development upon the existing trees, with associated recommendations for trees and vegetation to be preserved and recommended tree protection zones; Tree protection zones will follow recommended forestry division protection policies and procedures outlined in the Site Plan Control;
5. Possible infrastructure modifications and construction staging procedures to mitigate impacts;
6. Mitigation measures must align with the City's Site Plan Control and include provisions for replacement of trees and vegetation designated for preservation that are not successfully preserved;
7. Replacement tree details must follow Forestry Division's policy on suitable tree species and stock types. Details of long-term impact monitoring during and after construction to ensure protection measures are adequate and fully functional;
8. Where impacted trees are located on adjacent lands, written confirmation from the owner of those lands acknowledging the impacts and confirming agreement with the mitigation measures proposed;
9. The forestry division requires that tree replacement be calculated on a diameter-for-diameter replacement calculation for any trees to be removed. If it is not possible to plant new trees on site (i.e. no

space), Cash-in-lieu will be provided to the City to plant trees elsewhere. Cash-in-lieu rates are determined annual by council approved fee rates

10. If construction is being undertaken next to the edge of a woodlot suitable barrier fencing, at a minimum, along the drip line of the woodlot to be preserved prior to the start of construction on site;
11. The grades around woodlots shall not be disturbed. If it is necessary to change grades around treed areas to be preserved, the proponent may be required to take precautions such as dry welling and root feeding. Filling and grading within the drip line of trees shall be done by hand;
12. If trees are to be planted or transplanted on site, a Landscape Plan must be submitted to the City Forester or designate for review and approval. In addition a detailed maintenance program to be followed after development is complete. Tree transplanting should only be considered for rare, unique or otherwise 'special' individual tree or plant specimens;
13. Impact and Mitigation planning should include assessments for opportunities to support and enhance objectives described within the City's Climate Change Adaptation plans or the City's Urban Forest Management Plan (2024); and
14. The City Forester may request a security deposit in the form cash or a Letter of Acceptance of Responsibility. Financial Securities held by the City shall be released by the City provided that the trees are healthy and in a state of vigorous growth 2 years after the completion of all construction activity, guarantee the protection of trees, or the satisfaction of all the conditions of permit issuance will be required for the Detailed Vegetation Management Plan on lots or blocks that are to come into public ownership.

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### ***Qualifications:***

*A Tree Inventory and Preservation Study must be completed by a, Certified Professional Arborist, Professional Forester, Ecologist or Landscape architect or equivalent to the satisfaction of the City.*

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# Lighting Study

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## **Purpose:**

*The purpose of a Lighting Study is to evaluate the intensity and impact of light pollution generated by development, the potential impacts on residential property and wildlife, and to ensure visibility and safety.*

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The following should be read in conjunction with Section 8.13 of the Official Plan. Where a Lighting Study is required, such study should:

1. Identify the location and specifications of all lighting fixtures proposed on the exterior of the buildings and site of the proposed development;
  2. Include a photometric plan of projected illumination (lumens) in connection with the proposed development and demonstrate the illumination levels at all property lines and 6.0 metres beyond those property lines;
  3. Identify the Light Pollution Index (LPI);
  4. Analyze the LPI and cumulative effects of lighting in the context of existing and planned future conditions;
  5. Recommend measures to mitigate the impact of light pollution in connection with the proposed development; and
  6. Provide evidence that sufficient lighting is provided to ensure lighting improves visibility and safety.
- 

## **Qualifications:**

*A Lighting Study must be completed by a registered professional engineer or certified engineering technologist in the Province of Ontario, to the satisfaction of the City.*

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# Climate Change and Energy Studies

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## ***Purpose:***

*The purpose of Climate Change and Energy Studies are to evaluate how the proposed development could alter the climate by impacting: wind; shadow and sunlight penetration; urban heat island effects (extreme heat); flooding and to determine the appropriate design measures to reduce the impacts of climate change and mitigate the contribution of greenhouse gas emission.*

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The following should be read in conjunction with Sub-section 8.6.2.3 of the Official Plan. During the pre-application process the City will determine the components of the Climate Change Study required.

## ***Energy, Greenhouse Gas (GHG) Emissions and Mitigation Study***

The intent of this study is to understand the GHG emissions and energy impact of the development, along with the opportunities to support the community's efforts to mitigate climate change.

1. Does the proposed development promote:
  - i. A compact urban form that encourages and facilitates walking, cycling and the use of public transit;
  - ii. A development pattern where public parks, small-scale convenience retail and other appropriate neighbourhood serving uses are provided within an approximate 5 minute walk from all residents;
  - iii. The electrification of various transportation modes, including the installation of electric charging for electric vehicles and bicycles;
  - iv. The use of low carbon construction, including but not limited to concrete and steel; and
  - v. Green building certifications of any kind.

## ***Energy Strategy***

The intent of this study is to further encourage energy efficient building design.

1. The Energy Strategy is designed to facilitate the following key outcomes:
  - i. Energy and GHG emissions reductions above base case;
  - ii. Explore alternative energy systems, renewable energy systems, district energy systems and distribution and demand management plans to accommodate current and projects needs of the community;
  - iii. Energy resiliency; and
  - iv. Innovative residential and public building designs that contribute to the low carbon design, energy reduction and natural resource conservation.

## ***Climate Resiliency Study***

The intent of this study is to examine the risk and resilience of the development to a climate change related disruption or impact. The primary climate change risks in the City of Windsor are attributed to Extreme Heat (Urban Heat Island), Flooding and Biodiversity loss. However, additional climate hazards may be identified due to location of the development or updated climate data.

### *1. Heat Island Reduction Brief*

Within the Climate Resiliency Study, the heat island reduction brief should include factors influencing and opportunities to address the urban heat island. This may include but not be limited to:

- i. Changes to permeable surfaces resulting from the development and associated impacts on heat retention and reflection;
- ii. Changes to vegetation cover and canopy and impact on heat island effects;
- iii. Changes to retention of storm water on the site and the associated impacts on-site and downstream; and
- iv. Measures taken to reduce the heat island effect including but not limited to:
  - a) Maintaining or restoring tree canopy;
  - b) Provisions for shading;
  - c) Maintaining vegetative surfaces such as green or cool roofs; and
  - d) Use of retained stormwater for water vegetation or water features.
- v. This brief shall be supported by any required landscape plan.

### *2. Flood Reduction Brief*

Within the Climate Resiliency Study the flood reduction brief shall include:

- i. A short summary of the findings from any required Stormwater Study, focused on Climate Change analysis, findings and solutions;
- ii. Measures taken to reduce risks in the event of flooding, including but not limited to:
  - a) Location and protection of essential building components;
  - b) Green infrastructure to complement existing infrastructure, including the requirement for innovative low impact development opportunities and best practices that minimize the risks associated with natural hazards.
- iii. This Study shall also review if the development occurs in a location that is at risk or vulnerable to other climate influenced natural hazards and measures that may be taken to reduce risk.

### *3. Sustainability Brief*

It is the intent of the Sustainability Brief to understand any development's contribution to the overarching sustainability objectives of the City beyond those encapsulated by the climate change studies. Where a Sustainability Brief is required, it shall include measures taken to promote:

- i. Waste diversion, including recycling and organics;
- ii. Bird Friendly Architecture (ex. Windows and lighting);
- iii. Potential for local food production or pollinator habitat;
- iv. Electric Vehicle Infrastructure;
- v. Use of Environmentally preferable materials and products;
- vi. Water Conservation energy conservation, air quality protection and integrated waste management opportunities;
- vii. Compact urban form that encourages walking, cycling and the use of public transit

- viii. A development pattern where public parks, small-scale convenience retail and other appropriate neighbourhood serving uses are provided within an approximate 5 minute walk from all residents; and
- ix. Alternative energy systems, renewable energy systems, district energy systems and distribution and demand management plans to accommodate current and projected needs of the community;
- x. Innovative residential and public building designs that contribute to low carbon design, energy use reduction and natural resource conservation; and
- xi. Green infrastructure to complement existing infrastructure, including the requirement for innovative low impact development opportunities and best practices that minimize the risks associated with natural hazards.

#### 4. *Shadow Study*

Where a Shadow Study is required, such study should include:

- i. Include diagrams showing extent of shadows at different intervals over different months;
- ii. Include diagrams showing surrounding topographic context;
- iii. Include a digital copy of the 3-D model used by the consultant to generate the shadow diagrams;
- iv. Include architectural elevation indicating building height at rooftop, mechanical equipment and average grade around building foundation; and
- v. Include diagrams showing the vertical extent of shadows upon adjacent lands.

#### 5. *Wind Study*

Where a Wind Study is required, such Study shall include:

- i. The height of the proposed development in relation to the height of surrounding structures;
- ii. The orientation and general massing of the development with respect to the primary wind directions;
- iii. The location and shape of specific design features that induce wind activity;
- iv. The orientation of the development with respect to sun angles;
- v. The potential impact of wind speed increases created by the development on the surroundings, pedestrians and birds in all four seasons; and
- vi. An outline of mitigation features to be included in development design including base and podium conditions, canopies, tower orientation and landscaping.

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### ***Qualifications:***

*A Climate Change Study, and its various individual components may require a host of professionals with a variety of areas of expertise. All elements of a Climate Change Study shall be carried out by qualified professionals with expertise in the appropriate area of study, to the satisfaction of the City.*

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# Financial Impact Study

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## ***Purpose:***

*The purpose of a Financial Impact Study is to evaluate the growth-related financial impact of proposed development, including impacts to the City's capital and operating budgets triggered by the proposed development. It is also used to estimate the cost and timing of local municipal capital infrastructure required to service the new development.*

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A Financial Impact Study ensures that the proposed new development is consistent with and supported by, the necessary local municipal infrastructure, and that it is not premature. Where required, a Financial Impact Study should include:

1. The projected incremental assessment, together with the estimated tax and non-tax revenues that would be generated;
  2. The projected incremental local municipal operating costs;
  3. The expected marginal net revenue or deficit; and
  4. A projection of each of the planned phases of development, if applicable, for both operating and capital components to show that the approvals being requested are in the public interest and not premature pursuant to the Planning Act.
- 

## ***Qualifications:***

*The Financial Impact Study should be prepared by a qualified municipal financial consultant, to the satisfaction of the City.*

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**APPENDIX "E"**  
**Consultations****CALDWELL FIRST NATION COMMUNITY**

No comments provided

**ENGINEERING - DEVELOPMENT**

We have reviewed the subject Rezoning application and have the following comments:

The Sanitary Sewer Study has been deemed acceptable, and the proposed sanitary servicing strategy is supported by the Engineering Development department.

A Stormwater Management Report complete with Site Servicing Drawings has been received and approved.

In summary we have no objection to the proposed development, subject to the following requirements:

**Site Plan Control Agreement** - The applicant enter into an agreement with the City of Windsor for all requirements under the General Provisions of the Site Plan Control Agreement for the Engineering Department.

**Sidewalks** - The owner(s) agrees, to pay to the Corporation, prior to the issuance of a Building Permit, the sum of \$9,142.00 being the Owner's contribution towards the future construction of a concrete sidewalk on the Turner Road and Moxlay Avenue frontage of the subject lands.

**Curbs and Gutters** - The Owner further agrees, at the discretion of the City Engineer, to pay to the Corporation, prior to the issuance of a construction permit, the sum of \$4,770.00 being the Owner's contribution towards the future construction of concrete curb and gutter on the frontage of the subject lands.

If you have any further questions or concerns, please contact Shannon Mills, of this department at [smills@citywindsor.ca](mailto:smills@citywindsor.ca).

**[Juan Paramo - Development Engineer]**

**ENGINEERING - R.O.W.**

No comments provided

**ECONOMIC DEVELOPMENT & CLIMATE CHANGE**

The ESCC team has no objections to this application. We are requesting an energy strategy by the SPC review.

**[Barbara Lamoure - Environment and Sustainability Coordinator]**

**ENWIN UTILITIES LTD. - HYDRO ENGINEERING**

No Objection.

Please be advised of the overhead 120/240V secondary conductor on the eastern limit of the property.

Prior to working in these areas, we suggest notifying your contractor and referring to the Occupational Health and Safety Act and Regulations for Construction Projects to confirm clearance requirements during construction. Also, we suggest referring to the Ontario Building Code for required clearances for New Building Construction.

**[Nillavon Balachandran - Hydro Engineering Technologist]**

**ENWIN UTILITIES LTD. - WATER ENGINEERING**

Water Engineering has no objections.

**[Bruce Ogg - Water Project Review Officer]**

**FORESTRY**

Same comments as Planning Department - Landscape Architect

**[Yemi Adeyeye - Manager of Forestry & Natural Areas]**

**GREATER ESSEX COUNTY DISTRICT SCHOOL BOARD**

No comments provided

**PARKS DESIGN & DEVELOPMENT**

No concerns from Parks Design & Development and Natural Areas.

**[Sherif Barsom - Landscape Architect]**

**PLANNING DEPARTMENT - HERITAGE**

No supporting information required.

There is no apparent built heritage concern with this property, and it is located on an area of low archaeological potential.

Nevertheless, the Applicant should be notified of the following archaeological precaution.

1. Should archaeological resources be found during grading, construction or soil removal activities, all work in the area must stop immediately and the City's Planning & Building Department, the City's Manager of Culture and Events, and the Ontario Ministry of Citizenship and Multiculturalism must be notified and confirm satisfaction of any archaeological requirements before work can recommence.

2. In the event that human remains are encountered during grading, construction or soil removal activities, all work in that area must be stopped immediately and the site secured. The local police or coroner must be contacted to determine whether or not the skeletal remains are human, and whether the remains constitute a part of a crime scene. The Local police or coroner will then notify the Ontario Ministry of Citizenship and Multiculturalism and the Registrar at the Ministry of Government and Consumer Services if needed, and notification and satisfactory confirmation be given by the Ministry of Citizenship and Multiculturalism.

Contacts:

- Windsor Planning & Building Department:
  - 519-255-6543 x6179, [ktang@citywindsor.ca](mailto:ktang@citywindsor.ca), [planningdept@citywindsor.ca](mailto:planningdept@citywindsor.ca)
- Windsor Manager of Culture and Events (A):
  - Michelle Staaedegaard, (O) 519-253-2300x2726, (C) 519-816-0711, [mstaadegaard@citywindsor.ca](mailto:mstaadegaard@citywindsor.ca)
- Ontario Ministry of Citizenship and Multiculturalism
  - Archaeology Programs Unit, 1-416-212-8886, [Archaeology@ontario.ca](mailto:Archaeology@ontario.ca)
- Windsor Police: 911
- Ontario Ministry of Government & Consumer Services
  - A/Registrar of Burial Sites, War Graves, Abandoned Cemeteries and Cemetery Closures, 1-416-212-7499, [Crystal.Forrest@ontario.ca](mailto:Crystal.Forrest@ontario.ca)

**[Tracy Tang - Planner II - Revitalization & Policy Initiatives]**

**PLANNING DEPARTMENT - LANDSCAPE ARCHITECT**

The following studies are required from an urban design and landscape architectural perspective as part of a complete Site Plan Control application:

- Tree Inventory & Preservation Study
- Urban Design Study

The development will be subject to Site Plan Control at which time all landscape architectural comments and requirements will be made. At that time a landscape plan and photometric will be required as a condition of site plan agreement. The applicant can expedite the process for development permit by providing these plans with their application to site Plan control.

**[Stefan Fediuk - Landscape Architect / Acting Senior Urban Designer]**

**PLANNING DEPARTMENT - SITE PLAN CONTROL**

The development proposal is subject to Site Plan Control pursuant to the Planning Act and City of Windsor By-law 1-2004. Where preceding development applications are required, inclusive of Official Plan and Zoning By-law Amendments, request for Site Plan Control Pre-Consultation may be made following completion of the requisite Development and Heritage Standing Committee meeting at <https://ca.cloudpermit.com/login>.

**[Jacqueline Cabral - Clerk Steno]**

**TRANSPORTATION PLANNING**

- Turner Road is classified as a local road with a required right-of-way width of 20 metres. The current right-of-way width is sufficient; therefore, no conveyance is required.
- Moxlay Ave is classified as a local road with a required right-of-way width of 20 metres. The current right-of-way width is sufficient; therefore, no conveyance is required.
- All parking must comply with Zoning By-Law 8600.
- Each parking space shall have a minimum length of 5.5 metres and a minimum width of 2.5 metres, except where one side of the parking space is flanked by a wall or fence, each parking space shall have a minimum length of 5.5 metres and a minimum width of 3.5 metres.
- Aisle width must be 6 metres in order to have adequate width for turning manoeuvres.
- Per the Official Plan, a sidewalk is required on at least one side of a Local Road. A sidewalk contribution is required along the frontage of Turner Rd and Moxlay Ave, as per Engineering Right-of-Way's comments.
- All new accesses shall conform to the TAC Geometric Design Guide for Canadian Roads and the City of Windsor Standard Engineering Drawings.
- Driveways proposed must be 7-9 metres total at the property line (minimum 3.5m/lane, maximum 4.5m/lane).
- Raised curbs not permitted within the right-of-way.
- All new exterior paths of travel must meet the requirements of the Accessibility for Ontarians with Disabilities Act (AODA).

**[Elara Mehrilou - Transportation Planner I]**

**WALPOLE ISLAND FIRST NATION**

No comments provided

**WINDSOR AIRPORT**

The Airport Operations has no issues with the development PC 016/23 - OLIVIA CONSTURCTION HOMES INC. - 0 TURNER ROAD

**[Steve Tuffin - Director of Operations]**

**WINDSOR-ESSEX CATHOLIC DISTRICT SCHOOL BOARD**

No comments provided

**WINDSOR POLICE SERVICE**

No comments provided

**[Barry Horrobin - Director of Planning & Physical Resources]**

## Appendix A

### Sandwich Town CIP

Council Approval Date	Council Resolution	Address	Applicant	Project Description	Grant Program
June 3, 2019	CR284/2019	3239 Russell Street (0 Russell Street)	2579105 Ontario Inc.	Development of eight two-storey residential units with six bedrooms each	Development and Buildings Fee Grant Revitalization Grant
July 13, 2020	CR347/2020	3311 Peter Street	1603965 Ontario Ltd. (C/O: Julie Touma)	Demolition of a single dwelling unit to construct a new one storey single dwelling unit	Development and Buildings Fee Grant Revitalization Grant
April 19, 2021	CR147/2021	3150 to 3156 Sandwich Street	2594756 Ontario Ltd. (Kyle McDonald)	Conversion of a vacant building for commercial retail and residential uses	Development and Buildings Fee Grant Revitalization Grant Commercial/Mixed Use Building Facade Grant Commercial Mixed-Use Building Improvement Loan Grant
December 20, 2021	CR559/2021	3388 Baby St	Gurbax Wahid	Demolition of a single dwelling unit to construct a new two storey two unit duplex dwelling	Development and Buildings Fee Grant Revitalization Grant

# Appendix A

## Downtown CIP

Council Approval Date	Council Resolution	Address	Applicant	Project Description	Grant Programs
July 5, 2021	CR311/2021	364 to 374 Ouellette Avenue	2757395 Ontario Inc.	Construction of new residential units and facade improvements	Upper Storey Residential Development Grant Program Commercial/Mixed Use Building Facade Improvement Grant Program Building/Property Tax Increment Grant Program
November 1, 2021	CR495/2021	754 Ouellette Avenue	Trinity Windsor Drug Limited	Improvements to existing one storey building	Commercial/Mixed Use Building Facade Improvement Grant Program Building/Property Improvement Tax Increment Grant Program
February 8, 2021	CR151/2021, Extension: CR97/2024	511 Pelissier Street	Larry Wolf Horwitz	Create new residential units within existing building	New Residential Development Grant Program Building/Property Improvement Tax Increment Grant Program
December 6, 2021	CR15/2022	493 University Ave	2770722 Ontario Limited	Facade improvements and create new residential units	Upper Storey Residential Unit Creation Program Commercial/Mixed Use Building Facade Improvement Grant Program Building/Property Improvement Tax Increment Grant Program

## Appendix A

July 5, 2021	CR310/2021 DHSC 297, Extension: CR97/2024	490-495 Pelissier St	2527179 Ontario Inc.	Facade improvements	Commercial/Mixed Use Building Facade Improvement Grant Program
February 3, 2020	CR57/2020, Extension: CR97/2023	119 Chatham Street and 149 Chatham Street	St. Clair Rhodes Development	Facade improvements and renovations for office use	Commercial/Mixed Use Building Facade Improvement Grant Program  Building/Property Improvement Tax Increment Grant Program

### Ford City CIP

<b>Council Approval Date</b>	<b>Council Resolution</b>	<b>Address</b>	<b>Applicant</b>	<b>Project Description</b>	<b>Grant Programs</b>
January 18, 2021	CR33/2021	1008 Drouillard Road	2594756 Ontario Ltd. (C/O: Kyle McDonald)	Improvements to the interior/ exterior of the property	Municipal Development Fees Grant  Retail Investment Grant
April 19, 2021	CR154/2021	1024 to 1026 Drouillard Road	Spectrum Contracting Inc. (C/O: Randy Diestelmann)	Improvements to the interior/ exterior of the property	Retail Investment Grant

## Appendix A

### Main Streets CIP

Council Approval Date	Council Resolution	Address	Applicant	Project Description	Grant Programs
January 18, 2021	CR33/2021	1008 Drouillard Road	2594756 Ontario Ltd. (C/O: Kyle McDonald)	Improvements to the interior/ exterior of the property	Building Facade Improvement Grant
April 19, 2021	CR154/2021	1024 to 1026 Drouillard Road	Spectrum Contracting Inc. (C/O: Randy Diestelmann)	Improvements to the interior/ exterior of the property	Building Facade Improvement Grant
December 20, 2021	CR560/2021	1378 Ottawa Street	Jaskaran Takhar	Improvements to the exterior of the property	Building Facade Improvement Grant

### Economic Revitalization CIP

Council Approval Date	Council Resolution	Address	Applicant	Project Description	Grant Programs
May 4, 2020	CR212/2020	KJ Land Resources Inc.	KJ Land Resources Inc.	Renovation of building for head office	Business Retention and Expansion
May 25, 2020	CR/247/2020	1785 Walker Road	2520034 Ontario Limited	Renovation of building for employment use	Business Retention and Expansion Grant

## Appendix A

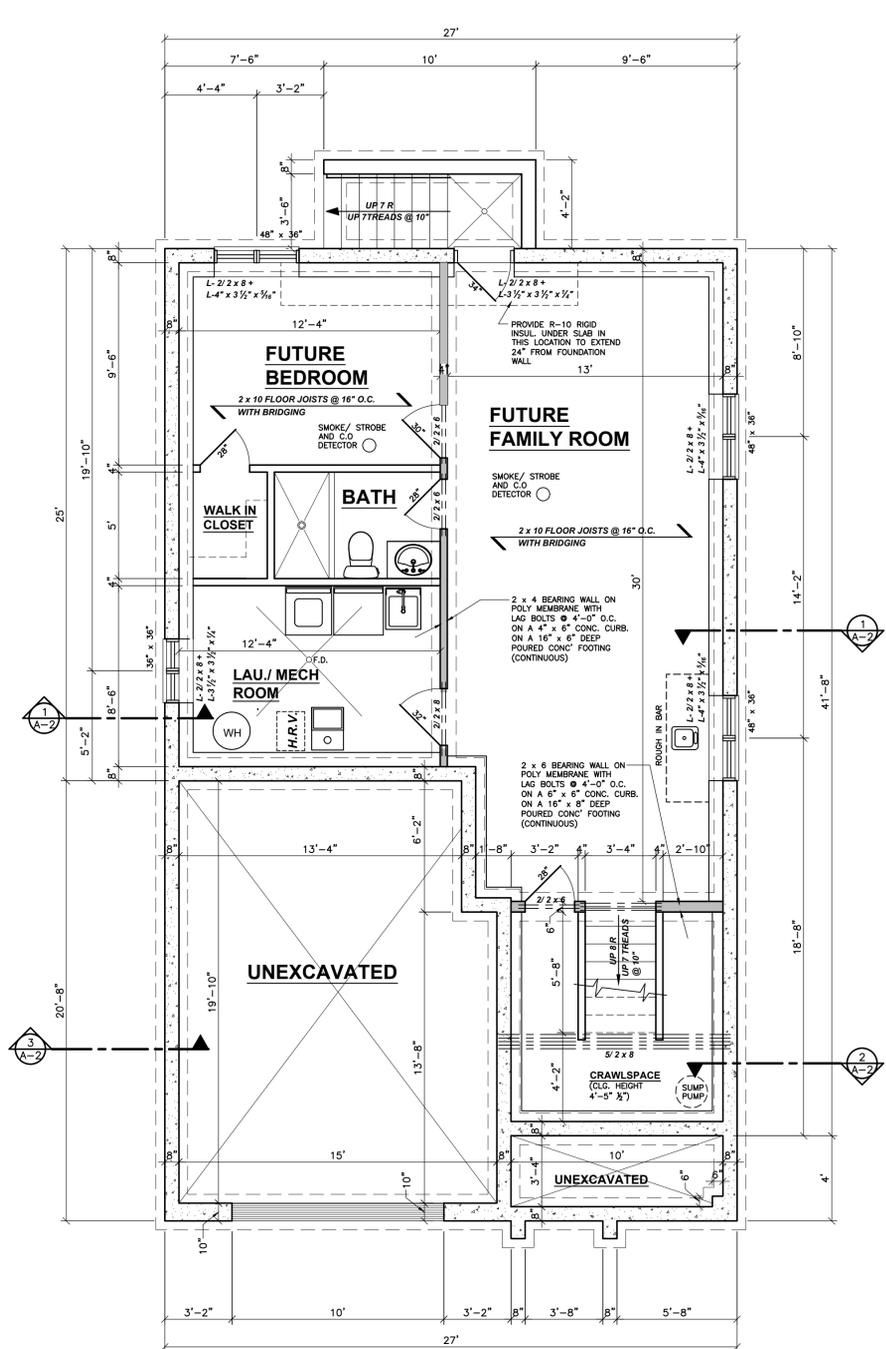
January 31, 2022	CR40/2022	10700 Tecumseh Rd E	2810859 Ontario Inc	Construction of new surgical facility	Small Business Investment Grant
April 25, 2022	CR/177/2022	3430 Wheelton Dr	538512 Ontario Limited	Renovation of building for manufacturing	Business Retention and Expansion Grant

### Brownfield Revitalization CIP

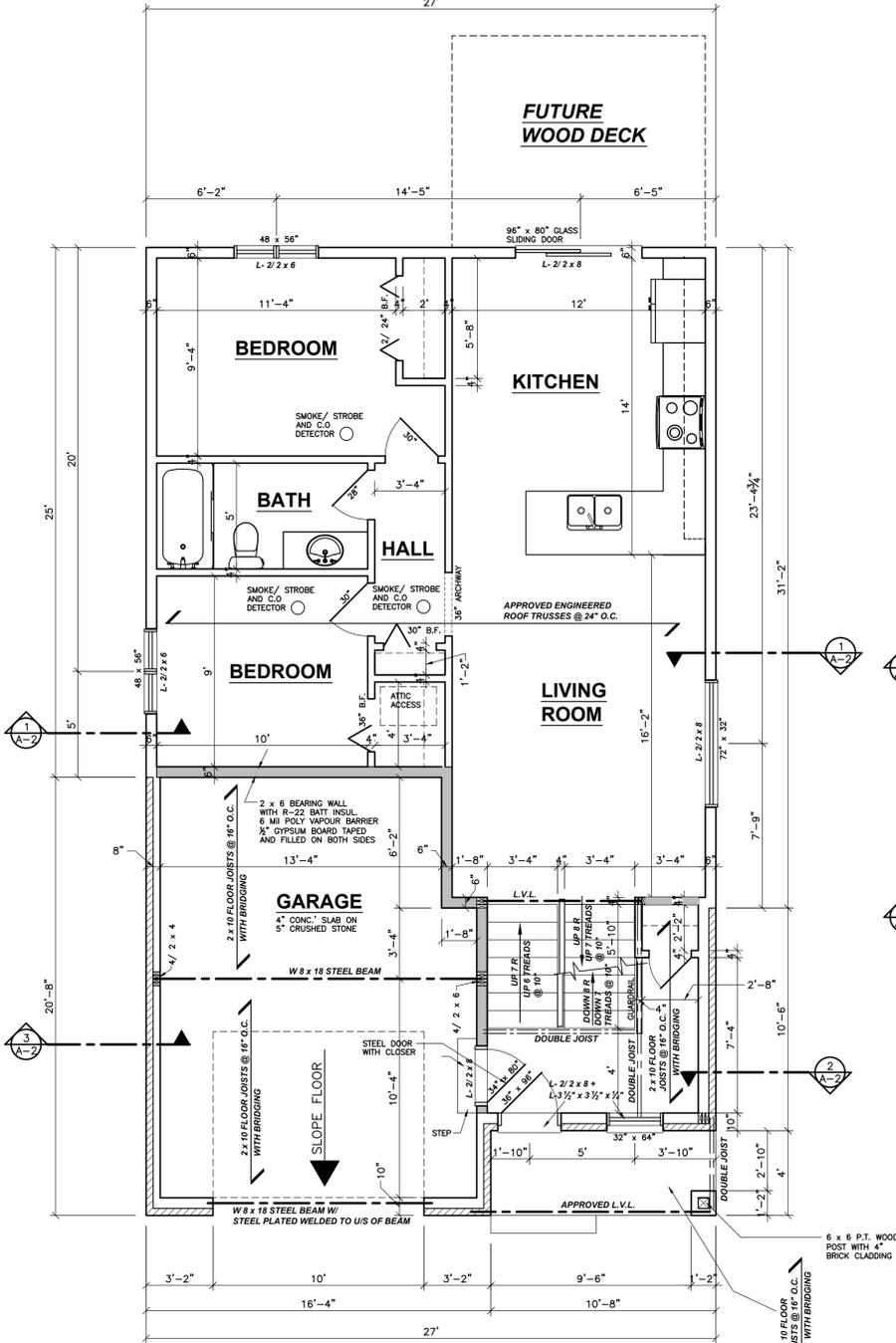
Council Approval Date	Council Resolution	Address	Applicant	Project Description	Grant Programs
August 4, 2020 February 1, 2021	CR405/2020 CR60/2021	840 Wyandotte St E	1362279 Ontario Ltd.	Clean up and redevelop site for mixed use	<ul style="list-style-type: none"> <li>• Feasibility Study Grant</li> <li>• Environmental Site Assessment Grant</li> <li>• Brownfield Tax Assistance</li> <li>• Brownfield Rehabilitation Grant</li> </ul>
February 1, 2021	CR60/2021	1370 Argyle Rd	Duo Fratres Inc.	Clean up and redevelop site for residential use	<ul style="list-style-type: none"> <li>• Brownfield Tax Assistance</li> <li>• Brownfield Rehabilitation Grant</li> </ul>



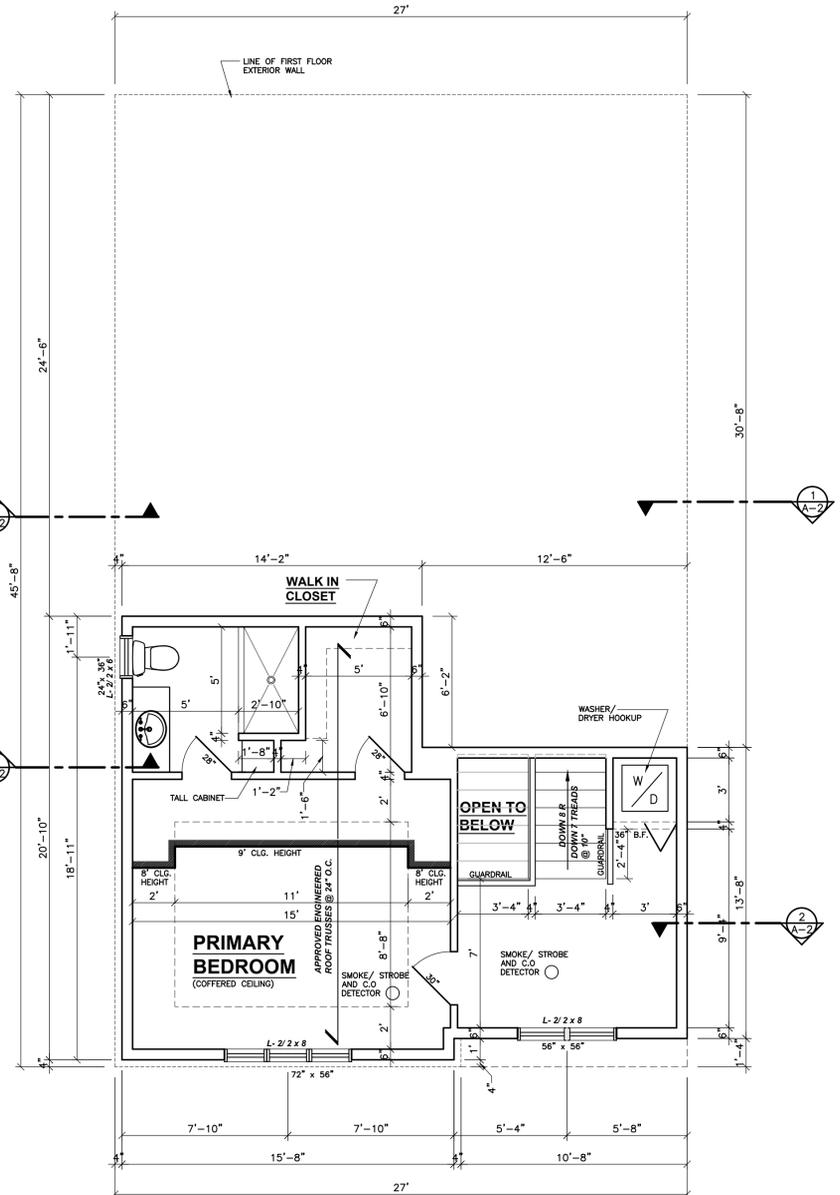
NOTE: THESE DRAWINGS ARE ONLY TO BE USED TO OBTAIN A BUILDING PERMIT. SIZES OF STRUCTURAL MEMBERS SUCH AS ROOF TRUSSES, STEEL AND WOOD LAMINATED BEAMS, SHALL BE PROVIDED BY THE MANUFACTURERS SPECIFICATIONS.



1 FOUNDATION PLAN  
A-1 SCALE: 1/4" = 1'-0"  
AREA: 874 Sq. Ft.



2 FIRST FLOOR PLAN  
A-1 SCALE: 1/4" = 1'-0"  
AREA: 874 Sq. Ft.



3 SECOND FLOOR PLAN  
A-1 SCALE: 1/4" = 1'-0"  
AREA: 423 Sq. Ft.

(2318 WESTCOTT)

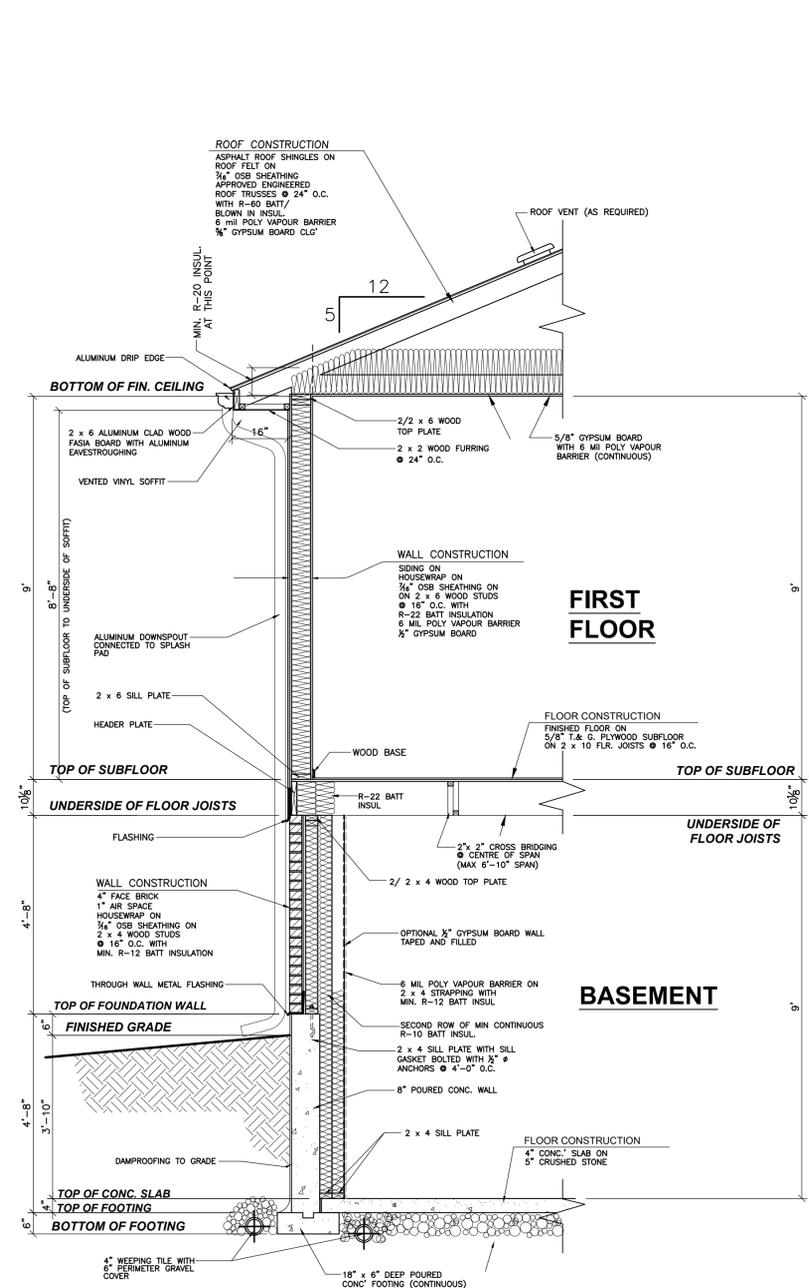
**MATTHEWS**  
design  
6 - 2557 Dougall Ave, Suite 1600  
WINDSOR ONTARIO, CANADA  
N8X 1T5  
(519) 915 - 3275  
E-MAIL: cmatthewsdesignwindsor@gmail.com

**BCIN**  
38359  
DESIGNS © C.MATTHEWS DESIGN 2024

PROJECT: PROPOSED BI-LEVEL BI-LEVEL  
HOUSE WITH BONUS ROOM (1297 Sq. Ft)  
FOR: 2644008 Ont Inc  
TITLE: FOUNDATION PLAN  
AND FIRST FLOOR PLAN

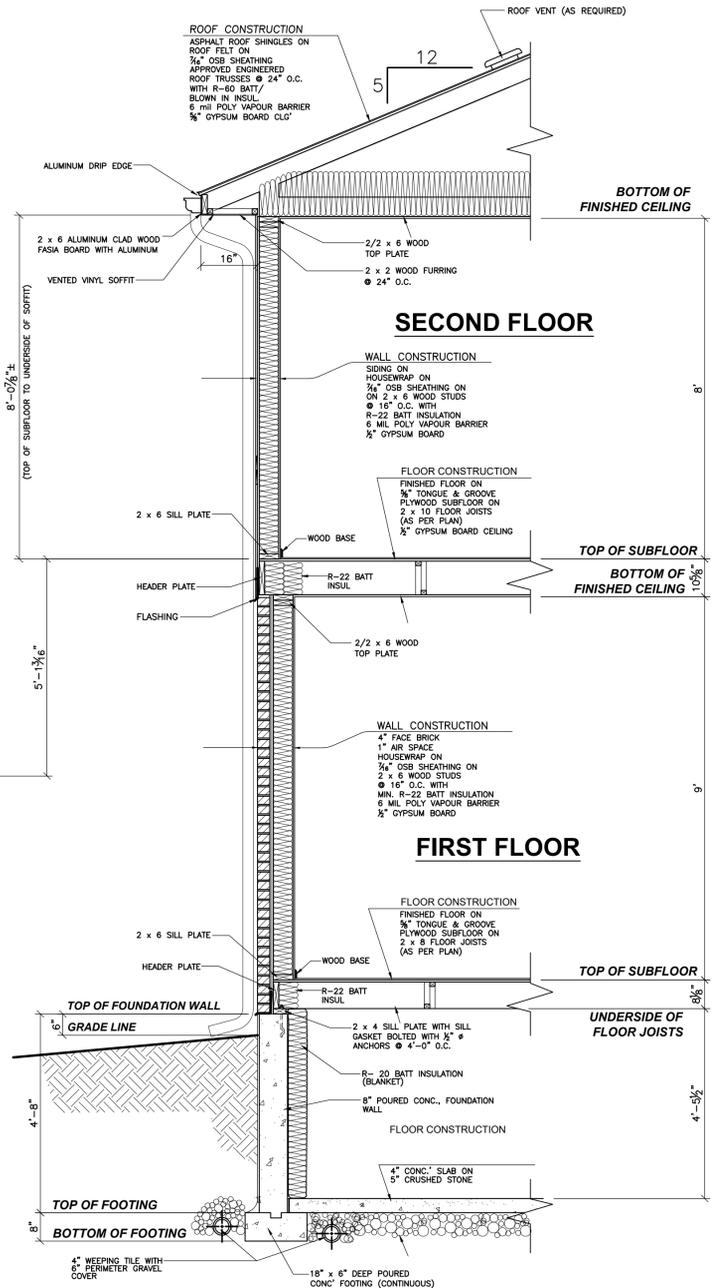
DRAWN BY:  
C.D.M.  
DATE:  
MAY 21 / 2024  
SCALE:  
1/4" = 1'-0"  
JOB No.  
2409D  
DWG. No.  
A-1

NOTE: THESE DRAWINGS ARE ONLY TO BE USED TO OBTAIN A BUILDING PERMIT. SIZES OF STRUCTURAL MEMBERS SUCH AS ROOF TRUSSES, STEEL AND WOOD LAMINATED BEAMS, SHALL BE PROVIDED BY THE MANUFACTURERS SPECIFICATIONS.

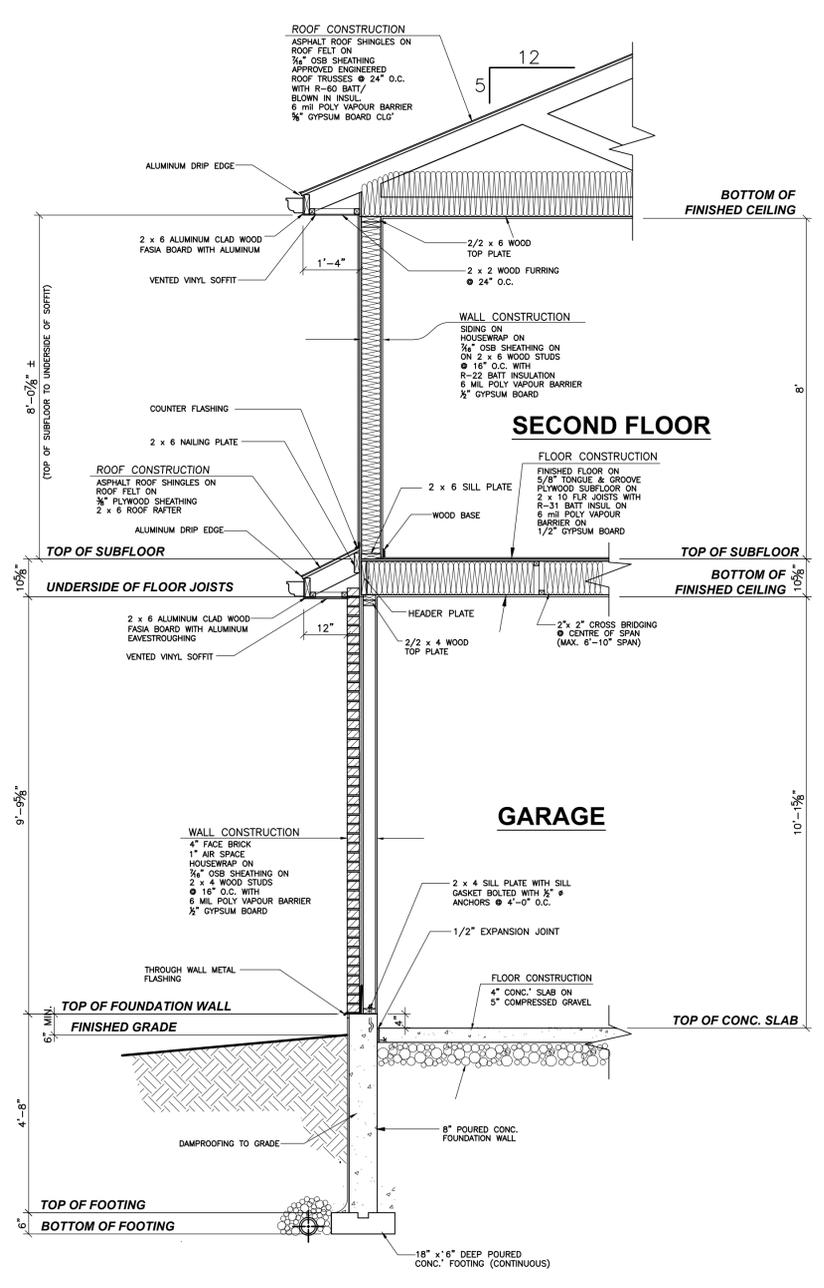


**1 WALL SECTION**  
A-2 SCALE: 1/2" = 1'-0"

NOTE  
INSULATION VALUES MAY VARY  
BASED ON SPACE HEATING EQUIPMENT,  
HRV (IF APPLICABLE) AND HOT WATER  
HEATER



**2 WALL SECTION**  
A-2 SCALE: 1/2" = 1'-0"



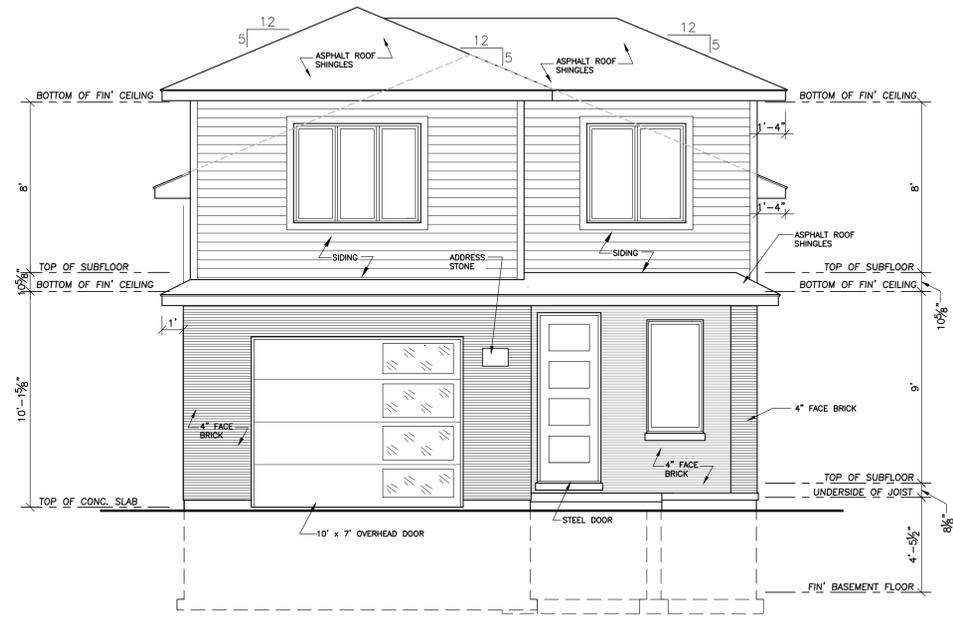
**3 WALL SECTION THROUGH GARAGE**  
A-2 SCALE: 1/2" = 1'-0"

**MATTHEWS**  
design  
6 - 2557 Dougall Ave, Suite 1600  
WINDSOR ONTARIO, CANADA  
N8X 1T5  
(519) 915 - 3275  
E-MAIL: cmatthewsdesignwindsor@gmail.com

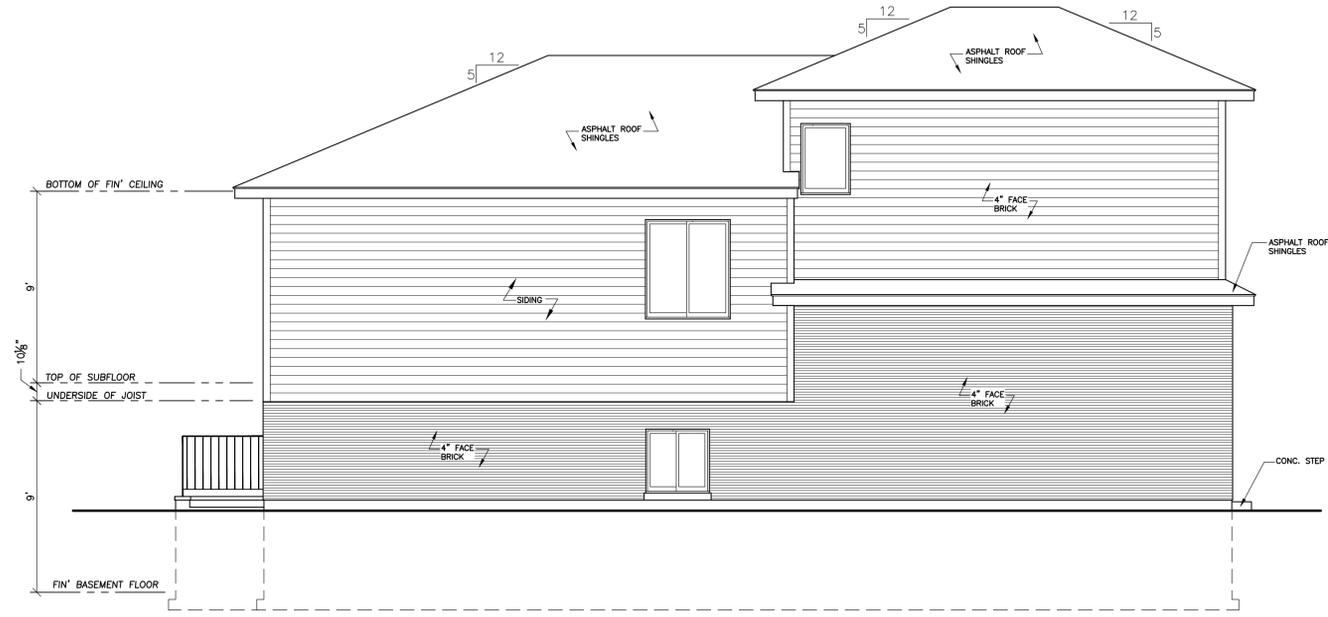
**BCIN**  
38359  
DESIGNS © C.MATTHEWS DESIGN 2024

PROJECT: PROPOSED BI-LEVEL BI-LEVEL HOUSE WITH BONUS ROOM (1297 Sq. Ft) FOR: 2644008 Ont Inc	DRAWN BY: C.D.M.	DWG. No. <b>A-2</b>
TITLE: SECTIONS	DATE: MAY 21 / 2024	
	SCALE: 1/2" = 1'-0"	
	JOB No. 2409D	

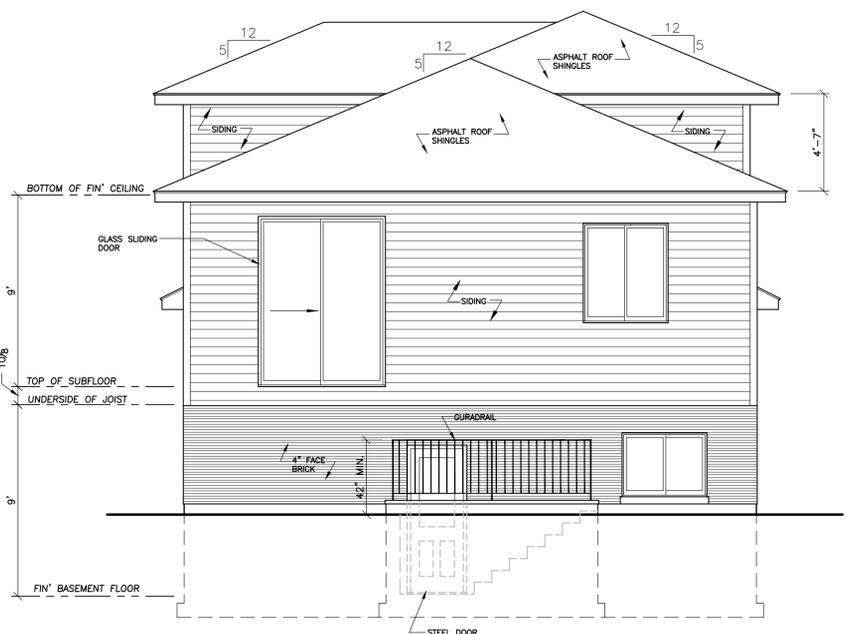
NOTE: THESE DRAWINGS ARE ONLY TO BE USED TO OBTAIN A BUILDING PERMIT. SIZES OF STRUCTURAL MEMBERS SUCH AS: ROOF TRUSSES, STEEL AND WOOD LAMINATED BEAMS, SHALL BE PROVIDED BY THE MANUFACTURERS SPECIFICATIONS.



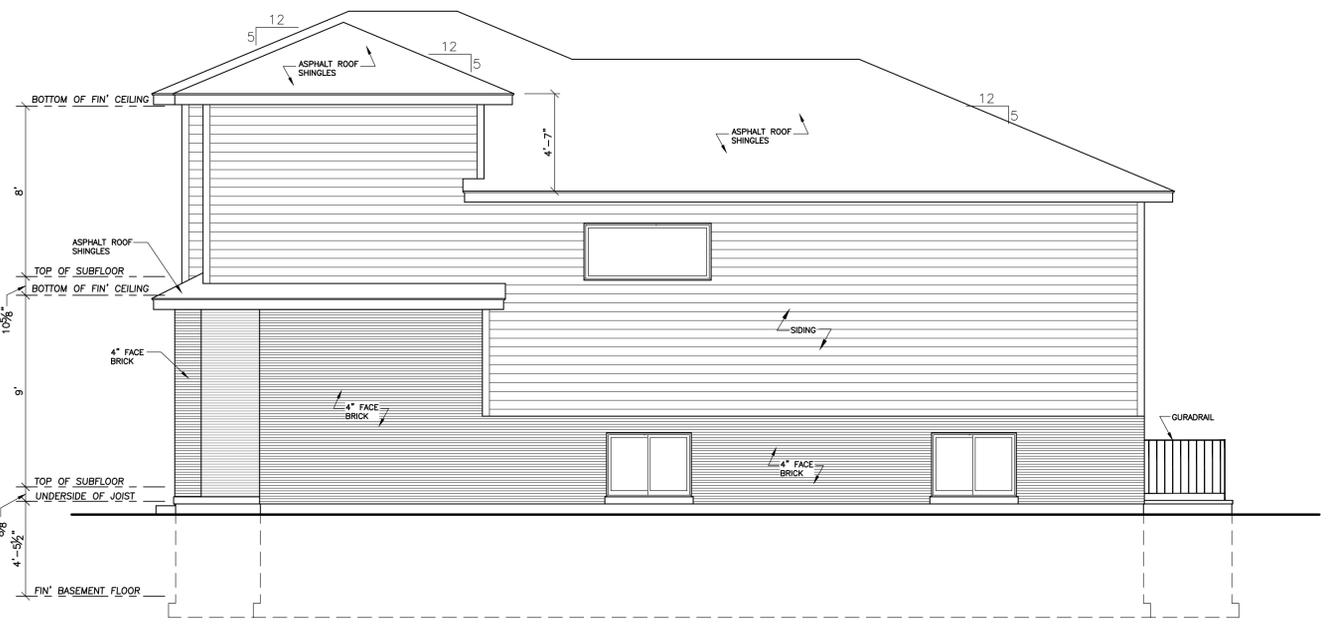
1 FRONT ELEVATION  
A-3 SCALE: 1/4" = 1'-0"



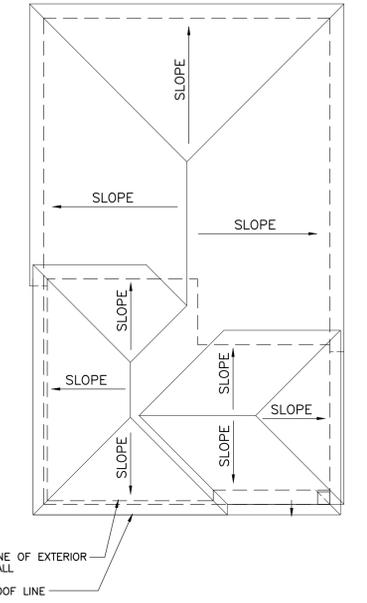
3 LEFT ELEVATION  
A-3 SCALE: 1/4" = 1'-0"



2 REAR ELEVATION  
A-3 SCALE: 1/4" = 1'-0"



4 RIGHT ELEVATION  
A-3 SCALE: 1/4" = 1'-0"



3 ROOF PLAN  
A-3 SCALE: 1/2" = 1'-0"

**MATTHEWS**  
design  
6 - 2557 Dougall Ave, Suite 1600  
WINDSOR ONTARIO, CANADA  
N8X 1T5  
(519) 915 - 3275  
E-MAIL: cmatthewsdesignwindsor@gmail.com

**BCIN**  
38359  
DESIGNS © C.MATTHEWS DESIGN 2024

PROJECT: PROPOSED BI-LEVEL BI-LEVEL  
HOUSE WITH BONUS ROOM (1297 Sq. Ft)  
FOR: 2644008 Ont Inc  
TITLE: ELEVATIONS AND  
ROOF PLAN

DRAWN BY:  
C.D.M.  
DATE:  
MAY 21 / 2024  
SCALE:  
1/4" = 1'-0"  
JOB No.  
2409D  
DWG. No.  
A-3

AMENDMENT NO. 181  
TO THE  
CITY OF WINDSOR OFFICIAL PLAN

Part E (Details of the Amendment) of the following text and attached Schedule C-1 of the City of Windsor Official Plan constitute Amendment No. 181.

Also included, but not constituting part of the Amendment, are explanations of purpose, location, background, legislative and policy basis, public involvement, implementation, and additional in Appendix I (Results of Public Notification).

## **A. PURPOSE**

The proposed Official Plan amendments will enable implementation of the updated Windsor Archaeological Management Plan for identification and conservation of archaeological resources. The amendments are proposed in Chapter 9 to 11 of the Official Plan, and to Schedule C-1 Archaeological Potential.

## **B. LOCATION**

The changes made apply to all land within the municipal boundaries of the City.

## **C. BACKGROUND**

The City of Windsor is an area rich in archaeological resources from both Indigenous peoples and early settlers. City Council recognized this through adoption of the original Windsor Archaeological Master Plan (WAMP) and associated Official Plan policies in 2005 and 2006, including a map of Archaeological Potential which has been used to identify when and where archaeological assessments are required prior to land disturbances. The WAMP is now updated to current legislation and standards, and the Archaeological potential model has been refreshed and supplemented with data collected from the past 20 years. Therefore, all of the Official Plan policies related to archaeology are proposed to be amended (majority in Chapter 9 Heritage Conservation), and Schedule C-1 Archaeological Potential is proposed to be renamed and replaced.

## **D. LEGISLATIVE CONTEXT AND POLICY BASIS FOR THE AMENDMENT**

Refer to the Council Report for Legislative context.

### **Official Plan**

The City's Official Plan currently addresses archaeology.

Chapters 1 (Introduction) describes reference to Schedule C-1: Development Constraint Areas: Archaeological Potential to identify potential development constraints on an area or parcel of land, and for municipal infrastructure undertaking or by-law.

Chapter 2 (Glossary) describes archaeological sites as heritage resources considered by Council to be of significance.

Chapter 5 (Environmental Management) indicates that any alteration or related works within Shoreline and Floodprone Areas will be evaluated based on potential negative impacts upon archaeological resources.

Chapter 9 (Heritage Conservation) speaks to maintaining and updating inventory of registered sites and lands of archaeological potential identified in the WAMP and in Schedule C-1. Protection of archaeological resources is also required for development or infrastructure undertakings to ensure sites are preserved mitigated prior to land disturbance/site development, through archaeological assessments.

Chapter 10 (Procedures) indicates that the Municipality may require archaeological assessments for Planning Act applications, and outlines the stages of Archaeological Assessments and the requirement that land disturbance is not to take place prior to Ministry review and “clearance”.

Chapter 11 (Tools) describes Zoning By-law specification of uses permitted and to contain regulation with respect to matters such as development on or near archaeological potential lands or significant archaeological sites.

## **E. THE AMENDMENT**

### **Summary of Revisions to Archaeological Policies**

Many of the Official Plan policies related to archaeology will remain. Schedule C-1 is proposed to be replaced and renamed to Schedule C-1 Archaeological Potential. New policies are included in Chapter 9.2 Objectives to Heritage Conservation. Identification and protection of archaeological sites will be strengthened through revisions to 9.3.2.1(a) and 9.3.4.1(a) with increased language about Indigenous engagement as required by Legislative changes. New policies on Human Remains and artifact curation provides some direction in those areas. In the policy on Heritage Resources and Planning Initiatives, Archaeological Assessment (9.3.7.1 (a)), more clarity is provided for the requirement of archaeological assessment including for municipal projects, and requirements for marine archaeological assessments. The process for review of the Archaeological assessment(s) and its acceptance is detailed, along with instructions for engagement with Indigenous communities. Housekeeping terminology changes are proposed for 10.2.16.3 for reference made to the Ministry and in 11.6.2.2 to the new name for Schedule C-1 Archaeological Potential.

### **Details of Official Plan Amendment**

1) That Schedule “A-1” of Volume 1: The Primary Plan of the City of Windsor Official Plan BE AMENDED be replaced.

2) General

Volume I: The Primary Plan, Schedule C-1 is hereby amended by:

changing the name of the schedule as follows:

- Schedule C-1 Development Constraint Areas: Archaeological Potential is changed to Schedule C-1 Archaeological Potential as shown on Appendix x.

Volume I: The Primary Plan, is hereby amended by:

changing the words Schedule C-1: Development Constraint Areas: Archaeological Potential to Schedule C-1: Archaeological Potential throughout Volume 1: The Primary Plan

Volume II: Secondary Plans & Special Policy Areas is hereby amended by: changing the words Schedule C-1: Development Constraint Areas: Archaeological Potential to Schedule C-1: Archaeological Potential throughout Volume II: Secondary Plans and Special Policy Areas

### 3) Specifics

Chapter 9 entitled Heritage Conservation is amended by adding the following sections 9.2.5 to 9.2.7:

<i>ARCHAEOLOGICAL CONSERVATION</i>	9.2.5	To identify, protect and conserve Windsor's archaeological resources in place wherever possible and encourage development that respects Windsor's archaeological heritage. Through an understanding of, and measures to protect archaeological heritage, Windsor can incorporate the past into planning for the future.
<i>INDIGENOUS COMMUNITY ENGAGEMENT</i>	9.2.6	To recognize that the lands within its jurisdiction are of interest to a number of Indigenous communities. As such, Windsor will engage with all such communities in the land development process.
<i>PROVINCIAL LEGISLATION</i>	9.2.7	To use as appropriate all relevant Provincial legislation that references the conservation of cultural heritage resources, particularly the provisions of the Ontario Heritage Act, the Planning Act, the Environmental Assessment Act, and the Funeral, Burial and Cremation Services Act in order to identify and conserve Windsor's cultural heritage including archaeological resources.

Chapter 9 entitled Heritage Conservation is amended by deleting sections 9.3.2.1(a), 9.3.4.1(a), and 9.3.7.1(a) and substituting the following:

<i>WINDSOR ARCHAEOLOGICAL MANAGEMENT PLAN (WAMP)</i>	9.3.2.1(a)	Preparing and maintaining an archaeological management plan that identifies known archaeological resources and areas of archaeological potential in Schedule C-1 Archaeological Potential and that provides direction and requirements for the identification, evaluation, conservation and management of archaeological resources in accordance with the Ontario Heritage Act. Maintenance will include updating the inventory of registered archaeological sites and lands for which an archaeological assessment has been completed by a provincially licensed archaeological consultant in accordance with provincial standards and guidelines. Schedule C-1 of the Official Plan is a map indicating areas of archaeological potential in Windsor.
--	------------	---

#### 9.3.4 Protection of Heritage Resources

	9.3.4.1	Council will protect and conserve heritage resources by:
<i>ARCHAEOLOGICAL SITES</i>	9.3.4.1(a)	<p>Requiring that development or infrastructure undertakings on lands containing potential archaeological resources avoid the destruction or alteration of these resources in Schedule C-1 Archaeological Potential; or where this is not possible, requiring the proponent to mitigate the impact to archaeological resources through documentation and removal in advance of land disturbances, in accordance with the Ontario Heritage Act and the policies contained within the Windsor Archaeological Management Plan. Where archaeological resources must be preserved in situ, avoidance and protection measures must be implemented under the direction of a licensed archaeological consultant in accordance with provincial standards and guidelines.</p> <p>Where Indigenous archaeological resources are to be preserved on site, the development proponent, and the consultant archaeologist shall engage with the appropriate Indigenous communities to identify approaches to the landscaping and interpretation of the site if desired, subject to discussions with stakeholders.</p> <p>Where Indigenous archaeological resources are identified and preservation on site is not possible, the development proponent, and the consultant archaeologist shall engage with the appropriate Indigenous communities to identify interpretive and commemorative opportunities relating to the resource if desired, subject to discussions with stakeholders.</p>
<i>HUMAN REMAINS</i>	9.3.4.1(a) (i)	<p>In the event that unexpected human remains or cemeteries are identified or encountered during assessment, development, or site alteration, all work must immediately cease, and the site must be secured. The appropriate provincial and municipal authorities must be notified. Provisions of the Funeral, Burial and Cremation Services Act, the Ontario Heritage Act, and other applicable protocols and policies must be followed. Where there are Indigenous burials, they will be addressed in consultation with the relevant Indigenous communities. A licensed archaeological consultant will be required to carry out an investigation if ordered by the Bereavement Authority of Ontario or the Registrar of Burials, Ministry of Public and Business Service Delivery.</p>
<i>ARTIFACT CURATION</i>	9.3.4.1(a) (ii)	<p>All artifacts found on property owned by the City of Windsor are to be reported to the City of Windsor for review and possible acceptance and curation by Museum Windsor, in accordance with the artifact transfer process of the Archaeology Program Unit, Ministry of Citizenship and Multiculturalism (MCM). Museum Windsor will also consider accepting transfers of significant artifacts found on private land, subject to Museum Windsor's Collections Policy.</p>

ARCHAEOLOGICAL  
ASSESSMENT

9.3.7.1(a) An archaeological assessment is required as part of a complete application for all development or site alteration application, including municipal projects, if it is determined using the archaeological management plan potential mapping that any part of a potential development area possesses archaeological potential or known archaeological resources as set out in Schedule C-1 Archaeological Potential. Projects involving in-water works may require a marine archaeological assessment if so determined using the Criteria for Evaluating Marine Archaeological Potential checklist published by the Archaeology Program Unit, MCM.

Archaeological assessments shall be undertaken to the appropriate stage of assessment by a consultant archaeologist in compliance with provincial requirements and standards.

All archaeological assessments reports shall be provided to the Archaeology Program Unit, Ministry of Citizenship and Multiculturalism in accordance with the Ontario Heritage Act. The assessment report shall be provided to the City of Windsor for comment to ensure that the scope is adequate and consistent with the conservation objectives of the WAMP. A copy of the Ministry review letter will be provided to the City by the licensed archaeologist who completed the assessment or the proponent. The City will maintain copies of all reports and review letters for information purposes.

Where archaeological resources are documented and found to be Indigenous in origin, a copy of the assessment report shall be provided by the consultant to the appropriate Indigenous communities.

Where Stage 3 or Stage 4 archaeological assessments are undertaken on Indigenous archaeological resources, the consultant archaeologist shall engage with appropriate Indigenous communities in accordance with Ministry Standards and Guidelines for Consultant Archaeologists.

Chapter 10 entitled Procedures is amended by substituting reference to the Ministry, with the following proposed section 10.2.16.3:  
(amendments noted in **bold** lettering, deletions noted by strikeouts)

APPROVAL  
AUTHORITY

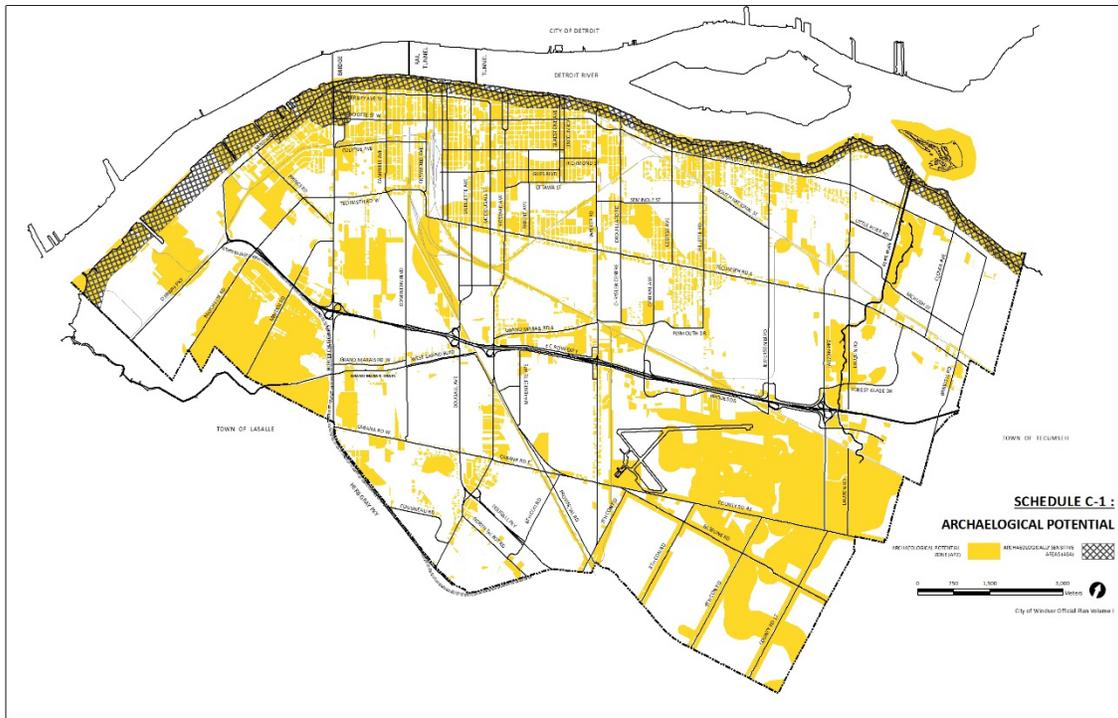
10.2.16.3 No land disturbance shall be permitted until notification has been received from the Ministry of Culture ~~of Culture~~ (**Archaeology Program Unit**) that the property has been cleared of archaeological concerns.

Chapter 11 entitled Tools is amended by revising reference to Schedule C-1, with the following proposed section 11.6.2.2(c):  
 (amendments noted in **bold** lettering, deletions noted by strikeouts)

*COMPREHENSIVE ZONING BY-LAWS(S)* 11.6.2.2 The comprehensive Zoning By-law(s) shall specify the uses permitted in all areas of the city and shall contain regulations with respect to matters such as:

(c) Development on or near lands identified on ~~Schedule 'C': Development Constraint Areas~~ **Schedule C-1 Archaeological Potential** and significant archaeological sites;

**Schedule C-1**



**F. PUBLIC INVOLVEMENT:**

The policies were drafted with the archaeological consultants (ASI) who prepared the Windsor Archaeological Management Plan review, and where much of the contents from this amendment originated from. Administration have also consulted with the Ministry of Citizenship & Multiculturalism (Archaeology Program Unit), and City of Windsor's Departments including Planning, Building, Engineering, Parks, Recreation & Culture, Asset Planning, Legal, Geomatics.

14 Indigenous First Nations, communities, and organizations, were consulted in March 2021, October 2021, and July 2022:

- Aamjiwnaang First Nation;
- Aboriginal Education Centre – Turtle Island at the University of Windsor;
- Caldwell First Nation;
- Can-Am Indian Friendship Center;
- Chippewa of the Thames First Nation;
- Delaware Nation;
- Haudenosaunee Confederacy Chiefs Council;
- Huron-Wendat Nation;
- Kettle and Stony Point First Nation;
- Métis Nation of Ontario
- Oneida of the Thames First Nation;
- Six Nations of the Grand River First Nation;
- Walpole Island First Nation, and;
- Wyandot of Anderdon

Ontario Archaeological Society Windsor Chapter was circulated through their Chapter president.

**Public Notice:**

The statutory notice required under the Planning Act was provided in the Windsor Star prior to the Development & Heritage Standing Committee Meeting (DHSC) meeting.

**G. IMPLEMENTATION:**

This amendment brings the Official Plan into conformity with provincial Legislation such as the *Planning Act*, *Ontario Heritage Act*, *Environmental Assessment Act*, *Funeral, Burial and Cremation Services Act* and consistency with the Provincial Policy Statement (2020). The amendment also references the archaeological potential model which has been updated.

The Amendment should be read and implemented in conjunction with the overall policies contained with the Official Plan.

## **APPENDIX I**

The following are the results of public notification of the amendments and the outcome of public meetings. Comments relate to the Official Plan Amendment:

Comments Received May 22, 2024



# Caldwell First Nation

14 Orange Street, Leamington, Ontario, N8H 1P5

Phone: 519-322-1766 Fax: 519-322-1533

**To:** Kristina Tang

Heritage Planner

City of Windsor

**RE: Windsor Archaeological Master Plan**

**Report Review and Comments**

Reference	Text Example	Comments	Reviewer
Masterplan p. 10	The archaeological sites that are the physical remains of the City of Windsor’s 13,000-year settlement history represent a fragile and non-renewable cultural heritage resource that must be conserved and protected	As opposed to referring to settlement history, refer to the history of First Nations people who have been stewarding these lands since time immemorial. The history of Windsor is not limited to the last 13,000 years.	
AMENDMENT NO. 181 TO THE CITY OF WINDSOR OFFICIAL PLAN p. 4 of 9	...are of interest to a number of Indigenous communities.	The communities should be listed and updated as required so as to remove any ambiguity as to which communities should be contacted. This list should be seen as inclusive rather than exclusive. In other words, no interested community should be excluded from being contacted because they were not yet added to the list.	
Ibid p. 4 of 9	Maintenance will include updating the	This standard is completely inadequate for the reality of archaeology as it has	

	<p>inventory of registered archaeological sites and lands for which an archaeological assessment has been completed by a provincially licensed archaeological consultant in accordance with provincial standards and guidelines.</p>	<p>been practiced in Essex County and the City of Windsor. The Ontario Heritage Act was passed in 1991, and there has been extensive archaeology that was carried out prior to both the provincial standards and guidelines as well as the provincial licensing system. Sites that were known to have been excavated prior to the OHA should be included as well, and if their precise location is not know, the best estimate of their location should be included in the registry until further information comes to light.</p>	
<p>Ibid p. 5 of 9</p>	<p>...unexpected human remains or cemeteries are identified or encountered during assessment, development, or site alteration...</p>	<p>The limitation of Schedule C-1 is that it only shows areas of archaeological potential, without differentiating what they could potentially contain. There are several known areas that are burial or ossuary complexes. Given what is known about the nature of those sites and the various indigenous cultures that used them, it would be reasonable to have both a map of known burial sites as well as potential areas around them where the probability of additional remains and grave sites is high. These areas should be treated with more care a scrutiny than a typical archaeological assessment would have. While we understand the need to not put the precise location of known burials on a map due to the possibility of vandalism or looting, it is important that areas with a high potential for human remains be flagged as a high priority.</p>	
<p>Ibid p.5 of 9</p>	<p>All artifacts found on property owned by the City of Windsor are to be reported to the City of Windsor for review and possible acceptance and curation by Museum</p>	<p>There should be some sort of mechanism in place for reporting the discovery of these artifacts to potentially impacted First Nations as well, regardless of their supposed origin (classified as either Euro-Canadian or Indigenous in origin). Given that First Nations families</p>	

	Windsor,	continued to live in their traditional territory (including the city of Windsor) to the present day, and gradually (or suddenly) adopted the artifacts, technology, and lifeways of the colonial peoples there is always the possibility that found artifacts could be associated with a First Nation individual or family.	
Ibid p. 6 of 9	...if it is determined using the archaeological management plan potential mapping that any part of a potential development area possesses archaeological potential or known archaeological resources as set out in Schedule C-1 Archaeological Potential.	As recent events have indicated, there are serious gaps in the map set out in Schedule C-1. For example, [REDACTED], an area that has been excavated several times during the 20 <sup>th</sup> century, is a known burial site, and is within 50-100 meters of other burial sites was left marked as having “low potential”. The only areas that are marked as sensitive are along the riverfront, ignoring areas such as the [REDACTED]. This map needs to be revised to bring it in line with current information, and a protocol needs to be put in place that triggers contact and a review with interested First Nations where there is archaeological assessment being done in a sensitive area, regardless of the stage.	
Ibid p. 6 of 9	Where Stage 3 or Stage 4 archaeological assessments are undertaken on Indigenous archaeological resources, the consultant archaeologist shall engage with appropriate Indigenous communities in accordance with Ministry Standards and Guidelines for	See my previous comments. Last year an archaeological excavation (stage 2) was undertaken in an area marked in Schedule C-1 as “archaeologically sensitive” that was also within 100 meters of an existing burial site. The City did not contact interested First Nations and insisted that they were not required to, despite the clear possibility that any excavation, even test pitting, would disturb human remains. The standards triggering consultation should be higher in areas such as those, and greater care must be taken given the damage that has already been done to burial sites within the city.	

	Consultant Archaeologists.		
Contingency Planning 8.4.2	The document refers to the role of the property owner, province, city, consultant archaeologist, etc.	There is no section that refers to the role of Indigenous communities. The community may have a reference for how the remains are honored. Some may want commemorative signage and some may want them returned and undisturbed.	
Contingency Planning 8.4.2	In the case of the discovery of Indigenous archaeological resources, the consultant archaeologist is required to engage with the appropriate First Nations to seek their input into this process in accordance with the Standards and Guidelines for Consultant Archaeologists (MTC, 2011)	How does the City define appropriate First Nations? It is not always just the closest First Nation to the site.	
Mapping of Significant Areas		By what criteria was used to determine significant sites? There are known archeological sites not mapped.	
Lack of Planning Involvement		There needs to be something that triggers the Planning Department to be engaged in future developments on sites where there is archeological potential, regardless of whether or not there is a planning act application.	

In conclusion, after reviewing the Archeological Master Plan and mapping of archeological significant areas, Caldwell First Nation can conclude that the City of Windsor has not accurately identified all significant areas of archeological interest. Additional time for Caldwell First Nation to necessary to complete a thorough review and revision of the significant areas mapping. It is requested that the City of Windsor revise the policies referred to in the section above and address each comment provided in this matrix.

Respectfully,

A handwritten signature in black ink, appearing to read 'Zack Hamm', with a long horizontal flourish extending to the right.

Zack Hamm  
Environment & Consultation Department Manager  
Caldwell First Nation  
226-936-2940  
[ecd.manager@caldwellfirstnation.ca](mailto:ecd.manager@caldwellfirstnation.ca)

**Appendix 3- 2024 Windsor Archaeological Management Plan Revised Excerpt of Executive Summary**

**Current version:**

“The archaeological sites that are the physical remains of the City of Windsor’s 13,000-year settlement history represent a fragile and non- renewable cultural heritage resource that must be conserved and protected...”

**To be replaced with**

“Indigenous peoples have been stewarding the lands of North America, which many refer to as Turtle Island, since time immemorial. Archaeological evidence indicates that, for the City of Windsor and environs, Indigenous settlement began at the end of the Pleistocene as the Laurentide Ice Sheet was withdrawing from the Great Lakes area over 13,000 years ago. Growing evidence from areas beyond the continental glacier indicates the presence of Indigenous peoples many millennia prior to that—indeed back into time immemorial. Windsor’s archaeological record of this vast Indigenous history represent a fragile and non-renewable cultural heritage resource that must be conserved and protected....”



# City of Windsor Archaeological Management Plan 2024 Update

May 2024



## **Project Personnel**

### **Archaeological Services Inc. (ASI)**

Consultant Project Manager: Robert I. MacDonald, Ph.D.,  
Managing Partner

Project Archaeologist: David Robertson, M.A., Partner

Project Manager: Martin Cooper, M.A., Senior Associate  
Eric Beales, M.A., Project Manager

Geomatics Manager: Jonas Fernandez, M.A.

Geomatics Specialist: Adam Burwell, M.Sc.  
Peter Bikoulis, Ph.D.

### **Fisher Archaeological Consulting**

Project Archaeologist: Jacqueline Fisher, M.A.,  
Principal Archaeologist

Project Archaeologist: Jim Molnar, Ph.D., Manager

Project Archaeologist: Ruth Macdougall, M.A., Project Manager

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## Executive Summary

The archaeological sites that are the physical remains of the City of Windsor's 13,000-year settlement history represent a fragile and non-renewable cultural heritage resource that must be conserved and protected. This document and associated mapping, developed on a geographical information system (GIS) platform, update Windsor's archaeological management plan (WAMP) based on best practices in archaeological resource management. With this updated WAMP, the City of Windsor can more easily identify where archaeological assessments are required in the land use planning and development process—or any other municipal processes involving land disturbance—and manage archaeological resources within its jurisdiction.

Through its GIS mapping of known archaeological sites and areas of archaeological potential, the WAMP allows the City of Windsor's Planning and Building Services Department, along with other city departments, property owners, developers, and prospective land buyers, to know whether archaeological investigations are necessary prior to land disturbing activities. Thus, the WAMP reduces the risk of unfortunate surprises occurring during land altering activities (such as disturbing an Indigenous burial site or a nineteenth century building foundation), and considerably enhances public awareness of archaeological resources. The WAMP also allows residents to know and appreciate their community's history better. For example, caring for and sharing information about Windsor's Indigenous archaeological heritage is an important step towards reconciliation with local Indigenous nations.

More specifically, the City of Windsor's archaeological management plan has three major objectives, as follows:

- the compilation of detailed, reliable inventories of registered archaeological sites within Windsor;

- the development of an archaeological site potential model specific to the City of Windsor, based on known site locations, past and present land uses, environmental and cultural-historical data, and assessment of the likelihood for survival of archaeological resources in various contexts; and,
- the provision of recommendations concerning the preparation of archaeological resource conservation and management guidelines for the City of Windsor.

The development of an archaeological site potential model was undertaken based on both an inductive and deductive approach to predicting where additional pre-contact Indigenous sites are most likely situated and detailed historical research to map historical archaeological potential. It was determined that the pre-contact Indigenous archaeological site potential layer captures all previously identified pre-contact Indigenous sites in Windsor excluding isolated finds.

The identification of areas in the Colonial Period archaeological potential layer involved the digitization of relevant nineteenth century residential, commercial, and industrial features and transportation routes from historical mapping and cemeteries, and captures all the colonial period archaeological sites previously discovered in Windsor.

The role of the City of Windsor in the conservation of cultural heritage resources is crucial. Although heritage conservation is regulated by the Province of Ontario, planning and land use control are predominantly municipal responsibilities and the impact of municipal land use decisions on archaeological resources is significant. This is particularly the case since municipally approved developments constitute most land disturbing activities in the Province. The primary means by which these resources may be protected is through the planning and development approval process.

The WAMP provides a series of policy recommendations within the planning and

development approvals process, to be integrated into Windsor's Official Plan, which will ensure the conservation of these valuable cultural heritage resources within the overall process of change and growth in the city. The WAMP policy recommendations are consistent with the Provincial Policy Statement (2020) and the Ontario Heritage Act (2005).

Development of the WAMP also benefitted from engagement with Indigenous nations. Windsor lies within the traditional territory of the Anishinaabe nations that comprise the Three Fires Confederacy: Ojibwa (Chippewa), Odawa (Ottawa), and Potawatomi. It is also within the scope of treaties signed by the British Crown, including Treaty #2 (also known as the 1790 McKee Purchase), signed with representatives of these Anishinaabe nations together with representatives of the Huron (Wendat/Wyandot) Nation, and the 1701 Nanfan treaty, signed with the Haudenosaunee Confederacy (Five Nations) at Albany, NY. These nations were also signatories of the 1701 Great Peace of Montreal treaty, negotiated between the government of New France and thirty-nine Indigenous nations, that ratified the Dish With One Spoon principle for sharing resources while respecting sovereign territories (Jacobs & Lytwyn, 2020). The WAMP recommends continued engagement with Indigenous nations in Windsor's archaeological review and planning approvals processes.

In summary, in having developed and updated this archaeological management plan, the City of Windsor joins with other major Ontario municipalities in pursuing the best approach available to ensuring archaeological site conservation within its jurisdiction.

# 1 Introduction

## 1.1 Study Objectives

The WAMP represents a comprehensive approach to the conservation of archaeological resources. The most effective means of protecting archaeological sites is through adoption of planning and management guidelines that are informed by both the known distribution and character of archaeological sites and by assessment of the potential location of additional sites that have yet to be discovered.

This report presents an archaeological potential model and planning and management guidelines that are consistent with provincial legislation. The archaeological potential model was developed using an ArcGIS® Geographic Information System to summarize and map various data sets as separate, but complementary layers. Modelling criteria specific to Windsor were then derived through analysis of these layers and applied to produce a final archaeological potential zone. This layer will be used by Windsor staff to evaluate planning applications and other municipal infrastructure projects for the necessity of carrying out archaeological resource assessments. While the archaeological potential zone has been derived with respect to land-based archaeological resources, adjacent water bodies may also have archaeological potential.

The report is divided into two main parts. Part I presents the archaeological potential model for both pre-contact Indigenous and colonial period sites. Part II addresses archaeological resource management, including outlines of the threats to archaeological resources and the legislative framework at the provincial and municipal levels to address those threats; how Windsor will apply the archaeological potential model across departments that participate in planning and development processes and infrastructure projects; and an explanation of the various roles that different agencies play in these processes. The report also addresses contingency planning for unexpected archaeological emergency finds, ownership and curation of archaeological artifacts, and periodic review of the archaeological potential model.

There are four appendices to the report as follows:

- Appendix A: Pre-contact Indigenous Archaeological Site Potential;
- Appendix B: Colonial Period Thematic History;
- Appendix C: Contingency Plan for the Protection of Archaeological Resources in Urgent Situations;
- Appendix D: Proposed Policy Revisions to the City of Windsor Official Plan.

## 1.2 Defining Archaeological Resources

Archaeological resources are scarce, fragile, and non-renewable and therefore must be managed in a prudent manner if they are to be conserved. The Government of Ontario, through various statutes and policies, asserts the stewardship interests of the provincial Crown on behalf of its citizens with respect to archaeological resources. In addition, the City of Windsor lies within the traditional territory of the Anishinaabe nations that comprise the Three Fires Confederacy: Ojibwa (Chippewa), Odawa (Ottawa), and Potawatomi. The land was acquired by the British Crown in the late eighteenth and nineteenth centuries through Treaty #2 (also known as the McKee Purchase) and a series of subsequent negotiated purchase agreements signed with representatives of these Anishinaabe nations together with representatives of the Huron (Wendat/Wyandot) Nation. Windsor also lies within the precincts of the Beaver Hunting Ground Deed (also known as the Nanfan treaty) signed between the Haudenosaunee Confederacy (Five Nations) and the British Crown at Albany, NY, in 1701. In addition to the provincial Crown, these nations assert their interests with respect to archaeological heritage management.

Effectiveness in incorporating archaeological heritage conservation and management within the overall land-use planning and development process requires a clear

understanding of the physical nature, variety of forms, and overall significance and value to society of archaeological resources.

The Provincial Policy Statement (2020), which is issued under the authority of Section 3 of the Planning Act, defines archaeological resources (Section on Definitions) as including “artifacts, archaeological sites, and marine archaeological sites.”

Individual archaeological sites are distributed in a variety of locational settings across the landscape, being locations or places that are associated with past human activities, endeavours, or events. These sites may occur on or below the modern land surface or may be submerged under water. The physical forms that these archaeological sites may take includes the following: surface scatters of artifacts; subsurface strata which are of human origin or incorporate cultural deposits; the remains of structural features; or a combination of these attributes.

The Ontario Heritage Act (Ontario Regulation 170/04) provides the following definitions:

- “archaeological site” is “any property that contains an artifact or any other physical evidence of past human use or activity that is of cultural heritage value or interest;”
- “artifact” is “any object, material or substance that is made, modified, used, deposited or affected by human action and is of cultural heritage value or interest;”
- “marine archaeological site” is “an archaeological site that is fully or partially submerged or that lies below or partially below the high-water mark of any body of water;” and,
- “archaeological fieldwork” is “any activity carried out on, above or under land or water for the purpose of obtaining and documenting data, recovering artifacts and remains or altering an archaeological site and includes monitoring, assessing, exploring, surveying, recovering, and excavating.”

### 1.3 Archaeological Background

Windsor is an area rich in cultural heritage resources and diverse cultural traditions. The Detroit River corridor is unquestionably an area of high cultural and historical significance not only to the First Nations who have lived here for millennia, but to the Europeans who settled here in the more recent centuries. For thousands of years, the river has facilitated the movement of both peoples and goods throughout the interior of the continent. In addition, the rich resources found in the water and the surrounding lands encouraged intensive Indigenous and early European settlement along its banks.

The shoreline comprises the earliest continuous European settlement in Ontario. The European influx began in the early eighteenth century with French settlement that grew up around Fort Pontchartrain (later Fort Detroit) on the north side of the river. The south shore, now Windsor, was settled later in the eighteenth century by French families from the St. Lawrence River settlements. By the 1790s, British settlement of the area was well underway, but although the interior of Essex County was surveyed, the population remained concentrated along the lakes and river shores for many decades. On the main thoroughfare of the Great Lakes, the Windsor area was pivotal as a base for the expansion of the eighteenth and nineteenth century fur trade and settlement throughout much of the interior and saw military action during the War of 1812, and the 1837 Upper Canada Rebellion. By the late nineteenth century, Windsor was becoming an industrial city important for international trade and shipping, a trend which expanded rapidly in the twentieth century with the influx of automobile plants and other manufacturing complexes.

Due to the limited extent of archaeological research undertaken in the Windsor area, the complexity of its archaeological heritage is poorly understood. Traces of Windsor's significant cultural and historical legacy have, however, been evident in the relatively small number of archaeological sites that have been identified within or immediately adjacent to the City. Documented Indigenous sites within the Windsor area include camps and villages spanning more than 10,000 years of habitation. Of particular

sensitivity are the various burial sites relating to both pre-contact and colonial period Indigenous settlement in the Windsor area. Colonial period sites include a wide range of domestic, military, commercial and industrial features primarily scattered along the Detroit River shoreline. Despite the minimal amount of systematic archaeological investigation carried out in the Windsor area, the presence of these sites indicates the potential for other similar sites throughout the region, reflecting over 13,000 years of human history.

## Part 1: Archaeological Potential Model

### 2 Pre-contact Indigenous Archaeological Site Potential

#### 2.1 Introduction

Only limited locational data exist for pre-contact Indigenous archaeological sites in the City of Windsor. While access to distributional information for all sites would be a significant advantage to land-use planners and heritage resource managers, the undertaking of a comprehensive archaeological survey of Windsor to compile a complete inventory is clearly not feasible. As an alternative, therefore, staff must depend on a model which predicts how sites are likely to be distributed throughout the city.

Archaeological site potential modelling can trace its origins to a variety of sources, including human geography, settlement archaeology, ecological archaeology, and paleoecology. The basic assumption is that pre-contact Indigenous land use was constrained by ecological and socio-cultural parameters. If these parameters can be discovered, through archaeology and paleoecology, pre-contact Indigenous land-use patterns can be reconstructed.

Two basic approaches to predictive modelling can be described. The first is an empirical or inductive approach, sometimes referred to as correlative (Sebastian and Judge 1988) or empiric correlative modelling (Kohler and Parker 1986). This method employs known site locations, derived from either extant inventories or through sample surveys, as a guide for predicting additional site locations. The second is a theoretical or deductive approach, which predicts site locations based on expected behavioural patterns as identified from suitable ethnographic, historical, geographical, ecological, and archaeological analogues. While data requirements or availability tend to influence the orientation of the study, every

modelling exercise will incorporate both inductive and deductive elements. Foremost is the need to employ all available data effectively and expeditiously.

Appendix A presents the detailed model of pre-contact Indigenous archaeological site potential developed for the City of Windsor. It begins with a brief review of the method and theory associated with pre-contact Indigenous site potential modelling and is followed by delineation of the modelling approach, which employs a descriptive reconstruction of pre-contact landscapes in Windsor together with a reconstruction of pre-contact Indigenous land-use patterns informed by both known site locations as well as archaeological and ethnographic analogues. This information is brought together in a list of criteria which are used to define a zone of pre-contact Indigenous archaeological potential on GIS mapping for Windsor.

## **2.2 Deductive Model**

Throughout much of pre-contact Indigenous history, the inhabitants of Windsor were hunter-gatherers who practiced an annual subsistence round to exploit a broad range of natural resources for food and raw materials for such needs as shelter construction and tool manufacture. Assuming that access to natural resources influenced and constrained the movement and settlement of Indigenous peoples, the goal was to understand what these resources were, how they may have been distributed, how their use and distribution may have changed over time, and how the landscape itself may have constrained movement and access to resources as well as settlement location. The investigation proceeded chronologically since certain aspects of Windsor have changed dramatically through the period of human occupation.

### **2.2.1 Late Pleistocene/Early Holocene (ca. 13,000 – 11,000 cal BP)**

The First Peoples began to move into what is now southwestern Ontario as the continental ice sheet retreated at the end of the last ice age. As populations increased in southeastern North America around 13,000 years ago, small groups of people gradually moved north into a newly revealed land (Chaput et al., 2015; Lothrop et al., 2016). The landscape that greeted them would have been open and

cold, sparsely vegetated with tundra plants such as lichens and sedges, with spruce and tamarack trees growing up over time (McCarthy et al., 2015; Stewart, 2013; Yu, 2003). The spruce parkland was home to mammoth, mastodon, stag-moose, giant beaver, caribou, arctic fox and snowshoe hare, California condors, and many other boreal species which no longer call the area home (Ellis, 2013; Stewart, 2013; Storck & Speiss, 1994). The first peoples would have moved across this post-glacial landscape in small groups, following herds of migrating animals and searching for food. As they travelled, they often followed the shoreline of glacial Lake Algonquin or one of the waterways that shifted across the clay plains, camping close to the water's edge (Deller, 1976, 1979; Jackson et al., 2000; Storck, 1984, 1988). They gathered nearby stones to support a portable shelter, cooked meals prepared from animals hunted, trapped, or fished, and resharpened large, fluted spear points or remade them into smaller tools for other uses (C.A.R.F., 1992; Ellis, 2013; Julig & Beaton, 2015).

Archaeological sites left behind by these First Peoples are usually small and ephemeral, the results of short-lived camps located close to ancient shorelines or at strategic inland locations (Jackson, 1997, 1998). Artifacts at these sites tend to consist of a few large spear points coupled with waste stone from the production of these tools, as organic materials such as wood, bone, and furs do not preserve on these exposed strandlines over the millennia. In combination with Indigenous oral histories, the archaeological record of these sites has the potential to illuminate the lives of the original residents of Windsor.

Sites dating to this earliest period are sparse in Ontario, and none have been identified within the bounds of the City of Windsor. There is, however, an unconfirmed report of contemporary artifacts having been recovered during an archaeological survey of the Turkey Creek valley conducted in 1968 and 1969 by Father Jack Lee (Baumann, 1978). Unfortunately, the sites from where these artifacts were recovered were not registered and their exact character and location are unclear. Sites which have been identified elsewhere in the province are located primarily on relict strandlines of glacial Lake Algonquin and its correlate in the Erie basin, and many have been discovered through targeted survey of these geological features

(Storck, 1984, 2004). If any of the earliest sites exist in Windsor, they would likely be situated near or above the estimated level of glacial Lake Algonquin (186 metres asl), although sites dating to later phases of this period may occur on recessional strandlines below this elevation.

The closest sites to Windsor, dating to the latter phase of this period, are the Holcombe Beach group of sites located about 15 kilometres north of Detroit. The Holcombe Beach sites were interpreted as temporary camp sites used to process barren ground caribou and make and repair stone tools and were located on a sand ridge overlooking a shallow glacial lake (Fitting et al., 1966). Chert types and the workmanship identified on projectile points link Holcombe to sites in Ohio, the Delaware Valley of the eastern US, and to quarrying areas around Saginaw Bay in Michigan and on the northeastern shore of Lake Erie (Ellis & Deller, 1990, p. 41; Fitting et al., 1966, pp. 90–92); groups moving between these areas would have passed through Windsor. Isolated Holcombe and Hi-Lo projectile points have been located within Windsor including within Sandwich West along the drainage of Turkey Creek, and on the grounds of the Windsor Airport along the drainage of the Little River (Ellis & Deller, 1990, p. 55; Garrad, 1971; Stantec, 2014), and it is possible that undiscovered sites also exist. Desirable site locations would have shifted as animal habitats and migratory routes changed with the retreat of glacial Lake Algonquin and early Lake Erie and the resulting alterations of local watersheds and drainages but raised sand ridges and glacial strandlines possess significant potential for sites from this period.

As time passed and Indigenous communities became more familiar with the seasonal changes and the habits of local animals, they began to establish regular camps to return to on a seasonal basis. Resources may have been initially quite limited, as the forest evolved from a conifer-dominated community to a more mixed community with nut-producers like oak. Although the ability of interior habitats to sustain hunter-gatherer bands through the warm season improved over time, reduced cold season carrying capacity would require bands to spread out their population over the winter. During the cold seasons, these bands likely dispersed themselves by smaller kinship groups into interior hunting territories.

Such hunting territories would likely have been organized on a sub-watershed basis, with individual families occupying adjacent stream catchment areas. Riparian wetlands and swamps would have provided fuel, building materials, roots and tubers, and small game. Archaeological evidence of such sites may be difficult to distinguish from warm season hunting camps, although the sustained occupation of a site over several months would likely leave a more substantial artifact assemblage. The few sites of this period in Windsor are situated in the middle and upper reaches of headwater streams and may reflect seasonal forays from coastal base camps later eradicated by the Nipissing highstand.

Throughout the lower Great Lakes there is evidence of seasonal camps being situated at toolstone (e.g., chert) sources, at wetlands where waterfowl gathered annually to lay eggs and raise young, or at river crossings where migrating herds of caribou were forced to slow down and bunch up (Ellis, 2013; Roosa & Deller, 1982). The most evocative example of large, seasonally visited sites is the evidence, now submerged beneath the waters of Lake Huron, of caribou hunting structures on the Alpena-Amberley Ridge (AAR). The network of hunting blinds, drive lines, cairns, caches, stone rings, and shelters are all that remains of a landscape in which, between 10,000 and 7,000 years ago, many of those living in the Great Lakes area would gather to take advantage of a constricted area on the annual caribou migration route (Julig & Beaton, 2015; Lemke & O'Shea, 2015; O'Shea & Meadows, 2009). While this is a good distance to the north of what is now Windsor, there are few landscapes like the AAR which can be examined on a large scale archaeologically, but the identification of sites of a similar age near Windsor is difficult due to their probable scarcity and small size. It is also possible that the Windsor area was less desirable during the lowstands in the Huron-Michigan and Erie basins, when flow into the St. Clair River and through Lake St. Clair and the Detroit River to Lake Erie was minimal or suspended.

### **2.2.1 Early/Middle Holocene (ca. 11,000 – 5,000 cal BP)**

As the climate continued to warm after 11,000 years ago, the land in southern Ontario became more hospitable and food resources more abundant. Isostatic

rebound altered drainages and caused water levels in the Great Lakes basins to begin rising again, but Lake Stanley (in the Huron basin) still drained northward via the North Bay outlet and not through the Detroit River and Lake St Clair. Some groups began to establish claims over specific areas of land and to follow the seasonal round within a more restricted territory, often within a particular watershed (Ellis 2013). One side effect was that access to the highest quality tool stone—none of which outcrops in the Windsor area—was no longer available to all groups (Fox 2013). Poorer quality local chert sources were sufficient for making everyday tools, but as a result the spear points and other lithic objects were never as finely made as those carried by earlier hunters (Ellis 2013; Fox 2013). Ground stone axes and adzes were added to the toolkit as coniferous forests established themselves in southern Ontario and the people made wooden dugout canoes and cooking troughs; other new ground stone tools were used to process a diversifying array of plant resources, or as weights for fishing nets (CARF 1992; Ellis 2013; Kapches 2013).

Ways of life changed over the next few millennia, as deciduous woodlands replaced the coniferous forests, and the post-glacial tundra became a distant cultural memory. Adaptive patterns would have completed the shift from the initial ecological framework outlined above in response to the establishment of the hardwood forest, with many nut-producing trees, abundant wetlands, and the wider range of available plant and animal resources. Warm season macroband camps would have still been situated at coastal river mouths to intercept spawning fish while interior stands of mast-producing trees (e.g., oak, hickory, beech) would have attracted both Indigenous foragers and game animals (e.g., deer, raccoons, squirrels, passenger pigeons) in the fall.

Warmer waters in the Great Lakes, and stable stream- and riverbeds provided new habitats for many of the fish species still found in the region today. These were caught using fishhooks made of bone or antler, or copper transported by canoe from the western end of Lake Superior (Ellis 2013; Fox 2013). Increasingly, large groups of people gathered together during spring and autumn fish spawning runs to catch fish in nets and to cooperate in the cleaning and processing of large catches

(Needs-Howarth, 2013). In parts of Ontario, fish weirs built at river narrows during this period were subsequently used for thousands of years; even when no longer used to harvest fish, the weirs still served as important gathering places for ceremonies and trading (Needs-Howarth, 2013). More changes to food gathering came with the introduction of the bow and arrow, which allowed hunters to target smaller game with something other than traps and snares (Needs-Howarth, 2013). A surplus of food, hides, or fur could be exchanged in trade or as gifts for exotic materials, allowing copper from Lake Superior, marine shells from the Atlantic coast and the Gulf of Mexico, and finely made Onondaga chert bifaces from the Niagara Peninsula to find their way into the hands of people living in diverse parts of eastern North America (Ellis, 2013; Fox, 2013). By about 3,500 years ago, favoured resource sites on the seasonal round were being re-inhabited year after year, with some groups beginning to establish cemeteries for their dead, marking ritually and territorially important places on the landscape (Ellis, 2013; Spence, 2013; Stewart, 2013).

### **2.2.2 Late Holocene (ca. 5,000 – 400 cal BP)**

After the Nipissing highstand, water levels in the Huron-Michigan and Erie basins gradually fell to modern levels (Morrison, 2017) and by about 4,000 cal BP the physical and biotic landscape of Windsor was essentially similar to that which existed immediately prior to the colonial period. While the environment continued to fluctuate and evolve as a result of natural processes such as forest fire and windthrow, re-modelling of waterways, organic in-filling of wetlands, animal population cycles, and others, these generally cannot be resolved with currently available paleoenvironmental data. Nor is it necessary to do so given the scope and analytical scale of this study. The lifestyle of Late Holocene hunter-gatherers seems to have been relatively unchanged from that practiced by their ancestors.

Around 3,000 years ago, people in southern Ontario began to make low-fired ceramics, a change in technology which would eventually have a profound impact on ways of life. The earliest pots broke or wore out quickly, and so were made and used in the same camp and disposed of before moving on to a new location

(Kapches, 2013). They did not at first replace the string bags, birch bark containers, and skin sacks which were already being used as storage vessels but were instead used to cook foods at a simmer, allowing the integration of more plant foods into the diet (Kapches, 2013; Williamson, 2013).

Changes that had begun on a small scale in earlier times were now more entrenched, especially regarding treatment of the dead. The ancestors were buried in knolls, sandbanks, and other visible natural features, often close to a favoured camp re-inhabited on an annual basis (Spence, 2013; Williamson, 2013). The remains of those who died close to the cemetery were buried soon after death, some with finely made stone objects, or with red ochre, or with exotic traded materials like marine shells or galena (natural form of lead sulphite) obtained through exchange networks built up over the preceding millennia (C.A.R.F., 1992; Spence, 2013; Williamson, 2013). The remains of those who died at a distance from the cemetery were temporarily laid to rest on platforms or cremated, until they could be reunited with their community in the cemetery, often bundled together with other ancestors (C.A.R.F., 1992; Spence, 2013). The gatherings around this reinterment may have coincided with the spring resource harvest and included feasting and the presentation of gifts to the ancestors in the form of caches of stone tools, gorgets, and food such as turkey, deer, fish, and dog which were buried within the bounds of the cemetery but not necessarily with any particular individual (Spence, 2013).

Over the next several centuries, the daily life and sense of identity of those living in the Windsor area began to diverge from that of people living farther east. Some of this was a result of the widespread influence of mound-building peoples in the Ohio and Mississippi river valleys, whose extensive trade networks introduced new materials such as Flint Ridge chalcedony for stone tools, and new ceremonies involving the construction of earthworks and burial mounds (C.A.R.F., 1992; Fox, 2013; Watts, 2016; Williamson, 2013). These earthworks usually consisted of a circular or semicircular embankment with associated ditches and mounds, enclosing an open area “from around 100 m<sup>2</sup> to more than a hectare”; their use

likely varied depending on time and context, providing defensive capabilities, an open space for trading, or for ceremonies (Watts, 2016, p. 1).

Life continued to follow a seasonal round; people congregated in larger groups for the warm season, usually in a succession of camps near the Detroit River, and dispersed to smaller, single-family camps in the interior during the cold season, with visits to numerous other small satellite camps throughout the year to take advantage of specific resources as they became available (Spence, 2013). Harvesting fish formed a major dietary focus, with different water and environmental conditions requiring the use of a wide variety of tools: harpoons, spears, leisters, and fishhooks to catch single fish; and seine nets to take advantage of spawning runs of fish such as walleye in spring, and freshwater drum in summer (Foreman, 2011; Needs-Howarth, 2013). Ceramic construction improved during this time: grit temper was added to clay to strengthen the fabric, and coil-built pots were fired at higher temperatures than they had been previously (C.A.R.F., 1992; Kapches, 2013). Regional differences in ceramic decoration and stone tool knapping across southern Ontario indicated that people held distinct identities tied to their places of settlement, which would be further delineated as life became increasingly settled (Monckton, 2013; Williamson, 2013).

By about 1,200 years ago, those living in the Windsor area shared their way of life with the people living in what would become southeastern Michigan and northwest Ohio but lived according to a different pattern than those living in south-central Ontario (Lennox & Dodd, 1991; Stothers & Abel, 2002). Spring was a time of gathering, when people reconnected to harvest spring spawning fish and to feast and hold ceremonies with the ancestors buried nearby (Killion et al., 2019; Lennox & Dodd, 1991; Stothers & Abel, 2002; Wright, 1977). The warm season, from spring until early autumn, was spent in large, multi-family settlements on the shores of the Detroit River. Houses were small, oval, bark-covered structures for one or two families each, which could be disassembled and moved to new locations (Ferris, 2013; Warrick, 2013). Here, the coastal marshes provided an abundance of animal and plant resources, as well as a defensive advantage in the event of the inter-

group violence which was on the rise (Stewart, 2013; Warrick, 2013; Williamson, 2013).

Women of the villages gathered clay from well-known spots along the riverbank, prepared it to remove impurities and strengthen it, then shaped the vessels and fired them in shallow pits covered in brush and wood, situated a good distance away from the settlement to avoid setting structures alight (Kapches, 2013). In most cases women made pots for themselves and their daughters and decorated them with motifs with personal or ancestral significance; children learned to make pots by watching their mothers, and by playing with clay to make small, rudimentary pinch pots of their own (Kapches, 2013; St John & Ferris, 2019; Williamson, 2013).

Both directly and indirectly, favoured wild plants were encouraged to establish themselves close to re-inhabited settlements, whether through replanting them just outside the village or by depositing food waste in nearby middens (Monkton 2013). These husbanded plants included raspberries, plums, elderberries, and other fruits along with chenopod, sumac, cattail, and spikenard. Techniques developed in husbanding wild plants began to be applied to new crops which had spread to Ontario from central America along exchange networks developed over the preceding millennia: first maize, then later squash, beans, sunflowers, and tobacco (Carroll, 2013; Monckton, 2013; St John & Ferris, 2019; Stothers & Abel, 2002; Williamson, 2013).

Deep storage pits were excavated to cache surplus food in large ceramic pots for later use (Ferris, 2013; Kapches, 2013). With the arrival of autumn, people dispersed from the warm season villages to small, one- or two-family cabins in the interior, located to take advantage of nut harvests, and as a base from which to set trap lines and for sugaring in winter (Ferris, 2013; Lennox & Dodd, 1991; Warrick, 2013). The autumn nut harvest was also an opportunity to hunt terrestrial animals such as deer, turkeys, squirrels, and raccoons, all of which were attracted to nut groves for their own subsistence purposes (Foreman, 2011). The colder months were also the most intensive time for deer hunting using blinds, drives, and corrals

in addition to the bow and arrow (Needs-Howarth, 2013). In addition to meat, deer were a critical source of hides for clothes and shoes, antlers for tools, bones for awls and needles, and marrow and grease for food flavouring; a surplus of hides could potentially have been exchanged with those living to the east around Lake Ontario (Foreman, 2011; Needs-Howarth, 2013).

In the following centuries maize and other imported crops, initially consumed only at feast times or as a minor supplement to husbanded or wild local plant foods, began to form an increasingly significant part of the daily diet (Monckton, 2013; Stothers & Abel, 2002; Williamson, 2013). The greater investment in time required to grow large quantities of these domesticates conflicted with the timed gathering of other food resources: spring planting occurred around the time of fish spawning runs, and the autumn harvest conflicted with nut gathering and deer hunting (Foreman, 2011).

As a result, warm season settlements were located in places with good ground for crop planting, as well as access to a wide variety of aquatic foods which would be available for most of the season (Foreman, 2011; Needs-Howarth, 2013; Stothers & Abel, 2002). Women and children would catch turtles and amphibians and gather shellfish from the rich marsh environments; deer, squirrels, raccoons, turkeys, and other animals attracted to the crops were hunted in small numbers year-round rather than primarily in the autumn (Foreman, 2011; Lennox & Dodd, 1991; Needs-Howarth, 2013). The crops did not require constant monitoring and so smaller groups still spent time hunting and fishing at satellite camps, with locally available fish from the Detroit River forming an increasingly important part of subsistence (Foreman, 2011; Lennox & Dodd, 1991).

Warm season residences began to resemble the longhouses of the peoples to the east, though with a smaller footprint and different internal structure. Settlements were surrounded by palisades and sometimes by earthworks to add some measure of protection and were inhabited for more months out of the year (Ferris, 2013; Lennox & Dodd, 1991; St John & Ferris, 2019; Stothers & Abel, 2002). The increased time spent living in large communities had an effect on social organisation, with

more emphasis placed on matrilineal descent and identification with lineage groups (Carroll, 2013; Ferris, 2013; Spence, 2013; Williamson, 2013). Inter-community conflict borne out of stronger internal group identities and competition for access to exchange networks was partially mitigated through lavish feasting and gift giving, maintaining social networks across the lower Great Lakes region (Carroll, 2013; Jamieson, 2013; Killion et al., 2019; Spence, 2013; Stothers & Abel, 2002). Political leaders were men, selected by influential women, responsible for diplomacy with nearby settlements, scheduling the seasonal round, organising raids, and other tasks, and governance was by consensus rather than by decree (Jamieson, 2013).

By the early 1500s, pressure from the westward expansion of Iroquoian peoples living around Lake Ontario caused many of those living in the Windsor area to relocate west and south for several decades, beginning to return to the area just before the onset of profound changes set in motion by European contact (C.A.R.F., 1992; Lennox & Dodd, 1991).

### **2.3 Inductive Model**

While the preceding deductive model paints a general picture of pre-contact Indigenous land use in Windsor throughout the millennia, the sample of registered pre-contact Indigenous sites also allows for the development of an inductive model from which to extrapolate pre-contact Indigenous archaeological potential based on locations of known sites. This requires some understanding of site types and ages since land-use patterns changed over time. The inductive modeling also included observations based on distance to water, soil types and slope.

The total number of archaeological sites in Windsor is 115, of which 25 have pre-contact Indigenous components. Some, however, are isolated finds of flakes or projectile points lost while traveling through the landscape and are therefore not useful in the modeling exercise. Thus, the total number of pre-contact Indigenous sites used for inductive modeling was 14.

### **2.3.1 Distance to Water**

For pre-contact Indigenous sites, the proximity of major lakes and rivers is considered to have always been a significant factor influencing land-use patterns in Windsor by acting as travel and settlement corridors. While the locations of the major shorelines have changed significantly over time, the layout of the inland drainage systems has remained relatively constant since the late Pleistocene. The middle and upper reaches of the inland drainages may have comprised seasonal hunting grounds analogous to those recorded historically throughout the Great Lakes-St. Lawrence region.

While the main source of hydrographic data used in the inductive site potential model was modern watercourse data, the dataset was found to be missing certain streams noted on various historical map sources. Accordingly, these were added manually to the hydrographic layer of the GIS.

Based on the above data, it was determined that a buffer of 250 metres from water sources captures 100% of the modellable registered pre-contact Indigenous sites in Windsor.

## **2.4 Summary of the Pre-contact Indigenous Potential Model**

In light of these deductive and inductive modeling considerations reviewed above, ultimately four water-based criteria (Table 1) were chosen as the most useful predictors of pre-contact Indigenous archaeological potential (In a relatively small area such as a city, especially one like Windsor with very limited topographical/geophysical variability, other factors were decided to be excluded as irrelevant or as redundant due to overlaps). The criteria used to create the pre-contact Indigenous archaeological site potential layer, were as follows: all current and former watercourses; all waterbodies, including lakes, ponds, and wetlands. First, all river and major stream segments—defined as those represented by two lines (i.e., banks) on the hydrographic layer—were buffered at 250 metres from the top of bank. Second, all subordinate streams—defined as those watercourses represented by a single line on the hydrographic layer—were buffered by 250

metres on both sides of the line. Third, all lakes, ponds, and wetlands were buffered at 250 metres. The 250-metre buffer was employed since it captures 100% of the sites employed for inductive modeling within Windsor. Figure 1 presents the pre-contact Indigenous archaeological site potential layer.

Table 1: Pre-contact Indigenous Archaeological Potential Modelling Criteria

Environmental or Cultural Feature	Buffer Distance (metres)	Buffer Qualifier
Rivers and streams	250	<ul style="list-style-type: none"> <li>from top of bank for former; from centreline for latter; on all soil types</li> </ul>
Lakes and ponds	250	<ul style="list-style-type: none"> <li>exterior buffer from current limits, all soil types</li> </ul>
Wetlands	250	<ul style="list-style-type: none"> <li>200m exterior buffer and 50m interior buffer. Only for verified wetlands</li> </ul>
Registered Indigenous archaeological sites	100	<ul style="list-style-type: none"> <li>Camps and other small sites</li> </ul>
	250	<ul style="list-style-type: none"> <li>Villages and other large settlements</li> </ul>

Figure 1: Pre-contact Indigenous Archaeological Potential Layer

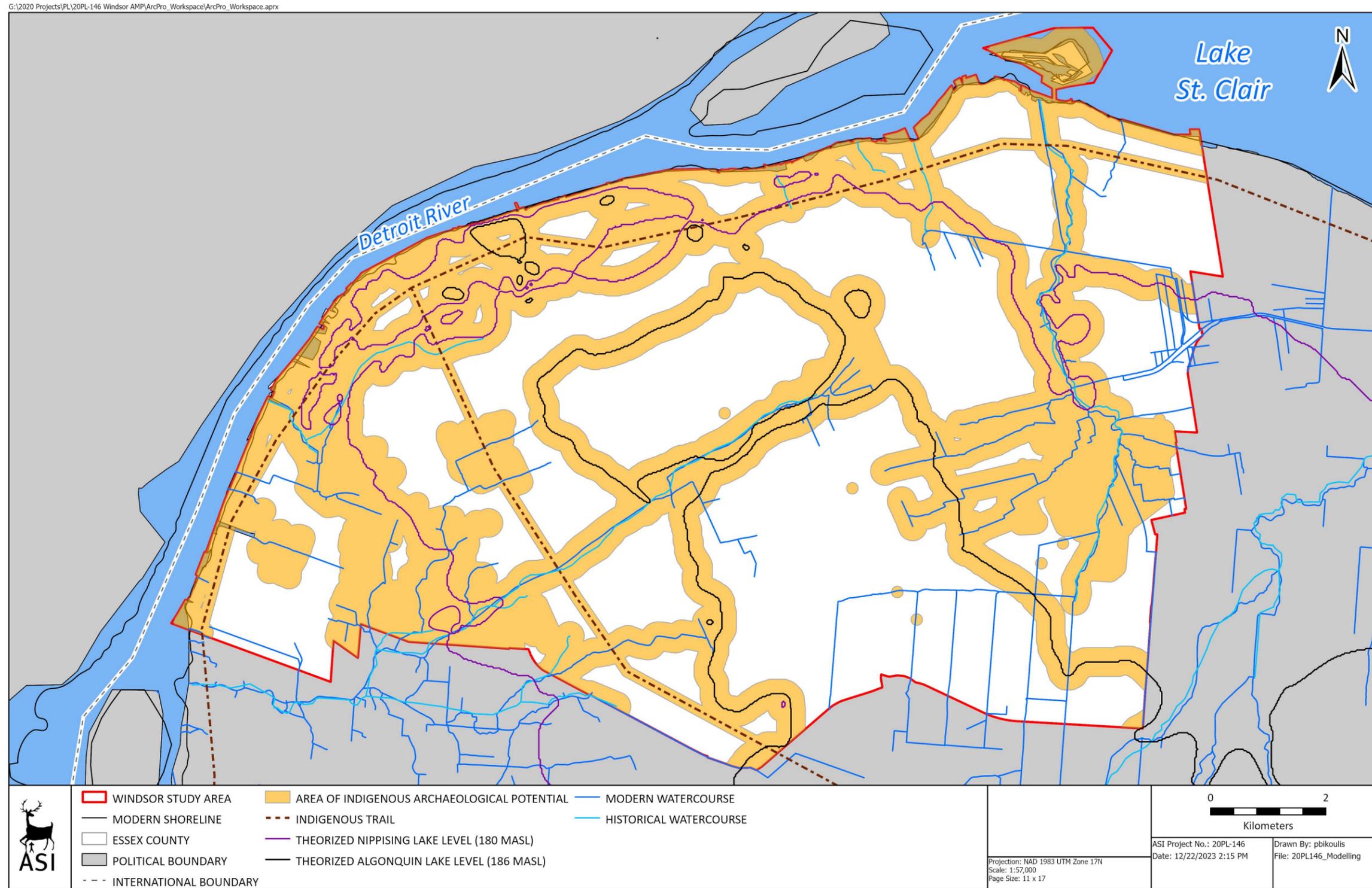


Figure 1: Precontact Indigenous Archaeological Potential

## 3 Colonial Period Archaeological Site Potential

### 3.1 Introduction

In contrast to the deductive and inductive modelling employed to create the pre-contact Indigenous archaeological site potential layer, the colonial period archaeological site potential layer was created primarily from historical mapping, historical thematic research, and the application of buffers to some features of historical interest. While it is primarily a terrestrial model, certain features (e.g., water-powered mills) may have marine archaeological components associated with them. In accordance with provincial standards and guidelines for consultant archaeologists, as detailed in Appendix B, attribution of archaeological significance focussed on historical features dating prior to 1900 (MTC, 2011, p. 41), especially those dating prior to 1870 (MTC, 2011, p. 59).

Europeans began mapping North America—commonly known as Turtle Island by Indigenous nations—soon after their arrival in the sixteenth century, and over the course of the seventeenth century several maps of Nouvelle France had been created by various explorers and cartographers working from their notes. One of the earliest maps depicting Indigenous settlement in the Windsor area is the 1641 “Novvelle France” map that shows locations of Great Lakes Indigenous peoples prior to the dispersals of the late seventeenth century (Heidenreich, 1988; Steckley, 1990). Peoples named just west of the Detroit and St. Clair Rivers include the Sauk and the Potawatomi (Steckley, 1990, p. 21). Other Algonquian-speaking peoples were living to the south and west in an area that is collectively marked “Gens du Feu” or Fire Nation.

Following the establishment of Fort Pontchartrain at present-day Detroit, more detailed mapping of the area ensued. Henri-Louis Deschamps de Boishébert, commandant of Detroit, produced several important early maps, including one entitled “Carte du Detroit et Partie du Lac Erie, et du Lac Ste. Claire” (Boishebert, 1731) that indicates the locations of several Indigenous villages on both sides of the river. Other eighteenth- and nineteenth-century maps of the area provide locations

of Indigenous communities, military installations, farmsteads, early roads and railways, crossroad communities, urban cores, public buildings, cemeteries and some early industrial sites (Belden, 1881; de Lery, 1764; McNiff, 1791; McPhillips, 1892; Pinney, 1857; Walling, 1877).

In the eighteenth century, the land use patterns of Indigenous and settler cultural groups overlapped (for details, see Appendix B). Farmsteads laid out during the French regime using the seigneurial system of land tenure, which provided waterfront access to all, situated all the early French farms along the Detroit River in a zone that also exhibits high potential for pre-contact Indigenous settlement. In contrast, nineteenth-century settlement under the British regime imposed an artificial grid structure on the inland landscape as townships were surveyed in rectangular patterns, lands drained, and roads constructed along concession boundaries throughout Essex County. Potential for finding the archaeological remains of historical structures exists within early urban boundaries, along settlement roads or waterways, and within the vicinity of known sites. The 1881 urban boundaries of Windsor, Sandwich and Walkerville, as indicated in the *Illustrated Historical Atlas of Essex County* (Belden, 1881), are useful in this regard.

### **3.2 Recording Location of Features Present on Historical Maps**

Several sources of historical mapping were used to identify the location of historical features of interest as well as settlement centres within the City of Windsor (Belden, 1881; McPhillips, 1892; Pinney, 1857). Digital versions of these maps were imported into GIS software and georeferenced using present lot boundaries as well as modern landmarks. The locations of historical features of interest identified on these maps were then digitized into geographic space in order to be included in the colonial period archaeological potential layer.

While every effort was made to reduce potential errors, there are numerous potential sources of error inherent in such a process. These include the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of

the feature being plotted, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.

### **3.3 Recording Location of Features Identified through Thematic History**

A thematic history of the City of Windsor was compiled to identify extant or former historical features that might yield associated archaeological deposits (Appendix B). Each of these was checked against the historical site archaeological potential layer generated from Pinney's 1857 map (Pinney, 1857), Belden's historical atlas (Belden, 1881) and other sources (see Section 3.1, above) to ensure that they were included in the mapping. For those features that were not represented by either the 1857 or 1881 maps, further research was conducted to ascertain the true location so that they could be included in the historical site potential layer.

Early roads were identified by comparing nineteenth-century maps to twentieth-century topographic and City of Windsor mapping. Since a portion of the original Front Road, along the Detroit River, south of Sandwich, appears to have fallen into disuse and perhaps eroded into the river, between 1881 when the Belden atlas (Belden, 1881) was produced and the 1909 topographic mapping, part of that original trail could not be placed accurately. Most of the road alignments, however, appearing in Belden 1881 and on Walling 1877 (Walling, 1877), are still in existence. These include Riverside Drive, Huron Church Line, and Talbot Road lying along former Indigenous trails, and Grand Marais Road associated with the Turkey Creek marsh. Concession and sideroads in place by the mid-nineteenth century include Howard Avenue, Walker Road, Pilette Road, Lauzon Road and Malden Road running north to south, and Tecumseh Road, Cabana Road/Division Road and the former Second Concession aligned with E.C. Row expressway. Sprucewood Avenue and Morton Drive in Ojibwa are also early settlement roads with Sprucewood providing access to LaFrere's mill on Turkey Creek. With the exception of E.C. Row, all of these may retain some archaeological potential along portions of their routes.

The Great Western (now CNR) was the first railway into Windsor (1854). It was followed in the subsequent decades by several others, most of which still maintain their original corridors. These include the Lake Erie, Essex and Detroit River (later Pere Marquette, now CSX), the Canadian Pacific, Conrail (formerly Canada Southern, Michigan Central), and the Essex Terminal built to join up the various lines. The Sandwich, Windsor and Amherstburg, and The Windsor and Tecumseh electric street railways have also been mapped, as remnants of them may remain below current pavements, and former stations and terminals may still exist along the routes.

Although private and public wharves have been added along the Windsor shoreline, several shoreline structures on the Detroit River in Sandwich, apparent on the Belden (Belden, 1881) map, have not been mapped, as it was impossible to place them accurately along the shoreline. As the full extent of industrial land making along the riverfront through Sandwich and Ojibway is not known, the presence of early shoreline structures, now under water or fill, should be considered along with land-based archaeological resources during shoreline alterations in those areas.

Some well-known early industrial sites have been noted, including the Walker Distilleries (Walling, 1877), the early Ford factory (McKay, 1905), and Walkerside industrial dairy (1908 topographic). Detailed information on such sites is not consistently accessible and undoubtedly many other significant small industries, located in the urban cores, will be located as individual properties are assessed. Many small craft industries, such as blacksmith shops, mills and harness or carriage makers, often located in crossroad service communities, would all be considered to be of potential archaeological interest. Only one such operation, a blacksmith shop depicted on the northwest corner of Talbot Road and Howard Avenue (Belden, 1881), could be specifically located within the city limits. Early mill sites are also located within the city limits. Baby's mill in Sandwich has not yet been definitively located, but the site of the Badichon-Labadie (alternatively known as the Lassaline-Montreuil) windmill, which stood on what is now Walker distillery land, has likely been destroyed. Windsor now encompasses several nineteenth-century crossroad villages such as Meros Corners (Pilette Corners), Jackson's Corners (Roseland),

Pelton (Walker Junction) and North Pelton (Belden, 1881; Walling, 1877). These have been plotted according to the general boundaries indicated in Belden (Belden, 1881). Crossroad communities traditionally are the sites of important local services such as craft industries, hotels, churches, and schools.

Military sites in the Windsor area include two barracks sites, an 1812 American encampment, and several American landing sites along the river. The location of General Hull's 1812 American camp, sometimes referred to as Fort Gowie, could be mapped as it is known to have been on Lot 76, Concession I, a property purchased by Robert Gowie *circa* 1805 (Museum Windsor record M214 3/RR). The bastioned fortification has been depicted on an 1812 military engineer's map (Archives of Ontario record RG1 B-11) but due to various inconsistencies, the site could not be accurately mapped. With the exception, however, of the Windsor Barracks in Civic Square, all are within the high potential strip identified along the Detroit River frontage. The Sandwich barracks on the site of Brock School has been excavated.

All cemeteries identified on the historical mapping and the Ontario Genealogical Society, City of Windsor, and Bereavement Authority of Ontario databases were added to the colonial period archaeological site potential layer. Unregistered family burial plots may also be found unexpectedly on any early farmstead. The Ontario Genealogical Society's listing of cemeteries in Essex County was examined for unmapped family plots, but none were identified within the City boundary. Sometimes churchyards, which were in use as cemeteries in the past, no longer display evidence of grave markers. The Sandwich Baptist Church on Peter Street may be one example, as it is thought to have been used for burials in the nineteenth century.

The oldest church burial ground in Windsor is the Assumption Parish cemetery. It has, however, occupied several locations throughout its 250-year history, the latest of which is still in use and has been mapped. The earlier cemetery grounds are poorly documented and could not be pinpointed. They exist in the general areas north of Assumption Church in association with Vista Place and Patricia Road. Some parts of

these burial areas may be intact where buildings have not been constructed over them.

The two large eighteenth-century Indigenous cemeteries are shown generally on several early maps, particularly McNiff's map (McNiff, 1791). Both are also associated with village sites. Unfortunately, neither the villages nor cemeteries can be mapped with precision due to the inherent inaccuracy of the original maps. Nevertheless, an attempt has been made to place them generally in relation to landmarks such as unregistered Indigenous burial finds, French lot locations, and oral history about burial locations. In addition, certain parcels within the City of Windsor, including the Huron Reserve and the Huron Church Reserve (Surtees, 1984, p. 51), are of archaeological and other interest to regional First Nations (see also Section 7.2, below).

### **3.4 Summary of the Colonial Period Potential Model**

The modelling of colonial period site potential is based on the premise that archaeological resources, including structures, are most likely to be found in and around documented cultural features. The proximity model assumes that most buildings and landscape alterations were built with access to nearby transportation routes, business trade, or specific resources such as waterpower. Urbanization on several scales also engenders clustering of structures creating city neighbourhoods and crossroad villages. Aspects of the roads, railways, and wharves themselves also contain potential for technological information.

Although historical maps provided general locations for former structures, they could not be relied upon for pinpoint accuracy because of differences of survey methodology, scale, and completeness. To allow for these variances, buffer zones using criteria listed in Table 2 were applied to the mapped features to determine general areas of potential. A 100-metre buffer zone was drawn around each specific registered archaeological site, early residential, institutional, or commercial structures where known, in order to capture associated outbuildings and make allowance for unreliable eighteenth- and nineteenth-century mapping. Buffer zones were not added to historical sites which fell within areas of high potential for pre-

contact Indigenous occupation, as they would already be captured. Several known wharves along the Detroit River, which represent both underwater and land-based potential, are marked with a 50-metre buffer zone to allow for approximate historical mapping.

Settlements and transport routes from the first half of the nineteenth century were considered to hold high potential for attracting roadside dwellings, businesses, utility buildings and route stations. Early routes considered significant were Riverside Drive (Front Road), Tecumseh Road (the first inland concession road), Grand Marais Road, Huron Church Road, Talbot Road, and farm lot sideroads leading from Riverside to Tecumseh (Howard, Walker, Lauzon, Pillette). The locations of farmsteads along settlement roads, although roughly illustrated on McNiff (McNiff, 1791) and Walling (Walling, 1877), were not individually plotted, as almost all lie within a short distance of an early road or the Detroit River within a buffer zone of 100 metres to either side of roadways. The buffer zones were plotted to catch most of these potential structures associated with the corridor rights-of-way. Similarly, 50-metre buffer were applied for early railways.

Developed urbanized areas, referenced as historical settlement centres, cannot automatically be eliminated from having potential because of the assumed disturbance of heritage resources by later construction. All areas within early to mid-nineteenth-century urban limits were considered to have archaeological potential, as many of them may encompass relatively undisturbed green patches and paved areas. Development dating prior to the 1950s has often been shown to only partially affect the integrity of pre-existing archaeological sites, and portions of such sites are often found to remain intact (see Section 4.1, below).

Registered cemeteries were given a buffer of 10-metres beyond known limits and other suspected or pioneer ones were marked with 100-meters buffer around a point.

Figure 2 presents the colonial period archaeological potential layer.

Table 2: Colonial Period Archaeological Potential Modelling Criteria

Environmental or Cultural Feature	Buffer Distance (metres)	Buffer Qualifier
Historical settlement centres	polygon as mapped	<ul style="list-style-type: none"> <li>• none</li> </ul>
Early residential, institutional, or commercial structures	100	<ul style="list-style-type: none"> <li>• none</li> </ul>
Early settlement roads	100	<ul style="list-style-type: none"> <li>• none</li> </ul>
Early wharves	50	<ul style="list-style-type: none"> <li>• none</li> </ul>
Early railways	50	<ul style="list-style-type: none"> <li>• none</li> </ul>
Cemeteries	10 100	<ul style="list-style-type: none"> <li>• Registered cemeteries with known limits. 10 m beyond limits of cemetery</li> <li>• Suspected cemetery or pioneer cemetery. 100 m around point</li> </ul>
Registered archaeological sites	100	<ul style="list-style-type: none"> <li>• none</li> </ul>

Figure 2: Colonial Period Archaeological Potential Layer

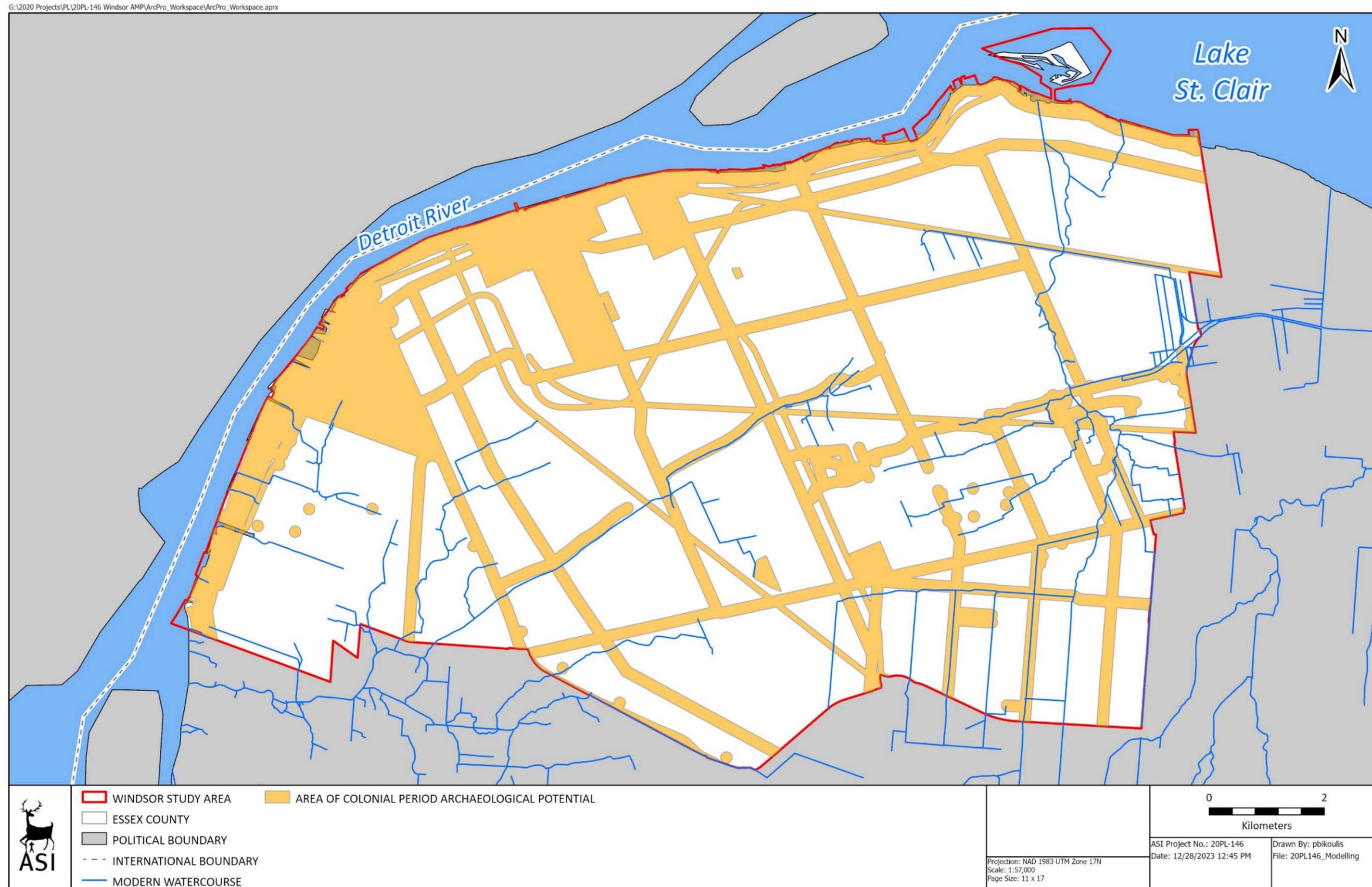


Figure 2: Colonial Period Archaeological Potential

## 4 Creating the Archaeological Potential Map

### 4.1 Archaeologically Sensitive Area Layer

Several known archaeological localities and settlement centres have been defined as “Archaeologically Sensitive Areas” (ASAs). In general, ASAs represent concentrations of interrelated features of considerable scale and complexity, some of which are related to single particularly significant occupations or a long-term continuity of use. Some may have an array of overlapping but potentially discrete deposits, including human burials. As such, the risk of encountering archaeological resources within an ASA are significantly elevated from the remainder of the archaeological potential zone. For Windsor, the following criteria were used to define ASAs: 250 metre proximity to the Detroit River; estimated area of the Huron Village and Jesuit Mission; estimated area of the Odawa Village and cemetery; approximate settlement limits of pre-1800 Sandwich; approximate limits of pre-1800 Euro-Canadian settlement; approximate limits of 1835 Euro-Canadian settlement.

### 4.2 Composite Archaeological Potential Layer

The composite archaeological potential layer (Figure 3) consolidates the pre-contact Indigenous archaeological potential layer (Figure 1) and the colonial period archaeological potential layer (Figure 2), as defined through application of the various modelling criteria (Tables 1-2).

As indicated in Tables 1 and 2, registered archaeological sites are included in the archaeological potential buffers. The original 2005 WAMP included discussions of unregistered archaeological sites and Indigenous burials (Sections 3.3 and 3.4, respectively). Although these sections have not been included in this update, the information has been reviewed and incorporated into Appendices A and B if the sites have been registered or sufficient information is provided to contribute to potential modeling. The remainder have not been included in this update, so readers are referred to the 2005 WAMP for details.

### 4.3 Integrity and Previously Assessed Lands Layers

The term archaeological integrity refers to the extent that development has modified or disturbed the physical landscape and, consequently, impacted archaeological resources through such activities as excavating, grading, filling, or compacting the soil. Land that has been extensively disturbed typically retains little or no archaeological integrity, whereas land that has been subjected to little or no disturbance exhibits a high degree of integrity. The latter may include parking lots, schoolyards, parks, farm fields, and golf courses. Certain settlement centres and registered archaeological sites that have not been completely excavated were also considered to retain integrity. The integrity GIS layer identifies areas that are deemed to possess low archaeological integrity and therefore do not warrant archaeological assessment.

The original WAMP integrity layer was compiled utilizing land use information within the city limits, aerial photographs flown in the year 2000, and a windshield survey through most major areas of the City of Windsor. For this update, integrity was reviewed using Google Earth ortho-imagery. Since detailed visual reconnaissance for integrity on a property-by-property basis was not feasible, and property-specific datasets for details such as individual building footprints with year of construction and presence of basements do not exist, the evaluation of integrity was based on a number of secondary sources. Areas such as landfills, brine holding areas, major industrial areas, and other large-scale landscape alterations were considered to have low integrity and were identified as such. City street maps were also utilized to check for street names which may have held some clue as to the history of a particular area, and to identify green spaces. Earlier topographic maps were also consulted, since some areas currently designated as green spaces were in fact, former land fill areas, which would have low integrity. Minimal visual reconnaissance was conducted to assess the general condition of green spaces, the overall age of various neighbourhoods, and any recent unmapped disturbances.

Areas deemed to have no remaining archaeological integrity were excluded from the zone of archaeological potential. Buffers extending from paved road

centrelines, sufficient to capture standard roadbeds (7.5 metres), are considered to have been disturbed and not retaining integrity. Additionally, those portions of active quarry sites which have been subject to deep excavation were considered to not retain integrity. It should be noted that refinements to the integrity layer may result from a detailed Stage 1 archaeological resource assessment which demonstrates clearly that a study area has been severely disturbed, thereby negating archaeological potential.

Certain areas in Windsor have already been subject to archaeological assessments by licensed archaeological consultants and deemed to be free of further archaeological concern. As with lands with no archaeological integrity, these areas are also excluded from the archaeological potential zone. The areas with no archaeological integrity and/or having already been cleared of further archaeological concern are illustrated in Figure 4.

#### **4.4 Archaeological Potential Map**

The archaeological potential map will be used when assessing a development application or municipal infrastructure project area for archaeological potential. This map is the composite archaeological potential layer minus areas that have no archaeological integrity and/or have previously been subject to archaeological assessments and require no further work. The archaeological potential map also features the Archaeologically Sensitive Areas (ASA), and is illustrated in Figure 5.

Figure 3: Composite Archaeological Potential Layer

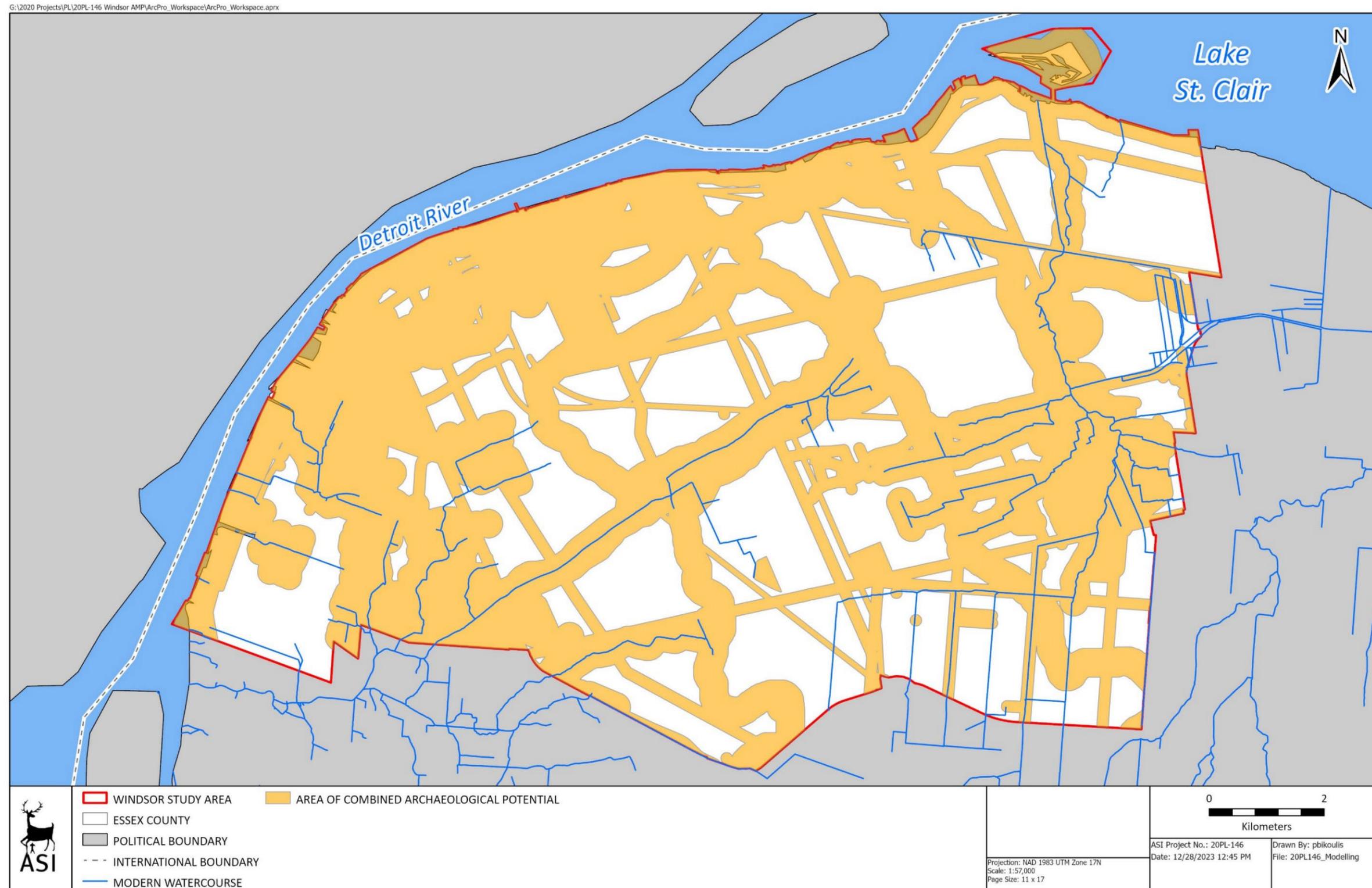


Figure 3: Combined Archaeological Potential

Figure 4: Lands With No or Low Archaeological Integrity

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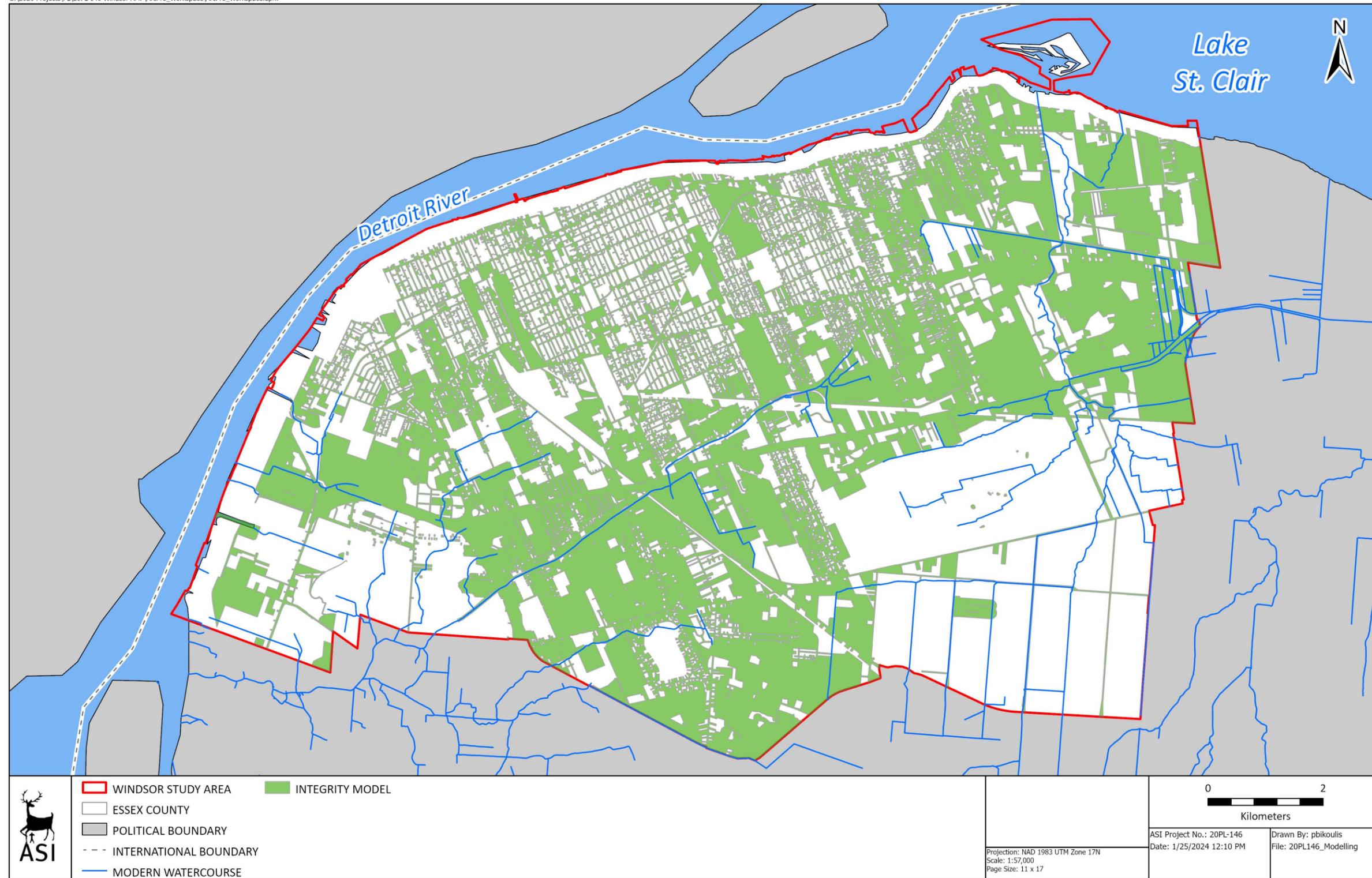


Figure 4: Archaeological Potential Zone and Lands with No Integrity or Previously Assessed and Cleared

Figure 5: Archaeological Potential in the City of Windsor

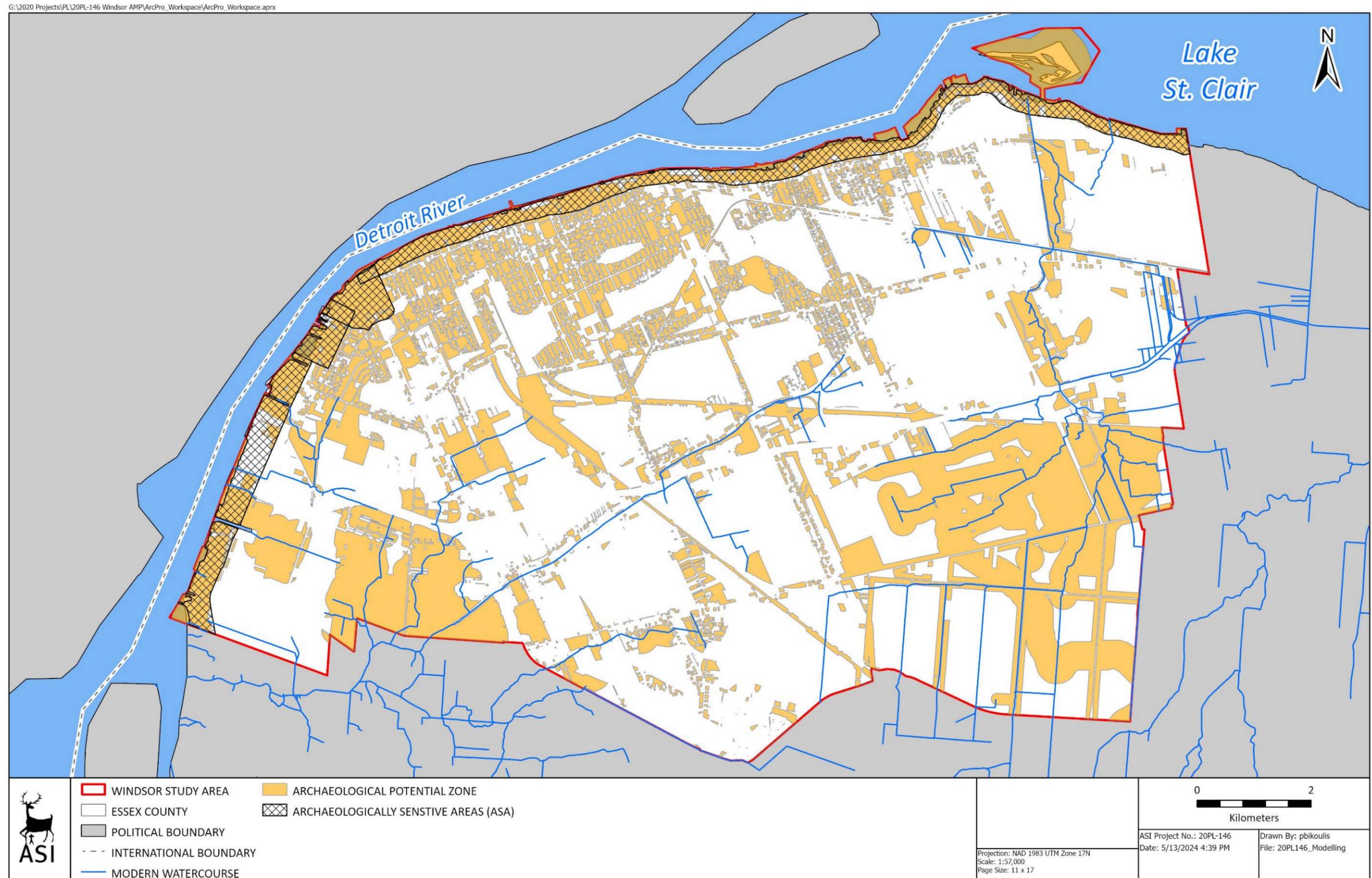


Figure 5: Archaeological Potential Zone and Archaeologically Sensitive Areas

## Part 2: Archaeological Resource Management

It is the principal objective of Windsor’s archaeological management plan to judiciously and uniformly apply the archaeological potential model across the city. The archaeological resource review and management approaches presented in this part of the Windsor Archaeological Management Plan are consistent with provincial legislation regulating archaeological resource conservation.

This part of the archaeological management plan also addresses site identification and mitigation through excavation, Indigenous nation engagement for archaeology, artifact care and the encouragement of greater citizen awareness of Windsor’s archaeological record.

### 5 Archaeological Resource Conservation and Planning

In Ontario, the conservation of cultural heritage resources is an objective of planning activity, as it is in many other provinces and countries. As Section 2 of the Planning Act states, “the conservation of features of significant architectural, cultural, historical, archaeological, or scientific interest” is a matter of provincial interest.

This provides a key mechanism for protecting archaeological resources in Windsor to ensure that future development (e.g., residential, industrial, recreational and infrastructure construction) clearly respects and follows provincial policy. In response to this provincial direction, the conservation of archaeological resources is addressed in Windsor’s Official Plan, which sets the goals and priorities to shape the future growth, conservation, and evolution of the city.

#### 5.1 Threats to Archaeological Resources

Protecting archaeological sites has become especially important in southern Ontario

where landscape change has been occurring at an ever-increasing rate since 1950, resulting in substantial losses to non-renewable archaeological resources.

The scale of the threats facing the finite and non-renewable archaeological record of southern Ontario was considered in a study in which rates of demographic and agricultural change were examined over the last century for south-central Ontario, and estimates generated of the number of archaeological sites that have been destroyed (Coleman & Williamson, 1994). The period of initial disturbance to sites was from 1826 to 1921 when large tracts of land were deforested and cultivated for the first time. During this period, disturbance typically resulted in only partial destruction of archaeological data as most subsurface deposits remained intact.

Unprecedented population growth in the post-World War II period, however, resulted in large amounts of cultivated land being consumed by urban growth, significantly threatening Ontario's archaeological resources. It is possible that more than 10,000 sites were destroyed in the period between 1951 and 1991. Of these, 25% represented significant archaeological features that would have merited some degree of archaeological investigation since they could have contributed meaningfully to an understanding of the past (Coleman & Williamson, 1994).

Archaeological sites also face a less direct, but equally serious threat from man-made changes to the landscape that inadvertently alter or intensify destructive natural processes. Increased run-off of surface water in the wake of forest clearance, for example, or hydrological fluctuations associated with industrial and transportation development may result in intensified rates of erosion on certain archaeological sites due to natural processes such as inundation. The amount of land (and hence the potential number of archaeological sites) which has been subjected to these destructive forces is impossible to quantify but is likely considerable.

There has been a marked reduction in the rate of archaeological site destruction since provincial planning regulations were strengthened in the 1990s and almost all major

municipalities in southern Ontario have carried out archaeological management plans and adopted progressive planning policies concerning archaeological site conservation. The potential for the loss of archaeological resources in the future remains great, however, due to continuing growth and development.

In the process of landscape change, archaeological resources may be affected in several ways. Change may result from some action that is purposefully induced in the environment, such as development activities (e.g., road construction, residential building). Change may also be a gradual and natural process of aging and degeneration, independent of human action, which affects artifacts, building materials, human memories, or landscapes. One objective of land use planning is to ensure that change, when it does result from human activity, is controlled. Any impacts upon archaeological resources resulting from land disturbing activities must be either averted or minimized.

## **5.2 Provincial Legislative Framework**

One of the objectives of the preparation of the WAMP was to review and ensure the City of Windsor is compliant with all current applicable provincial legislation and policy. This section outlines this legislation and policy, and the following sections provide guidance on how Windsor will adhere to it.

### **5.2.1 Provincial Legislation**

The specific provincial legislation governing planning decisions is complex but provides for several opportunities for the integration of archaeological conservation at the municipal level. The two main pieces of provincial legislation that create triggers for archaeological resource assessment are the Planning Act and the Environmental Assessment Act, while the Ontario Heritage Act regulates archaeological practice and conservation and protection of cultural heritage resources. The Provincial Policy Statement, 2020 (PPS) encourages municipalities to develop and implement archaeological management plans. Approximately 500 to 800

archaeological sites have been documented annually in southern Ontario since 1990 because of municipalities implementing this provision.

### 5.2.2 Planning Act & Provincial Policy Statement

Conservation of features of significant archaeological interest is identified as a matter of provincial interest under Section 2 of the Planning Act. Section 2 of the Planning Act also indicates that municipalities “shall have regard to” matters of provincial interest when making decisions pursuant to the Planning Act. This is reinforced through the PPS, which is issued under Section 3 of the *Planning Act*. Section 3(5) of the *Planning Act* also lays out municipal responsibilities in regard to the Provincial Policy Statement:

*a decision of the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government, including the Municipal Board, in respect of the exercise of any authority that affects a planning matter, “shall be consistent” with this policy statement.*

Thus, all decisions made during the land development process, regardless of the nature of the proposed development or site alteration, should address known or potential impacts to archaeological resources. The provisions in the Planning Act make it clear that archaeological resources must be conserved on public or private lands prior to the approval of a planning or development application.

Section 51 (17) of the *Planning Act* sets out the information required to be submitted with an application for subdivision approval. Schedule 1 of O. Reg. 544/06 (under the Planning Act), indicates the prescribed information that the applicant has to provide to the approval authority (i.e., City of Windsor) as follows:

**Section 23.** Whether the subject land contains any areas of archaeological potential.

**Section 24.** If the plan would permit development on land that contains known

archaeological resources or areas of archaeological potential:

- a) an archaeological assessment prepared by a person who holds a license that is effective with respect to the subject land, issued under Part VI (Conservation of Resources of Archaeological Value) of the Ontario Heritage Act; and
- b) a conservation plan for any archaeological resources identified in the assessment.

Additionally, Section 34 (3.3) of the Planning Act indicates that Zoning by-laws may be passed by the councils of local municipalities for “prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures on land that is the site of a significant archaeological resource.”

The Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use and development. This vision and policy statement now guide all provincial and local planning authorities in their land use planning decisions. With respect to archaeological resources, the PPS states that:

*Development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.... [Conserved]“means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained under the Ontario Heritage Act. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments (Provincial Policy Statement, Ontario Ministry of Municipal Affairs and Housing, 2020).*

In PPS archaeological resources are defined as those which “includes artifacts, archaeological sites and marine archaeological sites, as defined under the Ontario Heritage Act. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with the *Ontario Heritage Act*.” Areas of archaeological potential “means areas with the likelihood to contain *archaeological resources*. Criteria to identify archaeological potential are established by the Province. The Ontario Heritage Act requires archaeological potential to be confirmed by a licensed archaeologist.”

The PPS also includes policies recognizing Indigenous interests in the land use planning and development process. This recognition acknowledges the importance of Indigenous peoples’ history and cultural heritage and the need to engage with Indigenous communities when planning decisions are made that may affect their Aboriginal or treaty rights in accordance with Section 35 Constitution Act, 1982.

Note: At the time of preparation of this document the Province of Ontario proposed amendments to the Provincial Policy Statement 2020 through PPS 2024, which may impact the above provision. Therefore this document may need to be updated in the future to incorporate the provisions of proposed PPS 2024.

### **5.2.3 Environmental Assessment Act**

The Environmental Assessment Act applies to public sector projects and designated private sector projects. Private sector projects that are designated by the Province as subject to the *Environmental Assessment Act* are usually major projects such as landfills. The purpose of the *Environmental Assessment Act* is “the betterment of the people ... by providing for the protection, conservation and wise management in Ontario of the environment” (Section 2).

Environment is very broadly defined to include “the social, economic and cultural conditions that influence the life of humans or a community” [Section 1(c) (iii)] and “any building, structure, machine or other device or thing made by humans” [Section

1(d) (iv)]. Within this definition, archaeological artifacts are included in the “things” made by humans, and archaeological remains of residential structures, for example, fall within the “buildings” and “structures” made by humans.

The Environmental Assessment Act requires the preparation of an environmental assessment document, containing inventories, alternatives, evaluations, and mitigation. It is subject to formal government review and public scrutiny and, potentially, to a tribunal hearing. In Section 6.1 (2), it is noted that “the environmental assessment must consist of,” among other things, “(i) a description of the environment that will be affected or that might reasonably be expected to be affected, directly or indirectly; (ii) the effects that will be caused or that might reasonably be expected to be caused to the environment, and (iii) the actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment.” Studies of archaeological resources, as well as built heritage resources and cultural landscapes, are therefore necessary to address the requirements of the *Environmental Assessment Act*.

The Municipal Class EA process is a streamlined environmental assessment used for proposed municipal infrastructure projects like water supply, sanitary sewage, and road/transportation projects. These projects are categorized under four schedules according to their impacts on the environment; Schedule A and A+ projects are anticipated to have negligible to minimal effect on the environment and do not often require cultural heritage or archaeological assessments. Archaeological assessments are more commonly undertaken as part of Schedule B and Schedule C Municipal Class EA projects, where environmental impacts range from adverse to significant. Impacts to the Cultural Environment (archaeological resources and built heritage resources) must be inventoried to adequately consider the effects of a project on the environment. Archaeological assessments are a critical piece in the suite of considerations that inform the Municipal Class EA process, as it reviews existing conditions and develops and assesses alternatives for the proposed infrastructure

project.

Various provincial ministries are establishing protocols related to activities subject to the environmental assessment process in order to ensure that cultural heritage resource conservation in their respective jurisdictions is addressed. The Ontario Ministry of Transportation's *Environmental Reference for Highway Design* (2006), for example, ensures that archaeological assessments are undertaken in advance of all new road construction to ensure that no archaeological sites will be unknowingly damaged or destroyed. Similarly, the Ontario Ministry of Natural Resources and Forestry prepared the *Forest Management Guide for Cultural Heritage Values* (2014) to help protect archaeological sites, areas of archaeological potential, cultural heritage landscapes, historical Indigenous values, and cemeteries during forest operations.

#### **5.2.4 Ontario Heritage Act**

The Ontario Heritage Act governs the general practice of archaeology in the province to maintain a professional standard of archaeological research and consultation.

Pursuant to s.2 of the Ontario Heritage Act, the Minister is responsible for determining policies, priorities, and programs for the conservation, protection, and preservation of the cultural heritage of Ontario. These goals are partially accomplished through the provisions of the PPS and the legislated processes, such as those in the Planning Act and Environmental Assessment Act, rather than directly through the Ontario Heritage Act.

The Heritage Branch of the Ministry <sup>1</sup> has the primary administrative responsibility

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<sup>1</sup> Provincial management of cultural heritage resources has been carried out by operation units attached variously to the Ministry of Citizenship, Culture and Recreation (1993-1998), the Ministry of Tourism, Culture and Recreation (1998-2002),

under the Planning Act and Ontario Heritage Act for matters relating to heritage conservation. The Archaeology Program Unit is responsible for licensing archaeologists and reviewing archaeological assessments. The Heritage Planning Unit provides advisory services related to conservation of cultural heritage resources within the land use planning framework. Under the Planning Act, it is the responsibility of the Approval Authority (e.g., municipality) to ensure that land development applicants have undertaken archaeological resource identification and mitigation in advance of development through an archaeological assessment carried out by an archaeologist licensed under the Ontario Heritage Act for lands that contain any areas of archaeological potential.

Under Section 48 (1) of the Ontario Heritage Act, no person shall carry out archaeological fieldwork or, knowing that a site is a marine or other archaeological site within the meaning of the regulations, alter the site or remove an artifact or any other physical evidence of past human use or activity from the site unless the person applies to the Minister and is issued a licence that allows the person to carry out the activity in question.

The Ontario Heritage Act also contains significant penalties for altering an archaeological site without a permit. Under Section 69 (1) of the Ontario Heritage Act, anyone who disturbs or alters an archaeological site or removes an artifact from a site without a licence can be fined or imprisoned. A person or a director of a corporation on conviction under the Ontario Heritage Act or its regulations can face a fine of up to \$50,000 or imprisonment for up to one year or both. A corporation on conviction

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the Ministry of Culture (2002-2010), the Ministry of Tourism, Culture and Sport (2011 to 2019), Ministry of Heritage, Sport, Tourism and Culture Industries (2019 to 2022), Ministry of Tourism, Culture, and Sport (2022), and Ministry of Citizenship and Multiculturalism (2022).

under the Ontario Heritage Act or the regulations can face a fine of up to \$250,000.

While the filing of charges is at the discretion of the Ontario Provincial Police, Section 62 (1) of the Ontario Heritage Act empowers the Minister, should they and the Ontario Heritage Trust be of the opinion that property is of archaeological or historical significance and is likely to be altered, damaged, or destroyed by reason of commercial, industrial, agricultural, residential or other development, to issue a stop work order directed to the person responsible for such commercial, industrial, agricultural, residential or other development and prohibit any work on the property for a period of no longer than 180 days. Within that period the Minister or any person authorized by the Minister in writing may examine the property and remove or recover artifacts from the property.

All archaeological assessment reports are submitted to the Ministry as a condition of an archaeological license and are reviewed by Ministry staff to ensure that the activities conducted under a license meet current technical guidelines, resource conservation standards, and the regulations of the Ontario Heritage Act.

### **5.2.5 Renewable Energy Approvals Regulation**

The Renewable Energy Approvals regulation (O. Reg. 359/09), issued under the Environmental Protection Act, sets out the cultural heritage resource identification and mitigation requirements for obtaining approval to proceed with a renewable energy project. The regulation provides a streamlined approvals process, while simultaneously ensuring that the proposed project considers and avoids or mitigates impacts to the environment, including the cultural environment. O. Reg. 359/09 separates cultural heritage resources into “archaeological resources” and “heritage resources” (including both built heritage and cultural heritage landscapes) and addresses each separately (Sections 19 through 23 of O. Reg. 359/09). The Ministry has also issued a bulletin entitled Cultural Heritage Resources: An Information Bulletin for Projects Subject to Ontario Regulation 359/09 – Renewable Energy Approvals (2013).

The Renewable Energy Approvals regulation requires the development proponent to conduct archaeological and heritage assessments that identify and consider potential impacts to cultural heritage resources and propose strategies for mitigation of those impacts. Applicants may choose to undertake a self-assessment if there is reason to believe that there is low likelihood for archaeological and heritage resources to be present at the project location. The “self-assessment” is undertaken using Ministry checklists to determine if there is potential for archaeological resources present.

### **5.2.6 Aggregate Resources Act**

The Ministry of Natural Resources and Forestry, which administers the Aggregate Resources Act (1990), recognizes the potential impact quarrying activities may have on cultural heritage resources such as archaeological sites. Pursuant to O. Reg. 244/97 under the Aggregate Resources Act, the process for addressing archaeological concerns is similar to that outlined for Planning Act related projects. This regulation indicates that a background study, field survey and detailed archaeological investigations are required in accordance with the Aggregate Resources of Ontario-Technical Reports and Information Standards. Furthermore, the development of a pit or quarry will often require an Official Plan Amendment or Zoning By-law Amendment, and thus would require involvement by the municipality.

### **5.2.7 Funeral, Burial and Cremation Services Act**

The Funeral, Burials and Cremation Services Act, 2002 (formerly the *Cemeteries Act*, which was repealed in 2012) addresses the need to protect human burials, both marked and unmarked, which are yet another valuable link to the past. Burial locations uncovered on archaeological sites constitute “burial ground”. The discovery of such burials requires further archaeological investigation in order to define the extent and number of interments, and either the registration of the burial location as a cemetery, or the removal of the remains for re-interment in an established cemetery. The actual workings of this process are complex and vary depending on the nature of the burial(s) (e.g., isolated occurrence or part of a more formal cemetery)

and on the cultural affiliation of the remains. In all cases, the success of the process is dependent upon the co-operation of the property owner, the next of kin (whether biological or prescribed), and the Registrar of Burial Sites in the Ministry of Public and Business Service Delivery (formerly Ministry of Government and Consumer Services). The role of the Ministry is to assist in co-ordinating contact and negotiation between the various parties and ensuring that burial site investigations by licensed archaeologists meet provincial policies, standards, and guidelines.

### **5.3 Compliance and Enforcement**

The City of Windsor has an important role to play when municipal approval is engaged, in not only ensuring compliance with the statutory obligations outlined above, but in facilitating and enforcing compliance in conjunction with the Windsor Police Service, the Ontario Provincial Police, and the Archaeology Program Unit of the Ministry. If municipal approval processes are not engaged, then only provincial jurisdiction and enforcement applies.

Protections afforded to archaeological resources under the Ontario Heritage Act make it illegal to alter or remove artifacts from a site except under licence issued by the Ministry (see Section 5.2.4, above). This pertains not only to archaeological management in the context of various approvals processes and other major soil-disturbing activities, but also activities pursued by avocational archaeologists and hobbyists, including artifact hunting on cultivated agricultural lands, prospecting on archaeological sites, or metal detecting. To pursue such activities legally, individuals must obtain an Avocational Licence from the Ministry.

The WAMP is a tool that Windsor can use to inform all stakeholders of the locations of archaeological potential to comply with the obligations under various legislation. Additionally, the City of Windsor issues Metal Detecting Permits for City Parks outside of archaeological potential zones. The permit system and protocol began around 2020, after approval and review by the Ministry and First Nations representatives.

However, the provisions of WAMP and all relevant legislation apply in the event that any archaeological resources are encountered.

## **6 Municipal Policy**

### **6.1 Official Plan**

The City of Windsor Official Plan enables the implementation of the WAMP.

The current Official Plan's heritage policies (Chapter 9 Heritage Conservation) provide for the identification and conservation of archaeological sites in accordance with the Ontario Heritage Act. For reference, these policies are included here in Appendix D, Section 2.

These policies provide a strong foundation for the protection and sound management of archaeological resources in the City of Windsor. As part of the preparation of this archaeological management plan, the Official Plan policies will be amended to align with the 2020 Provincial Policy Statement under the Planning Act as it relates to archaeological conservation and engagement with Indigenous nations. Accordingly, amendments to some of the existing policies are presented in Appendix D, Section 3, of this report.

## **7 Indigenous Engagement in the Archaeological Assessment Process**

### **7.1 Principles and Methods of Indigenous Engagement**

Canadian society is striving to rebalance the relationship with Indigenous peoples guided by statutory rights and obligations, including those established in the Canadian constitution and developing case law, principles, such as those outlined in the United Nations Declaration on the Rights of Indigenous People (UNDRIP), and recommendations, such as the Calls to Action of the Truth and Reconciliation

Commission of Canada (TRC) (Association of Municipalities Ontario, 2021a; Ontario Professional Planners Institute, 2019).

This section is intended to provide Windsor with contextual information to help understand its Indigenous engagement role specifically as it pertains to the protection of Indigenous archaeological heritage resources. It may help inform Windsor's broader role and Indigenous engagement responsibilities, but it should not be considered a substitute for enterprise-level municipal engagement policies and procedures, nor for advice from legal counsel who specialize in Indigenous law and the constantly evolving case law and government policy.

### **7.1.1 Crown Duty to Consult and Accommodate**

Public sector agencies who represent the Crown, including federal, provincial, and territorial governments and certain Crown agencies and regulatory bodies in some situations, bear the Crown duty to consult and accommodate Indigenous nations when making decisions that may affect Aboriginal and/or Treaty rights. These agencies are generally alert to this duty and often have professionals in their ranks with the responsibility of guiding the process. While they cannot delegate the Crown duty, they may delegate procedural aspects to other agencies and municipalities to assist in its fulfillment (Kleer et al., 2011).

Since municipalities are not identified as the Crown in Canada's constitutional legislation, municipalities do not have the Crown's duty to consult Indigenous nations. However, from a practical point of view municipalities and their service providers (such as consulting archaeologists – described below) are often either subject to regulatory requirements related to the Duty to Consult Indigenous peoples or are actually delegated responsibilities related to these duties.

The PPS mandates Indigenous engagement in the planning process. Private sector land development proponents also need to be aware of these changes and the fact that engagement with Indigenous peoples is becoming a more rigorous feature of the

planning approvals process across Ontario and throughout Canada (Yarahmadi, 2021).

### **7.1.2 Engagement Obligation of Licensed Archaeologists**

The Ministry licenses archaeologists under the provisions of the Ontario Heritage Act. In carrying out their work, licensees have a statutory obligation to comply with *Standards and Guidelines for Consultant Archaeologists* (MTC, 2011). These include engaging with Indigenous nations when dealing with Indigenous archaeological sites.

Support for engagement by licensed archaeologists is in the best interest of the development proponent and the approval authority (City of Windsor) to develop and maintain positive working relationships with interested Indigenous nations.

In an effort to facilitate the engagement process, the archaeological resource management industry works with Indigenous nations to develop best practices for engagement. The approach that has gained the most widespread acceptance has been the training and inclusion of Indigenous practitioners, variously referred to as liaisons, monitors, or field liaison representatives, to work alongside consultant archaeologists in the field. With costs for these workers underwritten by development proponents, Indigenous nations gain both capacity funding, allowing them to participate in the engagement process, and first-hand knowledge of the archaeological fieldwork dealing with their cultural patrimony. Working with Indigenous liaisons, often from more than one Indigenous nation with overlapping treaty lands or traditional territories, has become routine practice for licensed archaeologists.

## **7.2 Legislative Context**

Section 17 of the Planning Act requires that the Chief of every First Nation Council on a Reserve within one kilometer of proposed official plan or official plan amendments is circulated on notices for those applications, as part of the public notice process (O.

Reg. 543/06, s. 3 (9); O. Reg. 467/09, ss. 2, 3).

While there are no Reserves that fall within that distance of the boundaries of the City of Windsor, planning authorities in Ontario are further required to engage with Indigenous nations having interest in the area in the planning approvals process. This is affirmed in the PPS which states that:

“The Province’s rich cultural diversity is one of its distinctive and defining features. Indigenous communities have a unique relationship with the land and its resources, which continues to shape the history and economy of the Province today. Ontario recognizes the unique role Indigenous communities have in land use planning and development, and the contribution of Indigenous communities’ perspectives and traditional knowledge to land use planning decisions. The Province recognizes the importance of engaging with Aboriginal communities on planning matters that may affect their section 35 Aboriginal or treaty rights. Planning authorities are encouraged to build constructive, cooperative relationships through meaningful engagement with Indigenous communities to facilitate knowledge-sharing in land use planning processes and inform decision-making.” (Part IV, Vision for Ontario’s Land Use Planning System).

The Provincial Policy Statement also states the following:

- Planning authorities shall engage with Indigenous communities and coordinate on land use planning matters (Policy 1.2.2, Section 1.2 Coordination);
- This Provincial Policy Statement shall be implemented in a manner that is consistent with the recognition and affirmation of existing Aboriginal and treaty rights in Section 35 of the *Constitution Act, 1982* (Policy 4.3, Section 4.0 Implementation and Interpretation).

The Indigenous engagement process should be distinct and separate from the general public engagement process. While Indigenous nations may be invited to the public engagement meetings, they will expect to discuss these matters on a government-to-

government basis.

With respect to archaeological resources, the Provincial Policy Statement states that:

- Planning authorities shall engage with Indigenous communities and consider their interests when identifying, protecting and managing cultural heritage and archaeological resources (Policy 2.6.5, Section 2.6 Cultural Heritage and Archaeology).

It is therefore recommended that the City of Windsor adopt an administrative process for engagement with the Indigenous nations identified in Section 7.4. This process should be tailored to the engagement and accommodation preferences of each community. It should involve relationship development and maintenance of a dialogue that is responsive to changing needs and capacities. Indigenous input can ultimately influence the development of plans which protect ecologically sensitive lands, significant archaeological sites, and other important areas, as well as the development of interpretation plans to share information about Indigenous heritage through plaques, signage, exhibits, social media posts, etc. The above-noted applications and projects have the greatest potential for impacting land use decisions and therefore would benefit from meaningful engagement with Indigenous nations. In turn, Indigenous input can ultimately influence the development of plans which protect ecologically sensitive lands, significant archaeological sites, and other important areas, as well as the development of interpretation plans.

Also, the Ministry *Standards and Guidelines for Consultant Archaeologists* (MTC, 2011) mandate engaging with Indigenous nations for Stage 3 and Stage 4 archaeological assessments as follows:

- In Stage 3, when assessing the cultural heritage value or interest of an Indigenous archaeological site that is known to have or appears to have sacred or spiritual importance or is associated with traditional land uses or geographic features of cultural heritage interest or is the subject of Indigenous oral histories [Section 3.4].

- At the end of Stage 3, when formulating a Stage 4 strategy to mitigate the impacts on the following types of Indigenous archaeological sites through avoidance and protection or excavation [Sections 3.4 and 3.5]:
  1. rare Indigenous archaeological sites;
  2. sites identified as sacred or known to contain human remains;
  3. Woodland period Indigenous sites;
  4. Indigenous archaeological sites where topsoil stripping is contemplated;
  5. undisturbed Indigenous sites; and,
  6. sites previously identified as of interest to an Indigenous community.

These standards are emphasized in the Ministry bulletin entitled *Engaging Aboriginal Communities in Archaeology: a Draft Technical Bulletin for Consultant Archaeologists* (Ministry of Tourism, Culture and Sport, 2011), which provides additional resources and guidelines to help licensed archaeologists fulfill their statutory obligation for engagement with Indigenous nations.

Much has changed since this engagement obligation came into effect and the engagement process continues to evolve as Indigenous nations seek to participate more fully in all stages of archaeological assessment and mitigation. For example, many nations now seek funding from development proponents to assign Indigenous monitors to Stages 2 through 4 archaeological fieldwork and this is becoming common practice throughout the province. It is expected that the engagement process will continue to develop through the coming years as Canadian society seeks to rebalance its relationship with Indigenous peoples in accordance with developing case law and other guiding declarations and principles (e.g., the Crown Duty to Consult and Accommodate Indigenous nations, the Truth and Reconciliation Commission Calls to Action (2015), and the United Nations Declaration on the Rights of Indigenous Peoples

(UNDRIP) with its tenet of Free, Prior and Informed Consent (FPIC)). All those involved in managing archaeological resources in the land-use planning process—including Indigenous nations, municipal planning approval authorities, development proponents, and licensed archaeologists—have important roles in proactively developing a respectful engagement process that best serves the needs of all concerned.

It is often assumed that the Indigenous nation that is geographically closest to a given project is the most suitable group with whom to engage. However, the complex histories of the Indigenous peoples of Windsor and vicinity, both before and after European contact and colonial settlement, means that such assumptions can be simplistic and detrimental to the success of the entire engagement process. Under these circumstances there should be an effort to identify all groups that are appropriate (on culture-historical grounds) to act as the designated descendants of those who occupied the region in the past, and who are willing to participate. This identification process is best achieved through communication with a variety of Indigenous nations and communities in order that they may arrive at the final decision. In this way, ancient sites are represented by several nations together.

### **7.3 Indigenous Treaty History and Traditional Territories**

The City of Windsor lies within the traditional territory of the Anishinaabe nations that comprise the Three Fires Confederacy: Ojibwa (Chippewa), Odawa (Ottawa), and Potawatomi. The land was acquired by the British Crown in the late eighteenth and nineteenth centuries by Treaty #2 (also known as the McKee Purchase or the 1790 Treaty of Fort Detroit) and a series of subsequent negotiated purchase agreements signed with representatives of these Anishinaabe nations together with representatives of the Huron (Wendat/Wyandot) Nation. The latter community had taken sanctuary in the area at the invitation of their Anishinaabe allies in the early eighteenth century (Jacobs & Lytwyn, 2020; Walpole Island Heritage Centre, 2018).

The land also lies within the precincts of the Beaver Hunting Ground Deed (also known as the Nanfan treaty and the 1701 Treaty of Fort Albany) signed between the Haudenosaunee Confederacy (Five Nations) and the British Crown at Albany, NY, in 1701. That same year, the Anishinaabe and the Haudenosaunee signed the Great Peace of Montreal treaty, negotiated between the government of New France and thirty-nine Indigenous nations, that ratified the Dish With One Spoon principle for sharing resources while respecting sovereign territories (Jacobs & Lytwyn, 2020).

The advent and significance of historical treaties are rooted in the Royal Proclamation of 1763, issued by King George III. The Proclamation affirmed that Indigenous people live under the protection of the Crown and that they were not to be “molested or disturbed in the Possession of such Parts of Our Dominions and Territories as, not having been ceded to, or purchased by Us, are reserved to them, or any of them, as their Hunting Grounds...” This statement recognized the existence of Aboriginal rights and title to vast areas within North America and beyond. In particular, the Royal Proclamation identified the lands west of the Appalachian Mountains, not including Rupert’s Land in the north as being Indigenous land, and therefore subject to land acquisition agreements between the Crown and the affected nations.

Between 1764 and 1815, the government acquired the lands of the shoreline of the upper St. Lawrence as well as the lower Great Lakes. While the earliest treaties were related to the use of land for military and defensive purposes, following the American Revolutionary War many treaties were for the purposes of settling the roughly 30,000 United Empire Loyalists who refused to accept American rule. After the War of 1812, the colonial administration of Upper Canada focused on greater settlement of the colony, and land purchases were then concerned with those lands beyond this first range of settlement. These involved a swath of about seven million acres from the Ottawa River to the eastern shores of Georgian Bay. After 1836, many portions of the northern and northwestern sections of the province were acquired, including the Saugeen Peninsula, Manitoulin Island and the north shores of Lake Huron and Lake Superior (Hall, 2019; Indigenous and Northern Affairs Canada, 2010; Surtees, 1984).

While the Royal Proclamation of 1763 established that all lands had to be purchased by the Crown before being allocated to settlers, several land purchases in the Detroit area, including the Thames Valley, had been privately negotiated with Indigenous groups or were being occupied by illegal squatters (Surtees, 1984, p. 47). The fact that these land purchases had been negotiated prior to a formal agreement placed additional pressure on the Crown to legitimize these purchases and to protect these lands from encroachment from American or French settlement (Surtees, 1984, p. 51). To regulate the situation, and to ensure the protection of the western part of its territory, the Crown appointed Alexander McKee to negotiate on its behalf the cession of the lands north of Lake Erie.

McKee was Deputy Agent for the Crown and had strong relationships with Indigenous communities in the Detroit area, having served in this capacity for both American and British forces through the latter half of the eighteenth century (Horsman, 1979). Aware of the political situation, McKee toured the area to discuss with Indigenous nations the potential negotiation of lands North of Lake Erie. McKee's request was met positively, and he convened a meeting to formalize the purchase at Detroit in May 1790. Present at the meeting were the officers of the 60<sup>th</sup> Regiment at Detroit, fur traders, officials of the Indian Department and 27 chiefs, representing the Odawa, Chippewa, Potawatomi and Huron (Wendat/Wyandot) Nations (Surtees 1984:51). Communities received a single payment of £1,200 in Quebec currency worth of goods (Surtees, 1984, p. 51). The Treaty was signed on June 22, 1790 and covers a 5,440 square kilometre area north of Lake Erie going from the Detroit River to the west to the base of Long Point to the east and as far north as the Thames River (Crown-Indigenous Relations and Northern Affairs, 2016a; Surtees, 1984, p. 51).

As part of the original purchase, all the islands in the St Clair River were excluded from the purchased lands as well as two small tracts of land in the Windsor area, known as the Huron Reserve and the Huron Church Reserve (Surtees, 1984, p. 51). These lands were renegotiated throughout the nineteenth century, beginning with the cession of the 1,078-acre (436 ha.) Huron Church Reserve in 1800 under Treaty #12 (Crown-

Indigenous Relations and Northern Affairs, 2016b). The remaining Huron Reserve was ceded through multiple small transactions through the remainder of the nineteenth century and was concluded in 1876 when the Wyandots of Anderdon applied for enfranchisement under the Indian Act, thereby removing the land rights for the band (Surtees, 1984, p. 127).

In 2014, Walpole Island First Nation filed a specific claim with the Federal Government stating that the Crown did not fulfill its obligations to set apart the proper amount of land to form the Huron Church Reserve for the ancestors of the Walpole Island First Nation. This claim is still under negotiation (Aboriginal and Treaty Rights Information System, 2020).

## **7.4 Indigenous Nations With Interests in the City of Windsor**

There are currently seven Indigenous nations that have an expressed interest in archaeological heritage in the City of Windsor, as follows:

- Walpole Island First Nation
- Caldwell First Nation
- Chippewas of the Thames First Nation
- Aamjiwnaang First Nation
- Haudenosaunee Confederacy Chiefs Council
- Six Nations of the Grand River
- Huron-Wendat Nation

These Indigenous nations have been provided the opportunity to comment on this WAMP update and the City of Windsor met with representatives of Walpole Island First Nation, Caldwell First Nation, Chippewas of the Thames First Nation, and

Aamjiwnaang First Nation in the course of the project.

## **7.5 Indigenous Perspectives on Stage 4 Mitigation**

In 2013, during the preparation of archaeological policies and guidelines for York Region, a discussion was held with thirteen Indigenous nations that resulted in an outline of Stage 4 mitigative recommendations for sites of various time periods and types. The indicators for cultural heritage value that these Indigenous nations communicated for Indigenous sites were not based in any way on the provincial indicators outlined in Table 3 in Section 8.3.5. In their view, any Indigenous site should be deemed to be of significant cultural heritage value. As such, there is a preference by Indigenous nations in favour of protection and preservation of all Indigenous sites. In any case, engagement with Indigenous nations is a statutory requirement of licensed archaeologists, whether pursuing avoidance and protection or excavation as Stage 4 mitigative options (see Section 8.3.6).

While conversation is ongoing as it relates to policies and protocols within the City of Windsor, the City's archaeological policies similarly encourage protection as the preferred option to mitigate the impacts of proposed development on any archaeological feature.

## **8 Archaeological Assessment in the Development Review Process**

Heritage conservation planning and management is generally concerned with ensuring that valued cultural heritage resources, including archaeological sites, are conserved and protected in a sound and prudent manner in the continuing and unavoidable process of change in the environment. The role of custodian and steward of these resources generally falls to the private property owner, as it is neither possible nor desirable that all resources be brought into public ownership. Therefore,

cultural heritage conservation management is undertaken by a variety of actors, and it is necessary, through legislation and education, to bring all of these actors together in pursuit of a common goal. In many instances, it is traditional planning mechanisms that seek to ensure that cultural heritage resources are conserved and/or maintained within the process of land use change.

## **8.1 Archaeological Review Process in Ontario – Roles and Responsibilities**

### **8.1.1 Role of Province**

Under the Planning Act, the Ministry has only limited responsibility for matters relating to cultural heritage including archaeological resources. Where the provincial government is involved in a process under the Planning Act (for example when a municipal planning document is circulated for provincial review through the Ministry of Municipal Affairs and Housing's One Window service), the Ministry's Heritage Planning Unit is the government's lead with respect to cultural heritage, including archaeological resources. Otherwise, the role of the Ministry with respect to archaeology is defined primarily by the Heritage Act, under which the Archaeology Program Unit of the Ministry is responsible for issuing archaeological consulting licenses to qualified individuals. All consultant archaeologists who undertake Stage 1 to 4 archaeological assessments in Ontario must be licensed by the Ministry. All work conducted by the consultant archaeologist must conform to the standards set forth in the most current *Standards and Guidelines for Consultant Archaeologists* authorized by the Ministry and the accompanying bulletins, such as, but not limited to:

- Engaging Aboriginal Communities in Archaeology: A Draft Technical Bulletin for Consultant Archaeologists in Ontario (2011);
- Land-Based Archaeological Licensing: A Bulletin for Archaeologists in Ontario (2017);

- Archaeological Reports: An Administrative Bulletin for Archaeologists in Ontario (2017);
- The Archaeology of Rural Historical Farmsteads: A Draft Technical Bulletin for Consultant Archaeologists in Ontario (2021);
- Project Information Forms: Protocols and Support for Licensed Archaeologists using Ontario's Past Portal (2013);
- Winter Archaeology: A Technical Bulletin for Consultant Archaeologists in Ontario (2013); and
- Forest Operations on Crown land: A Draft Technical Bulletin for Consultant Archaeologists in Ontario (2009).

The Ministry also has numerous fact sheets and memoranda on its website to explain the process of consultant archaeology in Ontario and, together with the *Standards and Guidelines for Consultant Archaeologists*, these supporting documents form the basis for evaluating archaeological fieldwork and determining whether it is compliant with the terms and conditions of the specific archaeological license and the Ontario Heritage Act. In order to determine where archaeological assessments are required, the Ministry has prepared checklists entitled *Criteria for Evaluating Archaeological Potential: A Checklist for the Non-Specialist* (2015) and *Criteria for Evaluating Marine Archaeological Potential: A Checklist for Non-Marine Archaeologists* which provide generic criteria for anyone to use to assess archaeological potential. Completion of the latter checklist indicates whether proposed in-water impacts require a marine archaeological assessment. Licensing, fieldwork and reporting on marine archaeology differs from the land-based archaeology process and are separate from the *Standards and Guidelines for Consultant Archaeologists*. Municipalities with archaeological management plans, like the City of Windsor, have access to much more detailed information specific to their jurisdictions which provide more effective and accurate means of determining archaeological potential and the need for archaeological assessments than the provincial checklists.

Most approval authorities rely on the Ministry review of archaeological assessment reports when deciding whether concerns for archaeological sites have been addressed by a development proponent. After reviewing an archaeological assessment report, Ministry staff will provide the consultant archaeologist with a review letter. If the archaeological assessment report complies with the Ontario Heritage Act, specifically the Ministry's *Standards and Guidelines for Consultant Archaeologists*, the letter will inform the consultant archaeologist that the archaeological assessment report has been accepted and entered into the Ontario Public Register of Archaeology Reports. The Ministry provides a copy of the review letter to the approval authority and development proponent, as identified by the consultant archaeologist, when submitting the report. The letter, in conjunction with the archaeological assessment report, can be used by the City of Windsor to verify that concerns for archaeological sites have been addressed for the property that was assessed or that further work is required.

The Ministry is also ultimately responsible for all matters related to the management of the archaeological resources documented, mitigation strategies proposed, and can provide advice or direction as needed should disputes arise between interested parties from the conservation of archaeological resources under the land use planning and development process.

### **8.1.2 Role of Consultant Archaeologists**

As part of the land use planning and development process, development proponents rely on consultant archaeologists who hold a professional license issued by the Ministry. Consultant archaeologists carry out archaeological assessments to ensure that requirements for archaeological sites and features have been addressed and that previously unknown archaeological sites are identified. They also provide technical advice on appropriate measures for the mitigation and conservation of archaeological sites.

Only Ministry-licensed consultant archaeologists, engaged with descendant

communities, may determine the cultural heritage value or interest of archaeological sites. Moreover, **only licensed archaeologists have the skills and authority to evaluate archaeological potential and integrity on a parcel of land or underwater.**

### 8.1.3 Role of the Private-Sector Development Proponent

When an archaeological assessment is required by the City of Windsor for planning or development applications, it is the responsibility of the development proponent to retain a consultant archaeologist to carry out the requisite archaeological work (see Section 8.1.4 for similar responsibilities for municipal projects). In order to carry out any necessary archaeological work (typically Stage 1 and/or 2 assessments to begin with), the consultant archaeologist will usually require the following from the development proponent:

- signed consent to enter the property and carry out the fieldwork;
- a copy of the most recent development plan, if available, or plan of topographic survey, ideally in a digital format (e.g., GIS, CAD); and,
- the study area limits clearly marked on the plan/survey; this map should show existing conditions, including contour lines, trees and tree lines, fence lines, property lines, structures, driveways, watercourses, etc.

Should an archaeological resource with potential cultural heritage value or interest be found during Stage 2 field assessment, it must be subject to Stage 3 investigations prior to its protection or mitigative excavation (Stage 4). However, a Stage 3 assessment of that resource is not required should the development proponent decide to not proceed with the development that triggered the Stage 2 assessment provided that long-term protective measures are addressed in the Stage 2 report. In such an instance, the archaeological resource will be protected from further disturbance by Section 48(1) of the Ontario Heritage Act.

It is the responsibility of the development proponent to provide to the City of Windsor

copies of all archaeological assessment reports, including any revised reports, and GIS mapping of archaeological study area, produced in support of a proposed development as part of a complete application.

All licensed archaeological activities must comply with the most current Ministry *Standards and Guidelines for Consultant Archaeologists*. If the development proponent submits documentation for archaeological activities that pre-date the current standards and guidelines, the Ministry will assess the sufficiency of the documentation in accordance with the current standards and guidelines.

Frequent issues that arise between development proponents, their consultant archaeologists, and the Ministry include whether consultant archaeologists are able to undertake field assessments when there is snow on the ground (including Stage 1 assessments), whether a consultant archaeologist can provide a summary letter to the Ministry rather than a full Stage 1 report, whether a marine archaeological assessment is required, and if there is built-in flexibility in the *Standards and Guidelines for Consultant Archaeologists* which allows for a consultant archaeologist to deviate from the provincial requirements. Resolution to these issues often requires communication between the consultant archaeologist, the proponent, the Approval Authority, and the Ministry.

The Ontario Heritage Act mandates the reporting requirements of archaeological investigations carried out under license, and these requirements are detailed in the Ministry's *Standards and Guidelines for Consultant Archaeologists*. The Approval Authority should refuse to issue clearance to a property until an archaeological assessment report has been submitted and reviewed and a letter of review issued by the Ministry. Copies of all archaeological assessment reports, GIS mapping of the project area, and correspondence with the Ministry must be filed with the City of Windsor Planning and Building Services Department for purposes of updating and maintaining the WAMP GIS.

### 8.1.4 Role of the City of Windsor

An approval authority “is any public body (municipality, conservation authority, provincial agency, and ministry) that has the authority to regulate and approve development projects that fall under its mandate and jurisdiction (*Standards and Guidelines for Consultant Archaeologists*: 162).” It approves those planning applications where development proponents have met all local by-laws, other legislated requirements, and public concerns, including whether the lands to be developed contained archaeological potential that merited an archaeological assessment.

For the City of Windsor, the Council is the Approval Authority for land use planning applications. The City’s Planning and Building Services Department is responsible for advising Council on matters concerning the mitigation and protection of archaeological resources related to the planning process. . Planning and Building Services Department staff, in particular a Heritage Planner, will also review archaeological assessment reports submitted by consultant archaeologists to ensure that the City’s policies have been met.

If the City of Windsor determines that a property has archaeological potential using the archaeological potential map in the WAMP GIS (and the Ministry’s *Criteria for Evaluating Marine Archaeological Potential* checklist, if applicable), it will advise the development proponent to retain a licensed consultant archaeologist to carry out an archaeological assessment before any soil disturbance, development, and/or site alteration occurs. This requirement will be communicated during the pre-application process as part of any application for Official Plan Amendments, Zoning By-law Amendments, Site Plan Control, Plans of Subdivision or Condominium, or Committee of Adjustment applications.

The City of Windsor must receive copies of all archaeological assessment reports conducted as part of proposed development as part of a complete application, including the Ministry letter(s) of acceptance for those reports. All archaeological

assessment reports will be submitted to the Heritage Planner at City of Windsor by the development proponent once completed. The Ministry will provide a copy of the acceptance letter to the consultant archaeologist and the development proponent, and may sometimes also copy the Heritage Planner at the City of Windsor. Regardless, the development proponent is responsible for providing the Ministry letter to the Heritage Planner. The archaeological assessment should be conducted early in the development process and Stages 1 and 2 if recommended, be submitted as part of the complete application.

It is also the responsibility of the City of Windsor that when it undertakes soil disturbance, development, and/or site alteration activities associated with project work in an archaeological potential zone, a consultant archaeologist must be retained to carry out an archaeological assessment before any soil disturbance occurs. Copies of all archaeological assessment reports, GIS mapping of the project area, and correspondence with the Ministry prepared by the City are to be filed with the City of Windsor Planning and Building Services Department for purposes of updating and maintaining the WAMP GIS.

All municipal public works projects must conform with Windsor's Official Plan which include its cultural heritage and archaeological resources policies. Works must also be consistent with the Provincial Policy Statement. It is understood that there are instances where public works may have an impact on known archaeological sites or lands identified within the archaeological potential map in the WAMP, such as the development or replacement of infrastructure (e.g., roads, bridges, sewage and water systems), the construction and maintenance of municipal assets (e.g., public service facilities), and public realm improvements such as parks and open spaces within Windsor's jurisdiction. While many of these examples are regulated by other legislation, such as the Environmental Assessment Act, the Ontario Water Resources Act and Drainage Act, an archaeological assessment is also required.

Refer to Section 8.3, Figure 6: Archaeological Review Process Flowchart for a graphic

summary of the process.

## **8.2 When Does the Archaeological Potential GIS Layer Apply?**

An archaeological assessment may be required for the following types of development applications, if any portion of the subject lands is within the archaeological potential zone of the WAMP GIS:

- Official Plan Amendments (including Secondary Plans/ Secondary Plan Amendments) (as per Planning Act s.22);
- Zoning By-law Amendments (as per Planning Act s.34);
- Site Plans (as per Planning Act s. 41);
- Plans of Subdivision (including Plans of Condominium) (as per Planning Act s. 51);
- Consents or Minor Variance applications (where there is soil disturbance, which may include activities such as excavation and compaction.) (as per Planning Act sections 53 and 45 respectively);
- Permits involving Site Alteration (meaning activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site as per the Provincial Policy Statement Section 2.6.2); and,
- City of Windsor public works (as per Planning Act, s. 24). (ie. City of Windsor municipal works and projects)

In exceptional situations, when a development proponent can demonstrate to the satisfaction of city officials that all archaeological integrity has been completely removed (eradicated) by previous development of the entire subject property (e.g., a building with a basement covers the whole property), the City of Windsor may exercise discretion in not requiring an archaeological assessment. However, given the

potential for residual archaeological resources to remain even within developed urban landscapes, a Stage 1 archaeological assessment will almost always or likely remain the minimum default requirement for the above. Only a licensed consultant archaeologist, undertaking a Stage 1 assessment, can determine that no archaeological potential survives within an area identified using the archaeological potential map of the WAMP GIS. In cases where it is clear that a property has archaeological potential, and it is assumed that a Stage 2 archaeological assessment will be required as part of the complete development application, it is recommended that the development proponent retain a consultant archaeologist to undertake a combined Stage 1 and 2 archaeological assessment.

### **8.2.1 Official Plan Amendments**

If a property owner or development proponent wishes to use, alter, or develop a property in a way that does not conform to the Official Plan, they must apply for an Official Plan Amendment. These applications require archaeological assessments of the subject lands if any portion of those lands fall within the archaeological potential zone identified in the WAMP GIS. The resultant report may recommend further archaeological assessment to be completed prior to soil disturbance, development, and/or site alteration.

### **8.2.2 Secondary Plans**

Secondary Plans establish local development policies to guide growth and change in a defined area of a municipality. Secondary Plan policies adapt and implement the objectives, policies, land use designations and overall planning approach of the Official Plan to fit local contexts and are adopted as amendments to the Official Plan. Archaeological assessments undertaken at the Secondary Plan stage provide the best opportunity for protecting significant archaeological sites through development design. Typically, this is conducted as a Stage 1 archaeological assessment during the development of the Secondary Plan, and is the responsibility of the applicant of the Secondary Plan. Any future assessment is the responsibility of the development

proponent; a combined Stage 1 and 2 archaeological assessment can also be conducted, if feasible.

### **8.2.3 Zoning By-law Amendments**

Section 34 of the Planning Act, authorizes municipalities to implement land use controls through Zoning By-laws. The Zoning By-law is the legal mechanism that implements policies and objectives described in the Official Plan and regulates the use and development of buildings and land by:

1. stating what types of land uses are permitted in various areas. Examples of these uses are residential, commercial, mixed commercial-residential, institutional, and industrial; and,
2. outlining how the land can be developed by establishing regulations for factors such as lot size and frontage, building setbacks, the height and built form of structures, the number and dimensions of parking and loading spaces and requirements for open space.

If a property owner wishes to make changes to a property that deviates from the permitted uses or the regulations of the Zoning By-law, the owner must apply for a Zoning By-law Amendment. A Zoning By-law Amendment process could be used to manage a known archaeological resource.

### **8.2.4 Holding Provision By-laws**

In order to protect known archaeological resources, where an archaeological assessment cannot be undertaken immediately, a municipality may use its authority under Section 36 of the Planning Act to enact a holding provision by-law. As the Section states:

36. (1) The council of a local municipality may, in a by-law passed under section 34, by the use of the holding symbol “H” (or “h”) in conjunction with any use designation, specify the use to which lands, buildings or structures may be put at such time in the future as the holding symbol is removed by amendment to

the by-law. R.S.O. 1990, c. P.13, s. 36 (1).

The wording of the holding provision by-law should be consistent with the objective to ensure that archaeological resources are investigated and if found are conserved in accordance with the provisions of the Ontario Heritage Act, the Planning Act, and/or the Provincial Policy Statement, such as:

- that the development proponent shall complete required archaeological assessment(s);
- that the development proponent shall conserve significant archaeological resources identified through the completed archaeological assessments;
- that the development proponent shall complete required engagement with Indigenous nations; and,
- that no soil disturbance, development, and/or site alteration shall take place on the subject property prior to the issuance of a letter of review by the Ministry.

### **8.2.5 Site Plans**

Section 41 of the Planning Act authorizes municipalities to establish areas to be designated as areas of Site Plan Control. In Windsor, all lands within city limits have been designated areas of Site Plan Control .

Site Plan Control ensures that new developments or redevelopments meet municipal standards, policies, and guidelines. This authority provides a process that examines the design and technical aspects of a proposed development or redevelopment to ensure it is compatible with the surrounding area. Features such as building location, site access and servicing, waste storage, parking, loading, and landscaping are all subject to review.

Should a property subject to site plan application approval fall within an archaeological potential zone and ground disturbance is contemplated, an archaeological assessment report will be required.

### **8.2.6 Plans of Subdivision and Plans of Condominium**

When a property owner wants to divide a piece of land into multiple parcels and offer them for sale, the subdivision provisions of the Planning Act require the submission of an archaeological assessment.

Applications for plans of subdivision and condominiums require archaeological assessments of the entire property if any portion of the property falls within the archaeological potential zone in the WAMP GIS. The resultant report may recommend further archaeological assessment to be completed prior to any soil disturbance, development, and/or site alteration.

### **8.2.7 Consent Applications**

Consents provide property owners with some flexibility within the land subdivision control process. A consent application is required to sever land into new lots, add land to an existing lot, establish easements or rights-of-way, and lease land in excess of twenty-one years or register a mortgage.

Archaeological assessments will be required when the consent application will create two or more new lots and falls within an Archaeological Potential Zone (and where soil disturbance will occur or might be reasonably anticipated). When a consent application creates less than two new lots, archaeological assessments will not be required unless the application falls within Archaeologically Sensitive Areas (ASA) in the WAMP GIS.

For clarity, when a consent application falls within Archaeologically Sensitive Areas (ASA) and when soil disturbance will occur or might be reasonably anticipated, archaeological assessment(s) will be a condition of the consent application regardless of the number of lot(s) created. Where the intent is to develop the severed lands and not the retained lands, only the severed land is required to be archaeologically assessed.

### **8.2.8 Minor Variance Applications**

Minor variance applications that fall within the Archaeologically Sensitive Areas (ASA) in the WAMP GIS, and where soil disturbance will occur or might be reasonably anticipated, must be subject to a condition requiring that an archaeological assessment be completed prior to approval. An accessory building constructed on slabs without footings, or a typical-sized garage or addition maybe exempt (eg. new construction of 50 square metres).

### **8.2.9 Building Permits**

Building Permits do not require archaeological assessments since archaeological assessments are not defined as applicable law for the purposes of issuing building permits. However, during the Building Permit process, the City of Windsor may wish to advise owner(s) of properties containing a registered archaeological site of the provincial statute prohibiting its disturbance and provide notification of archaeological precautions. Standard archaeological warning clauses are recommended to be added to Building Permits.

### **8.2.10 Site Alteration**

Site alteration include any construction activities requiring permits or approvals under legislation including the Building Code Act; this includes, but is not limited to, Fill Permits, Foundation Permits, Right-of-way Permits, etc.

Section 2.6.2 of the Provincial Policy Statement stipulates that development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved. Section 48.1 of the Ontario Heritage Act prohibits alteration of an archaeological site by anyone without an archaeological license.

Site alteration is defined as activities such as grading, excavation, and the placement of fill that would change the landform and natural vegetative characteristics of a site.

As a result, any activities (beyond normal gardening) such as landscaping, work on existing or new driveways and sidewalks, and the installation of patios, decks, pools, sheds, outbuildings, and utilities, may be considered as “site alterations.”

City of Windsor departments issuing the site alteration permits should require public-service proponents (such as Utility companies who conduct work resulting in large ground disturbing impact) to undertake archaeological assessment when the proposed work falls within the Archaeological Potential Zone, prior to the issuance of a permit or the proponent starting any work under their city-issued permit.

Should site alteration be contemplated in an area that falls within the Archaeologically Sensitive Area (ASA) in the WAMP GIS, and this work has not been subject to a statutory trigger (e.g., Class EA, Planning Act approval), City of Windsor departments issuing the site alteration permits should recommend to proponents that an archaeological assessment be undertaken prior to issuance of the permit.

Standard archaeological warning clauses is recommended to be added to Site Alteration Permits.

### **8.2.11 City of Windsor Departments**

Any improvement of a structural nature or other undertaking that is within the jurisdiction of the City or a local board, conducted by all City Departments, must conform to Windsor’s Official Plan; this includes its cultural heritage policies. Works must also be consistent with the Provincial Policy Statement. It is understood that there are instances where municipal infrastructure, works, projects may have an impact on known archaeological sites or lands identified within the archaeological potential zone in the WAMP GIS. These include the development or replacement of infrastructure (e.g., roads, sidewalks, utilities), the construction and maintenance of municipal assets, and public realm improvements including urban cores as well as in all parks and open spaces in Windsor.

In particular, where any soil disturbance, development, and/or site alteration is proposed, the City's Project Manager must refer to the WAMP GIS to determine if any lands associated with the project are within archaeological potential areas. The Project Manager should then consult with the City's Heritage Planner to confirm their determination. If the lands are ultimately identified as being within an area with archaeological potential, the City's Project Manager must retain a consultant archaeologist to undertake the requisite archaeological assessments prior to soil disturbance. Infrastructure projects must therefore include adequate budgets to address any archaeological requirements. Copies of all archaeological assessment reports, GIS mapping of the project area, and correspondence with the Ministry must be filed with the City of Windsor Planning and Building Services Department for purposes of updating and maintaining the WAMP GIS.

Some Schedule A projects listed under Municipal Road Projects, Municipal Water and Wastewater Projects and Municipal Transit Project Systems in the Municipal Class Environmental Assessment (March 2023) document (MCEA) may be exempt from the provisions of Environmental Assessment Act (EAA). The MCEA also lists Schedule A projects that are identified as eligible for screening, subject to the archaeological screening process (identified as "ASP") may also be exempt from MCEA as determined by the archaeological screening process as set out in Appendix 1 MCEA. All Schedule B and C projects are subject to the requirement for an archaeological assessment. Where the project area impacts water bodies that are identified as areas of archaeological potential zone, the proponent shall utilize the Ministry's Criteria for Evaluating Marine Archaeological Potential to determine if a marine archaeological assessment is required or proceed directly with a marine archaeological assessment. For projects abutting known archaeological sites or cemeteries, an archaeological assessment is also required

Asset Management Plans and similar Lifecycle renewal studies/plans must ensure that areas of archaeological potential are clearly identified within the areas of their concern and include adequate budgets to undertake the necessary archaeological

assessments prior to any work that will result in soil disturbance, development, and/or site alteration beyond existing disturbance.

One method of providing for the archaeological needs of city projects is to establish a corporate archaeological assessment fund to address archeological issues on projects. Pro-active archaeological assessment of City properties where development involving ground-disturbing activities may occur would also be useful. This would require budgeting of archaeological costs well in advance of any such City project.

Note: At the time of preparation of this document the Province of Ontario proposed amendments to the Environmental Assessment Act and to MCEA 2023 which may impact the above provisions. Therefore this document may need to be updated in the future to incorporate the proposed amendments.

## **8.3 Archaeological Review Process in Windsor**

Figure 6 outlines the basic decision flow recommended for use in the development review process for all land development applications and municipal projects in Windsor. The sections below provide an outline of the archaeological assessment process and its stages and the standard condition that can be applied to all applications and projects where a portion of the property falls within the archaeological potential zone in the WAMP GIS.

### **8.3.1 The Archaeological Assessment Process**

The archaeological assessment process in Ontario is a staged process with the results of each stage determining the requirements, if any, for the subsequent stage. The stages of assessments are described by the Ministry as follows:

#### **Stage 1: Background study and property inspection**

The archaeologist determines whether there is potential for archaeological sites on the property. They review geographic, land use and historical information for the property and the relevant surrounding area, visit the property to inspect its current condition and contact the ministry to find out if there are any known archaeological sites on or near the property. A Stage 2 assessment is required when the consultant archaeologist identifies areas of archaeological potential. Stage 1 may only be used to recommend exempting a property from Stage 2 assessment where it has been confirmed through a property inspection that potential for the entire project has been removed by extensive and deep ground disturbance. (ie. In accordance with 2011 *Standards and Guidelines for Consultant Archaeologist*, s. 1.4.2, recommending no further concern must be verified in person and cannot be a desktop study only).

### **Stage 2: Property assessment**

The archaeologist surveys the land to identify any archaeological resources on the property. For a ploughed field, they will walk back and forth over it looking for artifacts on the surface. In forests, overgrown pasture areas or any other places that cannot be ploughed, they will dig parallel rows of small holes, called test pits, down to sterile subsoil at regular intervals and sift the soil to look for artifacts. They may use other strategies if properties are paved, covered in fill or have deeply buried former topsoils (such as floodplains or former sand dunes). The archaeologist will determine whether any archaeological resources found are of sufficient cultural heritage value or interest to require Stage 3 assessment.

### **Stage 3: Site-specific assessment**

The consultant archaeologist determines the dimensions of the archaeological site, evaluates its cultural heritage value or interest and, where necessary, makes recommendations for Stage 4 mitigation strategies. To this end, they conduct further background research and fieldwork that expands the information gathered in Stage 2. They map the spatial limits of a site and acquire further information about the site's

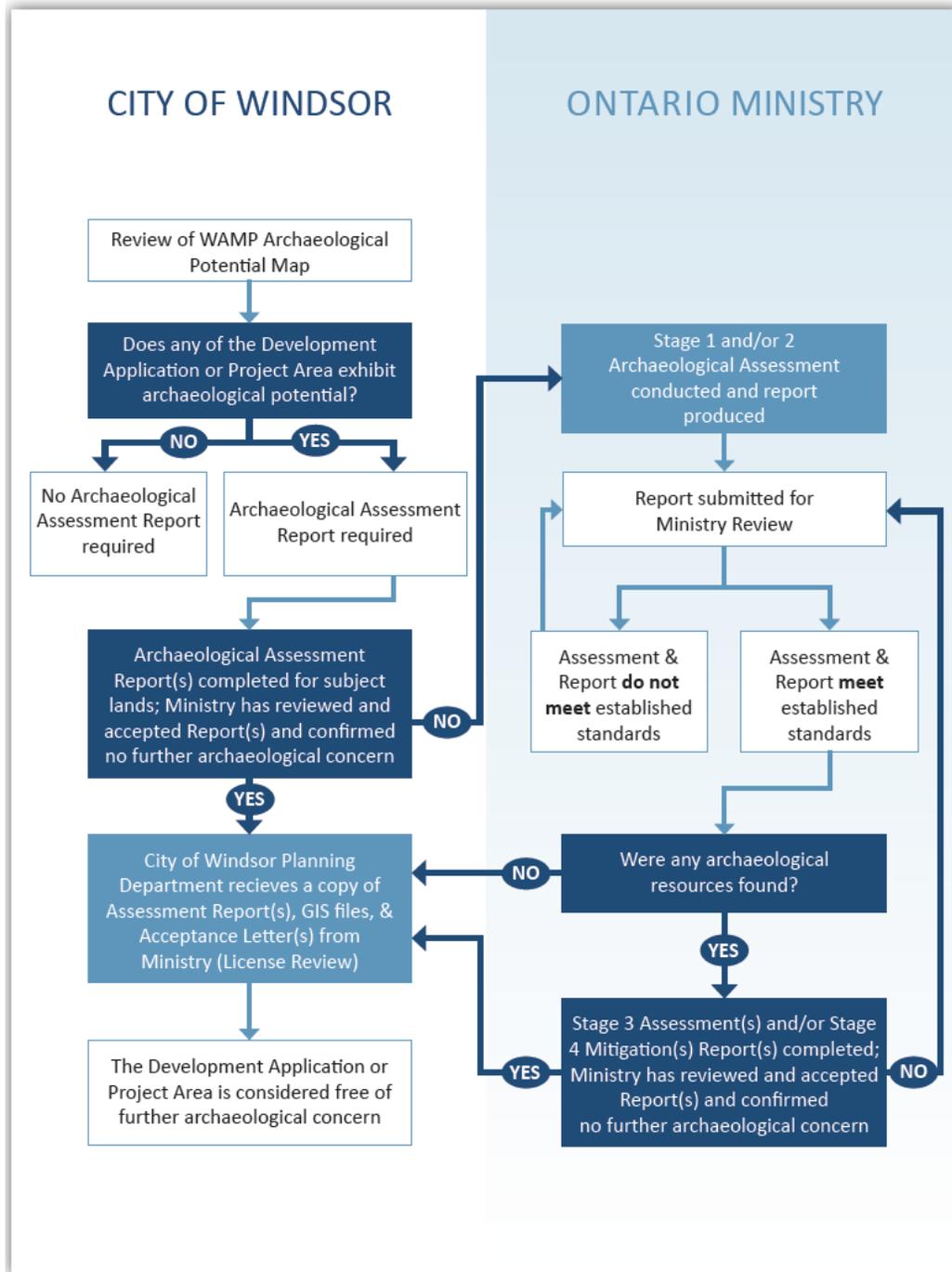
characteristics by excavating one-metre by one-metre square test units across the site. Based on circumstances, some sites (for example, ones that have been paved or are deeply buried) may require specialized methods of assessment (Safety considerations and requirements must be taken into account during excavation work. This may require consultation with a civil engineer). The archaeologist will determine whether any archaeological sites have sufficient cultural heritage value or interest to require Stage 4 mitigation of development impacts.

#### **Stage 4: Mitigation of development impacts**

This stage involves implementing conservation strategies for archaeological sites. Determining the best approach for conserving the site may include reviewing possible strategies with the development proponent, the municipality or other approval authority, Indigenous communities, and other heritage stakeholders. Conserving archaeological sites does not mean stopping development. Conservation can involve putting long-term protection measures in place around an archaeological site to protect it intact. The site is then avoided while development proceeds around it. This is called protection in situ and is always the preferred option for mitigation of development impacts to a site. If protection is not viable, mitigation can involve documenting and completely excavating an archaeological site before development takes place.

Where an Archaeological assessment predates the 2011 *Standards and Guidelines for Consultant Archaeologist*, the applicant can choose to conduct a new assessment or submit the study to the City of Windsor Planning Department, who will then forward the assessment to the Ministry for acceptability or not. The Ministry shall hold the final decision on the acceptability of the Report.

Figure 6: Archaeological Review Process Flowchart



### **8.3.2 Sample Wording for Conditions requiring Archaeological Assessments in Planning and Development Applications or Approvals**

The development proponent shall retain an archaeologist, licensed by the Ministry under the provisions of the Ontario Heritage Act to carry out a Stage 1 (or Stage 1 and 2) archaeological assessment of the entire property and follow through on recommendations to mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found (Stages 3 and 4). The archaeological assessment must be completed in accordance with the most current Ministry *Standards and Guidelines for Consultant Archaeologists*.

All archaeological assessment reports will be submitted to the City of Windsor in PDF format by the development proponent once completed. This also includes the letter from the Ministry stating that the report is compliant with the terms and conditions of the Ontario Heritage Act and has been entered into the Public Registry. Mapping of the study area used in the archaeological assessment(s) must also be provided to the City.

Significant archaeological resources will be incorporated into the proposed development through either in situ preservation or interpretation where feasible or may be commemorated and interpreted through exhibition on site including, but not limited to, commemorative plaque, subject to stakeholder discussions.

No demolition, construction, grading or other soil disturbances shall take place on the subject property prior to Windsor receiving the Ministry review letter indicating that all archaeological licensing and technical review requirements have been satisfied.

### 8.3.3 City of Windsor Planning and Building Services Department – Implementation Process

The archaeological review procedure, as it relates to planning and development applications, requires close co-operation between the Planning and Building Services Department and staff of the Archaeology Program Unit of the Ministry, as well as the development and archaeological consulting communities.

The general sequence of actions is as follows:

1. As part of the pre-application consultation process, the Planning and Building Services Department will determine if an archaeological assessment is required by means of review of the archaeological potential zone in the WAMP GIS. This will be done by reviewing the proposed development parcel against the archaeological potential zone. Should any portion of the property fall within that zone, an archaeological assessment of the entire property will be required. The archaeological assessment would be undertaken by the consultant archaeologist for the development proponent and submitted by the proponent as part of the complete planning or development application. If required, the Planning and Building Services Department will recommend that the completion of further archaeological assessments (e.g., a Stage 3 archaeological assessment) be made a condition of approval.
2. If impacts are proposed within a waterbody or watercourse, the proponent will be required to complete the Ministry's *Criteria for Evaluating Marine Archaeological Potential* checklist and submit it to the Planning Department to determine the requirement for a marine archaeological assessment. The study area to evaluate is the proposed project impact plus the extent of any construction impacts. Data about registered archaeological sites can be obtained from Windsor's GIS or from the data coordinator of the Ministry's Archaeology Program Unit.
3. Provincial legislation provides that only licensed consultant archaeologists (and/or marine archaeologist) can undertake field work, alteration or removals from of archaeological sites. The consultant archaeologist will conduct a Stage 1 or Stage 1 &2 combined archaeological assessment of the entire subject

property, not simply the portion(s) that falls within the archaeological potential zone in the WAMP GIS. The assessment of the entire subject property addresses any discrepancies between the archaeological potential zone and the actual conditions of the subject property. This is consistent with Windsor's mapping and the requirements of the most current *Standards and Guidelines for Consultant Archaeologists* and associated bulletins issued by the Ministry.

4. All work conducted by the consultant archaeologist must conform to the standards set forth in the most current *Standards and Guidelines for Consultant Archaeologists* and associated bulletins issued by the Ministry.
5. Once a Stage 1-2 archaeological assessment, consisting of background research and a field survey, has been completed, the consultant archaeologist will submit a report to the Archaeology Program Unit of the Ministry. The staff of the Archaeology Program Unit of the Ministry will review the report to determine if the assessment has met current licensing and technical standards. If this is not the case, the Ministry will require the consultant archaeologist to carry out additional field work, and/or provide more extensive documentation.
6. If the archaeological assessment complies with licensing and technical standards and did not result in the identification of any intact archaeological potential within the property (in the case of a Stage 1 assessment) or did not result in the documentation of any significant archaeological resources (in the case of a Stage 1&2 or Stage 2 assessment), the staff of the Archaeology Program Unit of the Ministry will provide an acceptance letter to the consultant archaeologist and to the City of Windsor in its capacity as Approval Authority, which will serve to notify them that all provincial concerns with respect to archaeological resource conservation and archaeological licensing have been met.
7. Upon receipt of the archaeological acceptance letter from the Ministry that archaeological conservation and licensing concerns have been addressed, and receipt of the final copies of archaeological assessment report(s) and of the GIS files for the assessed study area, Windsor will then clear the subject property/site of any further archaeological concern.
8. Should the development proponent choose not to proceed with all necessary Stage 3 and Stage 4 assessments prior to submitting a planning and development application, the completion of these activities to the satisfaction

of the Ministry must be made a condition of approval (e.g., draft plan condition of approval for a Plan of Subdivision).

9. Copies of all archaeological assessment reports, GIS mapping of the project area, and relevant correspondence with the Ministry must be filed with the City of Windsor Planning and Building Services Department for purposes of updating and maintaining the WAMP GIS.

It should be noted that completion of an archaeological assessment of a particular development property, no matter how rigorous, does not fully guarantee that all significant archaeological resources on that property will be identified prior to land disturbance. This is particularly the case in areas where natural processes, such as flooding or erosion, have resulted in the burial of original ground surfaces, or with respect to isolated human burials that are typically small features that can escape detection.

Therefore, in compliance with Ministry *Standards and Guidelines for Consultant Archaeologists*, every archaeological assessment report must contain the statement that should deeply buried archaeological remains be found on a property during construction activities, all ground-altering activities should be stopped, the Ministry should be notified immediately, and a licensed archaeologist should be retained to assess the situation (see Appendix C: Contingency Plan for the Protection of Archaeological Resources in Urgent Situations for more details). It must further specify that if human remains are encountered during construction, the development proponent must immediately contact the police, the Ministry, and the Registrar of Burial Sites, Ministry of Public and Business Service Delivery (formerly Ministry of Government and Consumer Services) (see Appendix C: Contingency Plan for the Protection of Archaeological Resources in Urgent Situations for best practices protocol). Where Stage 3 and Stage 4 archaeological assessments are required to be completed, these two warning clauses will be included in the appropriate development agreements between the City and the applicant.

### **8.3.4 Additional Considerations When Archaeological Resources are Identified**

If the Stage 1-2 assessment resulted in the documentation of one or more significant archaeological resources as determined by the consultant archaeologist, appropriate mitigation and/or preservation options must be recommended by the consultant archaeologist and approved by the Ministry. Upon completion of the mitigation, the consultant archaeologist must provide a report detailing this work and its results to the Ministry. The Ministry will review the work and provide the consultant archaeologist, and the City of Windsor in its capacity as approval authority, with an acceptance letter that there are no further archaeological concerns or that additional mitigation measures have been recommended.

It should be noted, in this regard, that once Stage 3 assessments have been completed on the archaeological sites requiring further investigation, it is generally possible to secure partial clearance for the property, in that the archaeological requirement may be removed from the balance of the subject lands not encompassed by the archaeological site(s) and the protective buffer zones surrounding it/them, which are defined in the *Standards and Guidelines for Consultant Archaeologists*.

Similarly, as the final report of a comprehensive Stage 4 archaeological excavation may take many months to complete, final clearance for the property may be available upon the consultant archaeologist completing the fieldwork and submitting a preliminary Stage 4 excavation report to the Ministry. The preliminary excavation report process allows the Ministry to assess whether the fieldwork and reporting is compliant prior to the full evaluation and reporting of the archaeological resources.

### 8.3.5 Determining the Cultural Heritage Value of Archaeological Resources

The *Standards and Guidelines for Consultant Archaeologists* (MTC, 2011) set out criteria for determining the cultural heritage value of archaeological resources, including information value, value to a community, and value as a public resource. They define a set of indicators based on these criteria, outlined in Table 3 below, which helps to determine which archaeological resources are significant and therefore must be preserved or conserved. Indigenous nations may also identify values not captured in this table.

Table 3: Indicators Showing Cultural Heritage Value or Interest (reproduced from *Standards and Guidelines for Consultant Archaeologists*, 2011)

Criteria	Indicators
<b>Information Value</b>	The archaeological site contributes to local, regional, provincial, or national archaeological history.
<b>Cultural Historical Value</b>	Information from the archaeological site advances an understanding of: <ul style="list-style-type: none"> <li>• Cultural history – locally, regionally, provincially, or nationally</li> <li>• Past human social organization at family, household, or community level</li> <li>• Past material culture – manufacture, trade, use and disposal</li> </ul>

Criteria	Indicators
<b>Historical Value</b>	<p>The archaeological site is associated with:</p> <ul style="list-style-type: none"> <li>• Oral histories of a community, Indigenous community, or specific group or family</li> <li>• Early exploration, settlement, land use or other aspect of Ontario’s history</li> <li>• The life or activities of a significant historical figure, group, organization, or institution</li> <li>• A significant historical event (cultural, economic, military, religious, social, or political)</li> </ul>
<b>Scientific Value</b>	<p>The archaeological site contains important evidence that contributes to:</p> <ul style="list-style-type: none"> <li>• Paleo-environmental studies</li> <li>• Testing of experimental archaeological techniques</li> </ul>
<b>Rarity or Frequency</b>	<p>The archaeological site is:</p> <ul style="list-style-type: none"> <li>• Unique – locally, regionally, provincially, or nationally</li> <li>• Useful for comparison with similar archaeological sites in other areas</li> <li>• A type that has not been studied or has rarely been studied, and is therefore under-represented in archaeological research</li> </ul>

Criteria	Indicators
<b>Productivity</b>	<p>The archaeological site contains:</p> <ul style="list-style-type: none"> <li>• Large quantities of artifacts, especially diagnostic artifacts</li> <li>• Exotic or rare artifacts demonstrating trade or other exchange patterns</li> </ul>
<b>Integrity</b>	<p>The archaeological site is well preserved and retains a large degree of original material.</p>
<b>Value to a Community</b>	<p>The archaeological site has intrinsic value to a particular community, Indigenous community, or group.</p>
<b>The archaeological site has traditional, social, or religious value.</b>	<p>The archaeological site:</p> <ul style="list-style-type: none"> <li>• Contains human remains</li> <li>• Is identified as a sacred site</li> <li>• Is associated with a traditional recurring event in the community, Indigenous community, or group (e.g., an annual celebration)</li> <li>• Is a known landmark</li> </ul>

Criteria	Indicators
<b>Value as a Public Resource</b>	The archaeological site contributes to enhancing the public’s understanding and appreciation of Ontario’s past.
<b>The archaeological site has potential for public use for education, recreation, or tourism</b>	The archaeological site: <ul style="list-style-type: none"> <li>• Is or can be made accessible to tourists, local residents or school groups</li> <li>• Is or can be incorporated into local education, recreation or tourism strategies and initiatives</li> </ul>

### 8.3.6 Assessing Archaeological Resource Impacts and Identifying Mitigation Strategies

If no adverse impacts to an archaeological resource will occur, then development may proceed as planned. Many of the archaeological sites routinely encountered will prove to be of little or no cultural heritage value or interest and will not require further investigation, beyond the mapping, measuring, and photographing of the surface attributes of the archaeological site that occurred during the Stage 2 archaeological assessment.

#### 8.3.6.1 Indigenous Archaeological Sites

Should an Indigenous archaeological resource with cultural heritage value or interest be discovered during an archaeological assessment, the *Standards & Guidelines for Consultant Archaeologist* require the consultant archaeologist to — engage with the affiliated Indigenous nations, or those identified in Section 7.4, and the development proponent—to assess the potential impact(s) to it and arrive at rational decisions

regarding potential mitigation options. Those may involve protection and avoidance of the archaeological site within the context of the proposed development, its mitigation by excavation, or a combination of these approaches. These decisions are subject to review and approval by the Ministry.

The relevant Indigenous nations must also be engaged throughout the agreed upon site mitigation process. Typically, engagement with Indigenous nations as it relates to archaeological assessment is undertaken by the consultant archaeologist with support of the development proponent. Engagement with Indigenous nations through the archaeological assessment process is defined by the Ministry's *Standards and Guidelines for Consultant Archaeologists* as well as the Ministry's draft bulletin entitled *Engaging Aboriginal Communities in Archaeology*. Under all circumstances there should be an effort to identify the group(s) that are the most appropriate (on cultural-historical and legislative grounds) to act as the designated descendants of those who occupied the project area in the past, and who are willing to participate and ensure that cultural heritage remains are treated in an appropriate and seemly manner.

This identification process is best achieved through communication with a variety of Indigenous nations in order that they may themselves arrive at the final decision. It should also be noted that the Ministry's bulletin *Engaging Aboriginal Communities in Archaeology* (2011) requires Indigenous engagement at Stage 3 when assessing the cultural heritage value or interest of certain types of Indigenous sites, at the end of Stage 3 archaeological investigations for formulating mitigation on significant Indigenous sites, to solicit input regarding Stage 4 mitigation strategies, and encourages engagement before Stages 2 and other Stage 3 scenarios. Section 7.4 (above) identifies those Indigenous nations that should be engaged as part of this process.

### **8.3.6.2 Non-Indigenous Archaeological Sites**

In the case of non-Indigenous archaeological sites, the same process is involved as with Indigenous archaeological sites. Engagement with Indigenous nations may not be required, although many non-Indigenous sites also yield Indigenous artifacts, in which case engagement would be required.

In the process of determining appropriate mitigation strategies on a non-Indigenous archaeological site, it is always possible that other descendant communities, heritage stakeholders, or interest groups may express a desire to participate.

### **8.3.6.3 Archaeological Site Mitigation Options**

There are several mitigation options for archaeological sites, including avoidance, modifications to construction techniques, long-term protection, and various degrees of documentation and/or excavation, as discussed below. Appropriate options for addressing the interpretive and educational potential of the site should be documented by Windsor through consultation with the development proponent and the consultant archaeologist. It should also be noted that detailed information regarding a site is frequently required to make a more accurate assessment of significance and to determine the potential for adverse effects. This may involve several stages of on-site investigations by the consultant archaeologist.

Avoidance and protection of archaeological sites is the preferred form of mitigation and is most viable when the cultural heritage value or interest of the archaeological site is determined early in the planning process. There are both short- and long-term components to the process of site protection, as outlined in the *Standards and Guidelines for Consultant Archaeologists*. The decision to avoid and protect a site is generally made by the development proponent in consultation with the consultant archaeologist and the Ministry.

By following this process, development proponents will have sufficient time to plan

for archaeological site protection, rather than mitigation through excavation, by considering alternative site plan designs.

Effective avoidance and protection strategies will include both avoidance measures to protect the archaeological site from impacts during construction and long-term protection measures to ensure that the site is not impacted during any future activities on the site.

In cases in which the avoidance and protection option is pursued, the limits of the site must have been fully defined through completion of Stage 3 archaeological assessment. The avoidance and protection area defined for the site must include the entire archaeological site and a minimum 20 metre buffer zone in the case of Late Woodland village sites or a minimum 10 metre buffer zone for all other site types. The buffer zone may be reduced in areas where pre-existing, permanent physical constraints to the extent of the site are present.

To ensure there are no impacts to the avoidance and protection area in the short term, during development of contiguous lands, the limits of the avoidance and protection area must be fenced (snow fencing or similar type) by the development proponent under the supervision of a consultant archaeologist prior to any soil disturbance, development, and/or site alteration. The protective fencing must remain in place for the duration of any development work resulting in land disturbance and instructions issued to all on-site contractors that there are to be no impacts of any sort within avoidance and protection area. It is a “no go” area. The avoidance and protection area must also to be identified on all project mapping.

Written confirmation from the development proponent regarding their commitment to implement this strategy and confirmation that any ground alterations will avoid the avoidance and protection area must be submitted to the Ministry prior to initiation of any such work and copied to the City of Windsor as the Approval Authority.

The maintenance and efficacy of the fencing must be confirmed through monitoring on the part of a consultant archaeologist and a report documenting this process must be submitted to the Ministry and the City of Windsor upon completion.

In terms of long-term protection, the most effective mechanisms are a restrictive covenant on title or a Zoning By-law Amendment, and preferably, the transfer of ownership to Windsor or another public landholder. The allowable uses of the protected area, under the terms of the covenant or by-law amendment, must not include any activities that would result in even minor soil disturbances or alterations, such as tree removal, minor landscaping, and installation of utilities.

Should transfer of ownership be part of the long-term protection strategy, the new property owner must provide documentation to the Ministry demonstrating that they are aware of their obligations with respect to the archaeological site and its protection and their ability to fulfil those obligations. It is also often recommended that this documentation include a proviso acknowledging that any future alterations or soil disturbances that may ultimately be proposed within the protection zone must be preceded by further Stage 3 archaeological assessment and Stage 4 mitigation of impacts in accordance with the Ministry *Standards and Guidelines for Consultant Archaeologists*.

In summary, when extensive archaeological mitigation is required, recommended mitigation options may take numerous forms, including:

- *Preservation*: the preferred mitigation option. Preservation may involve long-term protective measures such as project design changes (archaeological site protection) that integrate the resource within the overall development plan. To further avoid both accidental impact and intentional vandalism and looting, additional protective measures may include fencing, screening, or in special circumstances, capping. Windsor must determine whether preservation is to occur on the landscape scale (e.g., areas of high cultural heritage landscape integrity combined with high archaeological potential are to be preserved as a

whole), or at the scale of individual sites that are deemed to be particularly significant or sensitive (e.g., Late Woodland settlements that may contain human burials).

The site preservation/avoidance option has both short- and long-term components. The short-term component involves both the redesign of the development plan (e.g., lot layouts, parkland, road, and service alignments) and ensuring that the resource(s) to be preserved are physically protected during construction by means of fencing or other visible barriers. The long-term protective measures entail the use of prohibitive zoning by-laws, as permitted by subsection 34(1) of the Planning Act, or through other conditions or orders that prohibit any future land use activities that might result in soil disturbance for the avoidance and protection area of the site. Consideration should be given for Site Management Plans for archaeological resources retained in situ, as well as funding for perpetual care of sites transferred into public ownership.

- *Stabilization*: may be required in the case of eroding archaeological deposits. This may involve the excavation of the eroding area and/or the construction of retaining walls or barriers.
- *Systematic Data Recovery*: involves the recovery of data from significant archaeological sites when other mitigation options are not feasible. It includes a complete or partial systematic surface collection, excavation, or both; a comparative analysis and interpretation of site content and contextual information; and production of an investigative report. This mitigation strategy ultimately results in the destruction of the archaeological site and the elimination of its archaeological potential.
- *Monitoring*: monitoring may be undertaken in specific circumstances (e.g., deeply buried deposits which cannot be assessed prior to construction) to ensure that adverse impacts on archaeological sites which could not be predicted or evaluated prior to construction are addressed. Monitoring requires the presence of a consultant archaeologist during the construction phase of a project. This takes the form of scheduled site visits and on-call availability during a long-term project.

**All decisions regarding mitigation options or preservation strategies are subject to**

**Ministry review and approval.**

## **8.4 Archaeological Resource Management – Operations and Administration**

### **8.4.1 Managing Geospatial Data**

The layers used to create the composite archaeological potential layer are stored in Windsor's geospatial database. Access to these individual layers is granted only by permission of Windsor's Heritage Planner. These individual layers should not be publicly accessible due to the sensitivity of the information related to archaeological sites. Only the final archaeological potential map should be accessible to the public through Windsor's website.

The Planning and Building Services Department should update the archaeological potential map on a regular basis (at minimum annually) by adding all new archaeological sites with their Borden number and ensuring that all properties that have been subject to archaeological assessment and cleared of further archaeological concern are removed from the archaeological assessments layer as appropriate. Where archaeological sites are protected permanently, only the balance of the assessed property in which the site was found is removed from the archaeological assessments layer; the site and its avoidance and protection area retain their archaeological potential.

### **8.4.2 Contingency Planning**

There exist certain situations in which unforeseen and deeply buried archaeological deposits may be discovered during construction. There are also redevelopment contexts when Windsor may have limited planning control, thus being restricted in its ability to implement the WAMP.

In any case in which deeply buried archaeological remains (including burials) are encountered, all construction activity in the vicinity of the discovery must be

suspended immediately until an appropriate mitigation strategy is identified and executed. A consultant archaeologist may be required to visit the site and assess the resource prior to the development of the mitigation strategy.

In light of these considerations, Windsor has developed a “Contingency Plan for the Protection of Archaeological Resources in Urgent Situations” (Appendix C). While a Contingency Plan is not required by legislation, it represents best planning practice. The Contingency Plan addresses:

- Notification process, involving the City of Windsor, relevant Indigenous nations, and the Ministry;
- Investigation and reporting process undertaken by a consultant archaeologist;
- A recommendation that Windsor develop a roster of pre-qualified consulting archaeologists capable of responding immediately to contingent situations.

### **8.4.3 Site Locations and Reports – Constraints in Sharing Information**

Archaeological site locations are considered sensitive information. To protect these sensitive resources from damage and looting, Windsor shall not provide information concerning archaeological site locations to anyone externally except on an as need to know basis. To clarify, this information can only be provided externally by the City for a given property to an agent of the property owner, such as consultant archaeologists retained by the owner of a property for the purpose of site mitigation or preservation. In all other circumstances, consultant archaeologists should be referred to the Ministry for site information, as should any other external requests to Windsor for information about site locations.

Amendments to the *Ontario Heritage Act* on April 28th, 2005 created provisions in Section 65.1 for providing a register of archaeological reports. Reports filed with the ministry by licensed archaeologists on or after that date, and found to meet ministry requirements for fieldwork and reporting, are entered into the Ontario Public Register of Archaeological Reports (Register) and the Ministry of Citizenship and

Multiculturalism (MCM) is allowed to release a copy of these reports to a requestor. Redistribution of the Register report by the requestor requires authorization of the copyright owner of the work in question. Reports received prior to the creation of the Register require permission from the licensee before those reports can be released. The MCM redacts personal information from all released archaeological reports and removes site location information from reports requested by the public. City of Windsor may use archaeological assessment reports for internal purposes and provide copies to consultant archaeologists.

#### **8.4.4 Ownership of Artifacts**

The question of ownership of archaeological resources, whether they be sites or individual artifacts, remains unresolved in Ontario. Consequently, issues of ownership have often complicated the protection or conservation of the resource.

The Ontario Heritage Act governs matters related to the care and curation of artifacts. Under Section 66 (1), the Ontario Heritage Act stipulates that, “The Minister may direct that any artifact taken under the authority of a license or a permit be deposited in such public institution as the Minister may determine, to be held in trust for the people of Ontario”. Moreover, under O. Reg. 8/06, pertaining to licensing under the Ontario Heritage Act, “It is a term and condition of a license that the licensee keep in safekeeping all objects of archaeological significance that are found under the authority of the license and all field records that are made in the course of the work authorized by the license, except where the objects and records are donated to [His Majesty the King] in right of Ontario or are directed to be deposited in a public institution under subsection 66 (1) of the Act.”

The application of this section of the Ontario Heritage Act and O. Reg. 8/06 typically involves the curation of recovered artifacts by the consultant archaeologist until such time that the analyses are complete and that a place for ultimate disposition can be arranged, usually a fully accredited public repository, such as a regional museum .

### 8.4.5 Artifact Curation

In general, it is preferable that material from an archaeological site is ultimately deposited in a public institution located in the same community, provided that adequate storage and curatorial facilities for both artifacts and field records are available, that the institution's collections are accessible to researchers, and that the material is not transferred or disposed of without provincial approval.

The City of Windsor should consider making it Official Plan policy that all artifacts found on city-owned property are to be deposited with Museum Windsor if determined to be significant (see Section 3, Appendix D). It is understood that the Museum Windsor may also accept donations of significant artifacts found on private land, subject to their collections policy.

The Museum of Ontario Archaeology already houses collections of material from southern Ontario, including Windsor, at their Sustainable Collections Repository and are willing to accept additional material according to their policies. Some artifacts from sites in Windsor, however, are currently curated elsewhere. Indeed, most collections derived from the activities of private archaeological consulting firms, remain in the care of those firms.

It is recommended that significant archaeological assemblages resulting from future archaeological investigations within the City of Windsor be curated at Museum Windsor. Where Indigenous artifacts are involved, the repatriation of cultural artifacts will be addressed through ongoing dialogues with First Nations communities, the City, and the Ministry.

It is recommended that Windsor consider preparing an accurate and comprehensive inventory of the archaeological collections recovered from archaeological sites within Windsor currently held by consulting archaeologists and public agencies and plan for their curation, including provisions for additional storage space, as needed.

#### **8.4.6 Periodic Update to the Plan**

To ensure the long-term viability of the WAMP, it should be subject to comprehensive review in co-ordination with the review of Windsor's Official Plan as required by the Planning Act. Such a review should consider any changes in Ministry criteria for site significance, any data gaps in the site inventory, changes required to the composite archaeological potential and archaeological potential layers, and all procedures and guidelines related to the implementation of the WAMP.

It is recommended that the site inventory and repository of archaeological assessments within Windsor be subject to review and updating at minimum on an annual basis, or at a schedule which aligns with processes at the City of Windsor.

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## 9.1 Archives of Ontario

F47-5-1-0-44.1

RG1-100, C-34 A28 1821      Sandwich South Township Patent Plan

RG1-100, C-34 A36 1797      Abraham Iredell    Survey, Sandwich South Twp.

RG1 B-11 1812?              River Detroit "No.18"

RG1-100 C-35 Map 46 After 1800      Sandwich Town Site

RG1-100 C-68 1889              George McPhillips Outline Plan of Town of Windsor

RG1-100 C-81 1828              Plan showing water lots in front of Lots 40-68,

McNiff's Survey, Conc. I Town of Sandwich

RG1-100 C-82 1828 Plan showing water lots in front of Lots 63-93,  
McNiff's Survey, Conc. I Township of Sandwich

RG1-100 C-83 1828 Plan showing water lots in front of Lots 94-156,  
McNiff's Survey, Conc. I, Town of Sandwich

R-E 1877 H.Walling Map of Essex County, Ontario. Publ. R.M.Tackleberry

## 9.2 Museum Windsor

M109 3/L 1815 Captain W.R.W. Owen A Survey of the River Detroit from Lake  
Erie to Lake St. Clair

M173 3/RR early 19th T.M. County of Essex, Western District

M214 3/RR 1922 G.F.Macdonald Fort Gowie property plan Land Petition G. No.7,  
No.18 (1805) National Archives Lot 76, Conc. I, Sandwich Township

M380 6/L 1813 Map of Detroit River Showing Military Positions in the  
Surrounding Areas.

M389A 1826 John Farmer Map of Surveyed Part of the Territory of  
Michigan.

M392 6/R 1868 O. Bartley Plan of the Moy Property, Lot XCIII and part  
XCII. XCIV, Con. I & II

1800 A. Iredell untitled [survey of Sandwich Twp., Western District, details  
of Concession 1 along Detroit River]

1857 Charles Pinney Map of the Town of Windsor, County of Essex, Canada West.

1954 The Badichon-Labadie Windmill on Hiram Walker Property  
(1808) [Lassaline-Montreuil] ca.1930 Walker Airport

1905 Owen McKay Plan showing the location of the Windsor & Tecumseh  
Electric Railway Co's Line through portions of the City of Windsor, Town of Walkerville  
and Township of Sandwich East.

2000 WACAC Windsor Heritage Properties Inventory

## **Appendix A – Pre-contact Indigenous Archaeological Site Potential**

## **Appendix B – Colonial Period Thematic History**

## **Appendix C – Contingency Plan for the Protection of Archaeological Resources in Urgent Situations**

## **Appendix D – Proposed Policy Revisions to the City of Windsor Official Plan**

**APPENDIX A – Summary of Capital Project Variances – March 31, 2024**

Listed below is a summary by Department/Program as to the status of each capital project portfolio. Projects with any projected final variance are detailed in a table within the respective Department/Program summary.

Project explanations denoted with “Project surplus/deficit” are projects that are in a position to be closed and the variance is likely to materialize. Those denoted with “Anticipated surplus/deficit” are projects that are still ongoing and not completed, as such the preliminary variance is merely an estimate which may fluctuate significantly before the project is complete.

**Mayor’s Office**

Mayor’s Office:

There are five active capital projects in this area that are being administered by the Mayor’s Office, with no projected variance to report at this time.

**Office of the Commissioner of Economic Development**

Economic Development:

There are three active capital projects in this area that are being administered by the Economic Development department. No variances are being reported at this time.

Environment Sustainability & Climate Change:

The are three active capital projects in this area. No project variance is anticipated at this time.

Transit Windsor:

There are 24 active capital projects in this area that are being administered by Transit Windsor. One project, Transit Windsor - Garage Feasibility Study (7201004), is reporting a surplus of \$3,579.

Projects with Projected Deficit/Surplus	(Deficit)/Surplus Amount	Brief Explanation
Transit Windsor - Garage Feasibility Study (7201004)	\$3,579	Preliminary work on the Transit Windsor Master Plan Implementation has been completed as it relates to the Transit Garage. This project can be CLOSED. Administration is requesting to return the surplus to its original funding source in the Budget Stabilization Reserve (Fund 139).

Planning Development:

There are 23 active capital projects in this area that are being administered by the Planning and Development Services department. Five projects are reporting a combined surplus of \$634,344 and are detailed below.

<b>Projects with Projected Deficit/Surplus</b>	<b>(Deficit)/Surplus Amount</b>	<b>Brief Explanation</b>
Heritage Conservation District Study (7141014)	\$200,000	This project is ongoing. Administration is requesting to transfer surplus funding into a new project titled “Bill 23- Heritage Review” to assist in funding work related to the December 31, 2026 deadline to register Heritage properties. Funds for the Bill 23 work were originally approved in principle for 2026, however, this work needs to begin now and making the funds available now will save on internal financing charges. Funding for the Heritage Conservation District project will be replenished in 2026 as part of the 2025 Capital Budget.
BIA Assistance Program (7069002)	\$176,923	This project is complete and can be CLOSED. The BIA Assistance Program funds the City's contribution in cost sharing initiatives proposed by any of the 9 BIAs. The BIAs are responsible for developing proposals that improve local economic development in consultation with the Planning Department. Administration recommends returning surplus its’ original funding source, the Pay-As-You-Go Reserve, Fund 169.
Heritage Planning (7086006)	\$167,566	This project is required for the update to the City's Archaeological Management Plan as it relates to policy and legislation changes which require the involvement of Indigenous consultations. As this project is nearing completion, Administration is recommending transferring \$167,566 to a new project titled “Bill 23- Heritage Review” and returning any remaining funds to its’ original funding source, the Pay-As-You-Go Reserve, Fund 169. A report detailing the updated Plan will be brought forward to Council in the fall of this year once final consultant invoices and related costs are reconciled.
Ont Invs Ready Certified Sites (7151019)	\$92,297	This project is complete and can be CLOSED. Administration recommends transferring funding to cover the deficit in the Streamline Dev TPA project (7221061)

		and the remaining surplus to be returned to its' original funding source, the Pay-As-You-Go Reserve, Fund 169.
Streamline Dev TPA (7221061)	(\$2,442)	This project is nearing completion and was largely funded by the Streamline Development Approval Fund (SDAF) to aid in the development process of applications and to make digital improvements. Administration was notified by the grant provider that a lower amount of funds than initially budgeted would be received. Administration recommends funding this with a transfer from the Ont Invs Ready Certified Sites project (7151019).

## Office of the Commissioner of Infrastructure Services

### Roadways:

There are 30 active capital projects in this area that are being administered by the Engineering department. Two projects are reporting a combined surplus of \$101,425 and are detailed below.

Projects with Projected Deficit/Surplus	(Deficit)/Surplus Amount	Brief Explanation
Road Improvements – Walker (7035014)	\$131,815	This project is complete and can be CLOSED. Administration recommends transferring \$9,555 to the SMP-Risk Assessment W.Windsor project (7211017) to fund the current deficit before transferring the remaining balance to its' original funding source, the Pay-As-You-Go Reserve, Fund 169.
SMP-Risk Assessment W.Windsor (7211017)	(\$30,390)	This project is complete and can be CLOSED as the final payment from the grant provider was received from the Vulnerability & Risk Assessment on Windsor West. Administration recommends transferring \$20,835 in surplus funds from the Rankin-Wyandotte-Union Ward 2 project (7191026) and \$9,555 from the Road Improvements – Walker project (7035014) to offset this shortfall in funding.

### Sewer Rehabilitation:

There are 39 active capital projects in this area that are being administered by the Engineering department. In total, there is one project with a net surplus of \$20,835 and is detailed below.

Projects with Projected Deficit/Surplus	(Deficit)/Surplus Amount	Brief Explanation
Rankin-Wyandotte-Union Ward 2 (7191026)	\$20,835	This project is complete and can be CLOSED. Work on this area came in under budget and resulted in a surplus of funds. Administration

		recommends transferring surplus to the SMP-Risk Assessment W.Windsor project (7211017) to fund the current deficit.
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Storm Sewers:

There are 13 active capital projects in this area that are being administered by the Engineering department. No project variance is anticipated at this time.

Sanitary Sewers:

There are three active capital projects in this area that are being administered by the Engineering department. No project variance is anticipated at this time.

Corporate Projects:

There are 26 active capital projects in this area that are being administered by the Corporate Projects division. No project variance is anticipated at this time.

Corporate Facilities:

There are 25 active capital projects in this area that are being administered by Corporate Facilities. No project variance is anticipated at this time.

Development:

There are six active capital projects in this area that are being administered by the Design & Development division. This division is anticipating a surplus of \$743,855 in the Tecumseh Water Treatment Demolition / Redevelopment project and is detailed below.

Projects with Projected Deficit/Surplus	(Deficit)/Surplus Amount	Brief Explanation
Tecumseh Water Treatment Demolition/Redevelopment (7103001)	\$743,855	This project is complete and is in its maintenance period. After the maintenance period is complete, Administration recommends transferring the remaining surplus to the New Infrastructure Development project (7035119), to continue repaying developers that build oversized sewers and roads, which allow other lands to be serviced. These funds will also be used to assist in negotiations with developers that are the result of new initiatives anticipated in 2024 that require additional funding. The New Infrastructure Development project (7035119) has remaining funding of approximately \$1,115,000. Current commitments of funding for 2024 are anticipated to total approximately \$1,280,000 and if paid in 2024, will result in a year-end deficit of approximately (\$165,000). Some of these commitments include the Horizons Pratt Drain Oversizing (\$518,000), Ojibway (\$400,000), and the Northway Avenue

		Development (\$228,000).
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Pollution Control:

There are 82 active capital projects in this area that are being administered by the Pollution Control department. The majority of these projects are funded from the dedicated Pollution Control Reserve. The department has no deficits to report on at this time.

Environmental Services:

There is one capital project being administered by the Environmental Services division, which is expected to come in on budget.

Contracts & Field Services:

There are five active capital projects in this area that are being administered by the Public Works Operations department. No project variance is currently expected.

Road Rehabilitation:

There are 12 active capital projects in this area that are being administered by the Public Works Operations department. There is one project, as identified in the table below, anticipating an overall surplus of \$3,555,365.

Projects with Projected Deficit/Surplus	(Deficit)/Surplus Amount	Brief Explanation
2021 City Wide Road Rehab (7211000)	\$3,555,365	Project is complete and can be CLOSED. Surplus is a result of scope of work changes. Rehabilitation work was completed on several roadways throughout the City including Cameron, Labelle, Ypres, Tecumseh, Matchette, Lauzon, Kildare, Campbell, Bruce and EC Row. Upon release of final holdback, project can be CLOSED. Administration recommends returning surplus funds to the original funding source, the Service Sustainability Reserve, Fund 221.

Transportation Planning:

There are nine active capital projects in this area that are being administered in the Transportation Planning area. Administration has no variance to report at this time.

Traffic Operations and Parking Services:

There are 15 active capital projects in this area that are being administered by the Traffic Operations and Parking Services division, and in total is expecting to come in on budget.

Fleet Operations:

There are 19 active capital projects in this area that are being administered by the Public Works Operations department. Administration has no variance to report at this time.

PW Maintenance:

There are six active capital projects in this area that are being administered by the Public Works Operations department. Administration has no variance to report at this time.

Technical Support:

There is one active capital project in this area that is being administered by the Technical Support division. The Information IPS Hansen Asset Management System project (7209001) is expected to come in on budget.

## **Office of the Commissioner of Corporate Services**

City Solicitor:

There are nine active capital projects in this area that are being administered by the Legal Department. Administration has no variance to report at this time.

Records and Elections:

There are three active capital projects in this area that are being administered by the Council Services department. This division is reporting a \$157,128 surplus in the Electronic Agendas project and is detailed below.

<b>Projects with Projected Deficit/Surplus</b>	<b>(Deficit)/Surplus Amount</b>	<b>Brief Explanation</b>
Electronic Agendas (7121005)	\$157,128	This project is complete and can be CLOSED. Agenda.Net is the electronic agenda management software currently in use across the Corporation since 2015 to create and process Council/Standing Committee Reports, Agendas, Minutes, CAO/CAOP reports, By-Laws and their supporting documentation. Administration is recommending combining this surplus with the new Electronic Agenda Upgrade project (7241007) to assist in funding the improved software and its ongoing fees.

Information Technology:

There are 16 active capital projects in this area that are being administered by the Information Technology department. Administration has no variance to report at this time.

Human Resources:

There are seven active capital projects in this area that are being administered by the Human Resources department. Administration has no variance to report at this time.

Corporate Security:

There is one active capital project under Corporate Security that is being administered by the Security, City Hall Campus and Special Activities area. The Fire Prevention Renovations project (7231030) is reporting a surplus of \$8,218.

<b>Projects with Projected Deficit/Surplus</b>	<b>(Deficit)/Surplus Amount</b>	<b>Brief Explanation</b>
Fire Prevention Renovations (7231030)	\$8,218	This project is complete and can be CLOSED. Administration recommends returning this surplus to the Pay-As-You-Go Reserve, Fund 169.

## Office of the Commissioner of Finance & City Treasurer

Corporate Asset Planning:

There are 26 active capital projects in this area that are being administered by the Asset Planning department. Eight projects are reporting a combined surplus of \$952,024 and are detailed below.

<b>Projects with Projected Deficit/Surplus</b>	<b>(Deficit)/Surplus Amount</b>	<b>Brief Explanation</b>
Net Metering Rooftop PV-Essex (7219022)	\$277,395	Project can be CLOSED. As reported to Council (C42/2024), construction could not proceed as there were grid-related constraints at this location. The funding for this project is being redirected to the Net Metering Rooftop PV-Moose project (7219020) to allow for the full scope of the Council approved work award to Moose Power to proceed.
LRWRP Back Up Generator Upgrad (7131005)	\$270,000	Project can be CLOSED. Administration recommends transferring this surplus to the Energy Reserve (Fund 188) to allow for the funding of future energy-related projects, as identified in the 2024 Energy Management Plan.
LRPCP Energy Eff. Measures (7201017)	\$150,000	Project can be CLOSED. Administration recommends transferring this surplus to the LRPCP Energy Efficiency Upgrade project (7141024). The LRPCP Energy Efficiency Upgrade project is currently ongoing, with work on the aeration system upgrade expected to be completed this year. The transfer of funds will allow for more robust work to be completed at the LRPCP including the investigation of additional energy savings measures, such as pumps and Variable Frequency Drives (VFDs).
Power Factor Correction (7141023)	\$100,000	Project can be CLOSED. Administration recommends transferring this surplus to the Energy Reserve (Fund 188) until a detailed report is brought forward to Council to further review opportunities for implementing power

		factor corrections.
400 CHS Energy Eff. Upgrades (7211038)	\$100,000	Project can be CLOSED. Administration recommends transferring this surplus to the Energy Reserve (Fund 188) as a review of energy efficiency opportunities at 400 CHS are planned to take place this year which will result in a detailed report to Council where future projects will be identified and funding will be needed.
HL Energy Eff. Initiatives (7211040)	\$50,000	Project can be CLOSED. Administration recommends transferring this surplus to the Energy Reserve (Fund 188) as a review of energy efficiency opportunities at Huron Lodge are planned to take place this year which will result in a detailed report to Council where future projects will be identified and funding will be needed.
Enhanced Interim Financing Fund (7145005)	\$24,578	This project is ongoing and was designed to fund any temporary financing costs for those enhanced capital projects approved by Council which could not be absorbed within the allotted budget. Project can be CLOSED once construction of impacted projects is complete, with funds returned to the Pay-As-You-Go Reserve, Fund 169.
Corp Energy Reduction Measures (7085900)	(\$19,949)	This project is complete and can be CLOSED. The shortfall in funding is a result of \$27,800 spent to complete a study on efficiency improvement of the WIATC CHP. Administration is recommending a transfer from the CHP/PV Maintenance Reserve (Fund 222) to fund the current deficit.

Financial Accounting:

There are two active capital projects in this area that are being administered by the Financial Accounting department. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Financial Planning:

There are six active capital projects in this area that are being administered by the Financial Planning division. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Taxation and Financial Projects:

There are five active capital projects in this area that are being administered by the Taxation and Financial Projects department. No project variance is anticipated as all of these projects are currently expected to come in on budget.

# Office of the Commissioner of Human & Health Services

Huron Lodge:

There are 11 active capital projects being administered by Huron Lodge. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Employment and Social Services

There is one active capital project being administered by Employment and Social Services. The Windsor Reg Employment Network project (7239000) is expected to come in on budget.

Housing and Children’s Services:

There are three active capital projects being administered by Housing and Children’s Services. No project variance is anticipated as these projects are currently expected to come in on budget.

# Office of the Commissioner of Community Services

Fire and Rescue:

There are 14 active capital projects in this area that are being administered by the Fire and Rescue department. Administration has no variance to report at this time.

Cultural Affairs:

There are six active capital projects in this area that are being administered by the Recreation and Culture department. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Recreation Facilities:

There are eight active capital projects in this area that are being administered by the Recreation & Culture department. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Forestry:

There are three active capital projects in this area that are being administered by the Forestry division. One project, Natural Areas Management Prgm (7219014), is reporting a deficit of (\$39,030).

Projects with Projected Deficit/Surplus	(Deficit)/Surplus Amount	Brief Explanation
Natural Areas Management Prgm (7219014)	(\$39,030)	This project addresses management needs within the City's natural heritage parks and natural areas to maintain their ecological health and biodiversity. Management activities include prescribed burns, invasive species control, educational signage, addressing vandalism, conducting species surveys, and ecological restoration. Administration recommends a transfer from the Ojibway Bridge and Parking Lot project (7221027) to fund the anticipated deficit in this project.

Horticulture:

There is one active capital project in this area. The Bright Lights project (7171089) is currently expected to come in on budget and does not have a variance to report.

Parks Operations:

There are seven active capital projects in this area that are being administered by the Parks Operations division. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Parks Design & Development:

There are 42 active capital projects in this area administered by the Parks Design & Development division. Five projects are reporting a combined surplus of \$39,030 and are detailed below.

<b>Projects with Projected Deficit/Surplus</b>	<b>(Deficit)/Surplus Amount</b>	<b>Brief Explanation</b>
Little River Acres CIP Implementation (7041913)	\$54,900	Administration recommends transferring funding to cover deficits in the Kennedy Park Improvements project (7201021), the Tennis Pickleball Courts Expansion project (7221065), and the Forest Glade Tennis/Pickleball project (7212007).
Ojibway Bridge and Parking Lot (7221027)	\$39,030	Administration is recommending transferring surplus funding to the Natural Areas Management Prgm (7219014) to fund the anticipated deficit in the project.
Kennedy Park Improvements (7201021)	(\$910)	This project is complete and can be CLOSED. Neighbourhood redevelopment improvement projects include, but are not limited to, improved landscaping, pathway development and demolition/renovation of outdated park amenities. Improvement related work at Kennedy Park resulted in a slight deficit and Administration is recommending a transfer from the Little River Acres CIP Implementation project (7041913) to fund this shortfall.
Tennis Pickleball Courts Expansion (7221065)	(\$4,815)	Project is complete and can be CLOSED. This project was used to fund the expansion of courts located at Goldenwood, Fontainebleau, and Wilson Parks and came in slightly over budget. Administration recommends funding this deficit with a transfer from the Little River Acres CIP Implementation project (7041913).
Forest Glade Tennis/Pickleball (7212007)	(\$49,175)	This project is complete and can be CLOSED. Work on the Forest Glade Tennis and Pickleball Courts were tendered in the spring of 2021 and required the use of a pre-commitment in funds for 2025 to complete the full scope of the initially approved work.

		Administration is recommending funding this current deficit with a transfer from the Little River Acres CIP Implementation project (7041913).
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Facilities Operations:

There are eight active capital projects in this area administered by the Facilities Operations department. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Windsor Public Library:

There are 10 active capital projects in this area that are being administered by the Windsor Public Library and Corporate Projects. No project variance is anticipated as all of these projects are currently expected to come in on budget.

**Agencies and Boards**

Windsor Police Services (WPS):

There are 15 active capital projects in this area that are being administered by various WPS divisions. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Roseland Golf and Curling Club:

There are three active capital projects in this area that are being administered by the General Manager at Roseland. No project variance is anticipated as all of these projects are currently expected to come in on budget.

Windsor Airport:

There are five active capital projects in this area that are being administered by the Corporate Projects division. No project variances are anticipated at this time.

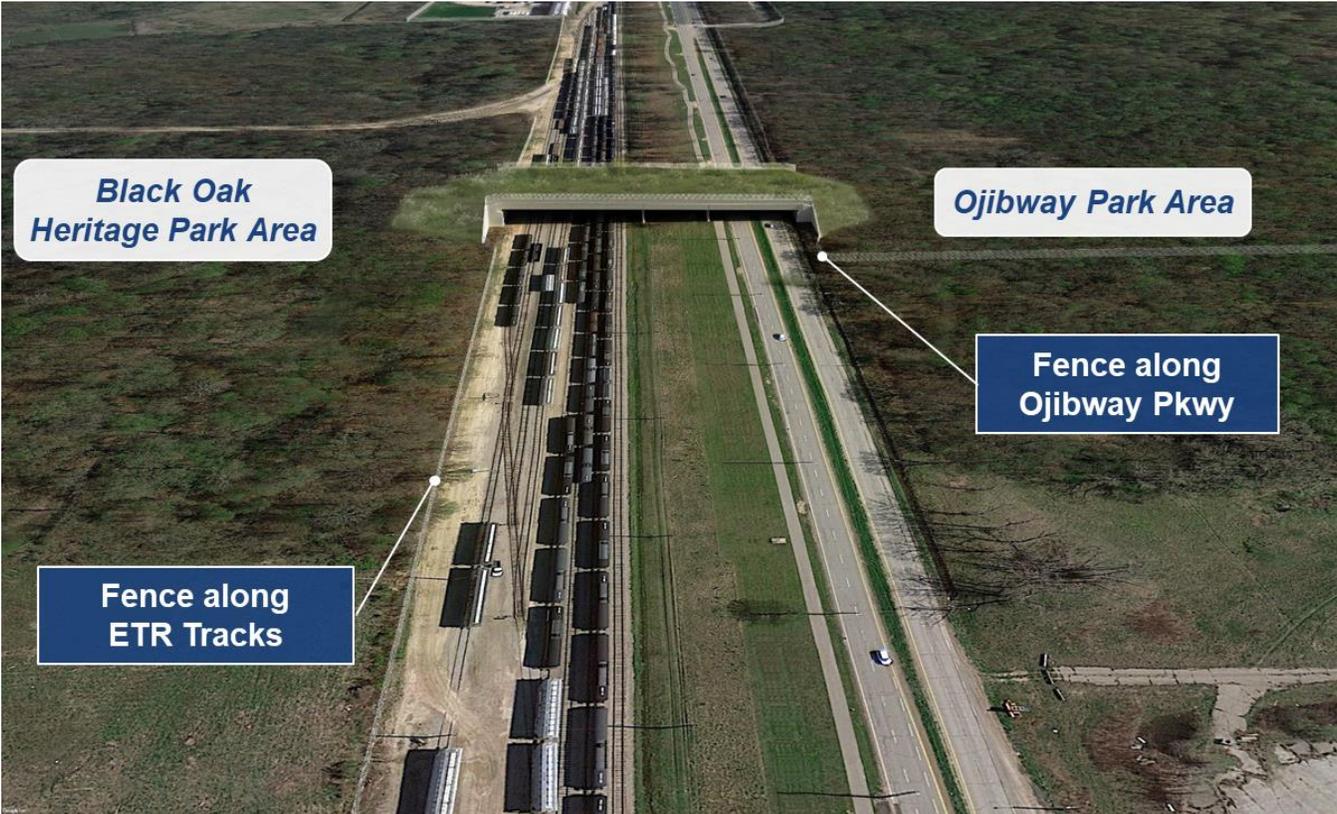
Handi-Transit:

There is only one active capital project active in this area that is being administered by Handi-Transit/Transit Windsor. The Handi-Transit Bus Acquisitions project (7191019) is expected to come in on budget.

City of Windsor

# Ojibway Parkway Wildlife Crossing Environmental Study Report

July 2024





# **Ojibway Parkway Wildlife Crossing Environmental Study Report**

**City of Windsor**

Project No.: IM20104013

Date: July 2024

**WSP Canada Inc.**

3450 Harvester Road, Suite 100

Burlington, Ontario L7N 3W5

T: +1 905-335-2353

WSP.COM

# Contributors

## City of Windsor

Project Manager

Michael Todd, P.Eng.

Naturalist

Karen Cedar

## WSP

Project Manager

Nathan Hellinga, B.Sc., CPESC, CAN-CISEC

Project Advisor

Andreas Stenzel

Ecology Lead

Samantha Hughes

Environmental Planner

Mir Ahsan Talpur, RPP, MCIP, EP

Senior Structural Engineer

Nathan Kranendonk, P.Eng.

Cultural Heritage Lead

Heidy Schopf, MES, CAHP

Archaeology Lead

Barbara Slim, M.A., CAHP

Geotechnical Engineering Lead

Dirka Prout, P.Eng.

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# Executive Summary

## Introduction

The City of Windsor has completed an environmental assessment to consider the construction of a Wildlife Crossing across Ojibway Parkway and the Essex Terminal Railway (ETR) tracks, south of Broadway Boulevard, to re-establish an ecological connection between the natural areas associated with Black Oak Heritage Park and Ojibway Park. The Wildlife Crossing would provide a connection for local tallgrass prairie plant communities and safe passage opportunities for wildlife, including species at risk. The proposed Wildlife Crossing would thereby reduce landscape fragmentation through improvement of habitat connectivity in the Ojibway Prairie Complex. The Wildlife Crossing would also reduce wildlife-vehicle collisions and their threat to motorists.

The 20 m wide Ojibway Parkway and the eight tracks operated by the ETR to the west of Ojibway Parkway inhibit wildlife movement and ecological functions. Approximately 20,000 vehicles per day travel along the Ojibway Parkway and E.C. Row Expressway, contributing heavily to wildlife mortality, driving hazards, and landscape fragmentation. In addition, traffic along Ojibway Parkway is expected to increase with the development of the nearby Gordie Howe International Bridge. Consequently, the Windsor-Detroit Bridge Authority (WDBA) is a funding partner for the commencement of the environmental assessment. The City's intent is to seek future funding from environmental organizations, provincial and federal levels of government and obtain approval for the remaining amount through the Capital Budget process.

The location and design of the Wildlife Crossing was selected as part of this environmental assessment after careful consideration of engineering requirements and existing site conditions, constraints related to land ownership, previous studies and literature and feedback obtained through a comprehensive consultation program, which was comprised of consultation with the Indigenous Nations, the public, government agencies, ETR, utilities, and key stakeholder groups. The preferred location and design of the Wildlife Crossing consider wildlife-related concerns, including habitat fragmentation and connectivity for several wildlife groups, as well as plants. The preferred location and design also consider the loss of habitat and secondary and cumulative impacts to the existing landscape.

This environmental assessment was completed following the Municipal Class Environmental Assessment (Class EA) process, for a Schedule 'C' project, which is outlined in the Municipal Engineering Association's document titled "Municipal Class Environmental Assessment," (amended 2023). The Class EA Study addressed Phases 1 through 4 of the Class EA process. The draft Environmental Study Report (ESR) was initially endorsed by the City of Windsor's Council (Council), by CR549/2021, on December 20, 2021. Subsequent to Council's endorsement, and before issuing the Notice of Study Completion, the draft ESR was circulated to the Indigenous Nations, relevant Government Agencies, and the ETR for their review. The feedback received prompted the continuation of the Class EA Study. Consequently, an updated preferred design for the Wildlife Crossing was selected. This crossing would extend over both Ojibway Parkway and the ETR railway tracks. At the time of finalization of this report, the Study Team had intended to present it to the City Council for endorsement at the Council Meeting of July 22, 2024.

## Study Area

The general limits of the Study Area are shown in Figure E-1. It is important to note that the Study Area initially included a portion of the Ojibway Park and Ojibway Parkway south of Broadway Boulevard. However, following input from the Indigenous Nations, the public, government agencies, and key stakeholder groups, the Study Area was expanded to consider a Wildlife Crossing across Ojibway Parkway as well as the ETR tracks.



## Municipal Class Environmental Assessment Process

The Municipal Class EA process includes five phases. Schedule 'C' projects require that all five phases be conducted. Phases 1, 2, 3, and 4 are part of this study; the fifth phase would be initiated following completion of this study. A description of the Class EA planning phases is provided below.

- **Phase 1 – Problem or Opportunity Statement:** Identify the problem (deficiency) or opportunity.
- **Phase 2 – Alternative Solutions:** Identify and evaluate alternative solutions to address the problem or opportunity by taking into consideration the existing environment and establish the preferred solution considering public and review agency input.
- **Phase 3 – Alternative Design Concepts for the Preferred Solution:** Identify Alternative Design Concepts for the preferred solution by taking into consideration the existing environment and establish the preferred design concept by considering public and review agency input.
- **Phase 4 – Environment Study Report:** Document and file the Environmental Assessment including the design and consultation process in an Environmental Study Report (ESR) for public review.
- **Phase 5 – Implementation:** Complete detailed design and required additional investigations, obtain permits and approvals, and proceed to construction and operation. Monitor construction for adherence to environmental provisions and commitments. Where special conditions dictate, also monitor the operation of the completed facility.

## Problem Statement

Phase 1 of the Class EA process requires developing a problem or opportunity statement. The following problem statement was developed for this Class EA Study:

The City of Windsor is undertaking a Municipal Class Environmental Assessment Study to consider the construction of a Wildlife Crossing across Ojibway Parkway and the Essex Terminal Railway (ETR) tracks, south of Broadway Boulevard, to begin to re-establish an ecological connection between the natural areas associated with Black Oak Heritage Park and Ojibway Park.

The 20 m wide Ojibway Parkway that carries approximately 20,000 vehicles per day, as well as the 8 tracks operated by the ETR to the west of the Ojibway Parkway inhibit wildlife movement and ecological functions. The Wildlife Crossing would provide a connection for local tallgrass prairie plant communities and safe passage opportunities for wildlife, including species at risk. The proposed Wildlife Crossing thereby reduces landscape fragmentation through improvement of habitat connectivity in the Ojibway Prairie Complex. In addition, the Wildlife Crossing would improve safety of the travelling public on Ojibway Parkway by reducing wildlife-vehicle interactions.

## Existing Conditions

Several technical studies were completed to develop an understanding of existing conditions within the Study Area. The ESR discusses existing conditions in detail relating to transportation, social, cultural, natural and technical environments. A summary of existing conditions is provided below.

### Transportation

- **Roadways:** Ojibway Parkway is a four-lane arterial road with a landscaped median that transitions into E. C. Row Expressway at Broadway Boulevard, which marks the Study Area's northern limit.
- **Trails:** The main trail within and adjacent to the Study Area is the Ojibway Parkway Trail, which runs in a north-south direction along the west side of Ojibway Parkway. In addition, the Ojibway Park to the east includes a series of loop trails.

- **Essex Terminal Railway:** A railway yard owned and operated by the ETR is located to the west of Ojibway Parkway in the Study Area. The ETR is a switching (or short line) railway that runs from the east side of Windsor through the Town of LaSalle and terminates in Amherstburg.
- **Land-use:** The lands on either side of Ojibway Parkway, within and adjacent to the Study Area, are primarily parkland and industrial uses. Ojibway Park is located to the east, and ETR-owned yard and lands, and Black Oak Heritage Park are located to the west of Ojibway Parkway. Dainty Foods' production is located to the northwest of the Study Area.

### **Cultural Environment**

- **Archaeological Resources:** Stage 1 Archaeological Assessments identified that portions of the Ojibway Park and Black Oak Heritage Park within the Study Area have archaeological potential. Areas of archaeological potential that will be subject to disturbance as part of project construction, shall be assessed through a Stage 2 Archaeological Assessment (and any subsequent assessments, if required).
- **Built Heritage Resources and Cultural Heritage Landscapes:** Ojibway Park and Black Oak Heritage Park have potential for Cultural Heritage Value or Interest.

### **Natural Environment:**

- **Natural Heritage:** The Study Area includes diverse oak-dominated forests, swamps, and savannahs, with mid-aged canopies, mixed understories, and ground layers hosting both native and non-native species, amidst ecological disturbances. There are a variety of birds, anurans, bats, and mammals, with some species at risk. Five species at risk have been confirmed in the Study Area, while several more have high or moderate probability of occurrence. Ojibway Park and Black Oak Heritage Park are part of an Area of Natural and Scientific Interest and include significant woodlands. Black Oak Wetland Complex is located in Black Oak Heritage Park.
- **Drainage:** There are three municipal drains within the Study Area (Ojibway Park Drain, Titcombe Road Drain, and Susan Drain), which are regulated by the Essex Region Conservation Authority.
- **Soil:** The subsurface soils in the region generally comprise silty sand/sandy silt deposits overlying an extensive silty clay layer, which is in turn underlain by limestone bedrock.
- **Contamination:** Two Areas of Potential Environmental Concerns were identified resulting from Potentially Contaminating Activities associated with known contaminants located adjacent to the Study Area (Salt applied to roadway surface and Rail Yards, Tracks and Spurs).
- **Source Water:** The Study Area is located within Surface Water Intake Protection Zone and Significant Groundwater Recharge Area (vulnerability score of 2).

### **Technical Environment:**

- **Utilities:** Utilities along Ojibway Parkway include two Enbridge gas pipelines, Bell Canada line, ENWIN's hydro poles and distribution lines, Town of LaSalle's sanitary forcemain, Windsor Utilities Commission's watermain, and City of Windsor's street-lights and sanitary sewer.

## **Alternative Solutions**

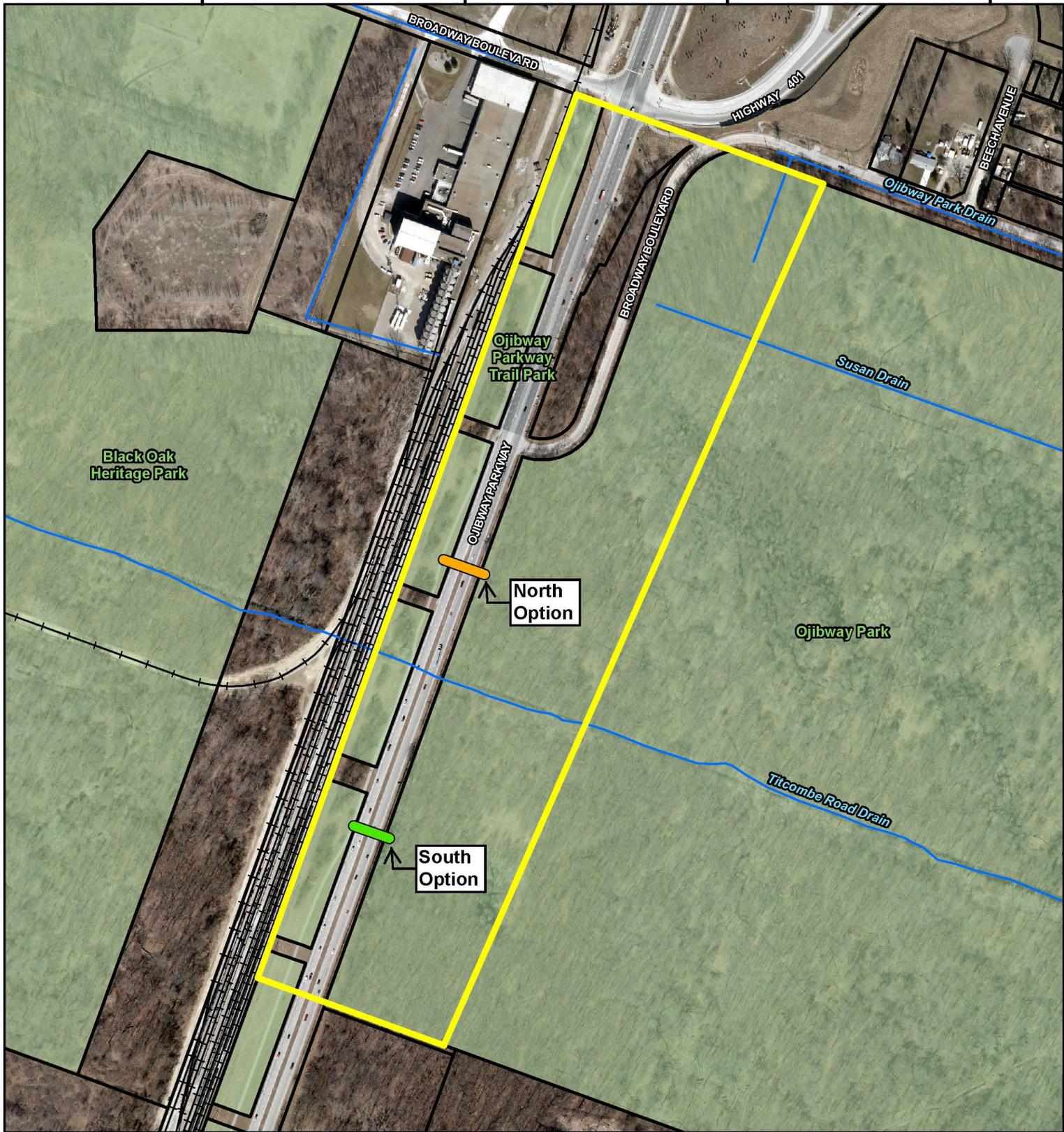
Phase 2 of the Class EA process requires that reasonable solutions shall be identified to address the problem statement. For this project, two alternative solutions were identified: Wildlife Overpass and Wildlife Underpass, with two alternative locations for each solution (Figure E-2). These solutions were evaluated using criteria related to natural, social, and cultural environments and technical and cost considerations to identify a preferred solution. Based on this evaluation, the Overpass Wildlife Crossing (North Option) was initially selected as the Preferred Solution. Subsequently, the Wildlife Crossing location was re-evaluated based on wildlife connectivity modelling, and the southern option was selected as the preferred location, where the Wildlife Crossing would cross Ojibway Parkway and ETR tracks.

328000

328250

328500

328750



4682000  
4681750  
4681500  
4681250  
4681000

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**LEGEND**

- Approximate Study Area
- Parks
- Watercourse / Drain
- Railway
- Property Boundaries
- Alternative Wildlife Crossing Locations**
- North Option
- South Option

**NOTES:**  
 - Aerial imagery extracted from Essex County interactive map, 2019.



**OJIBWAY PARKWAY WILDLIFE CROSSING**

**Alternative Wildlife Crossing Locations**

Datum: NAD83  
 Projection: UTM Zone 17N



PROJECT N<sup>o</sup>: IM20104013

**FIGURE E-2**

SCALE: 1:5,000

DATE: October 2020



## Design Options for Wildlife Crossing (Overpass)

Phase 3 of the Municipal Class EA process involves development and evaluation of alternative design concepts for the Preferred Solution. For this project, Wildlife Overpass was identified as the Preferred Solution. In accordance with the Phase 3 of the Municipal Class EA process, design options were identified and evaluated to determine a preferred design for the Wildlife Crossing (Overpass).

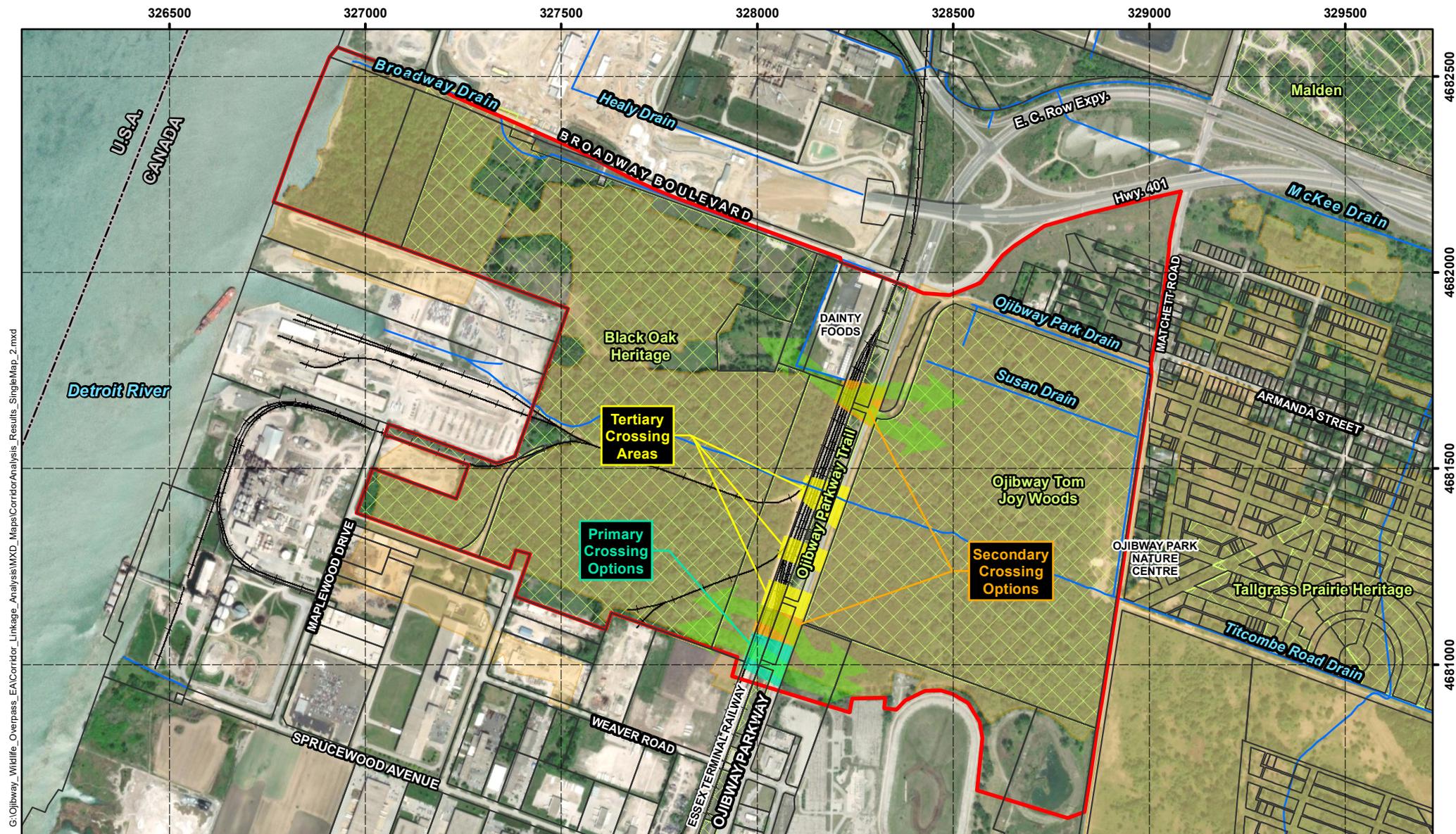
An initial set of four design options was developed and evaluated to identify a preliminary design for the Wildlife Crossing. These design options were comprised of Wildlife Crossing options across Ojibway Parkway, connecting Ojibway Park Area with the median area between Ojibway Parkway and the ETR tracks.

The initial design options, along with their evaluation and preliminary preferred design were shared with Indigenous Nations, the public, government agencies, ETR, utilities owners, and key stakeholders through Public Information Centre #2 in April 2021. A key comment received was to extend the crossing across the ETR tracks to provide connectivity between the Ojibway Park Area and the Black Oak Heritage Park Area.

Following PIC #2, the draft ESR was presented to the City Council for endorsement. Subsequent to the Council endorsement, and prior to issuing the Notice of Study Completion, the draft ESR was circulated to the Indigenous Nations, relevant Government Agencies, and the ETR for their review. The feedback received prompted the continuation of the Class EA Study. Accordingly, the Study Team completed additional work to explore design options for the Wildlife Crossing across Ojibway Parkway and the ETR tracks. This involved reevaluating the location of the crossing and identifying potential design alternatives for connecting Ojibway Park Area with the natural areas associated with Black Oak Heritage Park. The additional, or modified, studies to support this work included:

- **Study Area Expansion:** The Study Area was expanded to include the natural area associated with Black Oak Heritage Park to allow for consideration of Wildlife Crossing Options across the ETR tracks.
- **Additional Field Studies:** Additional ecological field studies were completed within the expanded Study Area during 2023. The Study Team completed surveys on public lands only, as permission to access private lands was not provided. Relevant information from other studies performed by the City was reviewed and incorporated into the assessments and evaluation.
- **Connectivity Analysis:** Connectivity modelling was completed to identify additional locations for a Wildlife Crossing along Ojibway Parkway. The intent was to identify an alternative location for the crossing that would minimize impacts to the Black Oak Wetland Complex. Potential Wildlife Crossing locations identified through connectivity modeling are shown in Figure E-3.
- **Development of Revised Design Options:** Four new “revised” design options were developed and evaluated to identify a preferred design for the Wildlife Crossing over Ojibway Parkway and the ETR tracks.

Ultimately, the preferred design for the Wildlife Crossing over Ojibway Parkway and the ETR tracks was chosen through the development and evaluation of revised design options. These revised options and preferred design for Wildlife Crossing over Ojibway Parkway and ETR tracks was presented at the Public Information Centre #3.



G:\Ojibway\_Wildlife\_Overpass\_EA\Corridor\_Linkage\_Analysis\MXD\_Maps\CorridorAnalysis\_Results\_SingleMap\_2.mxd

**LEGEND**

- Approximate Study Area
- National Border
- Railway
- Property Parcels
- Parks (labelled with name)
- Watercourse / Drain
- Natural Heritage Feature (ANSI, Provincially Significant Wetland, Environmentally Significant Area or Provincial Park)
- Primary and Secondary Wildlife Movement Corridors crossing Ojibway Parkway
- Primary Crossing Location
- Secondary Crossing Location
- Tertiary Crossing Area

**NOTES:**  
 - Aerial imagery extracted from ESRI basemap imagery service (scene date: May/June 2023)  
 - Property parcels and parks extracted from City of Windsor Open Data Catalogue, (<https://opendata.citywindsor.ca/> 2023)

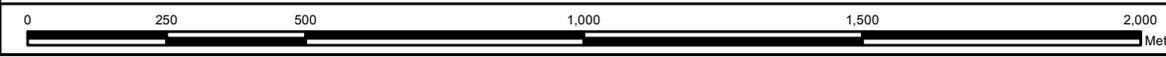
Datum: NAD83  
 Projection: UTM Zone 17N



OJIBWAY PARKWAY WILDLIFE CROSSING

Potential Wildlife Crossing Locations

PROJECT N <sup>o</sup> : IM20104013	FIGURE: E-3
SCALE: 1:13,500	DATE: September 2023



## Preferred Design for Wildlife Crossing

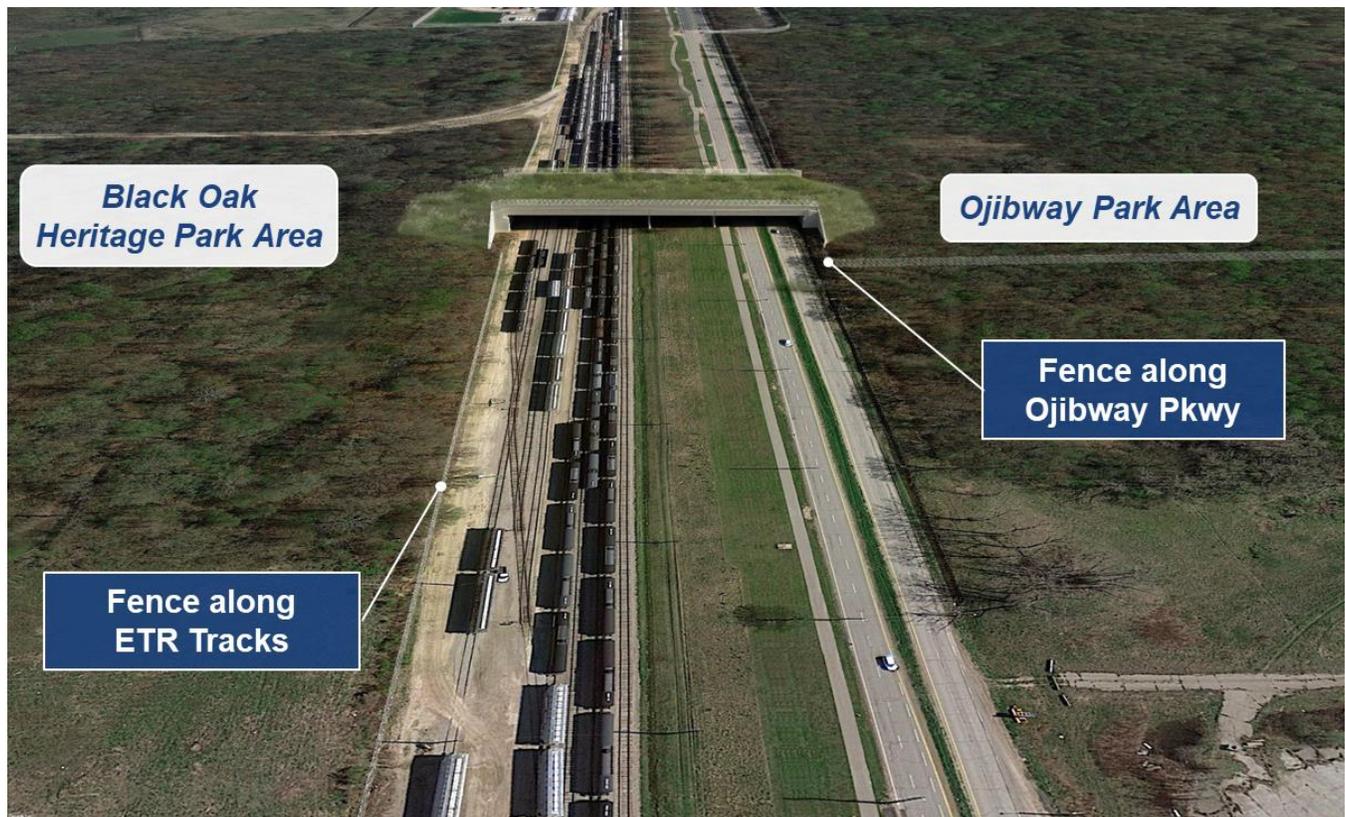
The refined preferred design for the Wildlife Crossing is a three-span bridge comprised of a 51.3 m span over the Essex Terminal Rail (ETR), a 21.62 m span over the boulevard area, and a 47.22 m span over Ojibway Parkway. The Wildlife Crossing features a sloped deck for water drainage and it is proposed to be supported by deep foundations with steel H-piles. The design includes wildlife-proof barriers to promote wildlife crossings at the location of the proposed bridge. Steel plate girders were chosen for ease of installation and to meet clearance requirements, while the bridge's longitudinal gradient and transverse crossfall ensure proper water flow. The existing Ojibway Parkway Trail to the west side of Ojibway Parkway would require realignment to pass under the new structure.

Vegetation is proposed on the Wildlife Crossing to create a natural environment with a mix of open areas and shrubs, using native plant species and soils. The design aims for a heterogeneous landscape that encourages wildlife use, with features like boulders and brush piles to deter human access.

Wildlife fencing, crucial for guiding animals to the crossing and preventing road intrusions, will be 8 feet (2.4 m) high and include escape features. The fencing will consist of a taller chainlink style fence with an attached segment of shorter fence with smaller openings. The fencing will connect seamlessly to the crossing, ensuring no gaps for wildlife to bypass the intended path. These design elements will be refined during the detailed design phase in consultation with local authorities and conservation agencies.

A conceptual rendering of the preferred Wildlife Crossing is provided in Figure E-4. An example of proposed wildlife fencing is provided in Figure E-5, whereas the alignment of the proposed wildlife fencing is shown in Figure E-6.

**Figure E-4: Conceptual Rendering of Preferred Wildlife Crossing Design**



**Figure E-5: Fence along the Herb Gray Parkway (Example)**





## **Potential Environmental Effects and Mitigation Measures**

The ESR provides a detailed account of project's potential environmental effects and proposes avoidance and mitigation measures. Mitigation of negative effects was applied throughout the Class EA process, including selection of preferred design by identifying the alternative that has the least overall effects on the environment. Some negative effects cannot be totally avoided; therefore, mitigating measures are proposed to minimize effects. These measures will need to be further developed and finalized in the next phase of design and will need to be included in the contract documents for implementation during construction.

## **Monitoring Plan and Future Commitments**

### **Monitoring and Management Recommendations**

The Wildlife Crossing's success hinges on comprehensive monitoring to assess habitat connectivity and road mortality reduction, with a diverse focus beyond single species. The City is encouraged to collaborate with universities and NGOs for monitoring support, establishing benchmarks for adaptive management. The detailed design phase will include a Restoration and Planting Plan, emphasizing native species and ecological principles to foster a natural crossing environment and manage vegetation. This plan will feature routine inspections, photo-monitoring, and formal vegetation sampling to guide ongoing management, ensuring the crossing supports a rich biodiversity and addresses the needs of species at risk while deterring human interference.

A multifaceted monitoring and management strategy is proposed, focusing on both vegetation and wildlife movement to ensure the crossing meets its goals of habitat connectivity and mortality reduction. Photo-monitoring and formal vegetation sampling will track ecological changes, while focal species monitoring will assess the crossing's effectiveness for wildlife. Adaptive management will play a crucial role, with ongoing evaluations leading to potential modifications in design, microhabitat elements, and fencing to optimize the crossing's functionality. Regular inspections, documentation of human interference, and invasive species control are integral to the plan, ensuring the crossing remains a vital and effective wildlife corridor.

### **Commitments for Additional Work and Permits and Approvals**

While the Class EA process has been supported by various technical studies, the project's next phase will necessitate additional studies. This phase will involve enhanced consultation and coordination with key stakeholders to refine and advance the project design. Moreover, the acquisition of several permits and approvals will be a critical part of advancing the project. These future actions and the associated commitments are detailed in the ESR.

## **Consultation Program**

Comprehensive consultation was a key component of the Class EA Study. The consultation process carried out during the Class EA study was designed to exceed the formal notice and consultation requirements of the Class EA process. Consultation was carried out with public, Indigenous Nations, government agencies, ETR, utilities owners, and key stakeholder groups. The following activities were completed as part of the consultation program:

- A project webpage was setup at the commencement of this project on the City of Windsor's website. Information related to the Class EA study was posted on this webpage throughout the study, including study notices, materials related to Public Information Centres, and study reports. The project webpage can be accessed from the following link:  
<https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Ojibway-Parkway-Wildlife-Crossing-Class-Environmental-Assessment.aspx>

- A Study Contact List was developed at the commencement of this Class EA study to identify contacts that may have an interest in this study. This list included contacts from the local Indigenous Nations, provincial government agencies, Essex Region Conservation Authority, emergency services provider, Town of LaSalle, ETR, utilities owners, special interest groups, members of the public who expressed interest in the study and the area residents and businesses. The Contact List was updated throughout the study.
- Study notices were distributed via several methods, including postings on the project webpage, the City’s Twitter and Facebook pages; publication in the local newspapers; email circulation and mail distribution to the contacts on the Study Contact List.
- Meetings were held with the Essex Region Conservation Authority to solicit technical input at key project milestones in the Class EA Study.
- Study Notices and projects reports were shared with the Indigenous Nations for review. Where requested, meetings were also held with select Indigenous Nations.
- Three Public Information Centres were held to share the project updates and to solicit public input.
- Meetings were held with the ETR, a key stakeholder, to share project information and discuss their concerns for a Wildlife Crossing across ETR tracks.
- Meetings were held with select utilities owners to identify potential conflicts with utilities and to discuss protection and relocation measures.

## **Closure and Next Steps**

The Environmental Study Report has documented the planning, decision making and consultation process for Ojibway Parkway Wildlife Crossing in accordance with the Municipal Class EA process for a Schedule ‘C’ project. This report is being made available for review by the Indigenous Nations, the public, government agencies, ETR, utilities owners, and interested stakeholder groups. The location and timing of the review of this report is being identified in the Notice of Study Completion. Interested persons may provide written comments to the following contact in accordance with the timeline identified in the Notice of Study Completion:

**Michael Todd, P.Eng.**  
 Project Administrator  
 Engineering Department – Corporate Projects  
[mtodd@citywindsor.ca](mailto:mtodd@citywindsor.ca)

Provided that no Section 16 Order Requests are received, this project can proceed to detailed design phase. Information on Section 16 Order Request process is provided in the Environmental Study Report.

APPENDIX A

LEGAL DESCRIPTION OF LANDS TO BE EXPROPRIATED

<b>Owner &amp; Municipal Address</b>	<b>Land to be Expropriated</b>	<b>Type of Acquisition</b>
Diaeddine Mohammed ARNOUS  2191 Dominion Boulevard	PART LOT 354, PLAN 558 DESIGNATED AS PART 4 ON PLAN 12R-29463, City of Windsor, County of Essex, being Part of PIN 01555- 6886 (LT)	Partial Taking Fee Simple

# CR340/2024 - Item 11.7 - Appendix B

## PARTS SCHEDULE

PART	LOT	PLAN	PART OF P.I.N.	AREAS (sq.m.)
1	PART OF LOT 453	REGISTERED PLAN 558	01313-2738	3.5
2	PART OF LOT 215		01313-1831	12.5
3	PART OF LOT 353		01555-7061	12.5
4	PART OF LOT 354		01555-6886	12.5

PLAN 12R-29463

Received and deposited

August 4<sup>th</sup>, 2023

Dragana Jovanovic

Representative for the  
Land Registrar for the  
Land Titles Division of  
Essex (No.12)

## PLAN OF SURVEY OF PART OF LOTS 215, 353, 354 & 453 REGISTERED PLAN 558

IN THE  
CITY OF WINDSOR  
COUNTY OF ESSEX, ONTARIO  
VERHAEGEN LAND SURVEYORS, A DIVISION OF J.D. BARNES LTD.

SCALE = 1:250 METRES  
0 2.50 5.00 10.00 15.00 25.00

THE INTENDED PLOT SIZE OF THIS PLAN IS 915mm IN WIDTH BY 609mm IN HEIGHT  
WHEN PLOTTED AT A SCALE OF 1:250

"METRIC" DISTANCES AND COORDINATES SHOWN ON THIS PLAN  
ARE IN METRES AND CAN BE CONVERTED TO FEET BY  
DIVIDING BY 0.3048

### LEGEND AND NOTES

BEARINGS ARE UTM DERIVED FROM OBSERVED REFERENCE POINTS "A" AND  
"B" BY REAL TIME NETWORK OBSERVATIONS AND ARE REFERRED TO UTM ZONE  
17 (81° WEST LONGITUDE) NAD83 (CSRS) (2010.0).

DISTANCES ON THIS PLAN ARE GROUND AND CAN BE CONVERTED TO GRID BY  
MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999923

ALL SET SSB AND PB MONUMENTS WERE USED DUE TO LACK OF OVERBURDEN  
AND/OR PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH  
SECTION 11 (4) OF O.REG. 525/91.

- DENOTES SURVEY MONUMENT FOUND
  - DENOTES SURVEY MONUMENT SET
  - SIB DENOTES STANDARD IRON BAR
  - SSIB DENOTES SHORT STANDARD IRON BAR
  - IB DENOTES IRON BAR
  - PB DENOTES PLASTIC BAR
  - WT DENOTES WITNESS
  - M DENOTES MEASURED
  - S DENOTES SET
  - ⊥ DENOTES PERPENDICULAR
  - (OU) DENOTES ORIGIN UNKNOWN
  - (P) DENOTES REGISTERED PLAN 558
  - (P1) DENOTES PLAN 12R-20723
  - (P2) DENOTES PLAN 12M-498
  - (FN) DENOTES FIELD NOTE BY(1744) DATED JULY 12, 2002. (Job No. 4-20866)
  - (FN1) DENOTES FIELD NOTE BY(1201) DATED AUGUST 13, 1971. (Job No. 2-2289)
  - (FN2) DENOTES FIELD NOTE BY(1194) DATED APRIL 8, 1996. (T556/42)
  - (FN3) DENOTES FIELD NOTE BY(1744) DATED SEPT. 29, 1993. (Job No. 4-10415)
  - (JDB) DENOTES J.D. BARNES LIMITED
  - (1744) DENOTES VERHAEGEN LAND SURVEYORS
  - (1201) DENOTES CLARKE SURVEYORS INC., O.L.S.
  - (1194) DENOTES JOHN B. SMETON INC., O.L.S.
- N = NORTH; S = SOUTH; W = WEST; E = EAST

### INTEGRATION DATA

COORDINATES ARE DERIVED FROM GRID OBSERVATIONS USING THE CAN-NET  
NETWORK SERVICE AND ARE REFERRED TO UTM ZONE 17 (81° WEST LONGITUDE)  
NAD83 (CSRS) (2010.0).  
COORDINATE VALUES ARE TO AN URBAN ACCURACY IN ACCORDANCE WITH  
SECTION 14(2) O.REG 216/10

POINT ID	NORTHING	EASTING
ORP-A	4683208.95	332181.31
ORP-B	4683030.55	332260.94

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS  
OR BOUNDARIES SHOWN ON THIS PLAN.

### SURVEYOR'S CERTIFICATE

- I CERTIFY THAT:
- THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT,  
THE SURVEYS ACT, THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
  - THIS SURVEY WAS COMPLETED ON THE 29th DAY OF JUNE, 2023.

DATE AUGUST 2, 2023

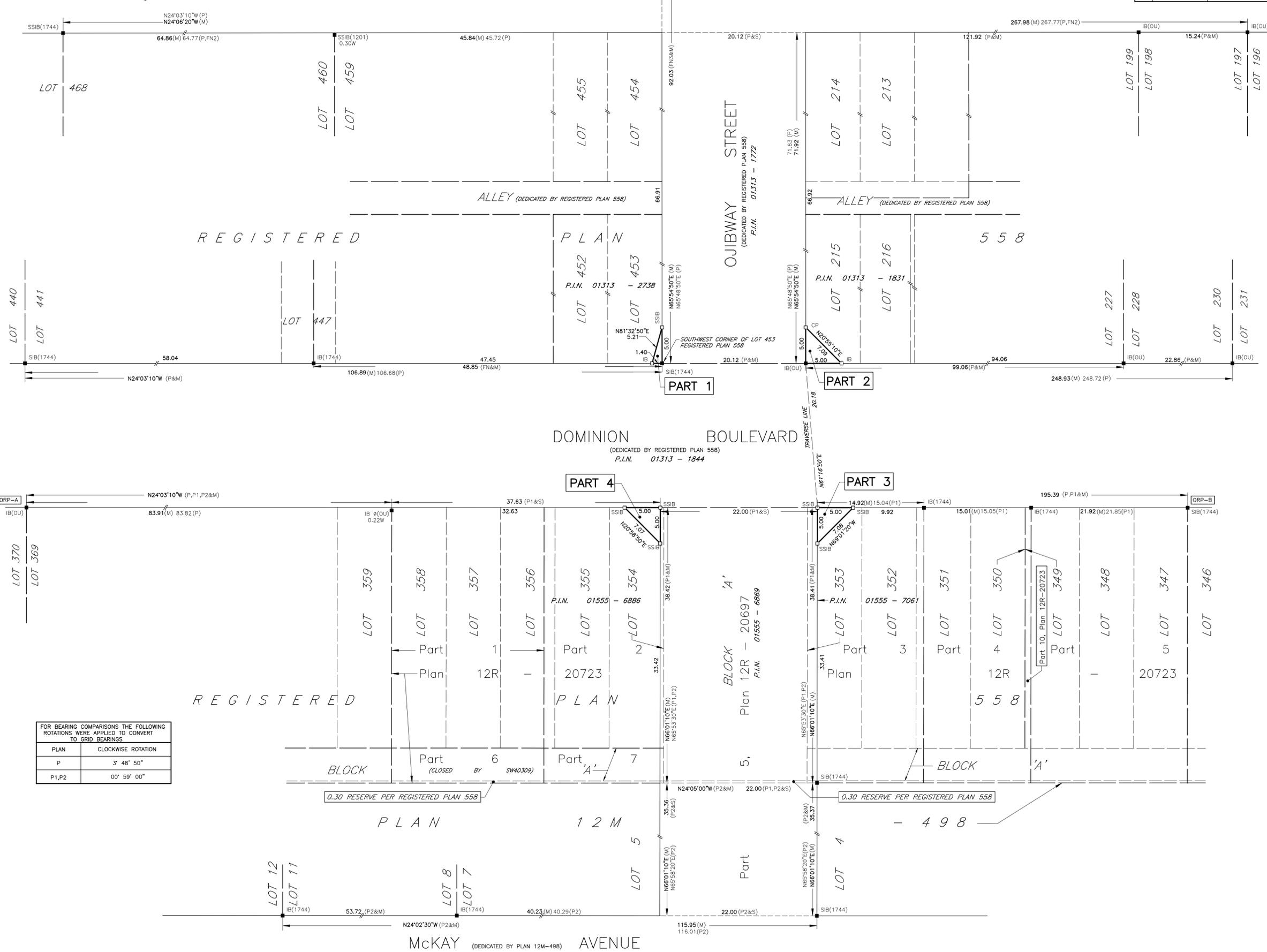
*Roy A. Simone*  
ROY A. SIMONE  
ONTARIO LAND SURVEYOR

THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER 2209533



**VERHAEGEN**  
LAND SURVEYORS  
A DIVISION OF J.D. BARNES LTD.  
94 OTTAWA STREET, WINDSOR, ON, N8X 2E1  
T: (519) 258-1772 F: (519) 258-1791 www.jdbarnes.com

DRAWN BY: D.J.	CHECKED BY: RAS	REFERENCE NO.: 23-47-303-00
CAD File: 23-47-303-00.dwg	E-558-21	CAD Date: August 2, 2023 10:26 AM



FOR BEARING COMPARISONS THE FOLLOWING  
ROTATIONS WERE APPLIED TO CONVERT  
TO GRID BEARINGS

PLAN	CLOCKWISE ROTATION
P	3° 48' 50"
P1,P2	00° 59' 00"

B Y - L A W N U M B E R -2024

A BY-LAW TO EXPROPRIATE PART OF THE LANDS KNOWN MUNICIPALLY AS 2191 DOMINION BOULEVARD

Passed the day of , 2024.

**WHEREAS** in accordance with the provisions of the *Expropriations Act*, R.S.O. 1990, c. E.26, an application was submitted to City Council as approving authority, for approval to expropriate a fee simple interest in part of the property municipally known as 2191 Dominion Boulevard, and legally described as PART LOT 354, PLAN 558 DESIGNATED AS PART 4 ON PLAN 12R-29463, City of Windsor, County of Essex, being Part of PIN 01555-6886 (the “**Lands**”) for the Dominion Boulevard / Ojibway Street Intersection Improvements;

**AND WHEREAS** notice of such application was published and served on the registered owners of the Lands in accordance with the *Expropriations Act*;

**AND WHEREAS** no request for a hearing of necessity was received pursuant to the *Expropriations Act*.

**AND WHEREAS** the Council of the Corporation of the City of Windsor, as approving authority, at its meeting held on July 22, 2024, has approved the application to expropriate the Lands and has given leave to introduce and enact this by-law.

**THEREFORE** the Council of The Corporation of the City of Windsor enacts as follows:

1. The expropriation of the fee simple interest in the Lands for the purposes of the Dominion Boulevard / Ojibway Street Intersection Improvements is approved by the Council of The Corporation of the City of Windsor, as approving authority, and the Chief Administrative Officer and City Clerk and their respective designates are hereby authorized to execute a Certificate of Approval pursuant to the *Expropriations Act*.
2. The expropriation of the fee simple interest in the Lands for the purposes of the Dominion Boulevard / Ojibway Street Intersection Improvements is authorized by the Council of The Corporation of the City of Windsor as expropriating authority and the Chief Administrative Officer and City Clerk and their respective designates are hereby authorized to execute the necessary plan of expropriation pursuant to the *Expropriations Act*;
3. The City Solicitor and designates, are hereby authorized to prepare, execute, serve, and file, as necessary, all other documents required to complete the expropriation and give effect to this bylaw, and to make an offer of compensation under section 25 of the *Expropriations Act* and issue payment accordingly.

DREW DILKENS, MAYOR

CLERK

First Reading - , 2024  
 Second Reading - , 2024  
 Third Reading - , 2024