



REPORT

Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment

Safarik Pit

Submitted to:

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Acknowledgements

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Ontario Heritage Trust	Courtney Kovacich, Provincial Heritage Registrar
Township of Puslinch	Laura Emery, Communications and Committee Coordinator

Executive Summary

CBM Aggregates (CBM), a division of St. Marys Cement Inc. (Canada), is applying to the Ministry of Natural Resources and Forestry (MNRF) for a new Class A Licence (Pit Below Water) under the *Aggregate Resources Act* (ARA), for the Township of Puslinch, Wellington County, Ontario (the Project). Golder Associates Ltd. (now WSP Canada Inc. [WSP]), was retained by CBM to complete a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (Cultural Heritage Report) as part of the licence application for the Project.

The property to be licensed is located at 4275 Concession Road 7, Township of Puslinch, Wellington County, Ontario (the site). The site is located to the east/southeast of the existing CBM Neubauer and McNally Pits. Although the site is bisected by a hydro corridor, access to the eastern portion of the site is permitted. The site is approximately 31.3 hectares (ha) in size.

The Project’s preliminary extraction area comprises part of Lot 29, Concession 7, in the Township of Puslinch, County of Wellington. For the purposes of this Cultural Heritage Report, the “Study Area” is comprised of the preliminary extraction area plus a 50 metre (m) buffer to account for the risk of potential adverse impacts to built heritage resources or cultural heritage landscapes on adjacent parcels.

Following guidance provided by the Ministry of Citizenship and Multiculturalism (MCM), Wellington County, and the Canada’s Historic Places’ (CHP) 2010 *Standards and Guidelines for the Conservation of Historic Places in Canada* (CHP *Standards and Guidelines*), this Cultural Heritage Report summarizes the applicable heritage policies, provides the Study Area’s geography and history, and identifies known and/ or potential built heritage resources (BHRs) or cultural heritage landscapes (CHLs). Based on this understanding of the Study Area and surrounding properties, the potential impacts to known and/ or potential heritage properties resulting from the Project are assessed and future actions recommended, where required.

Background research, information gathering, and field investigations conducted for this report identified one potential heritage property within the Study Area (CHR 1; 4275 Concession 7). The impact assessment determined that direct impacts are anticipated to CHR 1 as a result of the project. Accordingly, additional cultural heritage assessment is required per the recommendations contain in Table 1. Note that these recommendations are based on WSP’s current understanding of the Project and may need to be revisited if Project components are moved or altered.

Table 1: Summary of Cultural Heritage Recommendations

ID No.	Resource Type and Address/ Location	Summary of Impact and Mitigation Recommendations
CHR 1	<p>Type: CHL (farm complex)</p> <p>Recognition: Identified during field review:</p> <p>Address: 4275 Concession 7, Puslinch, Ontario</p>	<ul style="list-style-type: none"> ▪ Direct Negative Impact. As currently planned, the proposed work for the Project may result in the demolition/destruction of the built elements of the identified CHL. This will result in the removal of all potential CHVI and heritage attributes and constitutes a direct negative impact. ▪ As the Project is anticipated to have a direct negative impact to CHR 1, alternatives have been considered and mitigation is recommended: ▪ Prior to any site alteration or extraction within the Study Area, a property specific Heritage Impact Assessment (HIA) shall be required. The HIA should include a full evaluation of the property using the criteria prescribed in O. Reg.

ID No.	Resource Type and Address/ Location	Summary of Impact and Mitigation Recommendations
		<p>9/06. If the property is found to have CHVI, then a description of the property, Statement of CHVI, and list of heritage attributes must be prepared. The HIA must include an assessment of impacts and include a conservation strategy and site specific mitigation measures to ensure the CHVI and heritage attributes of the property are conserved.</p>

Study Limitations

WSP Canada Inc. (WSP) prepared this report solely for the use of the intended recipient, CBM Aggregates (CBM), a division of St. Marys Cement Inc. (Canada), in accordance with the professional services agreement between the parties. In the event a contract has not been executed, the parties agree that the WSP General Terms for Consultant shall govern their business relationship which was provided to you prior to the preparation of this report.

The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment.

The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by WSP and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

WSP disclaims any obligation to update this report if, after the date of this report, any conditions appear to differ significantly from those presented in this report; however, WSP reserves the right to amend or supplement this report based on additional information, documentation or evidence. WSP makes no other representations whatsoever concerning the legal significance of its findings.

The intended recipient is solely responsible for the disclosure of any information contained in this report. If a third party makes use of, relies on, or makes decisions in accordance with this report, said third party is solely responsible for such use, reliance or decisions. WSP does not accept responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken by said third party based on this report.

WSP has provided services to the intended recipient in accordance with the professional services agreement between the parties and in a manner consistent with that degree of care, skill and diligence normally provided by members of the same profession performing the same or comparable services in respect of projects of a similar nature in similar circumstances. It is understood and agreed by WSP and the recipient of this report that WSP provides no warranty, express or implied, of any kind. Without limiting the generality of the foregoing, it is agreed and understood by WSP and the recipient of this report that WSP makes no representation or warranty whatsoever as to the sufficiency of its scope of work for the purpose sought by the recipient of this report.

In preparing this report, WSP has relied in good faith on information provided by others, as noted in the report. WSP has reasonably assumed that the information provided is correct and WSP is not responsible for the accuracy or completeness of such information.

Benchmark and elevations used in this report are primarily to establish relative elevation differences between the specific testing and/or sampling locations and should not be used for other purposes, such as grading, excavating, construction, planning, development, etc.

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This limitations statement is considered an integral part of this report.

Abbreviations

BHR	Built Heritage Resource
CHER	Cultural Heritage Evaluation Report
CHL	Cultural Heritage Landscape
CHVI	Cultural Heritage Value or Interest
HCP	Heritage Conservation Plan
HIA	Heritage Impact Assessment
MCM	Ministry of Citizenship and Multiculturalism
OHA	<i>Ontario Heritage Act</i>
PHP	Provincial Heritage Property
PPS	Provincial Planning Statement
SCHVI	Statement of Cultural Heritage Value of Interest

Glossary

Adjacent lands	Those lands contiguous to a protected heritage property or as otherwise defined in the municipal official plan (Government of Ontario 2024).
Built Heritage Resource:	Means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community [Indigenous Nations]. Built heritage resources are located on property that may be designated under Parts IV or V of the <i>Ontario Heritage Act</i> , or that may be included on local, provincial, federal and/or international registers (Government of Ontario 2024).
Conserved:	Means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments (Government of Ontario 2024).
Cultural Heritage Landscape:	Means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community [Indigenous Nations]. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the <i>Ontario Heritage Act</i> , or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms (Government of Ontario 2024).
Heritage Attributes:	Means the principal features or elements that contribute to a protected heritage property's cultural heritage value or interest, and may include the property's built, constructed, or manufactured elements, as well as natural landforms, vegetation, water features, and its visual setting (e.g., significant views or vistas to or from a protected heritage property) (Government of Ontario 2024).
Protected Heritage Property:	Means property designated under Parts IV, V or VI of the <i>Ontario Heritage Act</i> ; property subject to a heritage conservation easement under Parts II or IV of the <i>Ontario Heritage Act</i> ; property identified by the Province and

prescribed public bodies as provincial heritage property under the *Standards and Guidelines for Conservation of Provincial Heritage Properties*; property protected under federal legislation, and UNESCO World Heritage Sites (Government of Ontario 2024).

Significant:

In regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province under the authority of the *Ontario Heritage Act* (Government of Ontario 2024).

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1 INTRODUCTION

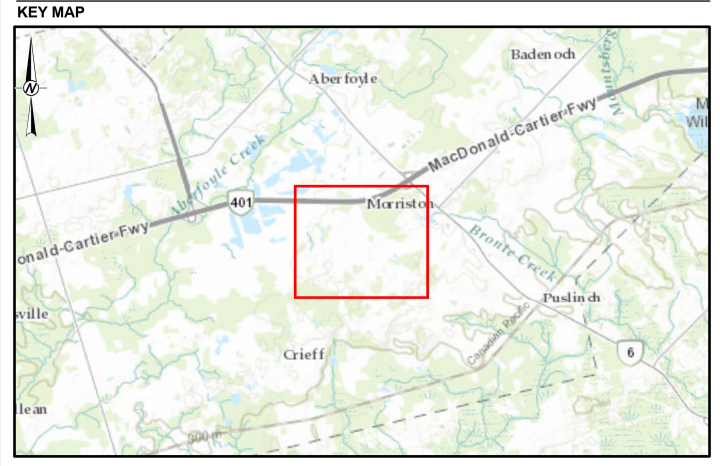
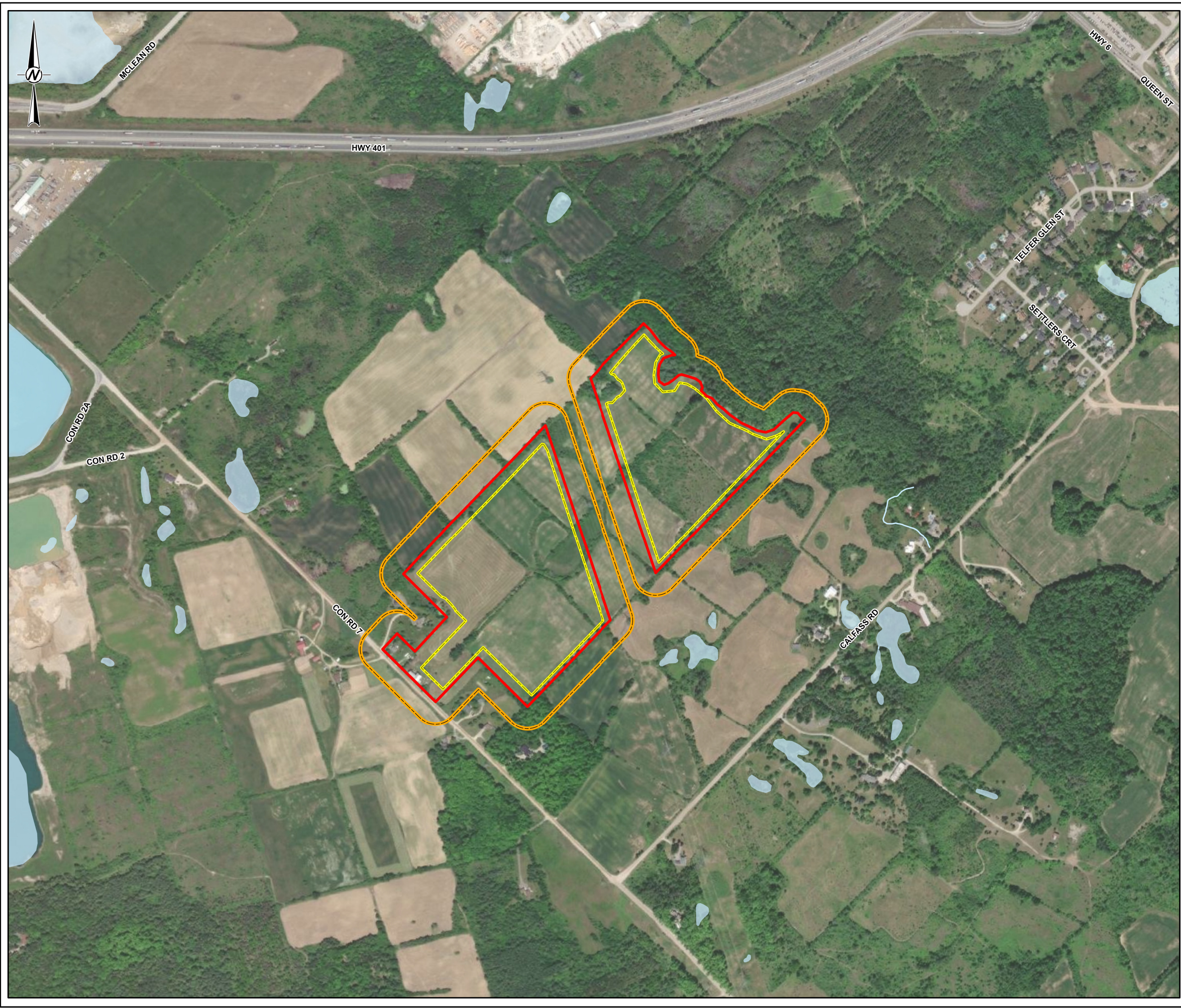
CBM Aggregates (CBM), a division of St. Marys Cement Inc. (Canada), is applying to the Ministry of Natural Resources and Forestry (MNRF) for a new Class A Licence (Pit Below Water) under the *Aggregate Resources Act* (ARA), for the Township of Puslinch, Wellington County, Ontario (the Project). Golder Associates Ltd. (now WSP Canada Inc [WSP]) was retained by CBM to complete a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (Cultural Heritage Report) as part of the licence application for the Project.

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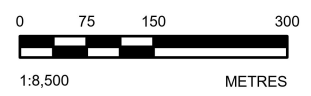
The Project's preliminary extraction area comprises part of Lot 29, Concession 7, in the Township of Puslinch, County of Wellington. For the purposes of this Cultural Heritage Report, the "Study Area" is comprised of the preliminary extraction area plus a 50 metre (m) buffer to account for the risk of potential adverse impacts to known or potential built heritage resources (BHRs) or cultural heritage landscapes (CHLs) on adjacent parcels (Figure 1 and Figure 2).

Following guidance provided by the Ministry of Citizenship and Multiculturalism (MCM), municipal documents such as Wellington County's *Official Plan* (OP), and recognized conservation manuals such as Canada's Historic Places' (CHP) 2010 *Standards and Guidelines for the Conservation of Historic Places in Canada* (CHP Standards and Guidelines), this Cultural Heritage Report includes:

- an overview of heritage legislation and policies in Ontario, and an outline of the methods that were used to identify and assess BHRs and CHLs within the Study Area
- an overview of the Study Area's historical development and existing conditions
- an inventory of known and/ or potential BHRs and CHLs within the Study Area
- a description of the proposed Project and an assessment of anticipated impacts to known and/ or potential BHRs and CHLs within the study area
- recommendations for cultural heritage mitigation or further studies where necessary



- LEGEND**
- WATERCOURSE
 - LICENCE BOUNDARY
 - LIMIT OF EXTRACTION
 - 50 M STUDY AREA
 - WATERBODY
 - ROADWAY



NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
 1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
 2. IMAGERY CREDITS: WORLD TOPOGRAPHIC MAP: CITY OF HAMILTON, TOWN OF MILTON, PROVINCE OF ONTARIO, ONTARIO MNR, ESRI CANADA, ESRI, HERE, GARMIN, USGS, NGA, EPA, USDA, NPS, AAFC, NRCAN
 3. LICENSE BOUNDARY PROVIDED BY MHBC MARCH 2025
 4. EXTRACTION LIMIT PROVIDED BY MHBC JUNE 2025
 5. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
 CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC. (CANADA)

PROJECT
 SAFARIK PIT

TITLE
AERIAL IMAGERY SHOWING THE LOCATION OF THE STUDY AREA

CONSULTANT	YYYY-MM-DD	2025-07-15
	DESIGNED	SO
	PREPARED	SO/MC
	REVIEWED	RP
	APPROVED	DE

PROJECT NO. 21476582 CONTROL 0004 REV. 0 FIGURE 2

PATH: S:\Client\Worawit\11_Clients\Newbourn_P1669_PROD\21476582_SafariK_P1669\11_Clients\Newbourn_P1669_PROD\21476582_0000_HIS_0002\476582_0000_HIS_0002.mxd. PRINTED ON: AT 2:56:17 PM

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2 SCOPE AND METHODOLOGY

The scope of this Cultural Heritage Report was defined by guidance outlined in the MCM's 2022 *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist* (the MCM Checklist) and the 2006 *Ontario Heritage Tool Kit: Heritage Resources in the Land Use Planning Process* (MCM 2006a,b,c). The MCM Checklist provides a screening tool to identify known or recognized BHRs and CHLs within the Study Area, as well as commemorative plaques, cemeteries, Canadian Heritage River watersheds, properties with buildings or structures 40 or more years old, or potential CHLs.

For this Cultural Heritage Report, WSP:

- researched archival and published sources relevant to the historical and geographic context of the Study Area
- reviewed federal, provincial, and municipal heritage registers, inventories, and databases to identify known BHRs and CHLs within the Study Area. Sources relevant to this study include:
 - *Canadian Register of Historic Places* (<https://www.historicplaces.ca/en/pages/about-afropos.aspx>)
 - *Parks Canada Directory of Federal Heritage Designations* (http://www.pc.gc.ca/apps/dfhd/search-recherche_eng.aspx) and *Directory of Heritage Railway Stations* (<https://www.pc.gc.ca/en/culture/clmhc-hsmbc/pat-her/gar-sta/on>)
 - *Canadian Heritage Rivers System* list of designated heritage rivers (<https://chrs.ca/en>)
 - Ontario Heritage Trust (OHT) *Places of Worship Inventory* (<https://www.heritagetrust.on.ca/en/places-of-worship/places-of-worship-database/search>), *Plaque Database* (<http://www.heritagetrust.on.ca/en/online-plaque-guide>), online map of OHT Buildings and Easements (<https://www.heritagetrust.on.ca/en/index.php/property-types/buildings>), and *Ontario Heritage Act (OHA) Register* (<https://www.heritagetrust.on.ca/en/oha/basic-search>)
 - Township of Puslinch *Designated and Listed Properties on Heritage Register* webpage (<https://puslinch.ca/wp-content/uploads/2024/04/Designated-and-Listed-Properties-on-Heritage-Register-April-2024.pdf>)
- engaged heritage planning staff at the MCM, Township of Puslinch, and OHT
- conducted a field investigation from within the preliminary extraction area as well as from the public right-of-way (RoW) to inventory and document known and/ or potential BHRs and CHLs within the Study Area and to understand the wider built and landscape context
- completed screening-level assessments of properties with buildings or structures 40 or more years old and assessed their potential cultural heritage value or interest (CHVI) at a preliminary level
- assessed the risk of impact to known and/ or potential BHRs and CHLs
- where necessary, recommended mitigation and conservation measures using MCM and other guidance documents

Primary and secondary sources, including historical maps, aerial imagery, photographs and genealogical histories were accessed from published and online sources such as the Ontario Council of University Libraries' (OCUL) *Historical Topographic Map Digitization Project*, the University of Toronto's Map and Data Library and *Ontario*

Historical County Maps Project, the University of McGill's *Canadian County Atlas Project*, and the Internet Archive's *Open Library*.

Cultural Heritage Specialist Robert Pinchin conducted the field investigation on 28 March 2024, which included recording and photographing properties and landscapes within the Study Area from vantage points within the preliminary extraction area as well as from the public right of way.

The approach and terms for impact assessment and mitigation measures follow the *Ontario Heritage Toolkit* (MCM 2006 a;b;c), supplemented with recognized federal and international guidance such as the CHP Standards and Guidelines and the *Guidelines for Landscape and Visual Impact Assessment, Third Edition* (Landscape Institute 2013).

2.1 Record of Engagement

Table 2 summarizes the results of engagement conducted for this Cultural Heritage Report.

Table 2: Results of Engagement

Contact	Date of contact and query	Response
Karla Barboza, Heritage Team Lead, Ministry of Citizenship and Multiculturalism (MCM)	Information gathering request sent via email on April 26, 2024.	Response received from Karla Barboza on April 29, 2024. Barboza stated that no properties within the Study Area have been designated by the Minister, and that the MCM is not aware of any provincial heritage properties within, or adjacent to, the Study Area.
Courtney Kovacich, Provincial Heritage Registrar, Ontario Heritage Trust.	Information gathering request sent via email on April 26, 2024.	Response received from Courtney Kovacich on May 6, 2024. Kovacich stated that the Study Area does not contain (nor is it adjacent to) any properties subject to a Trust easement or Trust ownership, or a provincial plaque.
Laura Emery, Communications and Committee Coordinator, Township of Puslinch	Information gathering request sent on April 26, 2024 and follow up request sent on March 17, 2025.	Response received from Laura Emery on March 19, 2025. Emery stated the Study Area is not designated under Part IV of the OHA and is not listed on the Township's Municipal Heritage Register.

3 POLICY FRAMEWORK

Cultural heritage resources are recognized, protected, and managed through a number of international, federal, provincial and municipal planning and policy regimes. These policies have varying levels of authority, though generally all inform decision-making on identification and evaluation of BHRs and CHLs.

3.1 Provincial Policies

3.1.1 Aggregate Resources Act

The 2020 *Aggregate Resources of Ontario: Technical Reports and Information Standards* adopted by Ontario Regulation 244/97 under the *Aggregates Resources Act* states that applications for a Class A licence, Class B licence, or an aggregate permit must include a Cultural Heritage Report consistent with provincial requirements under the *Ontario Heritage Act* and *Provincial Planning Statement* (MNR 2020). The Standards indicate that the consideration of cultural heritage is required to evaluate the potential for BHRs and CHLs. In addition to screening the Study Area for known or potential BHRs and CHL, the Standards state that a Cultural Heritage Evaluation Report (CHER) is required for any potential BHRs and/ or CHLs identified, and that the CHER must be prepared by a professional with appropriate experience and expertise. Following the CHER, if the evaluation determines one or more BHRs or CHLs to have CHVI, a Heritage Impact Assessment (HIA) must be completed.

3.1.2 Provincial Planning Statement (PPS)

The PPS provides policy direction to the entire Province of Ontario on matters of provincial interest related to land use planning and development (Government of Ontario 2024). Under the PPS, the conservation of cultural heritage is identified as a matter of provincial interest. Section 4.6 of the PPS gives direction on the consideration of cultural heritage and archaeology (Government of Ontario 2024). Specifically, the following direction is given regarding built heritage resources, cultural heritage landscapes, and protected heritage properties:

4.6.1 Protected heritage property, which may contain built heritage resources or cultural heritage landscapes, shall be conserved.

4.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property unless the heritage attributes of the protected heritage property will be conserved.

4.6.5 Planning authorities shall engage early with Indigenous communities and ensure their interests are considered when identifying, protecting and managing archaeological resources, built heritage resources and cultural heritage landscapes.

(Government of Ontario 2024)

3.1.3 Ontario Heritage Act

The *Ontario Heritage Act* (OHA) gives municipalities and the provincial government powers to preserve the heritage of Ontario, with a primary focus on protecting heritage properties and archaeological sites. The OHA grants authority to municipalities and the province to identify and designate properties of heritage significance, provide standards and guidelines for the preservation of heritage properties, and enhance protection of Heritage Conservation Districts (HCDs), marine heritage sites and archaeological resources.

Properties can be designated individually (Part IV of the OHA) or as part of a larger group of properties, known as an HCD (Part V of the OHA). Designation offers protection for the properties under Sections 33 and 34 of the OHA, prohibiting the owner of a designated property from altering, demolishing or removing a building or structure

on the property unless the owner applies to the council of the municipality and receives written consent to proceed with the alteration, demolition or removal.

The evaluation of BHRs and CHLs is guided by Ontario Regulation (O. Reg.) 9/06 and 10/06, as amended by O. Reg. 569/22. O. Reg. 9/06 prescribes the criteria for determining CHVI of local significance while O. Reg. 10/06 prescribes the criteria for determining CHVI of provincial significance.

O. Reg. 9/06, as amended by O. Reg. 569/22, provides nine principal criteria for determining CHVI:

- 1) *The property has design or physical value because it is a rare, unique, representative or early example of a style, type, expression, material or construction method,*
- 2) *The property has design or physical value because it displays a high degree of craftsmanship or artistic merit, or*
- 3) *The property has design or physical value because it demonstrates a high degree of technical or scientific achievement.*
- 4) *The property has historical value or associative value because it has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,*
- 5) *The property has historical value or associative value because it yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or*
- 6) *The property has historical value or associative value because it demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.*
- 7) *The property has contextual value because it is important in defining, maintaining or supporting the character of an area,*
- 8) *The property has contextual value because it is physically, functionally, visually or historically linked to its surroundings, or*
- 9) *The property has contextual value because it is a landmark.*

Per the O. Reg. 569/22 amendment to O. Reg. 9/06, if a property meets two or more of these criteria, it may be considered for designation under Part IV, Section 29 of the OHA. Although these criteria were developed to determine whether a property merits designation under Part IV of the OHA, they are also used to identify properties with potential CHVI that may never be considered for designation.

Designated heritage properties are formally described with a Statement of Cultural Heritage Value or Interest (SCHVI) that includes a brief property description, a succinct statement of the property's cultural heritage significance, and a list of its heritage attributes. The latter is defined in the OHA to mean "in relation to real property, and to the buildings and structures on the real property, the attributes of the property, buildings and structures that contribute to their cultural heritage value or interest." The designation is then recognized through by-law, and the property must be included on a "Register" maintained by the municipal clerk.

Under Part IV, Section 27, of the OHA, municipalities must maintain a Register of properties situated in the municipality that are of CHVI. A municipality may also "list" a property on the Register to indicate it as having potential CHVI. This provides interim protection against demolition in the form of a 60-day delay in issuing a demolition permit. Listed properties, although recognized as having potential CHVI, are not protected under the

OHA as designated properties, but are acknowledged under Section 2 of the PPS (Ontario Government 2020). Importantly, designation or listing in most cases applies to the entire property, not only individual structures or features.

3.1.4 Provincial Heritage Guidance

3.1.4.1 Ministry of Citizenship and Multiculturalism

To advise municipalities, organizations, and individuals on heritage protection and conservation, the Province, through the MCM, has developed a series of guidance documents. The MCM Checklist provides a screening tool to identify known BHRs and CHLs, commemorative plaques, cemeteries, Canadian Heritage River watersheds, properties with structures 40 or more years old, or potential heritage properties. If known and/ or potential BHRs and CHLs are identified, the MCM Checklist then advises whether further investigation as part of a CHER or HIA is required.

Further guidance on identifying, evaluating and assessing impacts to BHRs and CHLs is provided in the *Ontario Heritage Tool Kit* series. Of these, *Heritage Property Evaluation* (MCM 2006a) describes in detail the O. Reg. 9/06 criteria and methods for researching and evaluating potential cultural resources, while the *Heritage Resources in the Land Use Planning Process* (MCM 2006b) provides an outline for the contents of an HIA, which it defines as:

“a study to determine if any cultural resources (including those previously identified and those found as part of the site assessment) are impacted by a specific proposed development or site alteration. It can also demonstrate how the cultural resource will be conserved in the context of redevelopment or site alteration. Mitigative or avoidance measures or alternative development or site alteration approaches may be recommended.”

For large study areas, a Cultural Heritage Report combines CHER and HIA studies at a preliminary level to identify known and/ or potential BHRs and CHLs and assess the impacts of the proposed work. The MCM's 2019 *Sample Tables and Language for Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment* (MCM 2019) provides guidance to identify baseline cultural heritage conditions within a study area, identify preliminary potential project-specific impacts to known and/ or potential BHRs and CHLs identified, and propose and recommend measures to avoid or mitigate negative impacts to these resources.

3.2 Municipal Heritage Policies

3.2.1 County of Wellington

The Township of Puslinch defers its significant land use policy directions and policy framework to the County of Wellington's *Official Plan* (OP) (Wellington County 2024). The OP is intended to, “give direction over the next 20 years, to the physical development of the County its local municipalities and to the long term protection of County resources.” (Wellington County 2024). Part 4 of the OP is titled *General County Policies* includes Section 4.1: *Cultural Heritage and Archaeological Resources*. Of relevance to this Project are:

■ 4.1.5 Policy Direction

- a) *significant built heritage resources and significant cultural heritage landscapes shall be conserved. Conserved means the identification, protection, use and/or management of heritage and archeological resources in such a way that their heritage values, attributes and integrity are retained. This may be addressed through a conservation plan or heritage impact assessment in accordance with Section 4.6.7.*

- b) *The need for a Heritage Impact Assessment and/or Conservation plan will be based on the heritage attributes or reasons for which the resource is identified as significant, and will normally be identified in pre-consultation on development applications.*
- c) *Wellington County will work with its local municipalities to identify significant cultural heritage landscapes. The identification of significant cultural heritage landscapes shall be implemented through at least one of the following options:*
 - i) *Added to an Official Plan through an Amendment that shows the resource as an overlay designation on the Schedule, and adds site-specific policies where needed;*
 - ii) *included in the municipal register of properties that Council considers to be of cultural heritage value or interest but have been designated;*
 - iii) *Designated under the Ontario Heritage Act.*
- d) *The need for a Heritage Impact Assessment*
- e) *Wellington will encourage the conservation of significant built heritage resources through heritage designations and planning policies which protect these resources.*
- f) *The re-use of heritage buildings is often a valid means of ensuring their restoration, enhancement or future maintenance. Projects to re-use heritage buildings may be given favourable consideration if the overall results are to ensure the long term protection of a heritage resource and the project is compatible with surrounding land uses and represents an appropriate use of land.*
- g) *Where a property has been identified as a protected heritage property, development and site alteration may be permitted on adjacent lands where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved. Mitigative measures and/or alternative development approaches may be required in order to conserve the heritage attributes of the protected heritage property affected by the adjacent development or site alteration.*
- h) *The County recognizes the important cultural significance of the Grand River as a Canadian Heritage River, and the need to conserve its inherent values.*

4 GEOGRAPHIC AND HISTORICAL CONTEXT

4.1 Geographic Context

The Study Area is situated within the Horseshoe Moraines physiographic region of Ontario. (Chapman and Putnam 1984: 136-137).

The Horseshoe Moraines physiographic region stretches from the edge of the escarpment in Caledon to west of the Niagara Escarpment creating a belt of moderately hilly relief (Chapman and Putnam 1984: 127-129). The moraines are accompanied by a system of old spillways with broad gravel terraces and swampy floors (Chapman and Putnam 1984: 128). The soils within the Study Area are primarily Dumfries Loam, which can be found in irregular, steeply sloping, or stony contexts, but their good natural drainage would have been suitable for Indigenous and post-contact agricultural practices. Originally, the Study Area was forested in pines and hardwoods, including sugar maples, beech, wild cherry, and red oak varieties (Chapman and Putnam 1984: 136).

4.2 Historical Context

4.2.1 Pre-contact period

The following is a brief history of Indigenous land use in the general area of the Study Area from the first people to arrive following deglaciation, to the recent past. It is primarily based on archaeological studies and refers to sites, phases and time periods defined by archaeologists, not those used by Indigenous peoples.

The earliest evidence of human activity in the Great Lakes area can be traced back approximately 11,000 years. These first arrivals, known as Paleo People, moved into Ontario as the last of the glaciers retreated northward (10,950 to 9,950 Before Present [BP]). The limited available evidence suggests that Paleo People were highly mobile hunters and gatherers relying on migratory caribou, small game, fish and wild plants found in the sub-arctic environment. Their sites have been located along the former shores of glacial lakes such as Lake Algonquin and along the north shore of present-day Lake Ontario. The end of the Paleo Period was heralded by numerous technological and cultural innovations that appeared throughout the subsequent Archaic Period. These innovations may be best explained in relation to the dynamic nature of the post-glacial environment and region-wide population increases.

During the succeeding Archaic Period (9,950 to 2,900 BP), the environment of southern Ontario became more temperate, yielding larger areas suitable for human habitation. Archaic groups were also hunter-gatherers, yet their tool kit was more varied, reflecting a greater reliance on local food resources instead of high mobility. In the Middle to Late Archaic Periods, extensive trade networks developed and included copper from the north shore of Lake Superior among other exotic items.

The appearance of cemeteries during the Late Archaic Period has been interpreted as a response to increased population densities and competition between local groups for access to resources. These cemeteries are often located on heights of well-drained sandy/gravel soils adjacent to major watercourses.

The Woodland Period (2,900 to 350 BP) is distinguished by the introduction of ceramics into southern Ontario. Extensive trade networks continued through the early part of this period and Early Woodland populations in Ontario appear to have been heavily influenced by groups to the south, particularly the Adena people of the Ohio Valley. The Late Woodland Period is widely accepted as the beginning of agricultural life ways in south-central Ontario. Researchers have suggested that a warming trend during this time may have encouraged the spread of maize into southern Ontario, providing a greater number of frost-free days (Stothers and Yarnell 1977). The first agricultural villages in southern Ontario date to the 10th century Common Era (CE) and, unlike the riverine base camps of previous periods, were often located upland on well-drained sandy soils.

4.2.2 Post-contact period

When French explorers, missionaries, and fur traders arrived in southern Ontario in the early 1600s, they met diverse communities across the Great Lakes region, including the Nadowek nations of Wendat (Huron), Attawandaron (Neutral), Tionnontaté or Khionontateronon (Petun), and Haudenosaunee (Five Nations before 1722), and the Anishnaabe nations of Ojibwe, Odawa, Nipissing, and Algonquin.

At contact with Europeans, the lands comprising Wellington County were within the sphere of influence of the Attawandaron (Neutral Confederacy), then based to the south along the Fairchild Creek and Big Creek, and to the east along Spencer Creek and Bronte Creek (Lennox and Fitzgerald 1990: 411). However, the “Kitchener Cluster” of sites indicates that Attawandaron directly inhabited the wider locale of the Study Area during the 15th century (Lennox and Fitzgerald 1990; Horne 1987). With the defeat and dispersal of the Attawandaron in 1651-52, the

area fell within the Haudenosaunee Confederacy (then Five Nations) hunting territories, then incorporated into the territories of the Mississauga Anishinaabe by the 1690s (MCFN n.d: 03).

After defeating the French in the Seven Years' War, the British opened negotiations with numerous Indigenous communities in an attempt to solidify their influence and alliances over the territory that would become Canada. The 1763 Royal Proclamation was designed to prevent further unofficial incursions and land transactions in Indigenous-controlled territory (Talking Treaties Collective 2022: 78). To ratify the Proclamation with communities living in the Great Lakes Region, British colonial official Sir William Johnson convened a Treaty Council with twenty-four communities at Fort Niagara in 1764. After a month of negotiations, the communities agreed to a "grand peace and alliance" with the Crown, one that extended the 1667 Covenant Chain agreement between the Haudenosaunee and British to the Western Alliance Nations including the Anishinaabeg and Nadowek Wyandot (Talking Treaties Collective 2022: 79-86). The 1764 Treaty of Niagara was visually represented in the 1764 Great Covenant Chain Wampum Belt and the 24 Nations Wampum Belt, which were to serve as a record that any future agreements between the communities and Crown must be negotiated through Treaty and as equals (Talking Treaties Collective 2022: 86-87).

In 1784, the Study Area was included as part of the Haldimand Tract, a corridor "six miles deep" from each side of the Grand River that Kanienkagen (Mohawk) chief Thayendanegea (also known as Joseph Brant) had purchased from the Mississaugas and negotiated with Governor Frederick Haldimand as compensation for military support that the Haudenosaunee Confederacy (Six Nations) had provided British forces in New York during the American War of Independence (Taylor 2006: 121; Morris 1943: 19-21). Thayendanegea and his Kanienkagen followers first settled on the east side of the Grand River near a shallow ford at a settlement that became known as Brantford, while members of the Guyohkohnyoh (Cayuga), Onayotekaono (Oneida), Onundagaono (Onondaga), Onondowahgah (Seneca), and Ska-Ruh-Reh (Tuscarora) established village-like residences and isolated farms further downriver, continuing their distinctive nation communities (Ferris 2009: 125-126; Johnston 1994: 170).

It is now recognized that the British —and later Canadian governments— and Indigenous communities had different understandings of these treaties, but they remain legally binding agreements that "form the basis of the relationship between Indigenous and non-Indigenous people" (Government of Ontario 2022). Presently, there are ongoing land claims between Indigenous communities and the Government of Canada related to differing perspectives on treaty lands and traditional territory in Ontario (Sault 2021; SNGR 2022; MCFN 2022; and Haudenosaunee Confederacy 2022). Indigenous perspectives on land rights and treaties from the communities traditionally associated with the lands being considered by this project include:

- Mississaugas of the Credit First Nation (MCFN): [Treaty Lands & Territory – Mississaugas of the Credit First Nation \(mcfn.ca\)](#)
- Six Nations of the Grand River (SNGR): <https://www.sixnations.ca/key-issues/land-rights>
- Haudenosaunee Confederacy: <https://www.haudenosauneeconfederacy.com/land-aquisition/>

Presently, Wellington County has developed the following land acknowledgement to recognize the traditional territory of Indigenous communities who called, and still call, the land home before the arrival of settlers:

The County of Wellington is situated on multiple Treaties within the traditional territory of the Anishinaabeg. Historic agreements also include those made with the Haudenosaunee. We acknowledge this land has and continues to be, inhabited by other nations throughout time such as the Attawandaron, Métis and the Inuit. We acknowledge we are not the original stewards of these lands but have the responsibility of caring for this

land and its people, and to ensure that future generations are able to thrive here. The County of Wellington remains dedicated to a better understanding of past, present and future as a gesture of commitment to the process of ongoing and meaningful Reconciliation.

(Wellington County 2023a)

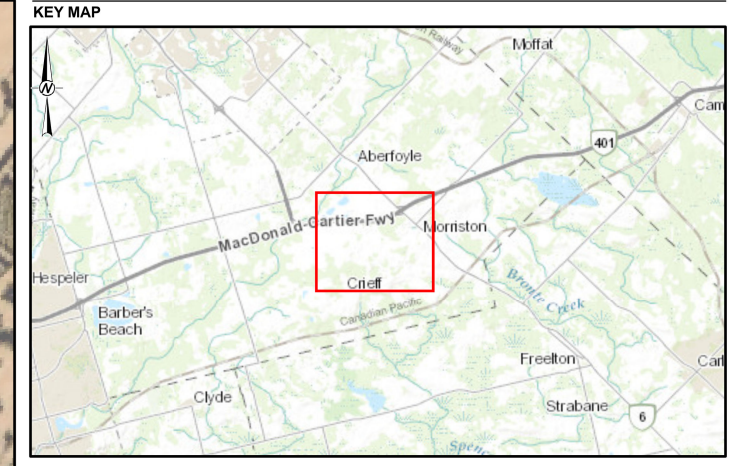
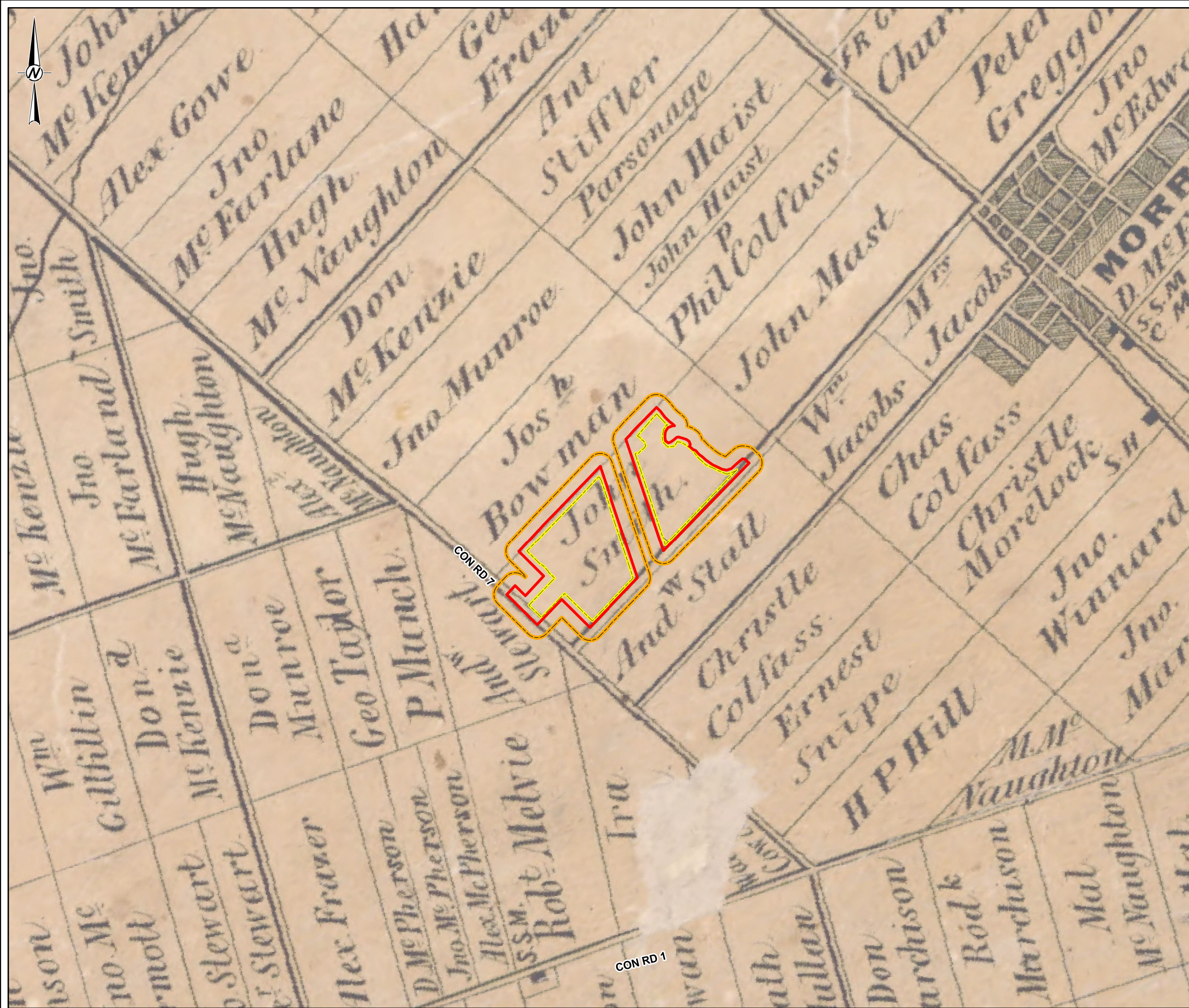
4.2.3 Township and County History

The Wellington District was created in 1838 out of parts of the Gore, London, and Home District and named after the Duke of Wellington, Arthur Wellesley (Armstrong 1985). With the abolition of the District System in 1849, the United County of Waterloo, Wellington, and Grey was formed in 1852 (Armstrong 1985) This organization was succeeded in 1854 when Wellington County became an individual county composed of Puslinch Township and ten other townships. (Wellington County 2023b). Puslinch Township was surveyed by David Gibson between 1828 and 1831 and contained an area of 59,800 acres (Wellington County Historical Atlas 1906, Armstrong 1985). The township was named after an area in Devonshire, England where Lt. Governor John Colborne met his wife (Wellington County Historical Atlas 1906). Initial development in Puslinch Township was spurred by the development of the Town of Guelph. As Guelph increased in prominence, a road was needed to connect Guelph and Hamilton that was more effective than the existing route that circled through Galt and into Dundas. The Dundas Road (later to be known as Brock Road, and then King's Highway 6) was cleared between the 7th and 8th Concession in Puslinch in and was suitable for wagon travel by 1831. The increase in trade and activity along this route led to the development of settlements such as Aberfoyle and Morriston in Puslinch Township, and Freelon and Carlisle in Flamborough Township.

A review of historical directories, county maps, topographic maps, and aerial photographs chart the 19th to 20th century development of the Study Area. The majority of the study area (the preliminary extraction area) is historically located within Lot 29, Concession 7, Township of Puslinch, Wellington County.

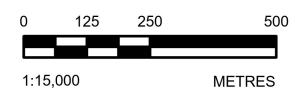
An early 19th century map showing patent claims in Puslinch Township enumerates John Smith as owning the property at Lot 29 (Archives of Ontario 2024) Tremaine's 1861 map of Wellington County indicates the lot was owned by John Smith at this time (Tremaine 1861, Figure 3). No structures or natural features are noted on the 1861 map. Mapping from 1877 and 1906 indicates ownership of the lot had been passed to Mathew Fahrner and his wife (Walker and Miles 1877, Wellington County Historical Atlas 1906). The 1877 map demarcates a house as being located on the southwest corner of the Lot (Figure 4). The 1906 mapping indicates this original house is no longer extant but a new structure has been built on the western edge of the Lot, fronting Concession 7 (Figure 5). This new structure is most likely the existing the farmhouse located at 4275 Concession 7. Topographic mapping produced throughout the 20th century confirms the presence of a farmhouse on the western edge of the property, fronting Concession 7, and the farmhouses adjacent barn is first depicted on the 1963 topographic map. As the barn is considerably older than 1963, it is likely that this is first version of the topographic mapping in which the barn was captured. The topographic mapping, and historic aerial photographs of the Study Area, show the area has largely retained its rural character throughout the 20th century with the most significant change being the construction of a hydroelectric transmission line (Figure 6, Figure 7).

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- LEGEND**
- LICENCE BOUNDARY
 - LIMIT OF EXTRACTION
 - 50 M STUDY AREA



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

- REFERENCE(S)**
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
 2. IMAGERY CREDITS: COUNTY OF WELLINGTON
 3. LICENSE BOUNDARY PROVIDED BY MHBC MARCH 2025
 4. EXTRACTION LIMIT PROVIDED BY MHBC JUNE 2025
 5. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC. (CANADA)

PROJECT
SAFARIK PIT

TITLE
1861 MAP OF WELLINGTON COUNTY SHOWING THE LOCATION OF THE STUDY AREA

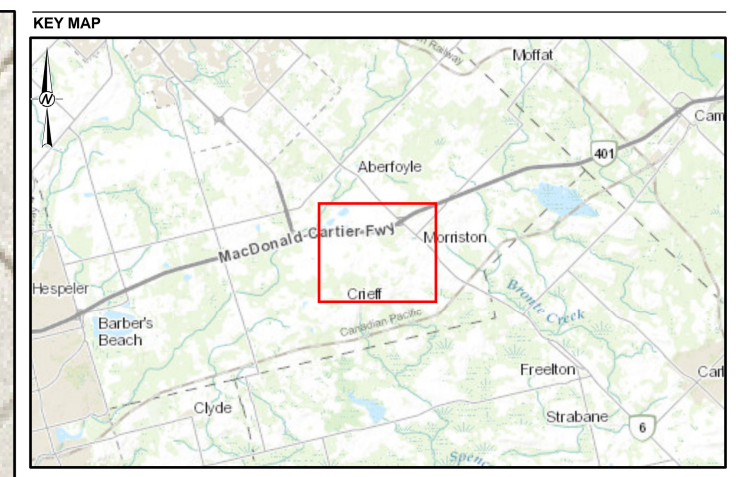
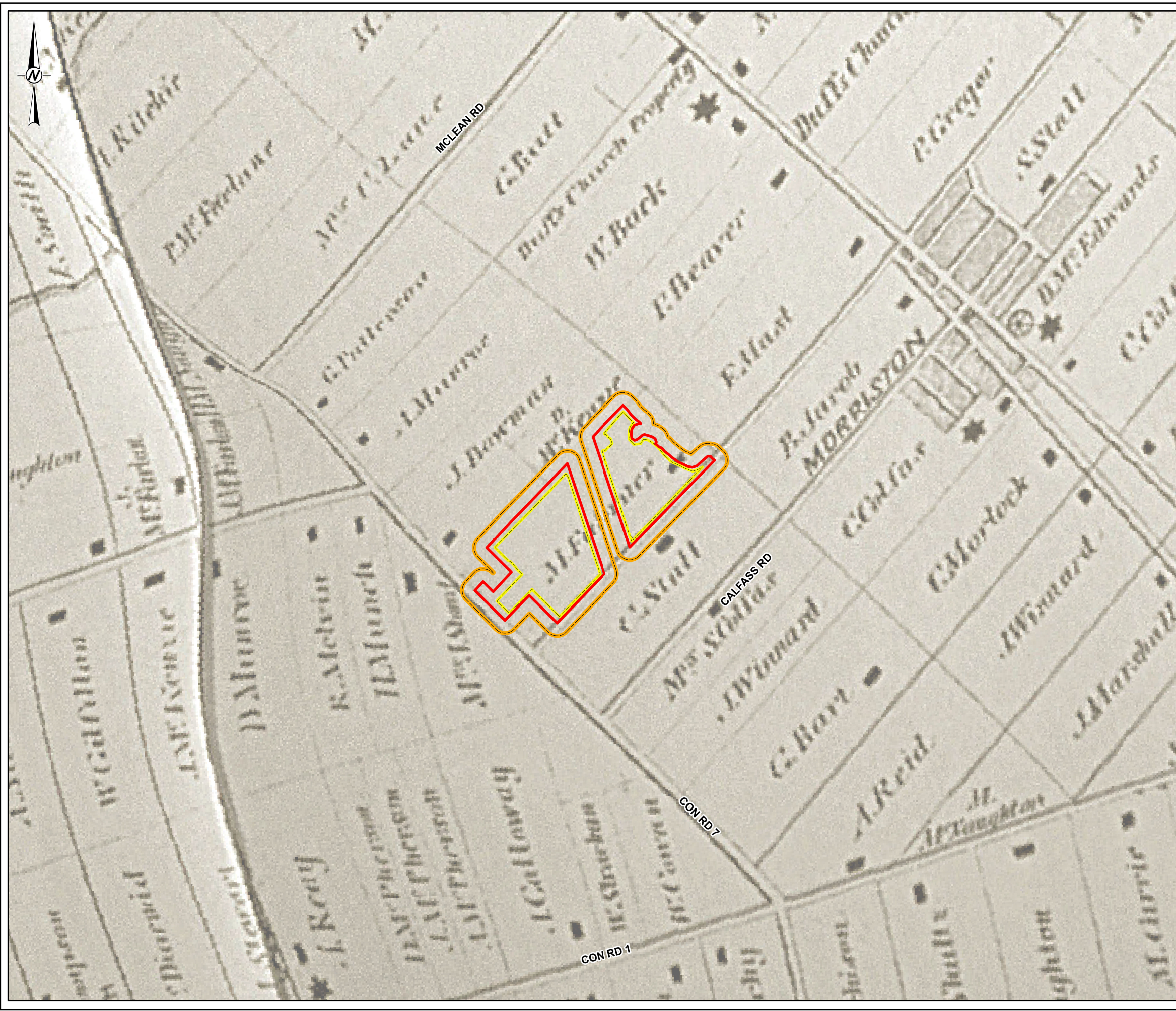
CONSULTANT	YYYY-MM-DD	2025-07-15
DESIGNED	SO	
PREPARED	SO/MC	
REVIEWED	RP	
APPROVED	DE	

PROJECT NO. 21476582 CONTROL 0004 REV. 0 FIGURE 3

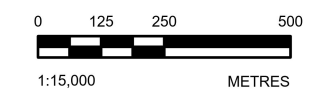


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- LEGEND**
- LICENCE BOUNDARY
 - LIMIT OF EXTRACTION
 - 50 M STUDY AREA



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

- REFERENCE(S)**
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
 2. IMAGERY CREDITS: TOWNSHIP OF PUSLINCH
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 5. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

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PROJECT
SAFARIK PIT

TITLE
1877 MAP OF WELLINGTON COUNTY SHOWING THE LOCATION OF THE STUDY AREA

CONSULTANT	YYYY-MM-DD	2025-07-15
DESIGNED	SO	
PREPARED	SO/MC	
REVIEWED	RP	
APPROVED	DE	

PROJECT NO.	CONTROL	REV.	FIGURE
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5 EXISTING CONDITIONS

A field visit was conducted by Robert Pinchin, Cultural Heritage Specialist with WSP on March 28, 2024 to document the existing conditions of the Study Area. The preliminary extraction area mainly consists of the rural farm property located at 4275 Concession 7 and associated agricultural fields (Plate 1 and Plate 2). A hydroelectric transmission corridor bisects the Study Area, but an easement allows for access between the east and west portions of the Study Area.

The general character of the area surrounding the Study Area is primarily rural with various residential buildings and agricultural structures lining Concession 7 (Plate 3, Plate 4, Plate 5, Plate 6). The Study Area is approximately 2 km west of the community of Morriston and 1.5 km south of Highway 401. Land use activity in the vicinity of the Study Area is primarily agricultural however resource extraction and quarrying operations exist to the north and west.



Plate 1: Residential building at 4275 Concession 7



Plate 2: Barn at 4275 Concession 7



Plate 3: Looking south along Concession 7



Plate 4: 4299 Concession 7



Plate 5: 4278 Concession 7





Plate 6: 4265 Concession 7

5.1 Identified Built Heritage Resources and Cultural Heritage Landscapes

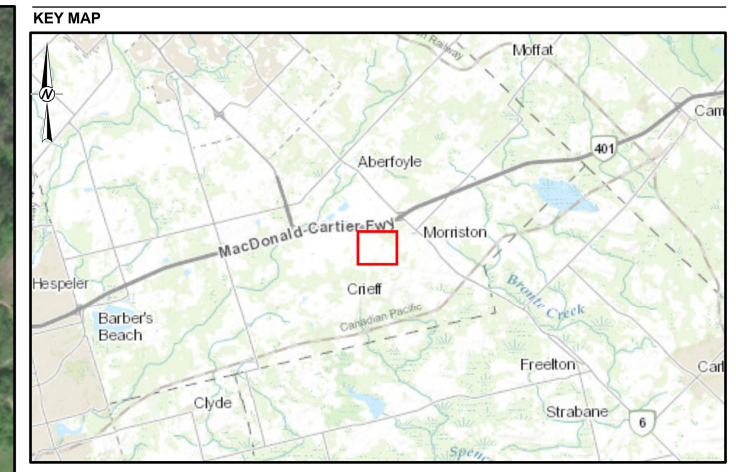
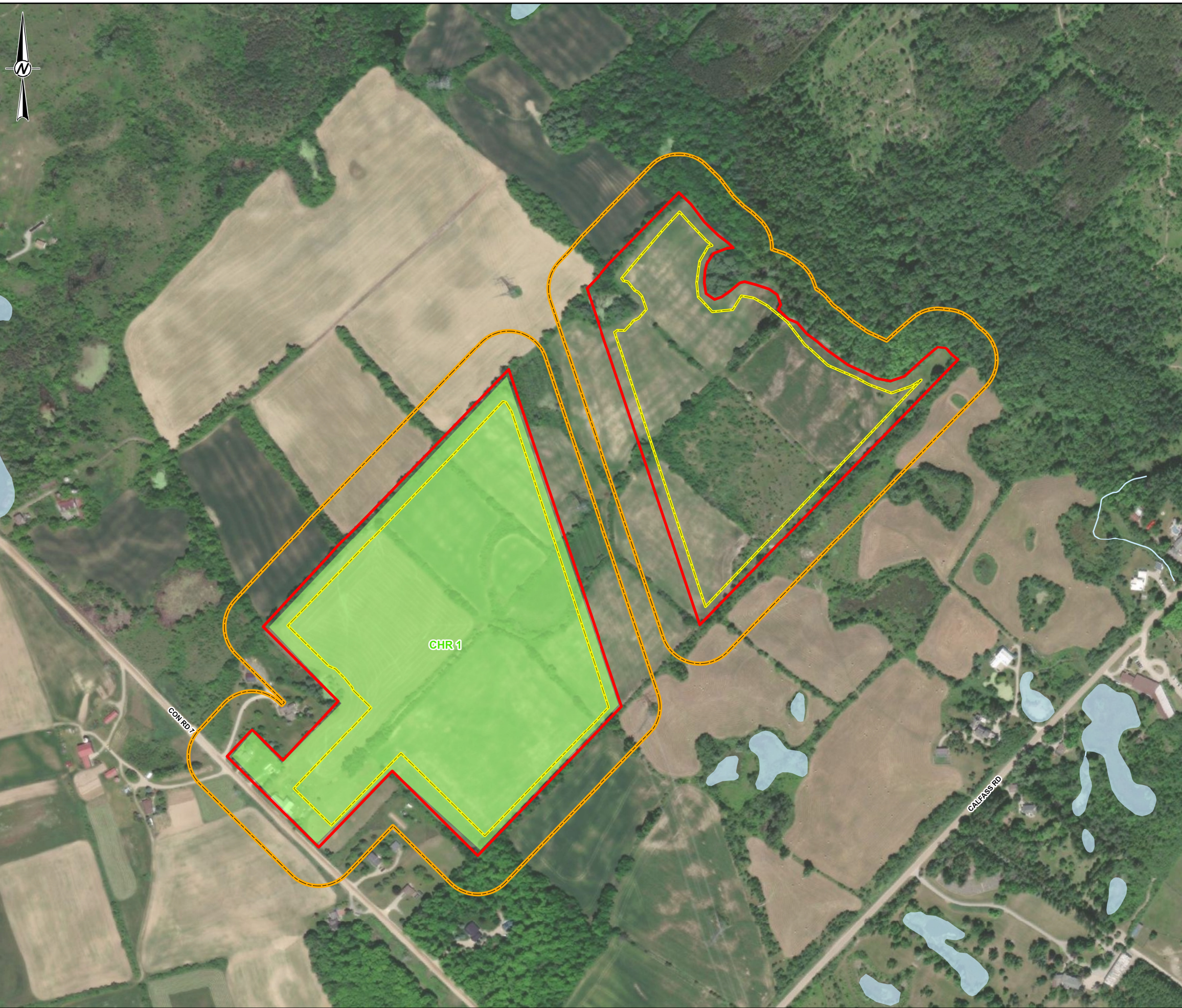
As described in Section 2, known or potential BHRs and CHLs were identified based on the MCM Checklist, which was supplemented by historical research and field investigations. Properties with a date of construction 40 or more years old were documented in the field and then screened at a preliminary level for potential CHVI.

Based on the results of the background research, information gathering, and field investigation, WSP identified one potential heritage property in the Study Area (CHR 1: 4275 Concession 7). Details of the potential heritage property are listed in Table 3 and mapped in Figure 8. Note that the potential CHVI listed in Table 3 is preliminary and can only be confirmed through a full evaluation for CHVI as prescribed in O. Reg. 9/06 (as amended by O. Reg. 569/22).

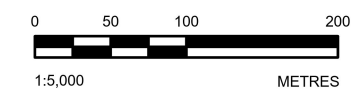
Table 3: Inventory of Built Heritage Resources and Cultural Heritage Landscapes

ID No.	Type	Address and Description	Cultural Heritage Status	Photograph	Description
CHR 1	CHL	4275 Concession 7, Puslinch, Ontario	Identified during background research and field review	 <p data-bbox="1308 963 1734 991"><i>Plate 7: Residence at 4275 Concession 7</i></p>  <p data-bbox="1252 1669 1790 1697"><i>Plate 8: Stone foundation Barn at 4275 Concession 7</i></p>	<p data-bbox="1964 344 2927 451">The property at 4275 Concession 7 contains a collection of structures, land use practices, and spatial arrangements that are demonstrative of the historical Ontario farmstead typology (ERA 2020). CHR 1 includes an entrance driveway framed by vegetation that leads to a farmhouse, outbuildings, a barn, rear fields that are accessed by drive lanes, and a rear woodlot.</p> <p data-bbox="1964 479 2927 848">The residential farmhouse structure is a side gable, wood framed, structure in a simple vernacular early 20th century style. The farmhouse is clad in pebble dash stucco, has a rear addition, multiple windows, and a one-storey, overhanging front porch. The house is located on the northwest portion of the Study Area and is accessed from Concession 7 via a short driveway lined with vegetation. An additional driveway, located south of the main driveway, leads to a small outbuilding located south of the farmhouse. The outbuilding is a simple front gable, wood plank structure clad in insulbrick. The outbuilding is used for storage. South of the farmhouse and outbuilding there is a two-storey wood barn with stone foundations. The barn's foundation is coursed, rough-cut limestone and mortar and is dotted with simple fixed window openings. Structurally, the barn is wood framed and clad with vertical wood planks. The roof is clad in corrugated sheet metal. The barn is a cross gable structure with a gambrel design on the north gable. The south section of the barn appears to be an addition to the original block. A simple wood post and beam fence runs from the barn north along the property line adjacent to Concession 7.</p> <p data-bbox="1964 876 2927 983">Informal circulation routes run throughout the property between the farmhouse, outbuilding, barn, and rear agricultural fields. Collectively, the built and spatial arrangement of the property potentially constitute a representative example of a late 19th – early 20th century Southern Ontario farmhouse complex.</p> <p data-bbox="1964 1012 2834 1040">Potential CHVI: This property has potential CHVI for physical and contextual reasons.</p>

ID No.	Type	Address and Description	Cultural Heritage Status	Photograph	Description
				 <p data-bbox="1143 681 1898 735"><i>Plate 9: Panorama photo showing the residence and outbuildings at 4275 Concession 7</i></p>	



- LEGEND**
- WATERCOURSE
 - CULTURAL HERITAGE RESOURCE
 - WATERBODY
 - LICENCE BOUNDARY
 - LIMIT OF EXTRACTION
 - 50 M STUDY AREA



NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

- REFERENCE(S)**
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
 2. IMAGERY CREDITS: WORLD IMAGERY: MAXAR, WORLD TOPOGRAPHIC MAP: CITY OF HAMILTON, TOWN OF MILTON, ONTARIO BASE MAP, PROVINCE OF ONTARIO, ONTARIO MNR, ESRI CANADA, ESRI, © OPENSTREETMAP CONTRIBUTORS, HERE, GARMIN, USGS, NGA, EPA, USDA, NPS, AAFC, NRCAN
 3. LICENSE BOUNDARY PROVIDED BY MHBC MARCH 2025
 4. EXTRACTION LIMIT PROVIDED BY MHBC JUNE 2025
 5. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC. (CANADA)

PROJECT
SAFARIK PIT

TITLE
IDENTIFIED CULTURAL HERITAGE RESOURCES WITHIN THE STUDY AREA

CONSULTANT	YYYY-MM-DD	2025-07-15
	DESIGNED	SO
	PREPARED	SO/MC
	REVIEWED	RP
	APPROVED	DE

PROJECT NO. 21476582 CONTROL 0004 REV. 0 FIGURE 8

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6 PRELIMINARY ASSESSMENT OF IMPACTS

6.1 Proposed Works

CBM is applying to the MNR for a new Class A Licence (Pit Below Water) under the *Aggregate Resources Act*, for the Township of Puslinch, Wellington County, Ontario. As currently planned, the proposed works for the Project will be limited to the Project's preliminary extraction area which comprises part of Lot 29, Concession 7, in the Township of Puslinch, County of Wellington.

If the Project is found to be feasible and a licence is granted, extraction would be completed in stages and commence in specific portions of the Study Area. Following extraction, areas would be progressively rehabilitated.

While the construction plans for the Project are still in the preliminary phase, the proposed works are anticipated to include:

- Overburden and topsoil stripping
- Sand and gravel extraction activities
- Use of heavy machinery such as excavators
- Use of heavy traffic such as dump trucks
- Vegetation removal and landscaping as necessary

6.2 Assessment Methodology

When determining the impact a project may have on known or identified BHRs or CHLs, the MCM *Heritage Resources in the Land Use Planning Process* advises that the following "negative impacts" be considered:

- *Destruction* of any, or part of any, significant heritage attributes, or features¹
- *Alteration* that is not sympathetic or is incompatible, with the historic fabric and appearance²
- *Shadows* created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden³
- *Isolation* of a heritage attribute from its surrounding environment, context or a significant relationship⁴
- *Direct or indirect obstruction* of significant views or vistas within, from, or of built and natural features⁵

¹ This is used as an example of a *direct* impact in the MCM *Info Bulletin 3*.

² A *direct* impact in the MCM *Info Bulletin 3*.

³ An *indirect* impact in the MCM *Info Bulletin 3*.

⁴ An *indirect* impact in the MCM *Info Bulletin 3*.

⁵ An example of a *direct* and *indirect* impact in the MCM *Info Bulletin 3*. It is a *direct* impact when significant views or vistas within, from or of built and natural features are obstructed, and an *indirect* impact when "a significant view of or from the property from a key vantage point is obstructed".

⁶ A *direct* impact in the MCM *Info Bulletin 3*.

- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces⁶
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect a cultural heritage resource⁷

Other potential impacts may also be considered such as encroachment or construction vibration particularly for heritage attributes within 50 m of proposed construction (Carmen et al. 2012: 31). Historical structures, particularly those built-in masonry, are susceptible to damage from vibration caused by pavement breakers, plate compactors, utility excavations, and increased heavy vehicle travel in the immediate vicinity. Like any structure, they are also threatened by collisions with heavy machinery or subsidence from utility line failures (Randl 2001: 03-06).

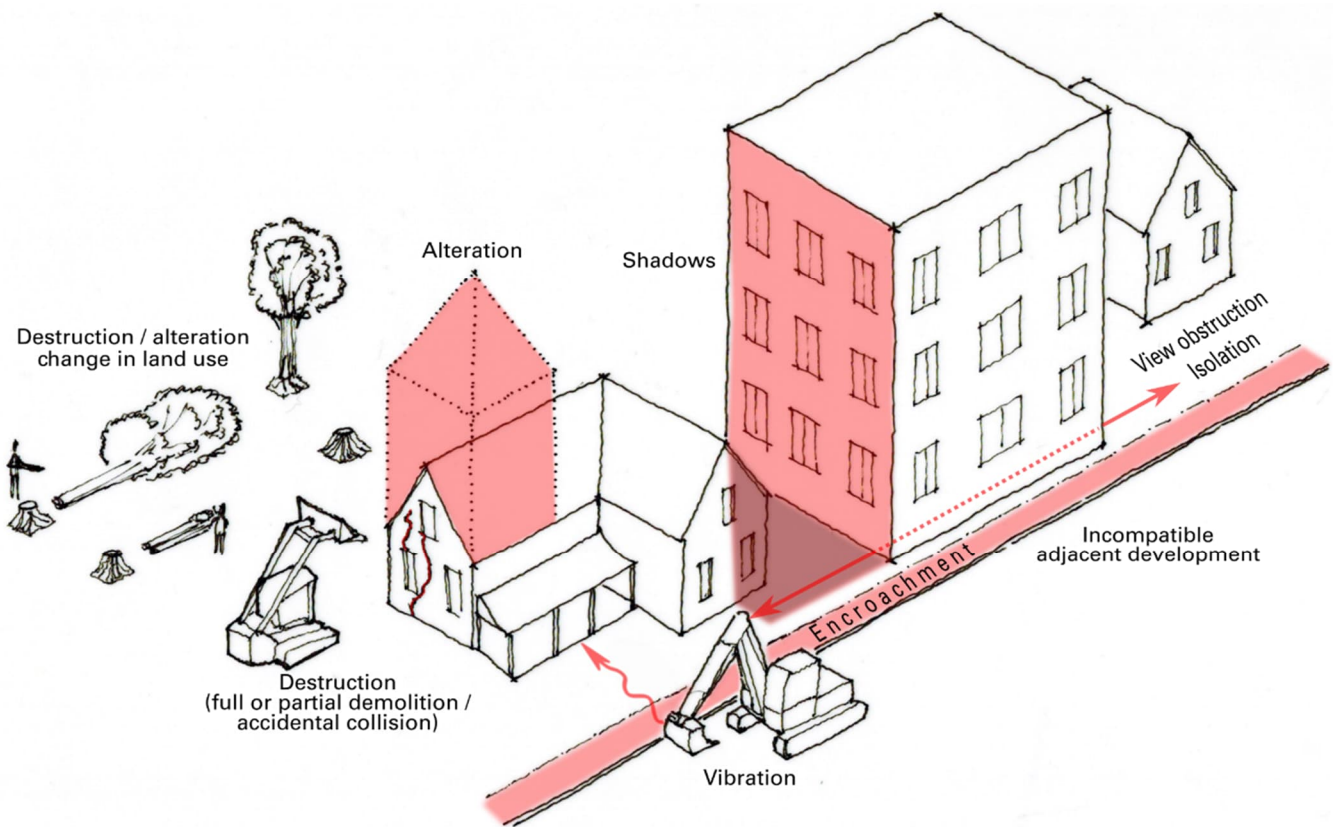


Plate 10: Examples of negative impacts

Although the MCM *Heritage Resources in the Land Use Planning Process* identifies types of impact, it does not advise on how to describe its nature or extent. For this, the MCM 1990 *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* provides criteria of:

⁷ In the MCM *Heritage Resources in the Land Use Planning Process* this refers only to archaeological resources but in the MCM *Info Bulletin 3* this is an example of a *direct* impact to "provincial heritage property, including archaeological resources".

- Magnitude (amount of physical alteration or destruction that can be expected)
- Severity (the irreversibility or reversibility of an impact)
- Duration (the length of time an adverse impact persists)
- Frequency (the number of times an impact can be expected)
- Range (the spatial distribution, widespread or site specific, of an adverse impact)
- Diversity (the number of different kinds of activities to affect a heritage resource) (MCM 1990: 08)

Since advice to describe magnitude is not included in the MCM *Guideline* or any other Canadian guidance document, the ranking provided in the ICOMOS *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS 2011: Appendix 3B) is adapted here. While developed specifically for World Heritage Sites, it is based on a general methodology for measuring the nature and extent of impact to cultural resources in urban and rural contexts developed for the UK Highways Agency *Design Manual for Roads and Bridges* [DMRB]: *Volume 11*, HA 208/07 (2007: A6/11) (Bond and Worthing 2016: 166-167) and aligns with approaches developed by other national agencies such as the Irish Environmental Protection Agency (reproduced in Kalman and Létourneau 2020: 390) and New Zealand Transport Agency (2015).

The ICOMOS impact assessment ranking is:

- Major
 - Change to key historic building elements, such that the resource is totally altered. Comprehensive changes to the setting.
- Moderate
 - Change to many key historic building elements, such that the resource is significantly modified.
 - Changes to the setting of an historic building, such that it is significantly modified.
- Minor
 - Change to key historic building elements, such that the asset is slightly different.
 - Change to the setting of an historic building, such that it is noticeably changed.
- Negligible
 - Slight changes to historic building elements or setting that hardly affect it.
- No impact
 - No change to fabric or setting.

The analysis of impacts includes a summary of each impacted property's cultural heritage significance, and terms provided under conservation or mitigation recommendations are defined as follows:

- **Avoid:** A recommendation to avoid means to move project components to locations a distance from the identified BHRs or CHLs. In all cases avoidance is the preferred approach, although it is recognized that other factors may preclude selecting this option.
- **Monitor for construction vibration:** Although direct impact to BHRs and CHLs may be avoided, indirect impacts from construction vibration may still present a risk. If a vibration risk is identified, the following measures are recommended:
 - *Site control and communication:* The property and specifically the footprint of the building should be clearly marked on project mapping and communicated to all project personnel for avoidance during design, construction, and subsequent operation.
 - *Create a physical buffer.* Temporary fencing should be erected at the nearest property line or lines to ensure that excavation, installation, and associated vehicle traffic during construction will not accidentally impact the property.
 - *Monitor for vibration impact:* Continuous ground vibration monitoring should be carried out near the foundations of the building using a digital seismograph capable of measuring and recording ground vibration intensities in digital format in each of three orthogonal directions. The instrument should also be equipped with a wireless cellular modem for remote access and transmission of data. The installed instrument should be programmed to record continuously, providing peak ground vibration levels at a specified time interval (e.g., 5 minutes) as well as waveform signatures of any ground vibrations exceeding a threshold level that would be determined during monitoring. The instrument should also be programmed to provide a warning should the peak ground vibration level exceed the guideline limits specified (such as 8.0 mm/s). In the event of either a threshold trigger or exceedance warning, data would be retrieved remotely and forwarded to designated recipients.
- **Fugitive dust emissions management plan:** Fugitive dust refers to small particles that become airborne from open sources such as construction sites. In addition to health concerns, these particles may pose a risk to heritage properties if determined to impede or damage heritage attributes. If a fugitive dust emissions risk is identified, the following measure is usually recommended:
 - This plan will follow practices outlined in the Ontario Standards Development Branch Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources (Government of Ontario 2017).
- **Conduct a Cultural Heritage Evaluation Report (CHER) and/or Heritage Impact Assessment (HIA)**

If a potential BHR or CHL cannot be avoided and will be directly impacted by the project, a CHER and/or HIA is recommended to determine if the potential resource meets the criteria for CHVI as prescribed in O. Reg. 9/06. If the heritage evaluation determines the property has CHVI, then an impact assessment will also be required to determine the impact of the proposed detailed design on the property's heritage attributes.

The impacts of the proposed Project on the known or potential BHRs and CHLs are assessed in Table 4 below.

6.2.1 Impact Assessment

Table 4: Preliminary impact assessment and conservation recommendations for known and/ or potential BHRs and CHLs within the study area

ID No.	Resource Type and Address/ Location	Preliminary Analysis of Impact	Conservation/ Mitigation Measures	Consideration of Alternatives
CHR 1	<p>Type: CHL (farm complex)</p> <p>Recognition: Identified during field review:</p> <p>Address: 4275 Concession 7, Puslinch, Ontario</p>	<p>Direct Negative Impact.</p> <p>As currently planned, the proposed extraction area will encompass the majority of the property parcel and is anticipated to directly impact the property's potential CHVI and heritage attributes.</p> <p>The proposed license boundary and extraction area encompasses the area of the residential structure, barn, outbuildings, and agricultural field. The proposed construction activities will include overburden/ topsoil stripping, sand/ gravel extraction, and the use of heavy machinery/ traffic.</p> <p>The location of the proposed construction activities suggests the possible demolition or destruction of the farmhouse, barn, and outbuildings of CHR 1. This will result in the removal of all potential CHVI and heritage attributes and constitutes a major direct impact.</p>	<ul style="list-style-type: none"> ▪ As the Project is anticipated to have a direct negative impact to CHR 1, mitigation is recommended. 	<p>Prior to any site alteration or extraction within the Study Area, a property specific Heritage Impact Assessment (HIA) shall be required. The HIA should include a full evaluation of the property using the criteria prescribed in O. Reg. 9/06. If the property is found to have CHVI, then a description of the property, Statement of CHVI, and list of heritage attributes must be prepared. The HIA must include an assessment of impacts and include a conservation strategy and site specific mitigation measures to ensure the CHVI and heritage attributes of the property are conserved.</p>

7 SUMMARY STATEMENT AND RECOMMENDATIONS

CBM, a division of St. Marys Cement Inc. (Canada), is applying to the MNR for a new Class A Licence (Pit Below Water) under the ARA, in the Township of Puslinch, Wellington County, Ontario (the Project). WSP was retained by CBM to complete a Cultural Heritage Report as part of the licence application for the Project. The Project’s preliminary extraction area comprises part of Lot 29, Concession 7, in the Township of Puslinch, County of Wellington.

Background research, information gathering, and field investigations conducted for this report identified one potential heritage property within the Study Area (CHR 1; 4275 Concession 7). The impact assessment determined that direct impacts are anticipated to CHR 1 as a result of the project. Accordingly, additional cultural heritage assessment is required per the recommendations contain in Table 5. Note that these recommendations are based on WSP’s current understanding of the Project and may need to be revisited if Project components are moved or altered.

Table 5: Cultural Heritage Recommendations

ID No.	Resource Type and Address/ Location	Summary of Impact and Mitigation Recommendations
CHR 1	<p>Type: CHL (farm complex)</p> <p>Recognition: Identified during field review:</p> <p>Address: 4275 Concession 7, Puslinch, Ontario</p>	<ul style="list-style-type: none"> ▪ Direct Negative Impact. ▪ As currently planned, the proposed work for the Project may result in the demolition/destruction of the built elements of the identified CHL. This will result in the removal of all potential CHVI and heritage attributes and constitutes a direct negative impact. ▪ As the Project is anticipated to have a direct negative impact to CHR 1, alternatives have been considered and mitigation is recommended: Prior to any site alteration or extraction within the Study Area, a property specific Heritage Impact Assessment (HIA) shall be required. The HIA should include a full evaluation of the property using the criteria prescribed in O. Reg. 9/06. If the property is found to have CHVI, then a description of the property, Statement of CHVI, and list of heritage attributes must be prepared. The HIA must include an assessment of impacts and include a conservation strategy and site specific mitigation measures to ensure the CHVI and heritage attributes of the property are conserved.

8 REFERENCES

- Archives of Ontario. 2024. *Puslinch Township Patent Plan*. On file at WSP.
- Armstrong, Frederick. 1985. *Handbook of Upper Canadian Chronology*. Dundurn Press. Toronto and London
- Abler TS, Tooker E. 1978. Seneca. In: Sturtevant WC and Trigger BD, editors. *Handbook of North American Indians*. Volume 15: Northeast. Washington, DC: Smithsonian Institution Press. p. 505-517.
- Blumenson, J. 1990. *Ontario Architecture: A Guide to Styles and Building Terms, 1784 to Present*. Toronto ON: Fitzhenry and Whiteside.
- Bond S, Worthing D. 2016. *Managing Built Heritage: The Role of Cultural Values and Significance*. Second Edition. Chichester, UK: John Wiley and Sons.
- Carmen RA, Buehler D, Mikesell S, Searls CL. 2012. *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects*. Washington, DC: Wilson, Ihrig and Associates, ICF International, and Simpson, Gumpertz and Heger, Incorporated for the American Association of State Highway and Transportation Officials (AASHTO).
- Chapman LJ, Putnam DF. 1984. *The Physiography of Southern Ontario*. Third Edition. Ontario Geological Survey Special Volume 2. Toronto, ON: Ontario Ministry of Natural Resources.
- CHP (Canada's Historic Places). 2010. *Standards and Guidelines for the Conservation of Historic Places in Canada*. Second Edition. Ottawa, ON: CHP.
- Coyne JH. 1895. *The Country of the Neutrals (as far as comprised in the County of Elgin) From Champlain to Talbot*. [accessed 05 May 2023]. https://archive.org/stream/cihm_03619#page/n7/mode/2up
- ERA 2020. *Historic Farmsteads Drive a New Rural Cultural Economy*. <https://www.eraarch.ca/2020/historic-farmsteads-drive-a-new-rural-cultural-economy/>
- Ferris N. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tucson, AZ: University of Arizona Press.
- Gentilcore, RL, Donkin K. 1973. *Land surveys of southern Ontario: an introduction and index to the field notebooks of the Ontario land surveyors 1784-1859*. Cartographica Monograph No. 8. BV Gutsell. Toronto, ON: Department of Geography, York University.
- Gibson MM. 2006. *In the Footsteps of the Mississaugas*. Mississauga, ON: Mississauga Heritage Foundation.
- Government of Ontario. 2022. *Map of Ontario treaties and reserves*. [accessed 05 May 2023]. <https://www.ontario.ca/page/map-ontario-treaties-and-reserves>
- Government of Ontario. 2024. *Provincial Planning Statement*. Available online: <https://www.ontario.ca/page/provincial-planning-statement-2024>
- Government of Ontario. 2017. *Ontario Standards Development Branch Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources*. Toronto, ON: Ministry of the Environment, Conservation and Parks, Toronto. [accessed 05 May 2023]. <https://www.ontario.ca/page/technical-bulletin-management-approaches-industrial-fugitive-dust-sources>

- Government of Ontario. 1990a. *Environmental Assessment Act*, R.S.O. 1990, c. E.18. [accessed 05 May 2023].
<https://www.ontario.ca/laws/statute/90e18>
- Government of Ontario. 1990b. *Ontario Heritage Act*, R.S.O. 1990, c. O.18. [accessed 05 May 2023].
<https://www.ontario.ca/laws/statute/90o18>
- Government of Ontario. 1990c. *The Planning Act* R.S.O. 1990, c. P.13. [accessed 05 May 2023].
<https://www.ontario.ca/laws/statute/90p13>
- Haudenosaunee Confederacy. 2022. *Land Acquisition*. [accessed 06 June 2023].
<https://www.haudenosauneeconfederacy.com/land-aquisition/>.
- Historic Scotland. 1999. *Historic Landuse Assessment*. Edinburgh, UK: Historic Scotland.
- Horne M. 1987. A Preliminary Examination of Site Selection Criteria for Middleport-Neutral Sites in Waterloo Region. Kewa: Newsletter of the London Chapter of the Ontario Archaeological Society 87(2): 4-24.
- Hubka, TC. 2013. *Houses without Names: Architectural Nomenclature and the Classification of America's Common Houses*. Knoxville, TN: University of Tennessee Press.
- ICOMOS (International Council on Monuments and Sites). 2013. *Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter*. [accessed 05 May 2023].
<https://australia.icomos.org/publications/burra-charter-practice-notes/>
- ICOMOS (International Council on Monuments and Sites). 2011. *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*. Paris, FR: ICOMOS.
- ICOMOS (International Council on Monuments and Sites). 1983. *Appleton Charter for the Protection and Enhancement of the Built Environment*. Ottawa, ON: ICOMOS.
- INAC (Indigenous and Northern Affairs Canada). 2011. *A History of Treaty-Making in Canada*. [accessed 05 May 2023]. <https://www.aadnc-aandc.gc.ca/eng/1314977704533/1314977734895>
- Johnston D. 2004. *Connecting People to Place: Great Lakes Aboriginal History in Cultural Context*. [accessed 05 May 2023].
http://www.attorneygeneral.jus.gov.on.ca/inquiries/ipperwash/transcripts/pdf/P1_Tab_1.pdf
- Johnston C. 1994. Six Nations in the Grand River Valley, 1784-1847. In: Edward S, R Smith and DB Smith, editors. *Aboriginal Ontario: Historical Perspectives on the First Nations*. Toronto, ON: Dundurn Press. p. 167-181.
- Jury EM. 1974. *The Neutral Indians of South-Western Ontario*. London: Bulletin of the Museums no.13, The Museum of Indian Archaeology. London, ON: The University of Western Ontario.
- Kalman H, Létourneau M. 2020. *Heritage Planning: Principles and Process*. New York, NY: Routledge.
- Landscape Institute. 2013. *Guidelines for Landscape and Visual Impact Assessment*. Third Edition. New York, NY: Routledge.
- Lennox PA, Fitzgerald WR. 1990. *The Culture History and Archaeology of the Neutral Iroquoians*. In: Ellis C, Ferris N, editors. *The Archaeology of Southern Ontario to AD 1650*. Occasional Publication Number 5. London, ON: London Chapter, Ontario Archaeological Society. p. 405-456.

- McEvoy, Henry. 1869. *The Province of Ontario Gazetteer and Directory*. Robertson and Cook Publishers. Toronto.
- MCFN (Mississaugas of the Credit First Nation). n.d. *The History of the Mississaugas of the New Credit First Nation*. Hagersville, ON: MCFN.
- MCFN (Mississaugas of the Credit First Nation). 2022. *Treaty Lands & Territory*. [accessed 05 May 2023]. <http://mncfn.ca/about-mncfn/treaty-lands-and-territory/>
- MCM (Ministry of Citizenship and Multiculturalism). 2022. *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist*. Toronto: Ministry of Tourism, Culture and Sport.
- MCM (Ministry of Citizenship and Multiculturalism). 2019. *Sample Tables and Language for Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment*. Toronto: Ministry of Tourism, Culture and Sport.
- MCM (Ministry of Citizenship and Multiculturalism). 2017. *Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties*. Toronto: Ministry of Tourism, Culture and Sport.
- MCM (Ministry of Citizenship and Multiculturalism). 2014. *Standards and Guidelines for Conservation of Provincial Heritage Properties*. Toronto, ON: Ministry of Tourism, Culture and Sport, Toronto.
- MCM (Ministry of Citizenship and Multiculturalism). 2007. *InfoSheet: Eight Guiding Principles in the Conservation of Built Heritage Properties*. Toronto, ON: Ministry of Tourism, Culture and Sport, Queen's Printer for Ontario.
- MCM (Ministry of Citizenship and Multiculturalism). 2006a. *Ontario Heritage Tool Kit: Heritage Property Evaluation – A Guide to Listing, Researching, and Evaluating Cultural Heritage Property in Ontario Communities*. Toronto: Ministry of Tourism, Culture and Sport.
- MCM (Ministry of Citizenship and Multiculturalism). 2006b. *Ontario Heritage Tool Kit: Heritage Resources in the Land Use Planning Process*. Toronto: Ministry of Tourism, Culture and Sport.
- MCM (Ministry of Citizenship and Multiculturalism). 2006c. *Ontario Heritage Tool Kit: Designating Heritage Properties: A Guide to Municipal Designation of Individual Properties Under the Ontario Heritage Act*. Toronto: Ministry of Tourism, Culture and Sport.
- MCM (Ministry of Citizenship and Multiculturalism). 1992. *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments*. Toronto: Ministry of Tourism, Culture and Sport.
- MCM (Ministry of Citizenship and Multiculturalism). 1980. *Guidelines on the Man-Made Heritage Component of Environmental Assessments*. Toronto: Ministry of Tourism, Culture and Sport.
- McMaster University Digital Archive. n.d. 1954 *Southern Ontario Aerial Photographs*. [accessed 04 July 2023]. <https://digitalarchive.mcmaster.ca/islandora/object/macrepo%3A71542?page=5>
- MEA (Municipal Engineers Association). 2015. *Municipal Class Environmental Assessment (MCEA) Manual*. [accessed 05 May 2023]. <https://www.municipalclassea.ca/manual/>
- MNR (Ministry of Natural Resources). 2020. *Aggregate Resources of Ontario: Technical Reports and Information Standards*. [accessed 04 July 2023]. <https://www.ontario.ca/page/aggregate-resources>

- Morris, JL. 1943. *Indians of Ontario*. 1964 reprint. Toronto, ON: Department of Lands and Forests, Government of Ontario.
- National Committee on Soil and Terrain. 2017. *Australian Soil and Land Survey Filed Handbook*. Third Edition. Collingwood, VIC: Csiro Publishing.
- New Zealand Transport Agency. 2015. *Historic Heritage Impact Assessment Guide for State Highway Projects*. Wellington, NZ: New Zealand Government.
- OCUL (Ontario Council of University Libraries). n.d. *Historical Topographic Map Digitization Project: Guelph Sheet*. [accessed 05 May 2023]. <https://ocul.on.ca/topomaps/collection/>
- Parks Canada Agency. n.d. *Parks Canada Directory of Federal Heritage Designations*. [accessed 05 May 2023]. http://www.pc.gc.ca/apps/dfhd/search-recherche_eng.aspx
- Parks Canada Agency. 1980. *Canadian Inventory of Historic Building Exterior Recording Training Manual*. Ottawa, ON: Parks Canada.
- Randl, C. 2001. *Temporary Protection No. 3: Protecting a Historic Structure during Adjacent Construction*. U.S. Department of the Interior National Parks Service Cultural Resources Tech Notes. [accessed 05 May 2023]. <http://www.nps.gov/tps/how-to-preserve/tech-notes/Tech-Notes-Protection03.pdf>
- Ricketts, S, Maitland L, Hucker J. 2004. *A Guide to Canadian Architectural Styles*. Peterborough, ON: Broadview Press.
- Robinson PJ. 1965. *Toronto during the French Regime: 1615-1793*. Toronto, ON: University of Toronto Press.
- Sault, M. 2021. *A Story About the Toronto Purchase*. In: Bolduc D, Gordon-Corbiere M, Tabobondung R, and Wright-McLeod B, editors. *Indigenous Toronto*. Toronto, ON: Coach House Books.
- Schmalz PS. 1991. *The Ojibwa of Southern Ontario*. Toronto, ON: University of Toronto Press.
- SNGR (Six Nations of the Grand River). 2022. *Key Issues, Lands & Resources*. [accessed 06 June 2023]. <https://www.sixnations.ca/key-issues/land-rights>
- Stothers D, Yarnell R. 1977. *An agricultural revolution in the Lower Great Lakes*. In: Romans ED, editor. *Geobotany*. New York, NY: Plenum. p. 209-232.
- Surtees RJ. 1994. *Land Cessions, 1763-1830*. In: Rogers ES, editor. *Aboriginal Ontario: Historical Perspectives on the First Nations*. Toronto, ON: Dundurn Press Limited. p. 92-121.
- Talking Treaties Collective. 2022. *A Treaty Guide for Torontonians*. Toronto, ON: Art Metropole.
- Taylor A. 2006. *The Divided Ground: Indians, Settlers, and the Southern Borderland of the American Revolution*. New York, NY: Vintage Books.
- Tooker E. 1978. *The League of the Iroquois: Its History, Politics, and Ritual*. In: Sturtevant WC and Trigger BD, editors. *Handbook of North American Indians*. Volume 15: Northeast. Washington, DC: Smithsonian Institute Press. p.418-441.
- Tremaine, G. 1861. *Tremaine's Map of the County of Wellington, Canada West*. Toronto, ON: GR and GM Tremaine.

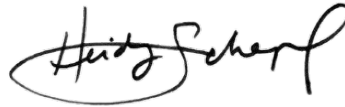
- Trigger BG. 1994. *The Original Iroquoians: Huron, Petun and Neutral*. In: Rogers ES, editor. *Aboriginal Ontario: Historical Perspectives on the First Nations*. Toronto ON: Dundurn Press Limited. p 41-63.
- United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). 2007.
https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf
- Walker M, Marquis-Kyle P. 2004. *The Illustrated Burra Charter: Good Practice for Heritage Places*. Burwood, AUS: ICOMOS.
- Warrick G. 2008. *A Population History of the Huron-Petun, A.D. 500-1650*. New York, NY: Cambridge University Press.
- White ME. 1978. *Neutral and Wenro*. In: Sturtevant WC and Trigger BD, editors. *Handbook of North American Indians*. Volume 15: Northeast. Washington, DC: Smithsonian Institute Press. p.407-411.
- Walker and Miles 1877. *Illustrated Historical Atlas of Wellington County*.
- Wellington County. 2023a. *Land Acknowledgement*. <https://www.wellington.ca/en/discover/indigenous-advisory-committee-la.aspx>
- Wellington County. 2023b. *Local History*. Retrieved from:
www.wellington.ca/en/discover/localhistory.aspx#:~:text=Wellington%20County%20was%20named%20after,Wellington%20and%20Grey%20were%20formed
- Wellington County. 2024. *County of Wellington Official Plan*. <https://www.wellington.ca/en/resident-services/resources/Planning/Official-Plan/WCOP---February-2024.pdf>
- Wellington County Historical Atlas 1906. *Illustrated Historical Atlas of Wellington County, Ontario*. Historical Atlas Publishing Co. Toronto.
- Wester MC, Henson BL, Crins WJ, Uhlig PWC, Gray PA. 2018. *The Ecosystems of Ontario, Part 2: Ecodistricts*. Sault Ste. Marie, ON: MNR.
- Williamson RF. 2013. *The Woodland Period, 900 BCE to 1700 CE*. In Munson, M.K. and Jamieson, S.M (Eds.) *Before Ontario: The Archaeology of a Province*. Montreal and Kingston, ON: McGill Queen's University Press.
- Williamson RF. 1990. *The Early Iroquoian Period of Southern Ontario*. In: Ellis CJ, Ferris N, editors. *The Archaeology of Southern Ontario to A.D. 1650*. London, ON: Occasional Publication of the London Chapter, OAS (Ontario Archaeological Society). p. 291-320.

Signature Page

WSP Canada Inc.



Robert Pinchin, B.A. Hons., CAHP Intern
Cultural Heritage Specialist



Heidi Schopf, MES, CAHP
Cultural Heritage Team Lead

RP/HS/al

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APPENDIX A

ASSESSOR'S CV



HEIDY SCHOPF, MES, CAHP

Cultural Heritage and Social Sciences Team Lead



PROFILE

Heidy Schopf is the Cultural Heritage and Social Sciences Team Lead for WSP Canada Inc. She is a Senior Cultural Heritage Specialist and has worked in the field of cultural resource management since 2007. Ms. Schopf is a Professional Member of the Canadian Association of Heritage Professionals (CAHP).

Ms. Schopf has worked on hundreds of cultural heritage projects in Ontario, including Cultural Heritage Reports, Cultural Heritage Evaluation Reports (CHERs), Heritage Impact Assessments (HIAs), Strategic Conservation Plans (SCP), heritage documentation (photography, photogrammetry, and LiDAR), Heritage Conservation District (HCD) Studies and Plans, and heritage peer review. She regularly provides cultural heritage conservation guidance to public and private sector clients. Heidy is a Senior Project Manager and has managed and delivered cultural heritage work under a variety of processes, including: *Environmental Assessment Act, Planning Act, Transit Project Assessment Process (TPAP)*, and the *Ontario Heritage Act*. She has extensive and applied knowledge of Ministry of Citizenship and Multiculturalism (MCM) guidance documents for heritage properties.

Ms. Schopf has had the privilege of working with Indigenous Nations on several projects to gather Indigenous perspectives on cultural heritage and integrate this shared learning into WSP's heritage work.

Areas of practice

- Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessments
- Cultural Heritage Evaluation Reports
- Heritage Impact Assessments
- Strategic Conservation Plans
- Heritage Documentation (Photography and 3DLiDAR)
- Heritage Conservation District Studies and Plans
- Peer Review
- Project Management
- Leadership

Languages

English

EDUCATION

Master of Environmental Studies (MES), Planning Program, York University	2011
Bachelor of Arts (BA), Anthropology and World History, McGill University	2007

PROFESSIONAL DEVELOPMENT

Senior Project Manager Certificate, Wood Environment & Infrastructure Solutions Canada Limited (Wood)	2022
Subject Matter Expert in Cultural Heritage, Global Technical Expert Network (GTEN), Wood	2021
Metrolinx Personal Track Safety Program	2020
CN Contractor Orientation Course	2020
RAQs Certified in Environmental/Heritage/Natural Sciences, MTO	2020
Secret (Level II) Federal Security Clearance, PWGSC	2017

PROFESSIONAL ASSOCIATIONS

Canadian Association of Heritage Professionals, since 2015	CAHP
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CAREER

Cultural Heritage and Social Sciences Team Lead, WSP Canada Inc.	2025-Present
Cultural Heritage Team Lead, WSP Canada Inc.	2022 – 2025
Built Heritage and Cultural Landscape Team Lead, Wood	2019 – 2022
Cultural Heritage Specialist, Stantec	2016 – 2019
Archaeological Services Inc. (ASI)	2011 – 2016



PROFESSIONAL EXPERIENCE

Mining and Aggregates

- **Ministry of Mines, Cultural Heritage Evaluation Report: Tribag Mine, Township of Nicolet, District of Algoma, Sault Ste. Marie Cluster** (Senior Cultural Heritage Specialist, WSP, 2024). Completed senior review of deliverable.
- **First Mining Gold Corporation, Springpole Gold Project, Red Lake District, Ontario** (Senior Cultural Heritage Specialist, WSP, 2022–2024). Acted as the cultural heritage liaison and provided senior QA/AC of the following deliverables:
 - Springpole Gold Mine, Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (2022)
 - Springpole Gold Mine, Cultural Heritage Evaluation Report: CHR 2, Springpole Lake to Birch Lake Travel Route, Kenora District, Ontario (2024)
 - Springpole Gold Mine, Cultural Heritage Evaluation Report: CHR 3, East Side of the North Arm of Springpole Lake, Kenora District, Ontario (2024)
 - Springpole Gold Mine, Cultural Heritage Evaluation Report: CHR 4, West Shore of Springpole Lake, Kenora District, Ontario (2024)
 - Springpole Gold Mine, Cultural Heritage Evaluation Report: CHR 5, West Shore of Springpole Lake, Kenora District, Ontario (2024)
- **Champion Iron Mines Limited, Kami Iron Ore Mine, Cultural Heritage Screening Technical Memorandum, Labrador West, Newfoundland and Labrador** (Senior Cultural Heritage Specialist, WSP, 2024). Completed senior review of deliverable.
- **Great Bear Resources/Kinross Gold Limited, Great Bear Mine, Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment, District of Kenora, Ontario** (Senior Cultural Heritage Specialist, WSP, 2024). Completed senior review of deliverable.
- **Ministry of Mines, Long Lake Gold Mine, Cultural Heritage Evaluation Report, Eden Township, District of Sudbury, Ontario** (Senior Cultural Heritage Specialist, WSP, 2023). Completed senior QA/QC of deliverable, attending and facilitated Indigenous Engagement sessions with the Atikameksheng Anishnawbek First Nation (AAFN).
- Regional Municipality of Peel (Cities of Brampton, Caledon, and Mississauga)
 - **CBM Aggregates, Caledon Pit/Quarry, POPA 2022-006 & RZ 2022-0010, Town of Caledon, Ontario** (Senior Cultural Heritage Specialist, WSP, 2022-2024). Cultural heritage liaison; completed senior QA/QC of the following deliverables:
 - Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (WSP 2023)
 - Heritage Impact Assessment for 1055 Charleston Sideroad, Town of Caledon, Ontario (WSP 2023)
 - Heritage Impact Assessment for 1420 Charleston Sideroad, Town of Caledon, Ontario (WSP 2023)
 - Heritage Impact Assessment for 18501 Mississauga Road, Town of Caledon, Ontario (WSP 2023)



HEIDY SCHOPF, MES, CAHP

Cultural Heritage Team Lead

- Heritage Impact Assessment for 18667 Mississauga Road, Town of Caledon, Ontario (WSP 2023)
- Heritage Impact Assessment for 18722 Main Street, Town of Caledon, Ontario (WSP 2023)
- Wellington County (Townships of Centre Wellington, Guelph/Eramosa, Wellington North, Mapleton, and Puslinch; Towns of Erin and Minto)
- **CBM Aggregates, Neubauer Pit Expansion Aggregate Resources Act License Application, Township of Puslinch, Wellington County, Ontario.** (Senior Cultural Heritage Specialist, WSP, 2024-ongoing). Cultural heritage liaison; completed senior QA/QC of the following deliverables:
 - Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (WSP 2023)



Robert Pinchin

Cultural Heritage Specialist

Areas of practice

- *Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessments*
- *Cultural Heritage Evaluation Reports*
- *Heritage Impact Assessments*
- *Strategic Conservation Plans*
- *Documentation and Salvage Reports*
- *Commemoration Plans*
- *Heritage Protection Plans*

Languages

English

PROFILE

Mr. Pinchin holds an Honours B.A. Degree in Canadian History from McMaster University and a Postgraduate Diploma in Geographical Information Systems from Toronto Metropolitan University. Mr. Pinchin is an intern member with the Canadian Association of Heritage Professionals (CAHP). He has been involved in the field of cultural heritage since 2016 and has conducted heritage reporting and archaeological assessments in support of public and private works throughout Canada.

Mr. Pinchin has experience identifying cultural heritage resources within the framework of the Ontario Heritage Act, Ontario Planning Act, and Environmental Assessment Act as well as writing Cultural Heritage Assessment Reports (CHARs), Cultural Heritage Evaluation Reports (CHERs), and Heritage Impact Assessments (HIAs). Mr. Pinchin has conducted Stage 1-4 Archaeological Assessments, working in partnership with members of Indigenous Nation communities. He has a strong working knowledge of Ontario's mapping history and experience with interpreting historic settlement patterns and land use activities through primary sources. Mr. Pinchin has worked with stadia rod and Catalyst GPS technologies and has experience with mapping field data and conducting spatial analysis with GIS software.

EDUCATION

Graduate Diploma, Applied Digital Geography and GIS, Toronto Metropolitan University	2023
B.A. Hons, Canadian History, McMaster University	2016

PROFESSIONAL CERTIFICATIONS

Canadian Association of Heritage Professionals (Intern Member)	2023 – Present
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PROFESSIONAL DEVELOPMENT

Personal Track Safety, Metrolinx	2022
Basics of Supervising, IHSA	2022

CAREER

Cultural Heritage Specialist, WSP	2023 – ongoing
Cultural Heritage Technician, WSP	2022 – 2023
Cultural Heritage Technician, Wood PLC	2022 – 2022
Archaeological Field Technician, Archaeological Services Inc. (ASI)	2021 – 2022

PROFESSIONAL EXPERIENCE

Cultural Heritage Reporting

- Ontario Line Cultural Heritage Services, Metrolinx (Cultural Heritage Specialist, WSP, 2023-ongoing). Provision of various cultural heritage reporting in support of the Ontario Line Transit Project.



ROBERT PINCHIN

Cultural Heritage Technician

- Wesleyville Nuclear Site Impact Assessment, Ontario Power Generation (Cultural Heritage Specialist, WSP, 2023-ongoing). Provision of various cultural heritage reporting in support of an impact assessment for a proposed nuclear generation site.
- Bruce C Nuclear Expansion, Bruce Power (Cultural Heritage Specialist, WSP, 2023-ongoing). Provision of various cultural heritage reporting in support of the proposed expansion of a nuclear generating station.
- 1055 Charleston Sideroad Documentation and Salvage Plan, CBM Aggregates (Cultural Heritage Specialist, WSP, 2023-ongoing). Development of a documentation and salvage strategy for a heritage structure in support of a proposed quarry.
- Elgin Mills Road Widening Heritage Impact Assessments, City of Markham (Cultural Heritage Specialist, WSP, 2023-ongoing). Provision of Heritage Impact Assessments reporting in support of a road widening project.
- 15717 Airport Road Heritage Conservation Plan, Sedgwick Marshal (Cultural Heritage Specialist, WSP 2023-ongoing) Development of conservation strategies for a heritage structure in support of a proposed residential development.
- 14275 The Gore Road Heritage Building Protection Plan, Argo (Cultural Heritage Specialist, WSP 2023-ongoing) Development of protection and mothballing strategies for a heritage structure in support of a proposed residential development.
- City of Cambridge Heritage Register Review, City of Cambridge (Cultural Heritage Specialist, WSP 2023-ongoing) Provision of cultural heritage services in support of a review and assessment of a municipal heritage register.
- 18667 Mississauga Road Heritage Conservation Plan, CBM Aggregates (Cultural Heritage Specialist, WSP 2023-ongoing) Writing of a conservation plan to guide the movement and conservation of a structure identified to possess CHVI in support a licensing application under the *Aggregate Resources Act*.
- 18501 Mississauga Road Heritage Conservation Plan, CBM Aggregates (Cultural Heritage Specialist, WSP 2023-ongoing) Writing of a conservation plan to guide the movement and conservation of a structure identified to possess CHVI in support a licensing application under the *Aggregate Resources Act*.
- Resources Road Logistics Siding Facility Cultural Heritage Screening Memo, ONxpress (Cultural Heritage Specialist, WSP 2023-ongoing) provision of cultural heritage services in support of the OnCorr Regional Express Rail expansion and rail electrification.
- Crawford Mine Cultural Heritage Screening Memo, Canada Nickel (Cultural Heritage Specialist, WSP 2023-ongoing) Provision of Cultural Heritage services in support of a proposed Nickel Mine in Northern Ontario.
- Safarik Pit Cultural Heritage Report and Heritage Impact Assessment, CBM Aggregates (Cultural Heritage Specialist, WSP 2023-ongoing) Conducting of heritage work in support of a license application under the *Aggregate Resources Act*.
- Upper Wellington CHR, City of Hamilton (Cultural Heritage Specialist, WSP 2023-ongoing) Provision of cultural heritage reporting in support of a Municipal Environmental Assessment.



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- Lower Sherbourne Street Subway Strategic Conservation Plan, ONxpress (Cultural Heritage Specialist, WSP 2023-ongoing) Provision of cultural heritage services in support of the OnCorr Regional Express Rail expansion and rail electrification.
- Parliament Street Subway Strategic Conservation Plan, ONxpress (Cultural Heritage Specialist, WSP 2023-ongoing) provision of cultural heritage services in support of the OnCorr Regional Express Rail expansion and rail electrification.
- Historic Structure Investigation 4910 Townline Road, City of Cambridge (Cultural Heritage Specialist, WSP 2023-ongoing) Conducting of a physical structural investigation to determine the original construction materials and methods of a structure.
- Tribag Mine Cultural Heritage Evaluation Report, Ministry of Mines (Cultural Heritage Specialist, WSP 2023-ongoing) Provision of cultural heritage services in support of abandoned mine remediation efforts.
- Bala Stage 2 Cultural Heritage Report, ONxpress (Cultural Heritage Specialist, WSP 2023-ongoing) provision of cultural heritage services in support of the OnCorr Regional Express Rail expansion and rail electrification.
- Dickenson Road W Cultural Heritage Impact Assessment Addendum, Broccolini (Cultural Heritage Specialist, WSP 2023-ongoing) Conducting of an additional CHIA addendum in support of a proposed industrial development.
- 309-325 James Street North Heritage Impact Assessment, Core Urban (Cultural Heritage Technician, WSP, 2022-2023) Conducting of an HIA in support of the proposed redevelopment of a 19th urban block.
- Springpole Mining Exploration Camp Heritage Reporting, First Mining Gold (Cultural Heritage Technician, WSP, 2022-2023) Conducting of multiple Cultural Heritage Evaluation Reports of various sites within the vicinity of Springpole Lake in support of a proposed mine expansion.
- Driftwood SWMF 8-2 Cultural Heritage Screening, City of Richmond Hill (Cultural Heritage Technician, WSP, 2022-2023) Conducting of a Cultural Heritage Screening Checklist in support of an Environmental Assessment.
- Kami Iron Ore Mine Cultural Heritage Screening, Province of Newfoundland and Labrador (Cultural Heritage Technician, WSP, 2022-2023) Conducting of a Cultural Heritage Screening Checklist in support of a proposed iron ore mine.
- Heritage Impact Assessment of Blair Road Retaining Wall, City of Cambridge (Cultural Heritage Technician, WSP, 2022-2023) Writing of a Heritage Impact Assessment in support of proposed replacement of a retaining wall located within the Dickson Hill Heritage Conservation District.
- OnCorr Regional Express Rail, Metrolinx (Cultural Heritage Technician, WSP, 2022-2023) provision of cultural heritage services in support of the OnCorr Regional Express Rail expansion and rail electrification.
- Elmira By-Pass Road Options Analysis, Region of Waterloo (Cultural Heritage Technician, WSP, 2022-2023) Conducting of an options analysis that considered the potential impacts to cultural heritage properties for six separate proposed roadway alignments. The preparation of a technical memo outlining the findings and recommending the most feasible alignment options.



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- Heritage Impact Assessment of 18501 Mississauga Road, CBM Aggregates (Cultural Heritage Technician, WSP, 2022-2023) Writing of a Heritage Impact Assessment in support of a proposed quarry in Caledon.
- Heritage Impact Assessment of 18667 Mississauga Road, CBM Aggregates (Cultural Heritage Technician, WSP, 2022-2023) Writing of a Heritage Impact Assessment in support of a proposed quarry in Caledon.
- Heritage Impact Assessment of 1055 Charleston Sideroad, CBM Aggregates (Cultural Heritage Technician, WSP, 2022-2023) Writing of a Heritage Impact Assessment in support of a proposed quarry in Caledon.
- Cultural Heritage Evaluation Report of 7666 Yonge Street, YNSE Metrolinx (Cultural Heritage Technician, WSP, 2022-2023) The project scope consisted of a Cultural Heritage Evaluation of 7666 Yonge Street in Vaughan, Ontario.
- Cultural Heritage Evaluation Report of Holy Cross Catholic Cemetery, YNSE Metrolinx (Cultural Heritage Technician, WSP, 2022-2023) The project scope consisted of a Cultural Heritage Evaluation of 8636 Yonge Street in Markham, Ontario.
- Heritage Impact Assessment of 4910 Townline Road, City of Cambridge (Cultural Heritage Technician, WSP, 2022-2023) Writing of a Heritage Impact Assessment in support of a proposed road widening project.
- Barrie Railway Corridor Cultural Heritage Report, Metrolinx (Cultural Heritage Technician, WSP, 2022-2023) The project consisted of conducting heritage assessments along a stretch of railway in York Region in support of proposed infrastructure developments.
- Chedoke Retrofits Cultural Heritage Report, City of Hamilton (Cultural Heritage Technician, WSP, 2022-2023) The project scope consisted of a Cultural Heritage Report assessing cultural heritage resources for the Chedoke Watershed Stormwater Retrofits Master Plan.
- Heritage Impact Assessment of 10080 Britannia Road, Mattamy Homes (Cultural Heritage Technician, WSP, 2022-2023) Writing of a Heritage Impact Assessment considering potential impacts of a proposal on a property.
- Heritage Impact Assessment of 5691 Fifth Line, Mattamy Homes (Cultural Heritage Technician, WSP, 2022-2023) Writing of a Heritage Impact Assessment considering potential impacts of a proposal on a property.
- Cultural Heritage Evaluation Report of Hendon Park, YNSE Metrolinx (Cultural Heritage Technician, WSP, 2022-2023) The project scope consisted of a Cultural Heritage Evaluation of Hendon Park in Toronto, ON.
- Cultural Heritage Resource Assessment of Black Creek Storm Sewer Public Works Project, City of Toronto, Ontario (Cultural Heritage Technician, WSP, 2022-2023) Writing of a cultural heritage resource assessment Schedule "C" Municipal Class Environmental Assessment (EA) for the proposed Black Creek Storm Sewer Site.
- Heritage Impact Assessment of Black Creek Storm Sewer Public Works Project, City of Toronto, Ontario (Cultural Heritage Technician, WSP, 2022-2023) The project scope consisted of a Cultural Heritage Impact Assessment report analyzing potential impacts to Cultural Heritage Resources in the site area of the proposed Black Creek Storm Sewer public works project.



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Archaeological Assessments

- Stage 2 Archaeological Assessment, Sir Adam Beck Generating Station, Niagara Falls (Cultural Heritage Technician, WSP, 2022-2023) Atura Power. Completion of a Stage 2 Archaeological Assessment in support of a proposed hydrogen plant.
- Transmountain Expansion Project, British Columbia (Cultural Heritage Technician, WSP, 2022-2023) TMEP. Completion of various Archaeological Assessments in support of large-scale oil and gas infrastructure project.
- Stage 1-2 Archaeological Assessment, Dig 23, 24, 25, Flamborough (Cultural Heritage Technician, WSP, 2022-2023) Imperial Oil. Completion of a Stage 1-2 Archaeological Assessment in support of utilities planning efforts.
- Stage 1 Archaeological Assessment for Intersection Improvements at Regional Road 24 (Victoria Avenue) and Regional Road 63 (Canborough Road), in the Town of Pelham and Town of West Lincoln (Cultural Heritage Technician, Wood, 2022-2023). Kerry T. Howe Engineering Ltd. Completion of a Stage 1 Archaeological Assessment and archival research of the site are of the proposed intersection improvements.
- Stage 2 Archaeological Assessment, City of Hamilton (Archaeological Field Technician, ASI, 2021-2022) Completion of a Stage 2 Archaeological Assessment in support of a municipal Environmental Assessment.
- Stage 4 Archaeological Assessment McClung Road, Empire Construction (Archaeological Field Technician, ASI, 2021-2022) Completion of a Stage 4 Archaeological Assessment in support of a proposed housing development.

