Appendix E: Cultural Heritage Report (ARA)
Cultural Heritage Resources Existing Conditions Report
Spring Valley Sewage Pumping Station Environmental Assessment
City of Kitchener
Regional Municipality of Waterloo

Prepared For
CIMA Canada Inc.
101 Frederick Street, Suite 900
Kitchener, ON N2H 6R2
Tel: (519) 772-2299

Submitted By
Archaeological Research Associates Ltd.
219-900 Guelph Street
Kitchener, ON N2H 5Z6
Tel: (519) 804-2291 Fax: (519) 286-0493
HR-147-2019

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Revised Report
Executive Summary

Under a contract awarded in February 2019, Archaeological Research Associates Ltd. was retained by CIMA Canada Inc. to complete a Cultural Heritage Resources Existing Conditions report. The requirement for the Cultural Heritage Resources Existing Conditions report was triggered by the Schedule B Municipal Class Environmental Assessment for structures and landscapes with the potential to be impacted by the proposed upgrade, expansion or replacement of the Spring Valley Sewage Pumping Station at 365 Riverbend Drive in the City of Kitchener, Regional Municipality of Waterloo.

The project location comprises part of Lots 58 and 59, German Company Tract, Geographic Township of Waterloo, Former Waterloo County. Archaeological Research Associates Ltd.’s business practice also considers a larger study area that includes abutting properties. This approach ensures that any Built Heritage Resources and Cultural Heritage Landscapes that may be subject to potential direct and indirect project impacts are identified.

The approach for the Cultural Heritage Resources Existing Conditions report has specific tasks required for the Environmental Assessment process, and they include:

- Background research concerning the project context and historical context of the study area;
- Consultation with the City of Kitchener and Region of Waterloo planners responsible for heritage matters;
- Identification of any designated or recognized properties within the limits of the study area;
- On-site inspection and creation of an inventory of all properties with potential Built Heritage Resources and Cultural Heritage Landscapes within, adjacent and in proximity to the project location;
- A description of the location and nature of potential cultural heritage resources;
- Evaluation of each potential cultural heritage resource against the criteria set out in Ontario Regulation 9/06 for determining cultural heritage value or interest;
- Evaluation of potential project impacts; and
- Provision of suggested strategies for the future conservation of identified cultural heritage resources.

A windshield survey of the study area was conducted, and all potential cultural heritage resources noted were evaluated against the criteria of Ontario Regulation 9/06. Of the properties evaluated, two cultural heritage landscapes were identified in the study area: the Grand River Corridor – City of Kitchener Identified Cultural Heritage Landscape
L-GRC-1 (CHL 1) and the Walter Bean Trail – City of Kitchener Identified Cultural Heritage Landscape L-TRL-17 (CHL 2).

Four alternatives are being considered for the Spring Valley Sewage Pumping Station:

- Alternative 1 – Upgrade existing station with offsite emergency storage.
- Alternative 2A – New station in the Walter Bean Tail parking lot.
- Alternative 2B – New station in the open area north of the existing station.
- Alternative 2C – New station on industrial land south of existing station.

Preliminary potential impacts to the properties within the study area were evaluated for possible project impacts upon review of the four proposed alternative solutions. Alternative 1, 2B and 2C are not anticipated to result in any cultural heritage impacts. Alternative 2A is anticipated to result in indirect impacts to CHL 1 and direct impacts to CHL 2. The following conservation/mitigation strategies are suggested based on the results of this Cultural Heritage Resources Existing Conditions report:

- That during the planning and design phases, infrastructure should avoid cultural heritage resources where possible and any construction staging areas should be located on lands that are not identified as CHLs.
- That CHL 1 and CHL 2 are related through views and associations, therefore, the siting of infrastructure and construction staging areas should not interrupt this relationship by being located between the two CHLs.
- That consideration should also be given to the nature of the construction activities (i.e., soil removal, vibrations, etc.) to minimize any direct impact to the adjacent Grand River (CHL 1) and Walter Bean Trail (CHL 2).
- That consideration should be given to the location of future construction and the type of construction techniques and machinery used so as not to impede with the existing alignment of the Walter Bean Trail Cultural Heritage Landscape.
- That Alternative 2A (new station in the Walter Bean Trail parking lot) has the potential to indirectly impact CHL 1 and directly impact CHL 2. Should Alternative 2A be selected as the preferred alternative, a Heritage Impact Assessment report should be undertaken to confirm the anticipated impacts outlined in this report, evaluate any additional impact of the proposed design, as well as outline avoidance/mitigation measures to minimize the impact. The Heritage Impact Assessment may outline mitigation measures including additional landscaping that might be required to minimize visual impacts along with suggested design approaches. Mitigation measures may be discussed with Planners at the Region of Waterloo and the City of Kitchener.
That public consultation may result in additional potential cultural heritage resources being identified. If potential cultural heritage resources are identified, they should be reviewed by a qualified heritage consultant to: 1) determine their cultural heritage value or interest, 2) evaluate potential project impacts, and 3) suggest strategies for future conservation of any candidate cultural heritage resources.

The Environmental Assessment process includes preliminary studies, an examination of alternatives, and the selection of a preferred alternative prior to the development of preliminary and detailed designs. Impacts to cultural heritage resources should be considered during all phases of the Environmental Assessment process. Further, these preliminary mitigation recommendations are subject to review and confirmation during the detailed design phase, in consideration of the more thorough understanding of design and project constraints.
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Glossary of Abbreviations

ARA – Archaeological Research Associates Ltd.
BHR – Built Heritage Resource
CHVI – Cultural Heritage Value or Interest
CHL – Cultural Heritage Landscape
EA – Environmental Assessment
MCL – (Former) Ministry of Culture
MTC – (Former) Ministry of Tourism and Culture
MTCS – Ministry of Tourism, Culture and Sport
OHA – Ontario Heritage Act
OHT – Ontario Heritage Trust
O. Reg. – Ontario Regulation
PPS – Provincial Policy Statement
SPS – Sewage Pumping Station

Personnel

Senior Review: P.J. Racher, M.A. CAHP
Project Director: K.J. Galvin, M.A., CAHP,
Project Manager: L. Benjamin, M.A.E.S., CAHP
Site Visit: L. Benjamin
Historical Research: S. Clarke, B.A.
Photography: L. Benjamin
Cartographer: K. Brightwell, B.A., PG (GIS)
Technical Writers: L. Benjamin, P. Young, M.A., CAHP, J. McDermid, B.A.
1. Project Context

Under a contract awarded in February 2019, Archaeological Research Associates Ltd. (ARA) was retained by CIMA Canada Inc. to complete a Cultural Heritage Resources Existing Conditions report for structures and landscapes with the potential to be impacted by the proposed upgrade, expansion or replacement of the Spring Valley Sewage Pumping Station (SPS) at 365 Riverbend Drive in the City of Kitchener, Regional Municipality of Waterloo. According to the Region of Waterloo’s Request for Consultant Services C2018 – 27 document, “The purpose of the Class Environmental Assessment is to review the needs of the Spring Valley SPS to determine the recommended approach for the future operation. This may include upgrades, expansion, or full replacement of the existing station” (Region of Waterloo 2018:34). The assessment was triggered as part of a Schedule B municipal class environmental assessment (EA) being undertaken by CIMA Canada Inc. (Project No. C2018-27) in accordance with the Environmental Assessment Act.

The project location consists of the properties at 355 and 365 Riverbend Drive in the City of Kitchener. These properties are specifically located on part of Lots 58 and 59, German Company Tract in the Geographic Township of Waterloo, Waterloo County (see Map 1).

The purpose of this assessment is to identify and evaluate the cultural heritage resources within and immediately adjacent to the project location that may be impacted by the Municipal Class EA that is being conducted in relation to the proposed Spring Valley SPS. This assessment was conducted in accordance with the aims of the Environmental Assessment Act, R.S.O. 1990, Provincial Policy Statement (2020), Ontario Heritage Act, R.S.O. 1990, c. O.18, and Official Plans for the Region of Waterloo and City of Kitchener.

All notes, photographs and records pertaining to the heritage assessment are currently housed in ARA’s processing facility located at 1480 Sandhill Drive – Unit 3, Ancaster, Ontario. Subsequent long-term storage will occur at the same location.
Map 1: Project Location in the City of Kitchener

(Produced by ARA under licence using ArcGIS® software by Esri, © Esri)
2. Method

The framework for this assessment report is provided by provincial planning legislation and policies as well as regional and local municipal Official Plans and guidelines. According to the *Environmental Assessment Act*, the environment includes “any building, structure, machine or other device or thing made by humans.” This study is conducted as part of a streamlined self-assessment EA process called a Class EA, which applies to routine projects grouped into classes for the Municipal Class EA. The classes range from A (i.e., minor undertakings) to C (i.e., construction of large new facilities). The Municipal Class EA applies to municipal infrastructure undertakings including roads, water and wastewater projects. This project is being undertaken as a Schedule B Municipal Class Environmental Assessment (EA).

The *Provincial Policy Statement (PPS) 2020* promotes the conservation of cultural heritage resources through polices in section 2.6 such that, “Significant built heritage resources and significant cultural heritage landscapes shall be conserved” as per policy 2.6.1 (2020:31).

The *Region of Waterloo Official Plan* Chapter 3 contains policies that address cultural heritage resources, such as Policy 3.G.1: “The Region and Area Municipalities will ensure that cultural heritage resources are conserved” (2015:48), as well as Policy 3.G.15 that states: “Where a development application includes, or is adjacent to, a cultural heritage resource of Regional interest which is not listed on a Municipal Heritage Register, the owner/applicant will be required to submit a Cultural Heritage Impact Assessment…” (2015:51).

The *City of Kitchener Official Plan* section 12 under the Objectives subsection, policy 12.1.1 has the objective: “To conserve the city’s cultural heritage resources through their identification, protection, use and/or management in such a way that their heritage values, attributes and integrity are retained” (2014a:12-1).

Through careful analysis of the heritage values and attributes of an identified resource, coupled with an analysis of project impacts and an outline of potential mitigation measures, the aims of the *Environmental Assessment Act* and these Official Plans can be met.

2.1 Key Concepts

The following concepts require clear definition in advance of the methodological overview; proper understanding is fundamental for any discussion pertaining to cultural heritage resources:
• **Cultural Heritage Value or Interest** (CHVI), also referred to as Heritage Value, is identified if a property meets one of the criteria outlined in O. Reg. 9/06, namely historic or associate value, design or physical value and/or contextual value.

• **Built Heritage Resource** (BHR) is defined in the *PPS* as: “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 Indigenous community. Built heritage resources are located on property that has been designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial and/or federal and/or international registers” (MMAH 2020:41).

• **Cultural Heritage Landscape** (CHL) is defined in the *PPS* as: “a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Aboriginal community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Examples may include, but are not limited to, heritage conservation districts designated under the *Ontario Heritage Act*; villages, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways, viewsheds, natural areas and industrial complexes of heritage significance; and areas recognized by federal or international designation authorities (e.g., a National Historic Site or District designation, or a UNESCO World Heritage Site)” (MMAH 2020:42).

It is recognized that the heritage value of a CHL is often derived from its association with historical themes that characterize the development of human settlement in an area (Scheinman 2006). In Ontario, typical themes that may carry heritage value within a community include but are not limited to: 1) Pre-Contact habitation, 2) early European exploration, 3) early European and First Nations contacts, 4) pioneer settlement, 5) development of transportation networks, agriculture and rural life, 6) early industry and commerce, and/or 7) urban development. Individual CHLs may be related to a number of these themes simultaneously.

The *Operational Guidelines for the Implementation of the World Heritage Convention* defines several types of CHLs: 1) designed and created intentionally by man, 2) organically evolved landscapes that fall into two-subcategories (relic/fossil or continuing), and 3) associative cultural landscapes (UNESCO 2008:86). The (former) Ministry of Culture (MCL)
Information Sheet #2 Cultural Heritage Landscapes (MCL 2006c) repeats these definitions to describe landscapes in Ontario.

- **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 relevant planning authority and/or decision-makers. Mitigative measures and/or alternative development approaches can be included in these plans and assessments” (MMAH 2020:41).

- **Heritage Attributes** are defined in the OHA as: “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).” (MMAH 2020:44-45).

- **Significant**, in reference to cultural heritage, is defined as: “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” (MMAH 2020:51).

Key heritage definitions from the Region of Waterloo Official Plan are as follows:

- **Built heritage resources** are defined as “one or more significant buildings, structures, monuments, installations or remains associated with architectural, cultural, social, political, economic or military history and identified as being important to the community. These resources may be identified through designation or heritage conservation easement under the Ontario Heritage Act, or listed by local, regional, provincial or federal jurisdictions” (2015:G-4).

- **Cultural Heritage Impact Assessment** is detailed as “a study to determine if cultural heritage resources will be negatively impacted by a proposed development or site alteration. It can also demonstrate how the cultural heritage resource will be conserved in the context of redevelopment or site alteration. Mitigative or avoidance measures or alternative development approaches may also be recommended” (2015:G-5).

- **Cultural heritage landscape** is “a defined geographical area of heritage significance which has been modified by human activities and is valued by a
community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts” (2015:G-5).

- **Cultural heritage resources** are “the physical remains and the intangible cultural traditions of past human activities. These include, but are not limited to:
  - buildings (residential, commercial, institutional, industrial and agricultural);
  - cultural heritage landscapes (designed, organic/evolved);
  - structures (water tower; bridge, fence and dam);
  - monuments (cenotaph, statue and cairn);
  - archaeological resources;
  - cemeteries;
  - scenic roads;
  - vistas/viewsheds;
  - culturally significant natural features (tree and landform);
  - movable objects (archival records and artifacts); and
  - cultural traditions (language, stories, music, dance, food, celebrations, art and crafts”) (2015:G-6).

### 2.2 Types of Recognition

BHRs and CHLs are broadly referred to as cultural heritage resources. A variety of types of recognition exist to commemorate and/or protect cultural heritage resources in Ontario.

The National Historic Sites program commemorates important sites, people or events that had a nationally significant effect on, or illustrate a nationally important aspect of, the history of Canada. The Minister of Canadian Heritage, on the advice of the Historic Sites and Monuments Board of Canada (HSMBC), makes recommendations to the program. Another form of recognition at the federal level is the Canadian Heritage Rivers System program. It is a federal program to recognize and conserve rivers with outstanding natural, cultural and recreational heritage. It is important to note that neither of these federal commemoration programs offer protection from alteration or destruction.

The Ontario Heritage Trust (OHT) operates the Provincial Plaque Program, which has over 1,250 provincial plaques recognizing key people, places and events that have shaped the province (OHT 2019). Additionally, properties owned by the province may be recognized as a “provincial heritage property” (MTC 2010). A cultural heritage resource may also be protected through an OHT or municipal easement. In addition,
many municipal heritage committees and historical societies provide plaques for local places of interest.

Under section 27 of the *OHA*, a municipality must keep a Municipal Heritage Register. A Register lists designated properties; including, those protected by municipal by-law as Part IV (individual properties) or Part V (Heritage Conservation Districts) designations under the *OHA*, as well as other properties of cultural heritage value or interest in the municipality. Properties on this Register that are not formally designated are commonly referred to as “listed.” Listed properties are flagged for planning purposes and are afforded a 60-day delay in demolition if a demolition request is received by the municipality.

The 2020 *Provincial Policy Statement* definitions of BHRs and CHLs include reference to value by Indigenous communities. Long before this inclusion, the Historic Sites and Monuments Board of Canada (HSMBC) drafted “An Approach to Aboriginal Cultural Heritage Landscapes” (1999). This document defines an Aboriginal Cultural Heritage Landscape as “a place valued by an Aboriginal group (or groups) because of their long and complex relationship with that land. It expresses their unity with the natural and spiritual environment. It embodies their traditional knowledge of spirits, places, land uses, and ecology. Material remains of the association may be prominent but will often be minimal” (HSMBC 1999:30).

### 2.3 Approach

The “Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments” indicates a need to describe the “affected environment,” which is defined as “a spatially defined area within which land will be altered as a result of the proponent’s development” (MCL 1992:3). As such, ARA completes research and a preliminary evaluation of any potential cultural heritage resource within the project location. ARA’s business practice also considers a larger study area that includes abutting properties. This approach ensures that any BHR and CHL that may be subject to potential direct and indirect project impacts are identified.

A combination of background research, consultation with the local community and field survey is essential to identify and effectively evaluate properties with potential BHRs and CHLs in a meaningful and objective format. Properties identified as potential BHRs and CHLs through the above-mentioned research, consultation and survey may be considered candidate cultural heritage resources once they have been evaluated against the regulations under the Ontario Heritage Act (i.e., *O. Reg. 9/06*). See section 2.4 Evaluation of Significance below for a discussion of the *OHA* Regulations.
2.3.1 **Historical Research**

Background information is obtained from aerial photographs, historical maps (i.e., illustrated atlases), archival sources (i.e., historical publications and records), published secondary sources (online and print) and local historical organizations.

2.3.2 **Consultation**

Consultation with the local community is essential for determining the community value of cultural heritage resources. At project commencement, ARA contacts the relevant local and regional municipalities to inquire about: 1) protected properties in the study area, 2) properties with other types of recognition in the study area, 3) previous studies relevant to the current study, and 4) other heritage concerns regarding the study area. Where possible, information is also sought directly from the MTCS and OHT.

2.3.3 **Field Survey**

The field survey component of an assessment involves the collection of primary data through systematic photographic documentation of all potential cultural heritage resources within the study area, as identified through historical research and consultation. Generally, potential cultural heritage resources are identified by applying a 40-year rolling timeline. This timeline is considered an industry best practice (i.e., MTO 2008). However, a construction date of 40 years does not automatically attribute CHVI to a resource; rather it indicates that it should be flagged as a potential resource and evaluated for CHVI.

Additional cultural heritage resources may also be identified during the survey itself (candidate cultural heritage resources). Photographs capturing all properties with potential BHRs and CHLs are taken, as are general views of the surrounding landscape. The field survey also assists in confirming the location of each potential cultural heritage resource and helps to determine the relationship between resources. Given that such surveys are limited to areas of public access (i.e., roadways, intersections, non-private lands, etc.), there is always the possibility that obscured cultural heritage resources may be missed or that heritage attributes may be refined upon closer inspection.

2.4 **Evaluation of Significance**

2.4.1 **Heritage Value**

In order to objectively identify cultural heritage resources, *O. Reg. 9/06* made under the *OHA* sets out three principal criteria with nine sub-criteria, which are municipal criteria,
for determining CHVI (MCL 2006a:20-27). The criteria set out in the regulation were developed to identify and evaluate properties for municipal designation under the OHA. Best practices in evaluating properties that are not yet protected employ O. Reg. 9/06 to determine if they have CHVI. These criteria include: design or physical value, historical or associative value, and contextual value.

Design or Physical Value manifests when a feature:
- is a rare, unique, representative or early example of a style, type, expression, material or construction method;
- displays a high degree of craftsmanship or artistic value; or
- displays a high degree of technical or scientific achievement.

Historical or Associative Value appears when a resource:
- has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to the community;
- yields or has the potential to yield information that contributes to the understanding of a community or culture; or
- demonstrates or reflects work or ideas of an architect, builder, artist, designer or theorist who is significant to the community.

Contextual Value is implied when a feature:
- is important in defining, maintaining or supporting the character of an area;
- is physically, functionally, visually or historically linked to its surroundings; or
- is a landmark.

If a potential cultural heritage resource property (BHR or CHL) identified during this study is found to have the potential to meet any one of these criteria, it may then be considered a candidate cultural heritage resource. A candidate cultural heritage resource meeting the above criteria may be added to a Municipal Heritage Register as a property with CHVI that is either designated by municipal by-law or as a “listed” property (see section 2.2 Types of Recognition). Additional work outside the scope of this report (i.e., Cultural Heritage Evaluation Report or Heritage Impact Assessment (HIA)) may be necessary to fully examine and evaluate a resources’ CHVI.

2.5 Evaluation of Impacts

Any potential project impacts on identified BHRs or CHLs must be evaluated, including direct and indirect impacts. InfoSheet #5: Heritage Impact Assessments and
Conservation Plans (2006b:3) provides an overview of several major types of negative impacts, including but not limited to:

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

The above direct and indirect impacts are primarily negative impacts but there may also be positive effects as a result of an EA project. For example, more recent infrastructure may be removed to restore the original views to cultural heritage resources.

2.6 Mitigation Strategies

If potential impacts on identified heritage resources are determined, proposed conservation or mitigative/avoidance measures must be recommended.

The Ministry of Culture’s InfoSheet #5: Heritage Impact Assessments and Conservation Plans (2006b:3) lists several specific methods of minimizing or avoiding a negative impact on a cultural heritage resource, including but not limited to:

- Alternative development approaches;
- Isolating development and site alteration from significant built and natural features and vistas;
- Design guidelines that harmonize mass, setback, setting, and materials;
- Limiting height and density;
- Allowing only compatible infill and additions;
- Reversible alterations; and
- Buffer zones, site plan control, and other planning mechanisms.
Strategies also may be developed to enhance positive environmental effects as a result of an EA undertaking.

### 2.7 Summary of Approach

The approach outlined herein is supported by the best practices, guidelines and policies of the following:

- *Provincial Policy Statement* (2020);
- *Ontario Heritage Act* (R.S.O. 1990);
- *Environmental Assessment Act* (R.S.O. 1990);
- *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (MCL 1992);
- *Ontario Heritage Tool Kit* series (MCL 2006a);
- *Region of Waterloo Official Plan* (2015); and

Senior review of the Cultural Heritage Resources Existing Conditions report for the proposed Spring Valley Sewage Pumping Station was undertaken by P.J. Racher, M.A., CAHP. It was directed by K.J. Galvin, M.A., CAHP, and managed by L. Benjamin, M.A.E.S., CAHP. The assessment was conducted by L. Benjamin, K. Jonas Galvin, P. Young, M.A., CAHP, and J. McDermid, B.A. The site visit was completed by L. Benjamin, and the historic research was completed by S. Clarke, B.A. Two-page Curriculum Vitae for key personnel can be found in Appendix B.

### 3. Historical Context

The City of Kitchener has a long history of Indigenous land use and settlement including Pre-Contact and Post-Contact campsites and villages. It should be noted that the written historical record regarding Indigenous use of the landscape in southern Ontario draws on accounts by European explorers and settlers. As such, this record details only a small period of time in the overall human presence in Ontario. Oral histories and the archaeological record show that Indigenous communities were mobile across great distances, which transcend modern understandings of geographical boundaries and transportation routes.

Based on current knowledge, the cultural heritage resources located within the study area are tied to the history of the initial settlement and growth of Euro-Canadian populations in the now City of Kitchener. The arrival of European explorers and traders at the beginning of the 17th century triggered widespread shifts in Indigenous lifeways.
and set the stage for the ensuing Euro-Canadian settlement process. Documentation for this period is abundant, ranging from the first sketches of Upper Canada and the written accounts of early explorers to detailed township maps and lengthy histories. The Post-Contact period can be effectively discussed in terms of major historical events, and the principal characteristics associated with these events are summarized in Table 1.

### Table 1: County and Town Settlement History

<table>
<thead>
<tr>
<th>Historical Event</th>
<th>Timeframe</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Contact</td>
<td>Early 17th century</td>
<td>Brûlé explores the area in 1610; Champlain visits in 1613 and 1615/1616; Iroquoian-speakers (Huron, Petun and Neutral) and Algonkian-speakers (Anishinabeg) encountered; European goods begin to replace traditional tools.</td>
</tr>
<tr>
<td>Five Nations Invasion</td>
<td>Mid-17th century</td>
<td>Haudenosaunee (Five Nations) invade circa 1650; Neutral, Huron and Petun Nations are defeated/removed; vast Iroquoian hunting territory established in the second half of the 17th century; Explorers continue to document the area.</td>
</tr>
<tr>
<td>Anishinabeg Influx</td>
<td>Late 17th and early 18th century</td>
<td>Ojibway, Odawa and Potawatomi expand into Haudenosaunee lands in the late 17th century; Nanfan Treaty between Haudenosaunee and British in 1701; Anishinabeg occupy the area and trade directly with the French and English.</td>
</tr>
<tr>
<td>Fur Trade Development</td>
<td>Early and mid-18th century</td>
<td>Growth and spread of the fur trade; Peace between the French and English with the Treaty of Utrecht in 1713; Ethnogenesis of the Métis; Hostilities between French and British lead to the Seven Years’ War in 1754; French surrender in 1760.</td>
</tr>
<tr>
<td>British Control</td>
<td>Mid-18th century</td>
<td>Royal Proclamation of 1763 recognizes the title of the First Nations to the land; Numerous treaties arranged by the Crown; First acquisition is the Seneca surrender of the west side of the Niagara River in August 1764.</td>
</tr>
<tr>
<td>Loyalist Influx</td>
<td>Late 18th century</td>
<td>United Empire Loyalist influx after the American Revolutionary War (1775-1783); British develop interior communication routes and acquire additional lands; ‘Between the Lakes Purchase’ orchestrated by Haldimand in 1784 to obtain lands for Six Nations; Constitutional Act of 1791 creates Upper and Lower Canada.</td>
</tr>
</tbody>
</table>
### Historical Event | Timeframe | Characteristics
---|---|---
County Development | Late 18th and early 19th century | Became part of York County’s ‘West Riding’ in 1792; Additional lands acquired in the second ‘Between the Lakes Purchase’ in 1792; Brant surrenders Blocks 1-6 of the Haldimand Tract to the Crown in 1798; Became part of Gore District and Halton County in 1816; Wellington District and Waterloo County created in 1840; Waterloo County independent after the abolition of the district system in 1849.

Township Formation | Early 19th century | Waterloo was originally Block 2 of the Haldimand Tract; Block 2 sold to United Empire Loyalist Richard Beasley and his partners in 1798; Nearly 5,750 ha sold to Pennsylvania Mennonites and non-Mennonites in 1800; German Company formed to facilitate the bulk sale of 24,281 ha in 1805, represented by Daniel Erb and Samuel Bricker; Lots drawn by shareholders in Pennsylvania; Steady and rapid stream of settlers ensued, disrupted only by the Napoleonic Wars and War of 1812.

Township Development | Mid-19th and early 20th century | Twenty saw mills and eight grist mills in operation by 1846; Population was 4,424 at that time; the arrival of the Grand Trunk Railway, the Galt & Guelph Railway and the Preston & Berlin Railway in the 1850s ushered in a golden era; Prominent communities existed at Berlin, Breslau, Shantz, Williamsburg, New Aberdeen, Strasburg, German Mills, Freeport, Oregon (Upper Doon), Doon, Blair, Preston and Hespeler in 1881.

Table sources: Smith 1846; Coyne 1895; Lajeunesse 1960; Cumming 1972, Ellis and Ferris 1990; Surtees 1994; Bloomfield 2006; Hayes 1997.

#### 3.1 Town of Bridgeport

The Village of Bridgeport was established in in early 1800s at the confluence of the Grand River and Beaver Creek. Initially, there were two separate settlements on either bank of the Grand River at this location. On the west bank, Jacob S. Shoemaker had erected a sawmill and dam by 1829 and by 1835 his enterprise had grown to include a flour mill, linseed oil mill, fulling mill, carding machine and lathe (Bloomfield 2006:86–87). This settlement was known first as Shoemaker’s Mills, then as Glasgow Mills by the 1830s and 1840s. The population of Glasgow/Shoemaker’s Mills in 1846 was 160 (Smith 1846:64). Following Shoemaker’s sale of his mill property to Elias Eby, the
settlement came to be known as Lancaster by the 1850s. On the east bank of the Grand River, opposite the settlement on the west bank, the Hamlet of Bridgeport had been established by John U. Tyson by 1838. By 1846, Bridgeport on the east bank of the river had a population of 100, along with a store, ashery, tavern and blacksmith (Smith 1846:18). A two-span wooden bridge was constructed to cross the Grand River in 1847 which replaced the earlier footbridge in the same location. In 1856, a survey plan of the Village of Bridgeport was created by Provincial Land Surveyors Schofield and Hobson for local land holders Shoemaker, Tagge, Eby, Devitt and Ferrier; thus merging the settlements on either bank of the Grand River as the Village of Bridgeport. The combined population of the Village of Bridgeport at the time of the 1856 survey totalled 400 people (Bloomfield 2006:87).

Beginning in the 1850s, the Township of Waterloo Council met at Bridgeport prior to the erection of a township hall at Centreville in 1868 (Bloomfield 2006:148). Meanwhile, milling remained the main industrial operation at Bridgeport. This continued to be the case toward the end of the 19th century, though an anticipated village population was not realized due to the bypassing of Bridgeport by the Grand Trunk Railway in 1856. Bridgeport’s population in 1871 was 700, though by 1891 is had dwindled to 200 (Bloomfield 2006:198). A brief stimulation to Bridgeport’s economy came with the construction of the Ontario Sugar Company’s sugar beet refinery in 1902 on the west bank of the Grand River. The refining of beet sugar at Bridgeport was short lived, with the company filing for bankruptcy prior to 1910 and its subsequent sale to the Dominion Sugar Company. The Dominion Sugar Company, which also operated a factory in Wallaceburg, closed the Bridgeport location in 1920 (Bloomfield 2006:209). Extant today at 1254 Union Street, a 1902 Ontario Sugar Company warehouse sits, now repurposed as the Hacienda Sarria event centre (Hacienda Sarria 2019). Bridgeport was annexed to the City of Waterloo in 1958 (Bloomfield 2006:18).
3.2 Project Location

In an attempt to reconstruct the historic land uses of the project location, ARA examined three historical maps that documented past residents, structures (i.e., homes, businesses and public buildings) and features between the mid-19\textsuperscript{th} and early 20\textsuperscript{th} centuries, and three aerial images from the mid-20\textsuperscript{th} century. Specifically, the resources outlined in Table 2 were consulted.

<table>
<thead>
<tr>
<th>Year</th>
<th>Map Title</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1861</td>
<td>Map of the County of Waterloo, Canada West</td>
<td>Tremaine</td>
</tr>
<tr>
<td>1881</td>
<td>Township of Waterloo</td>
<td>Parsell</td>
</tr>
<tr>
<td>1916</td>
<td>Galt Sheet No. 56 [040P08]</td>
<td>OCUL</td>
</tr>
<tr>
<td>1930</td>
<td>Aerial Photo</td>
<td>UW</td>
</tr>
<tr>
<td>1954</td>
<td>Aerial Photo</td>
<td>U of T</td>
</tr>
<tr>
<td>1963</td>
<td>Aerial Photo</td>
<td>UW</td>
</tr>
</tbody>
</table>
During Pre-Contact and Early Contact times, the vicinity of the project location, the entirety of which is located within the Geographic Township of Waterloo, would have comprised a mixture of coniferous trees, deciduous trees and open areas. Indigenous communities would have managed the landscape to some degree. During the early 19th century, Euro-Canadian settlers arrived in the area and began to clear the forests for agricultural and settlement purposes. The vicinity of the project location was well-settled for the remainder of the Euro-Canadian period, being located east of the historic communities of Berlin (Kitchener) and Waterloo, and within the Village of Bridgeport.

According to Tremaine’s *Map of the County of Waterloo, Canada West* (1861), Lancaster Street to the west of the project location had been laid and the Grand Trunk Railway line traversed east–west to the south. Agricultural properties surrounded the project location, and various subdivisions into smaller parcels are evidenced at Berlin to the southwest and Bridgeport to the north (see Map 2). The project location is situated on lands that belonged to George Davidson in 1861.

A map of the Township of Waterloo from Parsell & Co.’s *Illustrated Historical Atlas of Waterloo County* (1881) indicates few features. Road alignments in 1881 remained as they were in 1861, and the project location is situated on the property of Dilman Kolb (see Map 3).

A historic topographic map from 1916 denotes the location of the Dominion Sugar Refinery on the west bank of the Grand River within the project location. By this time, spur lines from the Grand Trunk Railway had been laid to the west of the sugar refinery. Additionally, Guelph Street and Riverbend Drive had been established south of the project location (see Map 4).

Between 1930 and 1954, considerable land alterations as a result of new development are visible on the landscape to the west and south of the project location. Encroachment from the City of Kitchener is evident in the various subdivisions that had been established in the neighbourhood of Arnold, Union and Guelph Streets by this time. The immediate vicinity of the project location, however, appears to have remained largely undeveloped after the closure of the Dominion Sugar Refinery (see Map 5–Map 7).
Map 2: Detail of Tremaine’s *Map of the County of Waterloo, Canada West* (1861), Showing the Project Location

*(Produced under licence using ArcGIS® software by Esri, © Esri; OHCMP 2018)*
Map 3: H. Parsell & Co.’s *Illustrated Historical Atlas of the County of Waterloo* (1881), Showing Project Location

(Produced under licence using ArcGIS® software by Esri, © Esri; OBMS 2018)
Map 4: Topographic Map (1916), Showing the Project Location
(Produced under licence using ArcGIS® software by Esri, © Esri; OCUL 2018)
Map 5: Historic Aerial Image (1930), Showing Project Location
(Produced under licence using ArcGIS® software by Esri, © Esri; University of Waterloo 1930)
Map 6: Historic Aerial Image (1954), Showing Project Location
(Produced under licence using ArcGIS® software by Esri, © Esri; University of Toronto 1954)
Map 7: Historic Aerial Image (1963), Showing Project Location
(Produced under licence using ArcGIS® software by Esri, © Esri; University of Waterloo 1963)
4. **Heritage Context**

To determine whether any previously-identified properties with CHVI are located within, adjacent to or in proximity to the limits of the study area, ARA consulted a number of heritage groups and online heritage resources as well as completed a field survey.

4.1 **Consultation**

The former Ministry of Culture’s current list of Heritage Conservation Districts was consulted. No designated districts were identified in the study area (MTCS 2019b). The list of properties designated by the MTCS under section 34.5 of the *OHA* was consulted. No properties in the study area are listed. The OHT Plaque Database and the Parks Canada Directory of Federal Heritage Designations were searched. Neither the project location nor adjacent properties located within the study area are commemorated with an OHT plaque, nor are any recognized as National Historic Sites (OHT 2019; Parks Canada 2019).

ARA contacted a Heritage Planner at the City of Kitchener via email on March 5, 2019 to inquire about any heritage interests that the City or Heritage Kitchener may have related to the study area. An email response was received on March 6, 2019 and a follow-up telephone call and email were received on March 7, 2019 indicating that none of the lands within the study area are listed on the Municipal Heritage Register, individually designated, part of a Heritage Conservation District or protected by a municipal easement. The municipality has not issued a notice of intention to designate for any of the properties in the study area. The Planner noted that the properties municipally addressed as 487 and 515 Riverbend Drive are included on the Heritage Kitchener Inventory and were re-evaluated in 2014. It was determined that the properties do not possess significant cultural heritage value or interest and as such were not listed on the Municipal Heritage Register. The properties do not hold status under the *Ontario Heritage Act*. In addition to the above, the property municipally addressed as 1254 Union Street (Hacienda Sarria), is listed on the Municipal Heritage Register. Although outside of the study area, it is located nearby and is associated with the historic sugar beet industry that was of significance to Bridgeport. The Planner shared the Statement of Significance for this property for information which has been incorporated into the historic context section of this report. It was confirmed that the study area contains the Grand River and Walter Bean Trail Cultural Heritage Landscapes, both significant CHLs identified in the City’s 2014 “Cultural Heritage Landscapes Study”.

ARA also reached out to the Cultural Heritage Planner at the Region of Waterloo via email on March 5, 2019 to inquire about any heritage interests the Region or its
Heritage Planning Advisory Committee (HPAC) may have related to the study area. The Region provided a response on March 25, 2019 and indicated that their records show that there are no cultural heritage resources of Regional interest in the study area. The Region’s Planner noted that the City of Kitchener-owned land adjacent to the south and east of 508 Riverbend Drive is noted as a historic core area in their records, however, there are no longer any built heritage structures found on these parcels. Beyond these comments, the Region reported no other known heritage interests in the study area.

4.2 Field Survey

A field survey was conducted on June 7, 2019 to photograph and document the study area surroundings, and to record any local features that could enhance ARA’s understanding of their setting in the landscape and contribute to the cultural heritage evaluation process. As noted in Method section 2, properties with potential cultural heritage resources were examined during the field survey and those that did not possess heritage value were eliminated. This type of preliminary investigation (a windshield survey) was appropriate given the scale of the study area. The heritage staff conducting the assessment reached conclusions regarding potential CHVI based on visual evidence and on their significant experience evaluating BHRs and CHLs using the criteria outlined in O. Reg. 9/06 of the OHA. A standardized checklist based on O. Reg. 9/06 was created for all properties with potential cultural heritage resources. This checklist aided in the evaluation process and was used to judge whether a given resource (BHR or CHL) possessed design or physical value, historical or associative value, or contextual value. Once evaluated, these potential cultural heritage resources were considered candidate cultural heritage resources. The significance of cultural heritage resources already identified and evaluated (i.e., identified CHLs) were documented in the same O. Reg. 9/06 format.

5. Heritage Assessment

The Spring Valley Sewage Pumping Station Class EA project involves the properties located at 355 and 365 Riverbend Drive in the City of Kitchener. The following CHLs were identified within the study area: the Grand River Corridor – City of Kitchener Identified Cultural Heritage Landscape L-GRC-1 (CHL 1) and the Walter Bean Trail - City of Kitchener Identified Cultural Heritage Landscape L-TRL-17 (CHL 2).

A summary of the results of the evaluation of the CHLs against the criteria set out in O. Reg. 9/06 can be found in Table 3 and Table 4. Information sheets containing the evaluations for each cultural heritage resource can be found in Appendix A.
The assessment determined that the two CHLs met one or more of the *O. Reg. 9/06* criteria. Accordingly, these can now be classified as candidate heritage properties - CHLs (CHL 1 and CHL 2). Locations of the candidate CHLs are illustrated below on Map 8.
Map 8: Assessment Results
(Produced by ARA under licence using ArcGIS® software by Esri, © Esri)
### Table 3: CHLs with Cultural Heritage Value or Interest

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>CHVI (Y/N)</th>
<th>Criteria Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHL 1</td>
<td>Grand River</td>
<td>Y</td>
<td>Historical or Associative, and Contextual Value</td>
</tr>
<tr>
<td>CHL 2</td>
<td>Walter Bean Trail</td>
<td>Y</td>
<td>Design or Physical Value, Historical or Associative, and Contextual Value</td>
</tr>
<tr>
<td>Number</td>
<td>Name</td>
<td>Value Statement(s)</td>
<td>Heritage Attributes*</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CHL 1</td>
<td>Grand River</td>
<td>The Grand River has been the ancestral home of Indigenous peoples for 10,000 years and has influenced the settlement of the watershed area. The CHL is important in defining, maintaining and supporting the character of the Region of Waterloo as it dominates the landscape and has influenced the area’s development. It is physically, functionally, visually and historically linked to its surroundings as it was a principle factor that influenced Pre-Contact lifeways and historic settlement patterns. The Grand River watershed is one of the best-known watersheds in southwestern Ontario and is federally recognized as a Canadian Heritage River. The river is a landmark in the community and the views to and from it represent important scenic landscapes.</td>
<td>Well-defined river valley with alternating steep and shallow banks; meandering river with significant vegetation communities and associated wildlife habitat; and significant views to, from and within the watershed.</td>
</tr>
<tr>
<td>CHL 2</td>
<td>Walter Bean Trail</td>
<td>Representative example of an urban trailway. The Walter Bean Trail is directly associated with Walter Bean (1908-1998), a prominent local businessman and community leader. Mr. Bean was a founding member of the Kitchener-Waterloo Community Foundation and through the organization established the trail in 1998. The Walter Bean Trail connects the cities of Waterloo, Cambridge and Kitchener and the Township of Woolwich along the Grand River. It is physically and functionally linked to its surroundings through the provision of critical ecosystem services and recreational opportunities. It is visually linked to the Grand River through scenic views. The trail is a landmark maintaining an important recreational and conservation link through the City.</td>
<td>A link from West Montrose (north) to the Town of Blair (south); alignment that parallels the Grand River on its west bank and rises and falls with the variable height of valley walls; a position in the valley that provides panoramic views along and across the river valley; pavement with limestone screenings; and, service sites including trail heads, parking, seating areas, and way-finding and interpretive signage.</td>
</tr>
</tbody>
</table>
6. Development Plan

According to the Region of Waterloo’s Request for Consultant Services, “The purpose of the Class Environmental Assessment is to review the needs of the Spring Valley SPS to determine the recommended approach for the future operation. This may include upgrades, expansion, or full replacement of the existing station” (Region of Waterloo 2018:34).

Specifically, the Request for Consultant Services notes that the goal of the Class EA is to identify alternatives and provide recommendations on the following:

- Requirements to accommodate future capacity needs, operational needs and meet current industry standards.
- Preferred approach to accommodate future needs, whether it be station upgrades, expansion, or full replacement.
- Future site requirements for the station, including the location of a new facility if this is feasible and identified as the preferred alternative.
- Conceptual design of the pumping station based on the preferred alternative (Region of Waterloo 2018:34).

The above objectives will require a Schedule ‘B’ Municipal Class EA study. A preliminary conceptual design will also be undertaken as part of this EA for the recommended pump station approach (Region of Waterloo 2018:34).

Four alternative solutions are being considered:

- Alternative 1 – Upgrade the existing station with offsite emergency storage.
- Alternative 2A – New station in the Walter Bean Tail parking lot.
- Alternative 2B – New station in the open area north of the existing station.
- Alternative 2C – New station on industrial land south of existing station.

The project location consists of the properties at 355 and 365 Riverbend Drive in the City of Kitchener and are specifically located on part of Lots 58 and 59, German Company Tract, Geographic Township of Waterloo, Former Waterloo County. The Study Area boundary for the project, as proposed by CIMA Canada Inc., is illustrated on Map 9. The map also depicts the smaller Focused Environmental Impact Study Area including the existing Spring Valley SPS along with the four proposed alternative solutions. The Study Area was used for the purpose of scoping the level of field investigation required to address natural and cultural heritage concerns as they relate to the development of design alternatives as part of the EA (MTCS 2019a).
Map 9: Spring Valley SPS Study Area – Alternative 1

(CIMA Canada Inc. 2020a)
Map 10: Spring Valley SPS Study Area and Alternative 2A, 2B, and 2C

(CIMA Canada Inc. 2020a)
7. Analysis of Potential Impacts

Municipal infrastructure projects have the potential to affect cultural heritage resources. The MTCS InfoSheet #5: Heritage Impact Assessments and Conservation Plans (MCL 2006b:3) provides a list of potential impacts to consider when evaluating any proposed development. Outlined in the method’s section of this report, impacts can be classified as either direct or indirect. Direct impacts (those that physically affect the heritage resources themselves) include but are not limited to: initial project staging; excavation/levelling operations; construction of access roads; and renovations or repairs over the life of the project.

Indirect impacts include but are not limited to: alterations that are not compatible with the historic fabric and appearance of the area; the creation of shadows that alter the appearance of an identified heritage attribute; the isolation of a heritage attribute from its surrounding environment; the obstruction of significant views and vistas; and other less-tangible impacts.

As outlined above, ARA considers a larger study area as part of its business practice and evaluates cultural heritage resources located within the project location and on all adjacent properties to ensure that all potential direct and indirect impacts to resources are addressed. It is noted that a preferred alternative and subsequent detailed designs would provide ARA with a clearer understanding of potential project impacts. Therefore, the review of impacts will be at a high-level.

Each of the four alternative solutions listed in Section 6 and illustrated on Map 9 above were evaluated to determine potential impacts to CHL 1 and CHL 2. If should be noted that archaeological and environmental impacts are to be addressed in separate environmental and archaeological reports.

7.1 Alternatives 1, 2B and 2C

Given the distance between Alternative 1, 2B and 2C and CHL 1 and CHL 2, and the presence of Riverbend Drive acting as a buffer between these landscapes and the potential new infrastructure, no cultural heritage impacts are anticipated.

If Alternative 1, 2B or 2C is selected, resulting in the construction of new infrastructure or the replacement, upgrade or expansion of existing infrastructure at the current SPS location, none of the heritage attributes outlined in Section 5 will be isolated from their surrounding environment, context or significant relationship and no rezoning will occur.
Should Alternative 1, 2B or 2C be selected as the preferred option, and a design concept is presented that maintains the current height of the SPS or proposes a minimally taller structure no higher than one storey, no new shadows will be cast near the identified cultural heritage resources. The placement of these alternatives are set a significant distance from CHL 1 or CHL 2. Further, waste water management buildings are typically low profile, resulting in minimal potential for the creation of shadows.

Alternative 1, 2B or 2C will not result in direct or indirect impacts to significant views or vistas within, from, or of natural features associated with the CHLs. Views and/or vistas are noted as heritage attributes of CHL 1 and CHL 2 and do contribute to their CHVI (see Appendix A). Significant views to, from, and/or within the watershed are noted as a heritage attribute of the Grand River Corridor (CHL 1) and the position in the valley that provides panoramic views along and across the river valley is noted as contributing to the CHVI of the Water Bean Trail (CHL 2). Alternative 1 would maintain the SPS in its current location, inclusive of upgrades, and Alternative 2C would be located a significant distance from the identified landscapes. Alternative 2B would be visible from the Walter Bean Trail (CHL 2), however this view is not noted as a heritage attribute of the CHL as it is focused outside of the river valley.

### 7.2 Alternative 2A

Alternative 2A was found to present the potential for indirect impacts to CHL 1 and direct impacts to CHL 2 through the placement of a new station on the Walter Bean Trail, specifically in the parking lot at the trail head in close proximity to the Grand River. CIMA+ detailed the following requirements to construct Alternative 2A:

> “A station on this property would increase the length of the proposed forcemain by approximately 100 metres as it is further North than the existing station. Approximately 200 metres of new sanitary sewer would also be required to cross under Riverbend Drive and divert flow to a new wet well on this property. The elevation of a new station on this property would be between one and two metres higher than the existing…” (CIMA+ 2019a:11).

Alternative 2A is anticipated to lead to direct impacts to the Walter Bean Trail (CHL 2) through the construction of a SPS at the trail head, resulting in alterations that are not compatible with the context of this cultural heritage resource. There is also the potential for the new station to cast shadows on the vegetation buffering the trail and the Grand River Corridor. In addition, both CHL 1 and CHL 2 are related through views and associations, therefore, the siting of infrastructure and construction staging areas between the two CHLs would interrupt this relationship, impacting views to, from, and/or within the Grand River Corridor and Water Bean Trail. If mature trees/vegetation in the
project location, notably along the Walter Bean Trail and banks of the Grand River, are to be impacted/removed during project activities related to constructing Alternative 2A, this may result in alterations to the naturalized setting and character of both CHLs.

In addition, the current placement of the Walter Bean Trail parking lot would need to be relocated should Alternative 2A be selected, further impacting CHL 2 as more naturalized land would be altered within the landscape to accommodate a new lot. The physical intrusion of SPS infrastructure directly adjacent to the Walter Bean Trail also posses an impact to the cultural enjoyment CHL 2 affords to the public who frequent the trail recreationally.

Lastly, the siting of additional infrastructure (i.e., water mains) and the nature of the construction activities related to possible wastewater servicing alternatives has the potential to directly impact the adjacent Grand River (CHL 1) and existing alignment of the Water Bean Trail (CHL 2).

8. Recommendations and Conclusions

The study area consists of the properties at 355 and 365 Riverbend Drive in the City of Kitchener as well as all adjacent properties. A windshield survey of the study area was conducted, and all potential cultural heritage resources noted were evaluated against the criteria of O. Reg. 9/06. Of those, the following two CHLs were identified within the study area: the Grand River Corridor – City of Kitchener Identified Cultural Heritage Landscape L-GRC-1 (CHL 1) and the Walter Bean Trail - City of Kitchener Identified Cultural Heritage Landscape L-TRL-17 (CHL 2).

Upon review of the four alternative solutions identified to address the existing opportunities associated with the Spring Valley SPS, Alternatives 1, 2B and 2C are not anticipated to result in any cultural heritage impacts.

As of December 2020, the preliminary preferred choice is Alternative 2B. Should this alternative be selected as the final design alternative, the evaluation shows there are no anticipated cultural heritage impacts.

Notwithstanding the preliminary preferred choice, should alternative 2A be considered as the preferred alternative there is potential indirect impacts to CHL 1 and direct impacts to CHL 2. These impacts include: casting shadows on mature vegetation adjacent to both landscapes; interruption of the relationship between CHL 1 and CHL 2 and views to, from, and/or within the landscapes; removal of mature trees that contribute to the scenic character of CHL 1 and CHL 2; and, construction activities with the potential to impact the existing alignment and recreational enjoyment of the Walter Bean Trail.
As a result of this Cultural Heritage Existing Conditions report, the following mitigation strategies are recommended to address the identified potential adverse impacts associated with Alternative 2A:

- That during the planning and design phases, infrastructure should avoid cultural heritage resources where possible and any construction staging areas should be located on lands that are not identified as CHLs.
- That CHL 1 and CHL 2 are related through views and associations, therefore, the siting of infrastructure and construction staging areas should not interrupt this relationship by being located between the two CHLs.
- That consideration should also be given to the nature of the construction activities (i.e., soil removal, vibrations, etc.) to minimize any direct impact to the adjacent Grand River (CHL 1) and Walter Bean Trail (CHL 2).
- That consideration should be given to the location of future construction and the type of construction techniques and machinery used so as not to impede with the existing alignment of the Walter Bean Trail Cultural Heritage Landscape.
- That Alternative 2A (new station in the Walter Bean Trail parking lot) has the potential to indirectly impact CHL 1 and directly impact CHL 2. Should Alternative 2A be selected as the preferred alternative, a Heritage Impact Assessment report should be undertaken to confirm the anticipated impacts outlined in this report, evaluate any additional impact of the proposed design, as well as outline avoidance/mitigation measures to minimize the impact. The Heritage Impact Assessment may outline mitigation measures including additional landscaping that might be required to minimize visual impacts along with suggested design approaches. Mitigation measures may be discussed with Planners at the Region of Waterloo and the City of Kitchener.
- That public consultation may result in additional potential cultural heritage resources being identified. If potential cultural heritage resources are identified, they should be reviewed by a qualified heritage consultant to: 1) determine their cultural heritage value or interest, 2) evaluate potential project impacts, and 3) suggest strategies for future conservation of any candidate cultural heritage resources.

The EA process includes preliminary studies, an examination of alternatives and selection of a preferred alternative prior to the development of preliminary and detailed designs. Impacts to cultural heritage resources should be considered during all phases of the EA process. Further, these preliminary mitigation recommendations are subject to review and confirmation during the detailed design phase, in consideration of the more detailed understanding of design and project constraints.
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Appendix A: Identified Built Heritage Resources and Cultural Heritage Landscapes

Cultural Heritage Landscape No. 1

**Boundary:** The Grand River flows through the east side of the Region of Waterloo, entering in the Township of Woolwich in the north and exiting in the Township of North Dumfries in the south.

**Name:** Grand River

**Recognition:** Federally recognized Canadian Heritage River; City of Kitchener Cultural Heritage Landscapes Study (L-GRC-1)

**Location:** Region of Waterloo

**Type of Landscape:** River

**Description:**

According to *Canadian Heritage Rivers System: National River Conservation Program*:

Farmland accounts for over 70 percent of the 6,800 square km Grand River watershed, which is the largest in southern Ontario. Although the river is not designated for its natural values, it provides habitat to thousands of species of birds, fish, animals and other wildlife including about 80 species at risk. The Grand River Forest is one of the few remaining Carolinian forests in Canada, containing species such as sycamore, sassafras, pignut hickory, and chinquapin oak. More than 90 species of fish are found in the river system, about half of all species in Canada. Close to 250 species of birds have been reported at Luther Marsh Wildlife Management Area (Canadian Heritage Rivers System 2017).

Over 800 archeological sites tell the story of 11,000 years of human history within the Grand watershed. When Europeans arrived, the Neutral people controlled the territory of the Grand. Following the American Revolution, members of the Iroquois Confederacy were granted land in the watershed as a reward for their loyalty to the British Crown (Canadian Heritage Rivers System 2017). The Six Nations of the Grand River and the Mississaugas of the New Credit First Nation have a strong presence to this day (GRCA 2018). Loyalist settlers soon followed, along with Mennonites from Pennsylvania as well as Scottish immigrants. The Mohawk Chapel in Brantford and the Pioneer Memorial Tower in Kitchener are two national historic sites that recognize these settlers. Adaptive reuse of historical structures like mills and factories along the river has helped to
preserve the Grand’s built heritage in areas such as Elora, Fergus, Cambridge and Brantford and Paris (Canadian Heritage Rivers System 2017).

Photograph:

![West Bank of the Grand River Adjacent to the Study Area, Looking North](image)

**Date of Photograph:** June 7, 2019

**Indicators of Cultural Heritage Value or Interest from O. Reg. 9/06:**

<table>
<thead>
<tr>
<th>O. Reg. 9/06 Criteria</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td><strong>1. The property has design value or physical value because it,</strong></td>
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<tr>
<td>i. Is a rare, unique, representative or early example of a style, type, expression,</td>
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<tr>
<td>material or construction method,</td>
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<tr>
<td>ii. Displays a high degree of craftsmanship or artistic merit, or</td>
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<tr>
<td>iii. Demonstrates a high degree of technical or scientific achievement.</td>
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<tr>
<td><strong>2. The property has historical value or associative value because it,</strong></td>
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<tr>
<td>i. Has direct associations with a theme, event, belief, person, activity organization</td>
<td>Yes</td>
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<tr>
<td>or institution that is significant to a community,</td>
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<tr>
<td>ii. Yields, or has the potential to yield, information that contributes to an understanding of a community of culture, or</td>
<td></td>
<td></td>
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<tr>
<td>iii. Demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.</td>
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</table>
3. The property has contextual value because it,

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<tr>
<th>O. Reg. 9/06 Criteria</th>
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<th>No</th>
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</thead>
<tbody>
<tr>
<td>i. Is important in defining, maintaining or supporting the character of an area,</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>ii. Is physically, functionally, visually or historically linked to its surroundings,</td>
<td>Yes</td>
<td></td>
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<tr>
<td>iii. Is a landmark.</td>
<td>Yes</td>
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</table>

**Evaluation of Cultural Heritage Value or Interest According to O. Reg. 9/06:**

**Historical or Associative Value:** The Grand River has been the ancestral home of Indigenous peoples for 10,000 years and has influenced the settlement of the watershed area.

**Contextual Value:** The Grand River CHL is important in defining, maintaining and supporting the character of the Region of Waterloo as it dominates the landscape and has influenced the area’s development. The CHL is physically, functionally, visually and historically linked to its surroundings as it was a principle factor that has influenced Pre-Contact lifeways and historic settlement patterns. The Grand River watershed is one of the best-known watersheds in southwestern Ontario and is federally recognized as a Canadian Heritage River. The Grand River CHL is a landmark in the community. The views to and from the river represent important scenic landscapes.

**Identification of CHVI:** Possess CHVI.

**Heritage Attributes:** Well-defined river valley with alternating steep and shallow banks; meandering river with significant vegetation communities and associated wildlife habitat; and significant views to, from and within the watershed.
Cultural Heritage Landscape No. 2

Boundary: Follows the west bank of the Grand River from the City of Kitchener’s north boundary to the south boundary at Highway 401.

Name: Walter Bean Trail

Recognition: City of Kitchener Cultural Heritage Landscapes Study (L-TRL-17)

Location: City of Kitchener

Type of Landscape: Transportation Corridor

Date: 1998

Description:

The following description of the Walter Bean Trail was adapted from the City of Kitchener’s 2014 study, Cultural Heritage Landscapes:

The Walter Bean Trail extends 78 km along the 290-km length of the Grand River basin. The trail alignment parallels the Grand River on its west bank and rises and falls with the variable height of valley walls. Its position in the valley provides panoramic views along and across the river valley. The trail is generally paved with limestone screenings with strategic asphalted sections where slopes are steep or where there is high traffic. The trail is serviced by trail heads where parking, seating areas, way-finding and interpretive signage is provided.

The trail was named for Walter Bean. He was a philanthropist, business and community leader and military hero who believed in contributing to the welfare of area residents. He championed the vision of a public hiking trail along the Grand River. As Honourary Chair of The Kitchener and Waterloo Community Foundation, Walter challenged the Foundation to increase public accessibility to the river by building a trail along its length within the Region of Waterloo. Following Walter's death, his many friends took up his challenge and in 1998 formed The Walter Bean Grand River Community Trails Foundation. To make his vision a reality, the non-profit fundraising corporation partnered with the cities of Cambridge, Kitchener, Waterloo and the Township of Woolwich to build and maintain the recreational trail.

The trail connects many local municipal trails and the Trans Canada Trail (City of Kitchener 2014b:106).
Map of the Walter Bean Trail in the Region of Waterloo (Walter Bean Trail 2006)

Economical Insurance Trailway (Walter Bean Trail) Trail Head in the Study Area, Looking East

Date of Photograph: June 7, 2019
Indicators of Cultural Heritage Value or Interest from O. Reg. 9/06:

<table>
<thead>
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Evaluation of Cultural Heritage Value or Interest According to O. Reg. 9/06:

Design or Physical Value: The Walter Bean Trail is a representative example of an urban trailway.

Historical or Associative Value: The CHL is directly associated with Walter Bean (1908-1998), a prominent local businessman and community leader. Bean was a brigadier-general in the Canadian Forces and became president and general manager of the Waterloo Trust & Savings Company. Walter was a founding member of the Kitchener-Waterloo Community Foundation and through the organization established the trail in 1998.

Contextual Value: The Walter Bean Trail connects the cities of Waterloo, Cambridge and Kitchener and the Township of Woolwich along the Grand River. The trail is physically and functionally linked to its surroundings through the provision of critical ecosystem services and recreational opportunities. It is visually linked to the Grand River through the provision of scenic views. The trail is a landmark maintaining an important recreational and conservation link through the City.

Identification of CHVI: Possesses CHVI.
Heritage Attributes: A link from West Montrose (north) to the Town of Blair (south); alignment that parallels the Grand River on its west bank and rises and falls with the variable height of valley walls; a position in the valley that provides panoramic views along and across the river valley; pavement with limestone screenings; and, service sites including trail heads, parking, seating areas, and way-finding and interpretive signage.
Appendix B: Key Team Member Two Page Curriculum Vitae

Paul J. Racher, M.A., CAHP
Principal - Management and Senior Review (MSR) Team
ARCHAEOLOGICAL RESEARCH ASSOCIATES LTD.
219-900 Guelph Street, Kitchener, ON N2H 5Z6
Phone: (519) 804-2291 x100 Mobile: (519) 835-4427
Fax: (519) 286-0493
Email: pracher@arch-research.com

Biography
Paul Racher is a Principal of ARA. He has a BA in Prehistoric Archaeology from WLU and an MA in anthropology from McMaster University. He began his career as a heritage professional in 1986. Over the three decades since, he has overseen the completion of several hundred archaeological and cultural heritage contracts. Paul has years of experience related to linear transportation and rail projects, notably through the ongoing work to complete a Cultural Heritage Inventory for the Region of Waterloo's Stage 2 LRT from Kitchener to Cambridge, Ontario. He holds professional license #P007 with the MTCS. Paul is a former lecturer in Cultural Resource Management at WLU. He is a professional member of the Canadian Association of Heritage Professionals (CAHP) and the President of the Ontario Archaeological Association (OAS).

Education

Professional Memberships and Accreditations
Current Ministry of Tourism Culture and Sport Professional Licence (#P007). Professional Member of the Canadian Association of Heritage Professionals (CAHP), Volunteer on the ethics committee. Member of the Ontario Archaeological Society (OAS), Volunteer on the Professional Committee.
Associate of the Heritage Resources Centre, University of Waterloo.
RAQS registered with MTO.

Work Experience

Current  
Vice-President, Operations, Archaeological Research Associates Ltd.
Responsible for winning contracts, client liaison, project excellence, and setting the policies and priorities for a multi-million dollar heritage consulting firm.

2000-2011  
Project Manager/Principal Investigator, Archaeological Research Associates Ltd.
Managed projects for a heritage consulting firm. In 10 field seasons, managed hundreds of projects of varying size.

2008-2011  
Part-Time Faculty, Wilfrid Laurier University.
Lecturer for Cultural Resource Management course (AR 336). In charge of all teaching, coursework, and student evaluations.

1995  
Field Archaeologist, University of Toronto.
Served as a supervisor on a multinational archaeological project in northern Jordan.

1992-1995  
Teaching Assistant, University of Toronto.
Responsible for teaching and organizing weekly tutorials for a number of courses.

1991-1994  
Part-Time Faculty, Wilfrid Laurier University.
Lectured for several courses in anthropology. Held complete responsibility for all teaching, coursework, and student evaluations.

1992-1996  
Partner in Consulting Company, Cultural Management Associates Incorporated.
Supervised several archaeological contracts in Southern Ontario. Participated in a major (now published) archaeological potential modeling project for MTO.

1989-1991  
Partner in Consulting Company, Cultural Resource Consultants.
Managed the financial affairs of a consulting firm whilst supervising the completion of several contracts performed for heritage parks in central Ontario.

1988-1991  
Principal Investigator/Project Director, Archaeological Research Associates Ltd.
Oversaw the completion of large contracts, wrote reports, and was responsible for ensuring that contracts were completed within budget.
Biography
Kayla Jonas Galvin, Archaeological Research Associates Ltd.'s Heritage Operation Manager, has extensive experience evaluating cultural heritage resources and landscapes for private and public-sector clients to fulfil the requirements of provincial and municipal legislation such as the Environmental Assessment Act, the Standards & Guidelines for the Conservation of Provincial Heritage Properties and municipal Official Plans. She served as Team Lead on the Ministry of Tourism, Culture and Sport Historic Places Initiative, which drafted over 850 Statements of Significance and for Heritage Districts Work!, a study of 64 heritage conservation districts in Ontario. Kayla was an editor of Arch, Truss and Beam: The Grand River Watershed Heritage Bridge Inventory and has worked on Municipal Heritage Registers in several municipalities. Kayla has drafted over 150 designation reports and by-laws for the City of Kingston, the City of Burlington, the Town of Newmarket, Municipality of Chatham-Kent, City of Brampton and the Township of Whitchurch-Stouffville. Kayla is the Heritage Team Lead for ARA’s roster assignments for Infrastructure Ontario and oversees evaluation of properties according to Standards & Guidelines for the Conservation of Provincial Heritage Properties. Kayla is a professional member of the Canadian Association of Heritage Professionals and sits on the board of the Ontario Association of Heritage Professionals.

Education
2016 MA in Planning, University of Waterloo. Thesis Topic: Goderich – A Case Study of Conserving Cultural Heritage Resources in a Disaster
2003-2008 Honours BES University of Waterloo, Waterloo, Ontario
Joint Major: Environment and Resource Studies and Anthropology

Professional Memberships and Accreditations
Current Professional Member, Canadian Association of Heritage Professionals (CAHP)
Board Member, Ontario Association of Heritage Professionals
Candidate Member, Ontario Professional Planning Institute (OPPI)
Work Experience

Current  **Heritage Operations Manager, Archaeological Research Associates Ltd.**


2009-2013  **Heritage Planner, Heritage Resources Centre, University of Waterloo**

Coordinated the completion of various contracts associated with built heritage including responding to grants, RFPs and initiating service proposals.


Coordinated the field research and authored reports for the study of 32 Heritage Conservation Districts in Ontario. Managed the efforts of over 84 volunteers, four staff and municipal planners from 23 communities.

2007-2008  **Team Lead, Historic Place Initiative, Ministry of Culture**

Liaised with Ministry of Culture Staff, Centre’s Director and municipal heritage staff to draft over 850 Statements of Significance for properties to be nominated to the Canadian Register of Historic Places. Managed a team of four people.

Selected Professional Development

2018  Indigenous Canada, University of Alberta

2017  Empowering Indigenous Voices in Impact Assessments, Webinar, International Association for Impact Assessments

2015  Introduction to Blacksmithing, One-Day

2015  Leadership Training for Managers Course, Dale Carnegie Training

2014  Heritage Preservation and Structural Recording in Historical and Industrial Archaeology, Wilfrid Laurier University, 12 weeks

2014  Conservation and Craftsmanship in Sustainable City Building Presented by the Hamilton Burlington Society of Architects

2012  Region of Waterloo Workshop on Heritage Impact Assessments, Half-Day

2012  Conducting Historic Building Assessments Workshop, One-Day

2012  Window Restoration Workshop, One-Day

2011  Lime Mortars for Traditionally Constructed Brickwork, Two-Day Workshop, ERA Architects and Historic Restoration Inc., Toronto

2011  Energy & Heritage Buildings Workshop Two-Day Workshop, Heritage Resources Centre
2010  Architectural Photography, Mohawk College
2010  Project Management Fundamentals, University of Waterloo Continuing Education
2009  Cultural Heritage Landscapes Two-Day Workshop, Heritage Resources Centre
2009  Urban Landscape and Documentary Photography, Mohawk College
2008  Introduction to Digital Photography, Mohawk College
2008  Heritage Planning Four-Day Workshop, Heritage Resources Centre

Selected Publications
Biography
Lindsay Benjamin is practiced at providing professional planning recommendations and expertise on complex studies, research projects, cultural heritage impact and archaeological assessments. Through her work as a Cultural Heritage Planner, Lindsay researched, drafted and implemented policies for the Regional Official Plan and other planning documents regarding the recognition, review and conservation of cultural heritage resources, including archaeological resources, heritage bridges, cultural heritage landscapes and scenic roads. She served as a Team Lead on the MTCS Historic Places Initiative that drafted over 850 Statements of Significance, was Series Editor for Phase 2 of Heritage Districts Work! a study of 32 heritage districts, and was the Primary Author of Arch, Truss and Beam: The Grand River Watershed Heritage Bridge Inventory. Lindsay has developed heritage property tax relief programs, worked on Municipal Heritage Registers and drafted designation by-laws in several municipalities. She holds a Master of Applied Environmental Studies degree from the University of Waterloo School of Planning and is a Professional Member of the Canadian Association of Heritage Professionals (CAHP).

Education
2013 MAES, University of Waterloo, Waterloo, ON
Focus: Planning
2009 Post-Graduate Diploma, Centennial College, Toronto, ON
Publishing & Professional Writing
2007 Honours BES, University of Waterloo, Waterloo, ON
Major: Urban Planning, Co-op
Distinction: Dean’s Honours List

Professional Memberships and Accreditations
Current Professional Member, Canadian Association of Heritage Professionals (CAHP)
Candidate Member, Ontario Professional Planning Institute (OPPI)
Work Experience

Current  **Heritage Project Manager, Archaeological Research Associates Ltd.**
Coordinate the completion of heritage projects, including the evaluation of the cultural heritage value or interest of a variety of cultural heritage resources.

2013-2017  **Cultural Heritage Planner, Region of Waterloo**
Planned and implemented Arts, Culture and Heritage initiatives that support creativity and quality of life in the Region of Waterloo. Researched, developed and implemented Regional cultural heritage policies and programs. Fulfilled Regional and Provincial cultural heritage and archaeological review responsibilities under the Planning Act and Ontario Heritage Act.

2009-2013  **Heritage Planner, Heritage Resources Centre, University of Waterloo**
Facilitate the completion of various cultural heritage contracts by undertaking archival research, site visits, report writing, liaising with municipal staff and stakeholders and coordinating project scheduling and budgetary responsibilities.

2006-2007  **Project Manager, Heritage Resources Centre, University of Waterloo**
Established the process of nominating heritage properties to the National Register of Historic Places. Primary liaison between all stakeholder groups, responsible for motivating each group to participate and provide funding. Drafted over 130 Statements of Significance for properties to be nominated to the National Register. Managed a team of five employees.

2005-2006  **Heritage Conservation Easement Planning Assistant, Ontario Heritage Trust**
Supported easement acquisitions through researching the historical and architectural value of potential acquisitions and extensive photo documentation. Screened and processed activity requests from property owners and stakeholders relating to the easement program. Conducted site visits to monitor conservation easement sites and prepared condition assessment reports.

Professional Development

2012-Present  Canadian Association of Heritage Professionals (CAHP), Professional Membership

2013-2017  Ontario Heritage Planners Network Workshops
2017, 2016  National Trust for Canada Conference
2016  Heritage Inventories Workshop, City of Hamilton & ERA Architects
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<td>Heritage Impact Assessments Workshop, Region of Waterloo</td>
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<td>Historic Preservation Conference, Spokane, WA</td>
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<td>2012</td>
<td>Canadian Institute of Planners National Conference, Banff, ON</td>
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<td>2012</td>
<td>Historic Window Restoration Workshop, Ontario Heritage Conference</td>
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<td>2011</td>
<td>Energy and Heritage Buildings Two-Day Workshop, Heritage Resources Centre</td>
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**Awards**

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<td>2014</td>
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<td>Celebration, Grand River Conservation Authority</td>
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<td>2009</td>
<td>A. K. (Alice King) Sculthorpe Award for Advocacy - Architectural</td>
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**Publications**

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<td>2017</td>
<td>Historic Interpretive Plaque, Village of German Mills</td>
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<td>2016</td>
<td>Historic Interpretive Plaque, Huron Road Bridge</td>
</tr>
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<td>2015</td>
<td>Region of Waterloo Public Building Inventory</td>
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<td>2014</td>
<td>Historic Interpretive Plaque, West Montrose Covered Bridge</td>
</tr>
<tr>
<td>2014</td>
<td>Series of 17 Practical Conservation Guides for Heritage Properties</td>
</tr>
</tbody>
</table>
Penny M. Young, M.A., CAHP (#P092)
Heritage Project Manager
ARCHAEOLOGICAL RESEARCH ASSOCIATES LTD.
1480 Sandhill Drive, Unit 3, Ancaster, ON L9G 4V5
Phone: (519) 804-2291 x121 Email: penny.young@arch-research.com

Biography
Penny Young has 27 years of cultural heritage management experience, 21 years working in government, as a Heritage Planner, Heritage Coordinator, Regional Archaeologist and Archaeological Database Coordinator where she managed and coordinated the impacts to cultural heritage resources including built heritage, archaeological sites and cultural heritage landscapes for compliance with municipal, provincial and federal legislation and policy. She has conducted results-driven and collaborative management of complex cultural heritage resource projects within the public sector involving developing project terms of reference, defining scope of work, preparation of budgets and conducting sites visits to monitor and provide heritage/archaeological and environmental advice and direction. At the Ministry of Transportation Penny revised, updated and developed policy, as part of a team, for the Ontario Heritage Bridge Guidelines for Provincially Owned Bridge Guidelines for Provincially Owned Bridges. She received the MTO Central Region Employee Recognition Award in 2001 and 2002. While at MTO she provided technical advice and input into the development of the MTO Environmental Reference for Highway Design - Section 3.7 Built Heritage and Cultural Heritage Landscapes and the MTO Environmental Guide for Built Heritage and Cultural Heritage Landscapes. She is a professional member of the Canadian Association of Heritage Planners (CAHP) and holds Professional License #P092 from MTCS. She also holds memberships in the Ontario Professional Planners Institute (OPPI) and the Ontario Archaeological Society (OAS).

Education
1990-1993 Master of Arts, Department of Anthropology McMaster University, Hamilton Ontario. Specializing in Mesoamerican and Ontario archaeology.
1983-1987 Honours Bachelor of Arts (English and Anthropology), McMaster University, Hamilton, Ontario.

Professional Memberships and Accreditations
Current Professional Member of the Canadian Association of Heritage Professionals (CAHP)
Member of Ontario Archaeological Society
Pre-Candidate Member of the Ontario Professional Planners Institute
Ministry of Tourism Culture and Sport Professional Licence (#P092)

Work Experience

Current

Heritage Project Manager, Archaeological Research Associates Ltd.
Coordinates ARA project teams and conducts heritage assessment projects including Heritage Impact Assessments, Built Heritage and Cultural Heritage Landscape Assessments, and Cultural Heritage Resource Evaluations. Additional responsibilities include the completion of designation by-laws and heritage inventories. Liaises with municipal staff, provincial ministries and Indigenous communities to solicit relevant project information and to build relationships.

2008-2016

Heritage Planner, Culture Services Unit, Ministry of Tourism, Culture & Sport (MTCS)
Responsible for advising and providing technical review for management of cultural heritage resources in environmental assessment undertakings and planning projects affecting provincial ministries, municipalities, private sector proponents and Indigenous communities. Advised on municipalities’ Official Plan (OP) policies cultural heritage conservation policies. Provided guidance on compliance with the Public Work Class EA, other Class EA legislation and 2010 Standards and Guidelines for Provincial Heritage Properties.

2014

Senior Heritage Planner, Planning and Building Department, City of Burlington (temporary assignment)
Project manager of the study for a potential Heritage Conservation District. Provided guidance to a multiple company consultant team and reported to municipal staff and the public. Liaised with Municipal Heritage Committee and municipal heritage property owners approved heritage permits and provided direction on Indigenous engagement, archaeological site assessments and proposed development projects.

2011

Heritage Coordinator, Building, Planning and Design Department, City of Brampton (temporary assignment)
Project lead for new Heritage Conservation District Study. The assignment included directing consultants, managing budgets, organizing a Public Information Session, and reporting to Senior Management and Council. Reviewed development/planning documents for impacts to heritage including OP policies, OP Amendments, Plans of subdivision and Committee of Adjustment applications and Municipal Class EA undertakings.
2010-2011  **Senior Heritage Coordinator, Culture Division, City of Mississauga**
(temporary assignment)
Provided advice to Senior Management and Municipal Council on heritage conservation of built heritage, archaeological sites and cultural heritage landscapes. Liaised with multiple municipal staff including the Clerks’ office, Parks and development planners and the public. Supervised and directed project work for junior heritage planner.

1999-2008  **Regional Archaeologist, Planning and Environmental Section, Ministry of Transportation (MTO)**
Responsibilities included: project management and coordination of MTO archaeology and heritage program, managed multiple consultants, conducted and coordinated field assessments, surveys and excavations, liaised with First Nations’ communities and Band Councils, estimated budgets including $200,000 retainer contracts.
Jacqueline McDermid, B.A.
Technical Writer
ARCHAEOLOGICAL RESEARCH ASSOCIATES LTD.
1480 Sandhill Drive, Unit 3, Ancaster, ON L9G 4V5
Phone: (905) 304-6893 x221 Fax: (519) 286-0493
Email : jmcdermid@arch-research.com

Biography
Jacqueline recently finished a six-month contract with MTO as the Heritage Specialist for Central Region, returning to her permanent position at ARA in the Fall 2018 where she had been the acting Heritage Team Lead for the year previous. As the lead, she directed the preparation and oversaw the submission of deliverables to clients. Currently, she is the Heritage Team Technical Writer and Researcher, where she continues to research and evaluate the significance of cultural heritage resources using Ontario Regulation 9/06 and 10/06, most recently completing designation reports for the City of Burlington, City of Kingston and Town of Newmarket and the Town of Whitchurch-Stouffville. Further, Jacqueline has overseen the completion of many Built Heritage and Cultural Heritage Landscape Studies as well as Heritage Impact Assessments including reports for a proposed aggregate pit, road widening, the LRT in the Region of Waterloo and a National Historic Site in St. Catharines. As well as being a proficient technical writer, Jacqueline is skilled at writing in approachable language demonstrated by my crafting of 30 properties stories and 35 thematic stories for Heritage Burlington’s website. She holds an Honours Bachelor of Arts in Near Eastern Archaeology from Wilfrid Laurier University. In addition to heritage experience, Jacqueline also has archaeological experience working as field crew, as an Assistant Lab Technician and archaeological technical writer.

Education
2000-2007 Honours B.A., Wilfrid Laurier University, Waterloo, Ontario
Major: Near Eastern Archaeology

Work Experience
2018  **Environmental Planner – Heritage Ministry of Transportation, Central Region** – Six-month contract.
Responsibilities included: project management and coordination of MTO heritage program, managed multiple consultants, conducted and coordinated field assessments and surveys, estimated budgets including $750,000 retainer contracts. Provided advice on heritage-related MTO policy to Environmental Policy Office (EPO) and the bridge office.

2017-2018  **Acting Heritage Team Lead – Heritage Archaeological Research Associates Ltd., Kitchener, ON**
Managed a team of Heritage Specialists, oversaw the procurement of projects, retainers; managed all Heritage projects, ensured quality of all outgoing products

Report preparation; correspondence with the Ministry of Tourism, Culture, and Sport; report submission to the Ministry and clients; and administrative duties (PIF and Borden form completion).

2012-2013  **Lab Assistant, Archaeological Research Associates Ltd., Kitchener, ON**
Receive, process and register artifacts.

2011-2012  **Field Technician, Archaeological Research Associates Ltd., Kitchener, ON**
Participated in field excavation and artifact processing.

2005-2009  **Teaching Assistant, Wilfrid Laurier University, Waterloo, ON**
Responsible for teaching and evaluating first, second, third- and fourth-year student lab work, papers and exams.

2005-2007  **Lab Assistant, Wilfrid Laurier University – Near Eastern Lab, Waterloo, ON**
Clean, Process, Draw and Research artifacts from various sites in Jordan.

**Selected Professional Development**

2017  Empowering Indigenous Voices in Impact Assessments, Webinar, International Association for Impact Assessments

2015  Introduction to Blacksmithing, One-Day

2015  Leadership Training for Managers Course, Dale Carnegie Training
Selected Cultural Heritage Projects

2018  Credit River Bridge Strategic Conservation Plan
      Worked with environmental planners, consultants and MTO management
      advising and providing technical review for the MTO’s pilot SCP,
      submission to MTCS.

2017-2018  500 Bloomington Road CHER, Aurora Client: Infrastructure Ontario
2018  Queen Victoria Park Heritage Impact Assessment, Niagara Falls
      Client: Canadian Niagara Hotels

2016  700 University Avenue CHER, Toronto Client: Infrastructure Ontario

2017  Weston Heritage Conservation District Phase II Study
      Client: Weston Heritage Conservation District Board

2017  Cultural Heritage Assessment of 176 Rennick Road, Burlington
      Client: City of Burlington

2017  Westdale Theatre Cultural Heritage Assessment
      Client: City of Hamilton

2017  Documentation & Salvage Report for 264 Governors Road, Hamilton
      Client: Intero Development Group Inc.

2016-2018  Cultural Heritage Inventory for Region of Waterloo LRT Client: WSP
2016  Town of Newmarket Designation Reports Client: Town of Newmarket

2016  Jigs Hollow Pit Cultural Heritage Impact Study, Township of
      Woolwich Client: Preston Sand & Gravel Company Limited

2016  Municipal Register of Cultural Heritage Resources Client: City of
      Burlington

2016  East Side Sanitary Pumping Station Built Heritage and Cultural
      Heritage Landscape Assessment, Port Colborne Client: Niagara
      Region
Biography
Sarah Clarke is Archaeological Research Associates Ltd.’s Heritage Research Manager. Sarah has over 12 years of experience in Ontario archaeology and 10 years of experience with background research. Her experience includes conducting archival research (both local and remote), artifact cataloguing and processing, and fieldwork at various stages in both the consulting and research-based realms. As Team Lead of Research, Sarah is responsible for conducting archival research in advance of ARA’s archaeological and heritage assessments. In this capacity, she performs Stage 1 archaeological assessment site visits, conducts preliminary built heritage and cultural heritage landscape investigations and liaises with heritage resource offices and local community resources in order to obtain and process data. Sarah has in-depth experience in conducting historic research following the Ontario Heritage Toolkit series, and the Standards and Guidelines for Provincial Heritage Properties. Sarah holds an Honours B.A. in North American Archaeology, with a Historical/Industrial Option from Wilfrid Laurier University and is currently enrolled in Western University’s Intensive Applied Archaeology MA program. She is a member of the Ontario Archaeological Society (OAS), the Society for Industrial Archaeology, the Ontario Genealogical Society (OGS), the Canadian Archaeological Association, and is a Council-appointed citizen volunteer on the Brantford Municipal Heritage Committee. Sarah holds an R-level archaeological license with the MTCS (#R446).

Education
1999–2010 Honours BA, Wilfrid Laurier University, Waterloo, Ontario Major: North American Archaeology, Historical/Industrial Option

Professional Memberships and Accreditations
Current Member of the Ontario Archaeological Society
Current Member of the Society for Industrial Archaeology
Current Member of the Brant Historical Society
Current Member of the Ontario Genealogical Society
Current Member of the Canadian Archaeological Association
Current Member of the Archives Association of Ontario

Work Experience

Current Team Lead – Research; Team Lead – Archaeology, Archaeological Research Associates Ltd.
Manage and plan the research needs for archaeological and heritage projects. Research at offsite locations including land registry offices, local libraries and local and provincial archives. Historic analysis for archaeological and heritage projects. Field Director conducting Stage 1 assessments.

2013-2015 Heritage Research Manager; Archaeological Monitoring Coordinator, Archaeological Research Associates Ltd.
Stage 1 archaeological field assessments, research at local and distant archives at both the municipal and provincial levels, coordination of construction monitors for archaeological project locations.

2010-2013 Historic Researcher, Timmins Martelle Heritage Consultants Inc.
Report preparation, local and offsite research (libraries, archives); correspondence with the Ministry of Tourism, Culture, and Sport; report submission to the MTCS and clients; and administrative duties (PIF and Borden form completion and submission, data requests).

2008-2009 Field Technician, Archaeological Assessments Ltd.
Participated in field excavation and artifact processing.

2008-2009 Teaching Assistant, Wilfrid Laurier University.
Responsible for teaching and evaluating first year student lab work.

2007-2008 Field and Lab Technician, Historic Horizons.
Participated in excavations at Dundurn Castle and Auchmar in Hamilton, Ontario. Catalogued artifacts from excavations at Auchmar.

2006-2010 Archaeological Field Technician/Supervisor, Wilfrid Laurier University.
Field school student in 2006, returned as a field school teaching assistant in 2008 and 2010.

Professional Development

2018 Grand River Watershed 21st Annual Heritage Day Workshop and Celebration (One day)

2018 Mississaugas of the New Credit First Nation Historical Gathering and Education Conference (One day)

2017 Ontario Genealogical Society Conference. (Two days)
2016  Ontario Archaeological Society Symposium (One day)
2015  Introduction to Blacksmithing Workshop, Milton Historical Society (One day)
2015  Applied Research License Workshop, MTCS (One day)
2014  Applied Research License Workshop, MTCS (One day)
2014  Heritage Preservation and Structural Recording in Historical and Industrial Archaeology. Four-month course taken at Wilfrid Laurier University, Waterloo, ON. Professor: Meagan Brooks

Presentations
2017  “Urban Historical Archaeology: Exploring the Black Community in St. Catharines, Ontario.” Canadian Archaeological Association Conference, Gatineau, QC.

Volunteer Experience
Current Council-appointed citizen volunteer for the Brantford Municipal Heritage Committee.