DRAFT REPORT

Stage 1 and 2 Archaeological Assessment

475 Terry Fox Drive, Part of Lots 4 and 5, Concession 1, Geographic Township of March, Carleton County, now the City of Ottawa, Ontario

Archaeological Licensee: Aaron Mior (P1077)

PIF Number: P1077-0078-2025

Submitted to:

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Report Abbreviations

ASDB	Archaeological Sites Database maintained by the MCM
BP	Years Before Present
CHVI	Cultural Heritage Value or Interest
ha	Hectare
km	Kilometre
m	Metre
MCM	Ministry of Citizenship and Multiculturalism
TNAS	True North Archaeological Services Inc.
PIF	Project Information Form issued by the MCM

Executive Summary

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

True North Archaeological Services Inc. (TNAS) was retained by Ironclad Developments Inc. to undertake Stage 1 and 2 archaeological assessment for the 1.3 ha property located at 475 Terry Fox Drive, situated within part of Lots 4 and 5, Concession 1, Geographic Township of March, Carleton County, now the City of Ottawa, Ontario (Maps 1 and 2). The study area is the location of a proposed residential development (Map 3) and this assessment was triggered by the requirements of the Planning Act, 1990, in accordance with the Ontario Heritage Act, 1990.

The objectives of the Stage 1 and 2 archaeological assessments were to complete relevant background research on the study area, assess the archaeological potential of the study area, document archaeological resources observed within the study area and to recommend appropriate mitigation strategies for any archaeological resources identified.

Although no archaeological sites have been registered within 300 m of the study area, there are 10 archaeological sites registered within 1 km of the subject property.

Based on the application of the City of Ottawa archaeological potential model, and the attributes for determining archaeological potential from the MCM *Standards and Guidelines for Consultant Archaeologists* (2011), the natural landscape within the entire Stage 1 study area is considered to possess archaeological potential and recommended to be assessed during a Stage 2 archaeological assessment.

The Stage 2 archaeological assessment was completed on 15 April 2025 and comprised a test pit survey and a visual inspection of the entire 1.3 ha study area. No archaeological resources were found during the Stage 2 archaeological assessment.

This Stage 1 and 2 archaeological assessment has provided the basis for the following recommendations:

1) No further archaeological assessment is recommended for the study area as shown on Map 18.

2) Should archaeological resources be encountered on the property in the future, all associated activities must cease, and a licensed archaeologist must be contacted to examine the cultural materials.

This report is submitted to the Ministry 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 the licensed consultant archaeologist has met the terms and conditions of their archaeological license, and that the archaeological field work and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario.

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1.0 Project Context

1.1 Development Context

True North Archaeological Services Inc. (TNAS) was retained by Ironclad Developments Inc. to undertake a Stage 1 and 2 archaeological assessment for the 1.3 ha property located at 475 Terry Fox Drive, situated within part of Lots 4 and 5, Concession 1, Geographic Township of March, Carleton County, now the City of Ottawa, Ontario (Maps 1 and 2). The study area is the location of a proposed residential development (Map 3) and this assessment was triggered by the requirements of the Planning Act, 1990, in accordance with the Ontario Heritage Act, 1990.

Permission to access the study area to complete the Stage 1 and 2 archaeological assessment was provided by Santan Singh, Senior Urban Planner with Ironclad Developments Inc. No restrictions or limitations were placed on accessing the property to complete the archaeological assessment.

1.2 Objectives

This Stage 1 and 2 archaeological assessment was completed in order to assess the archaeological potential of the study area (Stage 1), as well as to complete an archaeological field program (Stage 2) to identify archaeological resources within the study area. The objectives of the Stage 1 and 2 archaeological assessments are based on principles outlined in the *Ontario Heritage Act* (consolidated 2007) and the Ontario Ministry of Citizenship and Multiculturalism's (MCM) *Standards and Guidelines for Consulting Archaeologists* (2011). More specifically, this Stage 1 and 2 archaeological assessment was completed with the following objectives:

- To provide information about the study area's geography, environment, cultural history, previous archaeological fieldwork and current land condition;
- To evaluate in detail the study area's archaeological potential and assess whether the property contains archaeological resources requiring additional archaeological assessment;
- To document observed archaeological resources on the property;
- Determine whether further work within the study area is required based on the findings of the current investigation; and,
- If applicable, recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

2.0 Historical Context

2.1 Regional Indigenous Context

The following historical narrative is intended to provide a general overview of the interpreted land use during the "Pre-Contact and Post-Contact Periods" within the vicinity of the current study area. This historical overview generally reflects inferences and interpretations based on archaeological and historical interpretations primarily made by non-Indigenous representatives.

This section is intended to provide a general historical overview that can be referenced when determining the potential for archaeological resources within the current project study area. The text and comments below, including the cited references, may reflect archaeological literature within general publications, but may not represent the opinions of those Indigenous communities whose history it is purported to reflect.

Paleo Period (13,000 – 9,000 BP)

The Paleo Period represents a temporal classification developed by archaeologists and does not reflect any inferences of initial human habitation. This period extends from around 13,000 years before the present (BP), when glacial ice began to recede within the modern-day area of the Ottawa Valley.

Following the period of deglaciation, the Ottawa Valley was inundated by the Champlain Sea, which is interpreted to have extended from Rideau Lakes in the south, along the Ottawa Valley and St. Lawrence areas and terminating around Petawawa in the west (Watson 1999a). The exact western boundary is undetermined as current elevation levels reflect the isostatic adjustment of the land following the melting of the glaciers and cannot be used to determine the exact location of the Champlain Sea at the time of its existence (Chapman and Putnam 1984). The eastern portion of the sea extended into the Atlantic Ocean.

During the Early and Middle Paleo Periods (13,000 – 9,500 BP) the study area would have remained inundated by the Champlain Sea, although as the Champlain Sea receded during the Late Paleo Period (9,500 – 9,000 BP) it is likely that people migrated along the changing waterfront landscape where vegetation was being re-established (Watson 1999a). The ridges and old shorelines of the Champlain Sea and early Kichi Sibi (Ottawa River) channels reflect areas most likely to contain evidence of Paleo Period land use in the region. Archaeological and geological investigations in the Ottawa Valley have indicated these early sites may be identified within the 550 ft (167.6 m) or higher contour topography, although additional research may be required to confidently assess this correlation (Kennedy 1976).

The presence of Indigenous peoples during the recession of the Champlain Sea is reflected in Algonquin oral history which tells of the hero Wiskedjak hunting giant beaver by draining Lake Superior and the beaver creating rapids as it fled east (Morrison 2005). As giant beavers went extinct along with many other North American megafauna between 12,000 to 10,000 years ago and the draining of Lake Superior reflects the drainage of glacial lakes following the end of the last glaciation, these stories may reflect cultural memories of life during the Paleo Period.

By the Late Paleo Period (9,500 - 9,000 BP), enclosed coniferous forests with some minor deciduous elements became established in eastern Ontario, with contemporary populations traversing large territories in response to seasonal resource fluctuations. The transition to the Late Paleo Period also included projectile points comprised of smaller unfluted projectiles along with lanceolate parallel flaked stemmed and non-stemmed Plano points, while hunting strategies may have transitioned from communal groups to more individualized pursuits (Ellis and Deller 1997).

The identification of Paleo Period sites in the Ottawa Valley region has been hindered by the erosion of accessible locations during the environmental changes associated with the transition from the Late Paleo Period to the succeeding Archaic Period. The potential use of watercraft by Paleo Period inhabitants (Jodry 2005; Engelbrecht and Seyfert 1995) and evidence for the abundance of marine resources (Robinson 2012; Loring 1980) raises the possibility of occupation sites situated on accessible landforms such as those exposed as isolated islands above the 167 m elevation contours. As the Ottawa River delta prograded eastward during the regression of the Champlain Sea (Fulton et al. 1987), these isolated exposed landscapes would have been impacted by periods of overflow from glacial Lake Agassiz. The inundation of flood waters from the glacial lake may have caused significant erosion (Fulton and Richard 1987), with another possibility being that the sediment transport facilitated by the moving water may have buried cultural materials within these potential occupation areas.

Evidence indicating land use within the Ottawa Valley during the Paleo Period includes the recovery of two bi-facially fluted projectile points found near the Rideau Lakes that would have been situated near the contemporary Champlain Sea shoreline (Watson 1999b) and an isolated projectile point near Quyon, Quebec (Laliberté 1991), with additional interpretations of Paleo Period material identified during archaeological investigations near Greenbank Road (Swayze 2003), Albion Road and Rideau Road (Swayze 2004). There are no registered Paleo Period archaeological sites located within March Township (MCM 2024), with the nearest contemporary site interpreted to date to the Paleo Period documented as the Holy Spirit site (Borden Number BhFx-33), located over 5 km to the south of the study area.

Archaic Period (9,000 – 2,950 BP)

During the Early Archaic Period (9,000 – 8,000 BP), a gradual increase in atmospheric humidity in conjunction with warmer summers influenced the environmental landscape within the general study area vicinity. Fossil pollen and spore identification from sedimentation cores lifted from Lovesick Lake provide evidence of climate change, with jack pine forests becoming dominant during the beginning of the Early Archaic Period (Teichroeb 2007). Land use within the Ottawa Valley increased during this early environmental transition, with evidence of an Early Archaic dovetail projectile point recovered in the Ottawa area (Pilon and Fox 2015) confirming contemporary land use within the regional landscape.

Concurrent with the environmental evolution were notable diagnostic technological changes including the appearance of side and corner-notched projectile points used for hunting (Ellis 2013). Other significant innovations included the introduction of ground stone tools such as celts and axes, which may reflect an emerging woodworking industry.

Populations in Ontario during this period primarily utilized maritime landscapes during the spring, summer and fall seasons with large base camps on islands, near river mouths, and on the shores of embayment's where a variety of flora, fish, and wild fowl resources could be obtained. Smaller hunting and specialized campsites were also established in the uplands and along smaller watercourses. The waterways were the preferred method of travel, and many burials are located along these waterways (Taylor 2015), as well as the traditionally visited islands. Access to islands and mainland shorelines would have been facilitated by a variety of contemporary watercraft such as bark canoes, skin boats and dugout canoes (Monk 1999).

Indigenous community members utilized watercraft to travel along navigable waterways such as the Ottawa, Gatineau and Rideau River systems to meet, trade and exchange information. These waterways represented the historical highways facilitating the movement of both people and materials through the general study area vicinity. Archaeological discoveries made in the area around the Ottawa River system

and associated tributaries illustrate the existence of an extensive, continent-scale network of communication and trade with the discovery of a variety of raw materials used for stone tool production including Ramah chert from the tip of Labrador, Mistassini quartzite from the centre of Québec, Hudson's Bay Lowland chert from the region bordering Hudson Bay, abundant Onondaga chert obtained from the Onondaga Escarpment region south and west of Lake Ontario, as well as distinctive Mercer and Burlington Formation cherts from modern-day Ohio and Illinois (Pilon and Boswell 2015).

The Ottawa River and tributary waterways were also an important route for the movement of copper, either through direct trade between individual groups, or through expeditions to Lake Superior to access local copper deposits (Chapdelaine et al. 2001). Copper artifacts similar to those documented on Allumette Island in the Ottawa River have been discovered in Wisconsin, Michigan, New York State and Manitoba (Kennedy 1970). This commodity, as well as other tradable goods, were presumably transported by canoes and other vessels along regional waterways.

The Ottawa Valley was also one of the primary corridors that facilitated the transmission of technological information and techniques (Kennedy 1970). Artifacts representative of the expanding trade network included "birdstones" which were small, bird-like effigies usually manufactured from green banded slate, as well as marine shell artifacts from the Mid-Atlantic coast that are frequently encountered in burial contexts (Ellis et al. 2009; Ellis et al. 1990).

Sites with Archaic Period components that demonstrate this expanding trade network include Morrison's Island and Allumette Island in the Outaouais region of the Ottawa River (Clermont and Chapdelaine 1998; Chapdelaine et al. 2001; Clermont 1999), sites identified at Lac Leamy near the junction of the Gatineau and Ottawa Rivers, and also in the Rideau Lakes area (Watson 1982; Paterson 2020a). Additional significant sites with Archaic Period components along Ottawa Valley waterways that were likely influenced by these trade routes include Jessup Falls near the mouth of the South Nation River and at Spencerville near the source of the South Nation River (Daechsel 1980).

During the Middle Archaic Period (8,000 – 4,000 BP) the trend towards more diverse toolkits continued, as the presence of netsinkers and fish weirs reflect the importance of fishing within the contemporary subsistence strategy. It was also during this period that stone tools specifically designed for the preparation of wild plant foods were crafted and when 'bannerstones" were first manufactured, which are carefully crafted ground stone devices that served as a counterbalance for *atlatls* or spear-throwers (Ellis 2013).

The diverse trade relationships may have also influenced the transition from seasonal expeditions across large areas to more centralized occupation within smaller areas that provided the opportunity to facilitate interaction with those conducting trade, whether it was "down-the-line" or controlled by individuals interacting directly with different groups (Kennedy 1970). Another noticeable attribute during the Middle Archaic Period is the increased reliance on local, often poorer quality, chert resources for manufacturing projectile points (Ellis 2013). While groups traversed larger territories during the Paleo and Early Archaic Periods and were able to visit primary outcrops of high-quality chert at least once during their seasonal round, during the Middle Archaic Period groups traveled within comparatively smaller territories that did not always possess a source of high-quality raw materials. In these instances, lower quality resources that had been previously deposited by the glaciers in the local till and river gravels were utilized.

Trade connections across vast territories continued into the Late Archaic Period (4,000 – 2,950 BP), when the trend towards decreased territory size and a broadening subsistence strategy continued. Late

Archaic Period sites have been discovered in greater numbers compared to Early and Middle Archaic Period sites, suggesting the local population was rapidly expanding (Laliberté 1998c; Bursey et al. ND). It is during the Late Archaic Period that the first defined cemeteries are identified, as prior to this period individuals were typically interred close to the location where they died. During the Late Archaic Period, when an individual died while their group was away from the territorial cemetery, the remains would be kept until the group returned to the home cemetery where they could be interred (Kennedy 1966; Pilon and Young 2009). Consequently, it is not unusual to find disarticulated skeletons, or even skeletons lacking minor elements such as fingers, toes or ribs, in Late Archaic Period burial pits.

Burial grounds such as those at Morrison and Allumette Islands were also important junctions for trade and have been theorized to have provided strong symbolic claims over a local territory and the surrounding resources (Laliberté 1998c). These burial grounds are often located within areas of elevated topography containing well-drained sandy and gravel soils adjacent to major watercourses or on exposed islands.

A search of the MCM's archaeological site database indicates there are at least 7 sites interpreted to date to the Archaic Period registered within March Township (MCM 2025). These include the Akandoo site (BhFx-62), the BhFx-31 site, the BhFx-29 site, and Corelview site (BhFx-27) which are all located within 1 km of the study area.

Woodland Period (2,950 – 500 BP)

The Early Woodland Period (2,950 – 2,200 BP) is distinguished from the Late Archaic Period primarily by the introduction of ceramic technology. The first pots were thick walled and friable, suggesting they may have been primarily used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil (Spence et al. 1990). These early vessels were not easily portable, and their fragile nature suggests they may have required regular replacement. There have also been numerous Early Woodland Period sites identified where ceramics were absent from the recovered assemblage, suggesting ceramic vessels may not have been completely integrated within the daily lives of Early Woodland Period populations.

Besides the addition of ceramic technology, the cultural affinity of Early Woodland Period inhabitants shows a great deal of continuity with the preceding Late Archaic Period. For instance, birdstones continued to be manufactured, although the Early Woodland Period varieties have "pop-eyes" that protrude from the sides of their heads (Spence et al. 1990). Another example of general continuity from the terminal segment of the Archaic Period is represented by the thin, well-made projectile points, although the Early Woodland Period variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance (Spence et al. 1990).

The transition from the Early to Middle Woodland Period (*ca*. 2,400 to 1,100 BP) is primarily characterized by an overall increase in diverse decorative styles displayed on ceramic pots, with contemporary ceramic vessels often decorated with impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of vessels manufactured during the Middle Woodland Period can be diagnostically distinct.

In terms of subsistence strategies, the Middle Woodland Period (2,200 - 1,100 BP) reflects an evolving transition from patterns observed from archaeological excavations documenting Archaic and Early Woodland Period sites. While Middle Woodland Period populations still relied on hunting and gathering to meet their subsistence requirements, an increased consumption of fish became an important dietary

component. Some Middle Woodland Period sites have produced literally thousands of bones from spring spawning species including walleye and sucker (MCR 1981).

Along the Ottawa River, Middle Woodland Period sites have been identified within the National Capital Region at Marshall's and Sawdust Bays (Daechsel 1980; Daechsel 1981), Rockcliffe Park (Pilon 2008; Pilon and Boswell 2015) and a complex of sites at Lac Leamy (Laliberté 1994, 1995, 2000; Pilon 2006; Gates St-Pierre 2010; Paterson 2020a). The nearest Middle Woodland Period archaeological site to the study area is the Wescar Lane site (BhFx-72) located approximately 2.4 km west of the study area.

The transition from the Middle to Late Woodland Period is marked by the introduction of triangular projectile point styles and cord-wrapped stick decorated ceramics (Martin 2004; Crawford et al. 1997; Bursey 1995; Ferris and Spence 1995; Spence et al. 1990; Williamson 1990; Ritchie 1971), although these attributes may not always reflect diagnostic components of specific Nations as many interacted and shared cultural traits.

During the Late Woodland Period, the Ottawa Valley appears to have been a zone of interaction between Iroquoian speaking populations to the south who primarily relied on domesticated crops and Algonquian speaking groups to the north who continued a predominately hunter-gatherer lifestyle. The Huron peoples along the north shore of Lake Ontario had moved to the Lake Simcoe – Georgian Bay region, leaving the area of eastern Ontario, except for some small Algonquin groups, generally unoccupied by the time early French explorers arrived in the area around the beginning of the 17th century.

The increased population and semi-nomadic lifestyle prevalent within the Ottawa Valley during the Woodland Period are reflected in the distribution of sites documented along the Ottawa River and surrounding navigable waterways. During the winter, Algonquin families resided in hunting territories shared by male members of the family and bounded by rivers, lakes, or other natural features (Speck 1915; Pendergast 1999). Moose, deer, and beaver were hunted and trapped (Morrison 2005). During the summer, larger groups came together at summer camps such as those and Morrison Island and Lac Leamy along the Ottawa River (Pilon and Boswell 2015). The importance of the Ottawa River as a transportation route, as well as an area of resource and subsistence extraction, through this period is reflected in the number of known archaeological sites identified on both sides of the river.

Late Woodland Period sites have been recorded throughout the National Capital Region. A significant Woodland Period occupation has also been identified at Lac Leamy (Laliberté 1995; Pilon and Boswell 2015). Several sites have been documented along the north shore upriver of the study area including one near Aylmer (Sowter 1915), another just west of the Champlain Bridge registered as BiFw-39 (Laliberté 1998a; Laliberté 1998b), at Indian Point in the Pembroke area (Pilon 2005) and near the convergence of the Schyan and Ottawa Rivers (Kennedy 1964).

Although there is an absence of registered archaeological sites specifically dating to the Late Woodland Period within March Township (MCM 2025), there is evidence of Woodland Period occupation near the southern Ottawa River shoreline documented across from Aylmer at Raymond Point (Sowter 1915; Sowter 1901; Sowter 1900), near Shirley's Bay and Rocky Point (Jamieson 1989), Constance Bay (Watson 1972; Savage 1972), Marshall's and Sawdust Bays (Daechsel 1981) and on Morrison Island (Pilon and Boswell 2015; Pilon and Young 2009; Kennedy 1966). There are also two registered Late Woodland Period sites located along the Rideau River within the City of Ottawa (MCM 2025).

Early contact with European settlers at the end of the Late Woodland Period resulted in changes to the traditional lifestyles of many Indigenous populations, influencing settlement size, population distribution,

and material culture. The introduction of European-borne diseases also significantly increased mortality rates, resulting in a drastic decrease in population size (Warrick 2000).

2.2 European Contact and Post-Contact Period

The Algonquin Nation had long been established along the Ottawa River and its tributary valleys when the French arrived in the area. Samuel de Champlain met with several Algonquin representatives in 1603 shortly after he established the first French settlement on the St. Lawrence River at Tadoussac (AOO 2013), with Étienne Brûlé generally acknowledged as the first European to pass through what is now the Ottawa Valley area when he portaged at the Rideau Falls in 1610 and with the aid of Algonquin guides proceeded to explore the interior of Canada (AOO 2013).

Another French expedition led by Nicholas de Vignau traveled along the Ottawa River through the Ottawa Valley area in 1611 (Pendergast 1999), followed by Samuel de Champlain in 1613 who led the French voyageurs from Montreal to Morrison Island along the Ottawa River (Croft 2006), which was commonly known as the Grand River (*Kichi Sibi* in Algonquin) or the River of the Algoumequin (Pilon 2005). Champlain again encountered Algonquin community members in the Ottawa Valley area in 1615, with many living in regional groups around the Madawaska River, Muskrat Lake, along the Ottawa River above and below Morrison Island, and also along the Mattawa River to Lake Nipissing (AOO 2013).

The French established a relationship with the Algonquin communities around the Ottawa Valley that provided an opportunity to monopolize the early fur trade as the two groups developed close relations throughout the 17th century (Trigger and Day 1994). The colonial economic wealth stimulated by the French fur trade in the early 17th century promoted the rapid expansion northward, with the Ottawa River providing the opportunity to transport goods to the western trading posts on the lakes by canoe, which could not be accomplished by the larger sailing vessels operating on Lake Ontario (Adney and Chapelle 2014).

Competition for furs increased existing tensions between the Algonquin communities and their Indigenous neighbours including the Haudenosaunee Nations, residing to the south around the St. Lawrence River and Lake Ontario areas. The 17th century saw a long period of conflict known as the Beaver Wars between the Algonquin and the Haudenosaunee communities that resulted in the significant disruption of trade. Mohawk raids against Algonquin villages in the Upper Ottawa and St. Lawrence Valleys resulted in the abandonment or destruction of many Algonquin villages (Trigger and Day 1994). Some Algonquin's found refuge in French settlements such as Trois-Rivieres, Quebec City, Sillery, and Montreal while others may have relocated to interior locations along the Ottawa River's tributaries, including the Rideau River (Holmes 1993). At the end of the 17th century, the Haudenosaunee were driven out of much of southern Ontario by the Mississauga though they continued to occupy areas within eastern Ontario on a seasonal basis.

In 1701, representatives from the Haudenosaunee and more than 20 Anishinaabeg Nations assembled in Montreal to participate in the Great Peace negotiations, sponsored by the French Governor Calliere (Johnston 2004; Johnston 2006). A peace treaty between the Anishinaabeg and the Kanien'kehá:ka (Mohawk) was agreed to once again share in the bounty of the territory as partners (One Dish, One Spoon), although this partnership was strained by the "Great Imbalance" represented by the fur trade with European capitalists (Monague 2022).

The resulting treaty document signed at Montreal was not the only record made of the Peace between the Anishinaabeg and the Haudenosaunee. At a council held at Lake Superior, the Haudenosaunee secured

peace by delivering a wampum belt to the Anishinaabeg. This belt was carried by successive generations of leaders who were charged with remembering the meaning of symbols worked upon the shell beads and each generation had a responsibility to renew the peace forged by their ancestors (Johnston 2006).

Between 1712-1716, Algonquin communities continued to utilize the Ottawa Valley and Gatineau River areas, with the primary Haudenosaunee activities occurring south of the St. Lawrence River (Holmes 1993).

Following the Seven Years' War in the mid-18th century, the defeat of the French, Algonquin, and their allies by the British and the Haudenosaunee resulted in the further loss of Algonquin hunting territories in southern Quebec and eastern Ontario as the British seized former French colonies. Shortly after the French abandonment around the Great Lakes, English merchant Alexander Henry ventured into the Great Lakes area where he communicated with Anishinaabeg leader Minavanana in September 1761. Henry was informed that the English would suffer retaliation for Anishinaabeg war losses unless the English King made peace with them, with many of the former French forts in the Great Lakes region within Anishinaabeg control. In response, King George III issued a Royal Proclamation on 7 October 1763 acknowledging that Indigenous Nations residing on all lands outside the boundaries of the settled colonies "*not having been ceded to or purchased by Us, are reserved to them, or any of them, as their Hunting Grounds*" (Reimer 2019, p. 38). The territory reserved for Indigenous Nations encompassed the entire Great Lakes region and peace was secured following discussions between the British and more than 1,500 Anishinaabeg leaders at Niagara Falls in July 1764 where the alliance was sealed by two magnificent wampum belts (Johnston 2006).

The extension of Quebec's boundaries in 1774 through the Quebec Act and the use of the Ottawa River as the boundary between Upper and Lower Canada following the 1791 Constitution Act separated the traditional Algonquin lands between two colonial government administrations (AOP 2012). This legislative act does not seem to have negatively influenced trade between the British and local Indigenous communities as the recovery of European trade goods (e.g., iron axes, copper kettle fragments and glass beads) from Indigenous sites throughout the Ottawa River drainage basin provides evidence of the extent of contact between the Indigenous communities and the European explorers traversing the Ottawa River during this period.

2.3 Land Treaties

Britain's colonial policy differed from the French, with the British much more interested in securing land surrenders from the Indigenous populations for settlement by Europeans rather than establishing communal relationships. The Royal Proclamation of 1763 issued by King George III enabled the Crown to monopolize the purchase of Indigenous lands west of Quebec and although the proclamation recognized Indigenous rights to their land and hunting grounds, it also included stipulations where these rights could be taken away (Surtees 1994).

Land cession agreements between Indigenous groups and the Crown increased following the War of 1812 as a new wave of settlers arrived in Upper Canada primarily from Britain. The British implemented annuity systems in the purchase of lands from Indigenous peoples where the interest payments of settlers on the land were intended to cover the cost of the annuity rather than pay a one-time lump sum.

The study area is situated within the land encompassed by the Rideau Purchase (Treaty 27 and 27¼), which extended from the western boundary of the earlier Crawford Purchases and south of the Ottawa River.

At a council held on 13 May 1819, British government agent John Ferguson met with representatives of the Mississaugas of the Bay of Quinte and Kingston regions, who claimed rights to the area of the Rideau land purchase. Although the Ottawa and Madawaska River valleys were generally known to be the hunting grounds of the Iroquois and Algonquin communities, they were not invited to the discussions and the Mississauga representatives indicated they controlled the Ottawa Valley, and that “the Nipissings and Algonquins do not cross the Ottawa River” (Surtees 1982).

The land included in the Rideau Purchase comprised almost 2.75 million acres, which the Mississaugas agreed to sell for an annuity of £642.10. It was stipulated that this sum would be distributed at the rate of 50s per person. This provisional agreement was approved by the British Treasury, but due to delays in making some of the annuity payments, a confirmatory land transfer did not follow until 26 April 1825. At that time, the per capita annuity was raised to £2.10, but stipulated that payment must be confined to 257 people, which represented the number claiming the land at the time of the original agreement (Surtees 1982).

The Algonquin communities within the Rideau Purchase area were not only excluded from the treaty discussions, but were also not included in the allocation of payment for the “transfer” of land (Surtees 1994). In 1839, the Crown denied the Algonquin and Nipissing communities the right to lease portions of their land, including islands in the Ottawa River, to settlers with whom they had previously been collecting rent payments (Holmes 1993). Furthermore, the British did little to prevent additional encroachments by settlers on Indigenous lands. By the 1850s, Indigenous groups had become cautious of these agreements and began to demand the retention of reserved land and preservation of hunting and fishing rights (Surtees 1994).

A reserve was purchased for use by the Algonquins in Golden Lake in 1873, now known as Pikwàkanagàn (AOO 2013; Holmes 1993). Additional reserves and settlements for the Algonquin community members were also established in Quebec during the mid-20th century, although these reserves only secured a small fragment of what once had been the original homeland of the Algonquins (AOO 2013).

The Algonquin never surrendered their territory by treaty, sale or conquest and petitions to remove settlers from their lands and to have their title recognized date back to 1772. The Algonquin of Pikwàkanagàn set in motion the ongoing land claims process in 1983 when they presented their comprehensive claim to the Government of Canada and, in 1985, to the Government of Ontario. It was not until 1991 and 1992 that the land claim was accepted by the provincial and federal governments, respectively. In 1994, the three parties signed a Framework for Negotiations Agreement, outlining shared objectives (Tomiak 2016).

An agreement-in-principal was finalized in December 2012 and has since been subject to community consultations. According to the agreement-in-principal, 117,500 acres of land administered by the Crown within the land claim area will be selected for transfer to the Algonquins of Ontario in fee simple title (Tomiak 2016; Tasker 2016). While this represents an important step in the negotiations, the talks are ongoing.

The Algonquins of Ontario today consists of ten communities: Antoine, Algonquins of Pikwakanagan First Nation, Bonnechere, Greater Golden Lake, Kijicho Manito Madaouskarini, Mattawa/North Bay, Ottawa, Shabot Obaadjiwan, Snimikobi, and Whitney and Area (AOO 2013).

2.4 Post-Contact Period – March Township History

March Township was officially surveyed in 1820, though Euro-Colonial immigrant settlers had already begun to arrive the previous year. At this time March Township was part of the District of Johnstown, becoming part of the District of Bathurst in 1822, and eventually integrating into Carleton County in the 1840s. March Township was primarily settled by retired officers of the Napoleonic wars who were offered free land grants as a reward for their loyal service, with the amount of land given to each serviceman proportional to their military rank. Under this system, colonels became entitled to a substantial plot of land, being as much as 1,600 acres, with privates typically receiving a half lot, encompassing 100 acres (Burns et al. 1972). Colonial settlers were also given a starter tool kit consisting of various implements and supplies needed to settle and work the land including axes, shovels and nails, as well as a blanket, kettle and panes of glass. Additionally, each soldier was offered a year's rations (Belden 1879) intended to provide them with the required necessities until they could become self-sufficient. Several distinguished English officers chose to settle in March Township and selected plots adjacent to the Ottawa River. Among them were Captains Landell, John B. Monk, Benjamin Street, Weatherby, Cox, Stephens, General Arthur Lloyd and Lieutenant Thomas Reid (Belden 1879; Walker and Walker 1975; Burns et al. 1972).

While English officers settled on the picturesque lands of the riverbank, the first four concessions at the west end of the township were primarily settled by Irish farmers, tradesmen and lower ranking veterans. As it turned out, some of these settlers ended up with the best arable land in the township, whereas the soil closer to the river was deceptively shallow (Burns et al. 1972). In terms of soil capacity, Belden (1879) observed that March was the poorest township in Carleton County.

Settlers continued to arrive through the early 1820s, capitalizing on the prospect of free land grants. The first census of March Township, taken in 1823, recorded 49 families with a population of over 200 inhabitants (Walker and Walker 1975). Even after the land grants were discontinued in 1824, settlers continued to arrive. By the mid-19th century, the population expanded to 1,125 inhabitants and included a number of commercial and industrial enterprises comprising blacksmiths, cobblers, carpenters, tailors, innkeepers and merchants (Bond 1984; Burns et al. 1972).

The summer of 1870 was a particularly dry one and a fire which started in neighbouring Huntley Township swept through much of March Township. Crops, homes and livestock were burned, and although most settlers were able to take refuge at the river or in wells, a few human casualties occurred. This was one of many fires to engulf Carleton County that summer. The fire brought changes to the agricultural landscape such as clearing the land of trees and losing soil from erosion, significantly impacting the drainage system by turning swamps into fallow fields as they had dried out (Burns et al. 1972). March Township recovered from the 1870 fire and by the end of the decade the region witnessed increased settlement, with a number of properties having been subdivided and settled.

In 1978, March Township was integrated into the City of Kanata and in 2001 was amalgamated into the City of Ottawa (Gordon 2015). Since the integration into the City of Kanata, and later the City of Ottawa, a significant portion of March Township has undergone substantial development, primarily for residential and commercial infrastructure.

2.5 Contextual Study Area History

Land registry records indicate both Lots 4 and 5, Concession 1 of March Township were severed when their initial Crown Patents were issued in the 19th century. Lot 4, Concession 1 was divided into east and west halves while Lot 5, Concession 1 was separated into northern and southern parcels. The study area

is located within the east half of Lot 4, Concession 1 and the south half of Lot 5, Concession 1 (Map 2).

The Crown Patent for the east half of Lot 4, Concession 1 was first issued in 1829 to the Canada Company, which sold the parcel to Roderick Matheson in 1842 and Frederick W. Richardson purchasing the 100 acres in 1849 (Inst. Nos. RO1906; RO4229). The 1861 census records indicate Frederick W. Richardson was a 65-year-old farmer from Ireland. He was married to Anna Richardson (age 65) and living in a one storey stone house with Samuel H. Richardson (age 23) and Mary Curles (age 18).

Frederick Richardson sold the property to Samuel H. Richardson in 1875 after first bonding the land to him in 1862 (Inst. Nos. RO18659; MH444). Samuel H. Richardson is shown as the landowner on the 1879 historical atlas, with the family residence east of the study area (Map 4). Samuel Richardson continued to own the property until 1913 when it was sold to William Langstaff (Inst. No. MH2320).

The northern portion of the study area is located within the south half of Lot 5, Concession 1. The Crown Patent for this parcel was first issued to Thomas Acres in 1825, with the Acres family continuing to own the property into the 20th century.

Thomas Acres is listed in the 1861 census records as a 75-year-old farmer from Ireland married to 71-year-old Emily Acres who was also originally from Ireland. The couple was living in a one storey log house with George Acres (age 29), Mrs. H. Acres (age 26), J. Acres (age 3), Thomas Acres (age 1), and Emily Acres (age 19). The names George and Thomas Acres are shown associated with the southern half of Lot 5, Concession 1 on the 1863 historical plan of Carleton County (Map 4), with the family homestead shown less than 90 m from the study area on the 1879 plan (Map 4) and 1906 topographic plan (Map 5).

Aerial photographs show the study area landscape was agricultural field in 1954 and 1976 (Maps 6 and 7), with residential structures visible within Lots 4 and 5 east of the study area. By 1999, the lands adjacent to the study area were being developed for residential subdivisions, with the contemporary aerial image showing land grading activities extending into the eastern and southern portions of the study area (Map 8). Additional evidence of land disturbance activities within the study area landscape are visible on the 2002 aerial image, which was taken during the construction of Terry Fox Drive (Map 9). An aerial photograph from 2007 shows the study area following the construction of Terry Fox Drive to the south and Kanata Avenue to the west (Map 10). These aerial images provide evidence of land altering activities within the study area, although the extent and depth of soil disturbing activities cannot be confirmed from the available information.

3.0 Archaeological Context

3.1 Study Area Environment and Landscape

The physiography within the study area consists of shallow till and rock ridges with clay plains to the south (Map 11). The surficial geology primarily consists of bedrock, with offshore marine deposits in the south and nearshore sediments within the southeastern portion of the study area (Map 12).

The soil survey classifies the sediments as urban, providing additional evidence that a significant portion of the natural soils within the study area have likely been previously disturbed (Map 13).

The study area is located within the Great Lakes – St. Lawrence Forest Region. Prior to European agricultural practices and the removal of woodlots for agricultural purposes, the forest cover would have

consisted of white and red pines, eastern hemlock and yellow birch, as well as sugar and red maples, beech, red oaks, basswood and white elms (Eckenwalder et al. 2023).

The nearest water source is the Carp River, which is located less than 300 m south of the study area.

3.2 Previously Completed Archaeological Assessments Within 50 Metres of Study Area

There are several previously completed archaeological assessments located within 50 m of the study area, which each assessment area where a map was available delineated on Maps 14 and 15. Archaeological Services Inc. and Geomatics International Inc. completed archaeological potential mapping for the City of Ottawa as part of an archaeological master plan (ASI and GII 1999). Although this potential model was developed prior to the current *Standards and Guidelines* (MCM 2011) and doesn't accommodate the refined potential triggers, it does indicate the potential for archaeological resources within a small segment of the study area that requires archaeological mitigation.

In 2002, Cultural Resource Management Group Limited completed a Stage 1 and 2 archaeological assessment for the Terry Fox Drive Extension (CRMGL 2002). Map 15 shows the study area as depicted in the Stage 1 and 2 archaeological report, although as it does not reflect the present location of Terry Fox Drive, the assessment report mapping may be incorrect and the assessment likely included the Terry Fox Drive corridor immediately south of the study area.

Kinickinick Heritage Consultants completed a Stage 1 and 2 archaeological assessment for the Broughton Lands residential development to the west of the study area (KHC 2005). The Stage 2 portion of the assessment resulted in the discovery of four sites interpreted by Kinickinick Heritage Consultants as dating to the Archaic Period, which have been registered with the Province as Borden Numbers BhFx-28, BhFx-29, BhFx-30, and BhFx-31. As summarized in Section 1.4.3 of this report, none of these sites are located within 300 m of the 475 Terry Fox Drive study area.

In 2009, Golder Associates completed a Stage 2 archaeological assessment to the west of the study area in Lot 5, Concession 1 (Golder 2009). This report and corresponding recommendations were not available from the MCM Past Portal database, and although the exact extent of the study area could not be confirmed and the assessment boundaries could not be included on Map 15, it may have extended to within 50 m of the current study area.

In 2015, Northeastern Archaeological Associates Ltd. completed a Stage 1 and 2 archaeological assessment for the Carp River Floodplain Restoration Project, which included lands to the south of the 475 Terry Fox Drive study area (NEAA 2015). The Stage 2 archaeological assessment resulted in the discovery of the BhFx-62 site, which was recommended for Stage 3 archaeological assessment.

3.3 Registered Archaeological Sites Within One Kilometre of Study Area

The primary source of information regarding previously registered archaeological sites within the Province of Ontario is the MCM archaeological sites database (ASDB), which designates 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 km east to west and approximately 18.5 km 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 ASDB was accessed on 20 December 2024 and a 1 km buffer was applied to the general limits of the study area. The search of the ASDB indicated that 10 archaeological sites have been registered within 1 km of the study area (MCM 2024).

General information regarding each archaeological site within a 1 km radius of the study area is included in Table 1, which provides a general overview of each site, the spatial relationship to the study area, temporal context, inferred site type, and information regarding the development review status that indicates whether the site has been identified as retaining cultural heritage value or interest (CHVI) and recommended for additional mitigation. Blank entries within the table indicate the relevant information was not included with the corresponding entry in the MCM database or available from accessible reports.

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

Borden Number	Site Name	MCM PIF(s) Associated with Site	Spatial Relationship to Study Area	Temporal Context	Inferred Site Type	Development Review Status
BhFx-29	-	P039-064	310 m west	Early Archaic	Campsite, Quarry	No Further CHVI
BhFx-30	Richardson Farm	P039-064, P039-077, P109-028-2009, P051-161-2010	375 m west	Early Archaic, Post-Contact	Farmstead, Outbuilding	No Further CHVI
BhFx-31	-	P039-064	460 m west	Early Archaic	Campsite, Quarry	No Further CHVI
BhFx-28	Broughton Lands	P039-064, P039-077	480 m north	Pre-Contact	-	No Further CHVI
BhFx-27	Corelview	P003-031, P003-037, P003-041	685 m southeast	Middle Archaic	Campsite	No Further CHVI
BhFx-62	Akandoo	P025-0494-2015, P025-0498-2015	695 m southeast	Archaic	-	Further CHVI
BhFx-26	Allen	P003-031, P003-037, P003-041	765 m southeast	Post-Contact	Farmstead	No Further CHVI
BhFx-39	Gourley House	P025-153-2007	845 m west	Post-Contact	Farmstead	No Further CHVI
BhFx-35	Robertson	P051-144-2007	965 m south	Pre-Contact, Post-Contact	Findspot, Agricultural	No Further CHVI
BhFx-38	Armstrong House	P025-153-2007	1 km west	Post-Contact	Farmstead	No Further CHVI

3.4 Assessment of Archaeological Potential

Several factors are employed when assessing archaeological potential within a particular area. In addition to the proximity to known archaeological sites, factors for determining archaeological potential for Indigenous and Euro-Colonial historical resources include watershed area (primary and secondary watercourses), distance from water, drainage patterns, identification of historical water sources (e.g. beach ridges, river beds, relic creeks, ancient shorelines, etc.), elevated topography, identification of significant physiological

and geological features (e.g. knolls, drumlins, eskers, plateaus, etc.), soil geomorphology, distinctive land formations (e.g. mounds, caverns, waterfalls, peninsulas, etc.), known burials sites and cemeteries, ecological features (e.g. distribution of food and animal resources before European colonization), features identifying early Euro-Colonial settlements (e.g. monuments, structures, etc.), historical transportation routes (e.g. historical roads, trails, portages, rail corridors, etc.) and properties designated and/or listed under the *Ontario Heritage Act.* Local knowledge from Indigenous communities and heritage organizations, as well as consultation of available historical and archaeological literature and cartographic resources, aids in the identification of features denoting archaeological potential. These criteria are based on the MCM's *Standards and Guidelines for Consultant Archaeologists* (2011) and were used to assess the potential for archaeological resources within the study area.

The archaeological potential model developed for the City of Ottawa was used as the base plan for assessing the potential for archaeological resources within the study area. Consultation of this planning document was undertaken to establish a foundational baseline of archaeological potential within the study area, although the document is intended to be an overview of a large area rather than identify discrete intricacies within specific locations and as it only includes attributes of select archaeological knowledge up to its 1999 publication date, the current Stage 1 archaeological assessment included a review of this model and refinement where required.

In addition to the archaeological potential model produced for the City of Ottawa (ASI and GII 1999), the remaining portion of the study area was identified as possessing archaeological potential by applying the attributes denoting archaeological potential in the MCM *Standards and Guidelines for Consultant Archaeologists* (2011). Specifically, the remaining area was determined to possess archaeological potential as it is within 300 m of Carp River and is also within 300 m of two farmsteads illustrated on the 1879 historical plan (Map 4).

Based on the application of the City of Ottawa archaeological potential model, and the attributes for determining archaeological potential from the MCM *Standards and Guidelines for Consultant Archaeologists* (2011), the natural landscape within the entire Stage 1 study area is considered to possess archaeological potential.

Available aerial imagery shows that some portions of the study area have been disturbed by construction associated with the extension of Terry Fox Drive and development of adjacent lands (Maps 8, 9 and 10). As it is not possible to confirm the extent of the potential landscape disturbance from the available aerial imagery, and a visual property inspection was not completed as part of the Stage 1 archaeological assessment, a Stage 2 field investigation will be required to mitigate the potential for archaeological resources within the study area to comply with the MCM *Standards and Guidelines for Consultant Archaeologists* (2011).

3.5 Stage 1 Assessment Recommendations

Based on the Stage 1 desktop archaeological assessment, the following recommendation is made (Map 16):

1) The entire study area is recommended for Stage 2 archaeological assessment prior to development impacts. As the study area is situated within an urban landscape and ploughing is not a viable option, the Stage 2 archaeological assessment should consist of a visual inspection and hand excavated test pit survey. The test pit survey should be undertaken in compliance with the MCM's *Standards and*

Guidelines for Consultant Archaeologists (2011), with test pits at 5 m intervals and transition to discretionary test pit intervals and landscape documentation where soil disturbance is documented.

4.0 Stage 2 Archaeological Assessment

4.1 Stage 2 Field Methodology

The Stage 2 archaeological assessment comprising a test pit survey and/or a visual inspection of the entire 1.3 ha study area was completed on 15 April 2025. The weather comprised cloudy conditions with a high of 8° C and at no time was the weather or lighting conditions detrimental to the recognition or identification of archaeological resources. All Stage 2 archaeological work was conducted in accordance with the MCM's *Standards and Guidelines for Consultant Archaeologists* (MCM 2011).

The study area is bounded by Terry Fox Drive to the south, Kanata Avenue to the west, and by existing residential developments to the north and east (Map 2). As the study area is situated within an urban landscape with variable vegetation, surface rock and trees, ploughing was not a viable option.

The subsurface archaeological investigation consisted of hand excavated test pits, with each test pit excavated at least 30 cm in diameter and at least 5 cm into sterile subsoil. All excavated soils were screened through 6 mm mesh and each individual test pit was examined for stratigraphy, cultural materials and features and evidence of fill or previous disturbances and backfilled upon completion. Areas of natural undisturbed soil was tested at 5 m intervals, and areas where there was evidence of previous soil disturbances recognized by mottled stratigraphy and intrusive soils was tested at 10 m intervals. No built structures are present within the study area. The field methodology was implemented in accordance with Standards 2.1, 2.1.2 and 2.1.8 of the *Standards and Guidelines for Consultant Archaeologists* (MCM 2011).

A field log was maintained for the duration of the Stage 2 field investigation detailing pertinent information and digital photographs were taken of the assessed areas, general field conditions, specific representative test pits and general landscape and topography. The location and direction of photographs collected during the Stage 2 field investigation and included in this report are provided on Map 17. Table 2 shows the total area and percentage of the study area assessed by each field method.

Table 2: Total Area and Percentage of Study Area by Assessment Method

Assessment Method	Total Area	Percentage
Test pit survey at 5 m intervals	0.77 ha	59%
Test pit survey at 10 m intervals	0.30 ha	23%
Visually assessed (Saturated Soils)	0.23 ha	18%

Spatial data was collected in the field using QField GIS software on a Samsung TAB S7 tablet, including the collection of waypoints and polygons of archaeological interest. The Stage 2 study area was uploaded to the field tablet to accurately locate the boundaries of the study area in the field, with the GPS unit

integrated within the tablet providing +/- 3 m accuracy on average. The integration of the QField program on the tablet allowed landscape features and photograph locations to be mapped in the field, using georeferenced aerial imagery as the base plan. Spatial data collected during the field assessment referenced the UTM coordinate system (Zone 18) and the NAD83 datum with each observation recorded as six digit easting and seven digit northing coordinates. Following the Stage 2 field investigation, the field data was downloaded as SHP files and integrated into the Project GIS database.

Permission to access the study area to complete the Stage 2 field assessment was provided by Santan Singh, Senior Urban Planner with Ironclad Developments Inc. No restrictions or limitations were placed on accessing the property to complete the archaeological assessment.

5.0 Record of Finds

An inventory of the documentary record generated from the Stage 2 fieldwork is provided in Table 3 and the results of the Stage 2 fieldwork are described below.

Table 3: Inventory of Documentary Record for Stage 2 Field Investigation

Document/Data Type	Current Location of Document/Data	Additional Comments
Field Notes	TNAS Office, Ottawa	Original field notebook with scanned copy in project file
Maps Provided by Client	TNAS Office, Ottawa	Stored electronically in the project file
Digital Photographs	TNAS Office, Ottawa	Stored electronically in the project file
GPS/GIS Data	TNAS Office, Ottawa	Stored electronically in the project file

The northern portion of the property consists of an elevated terrace that gently slopes east-west from the existing residential properties towards Kanata Ave. This area generally comprised short grass with intermittent trees and was assessed by test pit survey at 5 m intervals (Images 1 and 2). The soil stratigraphy included an average of 40 cm of moderately compact dark brown loam topsoil with root inclusions over 5 cm of moderately compact grey clay subsoil with limestone inclusions (Image 3), with some test pits producing a matrix of an average of 18 cm of moderately compacted dark brown loam topsoil with root inclusions over bedrock (Image 4).

The central and southern segments of the study area were situated at a lower elevation, with a landscape comprising open grassed areas with surface rock and clusters of trees (Image 5). The central portion of the study area was assessed by test pit survey at 5 m intervals (Map 17), with the soil matrix comprising 25 cm of dark brown loam with root inclusions over bedrock (Image 6). Some evidence of previous soil disturbance was identified during the test pit survey in this area, although test pits indicating landscape disturbance were intermittent. The soil matrix indicating previous disturbance to the natural matrix

comprised an average of 25 cm of moderately compacted dark brown loam topsoil with root inclusions over 20 cm of mottled yellow sand with dark brown loam topsoil over 5 cm of grey, brown clay subsoil indicated soils in this area had been previously disturbed (Image 7).

The observed soil stratigraphy within the southern and southeastern segments of the study area confirmed previous extensive disturbance to the natural soils, which extended across the defined area (Map 17). These areas were assessed by test pit survey at 10 m intervals with the soil stratigraphy consisting of dark brown landscaped topsoil with an average thickness of 20 cm (Lot 1) over grey sand fill with cobble inclusions that average 30 cm thickness (Lot 2), over grey sand fill with cobble inclusions 30 cm thick (Lot 3) over orange sand fill mixed with gravel 10 cm thick (Lot 4) over grey sand fill with cobble inclusions for at least 60 cm (Lot 5) (Images 8 and 9). The soil matrix in this area is consistent with the landscape disturbance visible in recent aerial imagery (Maps 8 and 9).

The southwestern portion of the study area adjacent to Terry Fox Drive included a cluster of trees and soils that were too saturated to allow for test pit survey (Images 10 and 11). This area was assessed by visual inspection (Map 17).

No archaeological resources were observed during the Stage 2 archaeological assessment.

6.0 Analysis and Conclusions

The Stage 1 archaeological assessment determined the study area possessed the potential for archaeological resources based on the application of the City of Ottawa archaeological potential model, and the attributes for determining archaeological potential from the MCM *Standards and Guidelines for Consultant Archaeologists* (2011).

The Stage 2 test pit survey was conducted across the study area where possible, with the survey interval at 5 m within the northern and central portions of the study area and expanded to 10 m intervals based on the documentation of previous soil disturbance activities that negated the potential to recover archaeological resources. This field methodology was implemented in accordance with Section 2.1.2 *Test Pit Survey* and Section 2.1.8 *Property Survey to Confirm Previous Disturbance* detailed in the MCM *Standards and Guidelines for Consultant Archaeologists* (2011).

No archaeological resources were observed during the Stage 2 archaeological assessment and no further archaeological assessment is recommended for the study area detailed in this report.

7.0 Recommendations

This Stage 1 and 2 archaeological assessment has provided the basis for the following recommendations:

1) No further archaeological assessment is recommended for the study area as shown on Map 18.

2) Should archaeological resources be encountered on the property in the future, all associated activities must cease, and a licensed archaeologist must be contacted to examine the cultural materials.

This report is submitted to the Ministry 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 the licensed consultant archaeologist has met the terms and conditions of their archaeological license, and that the archaeological field work and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario.

8.0 Advice on Compliance with Legislation

This report is submitted to the Ministry 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 of 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 licence.

9.0 Important Information and Limitations of this Report

This report has been prepared for the specific site, development objective, and purpose as requested by the client and outlined in the original proposal, and subsequent agreed changes, for this project. The specific results, factual data, interpretations, and recommendations, outlined in this report are for the sole use of the client, and applicable only to this project and site location. No other warranty, expressed or implied, is made. No other party may rely on all, or portions, of this report without True North Archaeological Services Inc.'s express written consent. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permission of True North Archaeological Services Inc. The Client acknowledges the electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client can only rely upon the electronic media versions of this True North Archaeological Services Inc. report or other work products at their discretion.

True North Archaeological Services Inc. prepared this report in a manner consistent with the level of care and skill ordinarily exercised by other members of the archaeological consulting community currently practicing within the Province of Ontario, in accordance with the *Ontario Heritage Act* the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists*, and all the subsequent MCM bulletins.

There are special risks whenever an archaeological assessment is completed, whether they be solely desktop assessments or in-field assessments, and even a thorough background study, comprehensive field investigation or sampling and testing program may fail to detect all archaeological resources present within the project area. The desktop review, field strategies and subsequent interpretations utilized for this report comply with the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists*, and all the subsequent MCM bulletins.

All artifacts collected as part of this archaeological assessment, when applicable, will be housed and curated by True North Archaeological Services Inc. until such time that the collection may be transferred to an appropriate MCM approved repository or repatriated to an appropriate First Nation. As part of Licensing obligations, this report, along with pertinent written information will be uploaded to the MCM Past Portal website and reviewed for compliance with the 2011 *Standards and Guidelines for Consultant Archaeologists*.

10.0 References

Adney, Edwin Tappan and Howard Chapelle
2014 **Bark Canoes and Skin Boats of North America**. New York.

Algonquins of Ontario (AOO)
2013 **Our Proud History**. Accessed from <https://www.tanakiwin.com/algonquins-of-ontario/our-proud-history/> [15 January 2025].

Algonquins of Pikwakanagan First Nations (AOP)
2012 **History**. Accessed from <http://www.algonquinsofpikwakanagan.com/culture_history.php> [4 January 2018].

Archaeological Services Inc. (ASI) and Geomatics International Inc. (GII)
1999 **The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton: Planning Report**. Archaeological Master Plan study prepared for the Regional Municipality of Ottawa-Carleton.

Belden, H. & Co.
1879 **Illustrated Historical Atlas of the County of Carleton.** Reprinted 1981, Ross Cumming, Port Elgin.

Bond, Courtney C.J.
1984 **Where the Rivers Meet: Al Illustrated History of Ottawa.** Windsor Publications (Canada) Ltd., Ottawa.

Burns, B., J. Daw, S. Dielding, L. MacDonald, R. MacKay, R. Read and J. Tucker
1972 **March Past.** March Township Council, Kanata.

Bursey, Jeffrey
1995 *The Transition from the Middle to Late Woodland Periods: A Re-Evaluation*. **Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeology Society**. A. Bekerman and G. Warrick (eds), Ontario Archaeology Society, pp. 43-54.

Bursey, Jeffrey, Hugh Daechsel, Andrew Hinshelwood and Carl Murphy
ND **The Archaeology of Ontario: A Summary.** Accessed from <https://ontarioarchaeology.org/resources/summary-of-ontario-archaeology/> [8 January 2025].

Chapdelaine, Claude, Norman Clermont, and Jacques Cinq-Mars
2001 *Laurentian Archaic in the Middle Ottawa Valley*. In J. L. Pilon, M. Kirby and C. Theriault (eds.) **A Collection of Papers Presented at the 33rd Annual Meeting of the Canadian Archaeological Association**. Ottawa, The Ontario Archaeological Society and the Canadian Archaeological Association, p. 102-110.

Chapman, L.J. and D.F. Putnam
1984 **The Physiography of Southern Ontario**. Ontario Geological Survey Special Volume 2, Ontario.

Clermont, Norman
1999 *The Archaic Occupation of the Ottawa Valley*. In J. L. Pilon (ed.), **Ottawa Valley Prehistory**. Imprimerie Gauvin, Hull Quebec, p. 45-53.

Clermont, Norman and Claude Chapdelaine
1998 **Ile Morrison: Lieu Sacré et atelier de l'Archaique dans l'Outaouais.** Musée Canadien des Civilisations, Montreal.

Crawford, Gary, David Smith and Vandy Bowyer
1997 *Dating the entry of corn (Zea mays) into the Lower Great Lakes region*. **American Antiquity**, 62(1): 112-119.

Croft, David J.A.
2006 *Champlain's Portage from Muskrat Lake to the Ottawa River*. **Ontario Archaeology**, 81/82:3-12.

Cultural Resource Management Group Limited (CRMGL)
2002 **Stage 1 & 2 Archaeological Assessment Terry Fox Drive Extension, Campeau Drive to South of Richardson Side Road, Kanata.** Consultant's report submitted to the MCM under PIF 2002-010-002.

Daechsel, Hugh J.
1980 **An Archaeological Evaluation of the South Nation River Basin**. A report prepared for the South Nation River Conservation Authority, Berwick, Ontario.

1981 **Sawdust Bay-2. The Identification of Middle Woodland Site in the Ottawa Valley.** M.A. Thesis, Department of Anthropology, McMaster University.

Eckenwalder, James E., Deborah Metsger, Timothy Dickinson, and Sarah Hodges
2023 **A Field Guide to Trees of Ontario**. Royal Ontario Museum, Ontario.

Ellis, C.J.
2013 *Before Pottery: Paleoindian and Archaic Hunter-Gathers.* **Before Ontario: The Archaeology of a Province**., eds. Marit K. Munson and Susan M. Jamieson. Library and Archives of Canada Publishing.

Ellis, Christopher and Brian D. Deller
1997 *Variability in the Archaeological Record of Northeastern Early Paleoindians: A View from Southern Ontario*, **Archaeology of Eastern North America**, 25: 1-30.

Ellis, Chris J., Ian T. Kenyon, and Michael W. Spence
1990 *The Archaic*. **The Archaeology of Southern Ontario to A.D. 1650**, C.J. Ellis and N. Ferris (eds), Ontario Archaeology Society, p. 65-124.

Engelbrecht, William E. and Carl K. Seyfert
1995 *Paleoindian Watercraft: Evidence of Implications*. **North American Archaeologist** 15(3): 221-234.

Ferris, Neal and Michael Spence
1995 *The Woodland Traditions in Southern Ontario***. Revista de Arqueologia Americana** 9: 83-138.

Fulton, R.J. and S.H. Richard
1987 *Chronology of Late Quaternary Events in the Ottawa Region*. In **Quarternary Geology of the Ottawa Region, Ontario and Quebec**, edited by R.J. Fulton, pp. 24-30. Geological Survey of Canada 86-23.

Fulton, R.J., T.W. Anderson, N.R. Gadd, C.R. Harington, I.M. Kettles, S.H. Richard, C.G. Rodrigues, B.R. Rust and W.W. Shilts

1987 *Summary of the Quaternary of the Ottawa Region*. In H.M. French and P. Richard (eds) **Papers Presented at the Quaternary of the Ottawa Region and guides for day excursions INQUA 87 International Congress**, National Research Council of Canada, p. 7-20.

Gates St-Pierre, Christian

2010 **Le Patrimoine Archéologique Amérindien du Sylvicole Moyen au Québec.** Document soumis a la Direction du Patrimoine et de la Muséologie, Ministère de la Culture.

Golder Associates Ltd. (Golder)

2009 **Stage 2 Archaeological Assessment, Terry Fox Extension, Floodplain and Compensation Lands, Broughton Property, Part Lot 5, Concession 1, Geographic Township of March, Ottawa, Ontario**. Consultants Report Submitted to the MCM under PIF P051-159-2009.

Gordon, David

2015 **Town and Crown: An Illustrated History of Canada's Capital.** Invenire, Ottawa.

Holmes, Joan & Associates Inc. (Holmes)

1993 **Report on the Algonquins of Golden Lake Claim.**

Jamieson, J.B.

1989 **An Inventory of the Prehistoric Archaeological Sites of Ottawa-Carleton**. Report Submitted to the Ontario Archaeological Society, Ottawa Chapter.

Jodry, Margaret A.

2005 *Envisioning Water Transport Technology in Late-Pleistocene America*. In R. Bonnichse, B.T. Lepper, D. Stanford and M.R. Waters (eds) **Paleoamerican Origins: Beyond Clovis**. Texas A&M University Press, College Station, p. 133-160.

Johnston, Darlene

2006 **Connecting People to Place: Great Lakes Aboriginal History in Cultural Context**. Ipperwash Inquiry.

Johnston, Louise

2004 **The Covenant Chain of Peace: Metaphor and Religious Thought in Seventeenth Century Haudenosaunee Council Oratory**, Montreal, McGill University Press.

Kennedy, Clyde C.

1964 **Archaeological Survey in Renfrew and Pontiac Counties**. Report Submitted to the National Museum of Canada.

1966 *Preliminary Report on the Morrison's Island-6 Site*. **National Museum of Canada, Bulletin No. 206, Contributions to Anthropology, 1963-64, Part 1**. National Museum of Canada, Ottawa.

1970 **The Upper Ottawa Valley**. Renfrew County Council, Pembroke.

1976 *Champlain Sea and Early Ottawa River Shoreline Studies, 1975*. **Arch Notes**, 76-7:18-23.

Kinickinick Heritage Consultants (KHC)

2005 **A Stage 1 & 2 Archaeological Assessment of the Broughton Lands, Part of Lots 5, Concession 1, March Twp. (Geo), City of Ottawa.** Consultants Report Submitted to the MCM under PIF P039-064.

Laliberté, M.
1991 **Notes sur le site BjGb-1 a Quyon.** Consultants Report Submitted to the National Capital Commission.

1994 **Les Recherches Archeologiques de 1994 dans le Parc du Lac Leamy.** Report Submitted to the National Capital Commission and Ministere de la Culture et des Communications du Quebec.

1995 **Inventaire Archéologique du Parc du Lac Leamy, 1995.** Report Submitted to the National Capital Commission and Ministere de la Culture et des Communications du Quebec.

1998a **Inventaire archéologique des stationnements Champlain, Chaudière et autres d'aménagement connexes. Corridors des voyageurs/Parc des rapides Deschênes, Volume 1**. Consultant's Report Submitted to the National Capital Commission.

1998b **Fouilles de sauvetage sur un site de halte et de portage du Sylvicole inférieur et moyen. Projet de sauvetage du site archéologique BiFw-39. Parc des rapides Deschênes-stationnement Champlain**. Consultant's Report Submitted to the National Capital Commission.

1998c **Archaeological Resource Potential, Federal Lands in the National Capital Region, Volumes 1 and 2.** Report on file with the NCC.

1999 *The Middle Woodland in the Ottawa Valley*. In J. L. Pilon (ed.), **Ottawa Valley Prehistory**. Imprimerie Gauvin, Hull Quebec, p. 70-81.

2000 **Recherches Archéologiques Dans Le Parc du Lac-Leamy 1993-1999.**

Martin, Scott
2004 *Lower Great Lakes Region Maize and Enrichment in the First Millennium AD*. **Ontario Archaeology**, 77/78: 135-159.

Ministry of Citizenship and Multiculturalism (MCM)
2011 **Standards and Guidelines for Consulting Archaeologists**. Queens Printer, Ontario.

2025 **Search of Past Portal Database for Registered Archaeological Sites and Previous Archaeological Assessments within 50 metres of Study Area**, 20 December 2024.

Monague, Jeff
2022 *Area's Indigenous Roots Ignored in History Books*. **Orillia Matters**. Accessed from <https://www.orilliamatters.com/local-news/column-areas-indigenous-roots-ignored-in-history-books-5994672> [27 October 2022].

Monk, Kimberly E.
1999 *The Development of Aboriginal Watercraft in the Great Lakes Region*. **Totem: The University of Western Ontario Journal of Anthropology**, 7(1):1-7.

Morrison, J.

2005 *Algonquin History in the Ottawa Riber Watershed.* In **A Background Study for Nomination of the Ottawa River Under the Canadian Heritage Rivers System**, ed. Len Hopkins, pp. 17-32. Quebec-Labrador Foundation, Ipswich, MA.

Northeastern Archaeological Associates Ltd. (NEAA)
2015 **Stage 1 and 2 Archaeological Assessment of Part Lot 3, 4, and 5, Concession 1, Geographic Township of March, City of Ottawa, Ontario**. Consultants Report Submitted to the MCM under PIF P025-0482-2014.

Pendergast, James F.
1999 *The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context*. **Canadian Journal of Archaeology**, 23: 63-136.

Pilon, Jean-Luc
2003 *On the Nature of Archaeology in the Ottawa Area and Archaeological Mysteries.* **Ontario Archaeology** 75: 17-27.

2005 *Ancient History of the Lower Ottawa River Valley*. **A Background Study for Nomination of the Ottawa River Under the Canadian Heritage River System**. QLF Canada, p. 12-17.

2006 **In the Shadow of the City Archaeological Investigations at BiFw-6 and BiFw-16, Summer, 2002.** Canadian Museum of Civilization, Gatineau.

Pilon, Jean-Luc and Randy Boswell
2015 *Below the Falls; An Ancient Cultural Landscape in the Centre of (Canada's National Capital Region) Gatineau*. **Canadian Journal of Archaeology**, 39:257-293.

Pilon, Jean-Luc and William Fox
2015 *St. Charles or Dovetail Points in Eastern Ontario*. **Arch Notes**, 20(1):5-9.

Pilon, Jean-Luc and Janet Young
2009 *The Ottawa Valley Burial Patterns Spanning Six Millennia*. **Painting the Past with a Broad Brush: Papers in Honour of James Valliere Wright**, Canadian Museum of Civilization Corporation, p. 181-211.

Reimer, Gwen
2019 *British-Canada's Land Purchases, 1783-1788: A Strategic Perspective*. **Ontario History**, 111(1): 36-72.

Ritchie, William
1971 *A Typology and Nomenclature for New York Projectile Points, Revised Edition*. **New York State Museum and Science Service, Bulletin Number 384**. The University of the State of New York, The State Education Department, Albany, New York.

Savage, Howard
1972 *Faunal Findings at the Constance Bay Site No. 1 (BiGa-2)*. **Ontario Archaeology**, 18:25-36.

Smith, David G.
1990 *Iroquoian Societies in Southern Ontario: Introduction and Historic Overview*. **The Archaeology of Southern Ontario to A.D. 1650**. C.J. Ellis and N. Ferris (eds), Ontario Archaeological Society, p. 279-290.

Sowter, Edwin
1900 *Archaeology of Lake Deschènes*. **The Ottawa Naturalist**, 13(10):225-241.

1901 *Prehistoric Camping Grounds Along the Ottawa River*. **The Ottawa Naturalist**, 15(6):141-151.

1915 *The Highway of the Ottawa*. **Ontario Historical Society**, 13:42-52.

Speck, FG
1915 **Family Hunting Territories and Social Life of Various Algonkian Bands of the Ottawa Valley.** Department of Mines Geological Survey Memoir 70: No. 8, Anthropological Series. Government Printing Bureau, Ottawa.

Spence, Michael W., Robert H. Pihl, and Carl Murphy
1990 *Cultural Complexes of the Early and Middle Woodland Periods* in **The Archaeology of Southern Ontario to A.D. 1650**, C.J. Ellis and N. Ferris (eds), Ontario Archaeology Society, p. 125-169.

Surtees, Robert J.
1982 **Indian Land Cessions in Ontario, 1763-1862: The Evolution of a System**. Ph.D. Thesis Submitted to Carleton University.

1994 *Land Cessions, 1763-1830*. In In E.S. Rogers and D.B. Smith (eds) **Aboriginal Ontario: Historical Perspectives on the First Nations**. Dundurn Press, Toronto, p. 92-121.

Swayze, Ken
2003 **A Stage 1 & 2 Archaeological Assessment of Woodroffe Estates Part North Half Lot 16, Concession 2 Nepean (Geo.) Twp., City of Ottawa**. Consultant's Report Submitted to the Ontario Ministry of Culture.

2004 **Stage 1 & 2 Archaeological Assessment of Proposed Central Canada Exhibition, Albion Road Site, Part Lots 24 and 25, Concession 3, Gloucester Township (Geo.), City of Ottawa**. Consultant's Report Submitted to the Ontario Ministry of Culture.

Tasker, Paul
2016 **Historic Land Deal with Algonquin Peoples Signed by Federal, Ontario Governments**. Accessed from <https://www.cbc.ca/news/politics/ottawa-ontario-algonquin-agreement-in-principle-1.3809876> [15 January 2025].

Taylor, Anne
2015 *Forging New Bonds of Trust*. **Peterborough Archaeology**. D. Verhulst (ed), Peterborough Chapter of the Ontario Archaeological Society, p. 59-65.

Teichroeb, Janet
2007 **The Archaic Lithic Assemblage from West Burleigh Bay, Ontario**. M.A. Thesis Submitted to Trent University.

Tomiak, Julie
2016 *Unsettling Ottawa: Settler Colonialism, Indigenous Resistance, and the Politics of Scale*. **Canadian Journal of Urban Research**, 25(1):8-21.

Trigger, Bruce G. and Gordon M. Day

1994 *Southern Algonquin Middlemen: Algonquin, Nipissing and Ottawa, 1550-1780*. In E.S. Rogers and D.B. Smith (eds) **Aboriginal Ontario: Historical Perspectives on the First Nations**. Dundurn Press, Toronto, p. 64-77.

Warrick, Gary
2000 *The Precontact Iroquoian Occupation of Southern Ontario*. **Journal of World Prehistory**, 14(4): 415-456.

Watson, Gordon
1972 *A Woodland Indian Site at Constance Bay, Ontario*. **Ontario Archaeology**, 18:1-24.

1982 *Prehistoric Peoples in the Rideau Waterway*, **Archaeological Historical Symposium, Rideau Ferry, Ontario**, F.C.L. Wyght, Lombardy, Ontario, pp. 24-55.

1999a *The Paleo-Indian Period in the Ottawa Valley*. In J. L. Pilon (ed.), **Ottawa Valley Prehistory**. Imprimerie Gauvin, Hull, Quebec, p. 28-41.

1999b *The Early Woodland of the Ottawa Valley*. In J. L. Pilon (ed.), **Ottawa Valley Prehistory**. Impremerie Gauvin, Hull Quebec, 56-76.

Williamson, Ronald F.
1990 *The Early Iroquoian Period of Southern Ontario*. **The Archaeology of Southern Ontario to A.D. 1650**.C.J. Ellis and N. Ferris (eds), Ontario Archaeology Society, p. 291-320.

11.0 Images

Image 1: Existing site conditions within the northern portion of the study area, view north.

Image 2: Field crew conducting test pit survey at 5 m intervals, view north.

Image 3: Representative test pit excavated in northern portion of the study area, view west.

Image 4: Representative shovel test pit excavated in northern portion of the study area, view east.

Image 5: Existing site conditions within southern portion of study area, view south.

Image 6: Representative test pit with natural soils excavated in woodlot, view north.

Image 7: Representative shovel test pit excavated at the central portion of the study area indicating previous disturbance, view north.

Image 8: Representative shovel test pit excavated east of woodlot showing deep soil disturbance, view south.

Image 9: Representative test pit excavated in eastern portion of the study area indicating previous disturbance, view south.

Image 10: Low-lying wet area within woodlot, view west.

Image 11: Standing water within low-lying wet area, view south.

10.0 Maps

LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: ESRI OPEN TOPOGRAPHIC CARTOGRAPHY

DRAFT

300 0 300 600 900 m

SCALE 1:30,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

KEY PLAN

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
PREPARED	AM
REVIEWED	RH
APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	1

KEY MAP

SCALE 1:50,000

LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLANS: GOOGLE EARTH OPEN IMAGERY (7/15/2022) AND ESRI OPEN TOPOGRAPHIC CARTOGRAPHY

DRAFT

25 0 25 50 75 m

SCALE 1:2,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

SITE PLAN

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
PREPARED	AM
REVIEWED	RH
APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	2

LEGEND

Study Area and Site Plan Development Application Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: PRELIMINARY CONCEPT PLAN PROVIDED BY IRONCLADL DEVELOPMENTS INC (7 JANUARY 2025)

DRAFT

20 0 20 40 60 m

SCALE 1:18,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

DEVELOPMENT PLAN

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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PROJECT NO.	REV.	MAP
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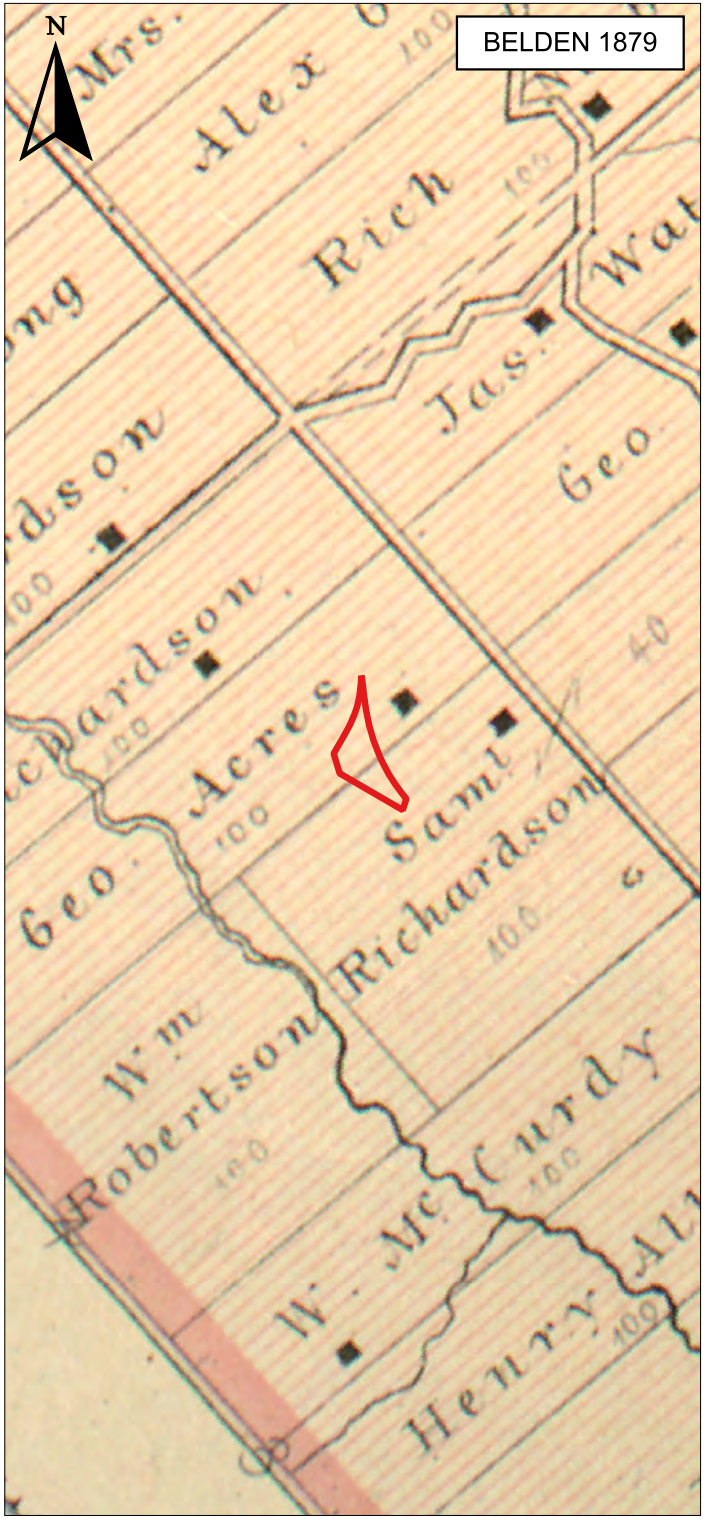

LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLANS: MAP OF THE COUNTY OF CARLETON, CANADA WEST, FRMO SURVEYS UNDER THE DIRECTION OF H.F. WALLING, 1863
ILLUSTRATED HISTORICAL ATLAS OF THE COUNTY OF CARLETON, MAP OF MARCH TOWNSHIP, H. BELDEN & CO., 1879

DRAFT

200 0 200 400 600 m

SCALE 1:15,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

19TH CENTURY HISTORICAL PLANS

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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APPROVED	AM

PROJECT NO.	REV.	MAP
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LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: DEPARTMENT OF MILITIA AND DEFENCE DEFENCE, GEOGRAPHICAL SECTION, OTTAWA SHEET, 1906

DRAFT

100 0 100 200 300 m

SCALE 1:10,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

1906 TOPOGRAPHIC PLAN

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
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APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	5

LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: 1954 AIR PHOTOS OF SOUTHERN ONTARIO, PHOTO NO. 453.754, ONTARIO. DEPARTMENT OF LANDS AND FORESTS

DRAFT

100 0 100 200 300 m

SCALE 1:10,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

1954 AERIAL PHOTOGRAPH

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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PROJECT NO.	REV.	MAP
2024056	001	6

LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GeoOTTAWA AERIAL IMAGERY, 1976

DRAFT

75 0 75 150 225 m

SCALE 1:6,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

1976 AERIAL PHOTOGRAPH

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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PROJECT NO.	REV.	MAP
2024056	001	7

LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GeoOTTAWA AERIAL IMAGERY, 1999

DRAFT

75 0 75 150 225 m

SCALE 1:6,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

1999 AERIAL PHOTOGRAPH

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
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APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	8

LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GeoOTTAWA AERIAL IMAGERY, 2002

DRAFT

75 0 75 150 225 m

SCALE 1:6,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

2002 AERIAL PHOTOGRAPH

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	9

LEGEND

Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GeoOTTAWA AERIAL IMAGERY, 2007

DRAFT

75 0 75 150 225 m

SCALE 1:6,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

2007 AERIAL PHOTOGRAPH

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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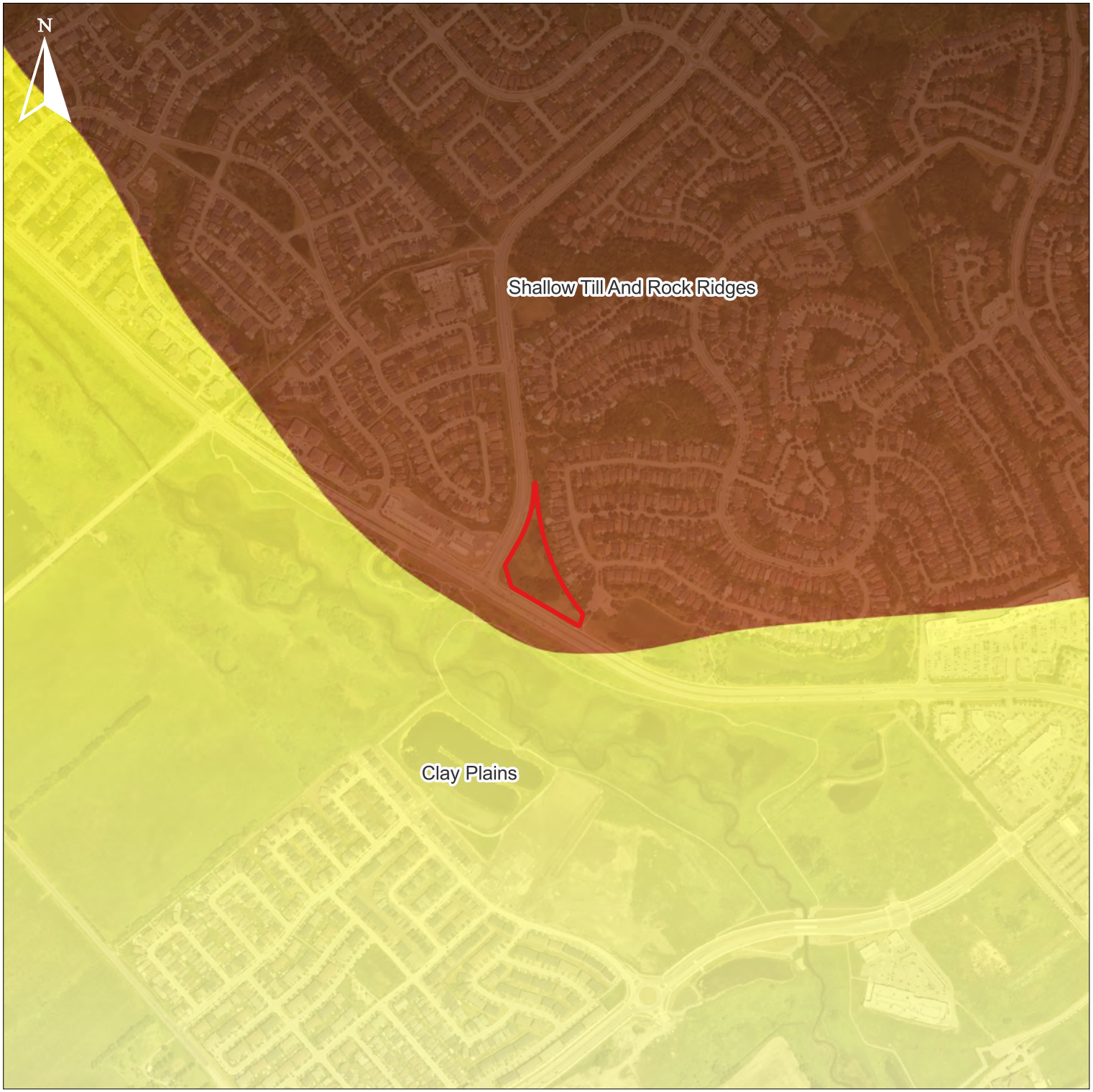

LEGEND

Study Area

Physiography

Clay Plains

Shallow Till And Rock Ridges

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: CHAPMAN, L.J. AND PUTNAM, D.F. 2007. PHYSIOGRAPHY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE-DATA 2008

DRAFT

100 0 100 200 300 m

SCALE 1:10,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

PHYSIOGRAPHY

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
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APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	11

LEGEND

Study Area

Surficial Geology

- Bedrock
- Nearshore sediments
- Offshore marine deposits
- Organic deposits

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: ONTARIO GEOLOGICAL SURVEY 2010. GEOLOGY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE-DATA 128-REV

DRAFT

100 0 100 200 300 m

SCALE 1:10,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

SURFICIAL GEOLOGY

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
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LEGEND

- Study Area

Soil Survey Complex

- BAINSVILLE
- BRANDON
- ERODED CHANNEL
- NORTH GOWER
- URBAN

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: SOIL SURVEY COMPLEX, ONTARIO MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS, 2019-11-06

DRAFT

100 0 100 200 300 m

SCALE 1:10,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

SOIL SURVEY COMPLEX

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
PREPARED	AM
REVIEWED	RH
APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	13

LEGEND

- Study Area
- Archaeological Potential
  City of Ottawa Archaeological Master Plan (ASI & GII 1999)

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GOOGLE EARTH OPEN IMAGERY (7/15/2022)

3. THE ARCHAEOLOGICAL POTENTIAL RESOURCE MAPPING STUDY OF THE REGIONAL MUNICIPALITY OF OTTAWA-CARLETON , ASI & GII 1999

DRAFT

100 0 100 200 300 m

SCALE 1:7,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

CITY OF OTTAWA ARCHAEOLOGICAL MASTER PLAN

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
PREPARED	AM
REVIEWED	RH
APPROVED	AM

PROJECT NO.	REV.	MAP
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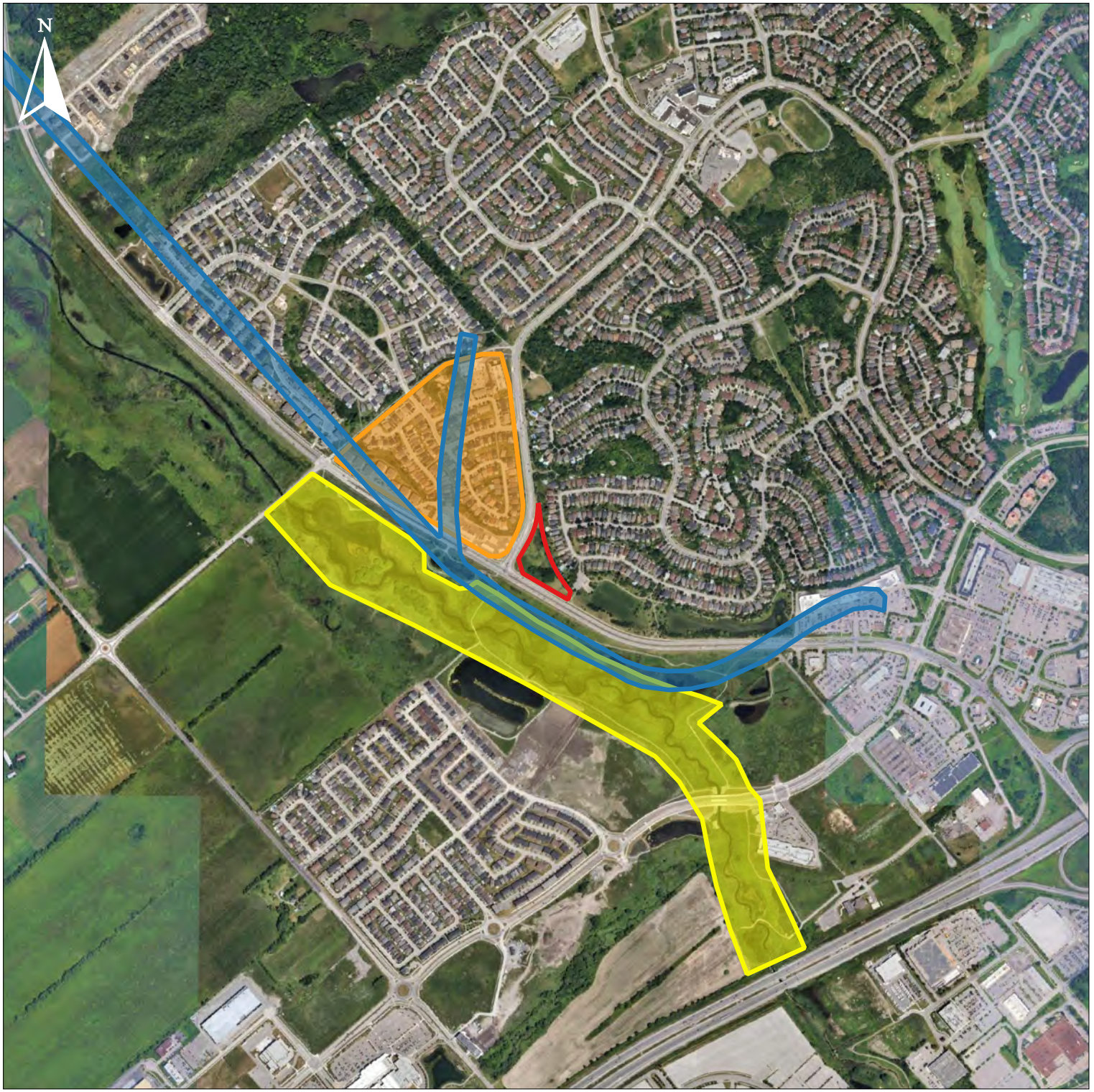

LEGEND

- Study Area
- Stage 1 and 2 AA PIF No. P025-0482-2014 (NEAA 2015)
- Stage 1 and 2 AA PIF No. P039-064 (KHC 2005)
- Stage 1 and 2 AA PIF No. 2002-010-002 (CRMGL 2002)

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GOOGLE EARTH OPEN IMAGERY (7/15/2022)

3. SPATIAL INFORMATION FOR ALL ARCHAEOLOGICAL ASSESSMENTS DEPICTEDON THIS MAP ARE REFERENCED FROM AVAILABLE REPORTS AND INFORMATION MAINTAINED BY THE MCM

DRAFT

200 0 200 400 600 m

SCALE 1:15,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

PREVIOUSLY COMPLETED ARCHAEOLOGICAL ASSESSMENTS WITHIN 50 METRES OF STUDY AREA

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
PREPARED	AM
REVIEWED	RH
APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	15

LEGEND

- Study Area
- Area Recommended for Test Pit Survey at 5 m Intervals, With Transition To Discretionary Test Pit Intervals Where Soil Disturbance is Documented

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GOOGLE EARTH OPEN IMAGERY (7/15/2022)

DRAFT

25 0 25 50 75 m

SCALE 1:2,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

STAGE 1 RECOMMENDATIONS

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
PREPARED	AM
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PROJECT NO.	REV.	MAP
2024056	001	16

LEGEND

- Study Area
- Test Pit Survey at 5 m Intervals
- Test Pit Survey at 10 m Intervals
  Evidence of Disturbed Soils
- Visual Inspection
  Area of Saturated Soils

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GOOGLE EARTH OPEN IMAGERY (7/15/2022)

DRAFT

25 0 25 50 75 m

SCALE 1:2,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

STAGE 2 METHODOLOGY WITH IMAGE LOCATIONS AND DIRECTIONS

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-05-26
PREPARED	AM
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APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	17

LEGEND

- Study Area
- No Further Archaeological Assessment Recommended

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GOOGLE EARTH OPEN IMAGERY (7/15/2022)

DRAFT

25 0 25 50 75 m

SCALE 1:2,000

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, 475 TERRY FOX DR, KANATA, ONTARIO

TITLE

STAGE 2 RECOMMENDATIONS

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YYYY-MM-DD	2025-05-26
PREPARED	AM
REVIEWED	RH
APPROVED	AM

PROJECT NO.	REV.	MAP
2024056	001	18

Signature Page

We trust that this report meets your current needs. If you have any questions, or if we may be of further assistance, please contact the undersigned.

TRUE NORTH ARCHAEOLOGICAL SERVICES

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