Stage 3 Archaeological Assessment
AfGr-118 and AfGr-119
825 Garrison Road, Fort Erie

Part of Lot 2, Concession 3, Geographic Township of Bertie,
Historical County of Welland, now the
Regional Municipality of Niagara

Submitted to:

2071380 Ontario Inc.
11 Nicholas Drive,
St Catharines, ON L2S 4C2

and

Ontario's Ministry of Citizenship and Multiculturalism

Submitted by:

Detritus
CONSULTING LTD.
archaeology · heritage

196 Westheights Drive, Kitchener, Ontario, N2N 1J9
Mobile/Office: 519-744-7018
E-mail: garth@golden.net
Web: www.detritusconsulting.ca

Licensee: Michael Pitul
License Number: P462
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CP Number: 2024-100 and 2024-101

ORIGINAL REPORT

November 28th, 2024

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Paul Di Francesco of 2071380 Ontario Inc. (the 'Proponent') to conduct a Stage 3 archaeological assessment at P1 (AfGr-118) and P2 (AfGr-119) located on part of Lot 2, Concession 3, in the Geographic Township of Bertie, within the Historical County of Welland, now the Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of future development on the property at 825 Garrison Road, Fort Erie and the development will span the entire property (the 'Study Area;' Figure 4).

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario, 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario, 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet this condition, a Stage 3 assessment was conducted as part of the application phase of development under archaeological consulting license P462 issued to Mr. Michael Pitul by the Ministry of Citizenship and Multiculturalism ('MCM') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario, 1990b) and the MCM's *Standards and Guidelines for Consultant Archaeologists* ('*Standards and Guidelines*'; Government of Ontario, 2011).

P1 (AfGr-118) and P2 (AfGr-119) were identified during a Stage 1-2 assessment of the Study Area, conducted by Detritus on July 29th, 2024 (PIF# P462-0315-2024; Detritus Consulting Ltd., 2024). The Study Area comprised a rectangular-shaped parcel that fronts onto Garrison Road and measures approximately 1.3 hectares ('ha'). The Study Area is bound by Garrison Road to the north, forested area to the east, residential properties to the west, and an open field to the south. At the time of assessment, the Study Area included one residential building, a garage, a gravel driveway, and a drainage ditch along the north side of the property. A manicured lawn with scattered trees makes up the remainder of the property (Figure).

The Stage 1 background research conducted by Detritus indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. This research also indicated that the Study Area is located within an area of archaeological potential, as indicated by the *Niagara Region Archaeological Management Plan* (Niagara Region, 2023). As such, a Stage 2 field assessment was recommended for all the Study Area (Detritus Consulting Ltd., 2024). During the Stage 2 field assessment, the manicured lawns with trees throughout the Study Area were assessed by means of a typical test pit survey at 5m intervals. This investigation resulted in the identification and documentation of two pre-contact Indigenous sites registered with the MCM as P1 (AfGr-118) and P2 (AfGr-119).

The Stage 2 assessment of P1 (AfGr-118) resulted in the documentation of six pre-contact Indigenous artifacts from two positive test pits located 5m apart to the southeast of the residential building. All of the artifacts recovered from the site were manufactured from Onondaga chert and were identified as pieces of chipping detritus. Morphological analysis of the chert flakes identified the fragments as three secondary flakes, two flake fragments, and one tool thinning flake, which suggested late-stage reduction for the production and maintenance of formal tools and projectile points. Based on the results of the Stage 2 assessment, P1 (AfGr-118) was interpreted as a small sized activity area occupied by unspecified Indigenous people during the pre-contact period and was recommended for a Stage 3 archaeological assessment.

The Stage 2 assessment of P2 (AfGr-119) resulted in the documentation of one pre-contact Indigenous artifacts from one positive test pit located to the west of the residential building. The artifact was a piece of chipping detritus manufactured from Onondaga identified morphologically as a secondary flake. Based on the results of the Stage 2 investigation and the proximity to P1 (AfGr-118), P2 (AfGr-119) was determined to retain CHVI and was recommended for a Stage 3 archaeological assessment.

The Stage 3 assessments of P1 (AfGr-118) and P2 (AfGr-119) were conducted between September 2nd and October 14th, 2024, under archaeological consulting license P462 issued to Mr. Michael Pitul by the MCM.

The Stage 3 assessment of P1 (AfGr-118) resulted in the documentation of 146 pre-contact Indigenous artifacts from the hand excavation of 18 1m test units. P1 (AfGr-118) covers an area of 10m north to south by 20m east to west. The artifacts within the Stage 3 assemblage were primarily pieces of chipping detritus, which all were manufactured from Onondaga chert. Three artifacts were identified as two retouched flakes and one core and were also manufactured from Onondaga chert. Based on the distribution of artifacts at the site, P1 (AfGr-118) has been identified as a single activity area, characterised by late-stage lithic reduction for the production and maintenance of formal tools and projectile points.

Artifact yields ranged from 0 to 25; three units were sterile. A single activity area was observed in the highest five units on site, which are located at 235E, 315N; 240E, 315N; 245E, 315N; 237E, 317N; and 243E, 317N and yielded 13, 20, 24, 25 and 17 artifacts respectively. Unit 237E, 317N was the highest yielding unit with 25 artifacts including 24 pieces of chipping detritus and 1 core. Unit 245E, 315N was the next highest yielding unit with 24 pieces of chipping detritus. Additional high yielding units were located at 240E, 315N; 243E, 317N; and 235E, 315N with 20, 17, and 13 pieces of chipping detritus, respectively. The remaining 13 units ranged in yield from zero to eight artifacts; seven units were sterile. All 18 of the Stage 3 units featured soil stratigraphy in the form of a dark brown loam topsoil, (Layer 1) over an orange loam subsoil, (Layer 2).

The Stage 3 assessment of P2 (AfGr-119) resulted in the documentation of eight pre-contact Indigenous artifacts from the hand excavation of nine 1m test units. P2 (AfGr-119) covers an area of 15m north to south and 15m east to west. All of the artifacts within the Stage 3 assemblage were pieces of chipping detritus, which all were manufactured from Onondaga chert.

Artifact yields ranged from 0 to 5; six units were sterile. The highest yielding unit at 205E, 335N contained five pieces of chipping detritus in the southeast section of the site. The remaining eight units ranged in yield from 0 to 2 artifacts. In total, all nine of the Stage 3 units featured soil stratigraphy in the form of a dark brown loam topsoil (Layer 1) over an orange loam subsoil (Layer 2). No unit within P2 (AfGr-119) produced more than nine artifacts.

No Indigenous ceramics, or fire cracked rock were recovered during any stage of assessment, nor were any subsurface features observed. Given all the available evidence, P1 (AfGr-118) and P2 (AfGr-119) have been interpreted as activity areas of unknown function, which were occupied briefly by unspecified Indigenous people during the pre-contact period. The extensive use of Onondaga chert, meanwhile, suggests that the people at P1 (AfGr-118) and P2 (AfGr-119) were largely relying on a single source of raw material. Outcrops of Onondaga chert are found along the north shore of Lake Erie between Long Point and the Niagara River, approximately 2.5 to the southeast of the site. The variety of flake types suggests that late stages of lithic reduction occurred at the site.

Based on the available evidence, P1 (AfGr-118) has been interpreted as a small to medium sized activity area occupied briefly by Indigenous people prior to the arrival of European settlers. Given the results of the Stage 3 assessments, wherein five test units yielded ten or more lithic artifacts, P1 (AfGr-118) fulfills the criteria for Stage 4 archaeological investigations as per Section 3.4.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario, 2011) and retains further CHVI. **Stage 4 archaeological mitigation of developmental impacts to P1 (AfGr-118) are recommended.**

Based on the available evidence, P2 (AfGr-119) has been interpreted as a small activity area occupied briefly by Indigenous people prior to the arrival of European settlers. Given the results of the Stage 3 archaeological assessment of P2 (AfGr-119), wherein none of the nine test units yielded ten or more lithic artifacts, P2 (AfGr-119) does not fulfills the criteria for Stage 4 archaeological investigations as per Section 3.4.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario, 2011) and retains no further CHVI. **Stage 4 archaeological mitigation of developmental impacts to P2 (AfGr-119) are not recommended.**

The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.

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Project Personnel

Project Manager:	Garth Grimes, P017
Field Director:	Maria Cecchini, R1356
Field Technician:	Brittanee Mason (R1362), Courtney Nadon (A1341), Samantha Fisher, Tanner Rudzinski, Sabrina Perreault
Report Preparation:	Brittanee Mason (R1362) and Tina Ross
Mapping:	Brittanee Mason (R1362) and Tina Ross
Licensee Review:	Michael Pitul, P462

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1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Paul Di Francesco of 2541859 Ontario Inc. (the 'Proponent') to conduct a Stage 3 archaeological assessment at P1 (AfGr-118) and P2 (AfGr-119) located on part of Lot 2, Concession 3, in the Geographic Township of Bertie, within the Historical County of Welland, now the Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of future development on the property at 825 Garrison Road, Fort Erie and the development will span the entire property (the 'Study Area;' Figure 4).

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario, 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario, 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet this condition, a Stage 3 assessment was conducted as part of the application phase of development under archaeological consulting license P462 issued to Mr. Michael Pitul by the Ministry of Citizenship and Multiculturalism ('MCM') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario, 1990b) and the MCM's *Standards and Guidelines for Consultant Archaeologists* ('*Standards and Guidelines*'; Government of Ontario, 2011).

The purpose of a Stage 3 Site Specific Assessment is to assess the CHVI of a site through a controlled collection of material. This information is used to support a determination of whether the site has been sufficiently documented or if further measures are required to protect or document it fully. In compliance with the *Standards and Guidelines* (Government of Ontario, 2011), the objectives of the Stage 3 assessments at AfGr-118 and AfGr-119 are:

- To collect a representative sample of artifacts;
- to determine the extent of each archaeological site and the characteristics of the artifacts;
- to assess the CHVI of each archaeological site; and
- to determine the need for mitigation of development impacts and recommend appropriate strategies for mitigation and future conservation.

The licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities, including the recovery of artifacts.

1.2 Historical Context

1.2.1 Post-Contact Indigenous Resources

The earliest documented pre-European settlers arrived to the Niagara Peninsula from southwestern Ontario during the 14th century AD, at the peak of Iroquois culture. By 1400, the majority of the region was occupied by an Iroquoian-speaking tribe referred to as the Attawandaran (aka the Atiquandaronk or Attouanderonks), who exploited the fertile land and abundant water sources throughout the region for fishing, hunting and agriculture (Niagara Falls Info, 2022). This moniker was given to the community by the neighbouring Wendat as a slur against their unusual dialect. Those Attawandaran tribes who settled along the Niagara River were referred to as the Onguiaahra (later the Ongiara), which has been loosely translated as one of "the Straight," "the Throat," or "the Thunder of Waters" (Niagara-on-the-Lake, 2016; Niagara-on-the-Lake Realty, 2022). The name 'Neutral' was given to the Attawandaran by French explorers who began arriving in the 17th century. This new designation referred to the community's status as peacekeepers between the warring Huron and Iroquois tribes (Niagara Falls Info, 2022).

The earliest recorded European visit to the Niagara region was undertaken by Étienne Brûlé, an interpreter and guide for Samuel de Champlain. In June 1610, Brûlé requested permission to live among the Algonquin people and to learn their language and customs. In return, Champlain agreed to take on a young Huron named Savignon and to teach him the language and customs of the French. The purpose of this endeavour was to establish good relations with Indigenous communities in advance of future military and colonial enterprises in the area. In 1615, Brûlé joined twelve Huron warriors on a mission to cross enemy territory and seek out the Andaste people, allies of the Huron, to ask for their assistance in an expedition being planned by Champlain (Heidenreich, 1978). It is believed that Brûlé first visited the future site of Niagara-on-the-Lake during this excursion (Niagara-on-the-Lake, 2016). The mission was a success but took much longer than anticipated. Brûlé returned with the Andaste two days too late to help Champlain and the Hurons, who had already been defeated by the Iroquois (Heidenreich, 1978).

Throughout the middle of the 17th century, the Iroquois of the Five Nations sought to expand upon their territory and to monopolise the local fur trade as well as trade between the European markets and the tribes of the western Great Lakes. A series of bloody conflicts followed known as the Beaver Wars, or the French and Iroquois Wars, were contested between the Iroquois and the French with their Huron and other Algonquian-speaking allies of the Great Lakes region. Many communities were destroyed during this protracted conflict including the Huron, Neutral, Erie, Susquehannock, and Shawnee leaving the Iroquois as the dominant group in the region. By 1653 after repeated attacks, the Niagara peninsula and most of Southern Ontario had been vacated. By 1667, all members of the Five Nations had signed a peace treaty with the French and allowed their missionaries to visit their villages (Heidenreich, 1978).

Ten years later, hostilities between the French and the Iroquois resumed after the latter formed an alliance with the British through an agreement known as the Covenant Chain (Heidenreich, 1978). In 1696, an aging Louis de Buade, Comte de Frontenac et de Palluau, the Governor General of New France, rallied the Algonquin forces and drove the Iroquois out of the territories north of Lake Erie, as well as those to the west of present-day Cleveland, Ohio. A second treaty was concluded between the French and the Iroquois in 1701, after which the Iroquois remained mostly neutral (Jamieson, 1992; Noble, 1978).

Throughout the late 17th and early 18th centuries, various Iroquoian-speaking communities had been migrating into southern Ontario from New York State. In 1722, the Five Nations adopted the Tuscarora in New York becoming the Six Nations (Pendergast, 1995). This period also marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes (Konrad, 1981; Schmalz, 1991). The oral traditions of the Mississaugas, as told by Chief Robert Paudash suggest that the Mississaugas defeated the Mohawk nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated and, at the end of the 17th century, the Mississaugas settled permanently in Southern Ontario (Praxis Research Associates, n.d.). Around this same time, members of the Three Fires Confederacy (the Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southwestern Ontario (Feest & Feest, 1978).

The Study Area first enters the Euro-Canadian historic record on May 9th, 1781, as part of the Niagara Treaty No. 381 with the Mississauga and Chippewa (Morris, 1943). This treaty involved the surrender of,

> *…all that certain tract of land situated on the west side of the said strait or river, leading from Lake Erie to Lake Ontario, beginning at a large white oak tree, forked six feet from the ground, on the bank of the said Lake Ontario, at the distance of four English miles measured in a straight line, from the West side of the bank of the said straight, opposite to the Fort Niagara and extending from thence by a southerly course to the Chipeweigh River, at the distance of four miles on a direct line from where the said river falls into the said strait about the great Fall of Niagara or such a line as will pass at four miles west of the said Fall in its course to the said river and running from thence by a southeasterly course to the northern bank of Lake Erie at the distance of four miles on a straight line, westerly from the Post called Fort Erie, thence easterly along the said Lake by the*

> *said Post, and northerly up the west side of the said strait to the said lake Ontario, thence westerly to the place of beginning.*
>
> Morris, 1943, pp. 15-16

Throughout southern Ontario, the size and nature of the pre-contact settlements and the subsequent spread and distribution of Indigenous material culture began to shift with the establishment of European settlers. By 1834 it was accepted by the Crown that losses of portions of the Haldimand Tract to Euro-Canadian settlers were too numerous for all lands to be returned. Lands in the Lower Grand River area were surrendered by the Six Nations to the British Government in 1832, at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (Page, The Illustrated Historical Atlas of the County of Haldimand, Ontario, 1879; Tanner, 1987; Weaver, 1978). Following the population decline and the surrender of most of their lands along the Credit River, the Mississaugas were given 6000 acres of land on the Six Nations Reserve, establishing the Mississaugas of New Credit First Nation, now the Mississaugas of the Credit First Nation, in 1847 (Smith, 2022).

Despite the encroachment of European settlers on previously established Indigenous territories, "written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought" (Ferris, 2009, p. 114). As Ferris observes, despite the arrival of a competing culture, First Nations communities throughout Southern Ontario have left behind archaeologically significant resources that demonstrate continuity with their pre-contact predecessors, even if they have not been recorded extensively in historical Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

P1 (AfGr-118) and P2 (AfGr-119) are located on part of Lot 2, Concession 3, in the Geographic Township of Bertie, within the Historical County of Welland, which is now the Regional Municipality of Niagara, Ontario.

In 1763, the Treaty of Paris brought an end to the Seven Years' War, contested between the British, the French, and their respective allies. Under the Royal Proclamation of 1763, the large stretch of land from Labrador in the east, moving southeast through the Saint Lawrence River Valley to the Great Lakes and on to the confluence of the Ohio and Mississippi Rivers became the British Province of Québec (Niagara Historical Society and Museum, 2008).

On July 24, 1788, Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg, and Lunenburg (Archives of Ontario, 2012-2024). Further change came in December 1791 when the former Province of Québec was rearranged into Upper Canada and Lower Canada under the provisions of the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada and he spearheaded several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne, 1895).

In July 1792, Simcoe divided Upper Canada into 19 counties, including Welland County, stretching from Essex in the west to Glengarry in the east. Each new county was named after a county in England or Scotland; the constituent townships were then given the names of the corresponding townships from each original British county (Powell & Coffman, 1956).

Later that year, the four districts originally established in 1788 were renamed the Western, Home, Midland, and Eastern Districts. As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. Under this new territorial arrangement, the Study Area became part of the Niagara District (Archives of Ontario, 2012-2024). In 1845, after years of increasing settlement that began after the War of 1812, the southern portion of Lincoln County was severed to form Welland County, of which Bertie

Township was a part. The two counties would be amalgamated once again in 1970 to form the Regional Municipality of Niagara.

Settlement within Bertie Township began in 1764, immediately following the end of the Seven Years' War. To help defend his newly acquired territory, King George III built a series of military forts along the Niagara River. Fort Erie was the first to be constructed and represents earliest permanent British Army Fort in Ontario. The Military Reserve around the fort was also set aside by the Crown at that time to demarcate the ordinance boundary for the garrison stationed there (Bradford, 1988).

During the American Revolutionary War, contested between 1775 and 1783, Fort Erie was used as a supply depot for British troops. In 1784, following the conflict, the land around the fort, later designated as the Town of Fort Erie, was granted to members of the disbanded Butler's Rangers. A number of Loyalist settlements emerged including the village of Ridgeway, which was named after the limestone ridge that passes through it from north to south (Niagara Parks, n.d.).

The earliest roads throughout the township followed existing Indigenous trails along the river and along the Onondaga Escarpment. Lakeshore Road connected Fort Erie and its occupants to growing community around it. The first survey of Bertie Township was completed in 1789 by Amos Chapman, who referred to the area as 'Quaker Township'; the name Bertie was not used until 1793 (Archaeological Services, Inc., 2003). Settlers continued to arrive throughout the remainder of the 18th and early 19th centuries, attracted by the fertile soil throughout the township, which was suitable for growing barley, wheat, oats amongst other crops (Niagara Parks, n.d.). In 1808, approximately 40 homes were located throughout the township. By 1812, the township boasted several mills, schools, and churches. Stevensville was the largest community at that time (Archaeological Services, Inc., 2003).

Following the winter of 1803, a new stone fort was constructed inland from the site of the original Fort Erie, which was made of wood and susceptible to ice damage. This new fort remained incomplete at the start of the War of 1812. American troops captured the new Fort Erie on two occasions during the War of 1812. In 1814, following a long, protracted siege by British forces, the Americans destroyed the fort before retreating back to Buffalo (Niagara Parks, n.d.).

In 1850, Bertie was officially incorporated as a township. Later, on June 2, 1866, between 1,000 and 1,350 Irish American invaders known as the Fenians crossed the Niagara River and defeated the local militia at the Battle of Ridgeway. The next day, as they were withdrawing back to America, the Fenian raiders met with another small force of Canadian volunteers and defeated them at the Battle of Fort Erie. Eventually, the Fenians retired back across the river and surrendered to American authorities. This conflict was the largest engagement of the Fenian raids and the only armed victory for the Irish during their battle for Irish Independence between 1798 and 1919 (Niagara Parks, n.d.).

Much of the development of Bertie Township during the second half of the 19th century can be attributed to the advancement of the railroad. In the 1850s, Ridgeway received an arm of the Buffalo, Brantford and Goderich Railway, the earliest railway to be built in southwestern Ontario. Later, in 1873, the Grand Trunk Railway built the International Railway Bridge, resulting in large population increases throughout the township and the establishment of a new town just north of the original settlement of Fort Erie. This town was originally called Victoria but would later be renamed Bridgeburg. By 1876, Victoria had three railway stations (Scrimgeour, 1990). The population of Fort Erie, meanwhile, had reached approximately 1,200 and the village of Ridgeway, 800. A decade later the population of Fort Erie had climbed to around 4,000 while Victoria boasted nearly 700 residents. Ridgeway, conversely, experienced a slight decrease in its growth, with a population of around 600 at that time. The following year witnessed the opening of a new amusement park at Crystal Beach. The park remained active for just over a century before closing its doors in 1989. In 1970, Bertie Township amalgamated with Fort Erie and Crystal Beach to form the Town of Fort Erie (Niagara Parks, n.d.).

George Tremaine's Map of the Counties of Lincoln and Welland, Canada West ('*Tremaine Map*') demonstrates the extent to which the region had been settled by 1862 (Tremaine, 1862). Landowners are listed for most of the lots throughout the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population

throughout the second half of the 19th century. The Study Area occupies a portion of the northern end of Lot 2 Concession 3. According to the Tremaine Map, the lot is owned in its entirety by an S. Woolover with a single structure in the northwest corner of the Lot (Figure 2). The Grand Trunk Railway runs to the east and south of the Study Area.

The *Illustrated Historical Atlas of the Counties of Lincoln and Welland* ('*Historical Atlas*'), demonstrates the extent to which Bertie Township had been settled by 1876 (Page, The Illustrated Historical Atlas of the Counties of Lincoln and Welland, 1876). Landowners are listed for most of the lots within the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures and orchards are prevalent throughout the township, almost all of which front early roads and waterways, especially the Niagara River and Lake Erie.

According to the *Historical Atlas* map of Bertie Township, the Study Area is located in the northeastern part of Lot 2 Concession 3. The Lot is owned in its entirety by Jacob Shisler, and an orchard and structure are depicted fronting what is now Garrison Road (Figure 3). The Grand Trunk Railway passes the Study Area to the east. Various other railways crisscross the township, including the Canadian Southern Railway to the north of the Study Area. The historic community of Fort Erie is visible on the Niagara River to the east of the Study Area, along the eastern edge of the township.

Although significant and detailed landowner information is available on the historical maps discussed here, it should be recognized that historical county atlases were funded by subscriptions fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always listed on the maps (Caston, 1997, p. 100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore & Head, 1984).

1.2.3 Recent Reports

P1 (AfGr-118) and P2 (AfGr-119) were discovered during a test pit survey conducted during the Stage 2 assessment of the Study Area and documented in the Stage 1-2 assessment of the Study Area, conducted by Detritus (PIF# P017-1120-2024) and documented in the following assessment report;

> *Stage 1-2 Archaeological Assessment on Part of Lot 2 Concession 3 within the Geographic Township of Bertie and Historical County of Welland, now the Regional Municipality of Niagara, Ontario* (Detritus Consulting Ltd., 2024).

The results of this investigation will be discussed in greater detail below in Section 1.3.4.

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

P1 (AfGr-118) and P2 (AfGr-119) were identified during a Stage 1-2 assessment of the Study Area, conducted by Detritus on July 29th, 2024 (PIF# P462-0315-2024; Detritus Consulting Ltd., 2024). The Study Area comprised a rectangular-shaped parcel that fronts onto Garrison Road and measures approximately 1.3 hectares ('ha'). The Study Area is bound by Garrison Road to the north, forested area to the east, residential properties to the west, and an open field to the south. At the time of assessment, the Study Area included one residential building, a garage, a gravel driveway, and a drainage ditch along the north side of the property. A manicured lawn with scattered trees makes up the remainder of the property (Figure).

The majority of the region surrounding the Study Area has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the mid-19th century. Much of the region today continues to be used for agricultural purposes.

The Study Area is located within Haldimand Clay Plain physiographic region (Chapman & Putnam, 1984). During pre-contact and early contact times, this area comprised a mixture of deciduous trees and open areas. In the early 19th century, Euro-Canadian settlers began to clear

the forests for agricultural purposes, which have been ongoing in the vicinity of the Study Area for over 100 years.

Haldimand Clay is slowly permeable, imperfectly drained with medium to high water-holding capacities. Surface runoff is usually rapid, but water retention of the clayey soils can cause it to be droughty during dry periods (Kingston & Presant, 1989). According to Chapman and Putnam,

> ...although it was all submerged in Lake Warren, the till is not all buried by stratified clay; it comes to the surface generally in low morainic ridges in the north. In fact, there is in that area a confused intermixture of stratified clay and till. The northern part has more relief than the southern part where the typically level lake plains occur.
>
> Chapman & Putnam, 1984, p. 156

Huffman and Dumanski add that the soil within the region is suitable for corn and soybeans in rotation with cereal grains as well as alfalfa and clover (Huffman & Dumanski, 1986).

The Niagara Region as a whole is located within the Deciduous Forest Region of Canada and contains tree species which are typical of the more northern Great Lakes-St. Lawrence Biotic zone, such as beech, sugar maple, white elm, basswood, white oak, and butternut (MacDonald & Cooper, 1997). During pre-contact and early contact times, the land in the vicinity of the Study Area comprised a mixture of hardwood trees such as sugar maple, beech, oak, and cherry. This pattern of forest cover is characteristic of areas of clay soil within the Maple-Hemlock Section of the Great Lakes-St. Lawrence Forest Province-Cool Temperate Division (McAndrews & Manville, 1987). In the early 19th, Euro-Canadian settlers began to clear the forests for agricultural purposes.

The closest source of potable water is an unnamed tributary to Lake Erie that lies 0.4 km to the east of the Study Area.

1.3.2 Pre-Contact Indigenous Land Use

This portion of southern Ontario was occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter-gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Bertie Township (Ellis & Ferris, 1990).

Table 1: Cultural Chronology for Bertie Township

Time Period	Cultural Period	Comments
9500–7000 BC	Paleo Indian	first human occupation hunters of caribou and other extinct Pleistocene game nomadic, small band society
7500–1000 BC	Archaic	ceremonial burials increasing trade network hunter-gatherers
1000–400 BC	Early Woodland	large and small camps spring congregation/fall dispersal introduction of pottery
400 BC–AD 800	Middle Woodland	kinship based political system incipient horticulture long distance trade network
AD 800–1300	Early Iroquoian (Late Woodland)	limited agriculture developing hamlets and villages
AD 1300–1400	Middle Iroquoian (Late Woodland)	shift to agriculture complete increasing political complexity large, palisaded villages
AD 1400–1650	Late Iroquoian	regional warfare and political/tribal alliances destruction of Huron and Neutral

1.3.3 Previous Identified Archaeological Work

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MCM were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario, n.d.) is maintained by the MCM. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres ('km') east to west and approximately 18.5km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The Study Area lies within block AfGr.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario, 1990c). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MCM will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

According to the ASDB, four Euro-Canadian archaeological sites have been registered within a 1km radius of the Study Area (Table 2).

Table 2: Registered Archaeological Sites within 1km of the Study Area

Borden Number	Site Name	Time Period	Affinity	Site Type
AfGr-13	AfGr-13	Post-Contact	Euro-Canadian	house
AfGr-105		Post-Contact	Euro-Canadian	scatter
AfGr-104		Post-Contact	Euro-Canadian	scatter
AfGr-103		Post-Contact	Euro-Canadian	scatter

To the best of Detritus' knowledge, no other assessments have been conducted adjacent to the Study Area, and no sites are registered within 50m of the Study Area.

1.3.4 Summary of Previous Investigations

P1 (AfGr-118) and P2 (AfGr-119) were identified during a Stage 1-2 assessment conducted on the property at 825 Garrison Road in the City of Fort Erie (PIF# P462-0315-2024; Detritus Consulting Ltd., 2024). The Study Area comprised a rectangular-shaped parcel that fronts onto Garrison Road and measures approximately 1.3 hectares ('ha'). The Study Area is bound by Garrison Road to the north, forested area to the east, residential properties to the west, and an open field to the south. At the time of assessment, the Study Area included one residential building, a garage, a gravel driveway, and a drainage ditch along the north side of the property. A manicured lawn with scattered trees makes up the remainder of the property (Figure).

The Stage 1 background research indicated that portions of the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. This research also indicated that the Study Area is located within an area of archaeological potential, as indicated by the *Niagara Region Archaeological Management Plan* (Niagara Region, 2023). Therefore, a Stage 2 Property Assessment was recommended for the Study Area. (Detritus Consulting Ltd., 2024). During the Stage 2 field assessment, the manicured lawns with trees throughout the Study Area were assessed by means of a typical test pit survey at 5m intervals. This investigation resulted in the identification and documentation of two pre-contact Indigenous sites registered with the MCM as P1 (AfGr-118) and P2 (AfGr-119).

P1 (AfGr-118) was identified in an area of manicured lawn to the southeast of the residential building in the eastern portion of the Study Area. The Stage 2 assessment of the site resulted in the documentation of six pre-contact Indigenous artifacts from two positive test pits located 5m apart to the southeast of the residential building. All of the artifacts recovered from the site were manufactured from Onondaga chert and were identified as pieces of chipping detritus. Morphological analysis of the chert flakes identified the fragments as three secondary flakes, two flake fragments, and one tool thinning flake, which suggested late-stage reduction for the

production and maintenance of formal tools and projectile points. Based on the results of the Stage 2 assessment, P1 (AfGr-118) was interpreted as a small sized activity area occupied by unspecified Indigenous people during the pre-contact period and was recommended for a Stage 3 archaeological assessment.

P2 (AfGr-119) was identified in an area of manicured lawn directly to the west of the residential building and gravel driveway. The Stage 2 assessment of P2 (AfGr-119) resulted in the documentation of one pre-contact Indigenous artifacts from one positive test pit located to the west of the residential building. The artifact was a piece of chipping detritus manufactured from Onondaga identified morphologically as a secondary flake. Based on the results of the Stage 2 investigation and the proximity to P1 (AfGr-118), P2 (AfGr-119) was determined to retain CHVI and was recommended for a Stage 3 archaeological assessment.

1.3.5 Archaeological Potential

Detritus applied archaeological potential criteria commonly used by the MCM to determine areas of archaeological potential within the Study Area. According to Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario, 2011), these variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, when considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site locations and types to varying degrees. As per Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario, 2011), water sources may be categorized in the following manner:

- Primary water sources, lakes, rivers, streams, creeks;
- secondary water sources, intermittent streams and creeks, springs, marshes and swamps;
- past water sources, glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- accessible or inaccessible shorelines, high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As was discussed above, the closest source of potable water is an unnamed tributary to Lake Erie that lies 0.4 km to the east of the Study Area.

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Haldimand Clay Plain physiographic region. As was discussed earlier, the soils within this region are imperfectly drained, but suitable for pre-contact and post contact Indigenous agricultural. Considering also the length of occupation of Bertie Township prior to the arrival of Euro-Canadian settlers, the pre-contact and post-contact Indigenous archaeological potential of the Study Area is judged to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario, 1990b) or property that local histories or informants have identified with possible historical events. The *Tremaine Map* from 1862 and the *Historical Atlas* map of Bertie Township from 1876 show the Study Area in close proximity to historical infrastructure, including the Grand Trunk Railway. Considering the location of the Study Area near to the town of Fort Erie, as well as the four post-contact Euro-Canadian registered within 1km, the potential for post-contact Euro-Canadian archaeological resources is judged to be moderate to high. Additionally, Detritus reviewed the *Niagara Region Archaeological Management Plan* (Niagara Region, 2023) which indicates that portions of the Study Area retain archaeological potential.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as outlined in Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario, 2011). Aerial imagery identified a possible disturbance area within the Study Area in the form of the one residential building, a garage, a gravel driveway, and a drainage ditch along the north side of the property. It is recommended that these potential disturbances be subject to a Stage 2 property inspection to confirm the limits of the disturbance. Detritus determined that the remainder of the Study Area, including the manicured lawns with trees, demonstrated the potential for the recovery of pre-contact Indigenous, post-contact Indigenous, and Euro-Canadian archaeological resources, and were recommended for Stage 2 assessment.

2.0 Field Methods

The Stage 3 assessments of P1 (AfGr-118) and P2 (AfGr-119) were conducted between September 2nd and October 14th, 2024, under archaeological consulting license P462 issued to Mr. Michael Pitul by the MCM. These investigations began with a review of all relevant reports of previous fieldwork on the property as per Section 3.2, Standard 1 of the *Standards and Guidelines* (Government of Ontario, 2011).

During the Stage 3 field assessment of P1 (AfGr-118) and P2 (AfGr-119), the weather varied from partly cloudy to mostly sunny with temperatures between 5 and 32˚Celsius ('C'). At no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. Photos 1 to 13 demonstrate the field and weather conditions at the time of the field survey and are provided in Section 9.1 of this report. Figure 5 and Figure 6 provide illustrations of the Stage 3 assessment results, as well as photograph locations and directions (see Section 8.0 below). Table 3 provides a summary of the weather and field conditions during the Stage 3 archaeological assessments.

Table 3: Field and Weather Conditions

Date	Weather	Field Conditions	Tasks
September 2nd, 2024	High of 28˚C; sunny	soil dry and screens easily	Set grid and unit excavations
September 3rd, 2024	High of 32˚C; sunny	soil dry and screens easily	Set grid and unit excavations
September 5th, 2024	High of 23˚C; overcast	soil dry and screens easily	Set grid and unit excavations
September 6th, 2024	High of 25˚C; sunny	soil dry and screens easily	Set grid and unit excavations
October 14th, 2024	High of 5˚C; overcast	soil dry and screens easily	Set grid and unit excavations and finished Stage 3 at P2

Upon arrival at the site, P1 (AfGr-118) and P2 (AfGr-119) were relocated by geographic reference markers that were established during the Stage 2 archaeological assessment. They were relocated using a using a 9.7 inch Apple iPad tablet paired with a "Bad Elf" GPS Pro with a stationary accuracy of 2.5m [North American Datum 1983 and Universal Transverse Mercator ('UTM') Zone 17T] and georeferenced shapefiles denoting the site boundaries. Two permanent datum stakes were placed in the ground and a 5m-by-5m grid was established across the Stage 2 site limits, as per Section 3.2.2, Standard 2 of the *Standards and Guidelines* (Government of Ontario, 2011). All coordinates taken during the Stage 3 assessment are listed in the Supplementary Documentation that accompanies this report.

For archaeological sites documented through a pedestrian survey of open ploughed fields, a Stage 3 field investigation typically begins with a controlled surface pick-up ('CSP'), conducted according to Section 3.2.1 of the *Standards and Guidelines* (Government of Ontario, 2011a). The purpose of a CSP is to gather information that will assist in documenting the characteristics and extent of the archaeological site. However, the entirety of P1 (AfGr-118) and P2 (AfGr-119) were recovered during a test pit survey; therefore, no CSP was necessary. Instead, the Stage 3 assessments of P1 (AfGr-118) and P2 (AfGr-119) consisted of test unit excavation only, conducted as per Section 3.2.2 of the *Standards and Guidelines* (Government of Ontario, 2011a).

The Stage 3 assessment at P1 (AfGr-118) involved the hand excavation of 18 one-metre test units, and 9 one-metre test units at P2 (AfGr-119), conducted as per Section 3.2.2, Standards 1 and 3 of the *Standards and Guidelines* (Government of Ontario, 2011a; Photos 1 to 9). The units were strategically positioned to test the nature and density of the subsurface artifact distribution at the site.

Given that it was not evident that the level of CHVI at the site would result in a recommendation to proceed to Stage 4, the Stage 3 assessment initially consisted of the hand excavation of test units every 5m across the site limits, as per Section 3.2.3, Table 3.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario, 2011). Additional test units amounting to 20% of the

original grid total were excavated in areas of interest within the site extent as per Section 3.2.3, Table 3.1, Standard 4 of the *Standards and Guidelines* (Government of Ontario, 2011). The limits of the Stage 3 grid were determined by low artifact yields on all sides, in this case seven artifacts or less at P1 (AfGr-118) and 2 artifacts or less at P2 (AfGr-119).

The test units were excavated in systematic levels, into the first five centimetres ('cm') of subsoil as per Section 3.2.2, Standards 4 and 5 of the *Standards and Guidelines* (Government of Ontario, 2011). Each of these test units contained a single stratigraphic layer, identified as typical ploughzone topsoil consisting of medium-brown loam with almost no gravel above a typical heavy orange-brown loam subsoil. The test units at P1 (AfGr-118) ranged in depth from 30cm to 50cm; considering that 18 test units were excavated 5cm into subsoil, the topsoil at the site ranged in depth from 25cm to 45cm. The test units at P2 (AfGr-119) ranged in depth from 30cm to 60cm; considering that 9 test units were excavated 5cm into subsoil, the topsoil at the site ranged in depth from 25cm to 55cm.

All excavated soil from the Stage 3 test units was screened through six-millimetre hardware cloth to facilitate the recovery of small artifacts, as per Section 3.2.2, Standard 7 of the *Standards and Guidelines* (Government of Ontario, 2011). From P1 (AfGr-118), 146 artifacts were recovered from 18 one-metre test units with artifact yields ranging from 0 to 25. From P2 (AfGr-119), a total of eight artifacts were recovered from nine one-metre test units with artifact yields ranging from 0 to 5. All of the artifacts were recovered from Layer 1. All artifacts recovered during the Stage 3 excavation were recorded and catalogued with reference to their corresponding site designation and test unit grid coordinates and were retained for laboratory analysis and description as per Section 3.2.3, Standard 8 of the *Standards and Guidelines* (Government of Ontario, 2011). The subsoil surface of each excavated unit was shovel shined and examined for any evidence of subsurface cultural features, none of which were observed.

3.0 Record of Finds

The Stage 3 archaeological assessments of P1 (AfGr-118) and P2 (AfGr-119) were conducted employing the methods described in Section 2.0 above. Maps indicating the exact site location of the site, and all UTM coordinates recorded during the assessment, are included in the Supplementary Documentation to this report. An inventory of the documentary record generated by the fieldwork is provided in Table 3 below. A description of the locations and the recovered artifacts are provided in Sections 3.2 and 3.3.

Table 3: Inventory of Document Record

Document Type	Current Location of Document Type	Additional Comments
1 Page of Field Notes	Detritus' office	Stored digitally in project file
1 Map provided by the Proponent	Detritus' office	Stored digitally in project file
1 Field Map	Detritus' office	Stored digitally in project file
21 Digital Photographs	Detritus' office	Stored digitally in project file

A sample of the artifacts recovered from the Stage 3 assessments are illustrated in Section 9.2. All of the material culture collected during the Stage 3 archaeological field assessment of the P1 (AfGr-118) and P2 (AfGr-119) survey is contained in one box and will be temporarily housed in the offices of Detritus until formal arrangements can be made for its transfer to His Majesty the King in right of the Province of Ontario or another suitable public institution acceptable to the MCM.

3.1 Cultural material

The artifacts collected during the Stage 2 assessment were manufactured from Onondaga chert. Chert type identifications were accomplished visually using reference materials located in the Detritus office.

Onondaga chert is a dense non-porous rock that derives from the Middle Devonian age, with outcrops occurring along the north shore of Lake Erie between Long Point and the Niagara River. (Eley & von Bitter, 1989). Primary outcrops have also been reported along the banks of the Grand River (Ellis & Ferris, 1990). Onondaga chert typically occurs in nodules or irregular thin beds, and may appear light to dark grey, bluish grey, brown, or black. It can also be mottled with a dull to vitreous or waxy lustre. Onondaga chert is often found at archaeological sites in southern Ontario and is commonly recognised as a high-quality raw material that was frequently utilized by pre-contact Indigenous people (Eley & von Bitter, 1989).

Furthermore, all pieces of chipping detritus were subject to morphological analysis following the classification scheme described by Lennox, Dodd and Murphy for the Wiacek Site (Lennox, Dodd, & Murphy, 1986) and expanded upon by Fisher for the Adder Orchard site (Fisher, 1997). The flake types that were identified during the analysis of the current Stage 3 assemblage include secondary, shatter, and fragmentary flakes.

Primary and secondary flakes, along with cortical removal flakes, are a product of percussion flaking undertaken during the initial reduction phases of raw material into blanks, bifaces and preforms. These early-stage reduction flakes tend to exhibit minimal dorsal flake scarring, and are often characterized by the presence of cortex, or the original unflaked chert exterior, on their dorsal surfaces and proximal ends. For cortical removal flakes, over half of the dorsal surface comprises cortex; for primary flakes, less than half. Secondary flakes, meanwhile, may not contain any cortex. Thinning flakes are produced during the latter stages of lithic reduction, when blanks, bifaces, and preforms are shaped into projectile points and formal tools. They are the result of pressure flaking, where the maker uses a softer material such as antler, wood or bone to apply direct pressure onto a specific part of the tool. Pressure flaking generally produces smaller, thinner flakes than does percussion flaking. Thinning flakes also exhibit more flake scars on their dorsal surface than do primary or secondary flakes. Fragmentary flakes are flakes that may have

some identifiable flake characteristic but cannot be classified with certainty into a specific category.

Chipping detritus is the waste product from the production of stone tools and is the most frequently recovered artifact on pre-contact Indigenous sites in southern Ontario. Chipping detritus has a low significance and interpretive value when it is not associated with any diagnostic material, therefore they cannot be used to determine the cultural affiliation or time period of the occupation of a site.

3.2 P1 (AfGr-118)

The Stage 3 assessment of P1 (AfGr-118) resulted in the documentation of 146 pre-contact Indigenous artifacts from 18 test units covering an area roughly 20m by 10m in the southeastern quadrant of the manicured lawn. All of the artifacts recovered from the site were manufactured from Onondaga chert and comprised 143 pieces of chipping detritus,2 retouched flakes, and 1 core.

3.2.1 Chipping Detritus

The majority of the artifacts (n=134; 98%) recovered from P1 (AfGr-118) were pieces of chipping detritus (Cat# 3; Plates 1 and Cat# 19; Plate 3). The results of the morphological analysis of the chipping detritus recovered from P1 (AfGr-118) are detailed in Table 4.

Table 4: Flake Analysis for P1 (AfGr-118)

	Secondary		Fragment		Shatter		Total Analyzed	
Chert Type	n	%	n	%	n	%	n	%
Onondaga	2	1.4	112	78.4	29	20.2	**143**	**100**

According to the morphological analysis presented above, the flake assemblage from P1 (AfGr-118) featured primarily fragmentary flakes (n=112; 78.4%), with lesser amounts of shatter flakes (n=29; 20.2%), and two pieces of secondary flakes (1.4%). This variety of flake types suggests late-stage reduction for the production and maintenance of formal tools and projectile points.

3.2.2 Retouched Flake

Two retouched flakes (Cat# 4; Plate 2 and Cat# 22; Plate 4) were represented in the Stage 3 artifact assemblage. Retouched flakes are pieces of chipping detritus that have been worked or sharpened. They are considered informal tools that were discarded after use and cannot be used to determine the cultural affiliation or time period of the occupation of a site.

3.2.3 Core section

A single reduced core (Cat# 24; Plate 5) was recovered during the Stage 3 assessment of P1 (AfGr-118). A core is a nodule of chert that has been struck to remove spalls, sections of chert that will be reduced through flaking to finished tools. After repeated removal of spalls from the faces of the core, too little remains to render further spalls, and it is discarded. Chert cores are not temporally diagnostic.

3.2.4 Artifact Distribution and Settlement Pattern

The Stage 3 assessment of P1 (AfGr-118) resulted in the documentation of 146 pre-contact Indigenous artifacts from the hand excavation of 18 1m test units. Artifact yields ranged from 0 to 13; three units were sterile. A single activity area was observed in the highest five units on site, which are located at 235E, 315N; 240E, 315N; 245E, 315N; 237E, 317N; and 243E, 317N and yielded 13, 20, 24, 25 and 17 artifacts respectively. The highest yielding unit at 237E, 317N also contained the single core recovered from the site. Based on the distribution of artifacts at the site, P1 (AfGr-118) has been identified as a single activity area, characterised by late-stage lithic reduction for the production and maintenance of formal tools and projectile points. No

Indigenous ceramics, or fire cracked rock were recovered during any stage of assessment, nor were any subsurface features observed.

3.2.5 Artifact Catalogue

See Appendix 10.1 for the Stage 3 artifact assemblage catalogue for P1 (AfGr-118).

3.3 P2 (AfGr-119)

The Stage 3 assessment of P2 (AfGr-119) resulted in the documentation of eight pre-contact Indigenous artifacts from nine test units covering an area roughly 15m by 15m in the western quadrant of the manicured lawn directly to the west of the residential building and gravel driveway. All of the artifacts recovered from the site were manufactured from Onondaga chert and were identified as pieces of chipping detritus (Cat# 2; Plate 6 and Cat# 3; Plate 7).

The results of the morphological analysis of the chipping detritus recovered from P2 (AfGr-119) are detailed in Table 5.

Table 5: Flake Analysis for P2 (AfGr-119)

	Fragment		Shatter		Total Analyzed	
Chert Type	n	%	n	%	n	%
Onondaga	6	75	2	15	8	100

According to the morphological analysis presented above, the flake assemblage from P2 (AfGr-119) featured primarily flake fragments (n=6; 75%) with lesser amounts of shatter flakes (n=2; 15%). This variety of flake types suggests late-stage reduction for the production and maintenance of formal tools and projectile points.

3.3.1 Artifact Distribution and Settlement Pattern

The Stage 3 assessment of P2 (AfGr-119) resulted in the documentation of eight pre-contact Indigenous artifacts from the hand excavation of nine 1m test units. Artifact yields ranged from 0 to 5; six units were sterile. The highest yielding unit at 205E, 335N contained five pieces of chipping detritus in the southeast section of the site. The remaining eight units ranged in yield from 0 to 2 artifacts. No Indigenous ceramics, or fire cracked rock were recovered during any stage of assessment, nor were any subsurface features observed.

3.3.2 Artifact Catalogue

See Appendix 10.1.2 for the Stage 3 artifact assemblage catalogue for P2 (AfGr-119).

4.0 Analysis and Conclusions

Detritus Consulting Ltd. ('Detritus') was retained by Paul Di Francesco of 2541859 Ontario Inc. (the 'Proponent') to conduct a Stage 3 archaeological assessment on part of Lot 2, Concession 3, in the Geographic Township of Bertie, within the Historical County of Welland, now the Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of future development on the property at 825 Garrison Road, Fort Erie and the development will span the entire property (the 'Study Area;' Figure 4).

P1 (AfGr-118) and P2 (AfGr-119) were identified during a Stage 1-2 assessment of the Study Area, conducted by Detritus on July 29th, 2024 (PIF# P462-0315-2024; Detritus Consulting Ltd., 2024). The Study Area comprised a rectangular-shaped parcel that fronts onto Garrison Road and measures approximately 1.3 hectares ('ha'). The Study Area is bound by Garrison Road to the north, forested area to the east, residential properties to the west, and an open field to the south. At the time of assessment, the Study Area included one residential building, a garage, a gravel driveway, and a drainage ditch along the north side of the property. A manicured lawn with scattered trees makes up the remainder of the property (Figure).

The Stage 1 background research conducted by Detritus indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. This research also indicated that the Study Area is located within an area of archaeological potential, as indicated by the *Niagara Region Archaeological Management Plan* (Niagara Region, 2023). As such, a Stage 2 field assessment was recommended for all the Study Area (Detritus Consulting Ltd., 2024). During the Stage 2 field assessment, the manicured lawns with trees throughout the Study Area were assessed by means of a typical test pit survey at 5m intervals. This investigation resulted in the identification and documentation of two pre-contact Indigenous sites registered with the MCM as P1 (AfGr-118) and P2 (AfGr-119).

The Stage 2 assessment of P1 (AfGr-118) resulted in the documentation of six pre-contact Indigenous artifacts from two positive test pits located 5m apart to the southeast of the residential building. All of the artifacts recovered from the site were manufactured from Onondaga chert and were identified as pieces of chipping detritus. Morphological analysis of the chert flakes identified the fragments as three secondary flakes, two flake fragments, and one tool thinning flake, which suggested late-stage reduction for the production and maintenance of formal tools and projectile points. Based on the results of the Stage 2 assessment, P1 (AfGr-118) was interpreted as a small sized activity area occupied by unspecified Indigenous people during the pre-contact period and was recommended for a Stage 3 archaeological assessment.

The Stage 2 assessment of P2 (AfGr-119) resulted in the documentation of one pre-contact Indigenous artifacts from one positive test pit located to the west of the residential building. The artifact was a piece of chipping detritus manufactured from Onondaga identified morphologically as a secondary flake. Based on the results of the Stage 2 investigation and the proximity to P1 (AfGr-118), P2 (AfGr-119) was determined to retain CHVI and was recommended for a Stage 3 archaeological assessment.

The Stage 3 assessments of P1 (AfGr-118) and P2 (AfGr-119) were conducted between September 2nd and October 14th, 2024, under archaeological consulting license P462 issued to Mr. Michael Pitul by the MCM.

The Stage 3 assessment of P1 (AfGr-118) resulted in the documentation of 146 pre-contact Indigenous artifacts from the hand excavation of 18 1m test units. P1 (AfGr-118) covers an area of 10m north to south by 20m east to west. The artifacts within the Stage 3 assemblage were primarily pieces of chipping detritus, which all were manufactured from Onondaga chert. Three artifacts were identified as two retouched flakes and one core and were also manufactured from Onondaga chert. Based on the distribution of artifacts at the site, P1 (AfGr-118) has been identified as a single activity area, characterised by late-stage lithic reduction for the production and maintenance of formal tools and projectile points.

Artifact yields ranged from 0 to 25; three units were sterile. A single activity area was observed in the highest five units on site, which are located at 235E, 315N; 240E, 315N; 245E, 315N; 237E,

317N; and 243E, 317N and yielded 13, 20, 24, 25 and 17 artifacts respectively. Unit 237E, 317N was the highest yielding unit with 25 artifacts including 24 pieces of chipping detritus and 1 core. Unit 245E, 315N was the next highest yielding unit with 24 pieces of chipping detritus. Additional high yielding units were located at 240E, 315N; 243E, 317N; and 235E, 315N with 20, 17, and 13 pieces of chipping detritus, respectively. The remaining 13 units ranged in yield from zero to eight artifacts; seven units were sterile. All 18 of the Stage 3 units featured soil stratigraphy in the form of a dark brown loam topsoil, (Layer 1) over an orange loam subsoil, (Layer 2).

The Stage 3 assessment of P2 (AfGr-119) resulted in the documentation of eight pre-contact Indigenous artifacts from the hand excavation of nine 1m test units. P2 (AfGr-119) covers an area of 15m north to south and 15m east to west. All of the artifacts within the Stage 3 assemblage were pieces of chipping detritus, which all were manufactured from Onondaga chert.

Artifact yields ranged from 0 to 5; six units were sterile. The highest yielding unit at 205E, 335N contained five pieces of chipping detritus in the southeast section of the site. The remaining eight units ranged in yield from 0 to 2 artifacts. In total, all nine of the Stage 3 units featured soil stratigraphy in the form of a dark brown loam topsoil (Layer 1) over an orange loam subsoil (Layer 2). No unit within P2 (AfGr-119) produced more than nine artifacts.

No Indigenous ceramics, or fire cracked rock were recovered during any stage of assessment, nor were any subsurface features observed. Given all the available evidence, P1 (AfGr-118) and P2 (AfGr-119) have been interpreted as activity areas of unknown function, which were occupied briefly by unspecified Indigenous people during the pre-contact period. The extensive use of Onondaga chert, meanwhile, suggests that the people at P1 (AfGr-118) and P2 (AfGr-119) were largely relying on a single source of raw material. Outcrops of Onondaga chert are found along the north shore of Lake Erie between Long Point and the Niagara River, approximately 2.5 to the southeast of the site. The variety of flake types suggests that late stages of lithic reduction occurred at the site.

Based on the available evidence, P1 (AfGr-118) has been interpreted as a small to medium sized activity area occupied briefly by Indigenous people prior to the arrival of European settlers.

Based on the available evidence, P2 (AfGr-119) has been interpreted as a small activity area occupied briefly by Indigenous people prior to the arrival of European settlers.

5.0 Recommendations

Given the results of the Stage 3 assessments, wherein five test units yielded ten or more lithic artifacts, P1 (AfGr-118) fulfills the criteria for Stage 4 archaeological investigations as per Section 3.4.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario, 2011) and retains further CHVI. **Stage 4 archaeological mitigation of developmental impacts to P1 (AfGr-118) are recommended.**

The MCM prefers that sites recommended for Stage 4 mitigation of impacts be avoided and protected rather than excavated, as per Section 7.9.4, Standard 2 of the *Standards and Guidelines* (Government of Ontario, 2011). Options to reduce or eliminate impacts to archaeological sites include redesigning the Study Area, excluding the archaeological site area from the Study Area, or incorporating the area of the archaeological site into the Study Area but without alteration, as outlined in Section 3.5 of the *Standards and Guidelines* (Government of Ontario, 2011). If these options are not feasible, Stage 4 archaeological mitigation by hand excavation is an alternative. In consultation with the client, the Stage 4 mitigation of P1 (AfGr-118) by avoidance and protection is not a viable option. As such, a Stage 4 archaeological mitigation by hand excavation is recommended.

It is recommended that the Stage 4 mitigation of impacts at P1 (AfGr-118) comprise hand excavation of 1m units surrounding the highest yielding Stage 3 test units. The extent of the excavation blocks will be determined in accordance with Table 4.1 of the *Standards and Guidelines* (Government of Ontario, 2011). Soil from all units will be screened through six-millimetre hardware cloth to facilitate the recovery of any artifacts that may be present. All artifacts will be bagged and tagged by provenience. The exposed subsoil surface will be cleaned by shovel or trowel and will be examined for cultural features. If any subsurface cultural features are encountered, they will be recorded and excavated by hand in accordance with Section 4.2.2 of the *Standards and Guidelines* (Government of Ontario, 2011). Block excavation will continue to 2m beyond any cultural feature identified in accordance with Section 4.2.2, Standard 7c of the *Standards and Guidelines* (Government of Ontario, 2011).

Given the results of the Stage 3 archaeological assessment of P2 (AfGr-119), wherein none of the nine test units yielded ten or more lithic artifacts, P2 (AfGr-119) does not fulfills the criteria for Stage 4 archaeological investigations as per Section 3.4.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario, 2011) and retains no further CHVI. **Stage 4 archaeological mitigation of developmental impacts to P2 (AfGr-119) are not recommended.**

6.0 Advice on Compliance with Legislation

This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, 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 fieldwork and report recommendations ensure the conservation, protection and preservation 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 Citizenship and Multiculturalism, a letter will be issued by the ministry stating that there are no further concerns with regard 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 fieldwork 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 *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

7.0 Bibliography

Archaeological Services, Inc. (2003). *The Archaeological Master Plan of the Town of Fort Erie.* Technical Report.

Archives of Ontario. (2012-2024). *The Evolution of the District and County System, 1788-1899.* Retrieved July 24, 2024, from http://www.archives.gov.on.ca/en/maps/ontario-districts.aspx

Bradford, R. (1988). *Historic Forts of Ontario. Belleville.* Belleville: Mika Publishing Company.

Caston, W. A. (1997). Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History, 10*, 91-106.

Chapman, L. J., & Putnam, D. F. (1984). *The Physiography of Southern Ontario. Ontario Geological Survey. Special Volume 2* (3rd ed.). Toronto: Ontario Ministry of Natural Resources.

Coyne, J. H. (1895). *The Country of Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot.* St. Thomas: The St. Thomas Print.

Detritus Consulting Ltd. (2024). *Stage 1-2 Archaeological Assessment on Part of Lot 2 Concession 3 within the Geographic Township of Bertie and Historical County of Welland, now the Regional Municipality of Niagara, Ontario.* Report on File with the Ministry of Citizenship and Multiculturalism.

Ellis, C. J., & Ferris, N. (1990). *The Archaeology of Southern Ontario to A.D. 1650. Occasional Publication No. 5.* London: Ontario Archaeology Society, London Chapter.

Feest, C. F., & Feest, J. E. (1978). Ottawa. In B. G. Trigger (Ed.), *Handbook of North American Indians* (Vol. 15: Northeast, pp. 772-786). Washington: Smithsonian Institute.

Ferris, N. (2009). *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes.* Tucson: University of Arizona.

Fisher, J. A. (1997). The Adder Orchard Site: Lithic Technology and Spatial Organization in the Broadpoint Late Archaic. *Occasional Publications of the London Chapter, Ontario Archaeological Society* (Number 3).

Gentilcore, L. R., & Head, G. (1984). *Ontario's History in Maps.* Toronto: University of Toronto Press.

Government of Ontario. (1990a). *Ontario Planning Act, R.S.O. 1990, CHAPTER P. 13. Last Amendment: 2024, c. 18, Sched. 5.* Retrieved July 3, 2024, from https://www.ontario.ca/laws/statute/90p13

Government of Ontario. (1990b). *Ontario Heritage Act, R.S.O. 1990, CHAPTER O.18. Last amendment: 2024, c. 18, Sched. 2.* Retrieved July 3, 2024, from https://www.ontario.ca/laws/statute/90018

Government of Ontario. (1990c). *Freedom of Information and Protection of Privacy Act, R.S.O. 1990, CHAPTER F.31. Last amendment: 2023, c. 21, Sched. 10, s. 13.* Retrieved July 3, 2024, from https://www.ontario.ca/laws/statute/90f31

Government of Ontario. (2002). *Funeral, Burial and Cremation Services Act, S.O. 2002, c33. Last amendment: 2021, c. 4, Sched. 6, s. 49.* Retrieved July 3, 2024, from https://www.ontario.ca/laws/statute/02f33

Government of Ontario. (2011). *Standards and Guidelines for Consultant Archaeologists.* Toronto: Ministry of Citizenship and Multiculturalism.

Government of Ontario. (2011). *Standards and Guidelines for Consultant Archaeologists.* Toronto: Ministry of Citizenship and Multiculturalism.

Government of Ontario. (2022). *Engaging Aboriginal Communities in Archaeology, Bulletin.* Toronto: Ministry of Citizenship and Multiculturalism.

Government of Ontario. (n.d.). *Archaeological Sites Database Files*. Ministry of Citizenship and Multiculturalism.

Heidenreich, C. (1978). Huron. In B. G. Trigger (Ed.), *Handbook of North American Indians* (Vol. 15: Northeast, pp. 368-88). Washington: Smithsonian Institute.

Huffman, E., & Dumanski, J. (1986). *Agricultural Land Use Systems in the Regional Municipality of Niagara*. Ottawa: Land Resource Research Institute.

Jamieson, S. M. (1992). Regional Interaction and Ontario Iroquois Evolution. *Canadian Journal of Archaeology, 16*, 70–88.

Kingston, M. S., & Presant, E. W. (1989). *The Soils of the Regional Municipality of Niagara* (Vol. 2). Guelph: Ontario Institute of Pedology.

Konrad, V. (1981). An Iroquois Frontier: the North Shore of Lake Ontario During the Late Seventeenth Century. *Journal of Historical Geography, 7*(2), 129-144.

Lennox, P., Dodd, C., & Murphy, C. (1986). *The Wiacek Site: A Late Middleport Component, Simcoe County*. London: Ontario Ministry of Transportation and Communications.

MacDonald, R., & Cooper, M. S. (1997). Environmental Context. In R. F. Williamson, & R. I. MacDonald (Ed.), *The Shadow of the Bridge—The Archaeology of the Peace Bridge Site (AfGr-9), 1994–1996 Investigations. Occasional Publications. 1*. Toronto: Archaeological Services, Inc.

McAndrews, J. H., & Manville, G. C. (1987). Descriptions of Ecological Regions. In R. C. Harris (Ed.), *Historical Atlas of Canada from the Beginning to 1800*. Toronto: University of Toronto Press.

Morris, J. L. (1943). *Indians of Ontario (1964 reprint)*. Ontario Department of Lands and Forests.

Niagara Falls Info. (2022). *Native American Settlement in Niagara*. Retrieved August 2022, from https://www.niagarafallsinfo.com/niagara-falls-history/niagara-falls-municipal-history/the-chronicles-of-settlement-in-niagara/native-american-settlement-in-niagara/

Niagara Historical Society and Museum. (2008). *Our Glory, A Brief History of Niagara-on-the-Lake*. Niagara-on-the-Lake: Niagara Historical Society and Museum.

Niagara Parks. (n.d.). *Old Fort Erie History*. Retrieved October 12, 2018, from Niagara Parks: http://www.niagaraparks.com/niagara-falls-attractions/old-fort-erie-history.html

Niagara Region. (2023). *New Niagara Official Plan: Niagara Region Archaeological Management Plan*. Niagara Region.

Niagara-on-the-Lake. (2016). *Queen-Picton Streets Heritage Conservation District Expansion Study (Second Draft)*.

Noble, W. (1978). The Neutral Indians. In Essays in Northeastern Anthropology in Memory of Marian E. White, Occasional Publications. In W. Englebrecht, & G. Donald (Ed.), *Northeastern Anthropology 5* (pp. 152-164). Rindge, NH: Department of Anthropology, Franklin Pierce College.

Page, H. R. (1876). *The Illustrated Historical Atlas of the Counties of Lincoln and Welland*. Toronto: H. R. Page & Co.

Page, H. R. (1879). *The Illustrated Historical Atlas of the County of Haldimand, Ontario*. Toronto: H. R. Page & Co.

Pendergast, J. (1995). The Identity of Jacques Cartier's Stadaconans and Hochelagans: The Huron-Iroquois Option. In A. Bekerman, & G. Warrick (Ed.), *Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society* (pp. 106-118). Ontario Archaeological Society.

Powell, J. R., & Coffman, F. (1956). *Lincoln County, 1856–1956*. St. Catharines: Lincoln County Council.

Praxis Research Associates. (n.d.). *The History of the Mississaugas of the New Credit First Nation*. Hagersville: Lands, Research, and Membership, Mississaugas of the New Credit First Nation.

Schmalz, P. S. (1991). *The Ojibwa of Southern Ontario*. Toronto: University of Toronto Press.

Scrimgeour, P. (1990). Historical Outlines of Railways in Southwestern Ontario. *Upper Canada Railway Society Newsletter*(489).

Smith, D. (2022). Their Century and a Half on the Credit: The Mississaugas. In F. Dieterman (Ed.), *Mississauga: The First 10,000 Years* (pp. 107-122). Mississauga: Eastendbooks.

Tanner, H. (Ed.). (1987). *Atlas of Great Lakes Indian History*. Norman: University of Oklahoma Press.

Tremaine, G. M. (1862). *Tremaine's Map of the Counties of Lincoln and Welland, Canada West*. Toronto: Geo. R. & G.M. Tremaine.

Weaver, S. (1978). Six Nations of the Grand River, Ontario. In B. Trigger (Ed.), *Handbook of North American Indians* (Vol. 15: Northeast, pp. 525-536). Washington: Smithsonian Institute Press.

8.0 Maps

Figure 1: Study Area Location Map

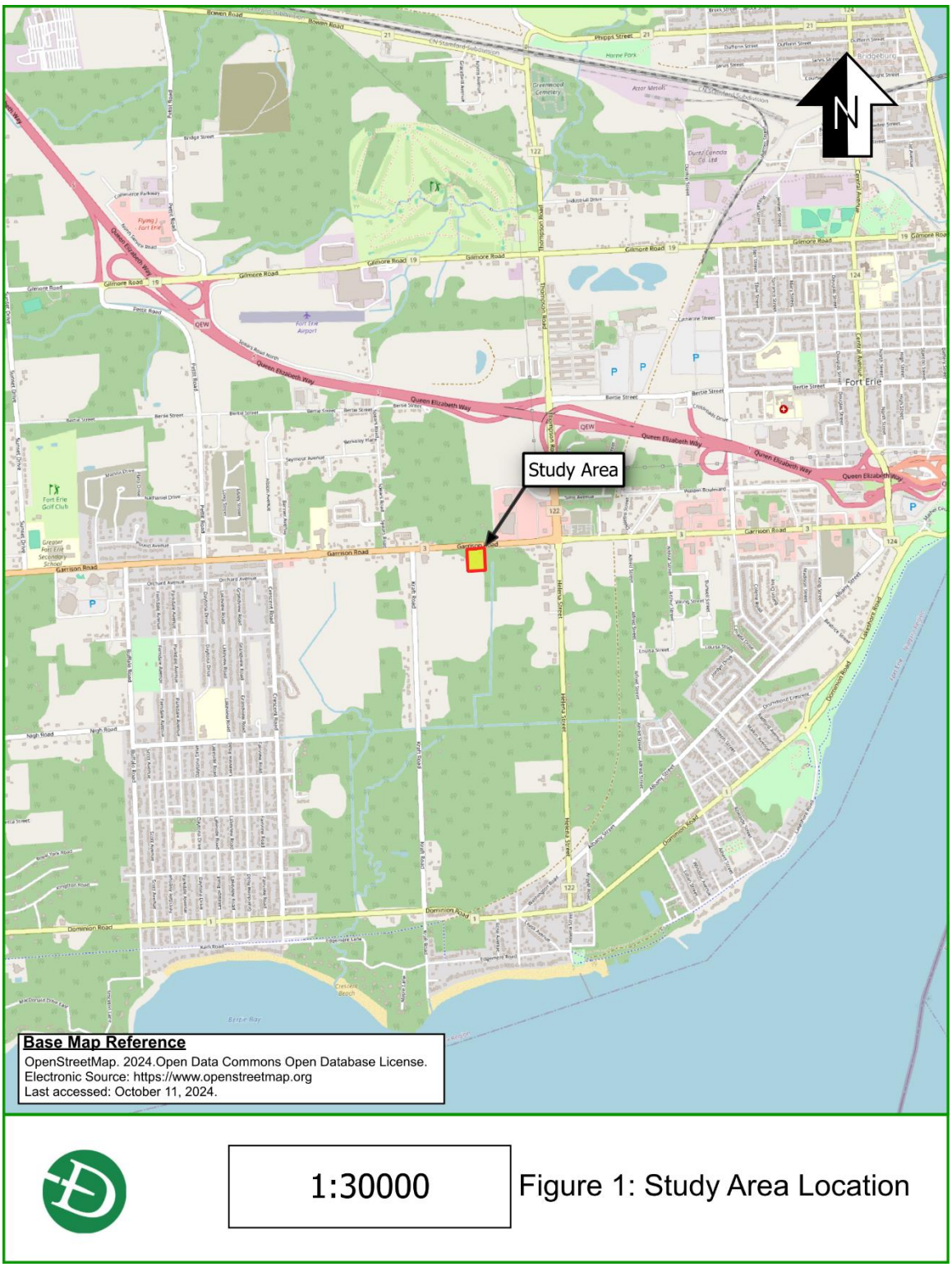


Figure 2: Historic Map Showing Study Area Location

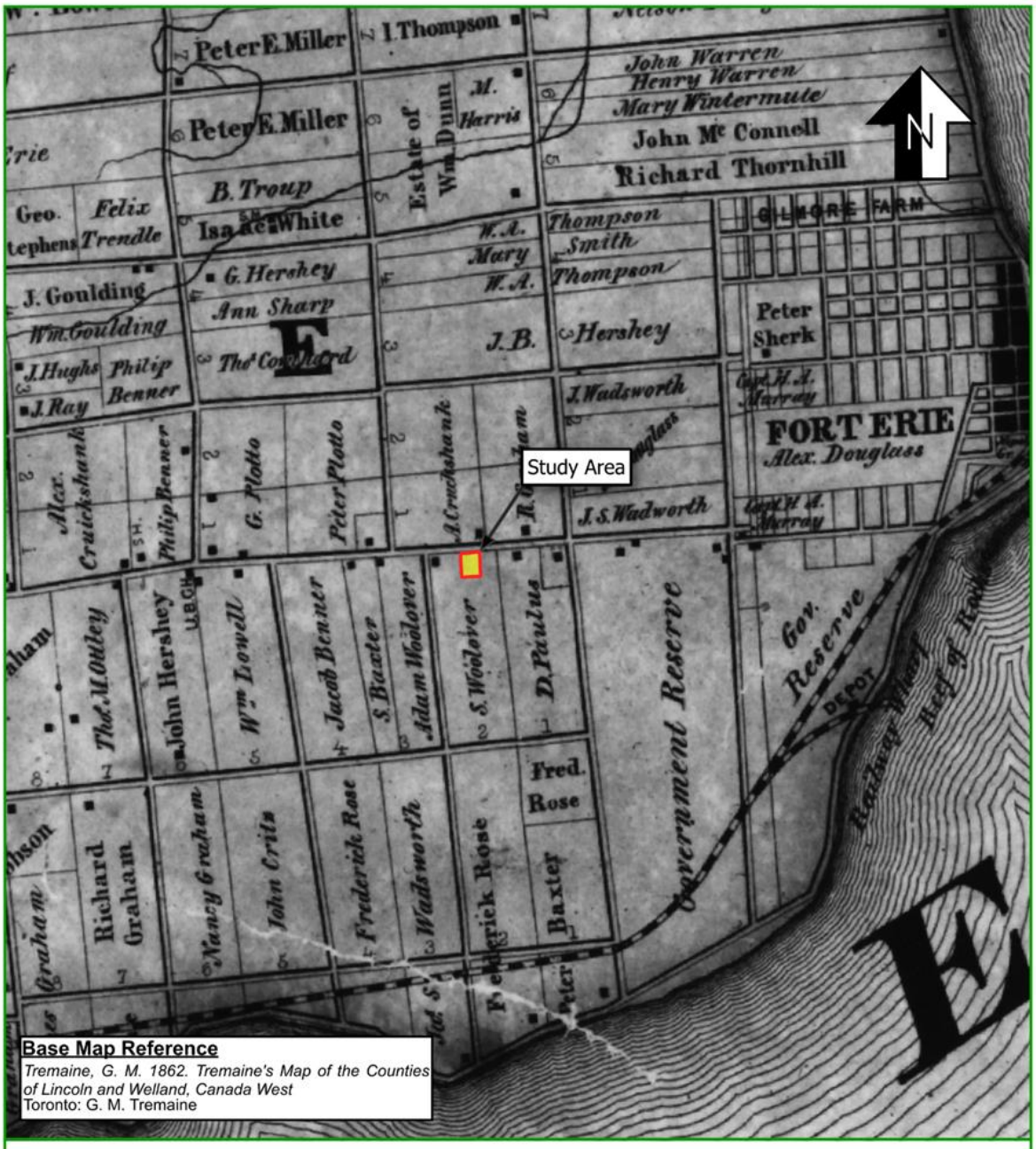


Figure 3: Historic Map Showing Study Area Location

Figure 4: Previous Archaeological Assessments

Figure 5: P1 (AfGr-118) Stage 3 Results

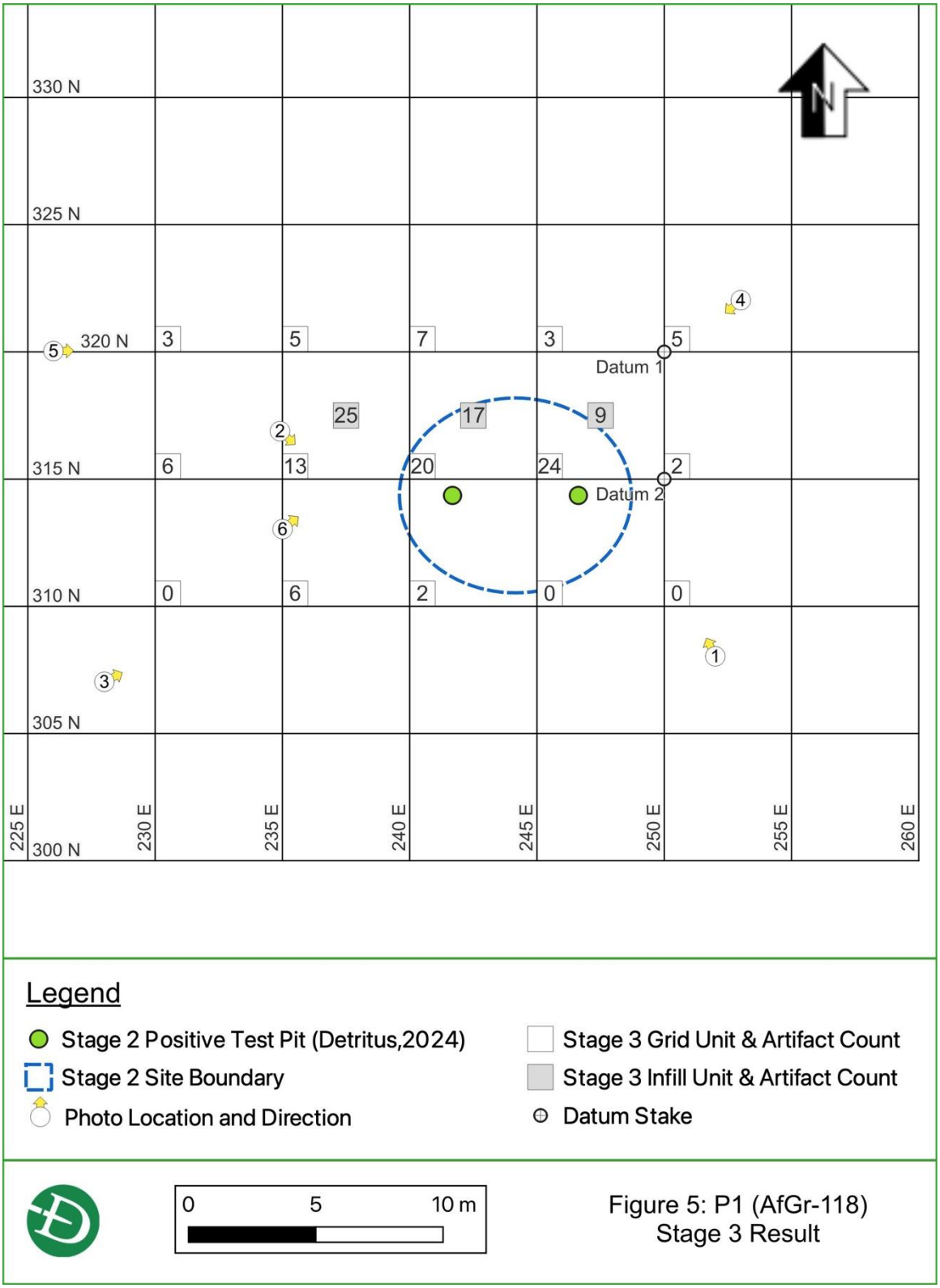


Figure 6: P2 (AfGr-119) Stage 3 Results

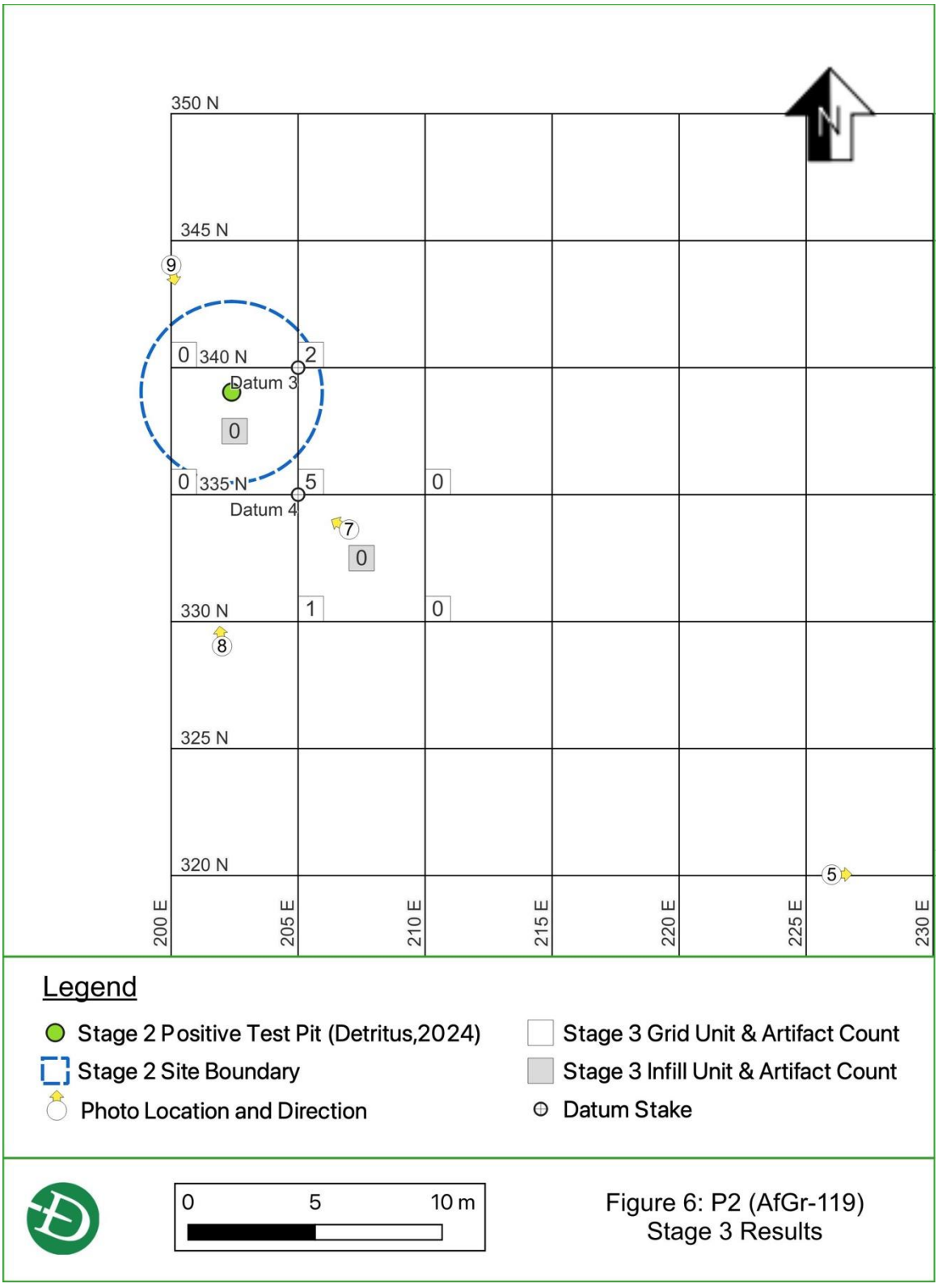
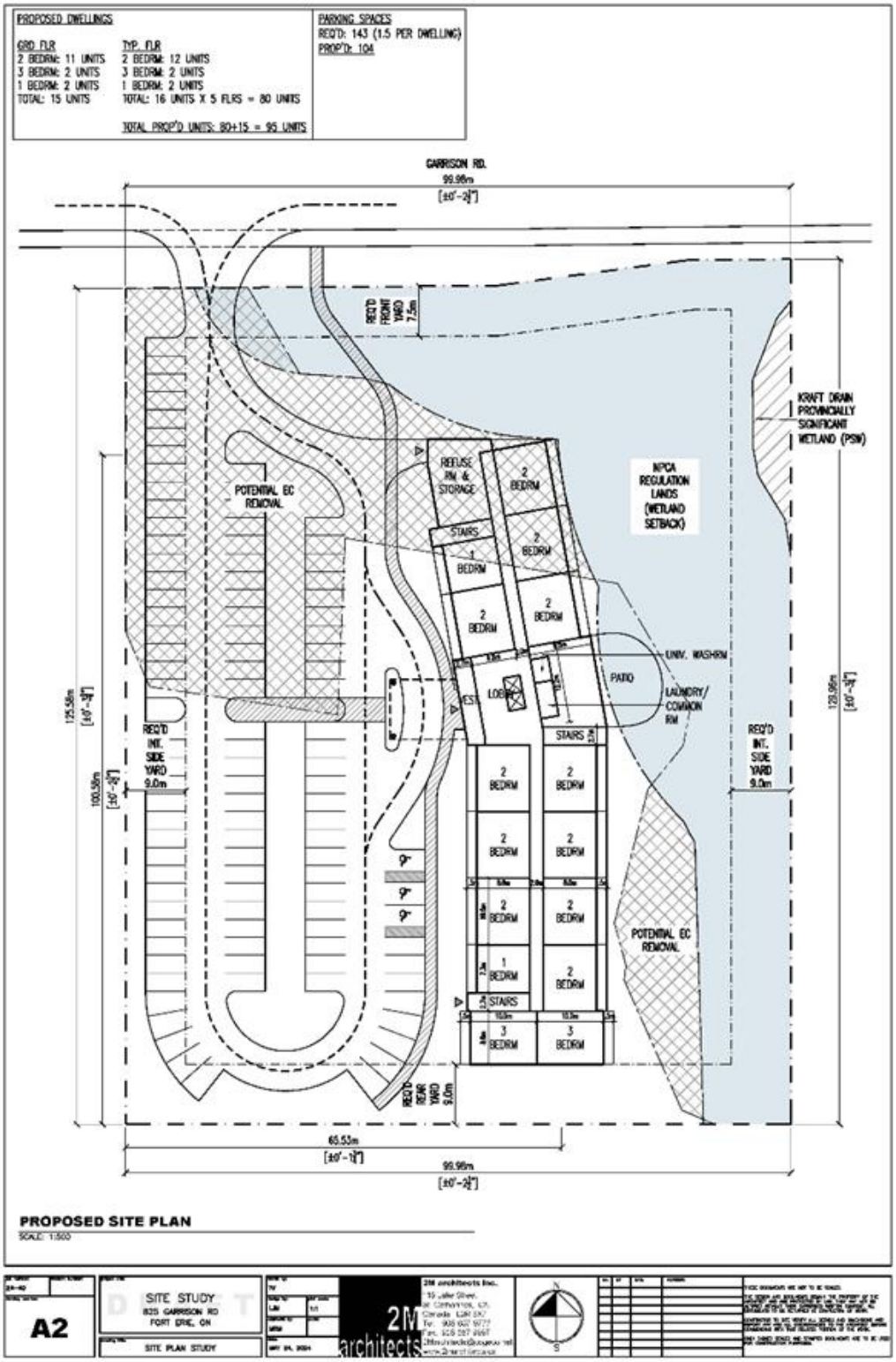


Figure 7: Development Plan



9.0 Images

9.1 Field Photos

Photo 1: Stage 3 Unit Excavation at AfGr-118, looking northwest

Photo 2: Stage 3 Unit Excavation at AfGr-118, looking southeast

Photo 3: Stage 3 Unit Excavation at AfGr-118, looking northeast

Photo 4: Stage 3 Unit Excavation at AfGr-118, looking southwest

Photo 5: Stage 3 Unit Excavation at AfGr-118, looking east

Photo 6: Stage 3 Unit Excavation at AfGr-118, looking northeast

Photo 7: Stage 3 Unit Excavation at AfGr-119, looking northwest

Photo 8: Stage 3 Unit Excavation at AfGr-118, looking north

Photo 9: Stage 3 Unit Excavation at AfGr-118, looking south

Photo 10: Stratigraphy of AfGr-118 Stage 3 Test Unit 250E, 310N Stratigraphy, looking west

Photo 11: Stratigraphy of AfGr-118 Stage 3 Test Unit 250E, 305N Stratigraphy, looking east

Photo 12: Stratigraphy of AfG4-118 Stage 3 Test Unit 230E, 320N Stratigraphy, looking south

Photo 13: Stratigraphy of AfGr-119 Stage 3 Test Unit 205E, 335N Stratigraphy, looking west

Photo 14: Stratigraphy of AfGr-118 Stage 3 Test Unit 200E, 340N Stratigraphy, looking south

9.2 Artifacts

Plate 1: Chipping detritus: secondary flake, from P1 (AfGr-118); Cat #3

Plate 2: Retouched flake, from P1 (AfGr-118); Cat #4

Plate 3: Chipping detritus: flake fragments, from P1 (AfGr-118), Cat #19

Plate 4: Retouched flake, from P1 (AfGr-118); Cat #22

Plate 5: Core, from P1 (AfGr-118). Cat # 24

Plate 6: Chipping Detritus: shatter flake, from P2 (AfGr-119). Cat# 2

Plate 7: Chipping detritus: fragment flake, from P2 (AfGr-119). Cat# 3

10.0 Appendix

10.1 Artifact Catalogue

10.1.1 P1 (AfGr-118) Stage 3 Artifact Catalogue

Cat #	Context: Easting and Northing	Unit Depth (m)	Artifact	Freq.	Morphology	Chert Type	Comments
1	Test Unit Excavation 235E 315N	0.38	chipping detritus	7	fragment	Onondaga	
2	Test Unit Excavation 235E 315N	0.38	chipping detritus	4	shatter	Onondaga	
3	Test Unit Excavation 235E 315N	0.38	chipping detritus	1	secondary	Onondaga	
4	Test Unit Excavation 235E 315N	0.38	retouched flake	1		Onondaga	
5	Test Unit Excavation 240E 310N	0.35	chipping detritus	2	shatter	Onondaga	
6	Test Unit Excavation 235E 310N	0.4	chipping detritus	6	fragment	Onondaga	
7	Test Unit Excavation 245E 315N	0.39	chipping detritus	24	fragment	Onondaga	
8	Test Unit Excavation 250E 320N	0.38	chipping detritus	5	fragment	Onondaga	
9	Test Unit Excavation 247E 317N	0.37	chipping detritus	8	fragment	Onondaga	
10	Test Unit Excavation 240E 320N	0.32	chipping detritus	5	fragment	Onondaga	
11	Test Unit Excavation 240E 320N	0.32	chipping detritus	2	shatter	Onondaga	
12	Test Unit Excavation 235E 320N	0.29	chipping detritus	4	fragment	Onondaga	
13	Test Unit Excavation 235E 320N	0.29	chipping detritus	1	shatter	Onondaga	
14	Test Unit Excavation 250E 315N	0.37	chipping detritus	2	shatter	Onondaga	
15	Test Unit Excavation 230E 315N	0.36	chipping detritus	3	fragment	Onondaga	
16	Test Unit Excavation 230E 315N	0.36	chipping detritus	3	shatter	Onondaga	
17	Test Unit Excavation 245E 320N	0.35	chipping detritus	2	fragment	Onondaga	
18	Test Unit Excavation 245E 320N	0.35	chipping detritus	1	shatter	Onondaga	
19	Test Unit Excavation 230E 320N	0.38	chipping detritus	3	fragment	Onondaga	
20	Test Unit Excavation 240E 315N	0.47	chipping detritus	1	secondary	Onondaga	
21	Test Unit Excavation 240E 315N	0.47	chipping detritus	14	fragment	Onondaga	
22	Test Unit Excavation 240E 315N	0.47	retouched flake	1		Onondaga	
23	Test Unit Excavation 240E 315N	0.47	chipping detritus	4	shatter	Onondaga	
24	Test Unit Excavation 237E 317N	0.33	core	1		Onondaga	
25	Test Unit Excavation 237E 317N	0.33	chipping detritus	18	fragment	Onondaga	
26	Test Unit Excavation 237E 317N	0.33	chipping detritus	6	shatter	Onondaga	
27	Test Unit Excavation 243E 317N	0.35	chipping detritus	13	fragment	Onondaga	
28	Test Unit Excavation 243E 317N	0.35	chipping detritus	4	shatter	Onondaga	

10.1.2 P2 (AfGr-119) Stage 3 Artifact Catalogue

Cat #	Context: Easting and Northing	Unit Depth (m)	Artifact	Freq.	Morphology	Chert Type	Comments
1	Test Unit Excavation 205E 335N	0.52	chipping detritus	5	fragment	Onondaga	
2	Test Unit Excavation 200E 330N	0.33	chipping detritus	1	shatter	Onondaga	
3	Test Unit Excavation 205E 340N	0.4	chipping detritus	1	fragment	Onondaga	
4	Test Unit Excavation 205E 340N	0.4	chipping detritus	1	shatter	Onondaga	