

# Stage 1 Archaeological Assessment of the Port Colborne Lands Parcel 2, Part of Lots 21, 23, and 24, Concession 2, and Part of Lot 22, Concession 1, Geographic Township of Humberstone, County of Welland, City of Port Colborne, Regional Municipality of Niagara

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## Original Report

Prepared for:

### Elite MD Developments

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Archaeological Licence: P449 (Bhardwaj)

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## Executive Summary

Archaeological Services Inc. was contracted by Elite MD Developments to undertake a Stage 1 Archaeological Assessment of the Port Colborne Lands Parcel 2, part of Lots 21, 23, and 24, Concession 2, and part of Lot 22, Concession 1, in the Geographic Township of Humberstone, County of Welland, now in the City of Port Colborne, Regional Municipality of Niagara. The project area is approximately 34.4 hectares and is divided into three large, non-contiguous properties (Properties A, B, and C). Permission to access the project area and to carry out all activities necessary for the completion of the assessment was granted by the proponent on August 11, 2021.

The Stage 1 background research entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the project area, along with nineteenth- and twentieth-century settlement trends. This research has led to the conclusion that there is potential for the presence of both Indigenous and Euro-Canadian archaeological resources within the project area.

The Stage 1 assessment has determined that the entire project area retains archaeological potential and will require a Stage 2 Archaeological Assessment in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*.



## Project Personnel

- **Senior Project Manager:** Jennifer Ley, Honours Bachelor of Arts (R376), Lead Archaeologist, Manager, Planning Assessment Division
- **Project Manager:** Jamie Houston-Dickson, Master of Arts (P398), Associate Archaeologist, Project Manager, Planning Assessment Division
- **Project Director:** Robb Bhardwaj, Master of Arts (P449), Associate Archaeologist, Project Manager, Planning Assessment Division
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- **Report Reviewers:** Jamie Houston-Dickson; Jennifer Ley



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## 1.0 Project Context

Archaeological Services Inc. was contracted by Elite MD Developments to undertake a Stage 1 Archaeological Assessment of the Port Colborne Lands Parcel 2, part of Lots 21, 23, and 24, Concession 2, and part of Lot 22, Concession 1, in the Geographic Township of Humberstone, County of Welland, now in the City of Port Colborne, Regional Municipality of Niagara (Figure 1). The project area is approximately 34.4 hectares.

### 1.1 Development Context

This assessment was conducted under the senior project management of Jennifer Ley (R376), the project management of Jamie Houston-Dickson (P398), and the project direction of Robb Bhardwaj (P449); the work was completed under Ministry of Heritage, Sport, Tourism and Culture Industries (hereafter the Ministry) Project Information Form P449-0556-2021. All activities carried out during this assessment were completed as part of a Secondary Plan submission, as required by the City of Port Colborne and the *Planning Act* (Ministry of Municipal Affairs and Housing, 1990). All work was completed in accordance with the *Ontario Heritage Act* (Ministry of Culture [now the Ministry] 1990) and the *Standards and Guidelines for Consultant Archaeologists* (hereafter the Standards) (Ministry of Tourism and Culture [now the Ministry], 2011).

The overall Port Colborne Lands development area encompasses a large assembly of lands comprised of multiple property parcels (a mix of former residential and commercial lands and actively cultivated and fallow agricultural fields) situated between Highway 3 (also referred to as Main Street East) to the north, Elizabeth Street to the west, Lorraine Road to the east, and Killaly Street East to the south (part of Lots 21 through 24, Concession 2), with an additional property located south of Killaly Street East (part of Lot 22, Concession 1) (Figure 2); not all properties within this general area are included in the Port Colborne Lands development area. The various properties within the overall Port Colborne Lands development area have been grouped into three distinct project areas (“Parcels”), each of which will be subject to separate archaeological assessments.



Parcel 2, the focus of the current assessment, is divided into three non-contiguous properties totaling 34.4 hectares. Property A (11.1 hectares) is on Lots 23 and 24, Concession 2, Property B (15.7 hectares) is on Lot 21, Concession 2, and Property C (7.6 hectares) is on Lot 22, Concession 1 (Figure 3). Properties A, B, and C comprise the northernmost, easternmost, and southernmost portions, respectively, of the entire Port Colborne Lands development area. Permission to access the Parcel 2 project area and to carry out all activities necessary for the completion of the assessment was granted by the proponent on August 11, 2021.

Parcel 1 encompasses portions of Lots 22, 23, and 24, Concession 2, for a total of 74.7 hectares, and Parcel 3 consists of a single 12.7-hectare property in the southeast portion of Lot 22, Concession 2 (Figure 2). The Stage 1 and 2 Archaeological Assessments of Parcel 1 and Parcel 3 are being conducted under Ministry Project Information Forms P449-0542-2021 and P449-0552-2021, respectively.

## 1.2 Historical Context

The purpose of this section is to describe the past and present land use and settlement history of the project area, and any other relevant historical information gathered through the Stage 1 background research.

Historically, the project area was located in the centre of Lots 21, 23, and 24, Concession 2, and the north of Lot 22, Concession 1, in the Geographic Township of Humberstone, County of Welland.

Currently, the Parcel 2 project area is divided into three separate properties (Figure 3). Property A is a single 11.1-hectare rectangular property parcel (current street address 543 Main Street East) fronting the south side of Highway 3 and west side of Snider Road and spanning Lots 23 and 24, Concession 2. Property B is a single 15.7-hectare L-shaped property parcel with no current street address fronting the south side of Highway 3 and the west side of Lorraine Road on Lot 21, Concession 2. Property C is a single 7.6-hectare rectangular property parcel with no current street address fronting the south side of Killaly Street East and east side of Snider Road on Lot 22, Concession 1; currently, the length of Snider Road adjacent to Property C ceases to be a proper road approximately 100 metres



south of Killaly Street East, at which point it transitions into a narrow farm lane or trail.

All three properties are currently vacant agricultural lands comprised primarily of cultivated fields, with Properties A and B also containing large woodlots. It is not known whether any occupants or structures were ever present on Properties A or B, but there are remnants of two small building foundations at the north end of Property C.

### 1.2.1 Pre-Contact Settlement

Table 1 provides a general summary of the pre-contact Indigenous settlement history of southern Ontario.

**Table 1: Pre-contact Indigenous Temporal Culture Periods in Southern Ontario**

Period	Description
Paleo 13,000 Before Present – 9,000 Before Present	<ul style="list-style-type: none"><li>• First human occupation of Ontario</li><li>• Astronomers/ Artists/ Hunters/ Gatherers/ Foragers</li><li>• Language Unknown</li><li>• Small occupations</li><li>• Non-stratified populations</li></ul>
Archaic 9,000 Before Present – 3,000 Before Present	<ul style="list-style-type: none"><li>• Astronomers/ Artists/ Hunters/ Gatherers/ Foragers</li><li>• Small occupations</li><li>• Non-stratified populations</li><li>• Mortuary ceremonialism</li><li>• Extensive trade networks for raw materials and finished objects</li></ul>





Period	Description
<p>Early Woodland 3,000 Before Present – 2,400 Before Present</p>	<ul style="list-style-type: none"> <li>• Astronomers/ Artists/ Hunters/ Gatherers/ Foragers</li> <li>• General trend in spring/summer congregation and fall/winter dispersal</li> <li>• Small and large occupations</li> <li>• First evidence of community identity</li> <li>• Mortuary ceremonialism</li> <li>• Extensive trade networks for raw materials and finished objects</li> </ul>
<p>Middle Woodland 2,400 Before Present – 1,300 Before Present, Transitional Woodland 1,300 Before Present – 1,000 Before Present</p>	<ul style="list-style-type: none"> <li>• Astronomers/ Artists/ Hunters/ Gatherers/ Foragers</li> <li>• A general trend in spring/summer congregation and fall/winter dispersal into large and small settlements</li> <li>• Kin-based political system</li> <li>• Increasingly elaborate mortuary ceremonialism</li> <li>• Incipient agriculture in some regions</li> <li>• Longer term settlement occupation and reuse</li> </ul>
<p>Late Woodland (Early) Anno Domini 900 – Anno Domini 1300</p>	<ul style="list-style-type: none"> <li>• Foraging with locally defined dependence on agriculture</li> <li>• Villages, specific and special purpose sites</li> <li>• Socio-political system strongly kinship based</li> </ul>
<p>Late Woodland (Middle) Anno Domini 1300 – Anno Domini 1400</p>	<ul style="list-style-type: none"> <li>• Major shift to agricultural dependency</li> <li>• Villages, specific and special purpose sites</li> <li>• Development of socio-political complexity</li> </ul>
<p>Late Woodland (Late) Anno Domini 1400 – Anno Domini 1650</p>	<ul style="list-style-type: none"> <li>• Complex agricultural society</li> <li>• Villages, specific and special purpose sites</li> <li>• Politically allied regional populations</li> </ul>



## 1.2.2 Post-Contact Settlement

### Between the Lakes Purchase (Treaty 3)

The project area is within Treaty 3, the Between the Lakes Purchase. Following the 1764 Niagara Peace Treaty and the follow-up treaties with Pontiac, the English colonial government considered the Mississaugas to be their allies since they had accepted the Covenant Chain. The English administrators followed the terms of the Royal Proclamation and insured that no settlements were made in the hunting grounds that had been reserved for their use (Johnston, 1964; Lytwyn, 2005). In 1784, under the terms of the Between the Lakes Purchase, signed by Sir Frederick Haldimand and the Mississaugas, the Crown acquired over one million acres of land in-part spanning westward from near modern day Niagara-on-the-Lake along the south shore of Lake Ontario to modern day Burlington (Aboriginal Affairs and Northern Development Canada, 2016).

### Geographic Township of Humberstone

The land within Humberstone Township was acquired by the British from the Mississaugas (Ojibwa) in 1784. The first township survey was undertaken in 1789, and the first legal settlers occupied their land holdings the same year. The township was named after a town in Lincolnshire, England. Humberstone was initially settled by disbanded soldiers, mainly Butler's Rangers, following the end of the American Revolutionary War. In 1805, Boulton noted that, due to its remote location from Niagara, Humberstone was "but little cultivated." The township began to flourish more following the construction of the first Welland Canal during the early 1830s. By the 1840s, the township was said to contain good land but that the farms were not well cultivated. The population was comprised mainly of a large community of Pennsylvania Dutch settlers, with some Canadians and Americans (Armstrong, 1985:144; Boulton, 1805:82; Ott, 1967; Rayburn, 1997:163; Smith, 1846:84).

### Early Development of Port Colborne

The City of Port Colborne is located at the Lake Erie end of the Welland Ship Canal. First named Gravelly Bay, and later renamed in honour of the Lieutenant-Governor of Upper Canada, Sir John Colborne, the village was established in 1832 when the Welland Canal was extended in a direct line to Lake Erie from the



Chippawa Creek, or Welland River, and a lock was constructed near the settlement. The settlement was laid out on parts of Lots 26, 27, and 28, Concession 1, and registered plans of subdivision for the village date from 1847 to 1863.

Port Colborne became a port of entry during the nineteenth century and was served by the Buffalo, Brantford and Goderich Railway (which later became the Buffalo and Lake Huron Railway and then the Grand Trunk Railway) and the Welland Railway. In 1873, the population of the village was about 1,500 and there were several stores and hotels, as well as a brewery (Crossby, 1873:256). By 1876, there was one public and one separate school, four churches and burial grounds, a town hall, one grist mill, one sawmill, three planning mills, a sash and door factory, one bank, two telegraph offices, and a grain elevator, and a protective pier with a lighthouse extended into Lake Erie on the west side of the canal. Port Colborne became a town in 1918 and later incorporated as a city in 1966 (Wainfleet Historical Society, 1992:281-289; City of Port Colborne, 1970; Page, 1876:11; Rayburn, 1997:276; Scott, 1997:182; Winearls, 1991:783-784).

### **The Buffalo, Brantford and Goderich Railway, the Buffalo and Lake Huron Railway, and the Grand Trunk Railway**

The Parcel 2 project area, in particular Property C, is located less than 100 metres north of a former nineteenth-century railway that bisected the north halves of the lots along Concession 1. Originally the Buffalo, Brantford and Goderich Railway, the name and ownership of this railway changed several times throughout the nineteenth and twentieth centuries. The railway ran west from Fort Erie, passing through Port Colborne on its way to Caledonia and eventually Brantford.

The Buffalo, Brantford and Goderich Railway Company was incorporated in 1852 and given authority to build from Fort Erie to Brantford. The rail line from Buffalo to Caledonia was opened on December 20, 1853, followed shortly thereafter by the opening of the line from Caledonia to Brantford in January 1854; in November 1856, the line opened to Paris (Walker, 1954; Scrimgeour, 1990; Hughes, 2003; Cooper, 2014a; Cooper, 2014b).



The Buffalo, Brantford and Goderich Railway encountered financial difficulties during construction of the line extension between Paris and Goderich, and, in 1856, the company was reorganized as the Buffalo and Lake Huron Railway Company in order to purchase the assets of the Buffalo, Brantford and Goderich Railway (Walker, 1954; Scrimgeour, 1990; Hughes, 2003; Cooper, 2014a; Cooper, 2014b). Extension of the renamed Buffalo and Lake Huron Railway line to Goderich was completed in 1858, allowing the railway company “to capture sizeable freight traffic from Lake Michigan and Chicago to the eastern United States, via Goderich” (Scrimgeour, 1990). The rail line continued to experience financial issues and, in 1864, the Buffalo and Lake Huron Railway entered into a lease agreement with the Grand Trunk Railway Company. With access to the Buffalo and Lake Huron Railway, the Grand Trunk Railway hoped to facilitate easier and more efficient passenger and freight traffic between Detroit and Buffalo via Stratford, allowing the Grand Trunk Railway to better compete with the Great Western Railway. Finally, following several years of financial disputes, the Grand Trunk Railway took full ownership of the Buffalo and Lake Huron Railway in 1869-1870 (Walker, 1954; Scrimgeour, 1990; Hughes, 2003; Cooper, 2014a; Cooper, 2014b).

The railway continued operations as part of the Grand Trunk Railway network. In the early twentieth century, however, the Grand Trunk Railway, like several other Canadian railways, encountered financial difficulties. The federal government assumed operational control of the Grand Trunk Railway in 1920 and took full ownership in 1923, at which time the Grand Trunk Railway was amalgamated into the Canadian National Railways System (Scrimgeour, 1990); the former government-owned Canadian National Railways company was privatized in 1995.

Different segments of the original nineteenth-century rail line were abandoned over the course of the twentieth century. The segment between Caledonia and Fort Erie, by way of Port Colborne, was abandoned circa 1985 (Delamere, no date) (Hughes, 2003) (Cooper, 2014b). The former stretch railway corridor between Fort Erie and the east side of the Welland Canal in Port Colborne is now the Friendship Trail (Figure 1).



### 1.2.3 Review of Map Sources

A review of nineteenth- and early twentieth-century mapping was completed to determine if these sources depict any nineteenth-century Euro-Canadian settlement features that may represent potential historical archaeological sites within or adjacent to the project area. Historical map sources are used to reconstruct/predict the location of former features within the modern landscape by cross-referencing points between the various sources and then georeferencing them in order to provide the most accurate determination of the location of any property from historical mapping sources. The results can be imprecise (or even contradictory) because sources of error, such as the vagaries of map production, differences in scale or resolution, and distortions caused by the reproduction of the sources, introduce error into the process. The impacts of this error are dependent on the size of the feature in question, the constancy of reference points on mapping, the distances between them, and the consistency with which both are depicted on historical mapping.

In addition, not all settlement features were depicted systematically in the compilation of these historical map sources, given that they were financed by subscription, and subscribers were given preference with regards to the level of detail provided. Thus, not every feature of interest from the perspective of archaeological resource management would have been within the scope of these sources.

Figures 4 and 5 show the overall Parcel 2 project area overlaid on the 1862 *Tremaine Map of the Counties of Lincoln and Welland* (Tremaine & Tremaine, 1862) and the 1876 *Illustrated Historical Atlas of the Counties of Lincoln and Welland* (Page, 1876), respectively. In addition to nineteenth-century historical mapping, the 1907 Welland topographic map (Department of Militia and Defence, 1907), which identifies waterways, wetlands, woodlots, elevation, and other land features, was also reviewed for the presence of potential historical features; all three properties appear just below the 600-foot (182-metre) elevation contour (Figure 6).



## Property A

Both the 1862 map and 1876 atlas show Property A situated centrally within Lots 24 and 23, Concession 2 (Figures 4 and 5). The north limit fronts the south side of Fort Erie Road (present-day Highway 3), which bisects the center of the lots, and the east limit fronts present-day Snider Road. The maps indicate that the south halves of Lots 24 and 23, Concession 2 (south of Fort Erie Road) were owned by Samuel Augustine and George Augustine, respectively, in both 1862 and 1876. There are no houses or other settlement features depicted or in the immediate vicinity of Property A on either map. The nearest source of water identified on the 1862 and 1876 maps is a south-flowing watercourse approximately 300 metres east of Property A.

The 1907 topographic map shows Property A on cleared land that is bordered by additional cleared land to the south and a woodlot to the west, and Highway 3 (north limit) and Snider Road (east limit) are illustrated in corresponding locations to earlier mapping. The south-flowing watercourse previously illustrated 300 metres west of the property is shown on the 1907 topographic map as cutting southwest from Highway 3 toward Snider Road, then crossing to the west side of Snider Road beneath a bridge located just outside the southeast corner of Property A, where it then resumes a southward course. It is inferred that this relocation of the watercourse represents the channelization associated with the first iteration of the Wignell Drain. No structures or other settlement features are depicted within the limits of Property A, but a frame house is illustrated just south of the property along the west side of the drain, and another is located directly opposite the property on the north side of Highway 3.

## Property B

The 1862 map and 1876 atlas show the L-shaped Property B overlying the northwest and centre parts of the south half of Lot 21, Concession 2 (Figures 4 and 5). Fort Erie Road, which bisects the centre of Lot 21, aligns with the north limit of Property B and the line of present-day Lorraine Road bounds the east of the property. Both maps show the south half of Lot 21 divided into multiple parcels, with the southern portion comprising a single large parcel and the northern portion divided into six unequal parcels. In 1862, the narrower



northwest segment of Property B corresponds to the parcel owned by E. Doan, and the larger south segment occupies part of the large southern parcel owned by P. Weaver. On the 1876 atlas, the south parcel is listed under the ownership of Daniel Fry, while no owner is indicated on the northwest parcel. There are no houses or settlement features illustrated on Property B on either map; the 1876 atlas does depict two houses fronting the roads in the northeast portion of the southern half of the lot, but neither is located on the property parcels immediately bordering Property B. The nearest source of water is an unnamed watercourse indicated on a north to south axis approximately 50 to 100 metres west.

The 1907 topographic map shows Property B on cleared land abutting Highway 3 to the north and Lorraine Road to the east, with mostly cleared agricultural land bordering to the west, south, and northeast. There is a small area of trees in the centre of the property and a larger woodlot bordering the southwest end, and a bridge is illustrated adjacent to the northwest corner where the Wignell Drain crosses beneath Highway 3. As previously mentioned, by the early twentieth century the south-flowing watercourse shown just west of Property B on nineteenth-century mapping had been diverted further away from the property to the southwest by the Wignell Drain. There are no houses or other settlement features illustrated on Property B, but there are nearby frame houses located to the east and north.

## Property C

The 1862 map and 1876 atlas show Property C located in the northwest corner of Lot 22, Concession 1, fronting intersection of the present-day Killaly Street East (north limit) and Snider Road (west limit) corridors. The north half of Lot 22 is divided into equal east and west parcels, and Property C is situated entirely within the north portion of the west parcel that was owned by H. Snyder Senior in 1862 and by George Snider in 1876. There are no structures illustrated on Property C on the 1862 *Tremaine* map, but the 1876 atlas shows two structures and an associated orchard fronting Killaly Street East at the north limit of Property C. The first is on the southeast corner of the crossroads of present-day Killaly Street East and Snider Road, adjacent to the property's northwest corner, and the second is



in the north-centre of the property. A third house and its associated orchard are depicted on the adjacent northeast parcel of Lot 22 in proximity to Property C. Both maps illustrate the Buffalo and Lake Huron Railway (formerly the Buffalo, Brantford and Goderich Railway) corridor running east-west along or just beyond the south limit of Property C, which is fairly accurate given the potential error inherent in the nineteenth century maps, as the actual location of the former railway corridor (now the Friendship Trail) is only approximately 65 metres south of Property C. The nearest source of water is an unnamed watercourse flowing south through the east half of Lot 22, just outside the east limit of Property C.

The 1907 topographic map shows Property C on cleared land at the southeast corner of the junction of Killaly Street East (north limit) and Snider Road (west limit), with additional cleared land to the south and east; a small area of trees is illustrated in the northwest portion. There is a single frame structure identified on or immediately adjacent to the northeast corner fronting Killaly Street East, which may correlate to one of the structures identified on the property on the 1876 atlas, and another frame structure illustrated further east of the property also corresponds to the location of a house on earlier mapping. The watercourse identified just east of Property C on the nineteenth-century maps is not shown in the same location on the 1907 topographic map. As previously noted, the watercourse had by this time been diverted to the west side of Snider Road well north of Property C by the Wignell Drain, which is shown passing the property to the west on the 1907 map, crossing Killaly Street East under a bridge approximately 100 metres distant. The Grand Trunk Railway (formerly the Buffalo and Lake Huron Railway, now the Friendship Trail) is illustrated less than 100 metres south of the property.

#### **1.2.4 Review of Aerial Imagery**

In order to further understand the previous land use on the project area, historical and modern aerial imagery was reviewed. Figure 7 depicts the project area on aerial photographs from 1934, 2000, and 2010 (Ministry of Natural Resources, 1934; Google Earth Pro, 2021).





## Property A

All three images show Property A overlying agricultural fields in the east and centre, and a wooded area in the west. An area of cleared land, corresponding to the present location of a hydroelectrical corridor, is visible along the west limit of the property. In the 1934 image, a farm lane extends east from Snider Road through the centre of the east field, then cuts north to connect to Highway 3. This lane feature is not visible in subsequent images. The 2000 and 2010 images show three separate residences fronting Highway 3 in the portions that have been excluded from the project area: two are located adjacent to the northeast corner of Property A (street addresses 667 and 683 Main Street East) and the other occupies the excluded portion bordered by the west part of Property A (street address 523 Main Street East). Current imagery of indicates no significant changes to Property A since 2010.

## Property B

The image from 1934 shows Property B overlapping parts of several adjacent and fully ploughed agricultural fields. By 2000, a large area in the centre of Property B is covered in scrub and a significant number of trees, indicating this area had not been ploughing for some time. The narrow channel of the Wignell Drain cutting diagonally through the northwest corner is visible on all three images, as is a broad seasonal drainage through the northern field. The small triangular area in the far northwest corner between the Wignell Drain and the road is cleared on the 1934 image, but the 2000 and 2010 images show this area covered in trees; more recent imagery shows the vegetation in this small area has since been removed and the land graded, with a portion covered in gravel to provide additional parking for the neighbouring residence (Figure 3).

## Property C

All three images show Property C as primarily open cultivated land. Along the north limit fronting Killaly Street East, however, the 1934 image shows multiple structures, including two located within the small, rectangular parcels that have been excluded from Property C (present-day 697 Killaly Street East to the northwest and 741 Killaly Street East to the northeast) and additional structures,



including one large barn, located within the Property C limits between those excluded parcels. By 2000, the two excluded residences are still present, but no structures remain standing within the Property C limits; there are, however, at least two old building foundations still visible in this location on Property C, and portions of Property C nearest to the road (between 30 and 50 metres, depending on location) is unploughed grassland. The conditions on the property appear unchanged on the 2010 image except for the addition of a large workshop associated with the excluded northeast residence at 741 Killaly Street East built directly on the property line, with half of the building falling within the limits of Property C. Current imagery shows the workshop remains partially within the Property C limits at this time. As noted in Section 1.2 above, current imagery also shows the length of Snider Road along the west limit of Property C transitioning from a proper road to a narrow farm lane or trail approximately 100 metres south of Killaly Street East.

## 1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the project area, its environment characteristics (including drainage, soils, surficial geology, and topography), and current land use and field conditions.

### 1.3.1 Registered Archaeological Sites

In order that an inventory of archaeological resources could be compiled for the project area, three sources of information were consulted: the site record forms for registered sites housed at the Ministry, published and unpublished documentary sources, and the files of Archaeological Services Inc.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database, which is maintained by the Ministry. This database contains archaeological sites registered within the Borden system. The Borden system was first proposed by Doctor Charles E. Borden and is based on a block of latitude and longitude. Each Borden block measures approximately 13 kilometres east to west by 18.5 kilometres north to south and is referenced by a four-letter



designator. Sites within a block are numbered sequentially as they are found. The project area is located in the centre-east of the AfGt Borden block.

Twenty-one archaeological sites have been registered with an approximate one-kilometre radius of the overall Parcel 2 project area (Ministry of Heritage, Sport, Tourism and Culture Industries, 2021). A detailed summary of all 21 sites is available in Appendix A. All sites are affiliated with Indigenous occupations except for one (Site AfGt-306) associated with a nineteenth-century Euro-Canadian occupation.

Two of the previously registered sites are located on Property B within the Parcel 2 project area: the Ott 1 site (AfGt-54), the eastern half of which overlaps the west limit of Property B, and the Ott 5 site (AfGt-59), which is located in the northeast portion of Property B near Highway 3 (Pengelly, 1984). See section 1.3.2 below for further discussion of these sites.

Six other Indigenous sites are located within 300 metres of the Parcel 2 lands. The Ott 2 (AfGt-55), Ott 3 (AfGt-56), Ott 4 (AfGt-57), Snider 1 (AfGt-35), and Snider 3 (AfGt-37) sites are within approximately 150 metres of Property B and the Augustine 1 site (AfGt-41) is approximately 300 metres south of the southwest corner of Property A. No other registered sites are within 300 metres of Properties A, B, or C.

### **1.3.2 Previous Assessments**

Two archaeological assessments are known to have been completed on portions of the Parcel 2 project area.

In 1984, James W. Pengelly conducted an archaeological survey of a small portion of the Wignell Drain Basin as part of the Archaeological Conservation Program, an initiative to identify and record archaeological sites in the Regional Municipality of Niagara (Pengelly, 1984; Pengelly and Pengelly, 1986). The work was conducted under Ontario Ministry of Citizenship and Culture (now the Ministry) licence #84-90.

The survey was carried out from 1984 to 1985 over approximately one square kilometre of the 18-square-kilometre Wignell Drain Basin area and resulted in the



identification of 30 sites dating from the Middle Archaic to the Contact periods (Pengelly and Pengelly, 1986:3-5). One cluster of sites, which Pengelly refers to as the Snider-Ott sites, are on or immediately adjacent to the Property B portion of the Parcel 2 project area under review<sup>1</sup>; all of these sites were encountered during pedestrian survey of the agricultural fields.

The Snider-Ott complex consists of the Snider 1 (AfGt-35), Snider 2 (AfGt-36), Snider 3 (AfGt-37), Ott 1 (AfGt-54), Ott 2 (AfGt-55), Ott 3 (AfGt-56), Ott 4 (AfGt-57), and Ott 5 (AfGt-59) sites, which were documented east of Snider Road in Lot 22 and Lot 21, Concession 2. The Ott 5 (AfGt-59) site and the east half of the Ott 1 (AfGt-54) site are located in the north portion of Property B, whilst the Ott 2 (AfGt-55), Ott 3 (AfGt-56), Ott 4 (AfGt-57), and Snider 1 (AfGt-35) sites are within 100 metres of the west limit of Property B. The Snider 2 (AfGt-36) and Snider 3 (AfGt-37) sites are more than 100 metres from any portion of the current project area. Only the six Snider-Ott sites on or within 100 metres of Property B are summarized in this section.

The Ott 5 (AfGt-59) site, described in the Pengelly report (1984:11, 16) as approximately 50 metres south of Highway 3 and approximately 60 metres east of the Wignell Drain, is situated entirely within the northwest corner of Property B. The site consisted of a small, dense scatter of non-diagnostic Indigenous lithic artifacts within an area measuring approximately 15 metres in diameter, from which a sample of two scrapers, three bifaces, two point or knife fragments, several utilized flakes, and three cores were collected. The Ott 1 (AfGt-54) site, which overlaps Lot 21 (east portion, within Parcel B) and Lot 22 (west portion) approximately 175 metres south of Highway 3, consisted of a non-diagnostic Indigenous lithic scatter measuring approximately 85 metres east-west by 60

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<sup>1</sup> The locations of the sites discussed in this report are based on field mapping supplied in Pengelly's 1984 report (Pengelly, 1984: Figures 4 and 6), which shows the sites relative to known topographic features, current roadways, and property boundaries. These locations may deviate from location coordinates listed in the Ontario Archaeological Sites Database, which were recalculated from their original North American Datum 27 coordinates during the mass data migration to the new Ontario Past Portal system in 2015.



metres north-south, from which six scrapers, five bifaces, and one potential drill base fragment were collected (Pengelly, 1984:11, 15).

The Ott 2 (AfGt-55), Ott 3 (AfGt-56), Ott 4 (AfGt-57), and Snider 1 (AfGt-35) sites, located in the southeast part of Lot 22, Concession 2, are in the vicinity of the watercourse indicated on the nineteenth-century historical mapping (Figures 4 and 5), before the Wignell Drain diverted drainage to the west side of Snider Road. The Ott 2 (AfGt-55) site, located just west of the northwest corner of Property B, consisted of a non-diagnostic Indigenous lithic scatter measuring approximately 30 metres by 20 metres, from which a sample of four bifaces, two scrapers, and two possible projectile point fragments were recovered (Pengelly, 1984:11, 15). The Ott 3 (AfGt-56) site, located approximately 70 metres west of Property B and between approximately 150 metres and 175 metres south of Highway 3, was a small, non-diagnostic Indigenous lithic scatter measuring approximately 25 metres by 20 metres, from which a sample of two bifaces and one scraper were recovered (Pengelly, 1984:11, 15-16). The Ott 4 (AfGt-57) site, located approximately 50 metres west of Property B and between approximately 200 metres and 250 metres south of Highway 3, was a large, dense, non-diagnostic Indigenous lithic scatter measuring approximately 80 metres by 50 metres, from which a sample of two bifaces and one scraper were recovered (Pengelly, 1984:11, 16). The Snider I (AfGt-35) site, located less than 50 metres from Property B and between approximately 400 metres and 450 metres north of Killaly Street East (within Parcel 3 of the Port Colborne Lands development area), consisted of a large Indigenous lithic scatter approximately 0.5 hectare in size, from which a sample of eight bifaces, five scrapers, two blade fragments, one preform, and one diagnostic Otter Creek projectile point indicative of a Middle Archaic occupation were recovered (Pengelly, 1984:11-13).

In 2009, Archaeological Services Inc. conducted a Stage 1 Archaeological Assessment for a proposed new South Niagara East-West Arterial Road Corridor (Archaeological Services Inc., 2009). The purpose of the overall study was to confirm the need and preferred route for a new or improved east to west arterial road in the southern tier of the Regional Municipality of Niagara. The study area, located east of the Welland Canal, spanned over 200 square kilometres across four townships (Humberstone, Bertie, Crowland, and Willoughby), with the



southern limit in Port Colborne terminating at Killaly Street East. Both Properties A and B of the Port Colborne Lands Parcel 2 project area currently under review fall within the southwest corner of the 2009 study area, while Property C, situated on the south side of Killaly Street East, is just outside the 2009 study area. The Stage 1 assessment, which consisted of a map-based review and did not include a field review, determined that 94% of the overall assessment area, including most of Property A and nearly all of Property B of the current Parcel 2 project area, had potential for the recovery of archaeological sites (Archaeological Services Inc., 2009: Figure 4F). The final assessment report recommended an archaeological field review of the preferred route chosen for the east to west arterial road be undertaken to confirm the extent of archaeological potential along the chosen route.

No other archaeological assessments are known to have been completed on or within 100 metres of the project area.

### 1.3.3 Physiography

The project area is in the Haldimand Clay Plain physiographic region. The Haldimand Clay Plain is among the largest of the 53 defined physiographic regions in southern Ontario, comprising approximately 3,500-square kilometres (Chapman and Putnam, 1984:156-159; MacDonald, 1980:3). Generally, this region is flat and poorly drained, although it includes several distinctive landforms, including dunes, limestone pavements, back-shore wetland basins, and cobble, clay, and sand beaches.

A number of environmental sub-regions have been described in this part of the Niagara peninsula, including the Niagara Slough Clay Plain, the Fort Erie Clay Plain, the Calcareous Rock Plain (Onondaga Escarpment), the Buried Moraines, the Lake Erie Coast, and the Niagara River Valley (MacDonald, 1980). The distribution and nature of these sub-regions, and the specific environmental features they contain, have influenced land use in the region throughout history and pre-history. Properties B, C, and the east half of Property A are located on a clay plain, while the west half of Property A overlies part of a limestone plain.



The surficial geology of Properties A, C, and the northwest and southwest corners of Property B consists of massive to well-laminated fine-textured glaciolacustrine deposits of silt and clay with minor sand and gravel (Ontario Geological Survey, 2000). The remainder of Property B contains Paleozoic bedrock. Areas of Paleozoic bedrock are also found approximately 150 metres south of Property A (on the Parcel 1 lands) and approximately 230 metres north of Property A (the location of an active commercial quarry).

The project area is within the Lake Erie North Shore watershed. A large area at the west end of Property A is a regulated wetland (Niagara Peninsula Conservation Authority, 2022). The Wignell Drain flows through the northwest corner of Property B at Highway 3 and then continues west and south to empty at the north shore of Lake Erie (Ministry of Natural Resources and Forestry, 2020).

### **1.3.4 Existing Conditions**

The Parcel 2 lands are divided into three separate properties (Properties A, B, and C) distributed across Lots 21, 23, and 24, Concession 2, and Lot 22, Concession 1, for an overall project area of approximately 34.4 hectares (Figure 3)(Esri et alia, 2020).

#### **Property A**

Property A is a single, 11.1-hectare rectangular property parcel (543 Main Street East) fronting Highway 3 to the north and Snider Road to the east. The property overlaps parts of both Lots 23 and 24, Concession 2, with the central and east portions on Lot 23 and the west end on Lot 24. The Lot 23 lands are comprised mainly of agricultural fields, with a small, wooded area at the east limit by Snider Road, while the western Lot 24 lands consist primarily of a large woodlot, part of which is a regulated wetland, with a north-south hydroelectrical corridor running along the west limit. Property A is further bordered by a large, wooded wetland area to the west and agricultural fields to the south, both of which fall within Parcel 1 of the Port Colborne Lands development area.



## Property B

Property B is a single, 15.7-hectare L-shaped property parcel with no street address fronting Highway 3 to the north and Lorraine Road to the east, within the south-central part of Lot 21, Concession 2. There are agricultural fields in the north and south part of the property separated by a large woodlot the centre. Part of the Wignell Drain flows through the northwest corner of Property B at Highway 3, and the small triangular portion of land between the west side of the drain and the project area limit at the road has been graded and graveled for use by the occupants of the adjacent residence. The Wignell Drain continues south along the west boundary of Property B for approximately 100 metres before bending southwest. The north portion of Property B is bordered to the east by a large residential property and additional wooded areas, and to the west by a large residential property and an agricultural field, while the south portion of Property B is bordered to the south by ploughed fields and a wooded area, and to the west by the ploughed lands comprising Parcel 3 of the Port Colborne Lands development area.

## Property C

Property C is a single, 7.6-hectare rectangular property parcel with no street address fronting Killaly Street East to the north and Snider Road to the west, at the northwest corner of Lot 22, Concession 1. As noted previously, Snider Road ceases to be a proper road approximately 100 metres south of Killaly Street East along the limit of Property C. Property C consists of a large, ploughed agricultural field except for a small portion at the northernmost limit adjacent to Killaly Street East, which is covered in scrub and contains the remnant foundations of former structures that were present on the property by at least the early twentieth century. The property is further bordered by cultivated fields to the east and south.

### 1.3.5 Review of Archaeological Potential

The Standards, Section 1.3.1 stipulates that undisturbed lands within 300 metres of primary water sources (lakes, rivers, streams, creeks), secondary water sources (intermittent streams and creeks, springs, marshes, and swamps), ancient water





sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, and cobble beaches), and accessible and inaccessible shorelines (bluffs, swamps or marsh fields by the edge of a lake, sandbars stretching into marsh) are considered, at a generic level, to exhibit potential for Indigenous archaeological sites.

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south-central Ontario after the Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most common variables used for predictive modelling of site location. Historical mapping indicates a watercourse once flowed south, less than 100 metres from both Property B and Property C in the nineteenth century (Figures 4 and 5). This watercourse appears to have been redirected by the early twentieth century to create the Wignell Drain, which cuts southwest through the northwest corner of Property B and crosses to the west side of Snider Road before continuing south (Figures 1, 2, 6, and 7).

Other geographic characteristics that can indicate pre-contact archaeological potential include elevated topography (eskers, drumlins, large knolls, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, and distinctive land formations that might have been special or spiritual places for Indigenous populations, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use by Indigenous peoples, such as burials, structures, offerings, and rock paintings or carvings. Resource areas, including food or medicinal plants (migratory routes, spawning areas, prairie) and scarce raw materials (quartz, copper, ochre, or outcrops of chert and bedrock), are also considered characteristics that indicate pre-contact archaeological potential.

For the post-contact period, Section 1.3.1 of the Standards stipulates those areas of early Euro-Canadian settlement, including places of early military or pioneer settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries, are considered



to have archaeological potential. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks. Also considered to have archaeological potential are early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a federal, provincial, or municipal historical landmark or site, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations.

The majority of early nineteenth-century farmsteads, which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth-century maps, are likely to be captured by the basic proximity to water model, since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, the Standards considers undisturbed lands within 100 metres of early settlement roads or railroads to have potential for the presence of Euro-Canadian archaeological sites.

In addition to the above criteria for Indigenous and historical archaeological potential, the Standards also defines potential buffers of 300 metres around registered Indigenous and historical archaeological sites. While no historical sites have been registered in the general vicinity, currently there are two Indigenous sites registered on the project area and another six Indigenous sites registered within 300 metres of the project area.

In addition to the presence of water and registered Indigenous sites, Properties A, B, and C all front multiple historical roads, and Property C is also located less than 100 metres from a former nineteenth-century railroad. Historical mapping further indicates there was a farmstead located in the north part of Property C by at least the late nineteenth century (Figure 5).

The project area thus meets the criteria for both Indigenous and Euro-Canadian archaeological potential.



## 2.0 Field Methods

The optional field review was not required as part of this assessment, as per the Standards, Section 1.2. In order to provide images to support the analysis, conclusions, and recommendations of this report, current orthographic imagery (Figure 3) and images available through Google Earth Street View were reviewed (Images 1 through 7) (Google Earth Pro, 2021). The Google Earth Street View images were taken in April 2021 and are presented in Section 7.0 of this report. Photo locations and assessment conclusions have been compiled on project mapping (Figure 8).

### 2.1 Findings

The project area consists of agricultural fields and two small areas of trees (Images 1 through 7). Upon review of the available background sources, including historical and modern mapping and aerial imagery, it is concluded that the entirety of Properties A, B, and C comprising the Parcel 2 project area is considered to have archaeological potential and all three locations will require a Stage 2 Archaeological Assessment (Figure 8).

## 3.0 Analysis and Conclusions

Archaeological Services Inc. was contracted by Elite MD Developments to complete a Stage 1 Archaeological Assessment of the Port Colborne Lands Parcel 2, part of Lots 21, 23, and 24, Concession 2, and part of Lot 22, Concession 1, Geographic Township of Humberstone, Welland County, now in the City of Port Colborne, Regional Municipality of Niagara. The Parcel 2 project area totals 34.4 hectares and is divided into three non-contiguous properties comprising the northern-most (Property A, 11.1 hectares), eastern-most (Property B, 15.7 hectares), and southern-most (Property C, 7.6 hectares) portions of the overall Port Colborne Lands development. Parcels 1 and 3 comprise the central and western portions of the larger development and will be assessed separately.

The Stage 1 background research entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the property, along with nineteenth- and twentieth-century settlement trends.



This research indicated there is potential for both Indigenous and Euro-Canadian archaeological resources on the project area.

The Stage 1 background review has determined the entire Parcel 2 project area (Properties A, B, and C) retains archaeological potential and will require a Stage 2 Archaeological Assessment.

## 4.0 Recommendations

In light of these results, the following recommendation is made:

1. Prior to any land-disturbing activities within the Parcel 2 project area (Properties A, B, and C), a Stage 2 Archaeological Assessment must be conducted on all lands within the project area in accordance with the Ministry of Heritage, Sport, Tourism, and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*.
  - a) The Stage 2 Archaeological Assessment of all agricultural or open lands within the project area must be carried out by means of a pedestrian survey. The lands must be ploughed in advance of survey and allowed to weather for at least one substantial rainfall. Ploughing must be deep enough to provide total topsoil exposure, but not deeper than previous ploughing. The pedestrian survey must be completed at five-metre transect intervals, as outlined in Section 2.1.1 of the *Standards and Guidelines for Consultant Archaeologists*.
  - b) The Stage 2 Archaeological Assessment of all remaining portions of the project area where ploughing is not possible or viable must be carried out by means of a test pit survey. All test pits must be excavated at least five centimetres into sterile subsoil, with all soils being screened through six-millimetre wire mesh to facilitate artifact recovery. All test pits must be at least 30 centimetres in diameter and backfilled upon completion. Test pits must be excavated at five-metre transect intervals, as outlined in Section 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists*.

**NOTWITHSTANDING** the results and recommendations presented in this study, Archaeological Services Inc. notes that no archaeological assessment, no matter



how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Heritage, Sport, Tourism and Culture Industries must be immediately notified.

The above recommendations are subject to Ministry approval, and it is an offence to alter any archaeological site without Ministry of Heritage, Sport, Tourism and Culture Industries concurrence. No grading or other activities that may result in the destruction or disturbance of any archaeological sites are permitted until notice of Ministry of Heritage, Sport, Tourism, and Culture Industries approval has been received.

## 5.0 Advice on Compliance with Legislation

Archaeological Services Inc. advises compliance with the following legislation:

- This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 2005, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the Ministry stating that there are no further concerns with regards to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further



cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.
- The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.
- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.

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## 7.0 Images



**Image 1: View of northwest corner of Property A, looking south (April 2021).**



**Image 2: View of north part of Property A, looking south (April 2021).**



**Image 3: View of the northeast corner of the Property A, looking southwest (April 2021).**



**Image 4: View of northwest corner of Property B, looking southeast (April 2021).**



**Image 5: View of northeast corner of Property B, looking south (April 2021).**



**Image 6: View of northeast corner of Property C, looking south (April 2021).**



**Image 7: View of north part of Property C, looking south (April 2021).**

## 8.0 Maps

See following pages for detailed assessment mapping and figures



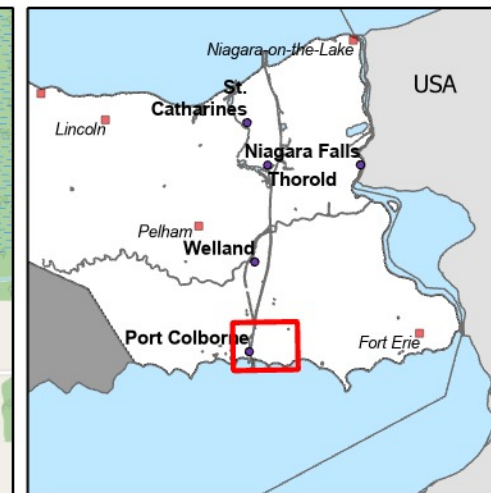
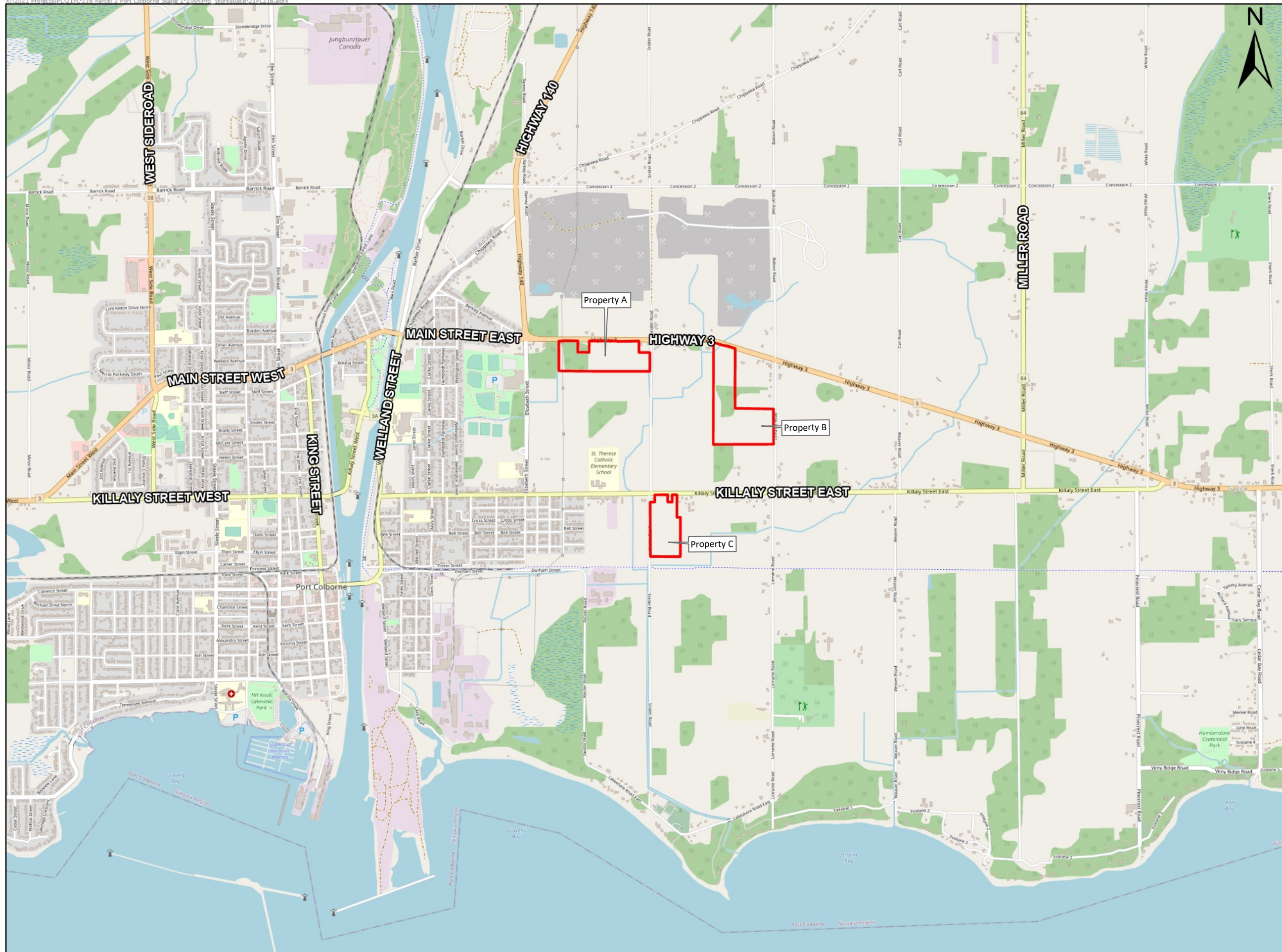
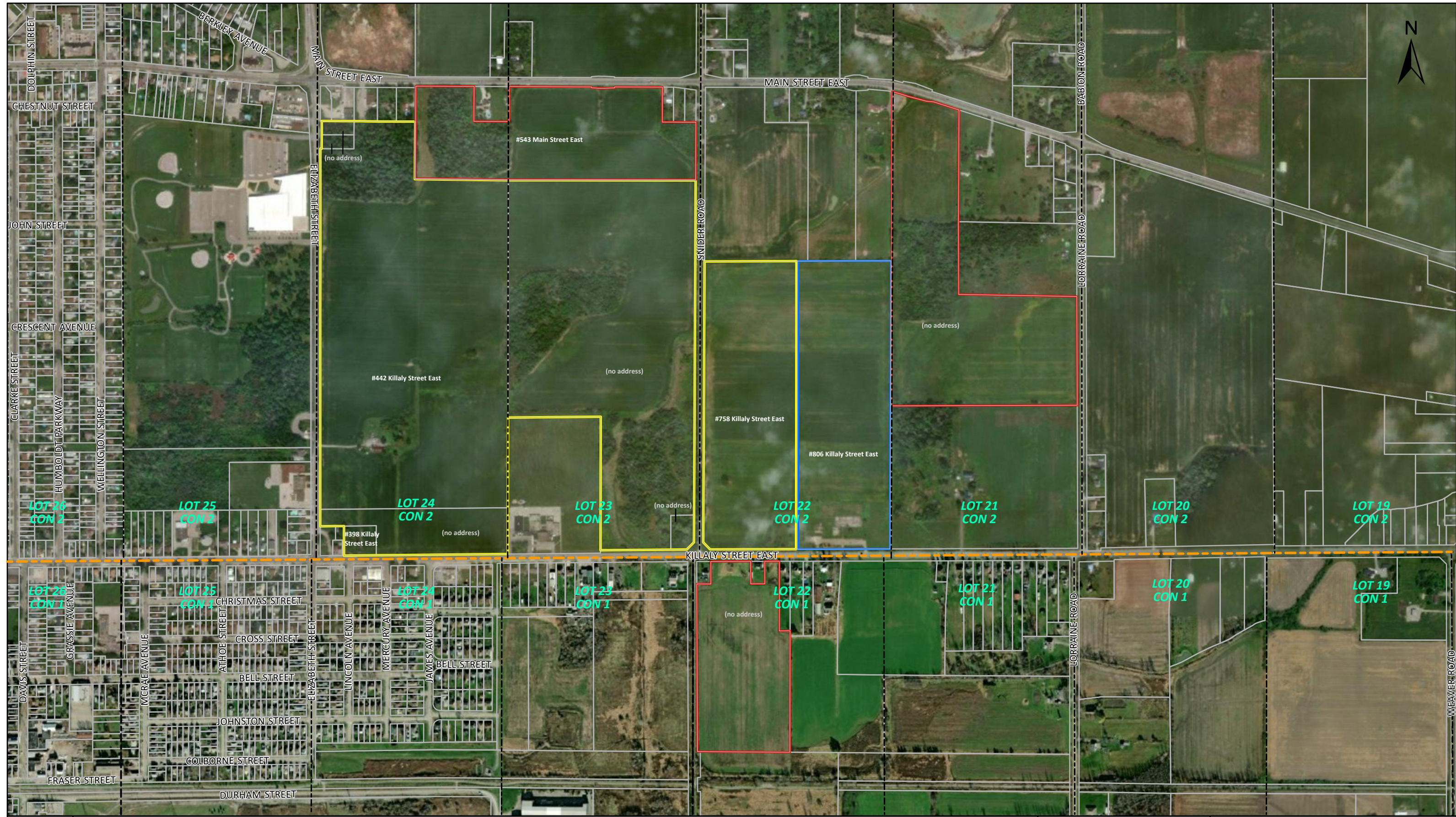


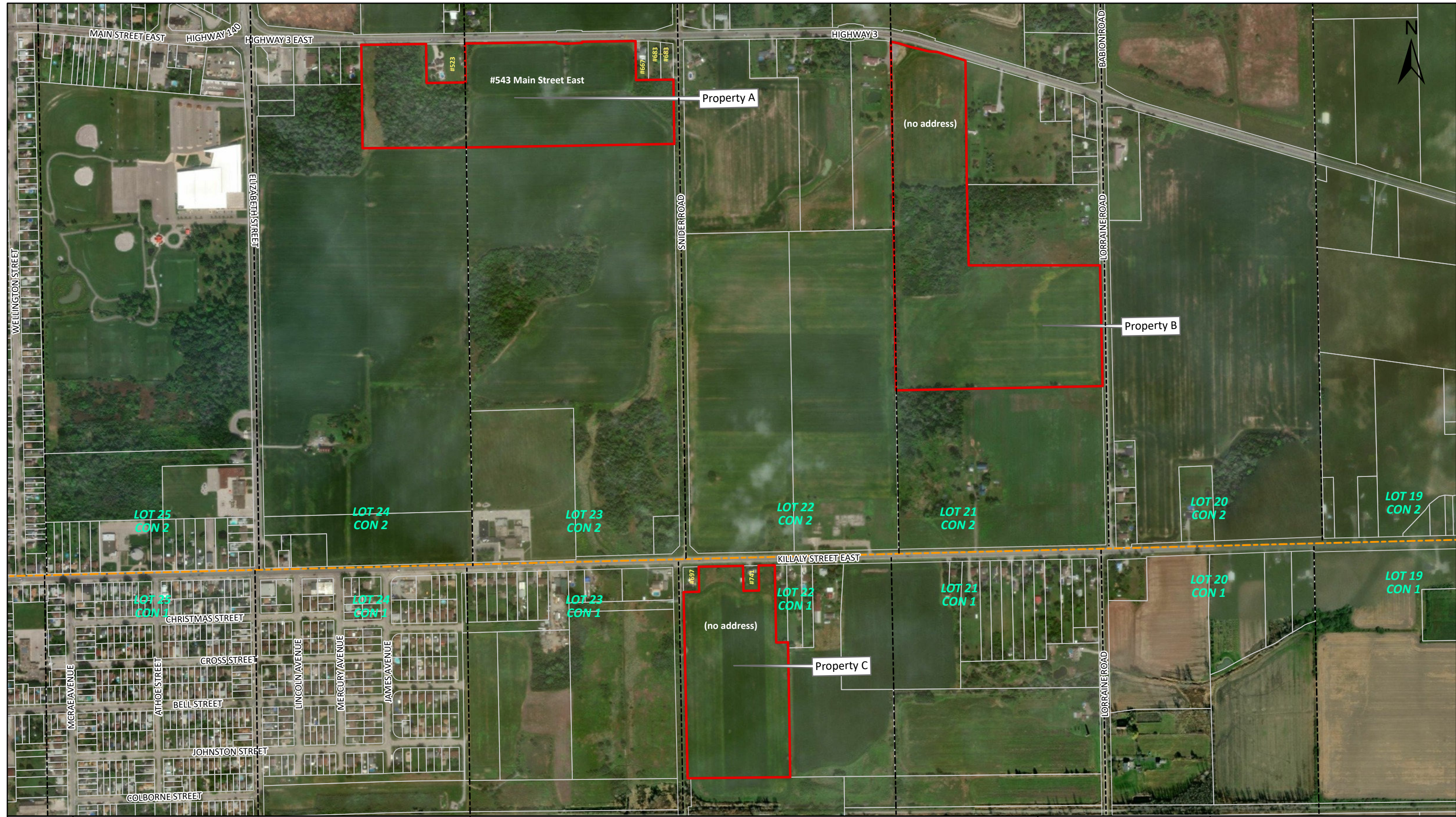
Figure 1: Location of the Project Area



	 PARCEL 1 LANDS	 LOT BOUNDARY	
	 PARCEL 2 LANDS	 CONCESSION BOUNDARY	
	 PARCEL 3 LANDS	 PROPERTY PARCEL LIMIT	ASI Project No.: 21PL-216 Date: 2/9/2022 2:31 PM
Projection: NAD 1983 MTM 10 Scale: 1:7,500 Page Size: 11 x 17			Drawn By: rlatour File: Fig2_N

Figure 2: Port Colborne Lands Development - Parcels 1-3







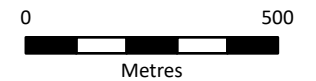
	 PROJECT AREA  LOT BOUNDARY  CONCESSION BOUNDARY  PROPERTY PARCEL LIMIT	Maxar  Projection: NAD 1983 UTM Zone 17N Scale: 1:6,752 Page Size: 11 x 17	 0 200 Metres
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Figure 3: Existing Conditions of the Project Area



 PROJECT AREA

Source:  
Tremaine Map of the Counties of  
Lincoln and Welland (Tremaine &  
Tremaine, 1862)

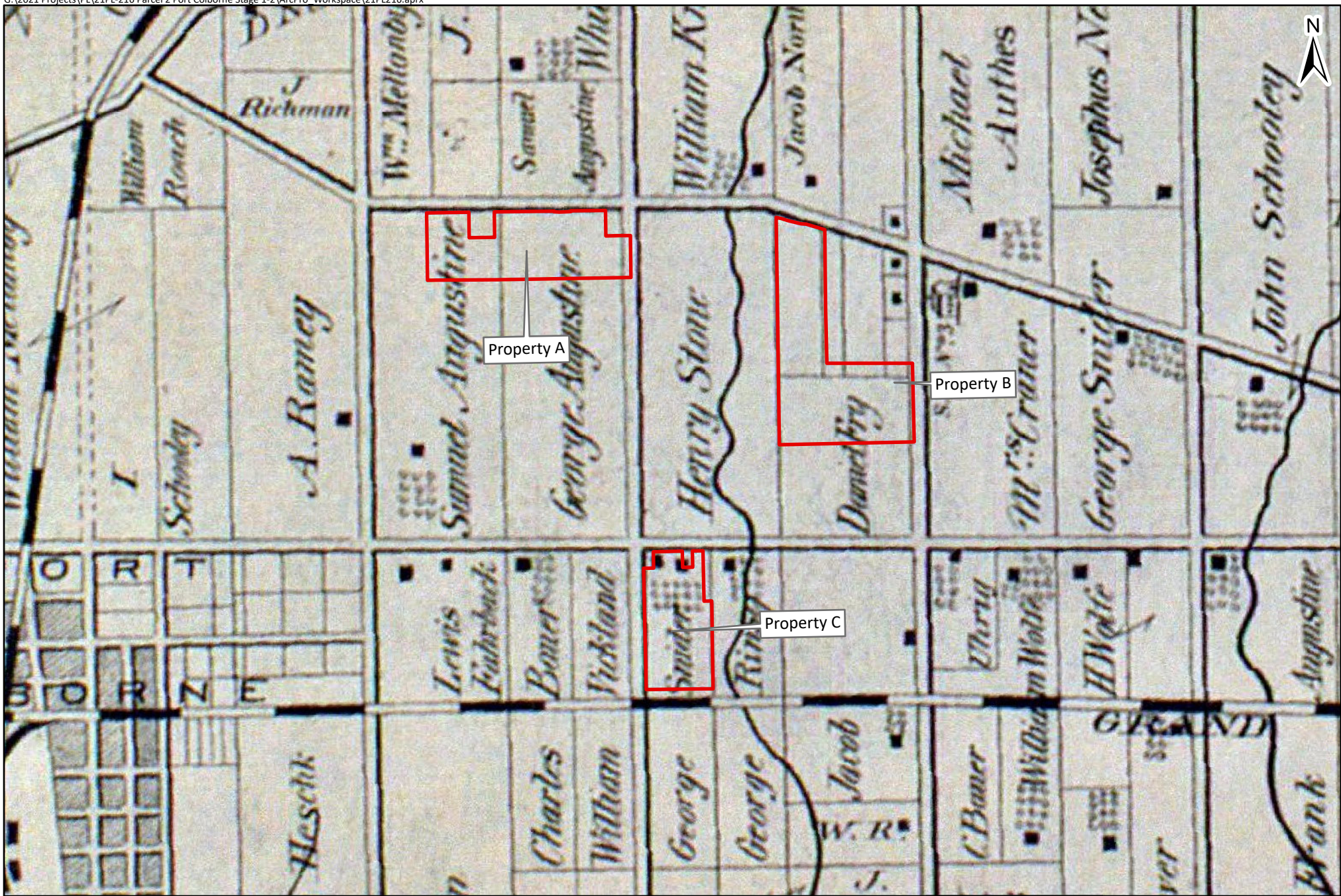


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Page Size: 8.5x11

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Date: 2022-03-03

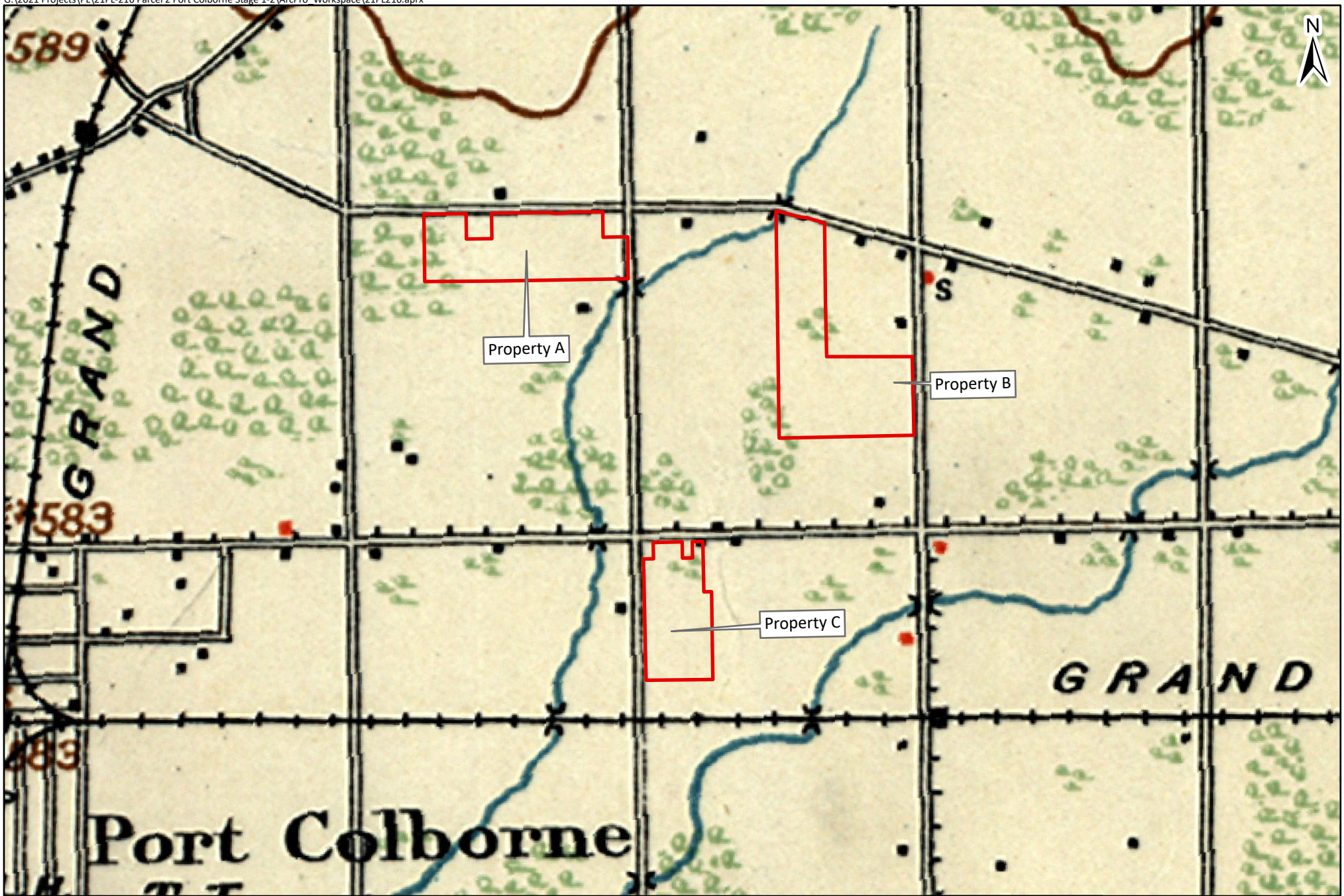
Drawn By: jfernandez  
File: 21PL216\_Hist

Figure 4: Project Area Located on the 1862 Tremaine Map of the Counties of Lincoln and Welland



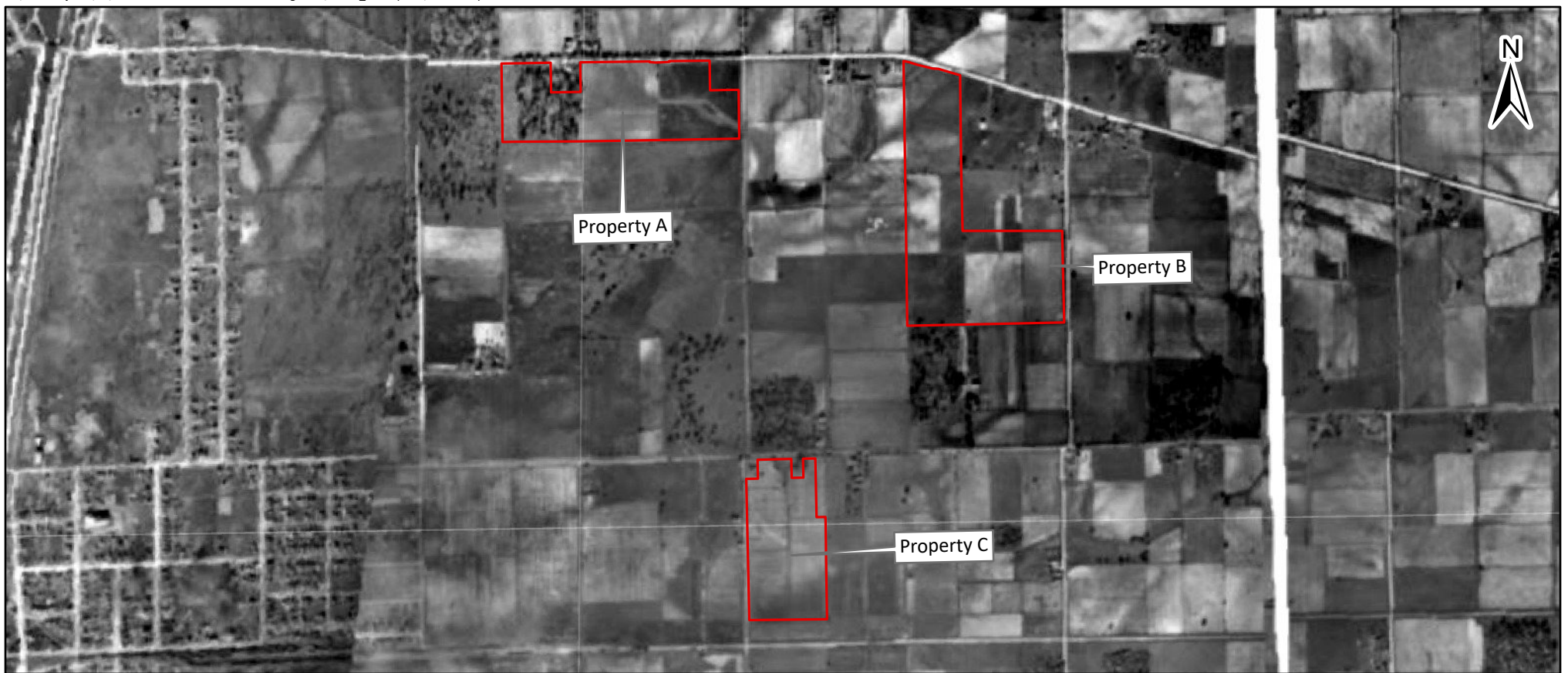
	 PROJECT AREA	Source: <i>Illustrated Historical Atlas of the Counties of Lincoln and Welland</i> (Page, 1876)	0 <span style="float: right;">500</span>  Metres
		Projection: NAD 1983 UTM Zone 17N Scale: 1:15,000 Page Size: 8.5x11	ASI Project No.: 21PL-216 Date: 2022-03-03 Drawn By: jfernandez File: 21PL216_Hist

Figure 5: Project Area Located on the 1876 *Illustrated Historical Atlas of the Counties of Lincoln and Welland*

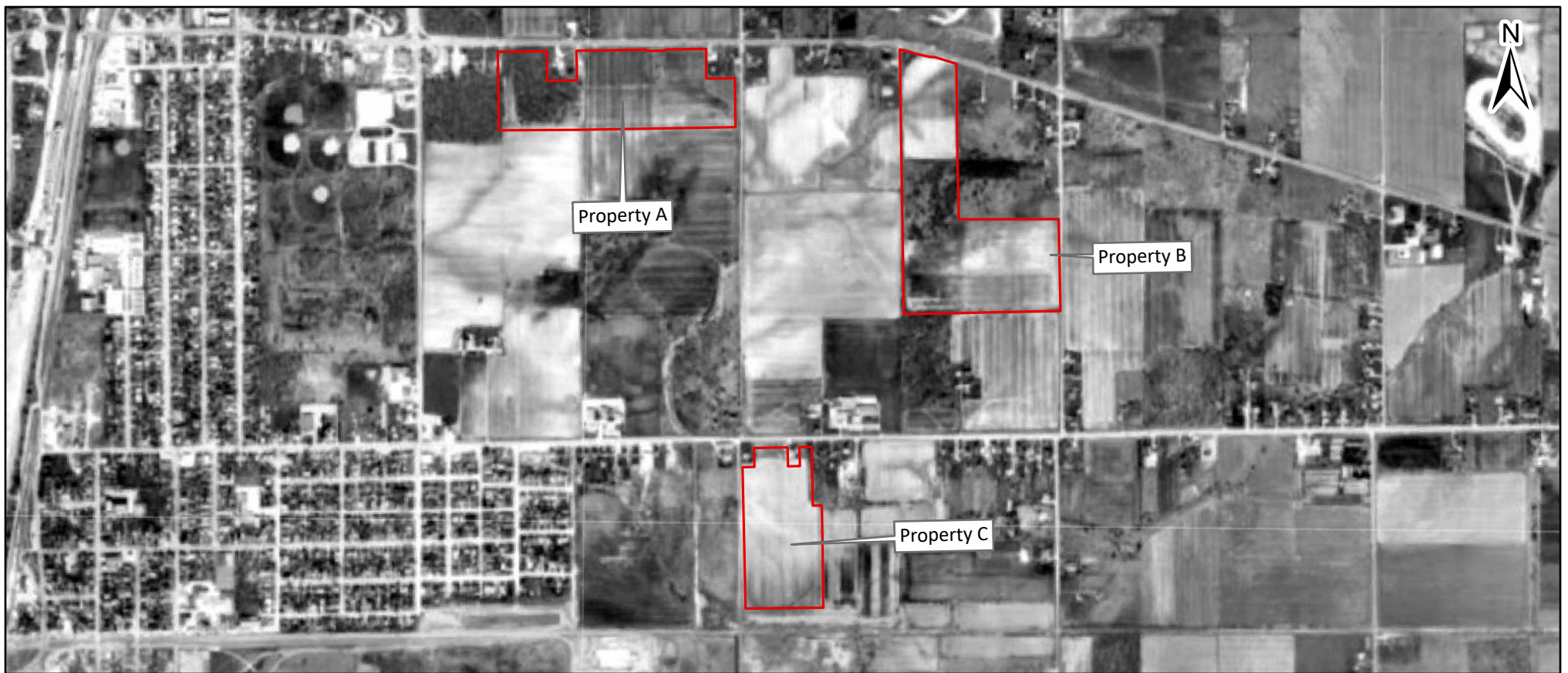


	 PROJECT AREA	Sources: Welland Sheet (Department of Militia and Defence, 1907)	 0 500 Metres	
			Projection: NAD 1983 UTM Zone 17N Scale: 1:15,000 Page Size: 8.5x11	ASI Project No.: 21PL-216 Date: 2022-03-03

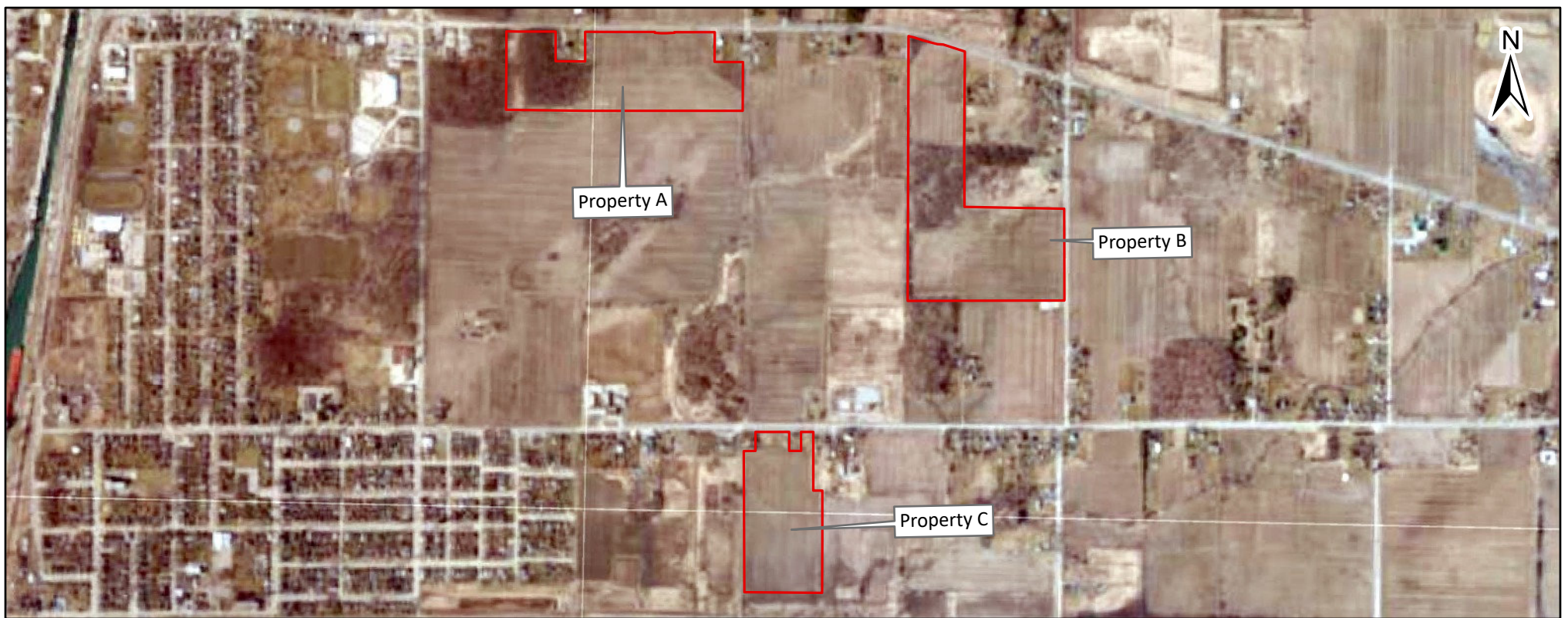
Figure 6: Project Area Located on the 1907 Welland Topographic Map



1934



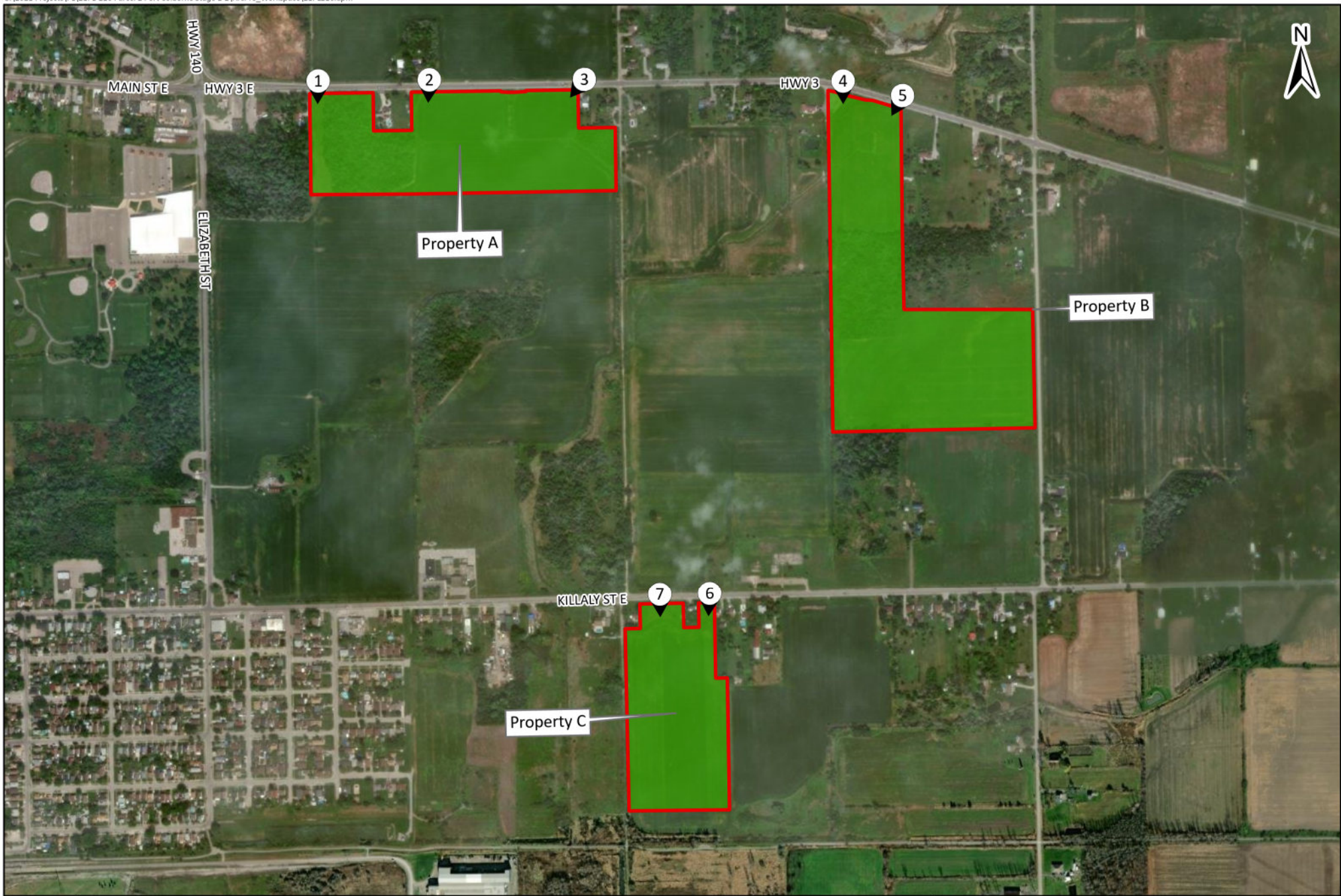
2000



2010

	 PROJECT AREA	Aerial Photography - 1937, 2000, 2010		0 <span style="margin-left: 100px;">500</span>  Metres	
		Projection: NAD 1983 UTM Zone 17N Scale: 1:15,000 Page Size: 11 x 17	ASI Project No.: 21PL-216 Date: 2022-03-10 3:53 PM	Drawn By: jfernandez File: 21PL216_Hist1937-2010	

Figure 7: Project Area Located on 1934, 2000, and 2010 Aerial Imagery



	 PROJECT AREA	Source: Maxar
	 STAGE 2 ARCHAEOLOGICAL ASSESSMENT REQUIRED	
 PHOTO LOCATION AND DIRECTION	<small>Projection: NAD 1983 UTM Zone 17N Scale: 1:10,000 Page Size: 8.5x11</small>	<small>ASI Project No.: 21PL-216 Date: 2022-03-10 Drawn By: jfernandez File: 21PL216_Stg1</small>

Figure 8: Stage 1 Archaeological Assessment Results

## 9.0 Appendix A: Registered Sites within One Kilometre of the Project Area

Twenty-one archaeological sites have been registered with an approximate one-kilometre radius of the project area (Ministry of Heritage, Sport, Tourism and Culture Industries, 2021).

<b>Borden</b>	<b>Site Name</b>	<b>Temporal/Cultural Affiliation</b>	<b>Site Type</b>	<b>Researcher</b>
AfGt-35	Snider 1	N/A	N/A	Pengelly 1984
AfGt-36	Snider 2	N/A	N/A	Pengelly 1984
AfGt-37	Snider 3	Middle Archaic	Campsite	Pengelly 1984
AfGt-41	Augustine 1	Pre-contact Indigenous	Findspot	Pengelly 1984
AfGt-42	Augustine 2	Pre-contact Indigenous	Findspot	Pengelly 1984
AfGt-43	Augustine 3	Pre-contact Indigenous	Findspot	Pengelly 1984
AfGt-54	Ott 1	N/A	N/A	Pengelly 1984
AfGt-55	Ott 2	N/A	N/A	Pengelly 1984

<b>Borden</b>	<b>Site Name</b>	<b>Temporal/Cultural Affiliation</b>	<b>Site Type</b>	<b>Researcher</b>
AfGt-56	Ott 3	N/A	N/A	Pengelly 1984
AfGt-57	Ott 4	N/A	N/A	Pengelly 1984
AfGt-58	Port Colborne Quarry	Late Archaic, Early Woodland, Late Woodland	Workshop	Pengelly 1984
AfGt-59	Ott 5	Early Archaic, Late Archaic, Late Woodland	Quarry	Pengelly 1984; Woodley 1997
AfGt-87	Eeyore	Late Paleo, Early Woodland, Late Woodland	N/A	Warrick 1996
AfGt-196	Chippawa 1	Pre-contact	N/A	O'Neal 2009
AfGt-197	Chippawa 2	Pre-contact	N/A	O'Neal 2009
AfGt-306	Location 20	Euro-Canadian	N/A	Archeoworks 2018
AfGt-307	Location 25	Pre-contact	Scatter	Archeoworks 2018; Golder Associates Ltd. 2019



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<b>Borden</b>	<b>Site Name</b>	<b>Temporal/Cultural Affiliation</b>	<b>Site Type</b>	<b>Researcher</b>
AfGt-308	Location 30	Pre-contact	Scatter	Archeoworks 2018; Golder Associates Ltd. 2019
AfGt-309	Location 31	Pre-contact	Scatter	Archeoworks 2018; Golder Associates Ltd. 2019
AfGt-310	Location 26/27	Pre-contact	Scatter	Archeoworks 2018
AfGt-316	N/A	Pre-contact	Scatter	Archeoworks 2019

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