

**Stage 1-2 Archaeological Assessment
Gibb Road Business Park
3516 Perth Road 119 (Highway 7),
Stratford**

Part of Lots 2-4, Concession 5, Historical Township of Downie, Geographical Township of Perth South, Perth County, Ontario

Submitted to:
GSP Group Inc.
c/o Chris Pidgeon, MCIP, RPP

and

Ontario's Ministry of Tourism, Culture and Sport

Submitted by:



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ORIGINAL REPORT

May 3, 2019

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Chris Pidgeon of GSP Group ('the Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lots 2 to 4, Concession 5, Geographical Township of Perth South, Historical Township of Downie, Perth County, Ontario (Figure 1). This assessment was undertaken in advance of the proposed Gibb Road Business Park development on a large agricultural property located at 3516 Perth Road 119 (Highway 7), Stratford, within the community of Saint Pauls Station. The assessment property ('Study Area') is a large L-shaped parcel measuring approximately 69.95 hectares (ha), and is generally located to the southwest of the intersection of Perth Road 119 (Highway 7) and Gibb Road (Figure 3). The large property at 3578 Perth Road 119 (Highway 7), positioned immediately adjacent to the southwest intersection, was not included in the Study Area; nor were the four smaller residential properties at the southeast corner of the Study Area, at 3502-3510 Perth Road 119 (Highway 7). The Study Area is generally bound by Gibb Road to the north, Perth Road 119 (Highway 7) to the east, a railway to the west, and neighbouring residential properties on all other sides.

This investigation 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* (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 the conditions of this legislation, a Stage 1-2 archaeological assessment was conducted as part of a Site Plan Application ('SPA') under archaeological consulting license P389 issued to Dr. Walter McCall by the Ministry of Tourism, Culture and Sport ('MTCS') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

At the time of assessment, most of the Study Area comprised active agricultural land. A small wooded area occupied the bend of the L-shaped property, adjacent to a larger low lying and wet wooded area on the neighbouring property at 3578 Perth Road 119 (Highway 7). A large farming complex occupied the southeast corner of the Study Area, complete with a two-storey house, a gazebo, multiple barns and outbuildings, several manicured lawn areas, and three gravel laneways accessing a large gravel barn yard (Figure 4).

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. As such, a Stage 2 archaeological assessment was recommended for the agricultural land, the small wooded area, and the manicured lawns. The remainder of the Study Area, including the existing structures and gravel surfaces, were evaluated as having no or low potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of the archaeological resources as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). These areas were photo documented only in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

The Stage 2 assessment, involving a pedestrian survey of the agricultural land and test pit survey of the wooded areas and manicured lawns, was conducted between April 9 and 13, 2019 (Figures 3 & 4). This investigation resulted in the identification and documentation of a single Euro-Canadian site, registered as Gibb 2 (AiHg-2), and four pre-contact Aboriginal findspots (Findspots 2-4 and Findspot 5 (AiHg-4)); see Tile 3 of the Supplementary Documentation).

The Stage 2 assessment of Gibb 2 (AiHg-2) resulted in the documentation of 30 Euro-Canadian artifacts scattered across an area of approximately 20 metres (m) north-south by 27m east-west within the agricultural land along the western edge of the Study Area. The Stage 2 assemblage was dominated by ceramic sherds, most of which originated from ironstone vessels. The remainder of the assemblage consisted of four bottle glass pieces, two of which appear to have been machine made. Based on the results of the Stage 2 investigation, Gibb 2 (AiHg-2) has been interpreted as a small, late 19th century domestic scatter. Given the presence of at least 20 artifacts that date the period of use to before 1900, **Gibb 2 (AiHg-2) meets the criteria for a Stage 3 Site**

Specific Assessment as per Section 2.2, Standard 1c of the Standards and Guidelines (Government of Ontario 2011) and retains cultural heritage value or interest ('CHVI').

The Stage 3 assessment of Gibb 2 (AiHg-2) will be conducted according to Section 3.2.2 of the *Standards and Guidelines* (Government of Ontario 2011). Typically, a Stage 3 assessment begins with an intensive controlled surface pickup ('CSP') across the Stage 2 limits of site, conducted as per Section 3.2.1 of the *Standards and Guidelines* (Government of Ontario 2011). During the Stage 2 pedestrian survey, however, all of the surface artifacts at Gibb 2 (AiHg-2) were digitally mapped individually and collected for laboratory analysis. Thus, the conditions for a Stage 3 CSP at the site were met during the Stage 2 assessment.

Given that it is not yet evident that the level of CHVI at Gibb 2 (AiHg-2) will result in a recommendation to proceed to Stage 4 (see Section 4.3 below), the Stage 3 assessment of Gibb 2 (AiHg-2) will consist of the hand excavation of 1m square test units every 5m in systematic levels and into the first 5cm of subsoil, as per Table 3.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011). Additional 1m test units, amounting to 20% of the grid total, will be placed in areas of interest within the site extent as per Table 3.1, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011). All excavated soil will be screened through six-millimetre mesh; all recovered artifacts will be recorded by their corresponding grid unit designation and collected for laboratory analysis. If a subsurface cultural feature is encountered, the plan of the exposed feature will be recorded and geotextile fabric will be placed over the unit before backfilling the unit.

The Stage 2 assessment of Findspot 2 resulted in the documentation of a single bifacially worked tool manufactured from Onondaga chert, located approximately 140m to the southwest of Gibb 2 (AiHg-2). The specimen was identified as the tip of a broken projectile point. Despite an intensified pedestrian survey of all agricultural lands within 20m of the artifact, no other archaeological materials were identified. Given the isolated nature of this non-diagnostic artifact, **Findspot 2 does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the Standards and Guidelines (Government of Ontario 2011). The CHVI of Findspot 2 is judged to be sufficiently documented.**

The Stage 2 assessment of Findspot 3 resulted in the documentation of an isolated piece of pre-contact Aboriginal chipping detritus, located approximately 99m to the southwest of Gibb 2 (AiHg-2). The specimen was identified as a secondary flake manufactured from Onondaga chert. Despite an intensified pedestrian survey of all agricultural lands within 20m of the artifact, no other archaeological materials were identified. Given the isolated nature of this non-diagnostic artifact, **Findspot 3 does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the Standards and Guidelines (Government of Ontario 2011). The CHVI of Findspot 3 is judged to be sufficiently documented.**

The Stage 2 assessment of Findspot 4 resulted in the documentation of a single piece of pre-contact Aboriginal chipping detritus, located approximately 120m to the southwest of Gibb 2 (AiHg-2). The specimen was identified as a secondary flake manufactured from Kettle Point chert. Despite an intensified pedestrian survey of all agricultural lands within 20m of the artifact, no other archaeological materials were identified. Given the isolated nature of this non-diagnostic artifact, **Findspot 4 does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the Standards and Guidelines (Government of Ontario 2011). The CHVI of Findspot 4 is judged to be sufficiently documented.**

The Stage 2 assessment of Findspot 5 (AiHg-4) resulted in the documentation of an isolated pre-contact Aboriginal projectile point manufactured from Haldimand chert, observed in the southwest corner of the Study Area, approximately 410m to the southwest of Findspot 2. The projectile point appears to have been heavily reworked as knife blade, but is reminiscent of a point from the Late Archaic Narrow Point tradition (c. 3,200-2,200 BC), most likely a Lamoka Side-Notched variety. Despite an intensified pedestrian survey of all agricultural lands within 20m of the artifact, no other archaeological materials were identified. Given the isolated nature of this artifact, **Findspot 5 (AiHg-4) does not fulfill any of the criteria for a Stage 3**

archaeological investigation as per Section 2.2 of the *Standards and Guidelines* (Government of Ontario 2011). The CHVI of Findspot 5 (AiHg-4) is judged to be sufficiently documented.

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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1.0 Project Context

1.1 Development Context

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This investigation 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* (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 the conditions of this legislation, a Stage 1-2 archaeological assessment was conducted as part of a Site Plan Application ('SPA') under archaeological consulting license P389 issued to Dr. Walter McCall by the Ministry of Tourism, Culture and Sport ('MTCS') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MTCS' *2011 Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

The purpose of a Stage 1 Background Study is to compile all available information about the known and potential archaeological heritage resources within the Study Area and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the following Stage 1 Archaeological Overview/Background Study are as follows:

- To provide information about the Study Area's geography, history, previous archaeological fieldwork and current land conditions;
- To evaluate in detail, the Study Area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property; and
- To recommend appropriate strategies for Stage 2 survey.

To meet these objectives Detritus archaeologists employed the following research strategies:

- A review of relevant archaeological, historic and environmental literature pertaining to the Study Area;
- A review of the land use history, including pertinent historic maps; and
- An examination of the Ontario Archaeological Sites Database ('ASDB') to determine the presence of known archaeological sites in and around the Study Area.

The purpose of a Stage 2 Property Assessment is to provide an overview of archaeological resources within the Study Area, to determine whether any of the resources might be archaeological sites with cultural heritage value or interest ('CHVI'), and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the following Stage 2 assessment are as follows:

- To document all archaeological resources within the Study Area;
- To determine whether the Study Area contains archaeological resources requiring further assessment; and
- To recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

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 Aboriginal Resources

The late 17th and early 18th centuries represent a turning point in the evolution of the post-contact Aboriginal occupation of Southern Ontario. It was at this time that various Iroquoian-speaking communities began migrating into southern Ontario from New York State, followed by the arrival of Algonkian-speaking groups from northern Ontario (Konrad 1981; Schmalz 1991). This period also marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes.

The oral traditions of the Mississaugas, as told by Chief Robert Paudash and recorded in 1904, 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 between the two groups and, at the end of the 17th century, the Mississaugas settled permanently in Southern Ontario, including within the Niagara Peninsula (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 and Feest 1978:778-779).

In 1722, the Five Nations adopted the Tuscarora in New York becoming the Six Nations (Pendergast 1995:107). Sir Frederick Haldimand, the Governor of Québec, made preparations to grant a large plot of land in south-central Ontario to those Six Nations who remained loyal to the Crown during the American War of Independence (Weaver 1978:525). More specifically, Haldimand arranged for the purchase of the Haldimand Tract in south-central Ontario from the Mississaugas. The Haldimand Tract, also known as the 1795 Crown Grant to the Six Nations, was provided for in the Haldimand Proclamation of October 25th, 1784 and was intended to extend a distance of six miles on each side of the Grand River from mouth to source (Weaver 1978:525). By the end of 1784, representatives from each constituent member nation of the Six Nations, as well as other allies, relocated to the Haldimand Tract with Joseph Brant (Tanner 1987:77-78; Weaver 1978:525).

The Study Area is situated within the County of Brant, Ontario. The area first enters the Euro-Canadian historical record as part of the Haldimand Tract which:

*...is a parcel or tract of land given to the Six Nations Indians, by Governor Haldimand October 25th, 1784, ...and conveyed by Grant the 14th of January, 1793.
... This Grant was composed of the following Townships: Dunn, Sherbrooke, Moulton, Canborough, North and South Cayuga, Oneida and Seneca in Haldimand County; Tuscarora, Onondaga, Brantford and South Dumfries in Brant County; North Dumfries, Waterloo and Woolwich in Waterloo County; Pilkington and Nichol in Wellington County; and is described as a parcel or tract of land six miles on each side of the Ouse or Grand River from its mouth toward its source, to be bounded by the tract of land deeded December the 7th, 1792 by the Mississauga Chiefs and people to the Crown. This part was set aside as a suitable retreat for the Six Nation Indians who had shewn attachment and Fidelity to the British Government during the troublous times 1759 to 1783 and was granted to the Chiefs, Warriors, Women and People of the Six Nations and their heirs forever.*

Morris 1943:19-21

The size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture in Southern Ontario began to shift with the establishment of European settlers in Southern Ontario. 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 & Co. 1879:8; Tanner 1987:127; Weaver 1978:526). 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 in 1847 (Smith 2002:119).

Despite the inevitable encroachment of European settlers on previously established Aboriginal 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 2009:114). 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

The current Study Area is located within the historical Township of Downie and County of Perth, Ontario.

On July 24, 1788, Sir Guy Carleton, the Governor-General of British North America, divided the former Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg and Lunenburg (Archives of Ontario 2009). Further change came in December 1791 when the Province of Québec was rearranged into Upper Canada and Lower Canada under the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada; he initiated several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them. In July 1792, Simcoe divided Upper Canada into 19 counties stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed the Western, Home, Midland and Eastern Districts (Coyne 1895:33).

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. In June 1840, meanwhile, territory was transferred from both Home and London Districts to establish Wellington District within the newly formed Waterloo County (Archives of Ontario 2009).

Perth County originally formed part of the Huron Tract. The impetus behind its settlement was provided by the Canada Company agency, which opened a road running from Stratford to Goderich early in the 19th century. Settlers began arriving the 1820s, with an influx in the 1820s and 1830s. Most were farmers emigrating from England, Ireland, Scotland and Germany. Today, the county continues to be known for its mixed farming, dairying and hog production. In 1850, Perth County was amalgamated with its neighbours to form the United Counties of Huron, Perth and Bruce in 1850. The county was issued its own Provisional Municipal Council at that time. Three years later, in 1853, Perth was separated from the United Counties, once again becoming its own entity (Perth County Tourism 2017).

Perth County originally had 11 original townships. Eight of these were laid out as part of the original Huron Tract; the other three were surveyed from a portion of the Crown lands known as the ‘Queen’s Bush’ (Wallace 1928; Perth County Tourism 2017). The City of Stratford was formed from parts of Downie, Ellice and Easthope Townships. The first lot was granted by the Canada Company to William Sergeant in 1831 on the condition that he open an inn. In 1832 he erected the first frame building in the region by the Avon River and called it the Shakespeare Hotel. In 1834,

John Sharman, a blacksmith originating from Bedfordshire, England, became the first purchaser of land.

In addition to Stratford, four additional towns were incorporated as urban municipalities: St. Mary's, Mitchell, Listowel, and Milverton. On January 1, 1998 the county was restructured by reducing fourteen municipalities to four. The City of Stratford and the Town of St. Mary's retained their status as separate municipalities (Perth County Tourism 2017).

The *Historical Atlas of the County of Perth, Ontario* ('Historical Atlas'; Belden & Co. 1879) demonstrates the extent to Downie Township had been settled by 1879 (Figure 2). Landowners are listed for most of the lots within the township, many of which had been subdivided into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures are prevalent throughout the township, almost all of which front early roads, the Avon River, or Black Creek. The road system in place in the late 19th century is still recognizable today.

The Study Area occupies most of Lots 2, Concession 5, in addition to the portions of Lots 3 and 4 that are adjacent to the southeast side of the Grand Trunk Railway. This railway passed through both lots on its way to the Town of Stratford, located in the northeast corner of the township; a branch of the Lake Huron Railway can be observed traversing the northern edge of Downie Township, entering Stratford from the west.

Jason Boyd is listed as the owner of Lot 2, Thos Waldie, the owner of Lot 3 and Geo Gibb, the owner of Lot 4. Two small structures are depicted on Lot 4, both to the northeast of the railway; a single structure is visible in the southeast corner of Lot 2, in the vicinity of the four smaller properties at 3502-3510 Perth Road 119 (Highway 7) that are not included in the Study Area. Although no structures are illustrated on Lot 3, Mr. Waldie likely lived on Lot 1, to the east, which he also owned. It should be noted, however, that historical county atlases were produced primarily to identify factories, offices, residences and landholdings of subscribers and were funded by subscription fees. Therefore, landowners who did not subscribe were not always listed on the maps (Caston 1997:100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

The Study Area is a large L-shaped parcel measuring approximately 69.95ha, and is generally located to the southwest of the intersection of Perth Road 119 (Highway 7) and Gibb Road (Figure 4). The large property at 3578 Perth Road 119 (Highway 7), positioned immediately adjacent to the southwest intersection, was not included in the Study Area; nor were the four smaller residential properties at the southeast corner of the Study Area, at 3502-3510 Perth Road 119 (Highway 7). The Study Area is generally bound by Gibb Road to the north, Perth Road 119 (Highway 7) to the east, a railway to the west, and neighbouring residential properties on all other sides.

At the time of assessment, most of the Study Area comprised active agricultural land (Figure 3). A small wooded area occupied the bend of the L-shaped property, adjacent to a larger low lying and wet wooded area on the neighbouring property at 3578 Perth Road 119 (Highway 7). A large farming complex occupied the southeast corner of the Study Area, complete with a two-storey house, a gazebo, multiple barns and outbuildings, several manicured lawn areas, and three gravel laneways accessing a large gravel barn yard (Figure 4).

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 situated within the Norfolk Sand Plain. This region has been identified as a wedge-shaped area with a broad, curved base along the shore of Lake Erie that tapers northward to a point at Brantford on the Grand River. The plain declines southward from about 850 feet, down to the level of Lake Erie (572 feet) or in the west to the top of the shore cliff 100 feet or more above the lake. Throughout large sections of the plain, the slope is only a foot or two to the mile; a

noticeable break in the slope occurs five to ten miles from the shore of Lake Erie. The sands and silts of this region were deposited as a delta in glacial Lakes Whittlesey and Warren. The drainage is through small rivers flowing directly to Lake Erie, except in a small area in the north, which is tributary to the Grand River (Chapman and Putnam 1984: 153).

The closest source of potable water is a tributary of Fairchild Creek, located approximately 190 metres (m) to the northwest of the Study Area.

1.3.2 Pre-Contact Aboriginal Land Use

This portion of southwestern Ontario has been demonstrated to have been 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 Downie Township, based on Ellis and Ferris (1990).

Table 1: Cultural Chronology for Downie 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 MTCS were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario n.d.) is maintained by the MTCS. 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 13km 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 under review is situated within Borden Block AiHg.

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 MTCS 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, no archaeological sites have been registered within a 1km radius of the Study Area.

Although not included in the Study Area, the adjacent property at 3578 Perth Road 119 (Highway 7) was subject to a Stage 1-2 assessment by Detritus, conducted at the same time as the current investigation (P389-0434-2019). The Stage 1 assessment indicated that portions of the property exhibited moderate to high potential for the identification and recovery of archaeological resources and were recommended for additional assessment. This investigation involved a typical pedestrian survey of the agricultural land that covered most of the property, as well as a typical test pit assessment of the manicured lawns surrounding the existing house. Only a small portion of the woodlot along the western edge of the property was able to be test pitted. The remainder was determined to be low lying a wet. This investigation had not been completed at the time of the current assessment.

Thus far, the Stage 2 investigation at 3578 Perth Road 119 (Highway 7) has resulted in the documentation of a Euro-Canadian site [Gibb 1 (AiHg-3)], and a pre-contact Aboriginal findspot (Findspot 1). Gibb 1 comprised 283 Euro-Canadian artifacts, recovered during the test pit assessment of the manicured lawns surrounding the existing house. Findspot 1 was an isolated flake of Haldimand chert, observed in the fields along the eastern edge of the property. The results will be discussed in a forthcoming assessment report.

Finally, Detritus conducted a Stage 1-2 assessment of the large property at 3852 Gibb Road (Po17-0692-2019), which occupies the northeast corner of the intersection of Perth Road 119 (Highway 7) and Gibb Road. The assessment comprised a typical pedestrian survey across the agricultural fields that make up the majority of the property. The manicured lawns around the existing house at the southern end of the property were subject to a typical test pit assessment. This investigation resulted in the documentation three Euro-Canadian artifact scatters (identified as Van Nes 1, Van Nes 2, and Van Nes 5), as well as two small pre-contact Aboriginal artifact scatters (Van Nes 3 and Van Nes 4) and an isolated pre-contact Aboriginal findspot (Van Nes 6). These artifacts had yet to be catalogued at the time of this assessment, nor were any recommendations available. The results of this investigation will be discussed in a forthcoming assessment report.

1.3.4 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MTCS (Government of Ontario 2011) to determine areas of archaeological potential within Study Area. 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 sites locations and types to varying degrees. The MTCS (Government of Ontario 2011) categorizes water sources 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 a tributary of Fairchild Creek, located approximately 190m to the northwest 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 Norfolk Sand Plain. As noted above, the soils within this region are typically well drained and suitable for pre-contact

and post contact Aboriginal agriculture. Considering also the length of occupation of Downie Township prior to the arrival of European settlers, and the pre-contact and post-contact Aboriginal 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.

By 1879 Downie Township was densely occupied. The *Historical Atlas* map shows landowners 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 (Belden & Co. 1879). The Study Area occupied portions of Lots 2 to 4, Concession 5, on a parcel situated adjacent to a branch of the Grand Trunk Railway. Considering also the proximity of the historical Town of Stratford to the northeast and the Lake Huron Railway to the north, and the potential for post-contact Euro-Canadian archaeological resources is judged to be moderate to high.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area (Wilson and Horne 1995). The existing structures and gravel surfaces associated with the large farming complex in the southeast corner of the Study Area were evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). The remainder of the Study Area, including the agricultural land, small wooded areas, and manicured lawns, demonstrated the potential for the recovery of pre-contact Aboriginal, post-contact Aboriginal, and Euro-Canadian archaeological resources and are recommended for Stage 2 assessment.

2.0 Field Methods

The Stage 1-2 archaeological assessment was conducted under archaeological consulting license P389 issued to Dr. Walter McCall by the MTCS (P389-403-2018; P389-413-2018). The Stage 1 background research presented above indicates that portions of the Study Area exhibit moderate to high potential for the identification and recovery of archaeological resources, and were thus recommended for Stage 2 assessment (Section 1.3.4).

The Stage 2 field assessment was conducted between April 9 and 13, 2019. During this time, the weather was mostly sunny with periods of overcast, and temperatures ranging from 3° to 13°C. Assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. Photos 1 to 20 demonstrate the soil and field conditions throughout the Study Area at the time of the survey, including areas that met the requirements for a Stage 2 assessment, as per Section 7.8.6 Standards 1a of the *Standards and Guidelines* (Government of Ontario 2011). Figures 3 and 4 provide an illustration of the Stage 2 assessment methods, as well as photograph locations and directions. Table 2 provides a summary of the weather and field conditions during the field survey.

Table 2: Field and Weather Conditions

Date	Activity	Weather	Field Conditions
April 9, 2019	pedestrian and test pit survey	sunny, high of 8°C	soil visibility >80%; soil was dry and screened easily
April 10, 2019	pedestrian survey	mix sun and cloud, high of 7°C	soil visibility >80%
April 11, 2019	pedestrian survey	overcast, high of 3°C	soil visibility >80%
April 13, 2019	pedestrian and test pit survey	sunny, high of 13°C	soil visibility >80%; soil was dry and screened easily

Approximately 95% of the Study Area comprised active agricultural field that was accessible for ploughing. As per Section 2.1.1, Standards 2 and 3 of the *Standards and Guidelines* (Government of Ontario 2011; Photos 1 to 7), the agricultural land had been ploughed and allowed to weather prior to assessment. The ploughing was deep enough to provide total topsoil exposure, and provided a minimum of 80% surface visibility, as per Section 2.1.1, Standards 4 and 5 of the *Standards and Guidelines* (Government of Ontario 2011). The ploughed area was subject to a typical pedestrian survey at 5m intervals, conducted in accordance with Section 2.1.1, Standard 6 of the *Standards and Guidelines* (Government of Ontario 2011). During the pedestrian survey, when archaeological resources were recovered, survey intervals were intensified to 1m within a 20m radius of the find as per Section 2.1.1, Standard 7 of the *Standards and Guidelines* (Government of Ontario 2011). This approach was taken to establish whether or not the artifact was an isolated find or part of a larger artifact scatter.

This investigation resulted in the documentation of a small Euro-Canadian artifact scatter and four pre-contact Aboriginal findspots (see Section 3.0 below). All of the artifacts encountered during the pedestrian survey were digitally mapped and recorded according to their specific site of findspot designation, and collected for laboratory analysis and description. A UTM reading was taken for each artifact, in addition to two fixed reference landmarks as per Section 2.1, Standard 4 of the *Standards and Guidelines* (Government of Ontario 2011). All coordinates were taken using a Garmin eTrex 10 GPS unit with a minimum accuracy 1-2.5m (North American Datum 1983 ('NAD83') and Universal Transverse Mercator ('UTM') Zone 17T).

The Euro-Canadian site and one of the four pre-contact Aboriginal findspots were registered with the MTCS as per Section 7.12 of the *Standards and Guidelines* (Government of Ontario 2011).

Approximately 3% of the Study Area consisted of a small wooded area and several manicured lawns that were inaccessible to ploughing (Photos 10 to 13, 15 to 20). These areas were subject to a typical test pit survey at 5m intervals in accordance with Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011). Test pits were excavated within 1m of all built structures or until they showed evidence for recent disturbance, as per Standard 4 of this section. All test pits were approximately 30 centimetres (cm) in diameter and were excavated 5cm into sterile subsoil. The soils were then examined for stratigraphy, cultural features, or evidence of fill.

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All soil from the test pits was screened through six-millimetre (mm) hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. No further archaeological methods were employed since no artifacts were identified during the test pit survey.

The remaining 2% of the Study Area comprised the existing structures and gravel surfaces associated with the large farming complex in the southeast corner. As was noted above, these areas were evaluated as having been previously disturbed (see Section 1.3.4 above). The areas of previous disturbance were mapped and photo documented only (Photos 10 to 19) in accordance with Section 2.1, Standard 2b and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

3.0 Record of Finds

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0 above. This investigation resulted in the documentation of one archaeological site, registered as Gibb 2 (AiHg-2) and four findspots; Findspots 2-4 and Findspot 5 (AiHg-4). Maps indicating the exact location the site and findspots, as well as all UTM coordinates recorded during the Stage 2 assessment, are included in the Supplementary Documentation to this report. A description of the recovered artifacts is provided in Section 3.1 below; a sample of the artifacts is illustrated in Section 9.2. An inventory of the documentary record generated by fieldwork is provided in Table 3.

Table 3: Inventory of Document Record

Document Type	Current Location of Document Type	Additional Comments
2 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
40 Digital Photographs	Detritus office	Stored digitally in project file

All of the material culture collected during the Stage 2 assessment 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 Her Majesty the Queen in right of the Province of Ontario or another suitable public institution acceptable to the MTCS and the Study Area's owners.

3.1 Cultural Material

The four findspots documented during the Stage 2 assessment produced lithic artifacts manufactured from Onondaga, Kettle Point, and Haldimand Chert. Chert type identifications were accomplished visually using reference materials located online or in personal collections.

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

Kettle Point formation chert is from the Late Devonian age and is situated between the Kettle Point (Late Devonian shales) and the Ipperwash Formations (Middle Devonian Limestone). It occurs as submerged outcrops that extend approximately 1,350 meters into Lake Huron (Janusas 1984:3). Secondary deposits have been reported in Essex County (Janusas 1984) and in the Ausable Basin (Kenyon 1980; Eley and von Bitter 1989). Kettle Point chert can be identified by the presence of a waxy lustre and occurs in a wide range of colours including brown, grey and greenish colours as well as reddish purple and dark blue varieties (Eley and von Bitter 1989). A rusty staining on the surface of artifacts is also frequently noted (Fisher 1997).

Haldimand chert, also known as Bois Blanc chert, is a medium quality raw material that outcrops along the Bois Blanc formation between Kohler and Hagersville, as well as in Cayuga, Ontario. Dating to the Early Silurian, it derives from chalk-bearing limestones which give the material its characteristically white to light grey or buff colour and relatively low lustre (Eley and von Bitter 1989).

In addition to chert identification, both pieces of chipping detritus within the artifact assemblage were subject to morphological analysis following the classification scheme described by Lennox and Murphy (1986:79-81) and expanded upon by Fisher (1997: 41-49). Both specimens were identified as secondary flakes. Cortical removal, primary and secondary flakes are produced during the initial reduction phases of raw material blanks and tend to exhibit minimal dorsal flake scarring. These flakes are also characterized by the presence of cortex, or original unflaked area, on their dorsal surfaces and proximal ends. For cortical removal flakes, cortex makes up

over half of the dorsal surface. For primary flakes, cortex makes up less than half of the dorsal surface, while secondary flakes may not contain any.

3.2 Gibb 2 (AiHg-2)

The Stage 2 assessment of Gibb 2 resulted in the documentation of 30 Euro-Canadian artifacts scattered across an area of approximately 20m north-south by 27m east-west along the western edge of the Study Area. The Stage 2 assemblage comprises 26 sherds of Euro-Canadian ceramics and 4 bottle glass pieces.

3.2.1 Ceramics

A total of 26 ceramic sherds were documented during the Stage 2 assessment of Gibb 2 (AiHg-2). The majority of these were of ironstone (92.31%). The remainder of the assemblage comprised single sherds of red earthenware and refined white earthenware ('RWE'). Table 4 provides a summary of the ceramic assemblage by fabric and Table 5, by decorative style.

Table 4: Gibb 2 (AiHg-2) Ceramic Assemblage by Fabric

Artifact	Frequency	%
ironstone	24	92.31
red earthenware	1	3.85
RWE	1	3.85
Total	26	100.00

Table 5: Gibb 2 (AiHg-2) Ceramic Assemblage by Decorative Style

Artifact	Frequency	%
ironstone, undecorated	19	73.08
ironstone, edged	2	7.69
ironstone, transfer printed	2	7.69
ironstone, sponged	1	3.85
red earthenware, undecorated	1	3.85
RWE, undecorated	1	3.85
Total	26	100.00

Ceramic Fabrics

Ironstone

Somewhat concurrent with the development of pearlware and whiteware was that of another refined white tableware commonly referred to as ironstone. Ironstone was designed by the Turner family in the late 1700s (Tharp 2017). Like its contemporaries, it featured a white surface, but with a bluish tint. Furthermore, ironstone vessels were typically thicker than earlier refined white earthenware varieties and featured a dense, heavy paste.

The impetus behind the development of Ironstone was a desire among Staffordshire potters to find a cheap alternative to imported porcelain. By 1813 James Mason had reworked and patented "ironstone china." The patent lasted only fourteen years; by then various Staffordshire potteries were producing a similar product. Nevertheless, the Mason's name had become associated with all of the various stone china ceramics that were in production. Ironstone began to be imported from England to Canada during the 1840s and came to dominate the ceramic trade during the latter half of the century. The predominance of undecorated ironstone in the Stage 2 assemblage is suggestive of a late 19th century occupation (The Potteries 2003).

In terms of appearance, ironstone vessels were commonly left plain with infrequent applied surface decoration, although moulded designs were common. Among the 24 sherds of ironstone documented during the Stage 2 assessment of Gibb 2 (AiHg-2), 19 were undecorated. The remaining five were decorated using a variety of surface treatments, discussed below.

Red Earthenware

A single sherd of red earthenware was recovered during the Stage 2 assessment. Red earthenware is a variety of utilitarian ware that is fired at a lower temperature than more refined white earthenwares and is made from a coarser, more porous paste. As a result, earthenware vessels were less expensive than other tablewares. Earthenware vessels cannot be used to date an archaeological assemblage since they were in use throughout the entirety of the 19th century. Their frequency on sites began to decline slowly from the 1850s onwards with the importation of stoneware from the United States and then dramatically after 1890 when they were replaced by glass jars (Miller 1980b:9).

RWE

A single, undecorated sherd of RWE was represented within the Stage 2 assemblage from Gibb 2 (AiHg-2). In the 1820s, the blue-tinted pearlware glaze gave way to a whiter variety, something some archaeologists have taken to calling whiteware; like pearlware, however, this term was not used by manufacturers. Miller (1980a:18) suggests that the white appearance of RWE was caused by reducing the amount of cobalt added to the glaze and adding it instead to the paste. It was manufactured by many different recipes and can be difficult to distinguish from other ceramics in the period, including sherds of pearlware, especially when examining small sherds. As Miller suggests;

if an assemblage of ceramics from the first half of the 19th Century is placed before six archaeologists and they are asked for counts of creamware, pearlware, whiteware, and stone china wares, the results will probably be six different enumerations (1980a:2).

The single RWE sherd recovered from Gibb 2 (AiHg-2) was undecorated.

Decorative Techniques

Five of the ironstone sherds within the Stage 2 assemblage featured surface decoration; two were edged, two were transfer printed, and the other was sponged.

Edging

Edgewares are ceramics where decoration is concentrated on the rim of the vessel, and most commonly occur as plates and other flatware. The earliest edgewares bore asymmetrical, rococo shell-edging and date from roughly 1775. Over time, the style of the edge design changed, ranging from symmetrical scalloping (scalloped edgeware) from around 1800; to straight-edged with feathering (feathered edgeware) by 1840; and non-embossed, straight edges (unscalloppeed edgeware) by 1860. Dates vary for somewhat for the popularity of the dominant colours, blue and green. Typically, blue scalloped edgeware dates from 1820 to 1840 and blue unscalloppeed edgeware, from 1860 (Hunter and Miller 2009). The two edged ironstone sherds within the Stage 2 assemblage were both unscalloppeed with a blue design, suggestive of a late 19th century occupation.

Transfer Printing

The technique of transferring a pattern from an engraved metal plate to the surface of a ceramic vessel is thought to have developed in the middle of the 18th century (Jervis 1911); it became more widely used among Staffordshire potteries in the 1790s (Shaw 1829). In Southern Ontario, transfer printing was popular through the first half of the 19th century before simpler techniques or no decoration whatsoever became popular. It underwent a revival after 1870 until the end of the century (Majewski and O'Brien 1987:145, 147). Blue was the dominant colour for transfer printed designs prior to 1830, although blue designs were popular throughout the 19th century on most wares. Brown and black transfer printed vessels were popular between 1830 and 1870 (Adams 1994:103). Two of the ironstone sherds within the Stage 2 ceramic assemblage demonstrated evidence of transfer printing, featuring designs in blue and brown respectively.

Sponging

Sponging was an inexpensive way of decorating ceramics by using a sponge to transfer ink to the vessel giving it a mottled effect. All over sponging became popular in the 1840s (Adams 1994). A lack of sponged ware on a site often indicates the occupants could afford more expensive decorated ceramics. A single piece of sponged ironstone featuring a design in red was represented within the Stage 2 assemblage from Gibb 2 (AiHg-2).

Ceramic Form and Function

All ceramic sherds were examined in order to describe the function of the item from which the ceramic sherd originated. However, for those sherds that were too fragmentary for a functional assignment, an attempt was made to at least provide a formal description, such as to which portion of an item the sherd belonged. For example, what used to be a porcelain teacup but now found in an archaeological context could be classified archaeologically in the artifact catalogue in a descending order of specificity depending on preservation and artifact size: a teacup (function), a cup (function), a hollowware (form), or a rim fragment (form). Flatware was differentiated based on the absence of curvature in the ceramic cross-section of each sherd. The classification system used here is based upon Beaudoin (2013:78-82). If Beaudoin's classifications could not be applied, then the broader definitions of Voss (2008:209) were used. Ultimately, if sherds were small enough that even a general functional or formal ware type could not be determined, then the sherd was simply classified as a rim fragment, a non-rim fragment, a base fragment, or indeterminate. Table 6 summarizes the ceramic assemblage by form. Given the fragmentary of the sherds, no function could be determined.

Table 6: Gibb 2 (AiHg-2) Ceramic Assemblage by Form

Ceramics	Flat	Hollow	Unknown
ironstone	4	1	14
ironstone, edged	2	0	0
ironstone, transfer printed	0	1	1
ironstone, sponged	0	1	0
earthenware, red	0	1	0
RWE	0	0	1
Total	6	4	16

3.2.2 Bottle Glass

In addition to the ceramic sherds described above, four bottle glass pieces were represented in the Stage 2 assemblage. Bottle glass fragments are generally not diagnostic and are often simply categorized according to colour. Two of the glass bottle pieces recovered from Gibb 2 (AiHg-2) were clear. Uncommon prior to the 1870s, clear or colourless glass came into widespread use after the development of automatic bottle manufacturing machines in the early 20th century (Lindsey 2014). The remaining two pieces were brown and olive green.

3.2.6 Artifact Catalogue

Table 7: Gibb 2 (AiHg-2) Stage 2 Artifact Catalogue

Cat #	Context	Artifact	No.	form	function	colour	Notes
154	Surface Find 1 ('SF 1')	ironstone	1	unknown	unknown		
155	SF2	ironstone	1	unknown	unknown		
156	SF3	ironstone	1				
157	SF4	ironstone	1	flat	unknown		
158	SF5	RWE	1	unknown	unknown		
159	SF6	ironstone	1	flat	unknown		
160	SF7	ironstone, edged	1	flat	unknown	blue	unscalloped edges
161	SF8	ironstone	1	unknown	unknown		

Cat #	Context	Artifact	No.	form	function	colour	Notes
162	SF 9	ironstone	1	hollow	unknown		
163	SF 10	ironstone, transfer printed	1	unknown	unknown	blue	
164	SF 11	glass, bottle	1			clear	
165	SF 12	ironstone, sponged	1	hollow	unknown	red	
166	SF 13	ironstone, edged	1	flat	unknown	blue	unscalloped edges
167	SF 14	ironstone	1	unknown	unknown		
168	SF 15	red earthenware	1	hollow	unknown		glazed
169	SF 15	glass, bottle	1			olive-green	
170	SF 16	glass, bottle	1			clear	surface burning
171	SF 16	ironstone	1	flat	unknown		
172	SF 16	ironstone	1	unknown	unknown		
173	SF 17	ironstone, transfer printed	1	hollow	unknown	brown	
174	SF 17	glass, bottle	1			brown	surface burning
175	SF 17	ironstone	1	flat	unknown	plate	
176	SF 17	ironstone	6	unknown	unknown		
177	SF 18	ironstone	2	unknown	unknown		

3.3 Findspot 2

Findspot 2 was one of three pre-contact Aboriginal finds, observed approximately 140m to the southwest of Gibb 2 (AiHg-2) along the western edge of the Study Area. The Stage 2 assessment of Findspot 2 resulted in the documentation of a single bifacially worked tool manufactured from Onondaga chert.

Bifaces are the most common form of pre-contact Aboriginal lithic tool and could be made into a variety of tools with different functions. Due to their long span of production, bifacially worked tools cannot be used to determine the cultural affiliation or period of the occupation of a site. The specimen recovered from Findspot 2 resembles the tip of a broken projectile point and measures 13mm long by 6mm wide by 2mm thick.

3.3.1 Findspot 2 Artifact Catalogue

Table 8: Findspot 2 Artifact Catalogue

Cat #	Artifact	Freq.	Chert Type	Comments
1	biface	1	Onondaga	possible projectile point tip; L=13mm, W=6mm, Th=2mm

3.4 Findspot 3

The Stage 2 assessment of Findspot 3 resulted in the documentation of a single piece of Onondaga chert chipping detritus, located approximately 47m to the northwest of Findspot 2 and 99m to the southwest of Gibb 2 (AiHg-2). Morphological analysis identified the specimen as a secondary flake. Given the isolated nature of this artifact, however, it is difficult to draw any useful conclusions regarding site function.

3.4.1 Findspot 3 Artifact Catalogue

Table 9: Findspot 3 Artifact Catalogue

Cat #	Artifact	Freq.	Morphology	Chert Type
1	chipping detritus	1	secondary flake	Onondaga

3.5 Findspot 4

The Stage 2 assessment of Findspot 4 resulted in the documentation of a single piece of Kettle Point chipping detritus, located approximately 24m to the northwest of Location 2, 23m to the southeast of Location 3 and 120m to the southwest of Gibb 2 (AiHg-2). Morphological analysis identified the specimen as a secondary flake. Given the isolated nature of this artifact, however, it is difficult to draw any useful conclusions regarding site function.

3.5.1 Findspot 4 Artifact Catalogue

Table 10: P4 Artifact Catalogue

Cat #	Artifact	Freq.	Morphology	Chert Type
1	chipping detritus	1	secondary flake	Kettle Point

3.6 Findspot 5 (AiHg-4)

The Stage 2 assessment of Findspot 5 (AiHg-4) resulted in the documentation of an isolated pre-contact Aboriginal projectile point manufactured from Haldimand chert, observed in the southwest corner of the Study Area, approximately 410m to the southwest of Findspot 2. The projectile point appears to have been heavily reworked as knife blade, but is reminiscent of the point types associated with the Late Archaic Narrow Point tradition (c. 3,200-2,200 BC), and in particular the Lamoka Side-Notched variety. In its current state, the specimen measures 57mm long, 22mm wide at the base, 15mm wide at the neck, and 7mm thick; the hafting element measures 12mm.

3.6.1 Findspot 5 (AiHg-4) Artifact Catalogue

Table 11: Findspot 5 (AiHg-4) Artifact Catalogue

Cat #	Artifact	Freq.	Chert Type	Notes
1	projectile point	1	Haldimand	possible reworked Late Archaic Lomoka Side-Notched point; L=57mm, W=24mm, Th=7mm, Hafting=12mm, Basal Width=22mm, Neck Width=15mm

4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 1-2 archaeological assessment on a large agricultural property located at 3516 Perth Road 119 (Highway 7), Stratford, in advance of the proposed Gibb Road Business Park development.

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. As such, a Stage 2 archaeological assessment was recommended for the agricultural land, the small wooded area, and the manicured lawns observed throughout the property. The remainder of the Study Area, including all standing structures and gravel surfaces, were determined to be previously disturbed, and were photo documented only.

The Stage 2 assessment, involving a pedestrian survey of the agricultural land and test pit survey of the wooded areas and manicured lawns, was conducted between April 9 and 13, 2019. This investigation resulted in the identification and documentation of a single Euro-Canadian site, registered as Gibb 2 (AiHg-2), and four pre-contact Aboriginal findspots, Findspots 2 to 4 and Findspot 5 (AiHg-4).

4.1 Gibb 2 (AiHg-2)

The Stage 2 assessment of Gibb 2 (AiHg-2) resulted in the documentation of 30 Euro-Canadian artifacts scattered across an area of approximately 20m by 27m along the western edge of the Study Area. The Stage 2 assemblage was dominated by ceramic sherds (86.7%; n=26), most of which (n=24) were pieces of undecorated ironstone vessels. The five decorated ironstone pieces within the assemblage featured styles common from the 1860 and 1970s onwards. The remainder of the assemblage consisted of four bottle glass pieces, two of which appear to be clear machine-made examples. Based on the results of the Stage 2 investigation, Gibb 2 (AiHg-2) has been interpreted as a small late 19th century domestic scatter.

According to the background research presented above, Gibb 2 (AiHg-2) was located on the portion of Lot 3, Concession 5 adjacent to the Grand Trunk Railway; Thos. Waldie is listed as the owner of the lot on the 1879 *Historical Atlas* map of Downie Township, although he likely lived on Lot 1 to the east. It is possible that these artifacts represent a late 19th century domestic refuse deposit at the rear of the Waldie property.

4.2 Findspots 2-4 and Findspot 5 (AiHg-4)

Four pre-contact Aboriginal findspots were documented during the Stage 2 assessment of the Study Area. Three of these, Findspots 2, 3 and 4, formed a small cluster approximately 100m to the southwest of Gibb 2 (AiHg-2). Two of these produced pieces of chipping detritus (Findspots 3 and 4), including single examples of Onondaga and Kettle point chert; the other yielded a possible projectile point tip manufactured from Onondaga chert (Findspot 2). Findspot 5 (AiHg-4) was a possible Late Archaic Lamoka Side-Notched projectile point manufactured from Haldimand chert, observed in the southwest corner of the Study Area. This point was heavily reworked as a knife blade making precise identification impossible.

Despite an intensified pedestrian survey of all agricultural lands within 20m of the each findspot, no other archaeological materials were identified. Given the isolated nature of the artifacts and a complete absence of lithic material anywhere else in the Study Area, it is difficult to draw any conclusions regarding the site function for any of the four findspots.

4.3 Preliminary Indication of Sites Possibly Requiring Stage 4 Archaeological Mitigation

This preliminary indication of whether Gibb 2 (AiHg-2) could be eventually recommended for Stage 4 archaeological mitigation is required under the *Standards and Guidelines* Section 7.8.3 Standard 2c (Government of Ontario 2011). No firm recommendation for, or against, Stage 4 archaeological mitigation will be made until the forthcoming Stage 3 archaeological assessment has been conducted. Given that Gibb 2 (AiHg-2) comprised a Euro-Canadian scatter dating to the

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late 19th century, it not yet clear whether a Stage 4 archaeological mitigation will be recommended for this site.

5.0 Recommendations

5.1 Gibb 2 (AiHg-2)

Based on the results of the Stage 2 investigation, Gibb 2 (AiHg-2) has been interpreted as a small late 19th century domestic scatter. Given the presence of at least 20 artifacts that date the period of use to before 1900, **Gibb 2 (AiHg-2) meets the criteria for a Stage 3 Site Specific Assessment as per Section 2.2, Standard 1c of the Standards and Guidelines (Government of Ontario 2011) and retains cultural heritage value or interest ('CHVI').**

The Stage 3 assessment of Gibb 2 (AiHg-2) will be conducted according to Section 3.2.2 of the *Standards and Guidelines* (Government of Ontario 2011). Typically, a Stage 3 assessment begins with an intensive controlled surface pickup ('CSP') across the Stage 2 limits of site, conducted as per Section 3.2.1 of the *Standards and Guidelines* (Government of Ontario 2011) in order to gather information that will assist in documenting the characteristics and extent of the archaeological site. During the Stage 2 pedestrian survey, however, all of the surface artifacts were digitally mapped individually and collected for laboratory analysis. Thus, the conditions for a Stage 3 CSP at Gibb 2 (AiHg-2) were met during the Stage 2 assessment.

Given that it is not yet evident that the level of CHVI at Gibb 2 (AiHg-2) will result in a recommendation to proceed to Stage 4 (see Section 4.3 above), the Stage 3 assessment will involve the hand excavation of 1m square test units every 5m in systematic levels across the Stage 2 limits of the site, and into the first 5cm of subsoil as per Table 3.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011). Additional 1m test units, amounting to 20% of the grid total, will be placed in areas of interest within the site extent as per Table 3.1, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011). All excavated soil will be screened through six-millimetre mesh; all recovered artifacts will be recorded by their corresponding grid unit designation and collected for laboratory analysis. If a subsurface cultural feature is encountered, the plan of the exposed feature will be recorded and geotextile fabric will be placed over the unit before backfilling the unit.

5.2 Findspots 2 to 4 and Findspot 5 (AiHg-4)

Given the isolated nature of the artifacts, **Findspot 2, Findspot 3, Findspot 4 and Findspot 5 (AiHg-4) do not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the Standards and Guidelines (Government of Ontario 2011).** The CHVI of Findspots 2 to 4 and Findspot 5 (AiHg-4) is judged to be sufficiently documented.

6.0 Advice on Compliance with Legislation

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c O.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 of Tourism, Culture and Sport, 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.

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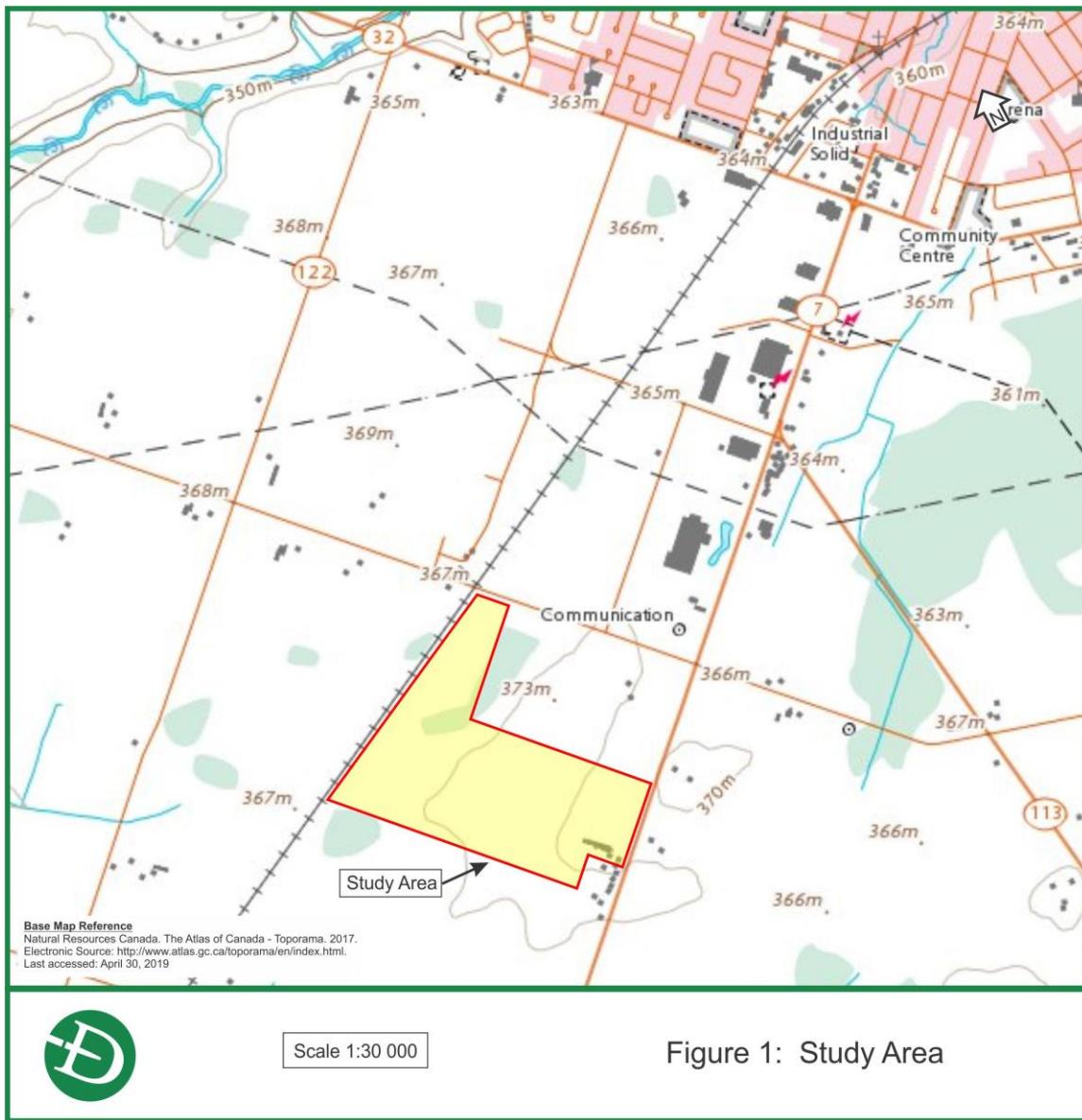
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8.0 Maps



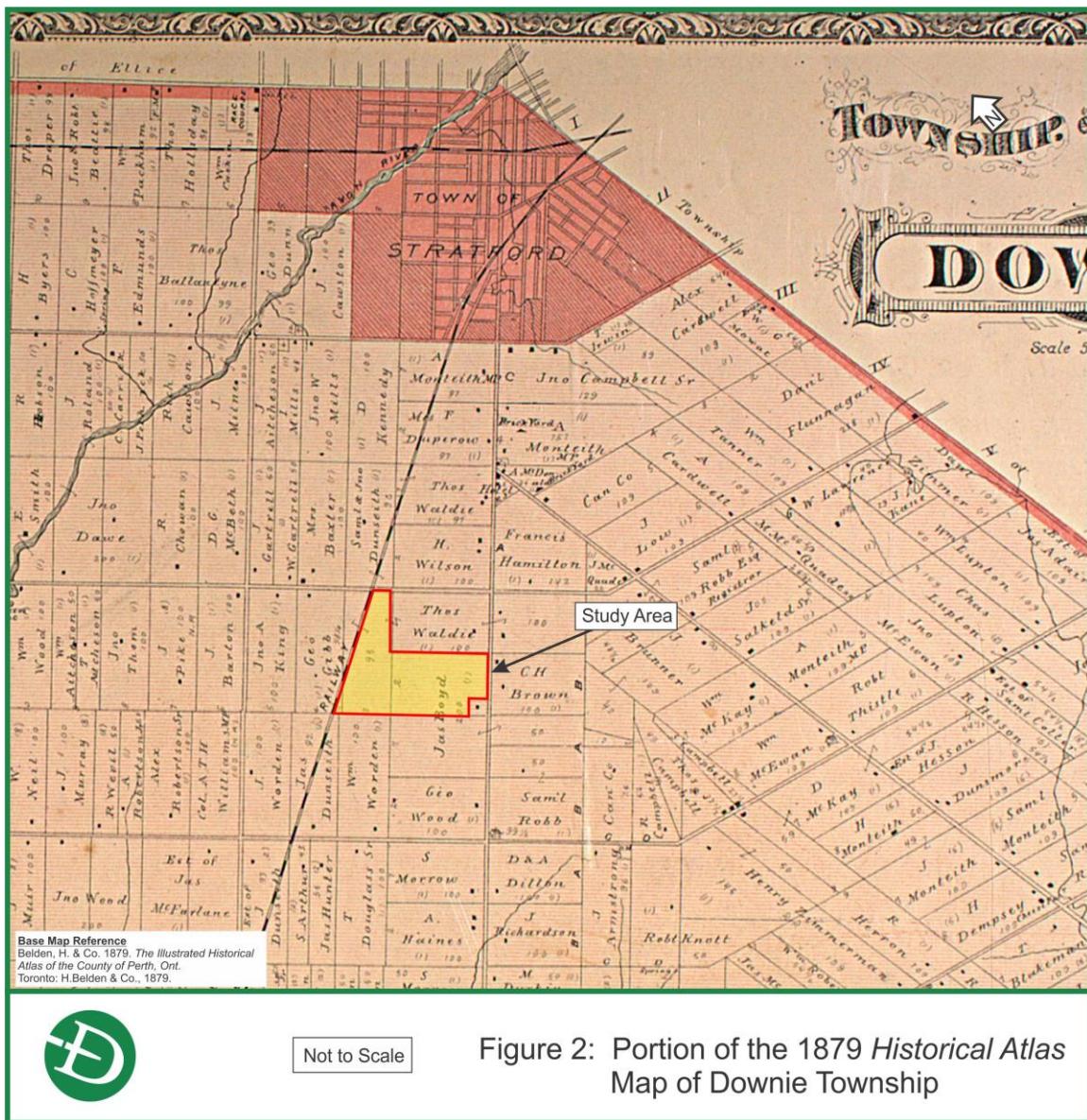






Figure 5: Development Map

9.0 Images

9.1 Photos

9.1 Field Photos

Photo 1: Pedestrian Survey at 5m Intervals, facing northeast



Photo 2: Pedestrian Survey at 5m Intervals, facing northwest



Photo 3: Pedestrian Survey at 5m Intervals, facing northeast



Photo 4: Pedestrian Survey at 5m Intervals, facing northwest



Photo 5: Pedestrian Survey at 5m Intervals, facing southwest



Photo 6: Pedestrian Survey at 5m Intervals, facing southeast



Photo 7: Pedestrian Survey at 5m Intervals, facing northeast



Photo 8: Test Pit Survey at 5m Intervals, facing northeast



Photo 9: Test Pit Survey at 5m Intervals, facing southwest



Photo 10: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed Gravel Laneway and Barns Not Assessed, facing northwest



Photo 11: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed House and Barns Not Assessed, facing southwest



Photo 12: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed Gravel Laneway and Barns Not Assessed, facing northwest



Photo 13: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed House and Gravel Laneway Not Assessed, facing east



Photo 14: Disturbed Gravel Laneway and Barns Not Assessed, facing northwest



Photo 15: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed Gazebo, Barn, and Gravel Laneway Not Assessed, facing southwest



Photo 16: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed Gravel Laneway, House and Barns Not Assessed, facing southwest



Photo 17: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed Gazebo, Barn, and Gravel Laneway Not Assessed, facing west



Photo 18: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed Gazebo and Barn Not Assessed, facing southeast



Photo 19: Manicured Lawn Test Pit Survey at 5m Intervals; Disturbed Barn, Silo and Gravel Laneway Not Assessed, facing northwest



Photo 20: Typical Test Pit



9.2 Artifact Photos

Plate 1: Blue Transfer Printed Ironstone



Plate 2: Blue Edged Ironstone



Plate 3: Findspot 2, Projectile Point Tip, Onondaga Chert



Plate 4: Findspot 3, Secondary Flake, Onondaga Chert



**Plate 5: Findspot 4, Secondary Flake,
Kettle Point Chert**



**Plate 6: Findspot 5, Possible Lamoka Side
Notched Projectile Point, Reworked as a
Knife Blade, Haldimand Chert**

